REDUCING
HOUSING
INEQUALITIES

Case study reports on green transition initiatives and their impact on housing inequalities

ReHousIn Deliverable 5.1

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The ReHousIn project aims to spark innovative policy solutions towards inclusionary and quality housing. To achieve this, it investigates the complex relationship between green transition initiatives and housing inequalities in European urban and rural contexts, and develops innovative policy recommendations for better and context-sensitive integration between environmentally sustainable interventions and socially inclusive housing.

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1 Introduction

This deliverable introduces 27 qualitative case study reports produced within Work Package 5 (WP5), "Local impacts of the green transition on housing inequalities", of the ReHousIn project. It explains the common analytical frame that structures the case studies, clarifies what these reports claim to do at this stage, and identifies recurring themes that will guide subsequent scenario work in WP5 and comparative analysis in later work packages.

1.1 Aim and Scope

Deliverable 5.1 compiles case study reports from 27 localities across nine European countries (Austria, Spain, France, Hungary, Italy, Norway, Poland, Switzerland, United Kingdom). These localities span metropolitan regions, medium-sized cities, and smaller towns and rural areas, and they were selected to capture diverse combinations of housing systems, welfare regimes, environmental challenges and green transition strategies.

In line with the Description of Action, this deliverable contributes to WP5's objective to "report on where, how and why green transition initiatives have been developed over the last two decades, what has been their impact on housing inequalities, and how these can be avoided, based on qualitative research in the 27 case studies".

Each report investigates how three types of green transition initiatives—energy retrofits, densification (including brownfield redevelopment), and nature-based solutions—have been planned, implemented and experienced locally over roughly the past 10–15 years. The central concern is how these initiatives intersect with housing inequalities understood in terms of housing quality, affordability, accessibility, and security of tenure, for different social groups and across different territorial settings.

The purpose of this introduction is to set out the problem space, concepts and questions that organise the case study work and to highlight cross-cutting issues that emerge when reading across the reports.

1.1.1 WP5 focus within the wider ReHousIn project

WP5 examines the localised impacts of the green transition on housing inequalities using qualitative methods. Its specific objectives are to:

- Develop a shared qualitative research design and protocol for the 27 case studies, including common interview guides, coding strategies and reporting templates.
- Analyse where, when and how energy retrofits, densification and nature-based solutions have been introduced in the case study areas, and through which policy and funding arrangements.
- Understand how civic groups, residents and institutional actors perceive these initiatives, how they relate them to existing and emerging housing inequalities, and what forms of mobilisation and innovation arise in response.

- Prepare the ground for scenario-based discussions on possible future trajectories of green transition initiatives and their implications for housing inequalities.

Deliverable 5.1 contributes primarily to the first three of these objectives. It provides the first full set of case reports that will underpin the qualitative scenarios in D5.2 and feed into the cross-case comparative work in WP6.

The case study design and analysis build on the national level insights on environmental and energy policy trajectories developed in WP3 and on housing systems and welfare regimes in WP4, while the findings presented here, in turn, supply local qualitative depth for the comparative synthesis in WP6 and the policy labs in WP7.

1.1.2 Role of this deliverable in the WP5 trajectory

Within WP5, Deliverable 5.1 plays three key roles.

1. It provides a systematically collected qualitative evidence base on the local nexus between green transition initiatives and housing inequalities across 27 diverse contexts building on semi-structured interviews, policy and planning materials, as well as relevant reports and media sources.
2. It clarifies and operationalises the core concepts and questions that will be carried forward into the qualitative scenario mapping workshops (T5.4/D5.2).
3. It surfaces a set of empirically grounded themes and leverage points—around governance, market dynamics, safeguards and civic innovation—that will inform subsequent cross-case synthesis and policy-oriented work in later work packages.

1.2 Shared design of the case study work

To ensure comparability across diverse contexts, the case studies were guided by a common qualitative protocol. This protocol combines: a shared interview guide for semi-structured interviews with residents, civic actors and institutional stakeholders; a set of case study clusters that position each locality within a broader typology of metropolitan, intermediate and rural contexts; and a simplified codebook that harmonises key analytical categories (detailed in the Appendix).

Across the 27 cases, fieldwork includes in depth semi-structured interviews, participant observation in meetings or public events, and document analysis of planning, housing and environmental policy materials. The coding framework foregrounds themes such as types of green initiatives (retrofit, densification, nature-based solutions), governance and participation, distribution of benefits and harms, housing trajectories and tenure, and different dimensions of justice and inequality.

This common design underpins the structure of the reports in this volume and allows the introduction to speak about emerging themes across cases without erasing local specificity.

1.3 Analytical focus: green transition and housing inequalities

Within WP5, “green transition initiatives” are understood as concrete local interventions and programmes rather than abstract policy goals. The case studies examine:

- **Energy retrofits** of residential buildings and estates, including both publicly supported programmes and market-driven improvement schemes, to improve energy efficiency, climatic comfort, and overall housing quality
- **Densification** and brownfield redevelopment projects that add new housing supply, often through large-scale regeneration or major transformation areas.
- **Nature-based solutions** and related green/blue infrastructures, from urban parks and green corridors to climate-adaptation measures embedded in redevelopment, especially in areas facing intensified heat, flood, or pollution risks.

These initiatives are analysed in relation to four core dimensions of housing inequality:

- **Quality**: physical condition, energy performance and exposure to environmental risks.
- **Affordability**: the relationship between housing costs and incomes, including energy costs.
- **Accessibility**: the ability of different groups to obtain suitable housing in desired locations.
- **Security**: tenure security and the right to remain, including vulnerability to displacement in the context of green investments.

The reports pay particular attention to how these housing inequalities are differentiated by income, tenure (owner-occupiers, social tenants, private renters), migration, age, and by the urban–rural and centre–periphery divides. They also explore tensions between distributional questions (who benefits and who is harmed), procedural questions (who participates and whose voice counts), and recognitional questions (whose needs, identities and forms of knowledge are acknowledged).

1.4 Early cross-cutting insights from the case study reports

Reading across the case study reports, distinct but connected patterns emerge around the three main types of green transition initiatives examined in WP5. In each case, the analysis links back to how interventions reshape housing quality, affordability, accessibility and security in the 27 localities.

1.4.1 Energy retrofits

Across the cases, energy retrofits clearly improve housing quality and reduce exposure to energy poverty for those who can access them: residents report better thermal comfort, lower bills and healthier indoor environments. However, access is strongly stratified. Programmes often require upfront contributions, organisational capacity or particular ownership structures,

which favours better-resourced condominium associations and ownero-ccupiers over low-income tenants, elderly residents in fragmented buildings, or households in informal or precarious tenures. This produces “selective inclusion”: retrofits alleviate affordability problems and energy poverty for some, while others remain in inefficient dwellings with higher costs and increasing relative disadvantage or are indirectly forced to move out due to renovictions

1.4.2 Densification and brownfield redevelopment

Densification and large redevelopment projects typically deliver new, higher-standard housing and upgraded public spaces (including nature-based solutions), improving the physical quality of the built environment and sometimes increasing the overall housing stock. Yet the case studies show that new units frequently target middle and higher-income groups, or narrow eligibility bands, leaving existing affordability gaps largely unaddressed. In growing metropolitan areas, new developments associated with green upgrades can trigger rising rents, shifts to more precarious leasing formats and indirect displacement, undermining both affordability and security of tenure for long-term residents. In slower growth and shrinking cities, densification is less about gentrification and more about who is able to enter regulated new schemes; here, entry costs and income thresholds can improve accessibility for “in-b etween” groups while excluding the most vulnerable.

1.4.3 Nature-based solutions and green/blue infrastructure

NBS and related investments—parks, green corridors, renaturalised riverfronts, climatea-dapted public spaces—are generally experienced as upgrades in neighbourhood quality and new environmental resources for residents, especially where previous deficits in green space or environmental health were acute. However, the spatial patterning and governance of these projects can deepen existing housing inequalities. In some cases, new high amenity green areas are located where housing markets are already strong, contributing to higher property values and rents and making these environments less accessible to lower-income households over time. Elsewhere, densification on former informal green areas in disadvantaged districts reduces everyday access to open space for existing residents. Conflicts around noise, crowding or changing uses also show how NBS can unsettle residents’ sense of home and neighbourhood, with implications for perceived security and belonging.

1.5 Equity-driven policy tools

Across all three intervention types, the reports document efforts to counter these dynamics: using retrofit schemes to stabilise costs in social and cooperative housing, attaching affordability and anti-displacement conditions to redevelopment projects, or codesigning NBS to protect existing users and improve access for marginalised groups. Some cases are also illustrative of new public or affordable housing construction on or next to green areas so as to support the housing needs or lower- and moderate-income residents. These local experiments suggest possible leverage points for aligning green transition initiatives more closely with housing justice, which later stages of WP5 and WP6 will examine in greater depth.

2 AUSTRIA

2.1 CASE STUDY (LARGE): VIENNA

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2.1.1 City profile, challenges around just (housing and ecological) transition

Vienna, with a population of 2,028,289 residents as of 1 January 2025, is not only the largest city in Austria but also a central node in the country's economy and urban system (City of Vienna - MA23, 2025a). As the national capital, Vienna is a key hub for services, culture, administration and international connectivity and hosts a bit more than one-fifth of Austria's population. Politically, since 1945, the Social Democratic Party of Austria (SPÖ) has continuously been in power. In the last regional elections, the party secured 39.4 % of the vote in the April 2025, the Freedom Party of Austria (FPÖ) more than doubled its share to around 20.4 %, followed by the Green Party (14,5%), Neos (10,0%) and the Austrian People's Party (ÖVP) (9,7%) (City of Vienna - MA23, 2025a).

Administratively, Vienna is both a federal province and a municipality. Furthermore, Vienna is divided into 23 municipal districts (Bezirke). Following the decentralisation reform in 1989, the Viennese districts have sole responsibility for maintaining public schools and kindergartens, as well as for street and green space maintenance, including greening public spaces and renovating existing urban parks. To perform these responsibilities, a budget is allocated through a complex financial allocation mechanism that considers factors such as the number

of children and pupils, the area of streets, and the hours spent on maintaining trees and green spaces, among others.

In terms of climate vulnerability, Vienna's location in the low-lying Vienna Basin along the Danube River and its dense urban structure contribute to heightened climate vulnerability, particularly for heat waves (Smida et al., 2019), as built surfaces such as concrete and asphalt trap and radiate heat more than surrounding rural areas, creating a pronounced urban heat island effect (City of Vienna, 2025a). Long-term monitoring by the City of Vienna shows that mean annual air temperatures have increased by nearly 3°C since the 1970s, intensifying extremes such as heatwaves and the number of hot days that disproportionately affect urban populations, especially in heavily built-up districts with low vegetation cover (City of Vienna, 2025a). Analyses of Vienna's urban climate demonstrate that the spatial distribution of heat vulnerability correlates with population density and age structure, indicating that the city's geography interacts with demographic factors to influence climate risk (Setz et al., 2021).

In terms of age structure, approximately 14 % of residents are aged 0–14, about 69 % are of working age (15–64) and around 17 % are aged 65 or older, indicating both a strong working-age base and a significant older population share (City of Vienna - MA23, 2025b). Over the past decade, continued population growth, primarily driven by migration, has slightly increased the proportion of young and working-age adults, while the share of older residents has also gradually risen, pointing to ongoing demographic ageing (Statistik Austria, 2024). Non-Austrian citizens constitute a substantial portion of the population: as of early 2025, 36.4% of Vienna's residents held foreign citizenship, 40.9% were born abroad, and 46.3% had a migration background (City of Vienna – MA23, 2025b). In six municipal districts, including Favoriten (since 2021), more than half of the population has a foreign origin.

This demographic structure is closely linked to Vienna's economic structure, as the city's service-oriented labour market, particularly in sectors such as tourism, health, care, retail, and business services, creates sustained employment opportunities that attract and absorb a large share of the migrant working-age population. Vienna's economy is dominated by the service sector, which accounts for over 85% of its economic output and underpins the city's role as Austria's primary economic hub, generating roughly a quarter of the nation's total GDP despite occupying only 0.5 % of the country's land area (Wirtschaftskammer Wien, 2025). Tourism is a key part of this service-oriented structure: in 2024, the city recorded a record 18.9 million overnight stays and substantial revenue growth compared to 2023, and tourism-related activity supports significant value-added and year-round employment, illustrating a considerable and growing contribution to Vienna's economy (Vienna Tourist Board, 2025).

At the same time, Vienna's recent labour market transformation has been described by Riederer, Verwiebe, and Ahn (2021) as "asymmetrical polarisation". While professionalisation, the expansion of higher-skilled, knowledge-intensive service occupations, has been the dominant structural trend, a parallel, though less pronounced, growth in lower-paid and more precarious service employment has contributed to widening income gaps. In this sense, Vienna's employment structure has shifted upward overall, yet inequality has increased at the margins. This dynamic is reflected in marked sectoral income differences: average annual gross incomes of full-time employees are substantially higher in finance, information and communication, and specialised professional services, while significantly lower in hospitality, retail, and personal services (Statistik Wien, 2026a). Income inequalities further intersect with migration background, as persons of non-EU origin are overrepresented in the lowest income

quintile, and about 7 % of Vienna's population relies on minimum social security benefits (Stadt Wien, 2023, p. 122). Income disparities also display a pronounced spatial dimension, with full-time gross annual incomes in central districts such as Innere Stadt (€67,300) and Josefstadt (52,300€) as well as the Western districts at the slopes of the Wienerwald (e.g. Hietzing with 53,630€) substantially exceeding the average income of more working class oriented districts like Favoriten and Simmering in the South (around €36,000) and the relatively central Brigittenau (36,700€), underscoring spatial income gradients within Vienna (Statistik Wien, 2026b).

Housing

In contrast to the national average, the Viennese housing market is dominated by the rental segment, with 78% of the population renting their apartments. The housing system in Vienna is characterised by a multi-segment structure comprising a large, publicly regulated social housing sector, a subsidised limited-profit cooperative segment, and a private market rental and owner-occupier segment. For decades, the city has maintained a substantial municipal housing stock (Gemeindebau) alongside limited-profit associations (LPHA) that build and manage housing under tight cost-rent regulation. The social housing sector (municipal and limited-profit housing stock) accounts for roughly 40% of Vienna's housing stock of around one million units (with a primary residency as shown in Table 1). About 21 per cent of this stock is owned by LPHA, and municipal units own 22 per cent. Another essential housing segment is the private rental sector, which accounts for 39% of the stock – with 24% rent-regulated apartments in buildings built before 1945 – and 15% of private rental stock where the rent is not regulated. Furthermore, approximately 17% are owner-occupied, comprising 11% condominiums and 7% single-family houses.

Table 1. Vienna: Housing Market Segments - 2021

	Persons		**Dwelling stock Total**		**Dwelling stock Main Residencies**	
	#	%	#	%	#	%
Owner-occupation	349 039	**18.6**	**158 377**	**14.7**	158 377	**17.1**
House	132 757	7.1	57 263	5.3	57 263	6.2
Apartment	216 282	11.5	101 114	9.4	101 114	10.9
Rental	**1 461 422**	**77.7**	**731 954**	**68.1**	**731 954**	**79.0**
Private Rental	*699 167*	*37.2*	*361 485*	*33.6*	*361 485*	*39.0*
rent-regulated	425 992	22.6	221 293	20.6	221 293	23.9
free market	273 175	14.5	140 192	13.0	140 192	15.1
Social Rental	*762 255*	*40.5*	*370 469*	*34.5*	*370 469*	*40.0*
Publicly Owned**	440 751	23.4	207 144	19.3	207 144	22.4
Limited-profit Owned	321 504	17.1	163 325	15.2	163 325	17.6
Other	**71 136**	**3.8**	**36 449**	**3.4**	**36 449**	**3.9**
Total (Main Residencies)	**1 881 597**	**100**	**926 780**	**86.2**	**926780**	**100**
Second or Non-Residencies	-	-	**148 187**	**13.8**	-	-
Total	-	-	**1 074 967**	**100**	-	-

*in primary residences; **owned by municipalities (in German *Gemeindebauten*)

Source: compiled by authors, data from: STATcube – Statistical Database of Statistics Austria

Apart from the national legal framework on housing (Rental Act, Condominium law), Vienna as a federal province regulates its housing production and subsidies via the Vienna Housing Promotion and Housing Rehabilitation Act (WWFSG), which contains provisions for brick and mortar subsidies (construction of new housing and refurbishment of existing residential buildings) and regulates the benefits disbursed to tenants (individual subsidies, housing allowances). The laws of the federal provincial government determine the type and extent of earmarked support granted to housing developers (e.g., low-interest loans, investment grants, and contributions). Out of the total budget of the City of Vienna (total payments as recorded in 2024) of €19.9 billion, 21% is allocated to social welfare and housing promotion (City of Vienna, MA23, 2025a). For the housing promotion subsidies of approximately €530 million, €232 million is dedicated to subsidised new construction, €148 million to subsidised refurbishments, and €150 million to individual benefits (housing allowances) (City of Vienna - MA23, 2025a).

By maintaining its municipal social rental system and supporting limited-profit housing associations (LPHA) through bricks-and-mortar subsidies, Kadi and Lilius (2022) highlight the stability of the social housing segment in Vienna compared with other cities, illustrating that it remains a backbone of the city's housing regime. However, over the last 30 years, governance reforms at the federal state level have simultaneously led to an increasingly deregulated private rental market (Friesenecker & Kazepov, 2021; Kadi, 2025).

Hence, key issues emerging in Vienna's housing system include tenure segmentation, spatial inequality, and the risk of exclusion in the private rental market. Friesenecker & Kazepov (2021) argue that while Vienna's inclusive strategy aims to avoid spatial isolation of disadvantaged groups, the shift towards a more deregulated private rental market has introduced new forms of exclusion and access barriers. Kadi (2025) notes that, despite the remarkable stability of social housing, emerging pressures such as rising rents in the private sector and eligibility restrictions for new immigrants are increasingly shaping debates over access. Thus, the discourse includes concerns about whether newcomers, lower-income households or migrant families are effectively locked out of social housing and pushed into more precarious tenure. The private rental market now exerts greater pressure on households through rising rents and reduced long-term security, thereby creating displacement risks despite the large share of social housing.

Districts differ significantly in terms of size, density, housing segments, and socioeconomic composition. Socio-spatial inequalities are closely tied to the distribution of access to different housing sectors across its districts. Inner districts within and around the Gürtel have undergone gentrification and rising rents, resulting in a greater concentration of high-status groups with higher levels of education and income. These areas became less accessible for lower-income and newcomer populations after rent deregulation and the financialisation of housing. Outer districts, especially in the north-eastern and southern parts of the city, contain large municipal housing estates and limited-profit housing, where low-income and vulnerable groups are disproportionately represented. While these areas preserve a broad social mix, some show signs of residualisation, with increasing concentrations of disadvantaged residents. The western outskirts and central historical zones remain wealthier. In contrast, the belt around the Gürtel and older private rental areas continue to function as arrival zones for migrants and low-skilled newcomers. Overall, segregation between high- and low-status groups has slightly decreased, with a more even distribution across districts. Vienna thus

maintains relatively low segregation levels, but subtle east–west and centre–periphery socio-spatial divides remain.

Green Transition policies

Vienna's environmental policy evolved over the past three decades through a combination of local innovation and multi-level governance coordination. The city's environmental strategy originated in 1979 with the creation of the Department of Environmental Protection, establishing a social–ecological model centred on quality of life, social justice, and resource conservation. This framework was institutionalised in the 1980s through urban planning focused on dense development, public transport, and green spaces.

From 1989 to 1999, key turning points, such as the fall of the Iron Curtain, EU accession, and membership in the Climate Alliance (1991), prompted Vienna to link its local ecological agenda to global environmental goals. The Climate Protection Programme (KliP), launched in 1999, introduced 300 concrete measures across energy, mobility and housing. During the 2000s, sustainability became the city's guiding principle, and managerial coordination was strengthened through the Coordination Office for Climate Protection, which implemented interdepartmental cooperation, annual evaluations, and reporting.

Over time, Vienna's approach shifted toward techno-managerial, efficiency-oriented solutions, particularly in energy and housing, influenced by EU directives and national legislation, such as the 2009 Article 15a Agreement on building emissions. The *Smart City Wien Framework Strategy* (2014) integrated technological innovation with long-standing social and ecological principles, coordinating multiple actors—municipal departments, public utilities, research institutions, and businesses—through the Smart City Wien Agency. This framework strategy was later revised into the Smart Climate City Strategy Vienna (2022), which included the goal of climate neutrality by 2040 and the *Sustainable Development Goals* (SDGs) of the UN Agenda 2030.

Vienna's governance model remains highly centralised and hierarchical, with limited public participation, yet it benefits from substantial municipal autonomy as both a city and a federal state. More recently (since 2022), Vienna introduced the Wiener Klimateam[1], a participatory climate initiative in which residents across participating districts can submit and collaboratively develop ideas for climate mitigation and adaptation (*participatory climate budget*), and a representative citizen jury in each district helps decide which of these ideas receive funding and implementation. Despite increasing emphasis on economic competitiveness and technological fixes, Vienna has maintained its core social-ecological orientation and multi-level policy coordination (Mocca et al., 2020).

[1] See https://klimateam.wien.gv.at/

Nature-based Solutions

Vienna has a long-standing tradition in nature protection and the provision of public parks (see Brenner et al. 2022). The introduction of new zoning categories for nature protection in the 1990s effectively imposed a building ban, making rezoning for other purposes highly challenging. Also, planning for new development areas since the 1990s has emphasised the provision of green spaces in accordance with administrative guidelines. The recent decade has been marked by the increasing effects of heat waves, leading to a strategic shift in cities towards greening public spaces in densely built-up, historic housing stock, while maintaining the other two pillars of green space development (Brenner et al. 2022, Friesenecker et al. 2024a).

The implementation of climate adaptation strategies in Vienna builds on (1) strategic documents binding for the work of the public administrative units, (2) adapting legal regulations, and (3) adapting financial support. Based on a set of strategic documents, a shared, binding policy framework for public authorities has led to diverse concepts, guidelines, and policy instruments at the administrative unit level, accelerating NBS implementation. Notable documents include the *Vienna Street Greenery Concept* (2012[2]), *Surface Drainage Guidelines* (2018[3]), *Green Facades Guideline* (2019[4]), and the *COOLing Fibel* (2023[5]). These efforts have fostered a "common understanding" of key NBS measures across city administration. In sum, the core strategies include street trees with automated irrigation, de-sealing surfaces, water features (e.g., fountains, fog showers), green facades and roofs.

Second, legal regulations in the Vienna Building Code (Bauordnung) have been a second key tool for implementation. In 2024, amendments to the Building Code strengthened requirements for green infrastructure, including streamlined approval for green facades, increased street tree planting, and mandates to descale surfaces[6]. For instance, two-thirds of landscaped areas must remain unsealed and contain soil-bound greenery (Section 79 (6) BO2024). Façade greening is now permit-free for the first three stories (Section 62a(1)(14) BO2024), and tree planting regulations have been tightened, requiring one tree per 200 m² of landscaped land (previously 250 m²) (Section 79 (7) BO). New parking space regulations (as of 2023) further promote urban greening by reducing required parking spots in public transport-accessible areas, freeing space for 2–3 additional street trees per 3,000 m² residential building. However, these legislative changes are not immediately binding on property owners unless modifications or new developments are undertaken.

Third, financial support has been recently adapted as well. In Vienna, 23 district governments are responsible for managing, providing, and expanding green spaces, including street

[2] https://www.wien.gv.at/umwelt/parks/pdf/strassengruen-leitbild-2012.pdf
[3] https://wien.arching.at/fileadmin/user_upload/redakteure_wnb/D_Service/D_1_1_Baurecht/Richtlinien/oberflaechenentwaesserung-leitfaden.pdf
[4] https://www.wien.gv.at/umweltschutz/raum/fassadenbegruenung.html
[5] https://www.wien.gv.at/kontakte/ma42/publikationen.html
[6] https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrW&Gesetzesnummer=20000006

greening and tree planting. Since 2018, Vienna's 23 districts have received dedicated funding to preserve, adapt and expand green spaces[7]. A 2021 funding reform increased financial allocations to districts, linking funds to green space maintenance needs and prioritising climate-stressed areas, such as those requiring additional watering of trees. The budget for new green infrastructure was further expanded, but districts maintain control over fund allocation. Additionally, the "Lebenswerte Klimamusterstadt" (Livable Climate Model City) programme, launched in 2021, provides €20 million annually for district greening projects, totalling €100 million by 2025. Projects receive 40–80% co-funding, depending on factors such as soil de-sealing, the proportion of greenery, and the use of sponge city principles. Surface sealing levels are particularly considered due to their direct impact on urban heat stress (Friesenecker et al. 2024b).

Densification

In Vienna, initially, the densification of already built-up central areas aimed to ease the pressures of population growth. These urban areas are primarily dominated by pre-war private rental housing, which is subject to rent regulation under the national tenancy law. Due to rapid population growth (around 450,000 since 1990) and rising private housing prices, the City Government has made affordable housing a primary goal in recent decades. Hence, to ensure the production of affordable housing, the key mechanism used is the continuous construction of new apartments across the city (Friesenecker and Litschauer, 2022). Although the city tries to (re-)use brownfield sites, rising land prices have forced it to build new affordable housing on greenfield sites as well (Friesenecker and Litschauer, 2022). For significant greenfield site developments, the administration regulates the construction of new green spaces through land zoning, developer competitions, and general urban planning guidelines, e.g., the size of parks, the features green spaces should have, etc. The Viennese administration has strategically supported the construction of limited-profit housing units since the 1990s through a policy mix of: a) developer competitions (Bauträgerwettbewerbe), b) housing subsidies and c) an active land policy in place since the mid-1980s. In brief, developer competitions are not contests for the lowest bidders, but rather competitions for high construction quality combined with low rents, thereby favouring LPHA (see Friesenecker and Litschauer, 2022, for more details).

Assessing the spatiality of new urban developments since 2005, most of these large residential areas have been developed on the outskirts of the city or on previously brownfield sites distributed across the city. Large brownfield projects in the city centre are usually located at former railyards around train stations, such as Nordbahngelände (2nd district), Nordwestbahngelände (20th district) or Sonnwendviertel (10th district), or at former industrial production facilities. These areas are usually characterised by a mixed approach to housing, including subsidised social housing by LPHA, as well as freely financed housing and ownership models.

[7] https://www.wien.gv.at/bezirke/dezentralisierung/budget/

In sum, the Viennese housing policy focuses on building new residential buildings within existing urban areas. The main advantage of the Viennese housing policy is that it provides a strong instrument for integrating social and ecological aspects under the banner of liveability. While new residential developments focus on delivering a minimum amount of green space for new citizens, this comes at the cost of improving overall green space within the city, especially in areas where historically dense urban development leads to problems with urban heat waves and biodiversity loss.

Energy Efficient Retrofit

In Vienna, the use of housing subsidies for retrofitting is organised via the "Soft Urban Renewal" (Sanfte Stadterneuerung) programme. The origins of this programme date back to the 1970s, to subsidise the renovation of pre-WWII private buildings with rental units while minimising negative impacts on existing tenants (see Franz, 2015, p. 175ff; Kirsch-Soriano da Silva et al., 2025). If private landlords use public loans for renewal within this programme, they must comply with specific regulations, e.g. they are not allowed to convert rental flats into condominiums and must observe a rent freeze for the duration of the subsidies - usually for 15 years. Managed by the public agency wohnfonds_wien, which distributes renewal subsidies in the form of loans and non-repayable grants, the programme includes several types of renewal and retrofitting. On the one hand, singular measures, e.g., dwelling improvements, liveability improvements (shading systems, greening, etc.), and subsidies for adding rooftop units. Most common, however, is the so-called base renewal (Sockelsanierung), where renewal of the building but also the dwellings is done either with tenants' present upon their agreement, or their relocation, including financial compensation or the denial of tenants in having their apartments renewed (see Hatz, 2021, for more details). A so-called total renewal, on the other hand, is carried out in vacant buildings and can include demolition, new construction, or the addition of storeys. In the years before the global financial crisis of 2008, subsidies granted to private owners as an instrument showed decreased effectiveness and popularity. According to Franz and Gruber (2019, p. 390), reasons include the high administrative effort required for subsidised renewals, the increased inflow of international investment capital, and low interest rates.

According to Hatz (2021), political priorities also shifted towards environmental and climate protection efforts and subsidised energetic retrofits (Thermisch-energetische Wohnhaussanierung), which have since become more critical. The funding regulation stipulates that a complete energetic retrofit requires the improvement of at least 3 parts of the building hull and/or heating system: replacing windows and outer doors, insulation of roof or top floor ceiling, façades, basement ceiling, or improvements in relation to the heating and hot water provision (Wohnfonds_Wien, 2024). Furthermore, they must comply with the minimum requirements for heating and energy standards set out in the housing renovation ordinance (Sanierungsverordnung), introduced in 2008. In contrast to deep renovations, including the replacement of heating systems, energetic retrofits such as thermal insulation were, to a large degree, applied to municipal housing estates because retrofitting the building hull can be carried out in occupied buildings as well (Hatz, 2021). A report by the Austrian Court of Audit, however, identified a lag in retrofitting activities in recent years. Assuming a 30-year renovation cycle is the most cost-efficient, around 7,000 units should be retrofitted each year. In contrast, between 2013 and 2023, only about 45% were undergoing retrofits or were planned for retrofits (Rechnungshof Österreich, 2021). However, according to that report, Wiener Wohnen

introduced a retrofitting strategy in which it identified 9% of its stock as being in an insufficient energetic and building condition and designated it as the primary target for retrofitting.

2.1.2 Green Transition Interventions in Vienna: Innerfavoriten and Nordbahnhof

Over the last three decades, as one of the fastest-growing cities in Europe, Vienna's historic neighbourhoods have undergone highly dynamic transformations in density and urban renewal. At the same time, centrally located, large-scale brownfields were transformed into new urban city quarters. The two areas for the Vienna case study were selected based on these two transitions: On the one hand, the neighbourhood of Innerfavoriten stands for the transformation of centrally located historic areas undergoing urban renewal and retrofitting processes geared towards climate adaptation through NBS. On the other hand, Nordbahnhof is a central, newly built area on a former railway yard and industrial brownfield, where the city aims to create a new, highly dense and green urban residential quarter.

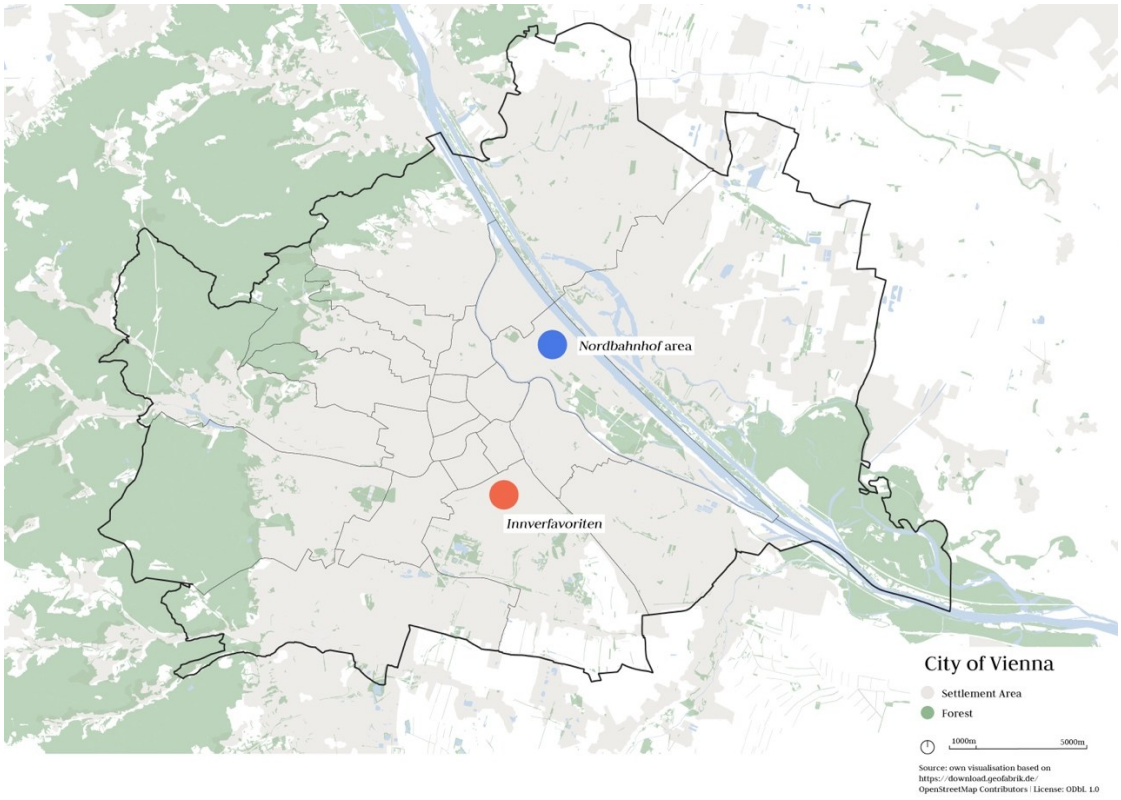

Figure 1: Map of Vienna with the districts and location of case study areas. Source: Own elaboration on basis of openstreetmap

Innerfavoriten

is characterised by its current physical structure: a largely intact Gründerzeit street grid, dense perimeter-block development, and very high building and population density. The area predominantly functions as a residential neighbourhood (with building typology ranging from Gründerzeit-era buildings to a mix of post-war reconstruction-era buildings). However, remnants of former commercial and small-scale industrial uses persist, particularly at the ground-floor level. A significant share of the building stock exhibits a high need for

refurbishment, reflecting both its age and long-term underinvestment. At the same time, vacancies and underused properties indicate substantial latent potential for transformation. The dense built form, limited green spaces with vegetation and a high degree of soil sealing contribute to pronounced summer heat stress, making Innerfavoriten particularly vulnerable to overheating during heatwaves. In terms of mobility, the district shows low car ownership and good public transport access, complemented by widespread traffic-calming measures, though cycling infrastructure remains underdeveloped. Economically, Innerfavoriten is characterised by highly heterogeneous ground-floor zones, a dense mix of small businesses and local suppliers alongside residual productive activities, and overall low purchasing power, shaping everyday economic life in the neighbourhood.

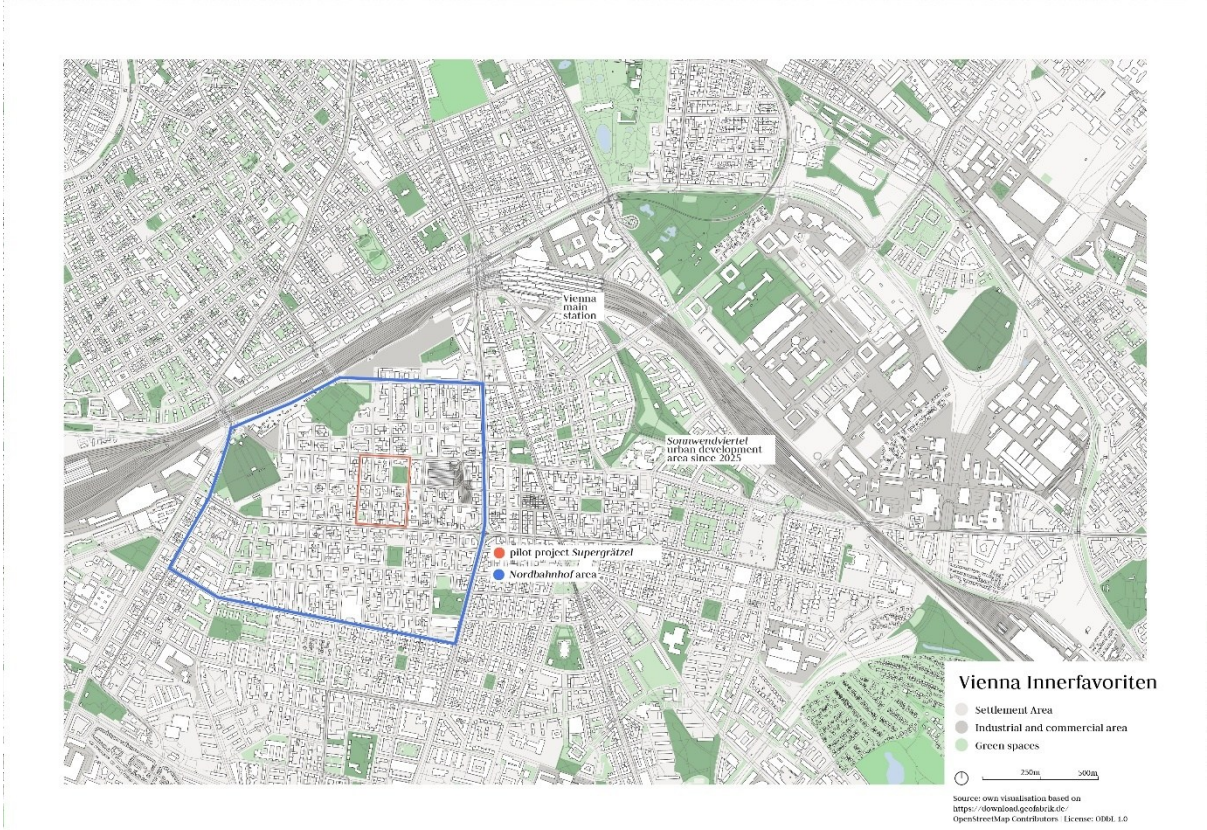

Figure 2: Area of Innerfavoriten. Source: Own elaboration on basis of openstreetmap

From a socio-demographic and functional perspective, Innerfavoriten displays a very high population density, relatively large household sizes and a high proportion of non-Austrian citizens (more than 40% of inhabitants are third-country nationals, e.g. from Serbia, Syria and Turkey, according to Stadt Wien – Integration und Diversität, 2023 & Land Wien – Statistik, 2024), while the average age of residents is slightly below the Vienna mean. Despite educational facilities for different age groups, the area is marked by a comparatively high unemployment rate and inadequate levels of care and health-related infrastructure, as evidenced by high unemployment among third-country nationals. In terms of participation and political representation, a high share of the voting-age population (16 years+) lacks voting rights in the area (Stadt Wien, MA 17 – Integration und Diversität, 2023, S. 65).

Due to the demand for renovation and the area's socio-demographic vulnerability, the area of Innerfavoriten outlined in Figure 2 was selected for the implementation of several programmes and projects, which are connected to Vienna's diverse strategy plans (STEP2025, Klimafahrplan, Stadterneuerung, etc.). First and foremost, Innerfavoriten was selected as the programme WieNeu+'s first focus area. The aim of the WieNeu+ programme (with its predecessor, the EU-funded Smarter Together programme) is to systematically activate built, social, and spatial potentials at the district level. Its objectives include the socially equitable, resource-efficient, and climate-neutral upgrading of the existing building stock, combined with climate change adaptation measures such as heat-reducing building design and improvements to semi-public and public open spaces. WieNeu+ further seeks to strengthen social cohesion and local participation by involving residents in neighbourhood development processes, while enhancing the local economy, promoting environmentally friendly mobility and improving the quality and accessibility of green and public spaces to increase overall liveability in dense urban areas. The latter was implemented in the area with the Viennese Superblock concept. Even before the start of WieNeu+, wohnfonds_wien worked in the area to initiate and subsidise retrofitting and thermal refurbishment of private building owners, and later on collaborated closely with WieNeu+ on its goal of climate-neutral upgrading of the existing building stock (see Figure 3 for a timeline).

In addition to the programme, the city developed the Innerfavoriten Supergrätzl (an adaptation of the Barcelona Superblock concept). It commissioned a design team through a competitive process to translate the pilot learnings from a Superblock test phase (temporary filters, tactical markings, neighbourhood participation) into a permanent scheme. The Innerfavoriten Supergrätzl established a pedestrian-priority core along Herz-, Bernersdorfer-, Alxinger- and Erlachgasse, with traffic-calming filters, expanded ground-level NBS (greening and trees targeting roughly half of the surfaces in quieter streets), and modular urban furniture for seating, play, shading and cooling.

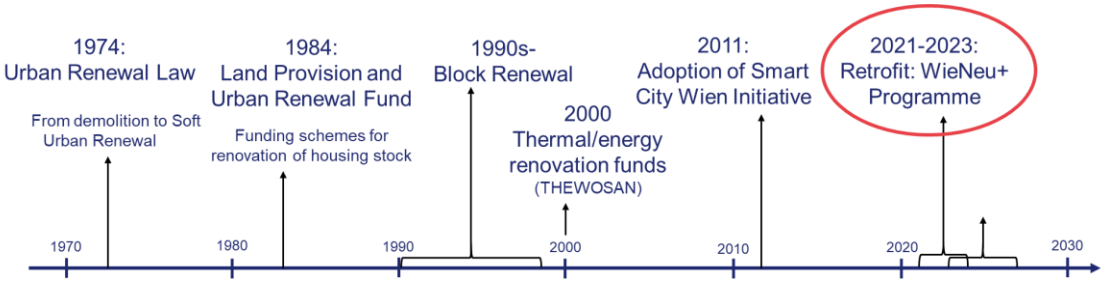

Figure 3: Timeline of the urban renewal process in Vienna. Source: Own elaboration

The Nordbahnhofviertel

On the other hand, is an example of brownfield development at the former Nordbahnhof railway station, which served as a train and freight station until 2000. It is centrally located between the Danube River and the city centre and is scheduled for completion by 2030, when approximately 20,000 people will live and work in the area. The first urban development guideline was published in 1994, and development began in 1999, including office buildings, social infrastructure (e.g., schools), and residential buildings (a mix of social housing, private rental, and condominiums). The first central park in the development, Rudolf Bednar Park, opened in 2008.

The case study, however, focuses on the second phase of development (see Figure 4). In 2011, the revision of the urban development guidelines began, and an urban development ideas competition was organised. Based on the winning project, new guidelines were developed, including a participatory process, and published in 2014 (see an overview of the whole development timeline in Figure 5). Instead of a perimeter-block development, the concept included a central, ample green space of about 10ha (called *Die freie Mitte/The free centre) with* higher buildings at the edges.

To allow for the development of the "freie Mitte", the residential areas at the edges feature more compact development with differentiated densities, including 8 high-rises ranging from 60 to 95 meters. Approximately 4,500 housing units are planned, including a mix of subsidised social housing, more expensive free-market private rental units, and apartment ownership. The question is whether this also led to greater building density than the previous plan, but it can be assumed, since building heights already exceed urban development guidelines. We also hypothesise that, besides some subsidised social housing and some subsidies and regulations for "affordable" housing units, new developments in the form of high rises will cater to the middle- and upper classes.

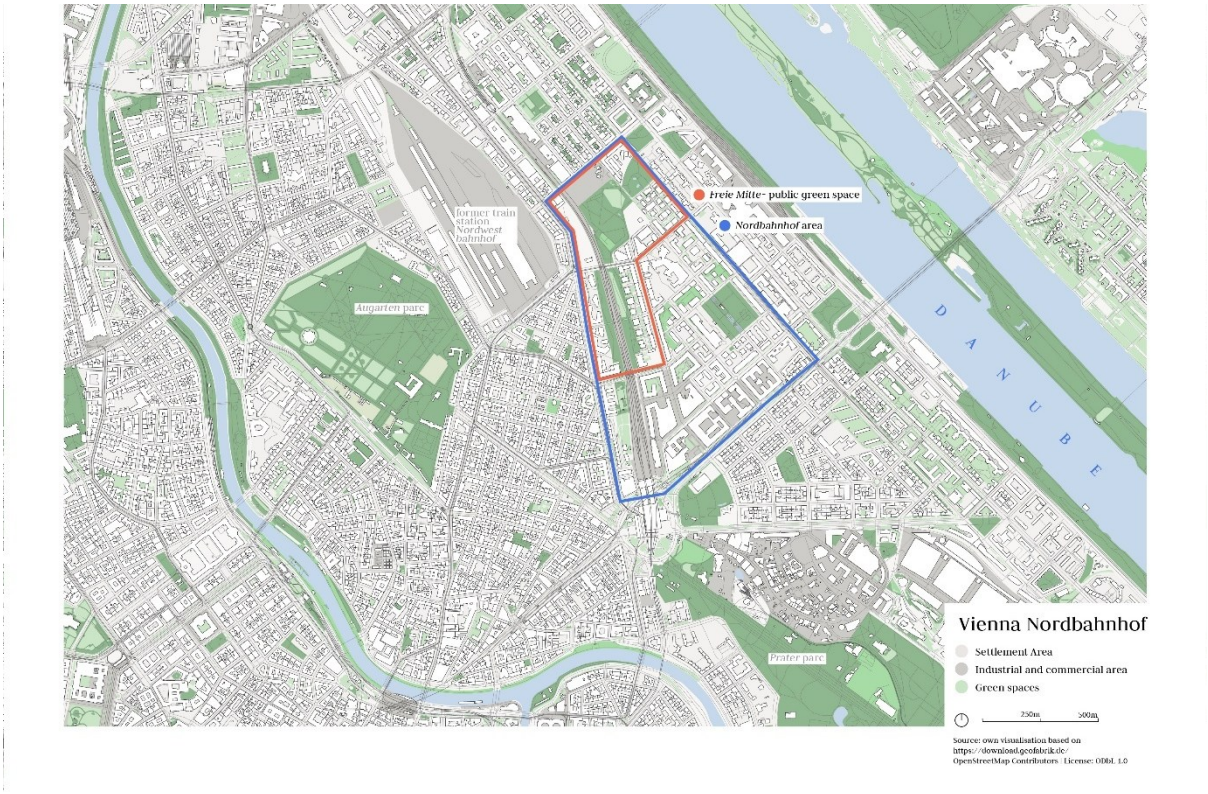

Figure 4: Area of Nordbahnhof. Source: Own elaboration on basis of openstreetmap

In 2015, the City of Vienna established a strategic unit (programme management) to coordinate and govern the development of the area. The programme management's work also includes detailed concepts for various topics (such as fire safety requirements and rainwater management) that respond to changing urban planning, transport, and infrastructure framework conditions and ensure a gradual, efficient implementation of the overall project. In 2016, the municipal council approved a framework agreement between the City of Vienna and

ÖBB with various contractual stipulations, including payments for infrastructure costs, the transfer of parts of the property, and the maintenance of urban development qualities, including basic shares of affordable housing provision.

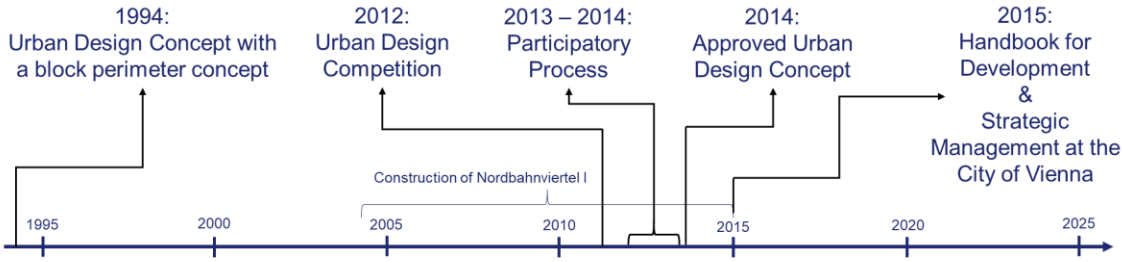

Figure 5: Timeline of Strategic Planning "Nordbahnhof - freie Mitte" in Vienna. Source: Own elaboration

In 2017, after the framework agreement with the consortium was formulated, the urban design concept was updated to continue the urban development model with fewer high-rise buildings while increasing the height of existing ones. The reduction from eight to five high-rises was justified by the high share of subsidised/affordable housing, which would not have been possible in high-rises. Based on those developments, the City released a general zoning plan and a partial development plan in 2017/2018. The narratives of housing developers and public city officials highlight the importance of having a single organisational body overseeing such a significant redevelopment to steer development which is aligned with the Manual of the Urban Design Concept.

In subsequent development, the consortium became the decisive organisational tool that enabled the coordination of repeated architectural competitions, the release of building plans aligned with competition outcomes, and recurring quality-assurance reviews across eight building plots from 2018 onwards. Architectural competitions for each of the eight building plots were held starting in 2018, followed by the release of the resulting building plans. Based on the 2012 competition ideas for the 'Freie Mitte' together with citizen participation results, the planning offices of *VlayStreeruwitz, Agence Ter,* and *Land in Sicht* further refined the design of the central ruderal, open space in the form of a master plan. After this master plan, the area for the freie Mitte was zoned, and in 2019, the City of Vienna commissioned AgenceTer (in cooperation with Land in Sicht) to plan the area[8].

The 9.3-hectare park was constructed and opened in several phases: the "wild" area in the northern part was opened in 2021, and the central area and strips that unfold into the built infrastructure were opened in 2022 and 2024[9]. Regarding the building plots, by the beginning

[8] https://www.gbstern.at/fileadmin/gb/mitte/_Archiv_18_23/2_STM_Nordbahnviertel/Freiraeume_Nordbahnviertel/Freie_Mitte/Praesentation_Freie_Mitte.pdf

[9] https://www.wien.gv.at/freizeit/parkanlage-nordbahnhof

of 2026, 6 of the 8 were completed. The first housing projects were realised in 2022, with others following subsequently.

Table 1. Key data on two case study areas in Vienna

	Innerfavoriten	Nordbahnhof
Neighbourhood characteristics (general social type, economic activities, density, etc.)	Historic neighbourhood with high building density with low share of green spaces; area: 1.12 km2**;** **p**opulation of area: approx. 34.500 inhabitants with a high percentage of migrant population; well connected to public transport and in proximity to the Vienna Main Train Station	Extensive brownfield redevelopment north of the historic centre and close to the Danube; "dense edges—open centre middle" model with a 9.3 ha ruderal Open Centre (Freie Mitte) and perimeter consolidation including five high-rises; mixed tenure (subsidised, price-capped, market), new ground-floor uses and local services; strong multimodal access and new path/corridor network; by early 2026, 6 of 8 building plots completed
Duration	Urban renewal focus with programs: WieNeu+ (Strategy/ Implementation 2021–2023 / predecessor project "**Smarter Together" (2016-2021**), Blocksanierungsgebiete (2017/18 – Strategy; since 2019/20 implementation), Superblock (2021 Concept, 2022 Pilot, 2025 Completion)	Long-arc transformation: 1994 Urban Design Concept (Leitbild); 2011 EU-wide ideas competition; 2013–2014 extensive participation; 2014 concept approval; 2015 handbook ("Freie Mitte – Vielseitiger Rand"); 2016 City–ÖBB framework agreement and programme management; 2017 concept update (fewer towers, taller perimeter); 2018–ongoing plot competitions and QA reviews; 2019 Freie Mitte design commission; park openings 2021/2022/2024; delivery ongoing to 2026
Institutional funding	City of Vienna, partial EU-funding H2020 (Smarter Together)	City of Vienna and ÖBB framework agreement (cost-sharing, land transfers); Vienna's housing support (Wohnbauförderung/LPHA subsidies) for subsidised segments; Public funds for green spaces
Actor constellation (in addition to "Institutional funding")	City of Vienna with diverse administrative departments (MA 25, MA 19, etc.), Gebietsbetreuung, wohnfonds_wien, Wiener Wohnen, limited-profit housing associations (ÖSW, bwsg), private developers, engineering, planning and architecture firms (***EGKK Landschaftsarchitektur***, studio laut, Schöberl & Pöhl) and residents involved in the participation process	City of Vienna (MA 21 planning, MA 19 architecture, MA 42 City Gardens), ÖBB (landowner), programme management unit; design/planning: StudioVlayStreeruwitz, Agence Ter, Land in Sicht; consortium developers (VIG, ÖVW, STRABAG Real Estate, KIBB Immobilien), limited-profit housing associations; wohnfonds_wien; Gebietsbetreuung Stadterneuerung; IG Lebenswerter Nordbahnhof; Quality Assurance Board with administration, experts, consortium and resident delegates

Aims and objectives	Activation of the area to initiate climate-neutral building refurbishment, climate change adaptation, and heat reduction through the enhancement of public and green spaces, the participatory inclusion of inhabitants, and sustainable mobility measures.	Preserve and operationalise a large ruderal Open Centre with dual park/nature protection; consolidate density at edges; deliver mixed tenures with majority regulated; ensure permeability and high-quality ground floors; coordinate greening, mobility corridors and social amenities; embed long-term governance and quality assurance.
Specific physical measures	Small-scale initiatives through participatory budget, partial initiation of refurbishments and facade greening, Creation of a superblock with public space greening and road reconfiguration.	Freie Mitte (9.3 ha) with species protection, new zoning category for dual use, ecological oversight/monitoring; perimeter blocks and five towers; aligned tree/shrub bands, rain gardens, green margins; façade greening and deep-root planting; activated ground floors and play areas; path network, co-working/shared rooms; rail-adjacent mitigation effort
Accompanying housing policy/ regulatory measures	Subsidies for refurbishment and decarbonisation feasibility studies in limited-profit housing and private developments; no new regulatory measures, but more intense collaboration between housing actors and administrative agencies across silos	City–ÖBB framework agreement fixing tenure shares (≈ two-thirds subsidised/price-capped, one-third market) and quality targets; “preiswert” 20-year indexed cap (with allowed tower surcharge); Smart housing allocation with NGO partnerships; iterative competitions and QA Board reviews as soft-law oversight; open-edge/permeability conditions; reduction/repositioning of towers due to subsidy feasibility
Key social tensions or/and benefits between greening and housing	Benefits: cooler, safer, more usable streets through Supergrätzl; energy savings from retrofits; activation of social infrastructure; maintenance-first approach supporting long-run affordability; pilot formats with public support scaling citywide. Tensions: upgrade-led valorisation and gradual rent pressure; cost pass-throughs from greening and retrofits; disruption and consent hurdles in works; fragmented ownership and regulatory limits slowing decarbonisation; speculative conversions; short-term rentals reducing affordable supply; uneven capacity for low-threshold participation.	Benefits: broad acceptance of the wild Open Centre; microclimate cooling and everyday liveability; regulated segments temper classic green-gentrification dynamics. Tensions: post-occupation participatory gaps; affordability pressures from macro cost/interest rate shocks; investor-type underuse in some ownership towers and higher operating costs for specific greening systems.

2.1.3 Methods

Qualitative data for this case study were collected through semi-structured interviews conducted between September 2025 and February 2026. A total of 21 interviews with 22 participants were performed, including public administration officials, public bodies, private developers, and civic initiatives.

Interviewees included representatives of public institutions (such as the City of Vienna and its city-owned agencies), representatives of private, public and limited-profit housing providers, civic organisations (such as tenant organisations, urban renewal neighbourhood offices), planners, and real-estate consultants, each with specific expertise in housing, nature-based solutions, building retrofit, and urban densification, and residents of buildings in the two selected areas.

Sampling of policymakers and technical staff drew on contacts established during the preparation and participation in the ReHousIn Policy Lab held in April 2025, as well as through researchers' previous research engagements, visits to public events, and direct contact via institutional email addresses associated with the respective organisations. Additional participants were recruited through snowball sampling.

The interviews were conducted in person (except one) and recorded with participants' consent using a recording device. The interviews were initially transcribed using the software A-train (Haberl et al. 2023). In a second step, all transcripts were carefully reviewed while listening to the audio recordings, and corrections were made where necessary. For coding and organising the qualitative data, MAXQDA was used. For reporting citations, parts of the interviews were translated into English.

Of the 22 interviews, four were conducted by more than one researcher from the project team, while 18 interviews were conducted by a single researcher. All interviews were conducted either at the interviewees' workplaces, homes or at the university. As preparation for the interviews, individual background research was conducted for each interviewee, based on their topic and position, including the review of legal documents, reports and studies, planning documents, academic literature, and materials from neighbourhood organisations, local district newspapers, and media outlets. These materials were used to identify interviewees, contextualise findings and triangulate claims.

In addition to the interviews, the study applied complementary qualitative methods tailored to the Viennese context. These included research walks through the two neighbourhoods to document locations referenced by interview partners, such as public green spaces, nature-based solutions (NBS), residential buildings by LPHA and retrofitting projects. During these walks, photographic documentation was produced to support the contextual interpretation of the interview findings.

Nonetheless, the research is subject to some limitations. Capturing civic perspectives proved challenging, as Vienna is characterised by a relatively small number of organised civic groups in housing. As a result, only a limited number of residents' perspectives could be captured, which does not constitute a representative sample of the affected population. While interviews with civic institutions (such as tenant organisations and urban renewal neighbourhood offices) provided essential insights into resident-related concerns, these perspectives cannot fully substitute for a broader range of individual resident voices, particularly those of more

marginalised groups with limited capacity for formal representation. In addition, as many of the redevelopment and adaptation measures examined are still ongoing, the findings reflect anticipatory assessments and evolving dynamics rather than finalised outcomes.

2.1.4 Perceptions of Green Initiatives in Case Study Areas: Innerfavoriten

2.1.4.1 Precedents and implementation

Innerfavoriten was selected as one of Vienna's WieNeu+ renewal areas ("Grätzl") based on a combination of social and physical needs and strategic development dynamics. The programme emerged from Vienna's long-standing tradition of urban renewal since the 1970s, with institutions such as the *Land Provision and Urban Renewal Fund* (today: wohnfonds_wien) being created and programmes such as *Block Renewal* being implemented. These precedents were recast after 2020 as a pilot-driven framework for the city through the programme WieNeu+, which connects technical priorities (decarbonization, climate adaptation, circularity) with social goals such as quality of life, inclusion and affordability. At the early start of WieNeu+, the area of Innerfavoriten was designated as an early testbed for method development in the city's existing building stock under real-world constraints. According to public city official in our interviews, selection combined acute needs and strategic anchors: significant renovation backlogs, vulnerable populations, weak public-space quality, and key sites likely to influence local trajectories (e.g., the tram garage *Remise*, the new brownfield development Neues Landgut, and the new subway line U5), alongside synergies with existing block-renewal areas and partners such as wohnfonds_wien.

Programme setup and early implementation coincided with the COVID-19 pandemic (2021–2022), complicating place-based engagement and slowing the start-up of field activities. City officials stress that renewal in built-up neighbourhoods proceeds through owner-led, long-cycle decisions; only a small share of buildings can realistically enter works each year, producing renovation rates of 1–3% and limiting the likelihood that any single programme will trigger a "wave" (public city official). This recognition shaped a pragmatic instrument mix: block-renewal studies and owner outreach; micro-grants for neighbourhood activation (e.g., "Grätzl-Marie"); demonstrator projects in energy and circular construction; and public-space transformation through the Supergrätzl.

> "I wouldn't say that WieNeu+ triggered a renovation wave there; that was beyond what was possible—and, to be honest, we can't do that. What we could do was make a difference in individual cases, providing support and funding to help specific properties and projects." (City official)

A visible public-space strand built on a prior pilot inspired by Barcelona's superblocks, the Viennese *Supergrätzl*. The Innerfavoriten Supergrätzl established a pedestrian-priority core, and the nearby school gained a quieter entrance area; overall quality improved according to the responsible landscape planner and a city official. Civic actors emphasise that Supergrätzl was decided for this area after contention elsewhere and was not formally part of WieNeu+, though it aligned closely and cooperated operationally. According to the civic organisation, a test phase drew initial scepticism from residents. Still, it proved valuable for cross-sectoral collaboration, resolving interdepartmental logistics within the city administration (e.g., waste,

fire access), and consolidating local support. Civic organisations on site, such as the GB* and the Kinderfreunde, provided more in-depth knowledge of local residents' needs and preferences for the project, according to a city official.

> "There were reactions like, 'Okay, and they've closed the street for this?' because people in Vienna aren't really familiar with these temporary measures, so there was some scepticism about what it was all for. In retrospect, I believe this test phase was very important—less for the public, I think, and more for clarifying and trying out unresolved internal questions within the city administration." (Civic organisation representative)

Energy and retrofit work proceeded through both public and private portfolios. Social housing providers used WieNeu+ to refine low-cost, high-impact optimisation, learning that tuning heating systems must accompany thermal improvements to capture efficiency gains (an insight that catalysed further applied research with academic and funding partners). The same actors of LPHA describe WieNeu+ grants as helpful but modest relative to needs; they therefore rely on portfolio-level planning tools (condition scoring every three years, size/budget balancing, synergy with district heating roll-outs) to prioritise interventions and aim to reduce the overall renovation cycle over time. Network effects were significant: regular multi-actor meetings facilitated knowledge transfer across research, utilities, NGOs, and owners, enabling formats such as "Cooling Zones" to mature and scale citywide from Innerfavoriten's experiments.

> "Affordable housing can, in effect, be achieved by lowering heating costs, but of course, the investments made by a non-profit do not pay back very quickly—or sometimes not at all. That is certainly the biggest obstacle." (Social housing provider)

Private developers engaged selectively with the programme's logics. According to a real-estate consultant, some private real-estate projects have already anticipated the city of Vienna's strategic goals by proactively integrating façade and roof greening, exploring geothermal solutions, and offering to co-develop adjacent public space—positioning themselves as pilots rather than waiting for incentives. Early neighbour agreements and close coordination with the planning department and the district were viewed as pragmatic risk management, and WieNeu+ subsequently drew on these examples as inspiration. At the same time, developer interviewees flagged a structural tension between financing deep retrofits and Vienna's strong rent regulation: loosening constraints to recoup investments could undermine affordability, while maintaining strict caps challenges the business case for rapid decarbonization at scale.

Civic perspectives underscore the selection rationale (high renovation needs, vulnerable groups, and adjacency to areas of rising land value, such as Sonnwendviertel and Hauptbahnhof) and the benefits of the Supergrätzl for everyday life. They also note the contribution of earlier groundwork, such as the GB* "Smartes Inner-Favoriten" area analysis, which informed WieNeu+ planning even as high-level political selection processes remained less visible externally.

Taken together, the history and implementation of projects such as WieNeu+ and Supergrätzl in Innerfavoriten illustrate a calibrated approach: politically anchored but pilot-oriented; cautious about impact attribution yet focused on building a replicable toolkit; and attentive to the interaction between social and technical aims. In general, city officials describe the

programme WieNeu+ as a vital learning ground, on the one hand for testing how strategies can be translated into practice and, on the other hand, for the urban renewal of subsequent areas and the roll-out of decarbonization measures and subsidies. Outcomes to date include method development for managing the existing building stock, citywide diffusion of measures against heat stress and cooling formats, demonstrators in circular renovation and heating optimisation, and a reconfigured public realm and mobility patterns that enhance the quality of local public spaces. The WieNeu+ programme's and Supergrätzl's next steps (expansion to additional districts) depend on budget, sustaining cross-actor networks and aligning portfolio logics with city utilities. When discussing these outlooks, both city officials and social housing providers stress that navigating the affordability–decarbonization trade-off that shapes renovation trajectories in neighbourhoods is a key challenge.

> "In essence—speaking in my own words—we also call WieNeu+ 'future- and climate-ready at the neighbourhood scale.' For me, and I think I've said this elsewhere, it's about connecting the social and the technical. The technical side is climate, climate change, adaptation, circular economy; the social side is quality of life, social inclusion, innovation, and so on. That linkage between the social and the technical has been a core theme of urban renewal in the past. It will certainly be one for the future—bringing social and technical progress together in the existing city." (City official)

2.1.4.2 Governance and participation

Vienna's hierarchical governance model mirrors the implementation of urban renewal programmes and projects in Inner Favoriten. In general, programmes such as WieNeu+ and the Supergrätzl are based on a politically mandated, pilot-driven framework for the city, aligned with strategies such as the *Smart Climate City Strategy Vienna* (2022). Unlike a statutory programme, WieNeu+ rests on City Council decisions and coalition agreements and is being continued into new areas. To counter silo thinking and facilitate cross-departmental collaboration in line with the *Smart Climate City Strategy*, additional units have been created to connect social goals with climate goals across all policies and programmes.

> "This means that we [in our unit] do not set up new projects or our own projects, but we work for others on the topics of social aspects of housing. This means that it is now very much about the transformation of the city, decarbonization, but also the circular economy. (…) And we are the ones who then say, yes, but we have not considered the social aspects of housing, we have not considered affordability, we have to look at the accessibility, what does that mean for the people?" (City official)

In Innerfavoriten governance combined the city-led, top-down coordination (along the *Smart Climate City Strategy* Vienna) of the local district in addition to manifold city administrative departments (MA18, MA19, MA25, etc.), public agencies (wohnfonds_wien, Wiener Wohnen, etc.) with delegated, place-based instruments and external partnerships (GB*, social housing providers, planners). Participation remains closely framed by existing governance structures, as WieNeu+ relies on the GB* as intermediaries that channel residents' inputs into district governance, thereby coordinating between citizens, municipal departments and other actors while leaving strategic priorities and decision-making authority primarily with the city administration. City officials describe stepping beyond their core remit in the WieNeu+ programme to convene planning and participation around key spaces (e.g.,

Quellenplatz/Laxenburger Straße) through surveys, a citizen day, and collaboration with the GB*, while acknowledging the limits to what their department could implement directly. The city also tested a participatory budget instrument, *Grätzlmarie*, which enables residents and initiatives to propose and implement small-scale projects within predefined, city-set programme objectives related to climate action and social cohesion. The *Grätzlmarie* approach was later exported to other WieNeu+ areas.

> “They continued to rely on cooperation with the Gebietsbetreuungen (...) so that the population is more involved in this transformation process.” (Civic organisation representative)

Participation around the Supergrätzl was organised by the city administrative department MA18, together with an external team (Studio LAUT), during the pilot phase, with the Gebietsbetreuung (GB*) acting as a cooperation partner rather than the lead. Civic actors, as well as a city official, emphasise that this design, especially in the pilot/test phase, helped the administration resolve cross-departmental logistics and support neighbourhood acceptance. In relation to the mentioned participatory budget instrument, one civic organisation noted that it is essential to keep participation low-threshold due to the local context, with limited resident capacity to apply for such programmes. This is also why institutions were explicitly allowed to submit projects (e.g., urban gardening furniture for the youth centre). This participatory governance choice was considered essential for equity from the civic side. In other settings, a planner reports recalibrating ambitions during participation when late-night noise or other concerns surfaced, showing that iterative, negotiated outcomes are part of the “governance DNA”.

Administrative coordination across governance levels and ambitions to include citizens in participatory formats brought friction: EFRE/structural-fund accounting was seen as difficult, and city teams faced internal compliance constraints, such as data-protection limits on proactive owner outreach that were later resolved via a new legal basis in the Vienna Climate Act to contact owners for climate-relevant activities. Officials also note that calls and design procurements for public-space projects have recently dropped due to budget pressures, even as climate goals remain on paper. According to one city official, this will lead to more low-cost tactical urbanism projects being implemented for more extended periods before final design.

> "EU money from the Structural Funds – the settlement of the Structural Funds, EFRE – to be honest, it's so tedious and complicated." (City official)

Policy and legal frameworks served both as enablers and constraints. City officials highlight the interplay of EU directives and national renovation roadmaps with local instruments (e.g., positioning WieNeu+ as a measure), and stress how regulatory tweaks are translated into practice (e.g., mandatory adherence to gardening land-use, stricter greening standards in the building code, and the need for combined federal and state subsidies to make “Raus aus Gas” upgrades viable). They also underline that most measures remain voluntary and highly dependent on incentives; when subsidies dip, advisory services (such as wohnfonds_wien) see an immediate slowdown in building owner decisions. On housing regulation, officials describe a fragmented landscape of rent-law applications across units within the same building, the effects of capped indices and temporary rent caps on investment appetite, and an ongoing debate about fixed-term leases and tenure security.

Perspectives of housing providers diverge by tenure and development logic. Private developers point to the complexity of securing consents in both condominium and rental buildings, and to the need for long, predictable policy horizons to inform decisions that take years from awareness to vote, design, and cost-secure approval. They also criticise limited densification potential for constraining viable deep renovations and retrofitting, arguing that tightening requirements for existing-building upgrades without parallel revenue reforms dampens delivery.

"The decision-making process for such a decarbonisation project takes years, and if the framework conditions change, that's (...) quite difficult for communication. There would have to be a long-term foreseeable development." (Private developer)

Social housing providers describe intensive tenant-engagement toolkits (e.g., door-to-door outreach, “house fairs,” on-site advisory offices, themed discussion tables, and dedicated project websites) to secure informed consent for disruptive works, with cost certainty and no net rent increases as decisive for residents to agree to improvement measures. With rents frozen or capped and statutory increase routes constrained, they time projects to funding windows (e.g., previously with 60% federal support) and pause when refinancing is impossible; they also face heritage and building code rules as major cost drivers and note there is still no legal handle to compel decarbonization at scale.

"There were information letters, door-to-door visits, in-house exhibitions, consulting offices ... The main concerns of the tenants were financial: 'If you can guarantee that it won't cost more than it does now, then I'll join.'" (Social housing provider)

Across groups, there is alignment on the centrality of funding and policy stability for implementation, on the value of delegated and low-threshold participation (e.g., Grätzlmarie; institutional eligibility) to reach diverse groups of residents, and on the need for cross-departmental coordination to translate pilot ideas into operating procedures. Participation is seen as key by social housing providers to address gaps in the tenancy-law framework (such as obstacles to actual renovation work in apartments, a tenant's right of appeal hindering comprehensive retrofitting of whole buildings, etc.) and to implement decarbonization and retrofitting measures. Disparities centre on regulatory stringency and feasibility: developers contest rigorous building codes and densification limits; social providers stress rent-law and income constraints; city officials emphasise voluntary uptake and the need for incentives. Civic actors add that future regulation must reconcile decarbonization mandates with tenant rights and a more transparent, more unified tenancy law framework to ensure fairness and enable consent-based implementation. Private developers stress that, apart from the tenancy law, the rigorous building codes and complex regulation system in the Gründerzeit housing stock make it difficult for developers to carry out renovations and retrofit buildings in a financially sustainable and profitable wa The following quote refers to this aspect, especially to heritage and building culture requirements such as the attempts to conserve the historic appearance of the Gründerzeit through restricting too many modifications through attic conversions and roof top extensions.

"And as long as we remain so restrictive ... Cityscape ... 45 degrees ... we don't want more than an attic ... There are more and more requirements for the renovation of existing buildings ... and on the other hand, there is no earnings situation that stands in contrast to this." (Private housing developer)

2.1.4.3 (In)Equity (distributional)

Inequity in Innerfavoriten in relation to the WieNeu+ programme and Supergrätzl is closely linked to the district's socio-demographic profile, characterised by comparatively high shares of low-income households and residents with a migration background, which shapes differentiated exposure to housing insecurity and uneven capacities to benefit from urban upgrading. Against this backdrop, civic institutions and experts are particularly alert to potential tendencies toward displacement or gentrification, as tenure-based inequalities are particularly pronounced in such areas. Tenure structures condition distributive outcomes, as tenants in municipal and limited-profit housing benefit almost exclusively from open-ended tenancies and strong rent regulation, which enhances residential security but may also constrain renovation and decarbonisation measures.

Interviews with local stakeholders provide only tentative assessments of the distributive effects of WieNeu+ and the Supergrätzl intervention, noting that impacts on urban upgrading and displacement remain difficult to capture empirically and largely indeterminate, not least because the Supergrätzl was completed only in late 2025. One planner vaguely addresses the question of whether the Supergrätzl will have negative impacts on particular inhabitants by summarising that there are critical statements in the planning community about possible displacements, without further empirical evidence due to the short time frame for completion.

> "So what that [the improvement of public space] means, we can't say yet. What we noticed: some property developers have already taken on the Supergrätzl, which has significantly improved the quality of life there. And so, there are already critical statements about the fact that this [displacement] may happen." (Planner)

A city official, on the other hand, doubts these suspected tendencies:

> "So I was there, I saw it was well received, everyone was sitting on the benches, but I don't think it will be such a big displacement." (City official)

More broadly, justice and equity concerns are closely intertwined with technical efficiency gaps and institutional responsibilities, as misaligned incentives between landlords, tenants and energy providers contribute to hidden energy inefficiencies. At the same time, civic actors emphasise the need for earlier, more transparent communication on tenant rights and the longer-term rent trajectories associated with subsidised renovation measures.

City officials stress that distributional justice is not only about renovated façades and thermal shells but also about "hidden" energy losses within buildings (poorly tuned heating systems, thermostatic valves, and high flow temperatures), where significant energy is wasted because responsibilities and incentives are misaligned across landlords, tenants, and utilities. They frame this as a "landlord–tenant–energy-provider" dilemma that leaves savings unrealised and costs unevenly borne by owners (in the case of retrofitting costs) and tenants (in the case of energy costs in unrenovated buildings). Additionally, various city officials stress that refraining from installing green infrastructure, public space improvements, and nature-based solutions solely to avoid gentrification would be the wrong approach. Instead, they call for a roll-out of such measures and projects across the city (e.g., not creating isolated areas with NBS or superblocks), combined with stronger tenancy protection and the reversal of fixed-term tenancies (which fall within national jurisdiction).

> “I say that all the people in this city deserve to have a great, open, high-quality public space. Regardless of how poor or how rich they are, or what financial opportunities they have. And I won't let myself be talked into gentrification just because parks are being made, because streets are being redesigned.” (City official)

For civic actors, equity hinges on informed consent and enforceable rights. They argue that proactive, low-threshold rights education is essential, since existing advice services depend on residents initiating contact. During forthcoming renovations, they call for stronger, earlier communication about tenants’ legal protections and obligations, and for clearer links between subsidies and rent trajectories – especially where subsidised rents are fixed for the duration of support but may rise afterwards unless contractual clauses hold. By contrast, older residents with open-ended tenancy contracts are substantially better protected from displacement and rent increases, producing a form of generational inequity. Civic voices also underline that the disparities in the tenancy-law landscape (split regimes and short fixed terms) exacerbate displacement risks and bargaining asymmetries, and that any decarbonization mandate must be matched with protections, relocation logistics, and a more unified legal framework.

> “A very important aspect ... would be to explain the existing rights more assertively ... and to communicate earlier and more clearly in the case of upcoming renovations what the rights are in the first place.” (Civic organisation representative)

Private developers highlight distributive issues in condominium ownership (WEG): equity and feasibility hinge on whether all co-owners can bear the costs. Financing constraints escalate for older or economically vulnerable owners who cannot secure loans, making unanimity difficult and potentially blocking collective upgrades. They question the fairness of proceeding when one owner would be overburdened, noting that courts often side against measures that impose unsustainable debt, thereby stalling urgently needed works. This raises a justice challenge, depending on who pays, and how rules can avoid penalising the least able while still enabling renovation.

> “And of course, I have to try to achieve unanimity [in condominiums]. And if I completely overwhelm a person, it doesn't matter whether he is older or whether he is disadvantaged in some other way; he cannot afford it: do we as a society then have the right to take away his apartment or to guarantee huge debts that he cannot afford? In court, this will usually probably have a negative outcome. But then you can't go on. That's a bit of a problem. Who bears the costs?" (Private Housing developer)

Social housing providers foreground affordability safeguards in implementation. They report that even small operating-cost increases can face resistance or legal challenge, as tenants worry about cumulative burdens (e.g., maintenance and inspections for shared amenities being passed to service charges). Providers, therefore, proceed cautiously and justify any cost impacts. Where disruptive works or affordability concerns arise, offer replacement apartments and negotiate through the “Schlichtungsstelle”, a conciliation board for applications by housing providers seeking to increase maintenance costs. They underscore that equity means minimising net rent increases, aligning the timing with subsidies, and ensuring tenants are supported throughout the renovation process.

"We have to be very careful with an increase. (…) The maintenance is reflected in the operating costs. In the case of measures that increase operating costs (for example, a drinking fountain in the courtyard) some tenant will probably protest against it, even if the costs increase only slightly." (Social Housing provider)

Across groups, alignments include the need for stronger information and participation to uphold rights and secure consent; the centrality of subsidies and predictable rules to protect affordability; and mechanisms that avoid pushing costs onto those least able to pay. Disparities emerge over who should bear upgrade costs and how far collective decisions can override individual constraints: developers emphasise the fairness of not proceeding when owners cannot afford the work; civic actors emphasise tenant protections and post-subsidy rent clarity; officials stress systemic inefficiencies and the misalignment of incentives across actors. All agree that justice in decarbonization requires coupling technical upgrades with legal safeguards, funding, and tailored support for vulnerable residents.

2.1.4.4 Political mobilisation

Political mobilisation in Innerfavoriten appears limited and pragmatic, with city officials reporting comparatively weak organised civil society compared to other districts and minimal protest around WieNeu+ and the Supergrätzl. An exception was a small, demand-side action by nearby students from the local school, who called for the Supergrätzl traffic-calming and redesign to be extended to their street.

From the private-development perspective, in general, mobilisation increasingly takes a media-led, affective form. Developers describe campaigns and protests framed by personal perceptions of nuisance or loss (noise, construction, alleged heritage harms), often amplified by negative messaging rather than legal arguments. They note that small groups coalesce, with only a few persisting to invest time, and suggest a gap between emotional claims and what is legally actionable.

"People are basically just trying to get into the media, simply to create a bad atmosphere, to spread negative slogans, then to organise protests and so on, which of course can be justified. When something new is created and there's noise right outside your door, you obviously don't want that at first, and initially you only see the downsides, and that's becoming more and more prevalent. […] So I believe it's being pushed outward a bit more, no longer focused on genuinely legally grounded aspects as it used to be, but rather on personal feelings and personal opinions." (Real-estate developer)

Across these views, alignment lies in observing that mobilisation in Innerfavoriten is initiated, if happening, by very small groups or individuals and remains modest in scale. Disparities concern its character and trajectory: city officials see little organised resistance (e.g., against noise in front of ground-floor apartments due to new urban furniture on sidewalks in the Supergrätzl) and even supportive demands for the extension of benefits (e.g., students demanding the extension of the Supergrätzl towards their school). At the same time, developers emphasise a broader trend of media-driven opposition and emotion-centred narratives around urban change.

See 3.2 for more specific insights into political mobilisation, as this topic in Austria is closely connected to governance structures and participation.

2.1.4.5 Socio-ecological impacts/benefits (positive)

City officials frame the socio-ecological benefits of Innerfavoriten in terms of adaptive reuse, affordability, and child-friendly public space. The administration highlights activating city-owned vacancies (e.g., a long-empty MA34 building now leased to associations and cultural initiatives) as a low-cost way to strengthen social infrastructure. Officials argue that sustained maintenance and renovation are socially and economically preferable to wholesale rebuilding, supporting long-term affordability alongside ecological gains. Planners note early but tangible effects from the Supergrätzl: tree planting and cooling formats, improved stayability, and safer streets where children can play, with parks and youth facilities acting as key anchors. They report no evident immediate negative effects, while acknowledging that impacts will materialise over time. Officials also point to “cooling zones” as a pilot-to-policy format that scaled citywide and to upgrades that benefit long-term tenants reverting to their rent category.

"I think we have tried a lot of things, which usually come anyway - more greenery, more quality of stay, more play opportunities. I think the biggest plus point is simply that the children can run outside, and there is no car or whatever, no truck whizzing by." (Planner)

Civic actors describe the changes as largely well-received, even if not yet empirically studied. Within the Supergrätzl, they underscore Erlacher Park’s heavy use and see value in added seating and a pedestrianised core that distributes pressure and enhances everyday use. More broadly, they link neighbourhood greening and building-side improvements to microclimatic cooling and residential comfort, especially where air-conditioning is impractical, anticipating that these co-benefits will grow in importance.

Private developers emphasise local co-benefits from ground-floor programming and tenure choices (e.g., a curated retail/food concept and keeping units in rental tenure rather than converting to ownership), seen as socially beneficial and supportive of an urban mix of infrastructure. On upgrades, they report acceptance of decarbonization and thermal renovation among younger owner-occupiers, willing to back long-horizon investments.

Social housing providers focus on direct tenant gains. Thermal renovations and heating optimisation reduce bills, sometimes yielding refunds after monitoring adjusts heating curves; decarbonization is framed as a service to tenants and the environment without rent increases. Common-area photovoltaics reduce operating costs in proportion, and clear communication of post-renovation savings supports acceptance. Providers associate comprehensive upgrades with improved maintenance levels, better living quality, and lower tenant turnover—an equity benefit as well as a socio-ecological one; even modest per-square-meter contributions can deliver noticeable improvements.

"Whether heating retrofitting or not, what I always do now is a heating optimisation, […] I make sure that I get monitoring and see if the heating curves fit, if they are adapted to the new climatic conditions anyway. […] This the tenants only notice once they suddenly get the bill back with a lot of credits, because we have these savings effects.” (Social housing provider)

Across groups, alignments include substantial perceived gains in public-realm quality, cooling and greening benefits, affordability co-benefits from maintaining rather than rebuilding, and wide acceptance of thermal/decarbonization measures—especially when operational savings are transparent. Disparities are modest and relate mainly to timing and measurability: officials and civic actors note that benefits and potential displacement effects are hard to quantify early

on; social providers stress that financial returns accrue to tenants rather than to the provider, requiring subsidy alignment to sustain delivery.

> "We have to put money into maintenance again and again, but in the long term, it will be cheaper than if we had to build all this from scratch. And this strengthens the economic, social aspect of affordable housing in addition to the ecological aspect, which is always very important. I think there is hope behind all that." (City official)

2.1.4.6 Socio-ecological impacts/harms (negative)

Negative social impacts in the Innerfavoriten area centre on affordability risks, uneven burdens during retrofits, and the catalytic effects of public space improvements. City officials acknowledge that urban upgrading can interact with pricing dynamics, noting that significant investments (U2 extension, Neues Landgut, Supergrätzl) contribute to long-term area valorisation, even if trends predate current initiatives. They also raise a justice debate about whether all substandard housing should be eliminated, given demand for very low-cost, substandard private rental units among residents with limited means. At the same time, the tenancy law protects long-term tenants from rent hikes, and accessibility for newcomers often declines as rents rise in the refurbished stock.

> “It can, of course—take the Neues Landgut development area, which is already basically completed—be a factor of upgrading, and the Supergrätzl could also become something like that. The U2 will have a station there; the metro is being extended. All these issues are potential factors for change and transformation, for the upgrading of this area. That the area is experiencing a certain upgrading is for sure—but this has been underway for decades already.” (City official)

Civic actors report early signs of commercialisation pressures around new buildings and high-end ground-floor uses, amplifying local perceptions of upgrading (e.g., Gudrunstraße case). Tenant support organisations highlight cost pass-throughs from greening (mainly maintenance and increased irrigation of green facades), which tenants, particularly in large estates, may bear. In the private housing market, they observe tactics to displace incumbent tenants to enable conversion to ownership, often unrelated to decarbonization goals, and a broader trend of higher re-letting rents after subsidy periods end or amenities are added. While the local setting and Vienna’s legal framework temper immediate displacement, civic services still encounter cases that require legal support and relocation negotiations to prevent forced displacement.

> “We try to prevent it [displacement]. If people come to us, there are various options, up to and including legal representation covered by a fund. Not every old building is worth preserving, and there have been cases (e.g., in the 14th district) where, after a lot of pressure, an agreement was reached so that tenants were given apartments in the new building.” (Tentant support organisation)

Social housing providers flag affordability tensions in implementation. Even when aiming to provide low-cost housing, maintenance and improvement contributions (Erhaltungs- und Verbesserungsbeitrag, EVB) increase procedures (§ 18 procedures), and centralising heat supply can raise individual bills; in some situations, switching energy carriers in already thermally upgraded buildings can increase costs, undermining tenant acceptance. They note

that cumulative burdens (from service charges to more maintenance-intensive measures) can push some tenants to consider moving, especially if rent increases exceed income levels.

Private developers cite construction-related disruptions as a negative effect, disproportionately affecting older residents who fear noise, dust, and intrusive work in their homes. They also acknowledge a gentrification risk intrinsic to investment logic: targeting neighbourhoods "on the rise" can accelerate valorisation and future price setting, with experimental or innovative projects justified by expected resale or rent gains.

Across all actors, there is recognition that upgrading can increase costs for some residents (through rent revaluation and operating charges) and that vulnerable tenants require safeguards and alternatives. Disparities centre on causality and thresholds: city officials emphasise long-term trends and legal protections; civic actors stress tactical displacement and cost pass-throughs; social providers highlight specific mechanisms (EVB, energy switches) that raise bills; developers foreground disruption burdens while conceding investment-led valorisation. Overall, negative impacts remain plausible but uneven, contingent on tenure, subsidy timing, and implementation choices, with mitigation hinging on strong tenant protections, careful cost management and transparent communication.

2.1.4.7 Tensions and power dynamics between stakeholders/actors

Tensions in Innerfavoriten revolve around regulatory and competency barriers that fragment responsibility, as well as the city administration's potential to influence the use of retrofitting subsidies. City officials describe how cross-departmental planning (e.g., Quellenplatz/Laxenburger Straße) advanced through participation but stalled at implementation due to jurisdictional limits and political decisions outside the city administration department MA25's remit. Proactive owner outreach was long constrained by data-use rules, prompting the city to anchor contact rights for climate-relevant activities in the Vienna Climate Law to enable coordinated engagement. Even with such tools, the legal framework keeps most measures voluntary, while procurement thresholds allow owners to bypass competitive processes for contracts under €400,000, undermining leverage for comprehensive solutions. In condominiums, unanimity requirements for heating switches make upgrades in substandard buildings especially hard to realise. Private developers sometimes negotiate upzoning and redevelopment, then proceed to offer private-market housing units rather than subsidised, rent-capped units, while the city laments lost opportunities to anchor affordability. This visualises the power dynamics between private developers and the limited capacity of public institutions to enforce affordability requirements through subsidies. More broadly, rent regulation and substandard conditions collide: keeping units cheap but poor-quality is untenable, yet upgrading risks rent pressure for newcomers.

> "Regarding this new-build project, I don't recall the name, at the beginning we put a lot of effort into it. It's a whole perimeter-block development, definitely a densification project. It involved demolition and new construction, and it was upzoned in advance. Was this part of WieNeu+? It was already in the planning phase and then with the project we also worked hard on zoning matters – the board was very keen to see it happen – it did become a project, but in the end it was carried out as a privately financed development. That was a great pity for us." (City official)

Private developers articulate their own contradictions: they seek leeway from strict rent regulation to recoup higher-standard renovations while acknowledging this can fuel gentrification dynamics. They see cost structures making retrofitting viable only with heavy public subsidies and long financing horizons, and recognise the broader investment logic of targeting districts with upward trajectories (accelerated by transit expansions such as the U5 subway line) while expressing concern about balancing climate imperatives with affordability.

Civic organisations, on the other hand, push for stronger mandates and protections to overcome fragmented ownership. They argue that subsidies alone are insufficient and call for legal bans on new gas boilers, rules to enforce decarbonization against minority vetoes in condominiums, and safeguards to prevent investment costs from being passed onto tenants. They also highlight the ongoing risk that upgrading (retrofits) raises rents, even if operating costs may fall; object subsidies (brick-and-mortar subsidies) are meant to damp costs but leave open distributional questions.

> "This fragmented ownership structure makes renovations impossible in many cases. You need much stricter legal requirements—for example, in five years, no new gas boilers should be installed; it simply shouldn't be allowed anymore. And trying to do it through subsidies and incentives isn't sufficient. We need clear legal mandates, and investment costs mustn't be passed on to tenants; owners should pay, potentially with subsidies." (Civic organisation)

Power dynamics coalesce around who decides, who pays, and who benefits. Officials confront legal and competency constraints and incentive misalignments across landlords, tenants, and utilities; civic actors press for mandates and tenant protections against cost pass-throughs; developers push for economic viability versus rent controls. Contradictions were described as sharpest where climate targets meet affordability duties (LPHA, social housing providers) and where voluntary decarbonization rules meet fragmented ownership (private developers). Mitigation hinges on more explicit mandates, coordinated competencies, data-driven asset planning, and funding designs that reward building-services efficiency while protecting low-income tenants.

2.1.4.8 Innovative governance mechanisms

Innovative governance in Innerfavoriten couples social and technical agendas under WieNeu+: climate adaptation, decarbonization, and circularity are linked with neighbourhood quality, inclusion, and pilots. This is operationalised through area-specific, participatory grants (Grätzlförderung, Grätzlmarie) and three pillars (build future, foster neighbourhood, foster innovation) that aim to upgrade the existing stock while testing formats at the district scale. Officials also frame careful, context-sensitive densification as a financing lever without broad upzoning in protection zones.

> "We see WieNeu+ as connecting the social with the technical – climate adaptation, decarbonization, circular economy on the one side, and quality of life, social inclusion, and innovation on the other. In Innerfavoriten we set up two area-specific grants (Grätzlförderung and Grätzlmarie) tested there for the first time, and we work under three programme goals: build future, foster neighbourhood, and foster innovation, so we can upgrade the existing city while deliberately trying out pilot measures. Densification in the existing stock can help make projects financeable, but possibilities are limited; we designate protection zones and do not simply open the door to broad upzoning." (City official)

Housing-security instruments underpin affordability within this innovation push. LPHA stress cost-covering rents under the Limited-profit Housing Act; increases occur only via voluntary agreements or maintenance contribution procedures, not general cost pass-throughs. In the private-regulated segment, rules such as capped rents for historical buildings, §63 WWSFG for subsidised attic extensions, and clauses reverting rents after 20 years temper long-run rent drift. Civic actors note that innovative emergency support programmes against evictions due to rent arrears or energy poverty, like the Wohnschirm, can act quickly but face demand and constraints.

> "In the limited-profit sector, we operate under the principle of cost coverage: we may only charge rents that reflect actual costs, and we can raise rents only when those costs are proven in advance. We're a limited-profit – so with rents we cannot earn anything – and that's a key pillar of social sustainability." (Social housing provider)

Technical and territorial mechanisms prioritise system-level solutions. City officials point to local energy networks that go beyond single-building solutions, district heating, greywater reuse, and a clear greening hierarchy: first trees, then large, ground-connected green, then façades/roofs. Social providers are standardising asset planning using energy certificates and building-condition audits; they push for central district heat supply for operational simplicity and tenant benefits, and deploy photovoltaics on flat roofs. Private developers advocate de-sealing, trees, and "sponge city" rainwater strategies, urging a more substantial cost–benefit focus in city planning.

2.1.4.9 Tourism and market pressures

Market pressures in Innerfavoriten are shaped by profit-maximizing redevelopment and short-term rentals. City officials note that many project companies avoid comprehensive, rent-regulated deep renovations, instead cherry-picking subsidizable items in complete refurbishments, which limits the city's ability to regulate rents through requirements linked to subsidies. Landlords facilitating short-term rentals are often distant or corporate, weakening ties to the neighbourhood.

Civic actors emphasise speculative dynamics: low historical purchase prices, coupled with profitable condominium conversion and resale, produced high expected returns across the entire 10th district, drawing investor activity and generating so-called "problem houses." The erosion of low-rise commercial or manufacturing buildings and their replacement with expensive ownership units pushes rents upward, and public-space upgrades risk primarily benefiting owners over tenants. A high share of short-term rentals (STR) persists because the district lacks designated Wohnzonen (areas where short-term rental is prohibited); this both reduces available housing and facilitates illegal overcharging, especially for newcomers and first-time renters unfamiliar with rights. STRs also appear in new builds.

> "In the 10th district, investor speculation has been strong: a Chamber of Labour study showed the highest return expectations here, because Gründerzeit houses could be bought cheaply, split into condos, renovated, and resold at high prices (…) We also have a high share of short-term rentals because there are no designated Wohnzonen here; that reduces available housing and enables illegal overcharging, especially for first-time renters who don't know their rights. And short-term rentals are increasingly an issue in new builds as well." (Civic organisation)

Private developers acknowledge gentrification risks while pursuing areas with "upward trajectories," accelerated by rail and subway connectivity. Strategies include holding vacant properties for future projects and scaling attic extensions already permitted, betting on higher resale values in a rising market.

> "Principally, as property developers, we go into neighbourhoods where we see the most potential and future potential. Values rise step by step, and we have to watch out not to gentrify – so we don't end up creating housing that's suddenly too expensive, everything hip and green, and we lose the affordable stock. The area is very well connected with the main station and soon the subway at Matzleinsdorfer Platz; that accelerates things, and it's a place where people consciously try things out because they already see the upward trend and can spend more on pilot projects – simply because they can sell later at a higher price." (Private Housing developer, I8b)

All in all, perceptions converge on intensified investor-led upgrading, rent pressure, and housing scarcity due to STRs. Tensions lie between public aims to secure affordability and investor strategies to maximise returns, with civic voices warning that public realm improvements and regulatory gaps (e.g., the lack of *Wohnzonen*) can amplify displacement risks.

2.1.4.10 Gaps in perceptions between civic groups and public agencies

In general, the interviews did not reveal explicit gaps in perception among civic organisations, public agencies, and public or social housing providers. Instead, differences emerged in the degree to which specific trends were perceived and in how proposed measures were evaluated. Civic actors call for strong legal bans (e.g., on particular heating systems), tighter controls on cost pass-throughs, and decisive action against financialised ownership and short-term rentals. They argue that voluntary coordination is insufficient and that upgrades to public space risk privileging owners over tenants. Public agencies, by contrast, emphasise soft-law tools—manuals and strategies—implemented collaboratively across departments within limited mandates. They leverage evidence-based greening and area programs but acknowledge a "jungle of subsidies" and a dependence on voluntary cooperation that cannot be imposed top-down. Social housing providers value this collaborative, networked governance (e.g., WieNeu+ jour fixes) but operate under cost-covering rent rules that constrain rapid innovation, diverging from civic expectations for swift, mandated change. Private developers highlight regulatory frictions (e.g., strict fire-safety requirements, attic expansion obligations) and the need for economic viability, which contrasts with civic demands for affordability-first enforcement.

Especially around perceptions of gentrification, the perceptions between city officials and civic organisations do not reveal gaps but instead focus on the degree to which tendencies of displacement are already in force – in general, assumptions have been phrased with only caution on this issue. City officials speak cautiously about displacement, framing upgrading as a long-running trend accelerated by major infrastructure projects and constrained/delayed by legal tenant protections, while acknowledging regulatory gaps, missing long-term monitoring procedures on housing market dynamics around projects such as Supergätzl and limited leverage over the national tenancy law. Civic organisations, by contrast, describe (to different degrees) active displacement pressures: speculative condo conversions, investor-led "problem houses," high STR shares enabled by the absence of Wohnzonen, illegal

overcharging of newcomers, and public-space upgrades that risk privileging owners. Developers admit gentrification risks yet target "upward trajectories," banking on higher resale values and expanding permitted attics, and social providers flag affordability strains (EVB, cost pass-throughs) that can push tenants to move. Thus, divergence centres on timing and intensity—city officials see gradual, structural valorisation; some civic actors see immediate, tactical displacement already underway.

2.1.5 Perceptions of Green Initiatives in Case Study Areas: Nordbahnviertel

2.1.5.1 Precedents and implementation

City officials and planners consistently frame the Nordbahnviertel as a long-arc urban transformation that began with a 1994 Urban Design Concept (städtebauliches Leitbild). Due to changed circumstances, e.g., railway tracks no longer needed and experiences with large central parks in other development areas, the City of Vienna, together with Austrian Federal Railways (ÖBB) as the land owner, launched an EU-wide, two-stage ideas competition in 2011.

"We had an urban design concept from 1994; it was very ambitious. But various framework conditions changed: the main train line was narrowed, creating space for new building plots, and ÖBB abandoned a track that had complicated the urban structure. The City of Vienna also shifted its educational facilities toward the campus model." (City Official).

City officials stress that only one submitted project proposed a large central park configuration, which concentrated density at the edges and preserved a generous ruderal core as the "Open Centre" (Freie Mitte). The concept by StudioVlayStreeruwitz replaced a continuation of perimeter-block extension with the now-fundamental "dense edges—free middle" model[10]. This reframing is central to how city officials explain the current form: the selected design consolidated built mass, including high-rises, along the perimeter, thereby freeing the central ruderal area as a 'rather wild' park landscape (Freie Mitte)[11], while still upholding the magnitude of residential and commercial areas embedded in the early Urban Design Concept. City officials and planners also emphasise why the two-stage competition format mattered institutionally. A two-stage process was chosen to ensure breadth and conceptual depth while protecting competitors from self-exhaustion in an initial screening round and allowing promising but under-elaborated concepts to mature in the second round.

"I think only one other competition project also had a generous green space. But essentially, the submissions focused on some small, compact urban park in the central area. But Vlay's

[10] https://www.vlst.at/en/prj/freie-mitte-vielseitiger-rand-2/#39
[11] Ruderal landscapes are brownfield sites that have been left untouched for a long period of time (usually several years). Vegetation develops dynamically in these areas.

concept was the only one that, in this radical way, densified the edge areas to free up the centre" (Landscape Planner)

The further development of the 'Urban Concept Idea' into a 'Urban Design Concept' involved not only different administrative units of the City of Vienna, but also explicitly linked to participatory processes, such as neighbourhood cafés and citizen dialogues, between May 2013 and September 2014 (see 4.2 for details and Magistrat der Stadt Wien, 2015a). The Urban Development Committee approved the Urban Design Concept in March 2014. In 2015, the City of Vienna published a 200-page manual on the urban design concept, commissioned and under the lead authorship of StudioVlayStreeruwitz (Magistrat der Stadt Wien, 2015b), giving the project a new title "Freie Mitte – Vielseiter Rand" (Open Centre – Versatile Edge) with the latter also emphasising not only housing, but also commercial uses. The manual summarises the participatory process and the key concept, and details the built infrastructure, mobility, green and open spaces, neighbourhoods, and sustainability.

Civic actors embed the area's development within a broader history of bottom-up engagement and advocacy around the central green, ruderal area. Founded in 2012, members of the 'IG Lebenswerter Nordbahnhof' (Interest group Livable North Station), amongst others, became crucial actors in the subsequent planning process, meeting at organised meetings in the neighbourhood. They recount how the publicly commissioned Urban Renewal Offices (Gebietsbetreuung Stadteurneuerung) convened a regular "Nordbahnvierteltreff," where residents and initiatives could exchange information, assess proposals, and later feed concrete demands and ideas, for example, keeping the "wildness" of the central landscape, into formal participatory processes of the Urban Development Concept. This strand of the narrative must be understood in the context of residents/civic groups using the derelict railway landscape informally, and of their shifting role in actively participating in the co-design of the planning process that enabled the preservation of much of the ruderal character of the central green area. From their perspective, the Free Centre is thus described as a deliberate, plan-based element that was sought after but needed a civic representation to be implemented appropriately and treated as a leftover of development economics.

To develop the built environment at the edges of the case study area, a consortium of housing developers was formed. The consortium consists of insurance companies and limited-profit and commercial housing developers (Vienna Insurance Group (VIG), ÖVW, STRABAG Real Estate, KIBB Immobilien according to Peer and Forlati 2022, p. 78). Rather than the usual practice of selling individual plots of land to individual developers, housing providers report ÖBB's staged building plot sales to a compact consortium. The necessary framework agreements were comprehensive, negotiated among the City of Vienna, ÖBB, and the consortium, and signed in 2016. The contract between ÖBB and a property development consortium was signed, which stipulated that the consortium would develop and gradually acquire land from ÖBB.

"And one thing that is very important for ÖBB is to have a single point of contact, to know when money will flow, and the model that slices everything up in advance and then sells individual building plots creates a great deal of work. So at Nordbahnhof, they thought: no, we'll do it differently; we want to have a consortium across the table with whom we can develop this together." (Housing developer)

2.1.5.2 Participation and governance (procedural)

City officials and planners describe a multi-stage participatory architecture woven into design governance as a key element. Before the EU-wide ideas competition, two public consultations physically presented evolving plans and attached local priorities, mainly preserving trees, youth and sport amenities, local accessibility and mobility, to the competition brief. The extensive, city-led participation process followed in 2013/14 culminated in a formal urban design concept and, subsequently, a detailed handbook that planners still use as an operational reference, alongside the Quality Assurance Board that developed the building plot.

The participatory format of the one-year-long consultancy itself mattered: planners recall large "topic-table" sessions for around 100 people, co-hosted by technical experts and resident representatives, with rotations so everyone could weigh in on each topic, plus smaller continuity groups selected by a lottery that met every two weeks. These formats helped move from general preferences to concrete planning discussions without having to restart at each meeting, because participants learned how the administration "ticks" and what was feasible to modify.

> "And we worked on different topics, in different groupings, with different representatives of the population, and contrary to the original assumption, at least mine, we received primarily positive feedback on this draft by Studio Vlay." (City official)

Civic actors similarly emphasise the neighbourhood-oriented, continuity and low-threshold channels that run in parallel to episodic, strategic processes. The mixed composition, with fixed stakeholders and lottery-selected residents, worked together over a year and was perceived as particularly valuable.

> "Twelve people per focus group … a mixed group with different approaches … it worked well. [..] " (Civic initiative representative)

Hence, civic actors echo planners' perception that participation strengthened legitimacy rather than fundamentally altering the core concept. Over time, the civic initiatives organised information events during the participatory process themselves, while after the approval of the urban development concept, a neighbourhood management team, financed by the consortia, organised a monthly meeting for locals, which became the 'everyday door' for issues ranging from dog zones and benches to rail noise. This sustained engagement during the construction and occupation phases.

The building consortium model, which organised architectural competitions and, after 2017, the assessment and installation of a quality assurance board for each building lot, is framed by city officials as a key governance feature to ensure the qualities defined earlier and to channel results into building plans. The cooperation agreement between the City and ÖBB demanded quality assurance: an interdisciplinary advisory board with representatives from politics and administration (MA 21, MA 19), master planners, external experts (architecture, open space, social sustainability, housing), consortium developers, and resident delegates via IG Lebenswerter Nordbahnhof reviewed projects against an agreed catalogue (Peer and Forlati 2022, p. 58). Housing providers emphasise that the "urban design concept–manual–quality assurance board" triad provided continuity and parcel-by-parcel alignment, reducing fragmentation across multiple architects and developers, and was complemented by site-level walk-throughs to verify delivery and enable learning for future projects.

From the providers' perspective, the consortium reduced transaction costs and enabled coherent phasing with the City and ÖBB. A framework agreement (similar to what later became institutionalised as urban development contracts (städtebaulicher Vertrag) fixed key qualities: shares of affordable and subsidised housing; and ground-floor uses and mix, which then informed joint architectural competitions for mixed-tenure plots. The Quality Assurance Board is described not just as a review gate, but as a collaborative forum where solutions, e.g. for the alignment of ground-floor uses, for the coordination of greening so that tree/shrub bands, rain gardens, and green margins that align across parcels reads as one continuous landscape, or the development of play areas could be sharpened with multi-actor input, reducing fragmentation and enabling 'one district' standards across multiple developers and architects.

> "We coordinated the competition in advance … we jointly juried the competition with the private (market-rate) partner. … We also paired different architectural teams and said: This part is good from you, that part is good from you. Now, in the second round, develop a joint concept that somehow incorporates these qualities." (Housing developer)

A central governance challenge concerned the Freie Mitte. Civic organisations and the participatory process explicitly demanded 'greenness' in the form of preserving the wild, ruderal character, keeping existing trees, protecting species, while providing amenities for young people, sports and dogs. Planners noted that the extensive workshops and smaller neighbourhood meetings confirmed these priorities and fed them into briefs and designs (I2a). Initially, the ecological case for wilder urban green spaces, tied to species protection and ruderal habitats, was contested. The administrative unit usually responsible for park management remained sceptical about how to maintain those areas, as the concept goes beyond conventional park templates and includes elements of nature protection. However, as reported by planners and civic representatives, acceptance shifted after administrative benchmarking with other cities (e.g. Berlin's Gleisdreieck). Based on this, the administration adopted a new zoning category that allows for dual use (park and nature protection), formal nature protection filings for protected species, ecological site supervision and multi-year monitoring. The broader implication of these claims is that the Nordbahnviertel's participatory governance is as much about internal, cross-department and cross-developer alignment as it is about participatory tools.

> "This zoning category was newly created … to bring the secondary use from nature protection into the designation." (Landscape Planner)

While civic interviewees assess the participatory process during the establishment of the urban design concept as broadly effective and legitimating, they judge the participation once residents moved in and everyday issues surfaced as falling short. After the occupation, persistent concerns, most notably regarding excessive train noise well beyond everyday levels, were, in their view, not adequately addressed in subsequent decisions. This fuels frustration and reinforces their insistence on low-threshold channels to distinguish one-off disputes from systemic issues and to keep engagement alive in everyday use.

> "Participation was great—until the very end; now facts are created, and no one can have a say." (Civic initiative representative).

2.1.5.3 (In)equity (distributional)

City officials, planners and housing developers describe distributional equity as incorporated into the project's design through a combination of subsidised, affordable, price-capped (*preiswert*) and freely financed segments, anchored in a framework agreement that contractually sets tenure shares and quality targets. Interviewees emphasised that the protected segments together constitute the majority of units, with market-rate limited to one third, and that these commitments were translated into parcel-level decisions via the quality assurance board and the development manual. Price-capping in the "affordable" category is presented as a negotiated, time-bound stabiliser (20-year, indexed cap) that emulates dampening effects without direct public subsidy, with a permitted surcharge of 2€ for high-rise buildings to reflect construction and operating costs. Furthermore, when the affordable category expires after 20 years, it can only be applied to new contracts, leaving existing contracts untouched. Furthermore, rental contracts under this scheme are unlimited in duration. In most cases, this housing was delivered by limited-profit housing associations (LPHAs). City officials also stress the avoidance of park-front exclusivity and the embedding of subsidised or price-capped projects along green edges, so access to amenities and environmental quality is not stratified by tenure.

> "It was always intended: two-thirds subsidised or price-capped and one-third market-rate." (Housing providers)

Furthermore, housing providers' understanding of equity operates at the policy, building, and unit scales, offering a diversity of apartment types and locations within the building. They explain the "preiswert" category's 20-year, indexed cap as an instrument to dampen market effects across mixed-tenure plots, noting that an uplift for high-rises (reported as around €2/m²) was allowed to avoid underfunding of tower operations while keeping overall affordability targets intact. Providers add that internal rent distribution based on a utility value (Nutzwert) enables them to spread rent targets across units with different attributes (orientation, floor, exposure), keeping larger family units relatively affordable within a cohesive offer. On subsidised housing, providers point to the City's Smart housing programme's role in reaching lower-income households (see Glossary for details about the programme), often in partnership with local NGOs for allocation and support. They underscore that Smart units are spread across subsidised building plots and building types, including along green edges, to avoid tenure clustering and to secure access to amenities. However, it also reported that, in today's developments, the number of subsidised housing units would be higher and the amount of price-capped rents would be lower because, at the time of development, the "subsidised housing" zoning category, which would have foreseen 50% of units as subsidised, had not yet existed.

> "We already collaborate in the background or during competitions with partners like Neunerhaus or Volkshilfe, reserving certain contingents for them, because they can target exactly these men and women. The goal for the NGOs is: we want a contingent from the Smart quota, because our clients really need every euro." (Limited-profit housing developer)

Despite the framework agreement, providers and city officials also emphasise that joint architectural competitions for mixed-tenure plots were co-juried, and that architectural teams were recombined to integrate the "best parts" into a shared concept for the second round of

their project proposals. Here, the Quality Assurance Board functioned as a collaborative forum to refine solutions for ground-floor alignment, continuous greening across building plots, the provision of playgrounds, reducing fragmentation and enabling equal standards for the whole development. High-rises, initially envisaged in greater numbers, were reduced in later iterations and positioned to balance exposure to benefits (views, proximity to green spaces) and burdens (rail corridor) with affordability.

Civic actors, meanwhile, foreground demand pressures and the lived experience of access. They report exceptionally high competition for subsidised dwellings, with long registrations and consistently narrow selection windows. Access to subsidised homes is not only a function of tenancy rules but of timing and luck. Finally, while acknowledging that towers are not all at the park edge, some civic voices, housing providers and planners perceive spatial symbolism in placing towers financed by private funds near green edges, interpreting this as a sign of capturing the green value, even when other green edges host subsidised or price-capped homes. While other providers and city officials respond that towers also sit near the rail corridor or further south, thus breaking a uniform "first row at green" pattern and widening exposure to both benefits and burdens. Furthermore, they note that the absence of fences on the ground floor and open edges were zoning conditions to ensure permeability with the large open centre. They also note that open-space alignment worked well at several plots, though not uniformly. This underscores the need for robust instruments and ongoing coordination to sustain equity in access to and environmental quality of green space beyond initial planning.

„The outcomes of the quality assurance boards show that coordination of open space worked very well on some plots, but did not work at all on another." (Landscape Planner)

2.1.5.4 Political mobilisation

City officials and planners depict mobilisation as supportive of the "Open Centre" and less oppositional than in many comparable inner-city transformations, emphasising how acceptance was consolidated through iterative engagement. However, planners and civic initiatives describe one significant momentum of political mobilisation: the reframing of the wild, ruderal area as a positive public asset after initial scepticism by the City of Vienna.

"Subsequently, there were talks with politicians; we went door-to-door to politicians, we went to the district, and to the director of the City Gardens, and said: this can work, it's not actually a risk, because if you look at Berlin, there's the Gleisdreieck, and it works!" (Landscape Planner)

From the perspective of the planners and the civic initiative, mobilisation is narrated as a broad effort to persuade, explain, and translate an initially unconventional open-space model into a universally accepted public space in the centre of the district, a role later reinforced by formal boards and handbooks.

Following that, housing providers describe political mobilisation primarily through the lens of governance and delivery. They recall early neighbourhood resistance, especially from informal green users, and highlight how structured instruments (competitions, the quality board, and parcel-spanning design appointments) channelled disputes toward negotiated solutions rather than anti-development stand-offs. The justification for the Open Centre and the dense perimeter is presented as a long-run public good, supporting a cohesive fabric with robust

green access, and providers underline that the emergent shared language around this urban model has made it easier to address the granular frictions in interfaces and operations.

Civic actors frame mobilisation as pragmatic and iterative, focusing on upholding the Leitbild's promises rather than opposing densification per se. For them, the central narrative is one of sustaining community input to preserve the wild, ruderal character of the Open Centre and to steer details when effects became visible (e.g., around rail noise).

> "Our interest was that we simply wanted what the City had promised itself in the Urban Development Concept." (Civic Initiative Representative).

At the same time, civic residents also express frustration about late-stage decisions made in specific sub-areas. While not a general critique of the process, these comments highlight instances where the opportunity for input was limited in decision-making, e.g. in railway operational matters. Thus, mobilisation takes the form of both top-down communication and bottom-up watchfulness, focusing on a greening project in which details about solutions and possibilities, rather than fundamental oppositions, have sparked the most enduring discussion.

2.1.5.5 Socio-ecological impacts (positive)

City officials and planners consistently frame the Open Centre as a wild, ruderal space that performs ecologically under intensive use, with ruderal habitats and protections for species such as the European green toad, common lizard, and red-backed shrike. They describe a governance setup for filings, ecological oversight, and monitoring to manage a dynamic balance between nature protection and public recreation. Civic actors support the participatory demand for a wilder character and youth/play functions, while also surfacing operational concerns (e.g., rail noise, maintenance touchpoints) that sit alongside, rather than against, the core concept of wild, open centre. Regarding the delivery and maintenance of the nature-oriented park, city officials argue that the approach is comparatively economical due to low-intervention maintenance and developer-funded play areas, with related operational implications for housing developers. Taken together, most interview accounts depict a park that is both ecologically intentional and heavily used, with broad social support and mostly mundane points of contention.

> "Acceptance is extremely high. Most criticisms concern a broken bench or dogs off-leash." (Planner)

Regarding benefits, housing providers underline microclimate and thermal comfort benefits associated with greening at the building scale. Façade greening and deep-rooted planting systems are linked to notable cooling of adjacent interior spaces during heatwaves, especially behind mature vegetation; providers emphasise survivability and reduced irrigation demand where ground connection is possible on (public) land. As one interviewee noted from direct experience:

> "The microclimate in the planting troughs is sensational in high summer and very pleasant." (Limited-profit housing developer).

Providers also point out that parcel-spanning landscape appointments helped reduce fragmentation at edges, enabling more coherent green interfaces and play-area distribution,

which in turn supported both ecological functions and social use. Civic actors clearly emphasise improvements to everyday liveability. They report heavy use of park corridors for walking and cycling, strong uptake of play facilities, and the activation of ground floors that increase daily presence. In high-rises, co-working and shared rooms signal that dense forms can sustain community life when interior spaces are generous and well-managed. Civic users articulate the park's "wild" texture as a qualitative good in itself, a distinctive complement to other green areas elsewhere in the city and describe the Open Centre's network effects as extending liveability improvements beyond the new build development into adjacent quarters.

2.1.5.6 Socio-ecological impacts (negative)

City officials acknowledge that the Open Centre's landscape quality created a branding effect that improved the marketability of nearby freely financed housing. It is noted that although two-thirds of homes have a price-regulation mechanism via contract, freely financed housing tended to rise in price. Housing providers and civic actors add that macroeconomic shifts, mainly construction cost inflation, interest-rate hikes, and tighter credit rules over the last years, have further raised hurdles, especially for mid-income-oriented market ownership. They connect current access difficulties to credit constraints; some mid-sized ownership units became harder to sell as interest rates jumped from about 1% to 4–4.5%, making these units unaffordable for mid-incomers, while top-end buyers remained less constrained. In turn, civic actors and housing providers report that this is fuelling demand in the private rental market, and residents also report high rent levels in market products (e.g., €2,000/month for 87 m²). Against this background, civic voices caution about notions of affordable housing, noting that even with price-capping, the absolute levels remain a crucial affordability barrier for many households, pushing them into smaller units or toward price-capped products whose caps may still feel high.

> "You always have to be careful when saying 'affordable.' At the moment, nothing is affordable, so to speak." (Resident)

In terms of building-related greening, housing providers point to operational costs and locational burdens that affect perceptions of quality and affordability. They point out that increased operating costs due to planting containers and irrigation must be communicated transparently as potentially increasing operating costs, especially in subsidised housing, where expectations and cost structures are of significant importance. Housing providers also stress that towers near the rail corridor are inherently disadvantaged on upper floors acoustically, an issue of location rather than greening, which complicates a uniform sense of quality across high-rise products. However, it should also be noted that, across interviewees, such granular burdens do not negate the overall acceptance of the Open Centre or the neighbourhood's liveability. Still, they help explain why household-level experiences diverge.

From various perspectives, green and amenity-led upgrading is considered one of several factors driving area change. While city officials and planners acknowledge that the Open Centre's branding boosted market prices in the privately financed segment, they also point to structural drivers, such as fixed-term tenancy contracts (*befristete Mieten*), which they describe as driving gentrification in nearby areas. Civic actors and housing providers also refer to broader transformations (such as new metro stations and a new university campus) that predate and amplify the effects of the new-build developments. Housing providers have

observed price increases in neighbouring streets due to infill and attic extensions, and have noted high prices for local attics in the local area. Providers also report that early-phase prices roughly doubled by later phases for some products due to increased construction costs, with civic actors describing tranche-based price adjustments within the same projects.

> "The big driver is fixed-term leases ... And that is the engine of gentrification, because the rents get more expensive each time. [In the Stuwerviertel] there is the advantage that there are still some unlimited main leases … and gentrification proceeds slowly as a result. In the Volkert- and Alliiertenviertel, it is a bit more dynamic, since the new construction started next door." (Planner)

The most persistent everyday burden is rail noise. Residents on upper floors near the corridor report low-frequency transmission even with windows closed, and say they wake up early as services resume. Some even claim that people move out because excessive rail noise is definitely too loud. Providers and city officials agree that the towers closest to the tracks are acoustically disadvantaged, which makes it challenging to maintain a consistent level of quality across high-rise properties. Seasonal access and lighting issues also arise: in early winter, initially, timber path closures were implemented for safety reasons, which constrained movement for strollers and wheelchairs. Users also report tensions with insufficient illumination at the Open Centre for safe use in the darker months, which had to be limited for nature protection reasons.

2.1.5.7 Tensions and power dynamics between stakeholders/actors

For all stakeholders, maintaining the Open Centre as wild and free as possible is a hard-won common good that requires constant defence against attempts to deviate from the original design concept. Planners and civic actors recount episodes in which additional uses or programme changes threatened to encroach on the open core. While some of these pressures were resolved without permanent loss, they demonstrate the ongoing challenges associated with the park's utilisation. City officials and planners also recall institutional friction in the early years relating to the wild character of the Freie Mitte. The Vienna City Gardens unit (MA 42) initially rejected the idea of a wild, ruderal landscape as a park, insisting on more conventional designs. Acceptance only ensued after a benchmarking trip and the creation of a special zoning category and care regime. This demonstrates the need for greater coordination between administrative units, as non-standard landscape models require new institutional capacities and maintenance procedures, such as mowing calibration, amphibian channel management and invasive species control, which typically exceed the scope of standard park operations.

While safeguarding the large, ruderal middle required shifting building density to the edges, city officials and housing providers reported pressure on affordability measures in taller buildings, which have higher per-unit costs and stricter fire and technical standards. City officials/planners describe how high-rises were initially accepted as a logical counterpart to preserving the park, but were later scaled back when it proved challenging to deliver subsidised units within tower typologies. The resulting recalibration relocated subsidised shares to lower blocks and concentrated price-capped or market units in towers. The implication is that the initial allocation of square meters had to be tested against regulatory and cost realities, with the consequence that the 'dense edges' could not mean subsidised

housing units in high-rises. Providers point to the need for persistent, lot-spanning design alignment to maintain edge quality coherence over time, especially given heterogeneous development teams and shifting market conditions. A limited-profit housing provider stated plainly:

> "High-rises are simply another world. Those cost ceilings in subsidised housing cannot be met." (Limited-profit housing developer).

Civic actors, for their part, highlight power asymmetries at the micro-level that challenge the rhetoric of openness. They point to enclosed private gardens along sections of the "Stadtwildnis" and to cases where developer consent acted as a gatekeeper for resident dialogues on building-specific issues, potentially narrowing channels for voice even within an overall collaborative model (I3a; I7a_I8a). An example of the physical manifestation of such asymmetry was reported: "Those private gardens were actually enclosed with a wall." (I3a). Together, these accounts underline that the Nordbahnviertel's governance, while unusually integrated, still confronts frictions at the intersections of institutional definitions, cost ceilings, and everyday symbols of enclosure and access.

City officials describe how leadership changes disrupted continuity, even though the current district leadership remains firmly committed to completing and upholding the agreed-upon qualities. This turnover made process memory and intermediary bodies (e.g. the Quality Assurance Board) more important in maintaining a consistent approach through cycles of changing political leadership. Across interviews, it is acknowledged that civic actors filled the gaps when formal participation tailed off after the initial processes. As they positioned themselves as advisors, idea generators, or networkers, they brokered agreements between departments and developers, pressed for commitments based on the urban development concept and the handbook, identified the right decision-makers, and maintained confidential, trust-based dialogues so sensitive topics wouldn't "blow up" publicly. Their stance was always supportive of the city's stated goals, yet they were insistent on delivery, which helped sustain legitimacy amid political shifts.

> "We talk to everyone, but we don't pass on what we hear to the outside. […] If it doesn't work with one person, where does it work then? Is there a superior? And that's how we worked." (Civic Initiative Representative)

2.1.5.8 Innovative governance mechanisms

Overall, all interviews consistently credit an interlocking toolkit for steering a complex, multi-actor process over many years as innovative. This toolkit comprises a framework agreement with ÖBB, an Urban Design Concept with a detailed handbook, iterative architectural competitions for the building plots and reviews by the Quality Assurance Board. The early, formalised collaboration between the city council and ÖBB is widely regarded as the foundation that established roles and cost responsibilities, as well as a target tenure mix, over an extended delivery period. City officials and planners emphasise that the framework agreement, which was approved by the council, created certainty and momentum at a time when parts of the administration were still cautious. While housing actors broadly agree that this approach was effective, they also highlight areas of opacity and non-binding elements, such as documents that were not published, which could undermine leverage in the future.

While civic voices largely accept the agreement as the backbone of governance, they add that civil society's role was to ensure that both parties remained committed to the promises outlined in the concept.

> “Housing developers showed a strong interest in implementing the concept” (Civic Initiative Representative)

Furthermore, another innovative aspect is that the urban design concept was operationalised through a detailed handbook and a concise quality catalogue. City officials and planners describe these as 'soft law,' translating intent into actionable rules on height, edges, through-routes, and ground-floor use. These rules feed directly into the review and approval process. City officials even characterise the production of the handbook as a research-like effort that raised the level of technical guidance and consistency. Housing practitioners treat these documents as practical tools for guidance and coordination across plots and teams. Civic actors also use the documents to hold the city council and developers accountable for their stated intentions once formal participation structures have concluded. However, designers and civic groups caution that such guidance can become ineffective over time if it is not backed by binding enforcement, as actors learn to satisfy only minimum thresholds. They advocate for stronger, sustained design oversight by the City rather than a multi-stakeholder setting.

> “Yes, the handbook refines the outcomes and develops them further … It is the basis for the well-functioning Quality Assurance Board … with very, very concrete rules and requirements …” (Planner)

Repeated architectural competitions consistently across all building plots are seen as transparent checkpoints that sustain quality while enabling the coordination of very different building types. Stakeholders agree that architectural competitions for towers and developer competitions for subsidised plots provided structured moments to test proposals against the handbook’s rules. Housing actors add that collaborative formats pairing teams to co-produce cross-plot concepts were used to avoid siloed schemes, to internalise area-wide principles, and to prevent minimising greening efforts due to cost constraints on individual plots, as this would have required tremendous coordination. Officials emphasise that competitions worked best when channelled through the qualities defined in the urban development concept manual.

> “At the time, it was relatively new; now it’s almost standard” (City official)

Civic interviewees support the mechanism but underscore the need for robust post-jury follow-through to prevent later value engineering that undermines jury intent. The Quality Assurance Board is consistently portrayed as an innovative forum that has become mainstream and extends oversight beyond building permits into a life-cycle process. City officials credit the Board with making quality transferable across plots and preventing actors from quietly undercutting standards. Housing actors emphasise that repeated reviews have forced alignment among multiple developers and architects regarding façades, sections, ground floors, and community provisions. Civic representatives value their seat on the Board as a channel for accountability and continuity. However, they also caution that the Board must continuously monitor and push for quality, and that these efforts must be paired with enforceable obligations. Otherwise, standards may slowly erode as stakeholders revert to the cheapest or easiest acceptable option.

"Competitions need sustained oversight after the jury to avoid sliding to the smallest common denominator" (Civic Initiative Representative).

2.1.5.9 Tourism and market pressures

Rather than attributing current pressures to tourism, city officials and planners situate them in macroeconomics and financialisation. They note that demand for subsidised and price-capped segments remains high, while stricter credit conditions and higher rates have slowed mid-income-targeted market ownership, leaving some units unsold. Housing providers add the historical context of a boom in free-market housing as an investment vehicle between 2014 and 2019, followed by a regime shift as bank loans tightened, interest rates rose, and commercial partners paused or exited longer developments, while limited-profit housing developers continued development. Civic actors confirm both financialisation and boom-era pricing strategies in the towers, recalling tranched releases with stepwise price increases and investment units, in which many people bought them as investment properties to rent out privately.

"The fat years are over … we're not a high-speed boat like the commercial players, but a steamship … we value continuity." (Limited-profit housing developers)

Housing providers also emphasise the importance of timing. Since the delivery process spans several years, cohort effects mean that earlier, freely financed products (pre-2021 tenders) can end up being cheaper than later, subsidised ones, once construction cost spikes and financing shifts have been factored in (I3a). They also describe tranche-based release strategies employed during the low-rate boom, which pushed asking prices up across successive releases in some towers. To prevent micro-unit dominance in the free-market segment, for instance, the Quality Assurance Board conducted a rigorous review of economic and typological factors to maintain a balanced overall mix. Housing providers also state that shocks were managed through cooperative adjustments with the City and general contractors in 2022.

"Earlier freely financed products can be cheaper than later subsidised ones. Phases after 2021 faced steeper construction costs." (Limited-profit housing developer).

Civic actors highlight rent issues and how households cope with them. They highlight the difference in cost between freely-financed rental units, which cost around €17–€20 per m², and subsidised or price-capped units, which cost around €10 per m². They also observe that many households rent smaller properties to stay within their budgets. Across these accounts, therefore, amenities and the Open Centre provide a 'brand uplift', but interviewees consistently attribute the most significant changes to macroeconomic shifts in interest rates, credit and construction costs.

2.1.5.10 Gaps in perceptions between civic groups and public agencies

A central perception gap emerges regarding participatory processes. City officials describe a consistent approach to participation, starting with the Urban Design Concept, competitions, and the Quality Assurance Board. They present this as evidence that early participation led to tangible results and that these results remained consistent over time. However, civic actors credit the initial participatory process but emphasise a subsequent lack of engagement once

the buildings were occupied. They highlight unresolved everyday issues, such as rail noise, winter path closures, and lighting restrictions. Therefore, the gap is less about whether participation occurred and more about whether procedural justice extends to everyday operations.

In contrast, issues surrounding market pressures, investor presence and the 'green edge' largely reflect a consensus rather than disagreement: most stakeholders accept that macroeconomics and financialisation, rather than tourism, drove boom-era pricing and the current mid-market slowdown. They also agree that Vienna's substantially regulated sector mitigates classic green gentrification dynamics. Civic accounts supplement this with specific details (e.g. renting smaller properties and the occasional underuse of certain park-front blocks), which refine rather than contradict the official diagnosis.

2.1.6 Critical Analysis: Vienna

Vienna's green transition in the housing sector is being implemented alongside a long-standing hybrid housing model, in which a large, limited-profit/municipal sector coexists with a sizeable historic, regulated private rental market from the Gründerzeit, which has been exposed to deregulation and market forces over the last few decades. The two contrasting case study areas, Innerfavoriten, which focuses on retrofitting and NBS-led renewal in a dense Gründerzeit stock, and Nordbahnhof, a large, centrally located brownfield densification area with a central wild, ruderal area, reveal how different intervention typologies interact with tenure segmentation, governance instruments, and (changing) macro-economic conditions.

2.1.6.1 Uneven social impacts of green transition interventions

In the case study area Innerfavoriten, the Supergrätzl and related cooling and greening were implemented quite recently. It is too early to say how the implemented NBS will improve the microclimate, but street usability has improved the quality of life. While immediate displacement is mitigated by robust protections within municipal and limited-profit stock, which are also prevalent in the neighbourhood, inequalities exist within the private rental sector. Three mechanisms shape these inequalities: (1) rent pressures upon renewing a tenancy or after a subsidy period ends (if retrofitted with subsidies) in the private rental sector, (2) costs associated with green maintenance and building retrofits (e.g. higher operating and irrigation costs; EVB procedures) being passed on (to different degrees in all segments), and (3) selective redevelopment or condominium conversion in mixed-tenure or privately owned Gründerzeit buildings. Short-term rentals (due to the absence of Wohnzonen in parts of Favoriten) reduce the supply of affordable housing and can enable landlords to overcharge newcomers. Fixed-term leases and fragmented ownership in condominiums increase bargaining asymmetries and slow down decarbonisation efforts, creating a myriad of justice trade-offs over who pays, who decides, and who blocks the implementation of green initiatives in buildings.

The study showed that early, perceptible impacts are present in Innerfavoriten. The Supergrätzl project has reallocated street space to prioritise pedestrians, providing shade and cooling, and making the area more appealing. While city officials and civic actors acknowledge the potential for increased property values from combined investments (the U2 extension, the Neues Landgut project, and the Supergrätzl project), they also note that long-term upgrading preceded these latest projects. Private-market pressures are already evident in selective

conversions, rising rents under renewed contracts, and the prevalence of short-term rentals (STRs). Furthermore, cost-pass-throughs for retrofits and green maintenance can increase net housing costs for specific properties. As WieNeu+ operates within a voluntary, owner-led renewal landscape with low annual renovation rates, the distributional effects will unfold gradually through continuous rental contract replacements, post-subsidy rent adjustments and cumulative operating costs. While this lowers the risk of dramatic neighbourhood turnover, (early) monitoring remains crucial. However, public institutions implement monitoring procedures for climate effects; for housing market dynamics, in-depth monitoring is not foreseen in the area.

In Nordbahnhof, where densification efforts are combined with a large NBS anchor in the form of protecting a large wild, ruderal area that integrates nature protection, biodiversity conservation, and recreational uses, positive outcomes of the “Freie Mitte – Vielseitiger Rand” are mostly perceived as the high everyday use and broad acceptance of the Freie Mitte. But also that the housing model deliberately embeds housing equity considerations by strategically fixing tenure shares from the outset. Two-thirds of the housing-dedicated square metres were meant to be subsidised or price-capped rental units. From a tenant security perspective, this also means unlimited rental contracts in the subsidised and price-capped segment, while spatial mixing of different tenures along green edges aims to establish equal access to nearby green space. The combination of these elements tempered classic “green gentrification pressures” in the form of exclusionary housing development areas with a clear upmarket focus.

At the same time, one-third was considered market developments, including condominiums and private rental units. The strongest affordability and accessibility stressors are currently driven by macro-economic shifts (e.g. construction costs, interest rates), which have: (1) shocks prevented middle-income buyers from accessing ownership units, (2) segmented demand toward rentals with substantial inequalities in rental prices between the subsidised/limited-profit (€10/m²) and free-market private rental segments (€17–€20/m²), and (3) yielded tranche-based price escalations in high-rise towers delivered during the boom. Especially for the latter, the Freie Mitte's branding effect is very likely to amplify market attractiveness for ownership and private rental units. Another concern documented is that extensive greening can raise operating costs (e.g., planters/irrigation) on the building level, whilst perceived to improve liveability, especially during hot summer days. A key finding in the Nordbahnhof case also highlights that high-rise buildings near the rail corridor face acoustic burdens, potentially counteracting liveability gains from greening and dampening capitalisation through reduced quality. Greening impacts are therefore practically always traded off against other factors.

Across both case study areas, the consequences for affordability, accessibility, and the risk of being priced out differ sharply by intervention type. Small-scale public NBS (Innerfavoriten’s Supergrätzl) improves free access and heat resilience, while affordability effects are indirect and lead to a gradual price-out in unregulated rentals. Municipal/LPHA tenants remain protected mainly. NBS on buildings sharpens affordability frictions at the building scale: planter-based greening and irrigation can raise operating charges, benefiting residents with improved comfort but selectively burdening those most price-sensitive; where deep-root planting on public land substitutes, cooling gains come with lower cost pass-through. By contrast, a large park-scale NBS (Nordbahnhof’s Freie Mitte) broadens accessibility and

stabilises liveability at the district scale. Here, gentrification manifests mainly through branding premium locations in freely financed products. At the same time, accessibility for low- and middle-income residents is provided through ex-ante tenure mixing and unlimited, price-capped contracts along the green edge.

Densification's affordability dynamics are driven more by macroeconomic and typological costs than by amenities. Interest-rate and construction-cost shocks, not the park, priced out middle-income buyers in Nordbahnhof and diverted demand into higher-rent market rentals. Furthermore, high-rises concentrate operating and compliance costs and therefore sit outside subsidised cost ceilings, pushing protected tenures into mid-rise blocks and segmenting access to upgraded units by income rather than by place.

Retrofit produces different distributional risks along segments. In LPHA/municipal stock, cost-coverage rules, subsidy timing, and consent practices translate efficiency gains into stable or lower net housing costs and broad access to benefits. However, even in this segment, retrofitting, specifically in combinations with other measures such as green façade constructions or heating system change to district heating, can lead to higher operating or energy costs. In private and mixed-tenure buildings, depending on the construction year before or after 1945, operating pass-throughs (combined with a lack of tenants' knowledge of rights and legal claims) can raise net costs despite energy savings, while unanimity and financing hurdles exclude low-liquidity owners from upgrades, fuelling selective pricing-out via rental contract renewal and post-subsidy rent increases.

2.1.6.2 Case studies situated in a historical and governance context

From a city-wide perspective, Innerfavoriten, as a case study, reflects Vienna's long arc of population growth and arrival dynamics into a dense, overheated Gründerzeit fabric where socio-demographic vulnerability is pronounced: larger households, high shares of non-Austrian citizens, including many third-country nationals and relatively low purchasing power. These profiles are the legacy of Vienna's role as a service-economy hub and migration magnet since the 1990s, with growth intensifying demand in precisely those pre-war private-rental areas that the city historically relied on as "arrival zones". Against this backdrop, the green transition in the existing housing stock reflects Vienna's tenure segmentation: a strong municipal/limited-profit backbone alongside a regulated, but ever more liberalised, private rental stock from before 1945 and a deregulated private context for buildings constructed after that period. These mixed arrangements in neighbourhoods stabilise incumbent tenants yet leave newcomers and fixed-term leaseholders more exposed to amenity capitalisation and selective upgrading.

Governance in Innerfavoriten is strongly public-driven, but it is calibrated to the constraints of the existing stock. Urban renewal traditions evolved through base and total renewals as well as Thewosan energy retrofits managed by wohnfonds_wien. WieNeu+ retools that tradition for climate and circularity, linking technical upgrades with social goals and deploying intermediaries (GB*) for low-threshold participation. Crucially, this is not a laissez-faire setting: the city sets frameworks (Smart Climate City Strategy, building-code greening mandates, Vienna Climate Act enabling outreach) and orchestrates cross-departmental alignment. Yet it cannot compel deep decarbonization or wholesale rent reform in private stock. Condominium

consent rules and fragmented ownership constrain collective action, making the uptake of retrofitting dependent on subsidies, timing, and trust.

Nordbahnhof reframes Vienna's response to population growth and densification needs in a centrally located brownfield, translating decades of public-driven planning into a district-scale model that integrates nature, housing, and accessibility from the outset. One limitation of the project, however, is the lack of new municipal housing, which the City announced in 2015 after municipal elections, and the first buildings of this program opened in 2019. Also, the zoning category "subsidised housing" was introduced in Vienna only later. Hence, it was not applied at Nordbahnhof, where the price-capped segment was introduced instead. This is important because, in subsidised programmes, a higher share of Smart Apartments is required, thereby guaranteeing greater accessibility for low-income groups through price-capped one-time tenant contributions. Therefore, while equity concerns are directly incorporated into the design, the outcome remains middle-class-biased, favouring families, mid-income workers, and subsidised-eligible households. This mirrors citywide trends in a diversified service economy that is rather middle-class-oriented, especially compared to Innerfavoriten, for instance.

While the city used to an ample extent land released by ÖBB for inner-city brownfield redevelopment, it was only at Nordbahnhof that it delivered this large, ruderal open centre with dense edges. The Freie Mitte's dual-use zoning (park + nature protection) and ecological monitoring institutionalise urban wilderness, an innovation born of civic mobilisation and administrative learning. In contrast to the constraints of an existing stock in Innerfavoriten, Nordbahnhof's new-build context allows the city to proactively put in place distributional safeguards in housing and public access, which would be much more challenging to implement retrospectively in existing structures. Hence, governance is strongly public-steered and unusually integrated amongst a variety of stakeholders. A City–ÖBB framework agreement codifies roles, cost sharing, and tenure shares. An Urban Design Concept and detailed handbook operationalise "soft law" into actionable rules for multiple developers (limited-profit and market), while parcel-level architectural competitions and a Quality Assurance Board translate the concept into tangible outcomes.

2.1.6.3 Concluding Reflections

Innerfavoriten represents complex urban renewal with elements of soft densification, NBS implementation and site-specific retrofitting. It layers block/base renewals, energy retrofits, and selective densification measures, such as infills or attic conversions, onto a dense Gründerzeit fabric, complemented by street-level public NBS. Cross-cutting, decommodified housing provided by the municipality and limited-profit housing associations protects many existing residents. In a nutshell, additional stressors include rent increases in the private segment upon re-letting, speculative conversions, short-term rental intensity due to missing Wohnzonen, partial increases in operating costs from greening and retrofits, and construction nuisances.

On the contrary, Nordbahnhof is best classified as hard densification and NBS on a brownfield/infrastructural site in a municipality under housing pressure. It transforms a former rail yard into dense edges, including high-rises, around a large biodiverse dual park–nature protection zone. Decommodified housing is central, with roughly two-thirds of units subsidised or price-capped under unlimited contracts, while tourism or second-home pressure is not a

primary driver. In Nordbahnhof, macroeconomic shocks such as interest-rate hikes, construction-cost inflation, and tighter credit conditions drive affordability and accessibility in market segments. The branding of the Freie Mitte adds a premium for market-financed units, and type-specific burdens include rail noise in towers and operating costs for specific greening systems.

Contrasted in their socio-spatial roles and governance logics, Innerfavoriten functions as an arrival area characterised by larger households, high migrant shares, and lower purchasing power, thereby heightening sensitivity to cost pass-throughs and speculative tactics in the deregulated private segment, even as the municipal/LPHA backbone stabilises stay-put tenants. By comparison, Nordbahnhof's long-arc, plan-led brownfield redevelopment mainly focused on middle-income future residents, leveraging public land release and integrated design governance to accommodate growth. While institutionalising accessibility to housing and the quality of neighbourhoods in Nordbahnhof through mixed tenures in the LPHA and private segments, and nature protection, these equity-oriented arrangements cannot be readily replicated in existing neighbourhoods, such as Innerfavoriten.

In summary, decommodified, price-regulated, and secure (rental) housing remains the decisive stabiliser across both cases: Where it is present and binding, green transition benefits are broadly accessible without large-scale risks pricing tenants out. At the same time, institutions of the decommodified housing sector are struggling to finance and implement green transition policies due to regulatory and practical impediments. For new urban developments, integrating a diversified decommodified housing sector (both municipal and LPHA) would allow this stabiliser to further broaden distributional effects within high-quality, affordable neighbourhoods. Where interventions rely on voluntary uptake within fragmented ownership and a deregulated private submarket, such as in historical neighbourhoods, justice outcomes hinge on empowering collective decarbonization with more explicit pass-through rules, restricting short-term rentals, and sustaining low-threshold rights and participation infrastructures. Overall, Vienna's model can essentially deliver climate-forward urbanism without large-scale displacement when affordability is hard-wired and governance is persistent.

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2.1.8 Appendix 1 – Glossary

Abbreviations

Abbreviation	Explanation (DE / EN)
EVB	**Erhaltungs- und Verbesserungsbeitrag** – Maintenance and Improvement Contribution (housing-related fee)
GB*	**Gebietsbetreuung Stadterneuerung** – Area-based urban renewal and neighbourhood management (Vienna)
KIBB Immobilien	Austrian real estate developer
KliP	**Klimaschutzprogramm** – Climate Protection Programme (City of Vienna climate strategy)
LPHA	**Limited-profit housing associations**
MA17	**Magistratsabteilung 17 – Integration und Diversität** – Municipal Department for Integration and Diversity (City of Vienna)
MA 18	**Magistratsabteilung 18 –** Stadtentwicklung und Stadtplanung – Municipal Department for Urban Development and Planning (City of Vienna)
MA 19	**Magistratsabteilung 19** – Stadtteilplanung und Flächennutzung – Municipal Department for District Planning and Land Use (City of Vienna)
MA 21	**Magistratsabteilung 21** – Stadtteilplanung und Flächennutzung – Municipal Department for District Planning and Land Use (City of Vienna)
MA 23	**Magistratsabteilung 23** –Wirtschaft, Arbeit und Statistik – Municipal Department for Economic Affairs, Labour and Statistics (City of Vienna)
MA 25	**Magistratsabteilung 25 – Technische Stadterneuerung** – Municipal Department for Urban Renewal (City of Vienna)
MA 42	**Magistratsabteilung 42 – Wiener Stadtgärten** – Municipal Department responsible for the planning, maintenance, and management of Vienna's public parks, gardens, urban green spaces, playgrounds, and urban tree stock
ÖBB	**Österreichische Bundesbahn** – Austrian National Railway Company
ÖVW	**Österreichisches Volkswohnwerk** – Limited-profit housing developer (Austria)
SDGs	**Sustainable Development Goals** – United Nations Sustainable Development Goals

Abbreviation	Explanation (DE / EN)
STEP 2025	**Stadtentwicklungsplan 2025** – Urban Development Plan 2025 (City of Vienna)
STR	Short-term rental
STRABAG Real Estate	Real estate development subsidiary of STRABAG (developer)
Thewosan	**Thermisch-energetische Wohnhaussanierung** – Thermal and energy-efficient residential building refurbishment
VIG	**Vienna Insurance Group** – Insurance group and real estate developer
WEG	**Wohnungseigentumsgesetz** – Condominium Ownership Act
WWFSG	**Wohnhaussanierungs- und Wohnbauförderungsgesetz** – Vienna Housing Promotion and Housing Rehabilitation Act

Terms and Concepts

Term	Explanation
§ 18 procedures	Legal procedures under § 18 of the Austrian Tenancy Act (MRG), governing rent setting and adjustments for regulated apartments
Base renewal (Sockelsanierung)	Renovation of the building base and ground-floor zone (façade, entrances, structural elements) to improve usability and streetscape quality
Block Renewal (Blocksanierung)	Area-based urban renewal approach in Vienna that targets entire urban blocks rather than individual buildings, combining building refurbishment, improvements to courtyards and semi-public spaces, energy upgrades, and social measures, typically coordinated through soft urban renewal instruments to enhance living conditions without displacement.
Brick-and-mortar subsidies	Public funding instruments for physical construction, renovation, or refurbishment

Term	Explanation
	of buildings (as opposed to social or rent subsidies)
Cooling Zones	Designated urban (indoor) spaces with heat-mitigation measures (e.g. air-conditioning) to reduce urban heat stress
Developer competitions (Bauträgerwettbewerbe)	Competitive tendering procedures where developers submit projects evaluated on design, sustainability, social quality, and cost criteria
Gründerzeit	Historic period of rapid urban expansion in the late 19th century; also refers to dense, perimeter-block building typologies from that era.
Schlichtungsstelle	Arbitration or conciliation board for housing disputes, but also for applications (by housing providers) to allow an increase of maintenance costs, such as § 18 of the Austrian Tenancy Act (MRG) (e.g. rent, maintenance, operating costs).
Smart Housing Programme	The programme delivers compact, space-efficient flats with low construction and energy costs, capped tenant contributions and affordable rents with open-ended leases, allocated under the same rules as municipal housing.
"Soft Urban Renewal" (Sanfte Stadterneuerung)	Vienna's (participatory) urban renewal approach, focusing on renovation without displacement, tenant protection, and social stability, was established in the 1970s
Urban development contracts (Städtebaulicher Vertrag)	Binding agreements between municipalities and developers regulating planning obligations (e.g. infrastructure, public space, affordable housing) are primarily financed by developers themselves
WieNeu+	Vienna refurbishment programme (building on the Soft Urban Renewal Programme) supporting comprehensive,

Term	Explanation
	high-quality renovation of residential buildings
wohnfonds_wien	As a semi-public organisation, it is responsible for providing and developing land for social housing construction and for managing the quality instruments 'property developer competition', 'land advisory board', and 'quality advisory board'.
Wohnzonen	Designated residential zones (under the Vienna Building Code and zoning law) where short-term rentals for tourist accommodation are prohibited or strictly limited, to safeguard permanent housing stock, stabilise residential neighbourhoods, and reduce pressure from commercial use of dwellings.

2.1.9 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	City official	City of Vienna	29.09.2025	In person
2	Representative Public Housing Agency	wohnfonds_wien	30.09.2025	In person
3	Representative of a civic group	IG Lebenswerter Nordbahnhof	13.10.2025	In person
4	Representative Limited-Profit Housing Association	ÖSW	20.10.2025	Zoom
5	Representative Civic Organisation	Stadtteilmanagement Nordbahnhof	21.10.2025	In person
6	Planner	Landscape Planning Studio	23.10.2025	In person
7	Real-estate consultant	Consulting firm	5.11.2025	In person
8	Representative of a Civic organisation	GB* 1100	6.11.2025	In person
9	Representative of Tenant Organisation	Mieterhilfe	10.11.2025	In person
10	Real-estate developer	Real Estate Association	10.11.2025	In person
11	Representative Limited-Profit Housing Association	EGW	18.11.2025	In person
12	Representative Limited-Profit Housing Association	BWSG	1.12.2025	In person
13	Representative of Public Housing Agency	Wiener Wohnen	13.1.2026	In person
14	City official	City of Vienna	29.1.2026	In person
15	Representative Limited-Profit Housing Association	Migra	26.1.2026	In person
16	Resident	Residential building Nordbahnhof	30.1.2026	In person
17	Planner	Landscape Planning Studio	3.2.2026	In person

18	Resident/Civic Initiative	Residential building Nordbahnhof	2.2.2026	In person
19	Resident/Civic Initiative	Residential building Nordbahnhof	2.2.2026	In person
20	City official	City of Vienna	3.2.2026	In person
21	City official	City of Vienna	9.2.2026	In person
22	Resident	Residential building Nordbahnhof	12.2.2026	In person

2.1.10 Appendix 3 – Visuals

Innerfavoriten Visuals

Figure 6: Retrofitting and attic conversion in Innerfavoriten (private building stock). Source: Judith M. Lehner

Figure 7: G'mischter Block. Infill and densification in Innerfavoriten (private rental). Source: Judith M. Lehner

Figure 8: Densification through attic conversion (private building stock) and Superblock measures with traffic circulation control and modal filtering in Innerfavoriten. Source: Judith M. Lehner

Figure 9: Supergrätzl with traffic circulation control and greening measures. Source: Judith M. Lehner

Figure 10: Supergrätzl pedestrian zone and urban furniture in front of the school. Source: Judith M. Lehner

Figure 11: Supergrätzl tactical urbanism with visual placemaking interventions. Source: Judith M. Lehner

Nordbahnviertel Visuals

Figure 12: Nordbahnhof Freie Mitte Source: Michael Friesenecker

Figure 13: Nordbahnhof limited-profit housing (right side) with facade greening. Source: Michael Friesenecker

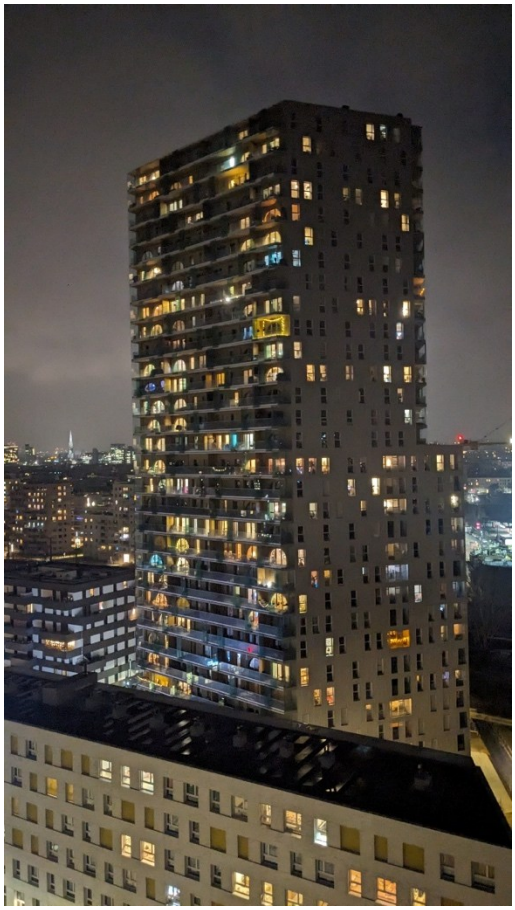

Figure 14: (left) Nordbahnhof freie Mitte. Source: Michael Friesenecker
Figure 15: (right) Nordbahnhof high-rise building. Source: Michael Friesenecker

Figure 16: Limited-profit housing with facade greening and semi-public green courtyard. Source: Judith M. Lehner

Figure 17: Limited-profit housing with semi-public green courtyard and public green areas towards railways. Source: Michael Friesenecker

Figure 18: Nordbahnhof rental as well as ownership housing next to rail tracks. Source: Michael Friesenecker

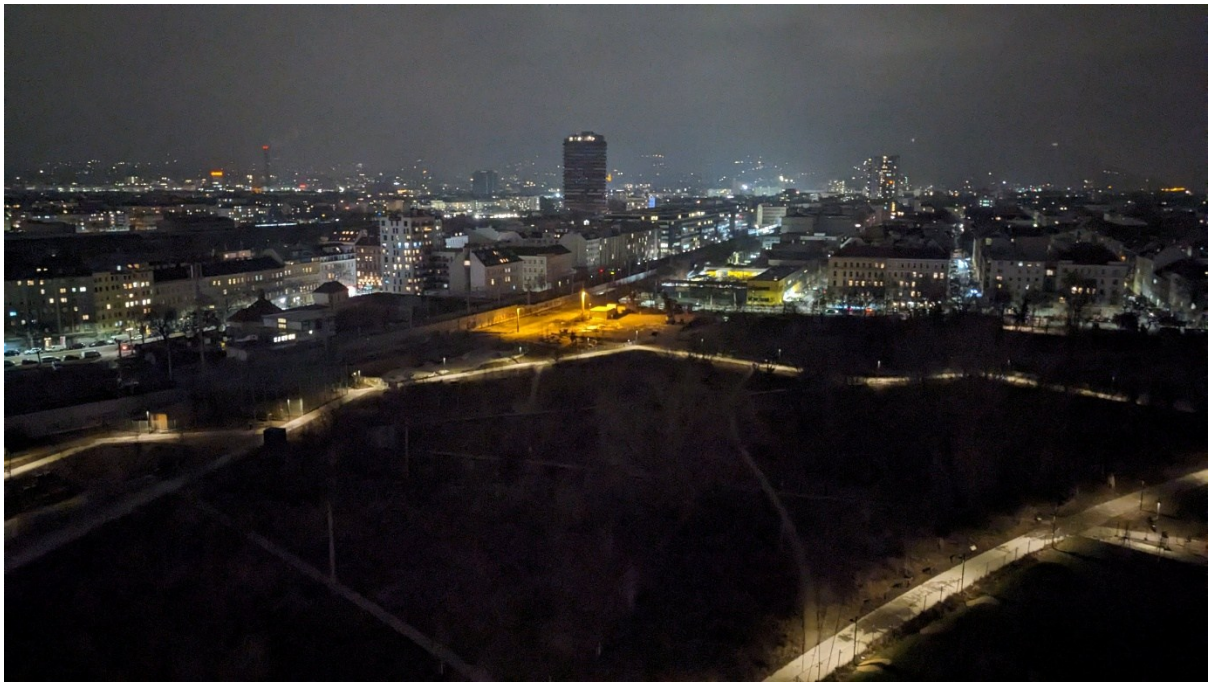

Figure 19: Nordbahnhof Freie Mitte at night. Source: Michael Friesenecker

2.2 CASE STUDY (MEDIUM): LINZ

Authors: Michael Friesenecker, Nina Lobnig (TU Wien)

2.2.1 City profile, challenges around just (housing and ecological) transition

Linz is the capital city of the federal state of Upper Austria (see Figure 1). As the third-largest city in Austria, Linz has a population of 214,987 (2026). It has grown moderately by about 17% and approximately 30,000 people in the last 25 years (Stadt Linz, 2026a). Population growth was primarily driven by immigration from non-Austrian citizens, whereas on average, Austrian citizens moved to areas surrounding Linz rather than moving into the city (Stadt Linz, 2026a). The share of non-Austrian citizens, therefore, increased from 13% in 2005 to around 31% in 2025 (Stadt Linz, 2026a).

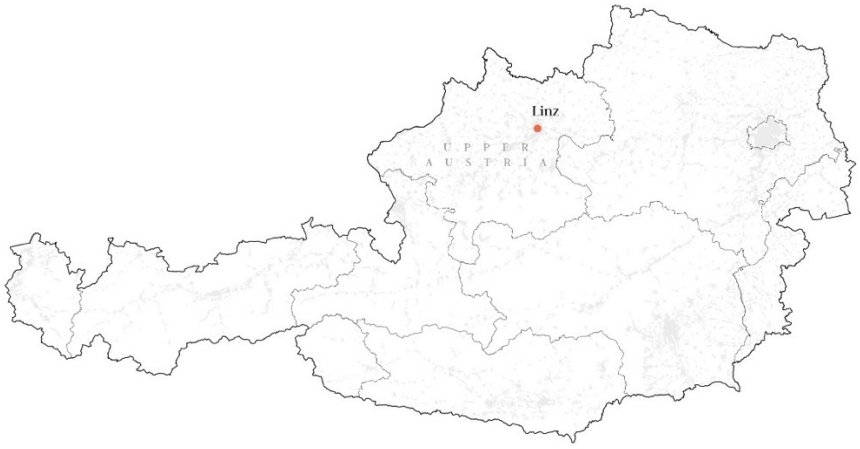

Figure 1. Location of Linz in Austria

Linz has evolved from an industrial city focused on steel production in the post-war period to a city with a diversified economic base, aiming to combine its industrial orientation with the development of digital technologies and creative industries. The city's economic strategy aims to promote and demand climate-neutrality, digitalisation, and resource-efficiency from leading industrial and manufacturing businesses, framed as a green new deal, to reduce city-wide emissions (Stadt Linz 2022). In terms of employment, a large proportion of people still work in manufacturing (15%) and in health and social work activities (16%). Other important sectors include wholesale and trade (10%), administrative and support service activities (including personal leasing, 9%), and public administration (8%) (Stadt Linz, 2026b). This also mirrors the educational structure of the City, with about 23% having attained compulsory-only education, 41% having attained basic vocational training, 20% having attained higher (vocational) education, and 16% having attained post-secondary and tertiary educational levels (Stadt Linz, 2026c). At the same time, non-Austrian citizens are clearly overrepresented in the lower education classes.

Politically, since the establishment of the Austrian Second Republic in 1945, Linz has consistently been governed by a Social Democratic (SPÖ) mayor, except for the period between 2015 and 2019, when the SPÖ formed a coalition with the right-wing Freedom Party (FPÖ).

In terms of housing, Linz has a relatively high proportion of social housing: 55% in total, of which about 53% is provided by limited-profit housing associations (LPHAs; see Appendix 1 – Glossary for a short characterisation of this housing actor) and 2% by the municipality. The share of social housing is remarkable and is even higher than in Vienna, with about 43%. As shown in Table 1, the private rental segment accounts for 23% and consists mainly of free-market rental units. In contrast, about 7% of the stock is price-regulated under the federal Tenancy Law (Mietrechtsgesetz – MRG, see Glossary). Another fifth is ownership, dominated by apartment ownership units.

The central areas of Linz (Innere Stadt in Figure 2) are characterised by buildings built before 1919, often privately owned and rented out. According to the federal Tenancy Law, privately owned buildings (up until 1945) are subject to price regulation, including basic tenant security regulations, e.g., regulations regarding the right of exit. However, time-limited contracts have become increasingly common in recent years, introducing volatility and market pressures into the regulated housing private rental segment. About two-thirds of the housing units in Linz, however, are built after 1945, with the majority (45%) between 1945 and 1990 (Stadt Linz, 2026d). Hence, the majority of units are price-unregulated rental units either owned by private persons or real estate companies, with some basic regulation regarding tenant security on the one hand. And apartment ownership units, on the other hand. These two units dominate areas on the outskirts of Linz, including Pöstlingberg and St. Magdalena to the north, Froschberg to the west, and Pichling to the south-east (see Figure 2).

Table 1. Linz: Housing Market Segments - 2021

	Persons		Dwelling stock Total		Dwelling stock Main Residencies	
	#	%	#	%	#	%
Owner-occupation	**46 507**	**23.1**	**21 407**	**17.8**	**21 407**	**20.4**
House	18 847	9.4	7 993	6.7	7 993	7.6
Apartment	27 660	13.7	13 414	11.2	13 414	12.8
Rental	**151 100**	**75.1**	**81 467**	**67.9**	**81 467**	**77.8**
Private Rental	*43 326*	*21.5*	*24 471*	*20.4*	*24 471*	*23.4*
rent-regulated	13 760	6.8	7 656	6.4	7 656	7.3
free market	29 566	14.7	16 815	14.0	16 815	16.0
Social Rental	*107 774*	*53.6*	*56 996*	*47.5*	*56 996*	*54.4*
Publicly Owned**	2 359	1.2	1 413	1.2	1 413	1.3
Non-profit Owned	105 415	52.4	55 583	46.3	55 583	53.1
Other	**3 651**	**1.8**	**1 894**	**1.6**	**1 894**	**1.8**
Second or Non-Residencies	**-**	**-**	**15 272**	**12.8**	**-**	**-**
Total	**201 258**	**100**	**120 040**	**100**	**104 768**	**100**

*in primary residences; **owned by municipalities (in German *Gemeindebauten*)

Source: compiled by authors, data from: STATcube – Statistical Database of Statistics Austria

Units owned by limited-profit housing associations have a substantial share of residential buildings from the interwar and wartime period (1911–1945), particularly those constructed by limited-profit housing associations such as GWG, Neue Heimat, and WAG (see glossary for details on limited-profit housing associations – LPHA). In contrast, most of the buildings date from after World War II. Linz represents an especially interesting case due to its history of social housing developed during the National Socialist regime and its close connection to the city's industrial expansion. With the founding of the *Hermann Göring Werke Linz* in 1938 and the rapid industrialisation that followed, Linz became an important industrial centre within the "*German Reich*". The establishment of armament and steel industries created an urgent demand for housing for industrial workers.[12] As a result, between 1938 and 1945, around 11,000 apartments were built—mainly by municipal and non-profit housing companies such as WAG (which still exists today, though it gave up its non-profit status in 2001), Neue Heimat, and the municipal housing company of the City of Linz.

[12] https://hdgoe.at/ns-wohnungsbau

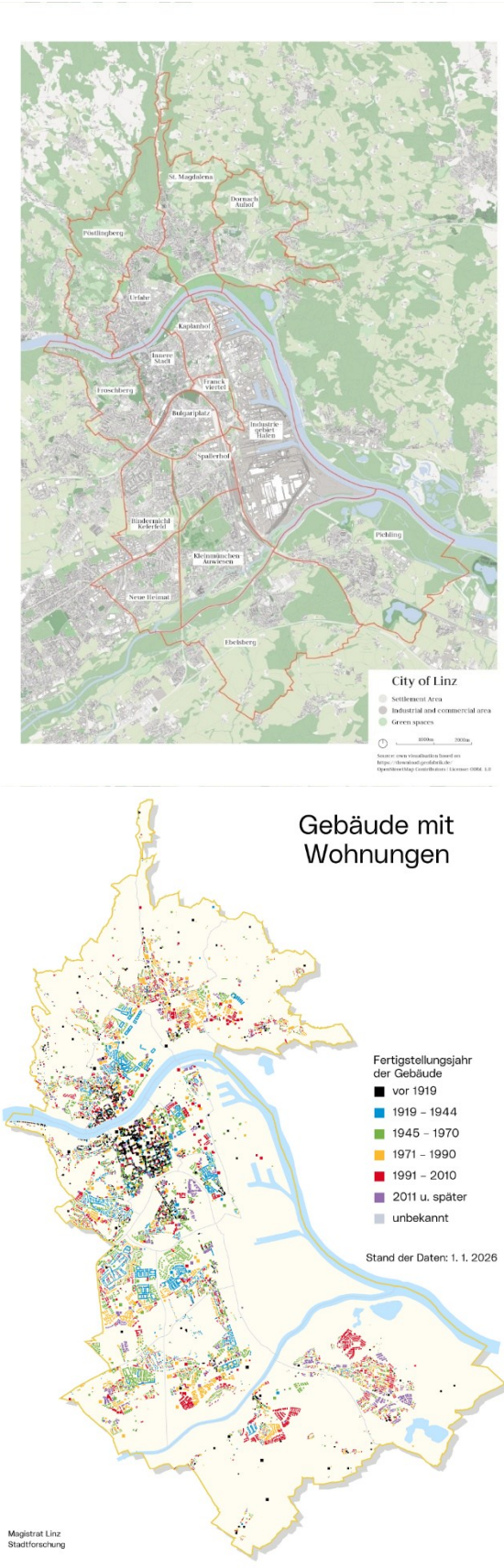

Figure 2: Neighbourhoods in Linz (left) and year of completion of residential buildings in the city of Linz (right). Sources: Left Map (own visualisation based on OpenStreetMap), Right map: Stadt Linz (https://www.linz.at/zahlen/050_Infrastruktur/080_GebaeudeundWohnungen/040_Wohnungen/#gallery-7)

These large, courtyard-style residential complexes, built in districts such as Bindermichl, Spallerhof, Wimhölzl-Hinterland, continue to shape the cityscape today. In Linz, these housing estates are still commonly referred to as *"Hitlerbauten"*—a term used for residential buildings constructed during the Nazi period. Characteristic features include the spacious green courtyards and solid architectural forms, often reminiscent of the regional *Vierkanthof* (four-sided farmstead)[13]. Some of these projects, such as the Bindermichl estate—originally planned with six different typologies and about 7,000 housing units under the responsibility of WAG—were only partially completed during the war, with several buildings finished after 1945. Other neighbourhoods, such as the Franckviertel, contain earlier workers' housing built during the industrialisation period for employees of local factories, such as the Franck company (Kolar, 2021). Today, still around one in eight residents of Linz live in one of these settlements known as *"Hitlerbauten."*[14] Moreover, many of these estates remain under the management of long-established non-profit housing associations in Linz and face multiple challenges, especially those related to retrofitting and energy-efficient refurbishment.

Housing and rental prices are moderate and relatively evenly distributed across the city (apart from the city centre, where private rental housing dominates), and have also risen over the last few years, though not to the extent seen in other Austrian cities. The high proportion of LPHAs is clearly dampening housing prices in the City. For instance, a recent study found that in Linz–Wels, households in limited-profit housing have substantially lower median equivalised incomes than those in private main rent (Linz–Wels: €1,385 vs €2,100), indicating that the limited-profit segment is more strongly targeted towards lower-income groups in the urban core (Raab, 2025, p. 87).

Rent levels also differ systematically across segments. Amann et al. (2023, p. 25) show that in Upper Austria (2022), average housing costs in LPHA rentals amount to about €7.7/m², compared to roughly €8.8/m² in private rentals (including utility payments, excluding energy costs). For Linz specifically, Zeller et al. (2018) report an average rent of €11.20/m², well below the average in Salzburg, a city of similar size, but more pressured by tourist housing. In Linz, the pressure from tourism is limited, and the share of second residences, with about 13% in 2021 (as shown in Table 1), is relatively low compared to other municipalities. Even in a city with a historically strong limited-profit housing sector, Zeller et al. (2018, p. 609) highlight rising commodification pressures in Linz, including increased apartment ownership, market-oriented dynamics in the private rental sector and a focus on housing as an asset.

Limited-profit housing associations in Linz were under increasing pressure due to rising land prices. As a reaction, the city council of Linz passed a resolution in 2020 entitled the '*Linzer Modell*', which is a planning and land-use policy instrument to secure subsidised/social housing in a context of rising land prices and scarce, well-located plots. It ties rezoning, upzoning, and the disposal of city land to binding affordability obligations through spatial planning contracts (*Raumordnungsverträge*). The Linzer Modell applies: (1) before selling or

[13] https://www.ooegeschichte.at/ausstellungen/hitlerbauten-in-linz
[14] https://newsv2.orf.at/stories/2141853/2141910/

granting building rights on city-owned land, 50% of the site must be designated for subsidized multi-storey housing, (2) when privately owned land is (re)zoned to allow housing with at least 5,000 m² gross floor area, the owner must deliver a minimum of one-third of the project as dwellings eligible under the Upper Austria Housing Subsidy Act; and (3) when privately owned land is upzoned to add at least 3,000 m² gross floor area, at least one-third of the additional residential floor area must be subsidized. In short, the model reserves a fair share of development capacity in well-served locations for regulated, affordable housing by making affordability a precondition of plan changes and municipal land transfers.

Given the City's high share of limited-profit housing associations, the case study does not focus on a specific area but rather on the challenges and opportunities that the extensive limited-profit housing segment poses for implementing green initiatives compared to the private segment. Regarding green initiatives, we focused on a) Nature-based Solutions (NbS), such as tree planting, façade greening, green roofs, b) retrofitting in combination with decarbonising the heating system, as these are currently the most pressing issues in Austria to curb emissions, and c) densification to avoid land take, which is another main challenge in Austria's environmental policy. From a housing inequality perspective, we will focus on whether actors perceive these green initiatives as already increasing housing costs and contributing to the pricing out and indirect displacement of residents, particularly vulnerable persons and households, or whether they perceive risks from these developments in the near future.

2.2.2 Green Transition Interventions in Linz

Since adopting its first Climate Strategy in 2019, Linz has continuously expanded its climate policy framework, creating a city climatologist and climate coordinator, establishing a municipal climate fund, and convening a climate advisory board in 2020. Several pilot projects and programs have been implemented.

Linz has become one of the leading cities in Austria to develop a comprehensive climate adaptation concept, including an action program (released in mid-2023)[15]. Developed in 2023 through a participatory process involving experts, the city administration, municipal enterprises, and residents, the "Future Linz – Linz's Climate-Resilient Path to Climate Change Adaptation" concept identifies local climate impacts and links them to concrete adaptation measures. The concept includes, for instance, a heat risk map that identifies places where heat impacts intersect with the presence of vulnerable groups. The accompanying action plan will prioritise these areas for greening. As early as 2021, for example, a tree planting campaign was launched in the more sealed areas of the city centre (see chapter 3.2). The Linz City Council has defined 10 overarching adaptation goals that guide all actions, aiming to create and maintain climate-effective open spaces, enhance the outdoor quality of life, and preserve biodiversity. The goals also emphasise considering climate risks from extreme events in urban

[15] https://www.linz.at/umwelt/111674.php

planning and disaster management, improving climate-relevant data, and integrating climate governance into city administration and development. The adaptation framework includes 15 action fields, such as Buildings & Housing, Energy/Electricity, Urban Planning & Spatial Development, Urban Green Spaces, Nature Conservation, Ecosystems, and Biodiversity, among others. The structure of Linz's Climate Change Adaptation Concept links climate impacts, urban action fields, and their specific consequences. Research-based findings on climate impacts across different urban sectors yield tangible effects that require targeted action.

To address multiple climate impacts simultaneously, recommended measures, especially in the fields of urban planning and buildings and housing, include (Magistrat Linz – Planung, Technik und Umwelt, 2023):

- Integrating adaptation measures into zoning and land-use planning.
- Greening urban squares and streets with trees and shrubs.
- Providing shade through vegetation.
- Installing green roofs and facades on public buildings.
- De-sealing surfaces and preventing new impervious areas.
- Increasing the inner-city green share and preserving natural areas.
- Reducing urban parking spaces to improve climate resilience and comfort

The City of Linz provides investment subsidies for a wide range of urban greening measures within its municipal area, targeting private individuals, companies, organisations, and associations. These measures are part of the city's broader climate adaptation strategy, which aims to counteract urban overheating, particularly during summer months. Well-designed green infrastructure, such as roof and façade greening, helps mitigate urban heat islands by lowering surface and ambient temperatures (Magistrat Linz – Planung, Technik und Umwelt, 2020). To support such initiatives, the municipality offers environmental subsidies of up to EUR 15,000 per project. Funding is available for different types of building greening, with specific minimum requirements and ceilings: ground-based façade greening with a minimum area of 30 m² is subsidised up to EUR 4,500, wall-bound façade greening with a minimum of 20 m² up to EUR 15,000, extensive roof greening with a vegetation layer of 8–15 cm up to EUR 5,000, and intensive roof greening with a vegetation layer of at least 15 cm up to EUR 7,500. In all cases, the subsidy covers up to 30% of the total project costs.

Against the background of this comprehensive NbS-oriented strategy, Linz provides a paradigmatic case that allows us to probe the (perceived) effects of NbS implementation in neighbourhoods that are dominated by strongly regulated and low- to mid-income oriented limited-profit housing associations (LPHAs) compared to more market-oriented housing segments.

In 2024, the city government of Linz adopted a guideline positioning the city as a climate-friendly industrial hub, embedding climate protection as a cross-cutting principle in urban development and defining 52 measures within the Climate Neutrality Concept "Climate Neutral Industrial City Linz 2040" across seven fields of action; Governance, Energy, Buildings, Transport/Mobility, Industry & Economy, Consumption, and others. The strategy was developed through a broad stakeholder process involving politics, administration, industry, science, and civil society.

In the Buildings field, key measures include developing climate-neutral neighbourhoods, promoting social and public housing built to low-energy and climate-neutral standards,

thermally and energetically renovating existing buildings, pursuing infill development, constructing new buildings with CO_2-optimized and circular building methods (e.g., hybrid or timber construction), and activating vacant sites and brownfields, particularly for commercial use. The city also plans to consult regional authorities to align housing subsidies with climate-neutrality objectives. The levers here are climate-neutral urban development, life-cycle assessment in construction, building renovation and optimisation, and reduced land and resource consumption. In the Energy field, measures include energy consultations for residents, businesses, and associations, expanding photovoltaic installations, forming renewable energy communities (EEGs), and implementing climate-oriented energy spatial planning. Targets include equal access to renewable energy and the mitigation of energy poverty. Across both fields, the city emphasises emissions-free buildings, the use of circular construction materials, energy-efficient renovation of municipal stock, and alignment with EU directives such as the Energy Performance of Buildings Directive (EPBD) and the Energy Efficiency Directive (EED III) (Magistrat Linz – Büro Stadtregierung Linz, 2024).

Given this emission-reducing, resource-efficiency-oriented strategy, Linz provides another paradigmatic case for assessing the (perceived) effects of retrofits and densification projects undertaken by limited-profit housing associations (LPHAs) compared to more market-oriented housing segments, allowing the inference of differential impacts on affordability and consequential neighbourhood dynamics. Amongst this, it is also a critical case that probes the possibilities and limitations of civic initiatives in retrofitting through potential energy communities, primarily to assess the role of multi-level policy arrangements. Since the operations of limited-profit housing associations in Linz are subject to housing subsidy regulations of the federal state, as well as other regulations in spatial planning and building regulations, it is a paradigmatic case for analysing synergies and trade-offs for the housing affordability and housing security for low- to mid-income and other marginal groups in different housing segments that emerge from multi-level settings, especially for energetic retrofits, heating decarbonisation and densification projects. That is also why the following briefly delves into selected policies at the federal state level in Upper Austria.

Essential policies at the federal state level of Upper Austria

Due to Austria's federal political system, Linz remains subject to the authority and legislation of the Upper Austrian provincial government. Austria's federal political system results in a range of plans, strategies, and regulations at the provincial level in Upper Austria. Consequently, these are also relevant for Linz.

Environmental policies

For instance, the Upper Austria Climate and Energy Strategy builds on existing climate plans and provides an overarching framework to coordinate efforts toward achieving climate goals, with updated technical and governance requirements as needed. The region aims to be climate-neutral by 2040, with remaining emissions offset through enhanced natural carbon sinks. In the long term, the strategy envisions achieving harmful emissions as effective technologies develop, reducing atmospheric CO_2 concentrations.

The strategy identifies three main clusters in the building sector: heating system changes, new construction, and thermal renovations, all of which involve both climate mitigation and adaptation. This includes **a)** the phasing out of fossil-fuel heating systems to reduce carbon

emissions; **b)** the adaptation of building standards and densification efforts, where new housing demand should primarily be addressed through infill development and higher-density or other measures that minimise land consumption, and **c)** the expansion of energetic retrofits (and decarbonisation. The 2021–2027 government agreement introduces a renovation offensive, offering targeted, project-based funding for innovative renovation projects to ensure affordable, energy-efficient housing. Thermal renovations aim to achieve at least a low-energy standard, with life-cycle costs as an economic benchmark. Federal targets require higher funding allocations, continued tax deductibility, and adherence to minimum standards coordinated through OIB Guideline 6. Subsidy programs are to continue supporting renovations with attention to ecological criteria (building density, location, energy performance) and the integration of climate adaptation measures. Overall, the strategy emphasises combining climate mitigation and adaptation, promoting energy-efficient, sustainable buildings, optimised urban development, and the phase-out of fossil energy to achieve long-term climate neutrality and urban resilience (Amt der Oberösterreichischen Landesregierung - Direktion Umwelt und Wasserwirtschaft, 2022).

Housing policies

In housing policy, the most essential regulations include the Upper Austrian Housing Subsidy Act (*Oberösterreichische Wohnbauförderung*[16]) within which the Department of Housing Subsidies, which is run by the right-wing Austrian Freedom Party (FPÖ) since 2009, determine the strategic approach, adapts the subsidy orientation and criteria through specific ordinances17 as well as approves every subsidised housing unit being built in Upper Austria. Upper Austria's housing subsidy approach shifted its focus from equally subsidising multi-apartment buildings and single-family houses (50%/50% in 2012, according to Amann & Mundt, 2013) to a stronger emphasis on subsidising multi-apartment buildings (65%) over single-family dwellings (35%) in 2022 (Amann et al., 2023). Historically, compared with other regions in Austria, Upper Austria has maintained a strong focus on single-family houses while still allocating a significant share of resources to subsidised rental housing (Zeller et al., 2018). Around 80% of housing subsidy funds for new construction flow to LPHAs (Zeller et al., 2018), highlighting their central role in providing affordable rental units in multi-storey buildings (Amann et al., 2023).

In general, the energy performance of building envelopes is high in subsidised housing, especially in the limited-profit housing sector. Still, the renovation rate for comprehensive renovations has been declining over the last few years (Amann et al., 2023). Also, Upper Austria grants subsidies for renovation measures. The subsidy amounts to a quarter of the eligible costs for buildings with up to three residential units. Alternatively, one-off non-repayable construction cost subsidies are available (15% of eligible expenses). For individual

[16] https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LROO&Gesetzesnummer=10000366
[17] https://www.land-oberoesterreich.gv.at/13704.htm

component renovations, the maximum eligible costs are €15,000 per component. For comprehensive renovations, the limit is €50,000.

While the housing construction subsidy has supported demolition and simultaneous rebuilding of single-family homes since 2015, since 2020, this approach has also been extended to multi-storey residential buildings under the Upper Austria Residential Renovation Ordinances I[18] and II[19]. The renovation ordinances prioritise building expansions through higher subsidies. At the same time, additional bonuses are granted for locations that minimise motorised private transport, for example, with a bonus if renovations are within an existing settlement area. With the renovation regulations effective from June 2020, a model with bonuses for renovation measures has also been created for owner-occupied homes, replacing the previous renovation levels. This makes gradual renovation in stages more attractive. In buildings with more than three residential units, the loan amount is limited to 80% of eligible renovation costs, with upper limits varying by renovation measure. The subsidy amounts to 20 to 30% (for comprehensive renovations).

The demolition and new construction renovation programme has been very successful, especially in existing residential areas (Amann et al. 2023). Since 2020, this has also been extended to multi-storey residential buildings, making it very attractive to commercial developers (ibid.). The advantage for them is that the renovation subsidy can be combined with a shorter, more favourable depreciation period under tax law. Furthermore, the government of the federal province of Upper Austria introduced this densification regulation on January 1, 2025 (*Oberösterreichische Nachverdichtungsverordnung 2025*[20]). The regulation provides subsidised loans for the construction of rental or purchase apartments in residential buildings with more than three units, provided that the building increases the ratio of living space to land area. Subsidies can be granted to non-profit housing associations, commercial developers, and municipalities for the demolition of an existing building and simultaneous construction of a new residential building, for new construction on already sealed land, or for extensions and conversions to add apartments. The maximum loan amount is €1,100 per square meter of living space, plus €15,000 per apartment and €4,000 per balcony or terrace. Loans have a 45-year term, with an interest rate of 0.5% for the first 25 years and 1% for the remaining term.

Table 2. Key data on the case study area of Linz

	Linz (City-wide)
City characteristics	- Statutory city (Upper Austria) with a population of around 210,118 (2023) and moderate population growth (+15%/10y). - Shift from a former industrial to an increasingly post-industrial economy, about 7% unemployment rate (Statistik Austria 2021)

[18] https://www.ris.bka.gv.at/Dokumente/LgblAuth/LGBLA_OB_20200529_44/LGBLA_OB_20200529_44.html
[19] https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrOO&Gesetzesnummer=20001080
[20] https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrOO&Gesetzesnummer=20001335

	- Housing structure: 53% LPHA share, 2% public, 23% private rental, 20% ownership; about 17% are built before 1944; 45% between 1945 and 1980; and 30% of stock after 1991. - Dense historic centre with a lack of green spaces, while historic LPHAs buildings are often characterised by large courtyards and green infrastructure - High district heating connection rates in many LPHA-dominated areas; Heating prices are moderate for district heating citywide, but rising because of the post-energy crisis - Negligible tourism/second home pressures
Duration	- *Strategies:* Climate Strategy Linz (2019) led to two aligned strategies: Climate Adaptation Strategy (2023) and Climate Neutrality Concept (2024) - *Implementation:* Administrative changes: establishment of climate coordinator & city climatologist (2020); Introduction of *Klimafonds Linz* to foster (civic) climate related projects; Introduction of Urban Development Committee in 2019 and constant retooling of (legal) urban planning tools; Tree planting programme (2021) and legal changes enhancing green infrastructure on public grounds and buildings; Introduction of Pilotproject "*Linz mit Ambitio3xn*" (Linz with Ambition).
Funding	- *Linz with Ambitions* funded under the federal Mission "*Klimaneutrale Stadt*" and Pionierstadt (2023-2028, public–public, ~€2m/5y); - *Klimafonds Linz* (municipal micro-grants, 2020–2025); - *Other public funds from the City* - *OÖ Wohnbauförderung* (public housing subsidies at the federal state level providing loans/grants for renovation/new build amongst private equity by LPHAs and other housing developers)
Actor constellation	Municipality/City of Linz; Federal State of Upper Austria (mainly the Housing Subsidy Department); Federal level (funding/building regulations); Public Utility Companies (e.g. Linz AG); Limited Profit Housing Associations (LPHAs); Private building owners/developers; Tenant Advocacy Organisations; Civic groups; Consultants/research partners
Aims and objectives	- Municipality-wide reduction of −90% GHG, ≤10% compensation by 2024 (Climate Neutrality Concept) - Municipality-wide preservation and expansion of green and blue infrastructure, integration of climate adaptation into urban planning and governance to counter climate hazards, and awareness raising.
Specific physical measures	- *Nature-based Solutions*: tree planting in streets, green space preservation, de-sealing, green roofs and facades. - *Retrofit/heat decarbonisation:* mainly energetic envelope improvements, district heating connections or heat pumps/photovoltaic installations, heating-circuit optimisation. - *Densification*: rooftop additions (*Aufstockung*), block infill, brownfield redevelopment, reconstructing projects (replacement where accessibility/fabric demand it)

Accompanying housing policy/regulatory measures	Urban Development Committee linked to climate mitigation and adaptation criteria (2019); Building plans and codes defining minima and binding plantation of trees and green roofs (2021); Prioritising subsidised housing through zoning: 1/3 subsidised units at rezoning (2020); Densification ordinance (2025) supports densification projects with adapted subsidy schemes (2025).
Key social tensions or/and benefits between greening and housing	*Expected benefits* include reduced heat exposure in vulnerable areas; potential lower total costs via retrofit and metered district heating; improved accessibility through densification cross-subsidy, whereas evidence hints that social plans and renovate-in-place tempered displacement. In general, the high LPHA share buffers rent surges. Tensions relate to private-rental stress, where fixed-term contracts and general price inflation increase precarious housing situations. Recent price inflation has increased tensions between greening and affordability, especially regarding heat changes, as cost reductions are not always significant. Also, costly double infrastructures where heat switches are not compulsory increase rent payments through higher operational costs. NbS and densification, when implemented in the LPHA segment, rarely show trade-offs.

2.2.3 Methods

Qualitative data for the Linz case study were collected mainly through semi-structured interviews conducted between September 2025 and February 2026. In total, 15 interviews were conducted with actors involved in urban development, housing, climate policy, and civic engagement in Linz. The interviewees represented public administration at the municipal level, academia, architecture and planning practice, limited-profit housing associations, private consultancy, and civic initiatives. This diversity was intended to capture multiple institutional and societal perspectives on green transition activities in the city. The sampling strategy combined purposive and snowball sampling. Initial interview partners were identified based on their formal roles in housing policy, climate governance, urban planning, and related fields using desktop research. Additional interviewees were subsequently identified through recommendations made during the interviews.

All interviews were conducted in person, primarily at the interviewees' workplaces. In accordance with TU Wien's ethical approval guidance, participants were informed about the project's objectives and data protection regulations. Before audio-recording the interviews, written informed consent was obtained from all interviewees, including a confidentiality clause. The interviews were transcribed in a two-step process. An initial automated transcription was produced using A-train software (Haberl et al. 2023). In a second step, all recordings were manually reviewed and corrected where necessary. Interviews conducted in German were analysed in the original language. For data analysis, the qualitative analysis software MAXQDA was used. For reporting citations, parts of the interviews were translated into English.

In addition, background research was conducted in preparation for the interviews. This included the review of legal documents, policy strategies, planning documents, municipal

reports, academic literature, and grey literature relevant to housing, climate policy, urban development, and energy transition in Linz.

Nonetheless, the research is subject to some limitations. While focusing on mechanisms or trade-offs that implementing green initiatives in a city with a large protected, limited-profit housing sector might generate, it must be noted that the full diversity of practices of limited-profit housing associations cannot be captured. However, the selection of limited-profit housing associations was intended to identify the most important actors. Furthermore, capturing civic perspectives, especially those from marginalised residents, proved challenging, as Linz (as Austria in general) is characterised by a relatively small number of organised civic groups in housing. While interviews with civic institutions and initiatives (such as tenant organisations and other activists) provided essential insights into resident-related concerns, these perspectives cannot fully substitute for a broader range of individual resident voices, particularly those of more marginalised groups with limited capacity for formal representation. In addition, as many of the green initiative measures examined are still ongoing, the findings reflect anticipatory assessments and evolving dynamics rather than finalised outcomes.

2.2.4 Perceptions of Green Initiatives in Case Study Areas: Linz

2.2.4.1 Precedents and implementation

Public officials in Linz describe that the decisive push around 2019–2020, which legitimised new climate governance and accelerated strategy-making, was anchored in the Paris Agreement, which Austria signed, and was additionally amplified by the Fridays for Future protests at this time. A climate coordinator role was introduced in 2020, under which an interdepartmental process produced the "Climate Neutrality Concept" (Klimaneutralitätskonzept) with a 2040 target (90% reduction, max 10% compensation) and a plan to implement a citywide greenhouse gas monitoring system to track annual progress. Alongside the Neutrality Concept, the climate adaptation strategy was developed in parallel and tightly coupled to decarbonisation.

"*Fridays for Future, the Paris Agreement—these made it impossible for cities to ignore the mandate. In Linz, we created roles and structures and secured the political backing to act. That's how these concepts and step-by-step implementations could take shape*." (Consultant and former climate coordinator for the city of Linz)

Officials underscore that the climate adaptation strategy explicitly frames social equity as a field of action, such as mapping vulnerable groups, and also addresses displacement and price effects, or emphasises pairing measures with safeguards to raise awareness of potential social implications. This "social" approach was later mirrored in the neutrality strategy, even if ex-ante assessment proved methodologically difficult; the potential for social impacts was acknowledged when describing actions (see also Linz City Administration, 2024).

For implementation, officials situate recent climate action within a formal, intergovernmental architecture that both institutionalises capacity and accelerates existing strategies. They describe the "Linz with Ambition" project as a public–public cooperation with the federal Mission "Climate Neutral City" (*Klimaneutrale Stadt*), not as a conventional grant, but

channelling about €2 million over five years predominantly into staffing to build seven new competencies across the city administration and its public utility companies. Furthermore, regular knowledge exchange and formats like a "climate breakfast" reinforced learning across Austrian pioneer cities and peer cities like Zurich within this funded project.

Civic actors recount the same period as a bottom-up opening catalysed by the "*Klimafonds Linz*" (Climate Fund Linz), which served as a low-barrier fund for subsidising projects by the city itself and by civic-led initiatives. One project, for instance, was "*Klimasoziales Linz*" (Climate-Social Linz), where, amongst others, art teams worked with underrepresented groups such as single mothers, children, and youth using speculative design to visualise futures for mobility, cohabitation, and land use, making trade-offs discussable beyond expert circles and motivating participation. These cultural and social practices complemented technical pilots in housing and energy, including bottom-up approaches to housing retrofits.

> *"The city's Climate Fund really tried to give citizens a way to kick-start things, so low-threshold that two private people could get support. That was unheard of then, but it helped prove what was possible."* (Civic initiative representative)

However, civic initiatives also underline the fragility of supportive policy instruments: the Klimafonds' discontinuation in 2025 is seen as a setback driven by political headwinds and contentious comparisons with other spending priorities. Despite uneven project quality, they argue the fund's catalytic value—in mobilising people, testing formats, and surfacing social dimensions—outweighed its risks, especially when paired with the new climate coordinator and climatologist roles that anchored collaboration.

In contrast to these more recent developments, housing experts and providers narrate long-standing, incremental upgrading within the limited-profit sector following a renovation cycle of 20-30 years (depending on the limited-profit housing association), sustained the energetic improvements of building envelopes according to building standards since the 1990s and high connection rates to Linz's dense, price-competitive district heating. This highlights a long-standing practice among the city's key sector, which accounts for roughly 50% of the housing stock. However, this steady practice contrasts with priorities at the federal state level since 2009, the policy level that provides housing subsidies, which kept the focus instead on new-build output and cost damping through standardisation, while comparatively underweighting renovation.

Housing experts characterise the past decade in Linz as defined by land scarcity and sustained price inflation, which progressively eroded the feasibility of subsidised schemes on market-priced plots. Since 2009, provincial housing policy has maintained its emphasis on maintaining new-build output and dampening costs through standardisation, while giving comparatively less weight to renovation, despite an ageing stock. As a result, even where demand for affordable housing was high, rising land prices, combined with rigid criteria for building subsidies, made it infeasible on the most expensive sites. Therefore, around 2020, following increased energy prices and the push for decarbonisation, densification also became more critical. As reported by limited-profit housing providers, adding extra storeys, infill, and selective reconstruction are now evident across portfolios, signalling experimentation beyond routine energy retrofits.

"Land is scarce and expensive. Some plots are now so costly that subsidised housing is not approved. The Linzer Model foresees a quota at rezoning as a response to rising land prices and limited, affordable sites—without it, many projects wouldn't be feasible." (Housing Expert)

Against this backdrop, the Linzer Modell emerged as a planning lever to secure affordability at the point of rezoning. When converting green to building land, roughly one-third of new units must be subsidised, regulated through rezoning conditions and urban development agreements[21]. Experts are frank that this was necessary because land became too scarce and expensive for many subsidised projects to pass provincial feasibility criteria; without a quota at the planning stage, affordable units would be crowded out entirely.

2.2.4.2 Participation and governance (procedural)

Public officials describe participation and governance as a mix of formalised planning instruments, broad but structured engagement, and multilevel coordination bounded by legal and fiscal constraints. They point to the council-approved climate adaptation strategy and climate neutrality concept as both mandate and a convening device: because these were co-developed across departments, utilities, external experts, and residents including cross-department "consultation days" involving 52 municipal staff and external partners from in October 2022 and 2023, an extensive prior household survey to 13,000 households, and a sharpened focus on monitoring citywide greenhouse gas emissions to steer decisions toward the 90% emission reduction (see also Linz City Administration, 2024, p. 19). The implementation of climate mitigation and adaptation measures is described as easier to "mainstream" into routine administrative work through broad collaborative efforts. In their view, co-produced strategies map responsibilities across the EU, federal, Land, and city levels and anchor them in specific departments and utilities, with the intention of preventing the passing of responsibility across actors.

They also see municipal levers as strongest at rezoning or building code changes; once projects fall under building law, adaptation measures are hard to mandate, pushing reliance on soft tools like the urban design commission and cooperative planning procedures. A budget-alignment working group under the piloting project "Linz with Ambition" is, in officials' eyes, another key step toward institutionalising climate budgeting. Still, they note that the full rollout is paused due to pending federal regulations.

Officials further perceive a need for procedural durability and more explicit higher-level rules. Funding tied to political cycles, divergent timelines between industrial and housing decarbonisation, and legal gaps all shape what they believe can be delivered within one term. Strategically, they describe a pilot-to-blueprint pathway (e.g., using Franckviertel for district heat decarbonisation) while lobbying, often together with LPHAs, for lifecycle standards and "existing stock before replacement" principles at the federal-state and federal levels. On

[21] see https://www.linz.at/stadtentwicklung/114753.php

greening and heat mitigation, officials feel they must mix formal levers where available with negotiated standards elsewhere.

> *"It requires clarity about what to do—and staying power beyond a single political term. Funding often runs on electoral cycles, which makes it challenging. But doing nothing is not an option."* (City Official)

When officials describe their participation in implementing concrete retrofitting, decarbonisation, and greening measures, they recount targeting inputs to specific decisions (e.g., CityBike station locations) and co-organising with local initiatives, reflecting what they see as a pragmatic, needs-first approach. For street greening, they perceive polarised views around parking pressure and acknowledge the difficulty of quantifying opinion at the street scale.

Limited-profit housing associations and housing experts, by contrast, perceive governance primarily through feasibility frames set by federal-state instruments and cost controls. They describe a long-standing emphasis on keeping new-build output stable, while prescribed standardised building material standards keep rents as low as possible. A focus on renovation became only more critical in recent changes to the housing subsidy scheme. In their assessment, the densification ordinance is a pivotal fix because it treats rooftop additions and infill under new-build funding criteria. These unlocking projects were not viable under earlier renovation subsidies. The densification ordinance released in 2025 is welcomed by limited-profit housing associations for its higher volumes and longer concessional terms. Yet, interviewees still see headwinds: inflation, cost volatility, and policy side effects such as the rent cap's freezing of the maintenance and improvement contribution.

On decarbonisation, housing providers perceive legal asymmetries as a core barrier. They report they cannot compel individual heating switches, forcing expensive parallel systems (district heating plus legacy gas) during transitions, even when the switching networks are ready. They also perceive weak incentives in current rental and non-profit law to monetise "green investments," making much of the push mission-driven rather than financially rewarded. Conversely, in their view, targeted provincial changes to revised renovation funding and densification rules can materially improve loan terms and rent calculations, bringing stalled projects within reach.

For greening, all interviewed housing providers say they always seek to maximise trees and extensive green roofs within tight cost parameters, while facade greening remains largely out of reach. In the context of retrofitting projects, providers' perceptions of participation are resolutely practical. They report moving away from large town halls, which are increasingly seen as counterproductive, to staircase- and building-level meetings, quarterly letters, and door-to-door conversations with social work specialists. In their experience, this format better explains heating changes in non-technical terms, reduces rumour, and builds consent around potential rent effects and construction disruption. From a civic perspective, tenant advocates add that §18 procedures cluster in LPHA stock. These procedures usually allow for an (usually not dramatic) increase in the rent after a court decision. However, tenant advocates perceive greater acceptance among long-term residents, where upgrades become more visible and baseline rents were long suppressed, so they have faced more pushback from recent movers. In general, tenant advocates situate participation within affordability stress and legal complexity.

"*We learned that 150–200-person briefings don't work. We now meet tenants in smaller groups, follow up quarterly in writing, and will likely go door-to-door to explain heating changes in simple, clear terms*." (Housing Provider)

Environmental civic initiatives see the Climate Fund as a rare, low-threshold pathway for grassroots experimentation, where early grants funded expert studies and founders' time, enabling initiatives that would otherwise have folded. Its discontinuation is perceived as a setback and reinforces their view that stronger levers, such as federal-state housing-subsidy criteria, lifecycle standards, and rezoning conditions, remain underweight in addressing renovation and climate costs. They also perceive limits in some city instruments and raise concerns about political steering in design bodies, while urging more inclusive formats that reach beyond the "already engaged" and maintain momentum between consultation and delivery.

"*The Climate Fund truly gave residents a low-threshold way to start things. Without early funding for studies and our time, we would have given up after two months*." (Civic Initiative Representative)

2.2.4.3 (In)equity (distributional)

Across actor groups, interviewees frame (in)equity in Linz as a question of who bears costs and who benefits from decarbonisation, greening, and densification—and how policy design can reduce unequal burdens. As already mentioned in section 3.1, public officials describe a deliberate "equity-by-design" approach in both adaptation and neutrality strategies: prioritising heat-vulnerable residential areas, integrating social vulnerability indicators (age, income, unemployment), and focusing on access to publicly available cooling within a five-minute walk. In the climate-neutrality concept, for instance, it refers to vulnerability characteristics that "include low income, age above 65 years, health impairments, migration background or low level of education. Other vulnerable groups are infants, toddlers" (Linz City Administration 2024, p. 39). Furthermore, officials acknowledge distributional asymmetries: dense, low-green neighbourhoods experience persistent night-time heat. At the same time, better-off areas "on the green hills" remain cooler—risks officials explicitly label as unfair and socially consequential. In senior facilities and other municipal buildings, targeted heat-shielding is being incorporated into renovation cycles.

"*People living in dense areas with little greenery simply have worse living conditions than those on the green hills around Linz. That is unjust—and it makes climate adaptation a social imperative*." (City Official)

A flagship equity move, in the officials' view, is the pre-emptive rollout of district heating in Franckviertel to lower household connection costs and phase out gas, thereby tackling energy poverty (via the project Linz with Ambition). They highlight the inefficiency of "double infrastructures" kept alive by a few hold-out users, and the intention to create a citywide blueprint that decarbonises heat while minimising financial barriers for tenants. At the same time, officials concede the limits of their tools: rental law prevents compelling individual heating switches, and the social impacts of neutrality measures could only be flagged qualitatively rather than quantified ex ante, with explicit instructions to add compensation measures where risks of disadvantages were anticipated.

Housing providers and experts emphasise distributional issues at the intersection of policy, legacy stock, and tenant protections. Experts recall decades of underinvestment in some non-profit estates justified by "keeping rents low," which ultimately left low-income residents with inadequate amenities and higher vulnerability. Recent projects aim to reverse this logic: providers strive to keep rent costs steady through renovation, deliver net savings via sharply lower heating costs, and avoid pricing out residents, especially long-term elderly tenants on unlimited contracts, by using on-site densification to finance upgrades. Yet they stress that legal and financial asymmetries persist: they cannot force individual switches to district heating, and current rental/non-profit law provides weak ways to refinance "green investment" costs, prompting calls for targeted subsidies to support part-by-part or building-wide conversions.

Limited-profit housing providers also foreground the role of social plans when relocations are unavoidable. They note that robust support packages in earlier projects, covering moving costs and guaranteeing affordable alternatives, were introduced in response to tenant protests and are now expected practice. In parallel, they argue that non-profits dampen overall housing costs relative to the private market, but acknowledge that operating-cost inflation because of heightened building norms and general macro-economic conditions as well as repayment schedules can still push burdens onto pensioners and low-to-middle income households, even within the LPHA segment, but even more so outside the LPHA segment where fixed-term leases ("*befristete Mietverträge*") drive insecurity and rent hikes.

Civic interviewees' equity lens highlights both social conflict within buildings and the time poverty of those most affected by climate risks. In mixed-ownership blocks, distrust, envy, and management churn can block cost-neutral improvements such as third-party-financed photovoltaics, suggesting that distributional politics within home-ownership apartments can stall decarbonisation even when funding solutions exist. Civic actors also stress that residents most exposed to heat (e.g., low-income households, single parents) often lack the time and bandwidth to participate in planning processes, reinforcing a mismatch between impact and voice.

> "*The people most affected by heat, those dealing with precarious housing and tight budgets, often have no time to engage. They're directly affected by tropical nights and poor housing conditions, but participation asks for time they don't have.*" (Civic group representative)

Tenant advocates underline that housing cost burdens now affect the "settled middle class" due to recent inflation and rising energy prices, not only the poorest. Additionally, fixed-term contracts on the private rental market create leverage for rent increases at renewal, amplifying insecurity. Tenant advocates and housing providers together highlight the uneven reach of rent brakes across housing segments, with limited-profit housing providers being hit the hardest, while at the same time limiting capital for necessary reinvestments in building maintenance. The rent brake should limit the influence of inflation and was introduced on the federal level in 2023. It also applies the maintenance and improvement contribution, which is the primary source of funding for retrofits of limited-profit housing associations. In follow-up reforms, this obligation was lifted again.

While they acknowledge the dampening role of non-profits and the moderating effect of district heating prices in Linz, they caution that greening features can create maintenance obligations and operating costs if not carefully designed and funded, raising questions about who pays

for climate adaptation, such as maintaining green spaces, in multi-apartment buildings. For civic groups, this context heightens their expectation that decarbonisation, densification and greening be paired with clear social safeguards and transparent communication about who pays, who benefits, and when.

2.2.4.4 Political mobilisation

Political mobilisation in Linz is perceived by interviewees as multi-register and issue-driven, combining protest-oriented action with institutionalised engagement and policy advocacy. Actors do not frame mobilisation purely as opposition; instead, they see it as a means to articulate interests around heat adaptation, street space, housing affordability, and energy transition, and to influence agendas across municipal and federal levels.

Officials emphasise that the current phase is about persuasion and delivery as much as planning. Greening and reallocation in dense streets trigger polarised reactions, often centred on "parking pressure", which officials find hard to verify at the street scale. They view continued, transparent communication and visible benefits as essential to sustain support, alongside iterative risk monitoring to show whether exposure to urban heat declines as measures roll out. Some argue that citywide signals are needed beyond incrementalism, given climate targets and cost headwinds:

> *"It won't be enough to publish strong concepts. We have to convince residents, investors, and the broader economy, and keep funding steady, even when quality requirements raise costs."* (City Official)

Housing providers and experts depict mobilisation as capable of reshaping projects and procedures. Early "demolition and rebuild" announcements provoked tenant protests that pushed the city to adopt a social plan covering moving logistics, costs, and affordable rehousing, which interviewees say has since become an expected template for similar schemes. At the same time, they describe a changed communications terrain: small but vocal opponents can dominate social media and email campaigns, while supportive majorities remain quiet, complicating consent-building even when internal backing is strong. Political mobilisation centres on affordability as a prerequisite for climate action, with tenant advocates calling for a general rent cap of about 2% annually, more substantial renovation subsidies, income-targeted support, and instruments such as a "warm rent" model that aligns landlord incentives with energy performance. They also call for larger, more stable housing budgets and better needs data for Upper Austria to steer supply mixes. However, political coalitions that support these claims are considered rather unlikely given the complexities of a federalist country like Austria.

Civic interviewees present mobilisation as pragmatic and experimental, catalysed by Fridays for Future and enabled by the city's Climate Fund, which lowered barriers to resident-led pilots. Attempts to implement photovoltaics and other measures in mixed-ownership buildings exposed trust deficits and distributional conflicts within homeowners' associations, showing how governance inside buildings can stall decarbonisation even when financing solutions exist:

> *"We applied as private residents to see if climate measures in a 30+ unit house were doable. We didn't get it over the line—not for lack of ideas or financing, but because distrust and*

distributional disputes blocked consensus." (Resident who initiated climate mitigation measures in a multi-ownership building)

Furthermore, institutional advocacy remains essential, as tenant organisations report a steady rise in representation needs across local assemblies, arbitration board cases, and public campaigns, especially as fixed-term contracts amplify insecurity through retrofitting and operating-cost inflation. In this view, mobilisation in Austria is also channelled through more institutionalised organisations, especially tenant advocacy organisations, which are often strongly intertwined with politics.

2.2.4.5 Socio-ecological impacts/benefits (positive)

From the officials' perspective, expanding district heating to the limited-profit housing estates in Franckviertel that are not yet connected is framed as a flagship benefit of the pilot project "Linz with Ambition," with citywide potential to establish clear standards for reducing the city's emissions. By pre-emptively extending pipes ahead of individual requests and offering lower-cost connections, the public utility company of Linz aims to phase out expensive "double infrastructures" (gas plus district heating) and cut household barriers to switching, framed explicitly as support against energy poverty. This lever builds on structurally high connection rates and a broader systematic decarbonisation trajectory of district heating, which officials see as achievable within the target window. The dual strategy of decarbonised heat production in district heating and continued efficiency gains, including the phase-out of remaining gas stoves, should lower bills and reduce utility costs for tenants, as no parallel networks need to be maintained. Civic and tenant representatives add that district-heating prices in Linz have risen far less than in other cities in recent years, cushioning the increase in total housing costs mediated by a public utility company.

Adaptation to urban heat is perceived to deliver multiple co-benefits when driven by nature-based solutions. Officials emphasise that trees and greened public spaces break urban heat islands through shading and evapotranspiration, while also supporting rainwater retention, enhancing biodiversity through greened networks, and providing overall environmental benefits that pure building shadows cannot offer without additional measures such as green roofs. The tree-planting offensive (*Baumoffensive*) is informed by heat-risk mapping and street-use criteria, prioritising places where shade benefits walkers and cyclists and where existing tree cover is scarce. Civic actors recognise visible adoption of these adaptation measures, including "sponge city" techniques that enhance subsurface water storage for street trees, as a concrete sign that the adaptation strategy is translating into practice, but they remain too fragmented. Although officials argue that scaling greening across the whole city can equalise neighbourhood living conditions and reduce the premium effects of isolated upgrades, trade-offs tend to characterise the implementation of adaptation measures.

"If we truly green the entire city, distinctions in 'quality of life' between quarters diminish." (City Official)

Officials and housing providers highlight positive health and well-being gains from exemplar projects and day-to-day upgrades. Demonstration buildings and greener streets are seen as persuasive tools for investors and residents alike: "Lowered energy bills, children playing, shade from trees, that means we feel good in the city" (City Official). Housing providers report that deep envelope improvements reduce the heating demand, so tenants experience direct

savings where consumption-based billing applies: *"If the heating demand drops significantly, the tenant benefits directly because district heating is billed by usage"* (Housing Provider).

Ensuring barrier-free access and social facilities are considered necessary by housing providers as a means of convincing residents to agree to renovation and, in some cases, demolition and new construction. While limited-profit housing providers aim to keep base rents steady through renovations while delivering net savings via lower heating costs, they usually add private outdoor access (balconies, ground-floor terraces), reorganise courtyards and "terraces for all" with 50 cm substrate for planting, preserve mature trees where possible, strengthen pedestrian permeability, and add play areas.

> *"We now try to offer the same rent before and after renovation, tenants should see lower total costs because heating bills should fall by more than half. We'll solve the financing puzzle, but we don't earn an extra Euro for doing the green upgrade."* (Housing Provider)

Overall, limited-profit housing providers show a high level of awareness of improvements that enhance everyday comfort and the microclimate. Green roofs are now standard for new builds and are considered necessary climate adaptation measures for extreme stormwater events. Modest tree planting in existing gardens is described as a low-cost, high-impact step when conditions allow. Civic and research partners similarly stress inclusion-oriented benefits: planning for residents to remain in place during retrofitting work; making interior upgrades (e.g., barrier-free bathrooms) optional rather than mandatory; and expanding shared spaces and gardens to support participation and community life.

As already mentioned, densification is perceived to yield resource and mobility benefits when implemented in the right locations and with the right instruments, as it requires no additional infrastructure. Experts point to brownfield transformations, such as "the Grüne Mitte", which has been one of the most significant brownfield developments on the former freight station, as long-running examples of adding housing built by limited-profit housing developers while unlocking large, accessible green spaces as a good practice that combines greening and affordability. Providers have described three pathways to densification that would yield socio-ecological benefits. These are: a) replacing underused above-ground garages with underground parking and surface greening; b) adding rooftops in well-connected areas by limited-profit housing providers to guarantee affordability; and c) selectively replacing blocks where renovating to barrier-free standards or replacing poor construction materials would outweigh the investment costs. However, it was emphasised that it is a common approach to assess each case based on its long-term suitability, the accessibility improvements it will deliver, and how it will encourage better use of existing streets, utilities, and transit. Housing providers view the densification ordinance as a policy enabler that steers toward inner development, reduces additional land sealing, and makes mixed-tenure supply financially workable. In turn, mixed-tenure tools such as the Linz Modell help ensure that affordable units are located in central areas, supporting social mix and access to urban amenities.

> *"First, I am not building on greenfield sites, but rather utilising existing land resources, which are very inexpensive because they are old properties that I purchased at a low price. Second, I am creating barrier-free access in the flat, but also to the flat itself, which is not technically possible everywhere with old properties."* (Limited-profit housing provider)

Finally, providing affordability in housing is seen as a system-level socio-ecological benefit in its own right. Tenant advocates underscore the dampening effect of the limited-profit sector on rents relative to the private market, with LPHA units, especially those where loan payments have been paid off after 30 to 40 years, offering significantly lower overall housing costs. This stabilising function is framed as essential for retaining diverse households in well-located, greener districts—so that environmental benefits accrue to existing residents rather than pricing them out.

2.2.4.6 Socio-ecological impacts/harms (negative)

Public officials describe a strategic and political intent to prioritise renovation and, when demolition is unavoidable, deconstruction with local reuse (often framed as "Reconstructing"). Civic and research actors report that when replacement occurs, it is typically conventional (concrete/brick with mineral or plastic insulation), leading to substantially higher emissions and material throughput than ecological renovation, e.g. with wood. They therefore clearly advocate for a "renovation first" approach without compromise. Limited-profit housing developers and housing experts report that, often, decades of underinvestment, as well as the creation of barrier-free units, underlie arguments for replacement.

Officials also describe feasibility limits: projects that depended entirely on provincial subsidies (which have changed with the densification ordinance), while fully circular material loops are not achievable under current economics. Housing experts also link ecological concerns to long-standing cost-damping rules at the federal and federal-state levels: standardised economic parameters and equipment catalogues stabilise costs but constrain higher-quality envelopes or adaptation features, producing systemic trade-offs in times of a climate crisis. Furthermore, officials caution against abandoning climate change adaptation measures on and around buildings due to upfront costs, noting that not adapting carries social harms, e.g., increased overheating.

Affordability risks are reported through operating-cost channels and parallel infrastructures. Providers and tenant advisers say decarbonisation does not consistently lower bills: small, local biomass or heat networks can be pricier than prior oil systems, particularly outside the core city, whereas these risks are rarely communicated up front. However, where individual household switches cannot be compelled, estates must maintain gas lines and chimneys alongside district heating, creating a double or triple infrastructure whose testing and maintenance costs are socialised across tenants, even when few remain on gas. Interviewees also describe extreme recent increases in indexed rents and operating costs (cleaning, insurance, maintenance) driven by price inflation in Austria, compounding affordability pressures even when net rents remain moderated in the regulated segments of limited-profit housing estates and the regulated private rental market. The intended social buffers around renovation do not always hold evenly. Limited-profit providers admit that in some complex 1990s-era buildings with costly geometries, keeping post-renovation rents flat is not feasible without moderate increases of €1–2/m². Tenant advocates emphasise that, while LPHA segments often remain cheaper than private units even after rent increases following §18 procedures, the "very low" base rents increase, which especially burdens recent movers.

> *"These heating systems are not cheap… in many cases, the new heat costs more than the old oil heating, and no one warns tenants it can be pricier."* (Tenant association representative)

Perceptions of gentrification and indirect displacement through pricing out focus on central areas where elevated heat stress, historic housing stock and competitive housing demand intersect. Nevertheless, officials see risks of displacement as context-dependent and slower-changing than in more liberalised cities. Furthermore, they anticipate that citywide greening could equalise qualities across neighbourhoods but call for rent-stabilising instruments if localised gentrification trends appear. They prefer to monitor any price effects of greening and stress that other factors are stronger rent drivers than greening itself. Tenant advisers add that they do not yet observe rent surges directly tied to greening measures. Housing experts, however, describe a parallel dynamic of inner-city modernisation by private and commercial owners (e.g. along Landstraße and Markartviertel) that has steadily removed low-rent units, with affected households relocating to cheaper districts or nearby municipalities. In their view, fast demolitions have also occurred, enabled by current legislative conditions. Across all interviewees, however, the large and dispersed limited-profit stock, which accounts for roughly half the city's housing, is perceived as moderating displacement and segregation.

> *"The inner city is being modernised and renovated… low-rent units disappear and come back much more expensive; households move to cheaper quarters or edge municipalities."* (Housing Expert)

Street greening and traffic reallocation often provoke pushback over parking and public space use for events; new garages intended to serve large mixed-use projects can shift traffic and noise burdens into quieter residential areas. Within estates, densification and new shared-space amenities can create social frictions: concerns about noise and safety near kiosks and meeting points; intergenerational tolerance gaps when playgrounds or communal areas are added; and resistance from long-time residents who fear loss of views or the informal use of green patches.

> *"Change is hard on principle for many people. Long-held privileges, such as views and informally used green patches, may make them feel threatened, escalating into opposition to retrofitting projects."* (Housing Provider)

2.2.4.7 Tensions and power dynamics between stakeholders/actors

Interviews highlight multi-level policy coordination as a key issue. City officials describe misalignments between municipal climate aims and provincial subsidy logics. For instance, the city would like to orient itself towards non-binding federal-level building standards for renovations (defined as the '*klimaaktiv'* building standard; for details, see BMWET, 2025) and would like to see more adaptation measures implemented in buildings (e.g., exterior shading and facade greening). However, these were deemed 'unrealistic' under the current provincial funding legislation. LPHAs risk not receiving funding if they add features beyond those in the catalogue, even if they pay for them themselves.

Administrative hurdles and competency gaps limit municipal capacity to implement climate mitigation and adaptation measures. Officials note that many densification projects in the existing proceed via a simple building notification (*Bauanzeige*), which need no approval from the administrative units. This limits the city's binding levers; even once a project is under building law, municipal influence is narrow. When a new building plan is required, planners refer to the Urban Development Committee (*städtebauliche Kommission*). Using this instrument in recent projects often led building developers to change their projects when

climate adaptation measures or other building standards were not implemented, citing cost pressures.

> *"We were always arguing from the defensive… later all the 'nice-to-have' items such as green roofs or open spaces were gone because 'there was no money left.'"* (City Official)

Actor constellations draw both cooperation and critique. Limited profit-housing providers describe a pragmatic relationship with the housing department of the federal state, including regular joint fixes, shared modelling of cost calculations aimed at providing affordable rents given subsidy conditions, and iterative adjustments (such as the densification ordinance), while underscoring that approval power for subsidised projects lies with the federal state. Civic interviewees, by contrast, criticise local instruments by the city as underpowered and politically steered: they argue stronger levers (stricter demolition control, binding rezoning conditions) are underused and claim that urban development and design committees legitimised over-scaled projects without robust city-led volume studies; and characterise much of the climate governance as "greenwashing" that avoids real levers.

> *"This is 90–99% greenwashing… the real levers are not touched."* (Civic initiative representative)

A recurring theme in multi-level policy coordination concerns cross-level funding and bureaucratic complexity as implementation frictions. Experts and tenant advocates highlight overlapping federal and federal-state subsidy schemes for retrofitting and decarbonisation, which are often, by design, non-stackable, and ex-post disbursement that biases actors toward lower-standard solutions that fit unbureaucratic and well-known funding schemes. Housing providers report that some federal programs were as generous as the support of the federal state but too bureaucratic to use, reinforcing a default toward the simpler housing subsidy at the federal state level. Housing experts also criticise the lack of a comprehensive housing strategy at the federal and state levels and the weak data on needs, and call for income-targeted subsidy design and more precise instruments (e.g., rent caps, upfront support) to address affordability without sacrificing standards.

> *"Federal subsidy conditions were as good as the provincial ones, but so bureaucratic, everyone said: keep it, we'll take the provincial subsidy instead."* (Housing provider)

Grassroots projects might run into micro-scale procedural and resident barriers. A tenant-led photovoltaic initiative in a mixed-ownership block collapsed amid mistrust, homeowner association disputes over parking, and changes to building management. Despite successful technical scoping and grant funding, this example illustrates how participatory frictions and a lack of institutional support can derail otherwise viable measures. During construction works, residents report noise nuisance that shapes acceptance, even where rents don't rise in limited-profit housing, underscoring the need for targeted outreach, persuasion, and practical mitigation. On heat conversions, providers and tenant advocates report regulatory limits to compelling individual switches, forcing estates to maintain parallel infrastructures alongside district heating, with costs socialised across tenants. At the microscale of streets and squares, greening measures face competing claims over scarce space (trees vs parking, event setups) and underground constraints; officials frame these as political choices rather than purely technical issues, and trials like dissolving a street segment into green mobility triggered intense neighbourhood debates as mobility patterns were forced to change. Across cases,

stakeholders point to underused municipal levers and fragmented responsibilities at the federal, state, and city levels, underscoring the need for clear institutional leadership, early co-design, and targeted outreach to sustain acceptance.

2.2.4.8 Innovative governance mechanisms

City officials and planners emphasise three strands of innovation: data-driven planning and monitoring, procedural reforms that make climate criteria central to planning, and pilot-to-blueprint delivery models for heat and housing. On the data side, they describe a digital city model with 3D buildings and tree-shadow simulation, linked to microclimate stations and a public dashboard, plus a citywide greenhouse-gas inventory co-developed with the emissions cadastre of the federal state to standardise methods and reduce dependency on external datasets. Governance-wise, city official considers cross-municipal dialogues ("*Dialog Klima-Governance OÖ*") as essential governance innovations that enable exchanges, but also the creation of an "extraordinary Climate City Senate" where updated emission budgets are presented to elected officials to support governance. Delivery-wise, the Franckviertel pilot project aims to flip the connection logic to decarbonised heating infrastructure. The public utility company, Linz AG, extends district heating in advance and then connects buildings, aiming to decommission costly dual gas/heat infrastructure and reduce barriers for low-cost switching framed as both decarbonisation and anti-energy-poverty strategies.

> *"A central goal is to expand district heating in Franckviertel ahead of connections… then phase out gas where possible. This creates a blueprint for citywide rollout." (*City Official)

Officials also report system changes in urban development instruments. This innovation needs to be viewed in light of the establishment of introducing a climate coordinator and climatologist. They are authorised to make statements on large project submissions to ensure alignment with climate-neutrality targets issued by the climate coordinator and adaptation targets issued by the city climatologist. Furthermore, the Urban Development Committee (*städtebauliche Kommission*) introduced in 2019 was retooled with external members (including a dedicated landscape and open space expert to strengthen climate adaptation measures) and linked to 'klimaaktiv' building criteria so that expectations that were set in early design approvals carry through to building code changes and approved building permits. Similar standards are being integrated into cooperative planning processes that prepare and set the framework for urban development and public-building portfolios. On adaptation measures, e.g. trees and green spaces, planners point to codified minimums in building plans, e.g., one tree per 750 m² building plot, green roofs from 100 m² roof area, and to prioritisation rules that weight heat-risk maps, street use, and existing shade to steer a tree planting program since 2020 (*Baumoffensive*).

> *"We needed an anticipatory tool, hence the urban development commission with 'klimaaktiv' standards, and a clear link to building permit approvals to avoid 'nice-to-haves' being cut later."* (City Official)

Housing experts and providers describe financing and technical mechanisms that let them combine decarbonisation with affordability. They highlight the densification ordinance, which has been in place since 2025, that treats densification like a "new-build subsidy", enabling rooftop additions and allowing cross-subsidisation of deep renovations, together with a maintenance and improvement contribution that tenants need to pay as part of rent (as

stipulated by the national Limited-profit Housing Act - WGG). Some limited-housing providers report that they are currently working on photovoltaic rollouts on existing roofs, alongside the installation of photovoltaic panels on carports whose power revenues finance the carports, generating additional revenue for limited-profit housing associations. Some providers also trial heating circuit optimisation to lower temperatures and reduce energy use, even in district heating systems. On the design level, limited-profit housing associations prioritise unbuilt soil around buildings and larger courtyards to support big-canopy trees and integrate core activation for summer comfort, paired with envelope upgrades that lower heating demands and directly reduce tenant heating bills. Limited-housing providers also underline renovate-in-place strategies and incremental switching incentives, acknowledging the need for targeted financial incentives in the regulated housing stock.

> *"So, figuratively speaking, you take a two-story building and add another two stories on top; those two upper stories then finance, let's say, half of the roof renovation and half of the lift installation, because whether the lift runs to four floors or two, the costs don't double. That way, you can make the renovation affordable, including financial means from the maintenance and improvement contribution."* (Housing Provider)

Policy and planning levers are used to preserve affordability while delivering climate goals. Experts describe the Linzer Modell: at rezoning, roughly one-third of units must be subsidised, ensuring social mix in high-cost areas where subsidised housing would otherwise fail the feasibility criteria of the housing department of the federal state. At the same time, housing experts point to proposals that align incentives with energetic performance, such as deductions for poor thermal quality based on energy performance certificates, or a "warm rent" model that bundles rent and heat at a high-efficiency benchmark, shifting the cost of inefficiency away from tenants and creating clear upgrade incentives for owners.

> *"Land is scarce and expensive… the Linzer Modell's one-third quota at rezoning keeps subsidised housing by limited-profit housing developers in prime locations."* (Housing Expert)

Civic and research actors add bottom-up and commons-oriented pilots to the toolkit. They advocate "renovation first," arguing that ecological renovation outperforms conventional replacement on embodied carbon and material flows and should be paired with inclusionary measures such as renovate-in-place, optional interior works, and staged heating centralisation so tenants can switch progressively.

> *"Ecological renovation is comparatively resource-efficient; wherever possible, renovate first—and do it in ways that let tenants stay."* (Civic Initiative Representative)

2.2.4.9 Tourism and market pressures

Tourism is not perceived as a major driver in Linz's current transformation. Interviewees focus instead on market pressures, especially high-end, investor-led projects and land-price dynamics, while noting that these are moderated by the city's strong limited-profit sector and planning instruments.

Public officials describe episodes of investor pressure around significant, high-rise proposals, which prompted the creation and use of the Urban Development Commission (*städtebauliche Kommission*) to bring external expertise (including open space planning) and to evaluate

projects against clearer standards, rather than reacting case by case. Housing experts confirm a growing but contained segment of luxury and investor-owned developments (e.g., Bruckner Tower, Quadrill, Lux Tower), driven by local/regional capital rather than global funds, and supported by planning approvals for high-end schemes. At the same time, they stress that pressure has not reached the scale of those in larger European metropolises.

> *"We were being overruled by real estate tycoons [Bautycoons]'… the commission helps us anticipate and evaluate, so 'nice-to-haves' like green roofs or free space aren't cut away later."* (City Official)

Civic interviewees point to specific instances where public assets were disposed of through highest-bid procedures, outcompeting LPHAs and reinforcing investor-led outcomes. They also note extremely high prices in select projects, sometimes with units held as investment assets rather than lived-in homes. At the same time, tenant advisers report fewer extreme cases of deferred maintenance or displacement pressure than in larger markets; private contracts are commonly time-limited, and post-renovation rent adjustments follow legal frameworks and standard surcharges, tempering more aggressive practices.

> *"Cases where tenants are living in terrible conditions and a landlord does nothing may occur, but I might see two or three such cases a year. Generally, no, because private tenancy agreements are usually fixed-term, the landlord can raise the rent anyway. And if the building has been thoroughly renovated, they'll charge a different rent; if they add a location surcharge, that applies in the private segment as well."* (Tenant Advocacy)

Overall, interviewees depict market pressures such as luxury towers, investor apartments, and high land prices as present, but moderated by LPHA dominance in the housing stock and by governance tools. Tourism pressures do not emerge as a salient factor in shaping housing dynamics.

2.2.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Civic interviewees acknowledge visible steps toward a strategic reorientation through the climate-neutrality concept and climate adaptation strategies, as well as through programs and implementation practices (e.g., the tree-planting program and sponge city installations). Still, they describe the latter as partial and uneven. They "see" new trees and sponge-city elements, yet are unsure how widely they have been implemented and emphasise that core levers (such as traffic) remain underused. This extends to a broader critique of 'green branding' by some actors, half-hearted regulation, and ineffective advisory bodies, which reinforces the sense that implementation is cursory or insufficiently binding.

In parts, city officials themselves underpin the "not enough yet" reading. They argue that incremental greening with a park here, a tree there, will not meet the challenge of urban overheating and call for bolder reallocation, such as annually dissolving a through-street for green space. They also acknowledge that current tools are modest and often non-binding: standard plan requirements and climate-related statements can be sidelined until instrument reforms make them enforceable. Their accounts of complex constraints, parking pressure, event space claims, underground utilities, etc., help explain why delivery of adaptation measures remains piecemeal and contested.

Housing providers add a practice-based critique that underscores quality and durability concerns. They favour soil-first, big-canopy tree strategies and are openly sceptical of façade greening due to maintenance failures; several installations have been removed, they note, and summer irrigation demands can be ecologically and financially problematic. This suggests that some "quick wins" have not been well matched to local operating realities, reinforcing perceptions of cursory greening when solutions are ill-suited or under-maintained. Officials, too, stress the need to control and sustain open space quality over time, implying gaps beyond initial delivery.

Perceptions also diverge on densification and retrofitting/decarbonisation. Public agencies and providers argue that reconstructing and densifying (now subsidised like new-build) can deliver barrier-free access, better urban form, and more units on existing infrastructure, often making deep renovation work via rooftop additions. At the same time, civic actors emphasise renovation-first inclusion (stay-in-place, optional interior works) and caution against routine upzoning without clear social/climate criteria. Affordability runs through these debates: limited-profit providers point to models that aim to hold base rents steady while cutting energy costs, whereas tenant advocates push for stronger tenant-side protections and thermal-performance-linked incentives so decarbonisation does not raise housing costs, also in private rental segments that are not regulated.

Furthermore, both officials and civic actors see the city's large non-profit sector as a structural buffer against classic displacement and segregation.

> *"Given the high share of public/non-profit housing, I don't think that happens here … I can't imagine such enclaves in Linz."* (City Official)

Nevertheless, civic representatives report rising pressure in the private segment driven by index-linked rent jumps, fixed-term rental contracts, and operating-cost inflation. They link price dynamics more to inner-city modernisations and investor projects than to street greening. On the effects of NbS, specifically retrofitting and densification, officials acknowledge potential value-uplift risks and discuss targeted safeguards. Still, tenant advocates say they see little direct impact on rents from trees or sponge-city measures to date.

> *"We have no perception of rent increases due to greening or densification … most of it is operating-cost increases and indexation."* (Tenant advisory)

Hence, they argue that affordability strains stem primarily from broader market and cost drivers. Providers position densification/reconstructing with social plans and retrofit co-financing (e.g., rooftop additions funding lifts/roofs) as ways to add units, improve quality, and hold base rents while lowering energy bills; civic voices counter that without robust criteria and tenant-side protections, routine upzoning and replacement of buildings risks pricing out lower-income households.

2.2.5 Critical Analysis: Linz

2.2.5.1 Uneven social impacts of green transition interventions

In Linz, observable affordability strains over the last three years stem primarily from macro drivers (index-linked rent hikes, operating-cost inflation, and land/finance pressures) rather than from the green transition interventions per se. Tenant advocates and civic actors have identified the most significant issues in the private rental sector. Fixed-term contracts allow landlords to gradually increase rent at retrofits, while operating costs (insurance and services) have risen sharply. Inner-city modernisations and investor-led projects have also steadily removed lower-rent units from central districts. By contrast, NbS-inspired measures such as street greening and the sponge-city principle, as well as decarbonisation efforts through district heating expansion, have not (yet) shown a consistent direct link to rent increases in Linz. Officials and tenant advisers alike report little evidence of rent increases attributable to greening itself, and limited-profit providers emphasise strategies to keep base rents low while cutting energy bills through envelope upgrades and district heat (where consumption-based billing applies).

Two caveats complicate this benign picture. First, green transitions can add costs if poorly designed. Limited-profit providers flag that parallel infrastructures (district heat plus legacy gas for holdouts) socialise maintenance across tenants, and small, local heat networks outside core Linz can be pricier than anticipated. Cost risks that are often not communicated up front. Second, densification and reconstruction can raise displacement risks if undertaken without robust safeguards. In Linz's limited-profit sector, general rent regulation, as well as support for social plans for extreme hardship cases, relocation, renovate-in-place logistics, and cross-subsidies via rooftop additions, have moderated those risks. Yet civic actors worry that routine upzoning and replacement could still price out lower-income households, especially in the private segment, unless criteria and protections are made explicit (e.g., performance-linked rent deductions, warm-rent models, binding social-impact conditions in planning approvals).

The city's structural buffers, in the form of its dominant LPHA stock and historically high district-heating coverage, have clearly dampened "green/ecological gentrification" pathways visible in more liberalised markets. It is still too early to see the effect of the Linz Model, which foresees a one-third subsidised quota for rezoning privately owned land. Where harms do appear in Linz, they are indirect, such as cost pass-throughs from macro inflation, investor upgrading cycles in central areas, and micro-conflicts around new shared spaces or construction nuisances. In short, while the transition has not yet been the primary driver of inequality in Linz, it can amplify existing pressures if affordability and governance misalignments are not managed.

Short-term affordability stress is already felt through indexation, operating costs, and selected inner-city modernisations, while the direct, rent-raising impact of greening measures remains limited. Retrofit/decarbonisation effects are mixed: where consumption is metered, and envelopes are improved, tenants probably feel savings; where parallel heat infrastructures persist, operating costs tend to rise. Densification effects are also varied: selective replacement paired with social plans can improve quality and add accessible units without generalised displacement, but noisy sites and the loss of informal green spaces or views can create local resistance.

In the medium term, two trajectories are plausible. If current governance arrangements are maintained, e.g. the densification ordinance, the Linz model and rezoning, and district heating rollouts, Linz could increase inner-city development and retrofitting while maintaining moderate aggregate affordability through the LPHA sector. However, if macroeconomic headwinds persist, municipal instruments remain non-binding and federal-state housing subsidy rules undervalue renovation and adaptation, risks will rise: (i) double infrastructures will last longer; (ii) routine replacements in the private sector will lead to higher prices; and (iii) greening will impose maintenance obligations without providing clarity on funding, which will result in costs being shifted onto tenants. The discontinuation of the city's climate funds (*Klimafonds*) also signals the fragility of low-threshold civic innovation, unless a more sustainable alternative replaces it.

2.2.5.2 Key critical points defining housing justice and inequalities

Strong social buffers and multi-level policy frictions define housing justice in Linz. The city's huge limited-profit sector (roughly half of the stock) and high district-heating penetration, rooted in post-war housing institutions and routine envelope upgrades since the 1990s, moderate classic displacement and energy-poverty pathways far more than in many peer cities. Connection rates in LPHA estates are typically high (often exceeding 80% in areas like the Franckviertel), and tenant advisers report that recent district-heating price increases were lower than in some other Austrian cities. These features create a protected baseline for a just transition. Where envelopes are improved, and heat is networked and metered by use, tenants can experience lower total costs, especially if base rents in limited-profit housing are held constant. At the same time, Upper Austria's subsidy logic has, for years, prioritised the standardised output of new-build units under "economic parameters" over the quality of renovation and adaptation, producing a misalignment with municipal efforts to embed *klimaaktiv* criteria in planning and to steer "district-heating first" decarbonisation and risk-led nature-based cooling.

This structural context sits atop a distinctive historical legacy. Interwar and wartime estates, the so-called "*Hitlerbauten*", and post-war buildings with generous courtyards but heterogeneous technical standards now concentrate the transition agenda: deep renovation and heat switching, barrier-free retrofits, and courtyard-based tree planting. The estates' spatial form creates an opportunity to equitably distribute shade, permeability, and everyday amenities, especially when the city's adaptation strategy prioritises heat-exposed areas using risk maps and social vulnerability indicators. Limited-profit housing providers' soil-first, big-canopy strategies align with this goal, whereas façade greening is often infeasible due to maintenance and irrigation burdens. In this sense, Linz's NbS agenda is not a cosmetic overlay but a historically conditioned lens through which environmental benefits can be redistributed, provided long-term maintenance is funded so that operating-cost drift does not undermine the households the measures aim to support.

Where green transition measures have intersected with LPHA practice, they have generally delivered tangible justice gains. Renovate-in-place protocols, optional interior upgrades, and social plans that require temporary relocations have become expected templates, reflecting a learning curve shaped by earlier tenant protests. Financially, the recent densification ordinance treats densification projects like new builds, unlocking future rooftop additions and infill with concessional 45-year loans; these additions often co-finance deep-envelope works

and lifts while keeping base rents steady and lowering energy bills under consumption-based district heating. At the planning scale, the Linz Modell secures a one-third subsidised quota at rezoning of private land, protecting future affordable supply in prime locations that would otherwise fail provincial feasibility tests as land values escalate. Together, these instruments have the potential to further moderate displacement risks even as environmental quality rises.

Yet limitations have significant consequences. A legal asymmetry prevents providers from compelling individual heating switches, necessitating costly parallel infrastructure (district heating plus legacy gas) and the socialisation of testing and maintenance across tenants. This blunts the equity dividend of decarbonisation. In the private rental market, where fixed-term contracts allow rents to be adjusted incrementally, recent index-linked increases and operating-cost inflation have increased total housing costs independently of greening measures. Interviewees consistently differentiate these macro pressures from NbS per se; street greening and sponge city elements have not produced measurable rent surges. Instead, conflicts revolve around parking, event space, disruption during works, and occasional externalities in operating costs when maintenance is unfunded or billing is opaque. Modernisations and investor projects in central areas have steadily removed low-rent units, with households relocating to cheaper districts or edge municipalities. Here, the city's buffers moderate, but do not eliminate, market-driven exclusionary pressures.

Densification is the most double-edged component. With the right leadership and tools, it can be both environmentally friendly and socially fair. This could involve replacing surface car parks with underground parking and planting, adding storeys to roofs to fund deep renovations and barrier-free access, and selectively reconstructing buildings where accessibility or poor condition makes it necessary. A case-by-case assessment is central to this, taking into account long-term suitability, accessibility improvements, and the efficient use of existing infrastructure. However, in the private sector, routine upzoning and replacement without binding social and climate criteria risks converting environmental improvement into exclusion through pricing. Performance-linked rent instruments, such as warm-rent models that bundle rent and heating costs based on an energy-efficiency benchmark, or deductions tied to energy building certificate (*Energieausweis*) classes, would better align incentives so that retrofitting benefits accrue to tenants rather than being eroded by rent or service charge increases.

The city's recent governance reforms have begun to shift the focus of implementation from advice to steering. This includes introducing a climate coordinator and a climatologist, retooling the Urban Development Committee with external expertise and *klimaaktiv* criteria, and piloting pre-emptive district-heating extensions. These measures aim to align expectations at stages where levers are strongest, such as rezoning and changes to building plans. However, the success of these measures hinges on enforceability. Once projects proceed under building law or via notification, municipal leverage narrows, and 'nice-to-haves' such as green roofs or open-space quality are vulnerable to cost pressures. Furthermore, the discontinuation of the city's climate funds (*Klimafonds*) highlights the vulnerability of low-threshold civic innovation, which enabled residents, especially those with limited time and resources, to initiate building-scale transitions and identify social impacts in time to address them.

In summary, Linz's green transition has not primarily driven housing inequality; rather, it intersects with an affordability landscape characterised by private-market churn, operating-cost inflation and central-area upgrading. The city's high LPHA share and high district heating

penetration create robust buffers that could translate environmental upgrading into housing justice. Whether this translation succeeds depends on enforcing tighter controls on rezoning and permitting, normalising 'existing stock before replacement' in subsidy law, closing the legal gap that forces dual infrastructure, explicitly funding NbS maintenance and equipping the private sector with performance-linked rent tools. If these conditions are met, Linz's structural advantages could facilitate an equitable transition. Otherwise, environmental improvement could become a vector of exclusion, with benefits accruing unevenly and costs drifting towards those least able to pay.

2.2.5.3 Concluding reflections

The case study of Linz reported a combination of green transition interventions, ranging from retrofitting limited-profit estates to instances of soft densification and infill in existing residential areas, such as rooftop additions. It also involves densification on brownfield sites, such as the Grüne Mitte development on the former freight yard, which limited-profit housing developers exclusively developed. In parallel, the City implements networked nature-based solutions (NbS) through climate risk-oriented street tree planting and sponge city installations in heat-exposed corridors and squares. This hybrid portfolio of NbS differs from large-scale, iconic park or river renaturalisation projects in that it relies on dispersed, data-guided micro-interventions tied to everyday streets and LPHA courtyards. The case study also covered the pilot-to-blueprint heat decarbonisation model (district heating first in Franckviertel) and general retrofitting and decarbonisation approaches in the limited-profit housing sector

Regarding stressors, affordability pressure in Linz is driven primarily by rent and operating-cost inflation in the private segment, and by macro-level price dynamics, not by tourism or second homes. Tenant representatives highlight indexation and fixed-term contracts as the primary sources of affordability drivers. In retrofits and decarbonisation, most interviewees link risks to double-infrastructure during heat transitions, while district-heating prices in Linz have risen less than in other cities, moderating energy-poverty exposure. Greening itself is not reported to trigger rent surges; distributional risks are more about maintenance costs and street-space conflicts than direct "green gentrification."

Actor constellations are distinctive and help explain the moderated risks. The LPHA sector (≈50% of stock), public utility companies (e.g., Linz AG for district heating), and a retooled municipal planning apparatus (climate coordinator/climatologist, Urban Development Committee with *klimaaktiv* criteria) anchor delivery of green transition initiatives. The federal state (Upper Austria) retains decisive levers via housing subsidies and equipment catalogues, historically favouring output in new builds, but the 2025 densification ordinance is a partial realignment. Nevertheless, tenant advocates and civic initiatives became more critical and active actors, which helps to implement a justice-oriented green transition.

In sum, the equity outcomes hinge less on the presence of NbS, retrofitting or densification per se. Still, more on the enforceability of rezoning/building plan changes, funded maintenance to prevent operating-cost drift, legal capacity to avoid double infrastructures in heat conversion, and performance-linked rent instruments so that retrofit gains become a shared dividend rather than a new cost vector.

2.2.6 Bibliography

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2.2.7 Appendix 1 – Glossary

Abbreviations

EU	European Union
NbS	Nature-based Solutions
LPHA	Limited-profit Housing Associations
OÖ	Oberösterreich (The federal state of Upper Austria)
GWG	GWG - Gemeinnützige Wohnungs-gesellschaft der Stadt Linz GmbH (Limited-profit Housing Association)
Neue Heimat	NEUE HEIMAT Oberösterreich Gemeinnützige Wohnungs- und SiedlungsgesmbH (Limited-profit Housing Association)
WAG	wag Wohnungsanlagen Gesellschaft m.b.H. (a former Limited-profit Housing Association which still manages dwelling units falling under the WGG).
WGG	Limited-profit Housing Act (regulating LPHAs)
MRG	Austrian Tenancy Act

Terms and Concepts

Linz with Ambition	'Linz mit Ambitio3xn' (Linz with Ambition) supports the City of Linz's goal of becoming climate neutral by 2040 (Climate Neutrality Concept). The project develops solution modules in the three areas of ambition governance, implementation, and learning environment, addressing key levers such as energy, mobility, and buildings. In the Franckviertel district, a climate-neutral neighbourhood is being developed as a blueprint for the whole of Linz, including decarbonisation of infrastructure, new mobility solutions and citizen participation. At the same time, administrative processes are being adapted, cooperation with pioneer cities, the Federal Ministry and research partners is being intensified, and civil society is being activated. In this way, Linz is making a decisive contribution as a pioneer city on the road to climate neutrality.
LPHA	Limited-Profit Housing Associations (Gemeinnützige Bauvereinigungen) are firmly institutionalised housing providers in Austria. Regulated by the Limited-Profit Housing Act, these providers set rents on a cost-based basis. Cost-rents consist of the repayment of loans, a

renovation component – the maintenance and improvement contribution (Erhaltungs- und Verbesserungsbeitrag – EVB), and an interest of 3.5% on the equity the LPHA has invested. Surpluses need to be reinvested into new construction (see GBV & VÖWG, 2025).

Austrian Tenancy Act The Austrian Tenancy Act (MRG) defines the rights and obligations of tenants and landlords depending on the type of rental agreement and the characteristics of the property. The law establishes three categories of regulation: full application, partial application, and exclusion from the MRG, each with varying levels of tenant protections. Properties in the full application scope, primarily older multi-unit buildings (pre-1945), are subject to rent control and strong tenant protections. Partial application covers newer buildings (build after June 1953) and allows market-driven rents while maintaining eviction protections. Fully excluded properties (e.g rental objects that have been newly constructed by the conversion of an attic or an extension on the basis of a building permit granted after 31 December 2001,) are not regulated under the MRG and offer no specific rent or eviction safeguards.

§18 procedures Legal procedures under §18 of the Austrian Tenancy Act (MRG), governing increases in rent setting and adjustments for apartments in the process of renovations.

Urban Development Committee The urban development committee (*Städtebauliche Kommission*) is an expert advisory body that supports the sustainable, innovative, and high-quality urban development of Linz by formulating concrete planning objectives to guide key urban decisions, particularly for complex large-scale projects. It consists of external and internal experts from fields such as architecture, urban and spatial planning, transport planning, and open-space planning.

2.2.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Housing Policy & Political Scientist	Johannes Kepler University Linz	17.09.2025	In Person
2	Architect / Sustainable Retrofitting Expert	Architectural Company	22.10.2025	In Person
3	Project manager, 'Linz with Ambitio3xn'	City of Linz	04.11.2025	In Person
4	Head of the Department of Urban Climatology and Environment	City of Linz	19.11.2025	In Person
5	Founder of a civic organisation for Energy Transition	Verein Energiewende Linz	26.11.2025	In Person
6	Employee, Planning, Technology and Environment Department	City of Linz	26.11.2025	In Person
7	Greenhouse Gas Monitoring Unit at Linz City Council ·	City of Linz	26.11.2025	In Person
8	Director of, and regional Spokesperson for Limited-Profit Housing Associations	WSG, LPHA	27.11.2025	In Person
9	Political Activist / Politician, former Architect	Independent Municipal Councillor for the City of Linz (Linz+)	28.11.2025	In Person
10	Consultant on climate neutrality and climate policy, former climate coordinator for the city of Linz	Self Employed	01.12.2025	In Person
11	Artist & Member of Civic Initiative	Klimasoziales Linz	03.12.2025	In Person
12	Property Developer for a limited-profit housing association	WAG-EBS	03.12.2025	In Person

13	Employee in the Economic, Social and Societal Policy Department focusing on housing policy	Upper Austrian Chamber of Labourers	15.12.2025	In Person
14	Tenant Interest Group Representative	Mietervereinigung, NGO	19.01.2026	In Person
15	Director of, and regional Spokesperson for Limited-Profit Housing Associations	Neue Heimat OÖ, LPHA	23.01.2026	In Person

2.2.9 Appendix 3 – Visuals

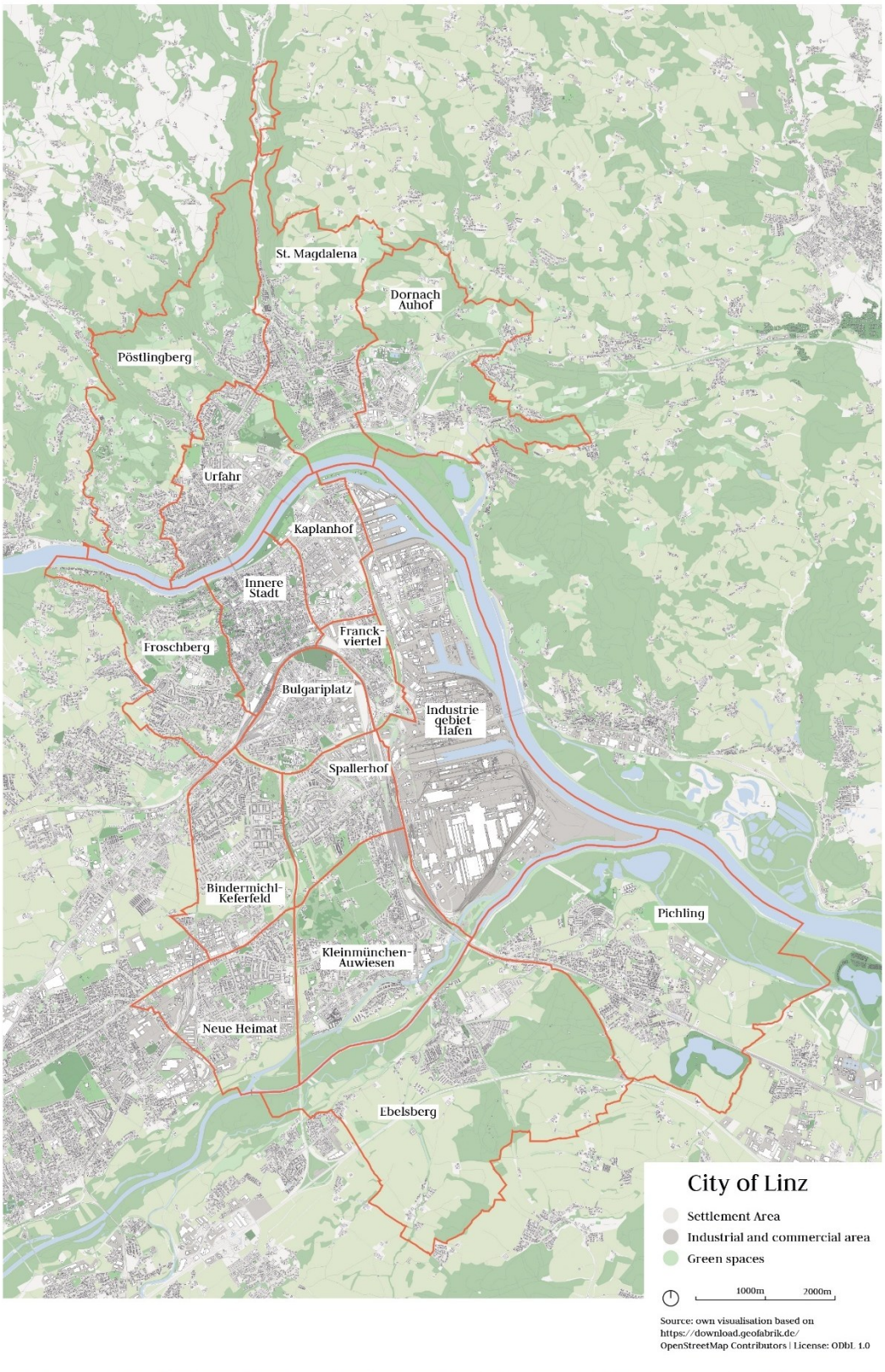


Figure 3: Overview of city structure, Linz

Figure 4: New "reconstructed" limited-profit estates in the front, in the back, interwar period housing estate (Picture: Michael Friesenecker)

Figure 5: Infill ownership apartments with the announcement of a 200m2 penthouse apartment at the top floor, located in Linz, Urfahr. (Picture: Michael Friesenecker)

Figure 6: Investor-driven highly densified buildings and urban development. (Pictures: Michael Friesenecker)

2.3 CASE STUDY (SMALL): GMUNDEN

Authors: Judith M. Lehner, Nina Lobnig, Michael Friesenecker (TU Wien)

2.3.1 Gmunden: Challenges of a small town around just (housing and ecological) transition

Gmunden is a municipality (Stadtgemeinde) in the Austrian state of Upper Austria (Oberösterreich), serving as the administrative centre of the political district of the same name. The municipal territory covers roughly 63.5 km² and functions as a local gateway to the Salzkammergut region.

As a lakeside town, Gmunden lies about 425m above sea level on the northern shore of Lake Traunsee, where the Traun River flows out of the lake. The municipality is bordered by the Traunstein and other alpine slopes, giving it a pronounced lacustrine–alpine landscape. The city is located in the temperate continental-alpine transition climate zone typical of the northern edge of the Northern Limestone Alps, with moderate to cool summers, ample precipitation, and cold, often snowy winters. The lake's large water mass also exerts a moderating microclimatic effect on local extremes, reducing frost frequency near the shores compared with upland terrain. At the same time, orographic uplift of moist westerly air against adjacent peaks commonly enhances rainfall in the broader catchment. Because of the geological

preconditions, the town is affected by regular landslides, with the most recent severe one in 2007, when 55 buildings were evacuated.

With a total population of 13,231, the population number of the core municipality of Gmunden is stagnating (0.9% and 112 inhabitants in the last 10 years) (Statistik Austria 2025). With a modest average overall density of 208/km^2, the town has a lower density than compact urban centres but a concentrated settlement pattern along the lake shore. Age-structure data indicate an older profile, with approximately 16.3% of the population aged 0–19, 57.8% aged 20–64, and 25.9% aged 65–74. This suggests a significant retired population alongside a dominant working-age cohort (Statistics Austria, 2025). The surrounding areas of Gmunden show strong population growth in the adjacent northern municipalities, but also population decline in the southern municipalities.

Historically, Gmunden was integrated into the Salzkammergut salt economy, and in the modern period, the local economy diversified into manufacturing (notably ceramics), services, and tourism. Apart from the industrial base of ceramics manufacturing and small and medium enterprises, cultural festivals and events (most recently through initiatives such as the European Capital of Culture Salzkammergut 2024) generate additional short-term economic multipliers (WKO 2024). Recently, however, tourism has become less dominant as a financial base. Nevertheless, due to its iconic location, it struggles to cope with the daily impacts of tourism, such as parking and second homes.

In terms of infrastructure, Gmunden, as the district's administrative seat, offers a dense array of public services (district administration, court, clinic, multiple schools, and cultural facilities). It is well connected by regional public transport, including public bus services, the national train network and by a light-rail connection (Traunseetram) that links Gmunden with surrounding municipalities. Local transport, port and pedestrian lakeside infrastructure support tourism and commuter flows, while the *Traunseetram* (operational since 2018 in its current form) is explicitly promoted as a key element of regional mobility.

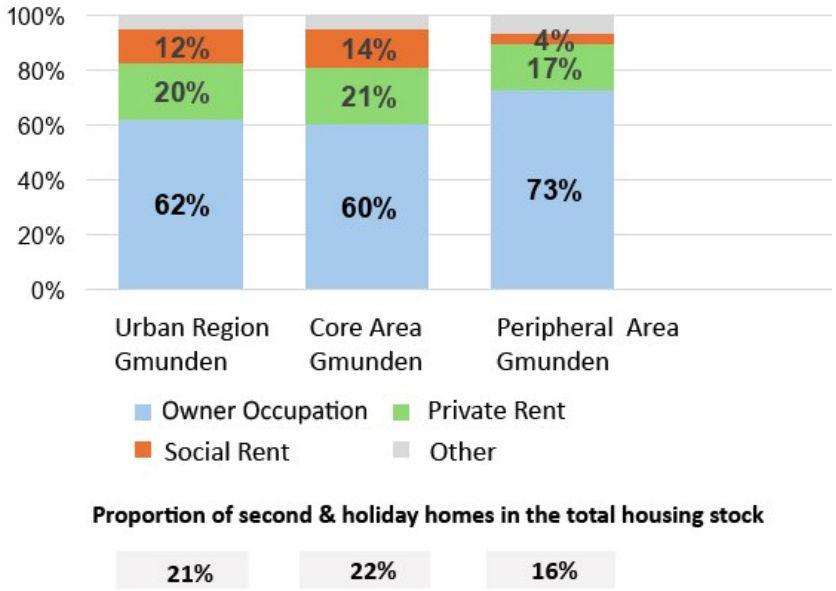
In terms of housing, about half of the housing stock in the political district of Gmunden consists of single-family homes. But also, apartment ownership (15%), private rentals (20%) and about 10% social housing exist. The densest area of the city is located in the historic centre of the town, also with (heritage-protected) townhouses originating from the Renaissance through the 19th century. Because Gmunden is part of the Salzkammergut tourism region, the housing stock includes a large proportion of seasonal or holiday apartments and second-home ownership. The growing share of second homes, with an increasing number of multi-storey and mixed-use residential buildings on the eastern lakeside, accounted for about a quarter of

homes in 2024. House prices in the district are increasing and rank third among Upper Austrian districts[22].

Against this background, recent housing completions in Gmunden show a marked increase in prices, particularly for newly built dwellings. Average prices rose from approximately €5,200 per m² for units completed between 2020 and 2022 to around €7,700 per m² in 2023, €9,600 per m² in 2024, and up to €13,300 per m² in 2025. Since the 2010s, local and regional developers have increasingly oriented new housing production towards affluent second-home users and investment-oriented buyers. Housing completions reached a clear peak in 2021, when 288 dwellings were completed, almost four times the average annual output of the preceding decade (around 76 units per year), mainly due to the completion of two large subsidised housing projects. This increase was temporary. In subsequent years, construction activity declined again, with 62 dwellings completed in 2023, and new housing production has since been limited mainly to high-priced, privately financed apartments in premium locations, with only a few exceptions (Matznetter 2024; Statistik Austria 2025). Due to the comparatively high share of second homes, the city council applied for 'reservation municipality' (*Vorbehaltsgemeinde)* status for second homes in March 2023, a designation that would allow limiting the number of holiday and secondary residences. Still, the request was rejected by the state of Upper Austria in 2024. Gmunden's application for designation as a "reservation municipality" was denied because the provincial government found that both the overall ratio of second homes to primary residences and the household-level ratio are lower than in comparable municipalities and remain below the thresholds set out in the Upper Austrian Restricted Areas Regulation (*Oberösterreichische Vorbehaltsgebiete-Verordnung*).

Figure 1. Share of housing market segments in the primary residence stock, including proportion of second & holiday homes in the total housing stock

[22] https://immopreise.at/Oberoesterreich/Haus/Eigentum#cl188



Politically, Gmunden has been dominated by the conservative People's Party (ÖVP), which has held the majority of votes in mayoral elections for over 20 years. The current mayor has been in office since 2014. Following the 2021 elections, the ÖVP formed a coalition with the Green Party (Die Grünen) for the first time. In the last regional elections, the ÖVP received 50.68% of the votes, followed by the Green Party with 16.28%, with an increase of 8.72 percentage points compared to the previous election. In comparison, the Social Democrats (SPÖ) gained 13.77% and the right-wing Freedom Party (FPÖ) 10.41% (Amt der Oö. Landesregierung 2021). In addition, Gmunden appointed its first climate coordinator in January 2023. Since then, she has been responsible for coordinating the implementation of the *Climate Strategy Gmunden 2030* and for raising public awareness of climate protection and climate change adaptation (Klimastrategie Gmunden, 2023).

2.3.2 Green Transition Interventions in Gmunden

Since adopting the Climate Pact in 2019, the City of Gmunden has implemented a range of measures to mitigate and adapt to climate change, and to promote sustainable urban development. The Climate Pact (Gemeinderat der Stadt Gmunden, 2019), unanimously adopted by the City Council, serves as the basis for the Gmunden Climate Strategy 2030 (Klimastrategie Gmunden, 2023). The strategy was developed through a participatory process between March and July 2022, including eight thematic workshops supported by Klimabündnis Oberösterreich, involving citizens, experts from regional institutions, members of the municipal council and civil servants (Klimastrategie Gmunden, 2023).

For the case study of Gmunden, no single neighbourhood, area, or project was selected for detailed investigation. Instead, the analysis is based on the city's Climate Strategy released in 2022, complemented by initiatives chosen that address nature-based solutions, urban densification, and building retrofitting across the city. The Climate Strategy 2030 defines four thematic fields with 16 objectives, including CO_2-neutral energy and climate-friendly land use, spatial planning, and nature. In the energy sector, Gmunden aims to achieve 100% renewable electricity by 2030, primarily through expanding photovoltaic systems. Following the completion of the Solar Cadastre in 2022, a Renewable Energy Community was established

to enable local participation in renewable energy generation. Further measures include retrofitting municipal buildings, replacing fossil-based heating systems, and preparing a Municipal Heat Plan that addresses district heating expansion, geothermal potential, and decentralised heating solutions (Klimastrategie Gmunden, 2023).

A small-scale nature-based solution in Gmunden is the sponge city project (Schwammstadt), mandated for implementation in the city's 2022 climate strategy. On 10 July 2025, the project was inaugurated and is located at Kastanienplatzl (Herakhstraße–Wunderburgstraße), transforming a former asphalted parking area into a green, climate-resilient space. The project applies sponge city principles by retaining rainwater in the soil to support tree growth and reduce sewer system loads. Six climate-resilient trees were planted alongside permeable surfaces and low-maintenance vegetation.

Another relevant initiative is *Altstadt Impuls Gmunden* (Old Town Impulse), an EU-EFRE co-financed pilot project (RMOOE, 2019). It supports the renovation and revitalisation of older or vacant buildings in the historic centre, providing building owners with expert assessments of their properties, guidance on renovation options, and coordination with housing subsidies. The development process began in 2018 and lasted about a year, culminating in two on-site renovation consultation days in October 2019. The project had a total budget of €50,000 and employed software applicable to other municipalities to model rent levels against investment costs (RMOOE, 2019; RMOOE, 2023).

Figure 2: Map of Gmunden with key areas (Source: own elaboration with GIS data, openstreet map)

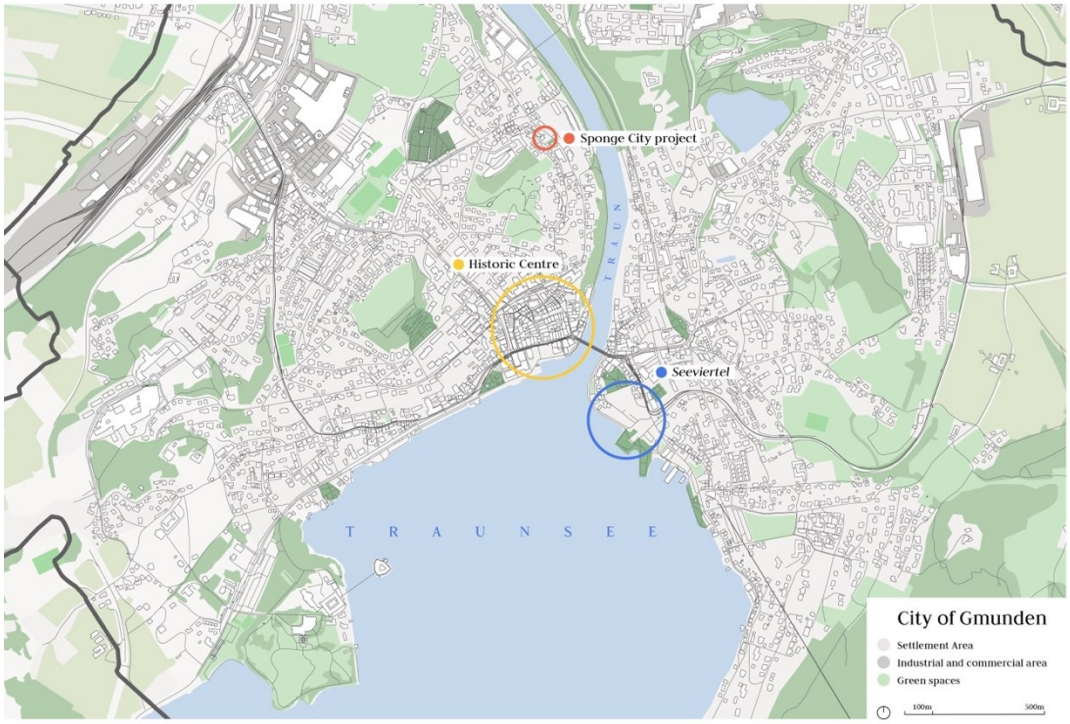


Table 2. Key data on the case study area of Gmunden.

	Climate Strategy 2030	"Altstadt Impuls"
Neighbourhood characteristics	Municipal level	City Centre
Duration	Strategy: 2022-2030 Implementation: September 2022	Strategy: development 2018-2019 Implementation: 2019
Funding	Federal Province of Upper Austria	EU (EFRE programme (2014-2020), Federal Province of Upper Austria
Actor constellation	*Klimabündnis* (municipal climate protection network), City Council, experts from regional institutions, interested Citizens	Members of the Gmunden city council & surrounding municipalities, representatives from building departments and city administrations
Aims and objectives	Mitigation of the global climate crisis at the local and communal level (retrofit, NBS)	Support and motivate property owners in renovating and revitalising older buildings, providing expert assessments of building conditions and renovation options, using software applicable to other municipalities (retrofit)
Specific physical measures	Implementation of the Sponge City project in 2025	Feasibility studies for retrofitting in 10 key properties; implementation pending
Accompanying housing policy/regulatory measures	-	-
Key social tensions or/and benefits between greening and housing	No tensions towards housing inequality impacts are perceived with a generally positive response towards implementation; however, scepticism about the real climate-mitigating effects and the cost-benefit ratio of intervention	Little awareness about possible effects on affordability and displacement, especially in the rental sector; benefits foreseen for commercial activities in the centre and for owner-occupiers and landlords

2.3.3 Methods

Qualitative data for this case study were collected through semi-structured interviews conducted between June 2025 and January 2026. A total of eight interviews with ten participants were performed, including those from public administration, public bodies, and civic initiatives. Interviewees included the mayor, the vice-mayor, civil servants from various administrative departments, a regional planner, representatives of limited-profit housing associations (LPHA) and a tenant organisation, and two members of a civic climate protection initiative.

Sampling of politicians, civil servants, technical staff, and civic initiatives was conducted through desktop research in preparation for the ReHousIn Policy Lab, held in April 2025, and through direct contact via institutional email addresses associated with the respective organisations. Additional participants were recruited through snowball sampling.

The interviews were conducted in person and recorded with participants' consent using a recording device. In accordance with TU Wien's ethical approval guidance, participants were informed about the project's objectives and data protection regulations. Before audio-recording the interviews, written informed consent was obtained from all interviewees, including a confidentiality clause. The interviews were transcribed in a two-step process. An initial automated transcription was produced using A-train software (Haberl et al. 2023). In a second step, all recordings were manually reviewed and corrected where necessary. Interviews conducted in German were analysed in the original language. For data analysis, the qualitative analysis software MAXQDA was used. For reporting citations, parts of the interviews were translated into English.

Of the eight interviews, three were conducted by more than one researcher from the project team, while five interviews were conducted by a single researcher. All interviews were conducted either in the interviewees' workplaces or in public settings such as restaurants and cafés. The interviews with members of the civic climate initiative also included a short walking tour of the city, during which sites of interest to our research were highlighted. In addition, as most interviews were conducted in Gmunden, they were complemented by individual walking tours of the city and by photographic documentation, either before or after the interviews. As preparation for the interviews, individual background research was conducted for each interviewee, based on their topic and position, including the review of legal documents, reports and studies, planning documents, academic literature, and grey literature.

In addition to the interviews, the study applied complementary qualitative methods tailored to the Gmunden context. These included research walks through Gmunden to document locations referenced by interview partners, such as public green spaces, the historic centre, nature-based solutions (NBS), municipal/LPHA residential buildings, hotel projects, or vacant sites. During these walks, photographic documentation was produced to support the contextual interpretation of the interview findings. Nonetheless, the research is subject to some limitations. Due to the size, Gmunden has a limited number of civil servants and institutions related to green transition policies and housing. In addition, capturing civic perspectives proved challenging, as Gmunden is characterised by a relatively small number of organised civic groups in the field of green transition and (to our knowledge) none in housing. As a result, only a limited number of residents' perspectives could be captured, which does not constitute a representative sample of the affected population.

2.3.4 Perceptions of Green Initiatives in Case Study Areas: Gmunden

2.3.4.1 Precedents and implementation

Politicians and civil servants describe the development and implementation of climate-related measures in Gmunden as closely linked to the adoption of formal strategies, the launch of

concrete pilot projects, and the funding of externally supported programmes. According to one politician, the City of Gmunden adopted a Climate Pact and a Climate Strategy that anchored key principles, including requirements for municipally led construction projects to use low-carbon energy solutions. For example, the general refurbishment of the city's theatre, with an investment volume of approximately six million euros, is planned to use geothermal energy for heating and cooling instead of fossil-based systems.

The development of the Climate Strategy itself is described as taking place after the 2021 local elections, with political responsibility assigned in 2022 and support provided by *Klimabündnis.* The process included a Climate Council and existing participation formats that had been in place since 2017. One civil servant states that neighbourhood-level projects were prioritised because initiatives originating from the population were considered more straightforward to implement.

Pilot-type activities are also described in the context of building retrofitting. One example is an energy consultancy event organised in cooperation with ÖGUT, held at a single-family house and used as a demonstration project for neighbours. The civil servant reports positive feedback from participants, who benefited from direct advice and a concrete example of retrofit measures (I4).

> *"We held a renovation party at a single-family house, where an energy consultant provided full advice. The homeowners benefited from the thermal renovation consultancy, and neighbours could see the house as a demonstration of what retrofit measures are possible, which made it much easier for them to understand where to start."* (Civil servant)

Civil servants refer to the sponge city project as an early implementation step under the Climate Strategy. It is described as a first-of-its-kind project in Gmunden, with implementation dependent on secured funding and intended as a starting point for similar projects across the city. Another civil servant notes that the project was realised at a time when implementation conditions were still favourable and expresses doubt that the same project could be approved under current circumstances. The project was officially opened shortly before the interview, and initial public feedback is described as largely positive, following direct information sent to nearby households and a public opening event.

Finally, the establishment of the *Forum für Klimaschutz in Gmunden* is described by representatives of the civic initiative as originating from an academic project completed in 2024. The forum is characterised as a non-partisan, informal civic initiative without formal organisational status, positioning itself as a continuation of the earlier Climate Council and as a platform to raise issues and propose additional measures beyond those included in the Climate Strategy.

Apart from the Climate Strategy, the densification of a specific central area in Gmunden, called Seeviertel (former station Seebahnhof and the demolished hotel area), has been debated and contested for years, along with climate-related issues (Environmental Impact Assessment, UVP) and the lack of affordable housing. In interviews, the area – now foreseen as a hotel project with additional apartments and commercial spaces at the lake shore – is referred to as a densification project, with constant objections at various levels, according to a politician, and as a real-estate project facilitating secondary-home use rather than affordable housing.

Implementation is still pending: although the renaturalization of the adjacent public lakeshore was completed, the real estate developer is delaying the project.

"Sometimes there are groups, it [the objection] also comes from individuals, so there are very, very many objections. Those who have party status almost always object. With the larger projects, there is always someone objecting. A prime example is the Seeviertel now. I don't know if you are aware of that. […] There are permanent objections at various levels." (Politician)

2.3.4.2 Participation and governance (procedural)

In the interviews, participation and governance are most frequently discussed in relation to planning and regulatory instruments, funding schemes at different governance levels, and formats for citizen and stakeholder involvement.

Governance: Planning and Regulatory Instruments

At the municipal level, politicians and civil servants describe zoning plans, including the possibility of appointing replanning areas (*Neuplanungsgebiete*), as key governance tools. These instruments allow the municipality to define parameters such as density, building heights and green space ratios. However, they are not applied across the entire city but mainly in the historic centre and selected sensitive areas. The old town is repeatedly described by a regional planning official and civil servants as a particularly challenging context due to heritage protection regulations, which constrain renovation and decarbonisation measures for building owners.

Several interviews describe regulatory and institutional frameworks as key factors shaping local implementation processes. In particular, zoning regulations, plot ratio limits and heritage protection requirements are repeatedly mentioned as constraining instruments. In the historic centre of Gmunden, civil servants note that implementing building renovations and decarbonisation measures is especially difficult due to monument protection rules and limited spatial flexibility.

Similar challenges are reported for large public buildings. The renovation and decarbonisation of the municipal theatre, for example, are described as strongly shaped by heritage protection and site-specific constraints, which limit the choice of technical solutions. Climate-friendly alternatives are associated with higher investment costs, while less sustainable options would be easier and cheaper to implement, according to a regional planning official.

Interviews with technical administrative staff highlight existing rental regulations as an instrument for housing security, particularly long-standing, non-terminable tenancy contracts, which shape the possibilities for renovations and upgrades. These contracts limit the ability to raise rents after costly investments, such as heating system upgrades. While operating costs can be passed on to tenants, rent adjustments linked to improved housing standards are often not feasible, constraining the implementation of decarbonisation measures in parts of the existing housing stock.

Governance: Funding Schemes

> *"From a policy perspective, the focus is really on renewable heat. Honestly, as a municipality, we feel overwhelmed. Theoretically, we know what needs to be done, but practically, we don't know how to implement it."* (Politician)

A central theme across multiple interviews concerns funding schemes and their accessibility. Civil servants and politicians clearly distinguish between EU-level, federal-level, and provincial-level funding instruments. EU funding programmes are described as difficult to access due to high administrative requirements, complex application procedures, and changing eligibility conditions. Several civil servants note that funding rates and eligible project volumes decreased over time, affecting projects already in preparation. As a result, the balance between administrative effort and financial return is perceived as unfavourable, particularly for smaller-scale municipal or private initiatives, according to a civil servant.

In contrast, provincial-level funding schemes are described as more practical and easier to implement. Provincial subsidies for housing, renovation and energy-related measures are reported to involve lower administrative effort and clearer procedures, and are therefore more frequently used. According to civil servants and a regional planning official, these funding instruments are currently better aligned with municipalities' and project developers' capacities.

Federal-level funding programmes are mentioned less frequently but are generally positioned between EU and provincial schemes in terms of complexity. While they are considered more accessible than EU programmes, civil servants still point to challenges in navigating overlapping responsibilities and eligibility criteria across governance levels.

Across governance levels, politicians and civil servants highlight information-related challenges. Funding landscapes are described as fragmented and difficult to navigate, with funding bodies providing unclear or inconsistent information. Civil servants report receiving differing guidance when contacting funding agencies, which creates uncertainty during project planning and application processes. In several interviews with civil servants, the funding schemes were described as complex, requiring capacities for subsidy acquisition and implementation that are often scarce in smaller municipalities.

> *"But if individual municipalities have to provide the staff themselves [for subsidy acquisition],… it might be easier for larger cities to assign someone. I mean, it's the same as with my colleague who deals with environmental issues. [...] Rural municipalities with 4,500 inhabitants [...] have a staff of perhaps two or three in the building department. Who is supposed to cover the subsidies there [...]?"* (Civil servant)

Despite these challenges, civil servants observe ongoing revitalisation processes, particularly in the historic centre, including façade renovations, reduced vacancies, and changes in building use. A regional planning official describes these developments as gradual and uneven, and they are partly shaped by the availability and conditions of funding schemes at different levels.

> *"The main challenge with funding is how confusing and inconsistent it is. You might call the offices three times and speak to three different people, each giving a different answer. Even with information sheets, detailed questions often lead to contradictory responses. This makes it hard to plan, because you might apply for a certain amount and end up receiving only a*

fraction of it. On top of that, just finding out what funding is available, even at the EU-level, is difficult, which limits potential applications" (Civil servant)

One politician noted that several projects are currently emerging in Gmunden where the floor area requirements set by the building committee and design advisory board can be met, making the developments economically feasible and supporting the creation of affordable housing. Politicians and civil servants emphasised, however, that the overall opportunities for such projects remain very limited in the city due to land scarcity and prices.

Participation

Participation is primarily discussed in relation to the development of the municipal climate strategy. Civil servants, politicians and citizen initiative representatives describe a participatory process involving a climate council, public events, and an established municipal participation model through which citizens could submit ideas. Contributions from these formats are reported to have been incorporated into the climate strategy, as per the citizen initiative.

"We developed the climate strategy in 2022 with support from the Klimabündnis (Climate Alliance) and broad public participation. We involved our climate council and the municipal participation model, which has been in place since 2017, allowing citizens to submit ideas. All contributions, including those from the council, were incorporated into the strategy, and the process was positively received as a way to involve people actively." (Politician)

The municipality's participatory formats are presented as part of its approach to coordinating implementation across different actor groups. Politicians describe stakeholder involvement in neighbourhood-level projects, including exchanges with housing developers, businesses and educational institutions.

„And I think that's our biggest favourite project at the moment, it's called 'Mitten drin gut leben' [Living well in the middle of it]. And we would like to make each district climate-fit. This year, we started with the first district. The role model is the Viennese climate team: stakeholder process, outreach participation. Now we are just evaluating the ideas that have come. […] And that's why we have now done this project, because everything that comes from the population is easier to implement." (Politician)

Interviewees refer to capacity-related challenges at the municipal level in communicating strategies and implementing participatory measures, particularly in the implementation of renewable heating policies. While strategic objectives are described as clear, translating these goals into concrete measures at the local level is portrayed as demanding. It would require more formats to involve civic stakeholders outside the administration. A lack of a more active approach from the administrative side is argued to stem from limited municipal resources and the complexity of existing policy frameworks. At the same time, citizen initiative representatives lament the lack of resident engagement in climate protection, decarbonization measures, and protests against, e.g., environmentally polluting or harmful measures (e.g., forest clearing).

2.3.4.3 Perceptions of (in)equity (distributional)

In one interview, the effects of housing regulations on vulnerable groups are described. The interviewee refers to tenants with old, unchangeable rental contracts, including elderly residents, who pay very low rent for large apartments. The interviewee notes that if expensive heating upgrades are implemented, these tenants cannot be charged higher rent, although operating costs may increase. Installing modern central heating could raise the apartment's standard, but the interviewee states that higher reference-value rents *(Richtwertmiete)* cannot be applied in such cases.

Perceived fairness in land use and development is described in another interview in the context of a project on partly sealed, previously used land. The civil servant reports that some residents object to the project because it would place affordable housing directly next to a cemetery, raising concerns about locating lower-income residents there, even though the surrounding area already includes established middle- and higher-income households and offers good access to public transport, schools, shops, and other amenities., despite the area's good access to transport, schools, shops, and other amenities.

Land-use issues, such as the prioritisation of high-end development over affordable housing, are also mentioned in relation to the Seeviertel project, where a member of a civic climate protection initiative noted critically that the zoning of former public land for a real estate project (hotel, apartments, and commerce) rather than affordable housing.

> *"The Seeviertel project is presented as a hotel, but it also includes apartments, assisted living, and commercial spaces. A 50-square-meter apartment costs around 500,000 euros, so only very few can afford it. Public land is being used for high-end development instead of affordable housing. The mayor has promised that no more than a quarter of units will become second homes, which reflects the realities of Gmunden."* (Citizen initiative representative)

Another interview describes site selection for (green) interventions in financially more disadvantaged parts of the city. The deputy mayor explains that projects were initiated in neighbourhoods with lower-income households rather than in wealthier districts, aiming to target areas with established community identities.

One civil servant refers to the implementation of the sponge city principle in Gmunden, citing a lack of strategic coherence in policy implementation. The interviewee describes a small intervention involving 10 trees and 6 parking spaces in a less populated area, contrasting it with the removal of 6,000 square meters of floodplain forest elsewhere to create a hotel parking lot.

2.3.4.4 Perceptions of political mobilisation

Political mobilisation in Gmunden is described in individual interviews in relation to specific development projects and environmental initiatives. In one interview, formal objections and complaints are reported as a recurring feature of larger development projects. The interviewee states that projects involving formal party status almost always lead to objections and appeals at different administrative levels, especially when it comes to densification. The *Seeviertel* development is cited as an example in which objections are described as occurring continuously (see quote in 3.1).

Public discontent is mentioned in relation to urban densification, second homes, and the construction of high-priced housing. While politicians and civil servants involved state that dissatisfaction is noticeable among parts of the population, it is also noted that this discontent may not constitute a clearly organised movement.

Mobilisation around environmental themes is described in one interview as part of awareness-raising activities. The interviewee refers to climate protection awards, public events, and regular events for schools and the wider public. From these activities, a civil society initiative, the Forum for Climate Protection in Gmunden, is reported to have emerged, consisting of approximately 15 participants.

A member of a citizen climate protection initiative describes activities directed towards the municipality, including organising lectures and events and appealing to the local government to ensure that the Climate Strategy adopted in 2022 is implemented.

"One element that is close to my heart is not only to arrange lectures, to educate, but to offer participatory formats. There is one so far, and that was a terra-preta workshop. […] There were almost 30 people, half of them were high school students and the other half were people from civil society, interested people like you and me." (Citizen initiative representative)

The interviewee also mentions geothermal energy projects, stating that information on project locations is currently not disclosed due to concerns that disclosure could trigger public protests. The limited transparency regarding the project, as described by the interviewee, is notable.

2.3.4.5 Socio-ecological impacts/benefits (positive)

Interviewees report that climate-related measures are perceived positively by residents and local communities. One interviewee states that greening measures and the sponge city project are generally viewed positively by both nearby residents and the broader population, rather than being met with scepticism.

"We only just opened the sponge city last Thursday, so in that sense, it's still a bit too early to really have major feedback. But what really pleased me was that it rained there, too. And despite that, how many people were there? Fifty, right? And yes, one person came and immediately complained about how much it costs and about our taxpayers' money, but everyone else was very positive. […] And a lot of people came, with positive feedback, saying it's an interesting project, etc. So in principle, I do think that people are interested." (Politician)

Regarding green space and environmental upgrades, interviewees from the city administration and the citizen initiative emphasise the perceived value of creating adequate living conditions for trees. One civil servant reflects that earlier urban practices involved excessive sealing and insufficient consideration of tree habitats. In contrast, current measures are understood as addressing these shortcomings by providing appropriate space and conditions for urban greenery. Another administrative staff member reports positive feedback from residents regarding a pilot initiative focused on energy renovation. In this case, neighbours benefited from direct access to energy advice and from seeing a concrete example of renovation

measures implemented in a nearby single-family home, which was described as helping to reduce uncertainty about where to begin.

> *"That means the owners benefited because they received a full energy consultation, and the neighbourhood benefited because this house was simply used as a showcase model—showing what can be done and how things can be implemented. And we actually got very positive feedback from the local residents, because I think they're also very overwhelmed by the whole issue, basically asking themselves: where do we even start?"* (Civil servant)

Positive social effects are also mentioned in relation to housing refurbishment. One interviewee notes that although renovated dwellings may become more expensive, they also reach a higher building standard. Improvements explicitly mentioned include the elimination of shared corridor toilets and an overall upgrade in housing quality, both of which are associated with better living conditions for residents.

In terms of densification, limited-profit housing providers (LPHA) discuss the usually negatively framed densification goals: higher-density proposals face initial resistance but are later accepted—often with calls for even more height. The LPHA representative urges "courage" in spatial planning to permit positive development rather than preempt it. According to him, densifying existing centres leverages established infrastructure (roads, sewers, water, energy), which is typically sufficient, yielding minimal marginal public costs and expanding the tax base. Added residents sustain schools, healthcare, local retail, and services through increased demand. Centre-focused growth also shortens travel distances, enhancing accessibility.

> *"And in many cases, I experience the topic of densification like this—you can quote me on that—that at first there is extreme criticism when you plan to build higher somewhere. Then, when it is finished, there is the handover ceremony, and people stand there and say: Well, I could have tolerated one more storey."* (Social housing provider)

2.3.4.6 Socio-ecological impacts/harms (negative)

Interviewees describe only vaguely the socio-ecological impacts of renovation, redevelopment, and climate-related measures in Gmunden, particularly regarding housing costs and affordability. One interviewee from the city administration states that renovated dwellings would likely become more expensive, emphasising that this is a personal assumption rather than a confirmed outcome. Another civil servant similarly expects rent increases following renovation, but characterises them as moderate.

> *"It will cost more, of course. But then you also have to think in a different category, because at the moment some flats really do still have a toilet in the corridor. And that won't be the case anymore afterwards."* (Civil servant)

> *"These [rents in the current municipal housing] are very low; they will rise, but to a manageable extent. So the key term is affordable housing, or social housing."* (Civil servant)

Concerns are raised that costs associated with energy-efficient refurbishment may be passed on to tenants. One civil servant notes that property owners may transfer renovation costs directly to rents, even if such cost transfers are not always formally permitted. In the context of limited-profit housing, rising land prices are identified as an essential factor influencing rent levels. Although limited-profit housing providers are legally restricted from generating profit, land costs are reflected in rents, which may appear high without housing subsidies but can be significantly reduced with housing allowances.

Civil servants also express critical views on the cost and implementation of climate-related urban measures. For example, additional requirements such as green infrastructure or reduced building density are described as potentially affecting development calculations and operating costs.

Housing affordability and accessibility are specifically discussed as broader concerns. One interviewee describes Gmunden as a city where access to housing is perceived as increasingly difficult, particularly for people without inherited property or high incomes. At the same time, it is noted that in municipal housing refurbishments, phased renovation approaches are used to enable residents to remain in place, and no clear evidence of displacement is reported.

"Affordable housing is a major issue in Gmunden—I'd almost say a problem. Honestly, it's very scarce here. Gmunden is certainly one of the municipalities in Austria with the highest land prices, especially along the eastern lake shore, where they are exorbitantly high. To be honest, controlling property prices is beyond our sphere of influence. Unfortunately, that's something we just have to accept, and it will likely always be the case in Gmunden." (Politician)

2.3.4.7 Tensions and power dynamics between stakeholders/actors

Across the interviews, tensions and power dynamics are primarily described in relation to housing development, climate-related infrastructure projects, funding arrangements, and institutional responsibilities across governance levels. These tensions are reported to arise both between different actor groups and within political and administrative structures.

A recurring theme concerns the trade-off between affordable housing and spatial or environmental considerations. Interviewees such as civil servants and social housing providers describe that affordable or subsidised housing projects often require higher density or greater building height to be economically viable. At the same time, such projects tend to encounter resistance from local residents when they are perceived as too large, too dense, or incompatible with the townscape. These conflicts are described by politicians as placing political decision-makers in a balancing role between social objectives, urban design concerns, and public acceptance.

"*We really focus on building volume, but that's always controversial. For example, there's a project where the Evangelical Church owns the land, and it only makes sense financially to build five storeys. This sparks intense political debates and strong public opposition. There's a general wish in politics to allow more volume and height, but in practice, every time you propose higher buildings, conflicts arise. That's the problem*." (Politician)

While a politician answers the question of governance and equity issue in terms of access to land and the right to densify as something where all actors (private developers and social housing providers) should be treated equally, one social housing provider considers a predominance of market-rate development in the past 15 years in Gmunden, which has contributed to escalating housing prices. Framing this as a governance and equity issue, the social housing provider contends that if the legislator had intended strict equal treatment, it would not have devolved planning discretion to municipalities implying that social housing should have more benefits in terms of density and land access.

"If the legislator had said that everyone should be treated equally, then they wouldn't have granted municipalities any discretionary powers." (Social housing provider)

Financial pressures emerge as another central source of tension. Interviewees from the city administration and local government report that municipal budgets are under significant strain, while at the same time additional responsibilities—particularly in relation to climate and energy policy—are assigned without corresponding financial resources. Funding schemes from higher governance levels are described as decisive for project implementation, yet also as uncertain and competitive. Several civil servants and politicians refer to cases in which planned projects could not be realised after funding frameworks were reduced or eligibility criteria changed.

Tensions are also reported regarding institutional coordination across governance levels. Interviewees describe the governance landscape as fragmented, with overlapping responsibilities between the EU, federal and provincial authorities. Communication with funding bodies is portrayed as inconsistent, and civil servants and regional planning officials report receiving differing information depending on the contact point. This is described as creating uncertainty during planning and application processes.

"So it's a relatively complex system that, from the outside, should be transparent for applicants. That means you don't necessarily really know what's going on in detail, but with all this support and guidance, it's meant to be accessible to everyone. And of course, from an Upper Austrian perspective, EU funding should also be drawn down accordingly. But it does come with its challenges to make everything fit together, and one is naturally always bound by funding rates and other framework conditions." (Regional planning official)

At the local political level, disagreements between parties and actors are explicitly mentioned. While some interviewees describe strong cooperation between certain political parties and a shared focus on ecological building standards, others point to conflicts within the municipal council that hinder unified decision-making. In some cases, interviewees associate these internal disagreements with perceived disadvantages in negotiations with higher-level authorities.

Interactions with private developers and housing providers are described as another area of tension. Interviewees report that private developers often pursue higher-density, profit-oriented projects, while the municipality seeks to limit building volumes.

"The lake poses a challenge in Gmunden—once people see it, mostly private developers want to build. They focus on high-priced condominiums and naturally push for much higher density than we allow." (Civil servant)

In several cases, cooperation with private actors is described as formally positive but substantively limited, with few concrete outcomes following initial discussions.

> *"When I first sounded things out, I went to one [housing developer]. He received me, and it was a pleasant conversation for about an hour; he smiled a lot, expressed his interest and said yes, yes—but in the end, nothing concrete came of it. Goodbye."* (Civil servant)

Finally, interviewees from both the city administration and civic initiatives also refer to tensions between policy objectives and public perceptions. Measures such as green infrastructure or the sponge city project are described as not always well understood by residents, particularly in a town perceived as already green and climatically advantaged. In some interviews, citizen participation instruments are defined as leading to frustration when formal participation processes do not affect decisions that have already been taken.

2.3.4.8 Innovative governance mechanisms

In Gmunden, ecological construction is a central priority to municipal bodies and advisory boards, such as the design review board, which guide planning decisions and ensure green building practices are implemented. Decision-support tools allow municipalities to assess building conditions, investment potential, and renovation needs using publicly available data and site inspections. These tools have been integrated into regional funding programmes, enabling more efficient and informed planning across multiple municipalities.

> *"And what you mentioned, that tool—of course, the state of Upper Austria also received it as the funding body. It was presented via the regional management organisation here in Gmunden–Vöcklabruck, and they then essentially took it on board as a building block of this new funding programme, because it allows a rapid assessment of potential investment costs."* (Civil servant)

The municipality also uses innovative property instruments to secure affordable housing. For example, architectural competitions and land rights transfers ensure that subsidised rental units are built to modern standards. In contrast, allocation rights remain with the municipality to prioritise social housing (even though they are often not used to the full extent, as discussed in section 3.7). Ground leases for private or church-owned land similarly maintain affordability while promoting sustainable construction.

Community engagement initiatives, such as renovation events with on-site energy advisory, serve as demonstration projects that both support individual homeowners and build broader awareness of sustainable retrofitting.

> *"We organised a refurbishment party once, together with ÖGUT, and there was an energy consultant on site. However, this wasn't for apartment buildings, but for single-family houses, where the party took place directly at a single-family home. That house was also used as a showcase property for the energy consultant."* (Politician)

2.3.4.9 Tourism and market pressures

Several interviewees, from politicians to civil servants to citizen initiatives, describe housing affordability in Gmunden as a significant challenge, closely linked to high land and property prices. One member of a citizen initiative notes that affordable housing is scarce and that Gmunden is frequently cited as one of the municipalities with the highest land prices in Austria, particularly along the eastern lakeshore. High demand is attributed to the city's landscape and recreational qualities, which are described as unlikely to support downward price development.

From a planning perspective, interviewees report intense development pressure near the lake, where private developers, rather than limited-profit housing providers, predominantly build high-priced owner-occupied dwellings and seek higher densities than permitted. Rising land values are illustrated through examples of long-term price increases and the replacement of older single-family houses with multi-storey residential buildings, maximising land use in areas with limited remaining building plots. Some interviewees explicitly describe these dynamics as land speculation or "concrete gold," noting that dwellings may remain vacant because leaving them unused is financially attractive.

> *"I find that relatively difficult, especially in our region, because we're also affected by what you really have to call speculation — land speculation, "concrete gold". I already compare us to Kitzbühel. Maybe not quite yet, but it's heading in that direction, because a lot of it isn't actually lived in."* (Politician)

As a result of these pressures, politicians and civil servants note that residents are increasingly relocating to neighbouring municipalities due to high housing costs in Gmunden. Another politician holds that access to housing in the city is mainly limited to people with inherited property or high incomes.

> *"Here in the city, you can basically only get by if you inherit or are wealthy."* (Politician)

Most interviewees also address the role of second homes in the local housing market. One politician states that around 18% of dwellings are registered as second homes and describes this share as manageable and economically beneficial, particularly for local businesses such as gastronomy and retail. Similar figures are mentioned elsewhere, with a regional planner noting that second homes are often associated with retirement or leisure use. At the same time, other politicians and civil servants see the number of secondary homes as too high and demand measures to prevent further development in this direction.

At the same time, concerns are raised that newly built, high-priced apartments are likely to be used as second homes and are largely unaffordable for residents. Planning instruments aimed at limiting second homes—such as allowing them only in specific floors of new developments—are described, alongside acknowledgements that such regulations can be circumvented. The increase in demand linked to lifestyle changes, including remote work and extended stays in Gmunden, is reported to be contributing to rising rents rather than to immediate displacement.

> *"I think the demand for second homes, especially amplified by the pandemic and home office trend, is putting pressure on the housing market. People are doing a kind of 'summer retreat 4.0'—working from Gmunden in the summer. This doesn't necessarily reduce affordable*

housing or force locals to move, but the high demand from wealthy urban residents has already pushed up rents in town." (Civil servant)

2.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

In terms of gaps between different stakeholders, the perceptions in interviews varied mainly by solutions or implementation approaches rather than by the actual issues, such as a lack of affordable housing or the necessity of decarbonisation.

Densification as a climate-related strategy reveals pronounced contestation rooted in misperceptions of decision-making power and regulatory control. Residents of Gmunden attribute a high degree of discretionary authority to local political actors, believing that density-related outcomes result from individual political will rather than formal planning and approval frameworks. Public authorities, by contrast, describe densification as tightly constrained by legal procedures, zoning regulations and multi-level approval processes that limit room for manoeuvre. This mismatch extends to temporal perceptions: residents frequently interpret lengthy planning timelines as deliberate political delay, while authorities frame them as an inevitable consequence of procedural complexity.

"The term 'first-instance building authority' is completely misunderstood—unfortunately. An authority has certain guidelines, and they sign off on them, which, of course, is the main problem. But the sense of being able to decide freely as a mayor—for example, saying 'four floors here, two floors there'—is something the public already expects." (Politician)

Additionally, interviews suggest a gap in perception between civic groups or residents and public authorities regarding what constitutes appropriate and meaningful climate mitigation measures. While public authorities mentioned (and partially promoted) concept-driven approaches such as the sponge city, other members of citizen initiatives noted the lack of such measures for site-specific conditions, existing ecological assets, and everyday needs. Ecological planning ideas such as greening or climate-adaptation concepts were not rejected per se, but questioned in terms of relevance, priority and practical benefit for the local context. This divergence reflected different interpretations of implementation: authorities emphasised symbolic or strategic projects, while the civic climate group demanded more tangible improvements aligned with the city's environmental reality.

"*I think the sponge city project is a flash in the pan or not well thought out, because it's not really relevant for this location. The whole concept hasn't really reached people—it's just a headline. Politicians know about it, but it doesn't resonate with the public. And in a city surrounded by greenery and forest, by a lake, it's questionable whether this principle even needs to be applied. So, sponge city, yes, it's nice, but there are more important ways to spend the money".* (Citizen initiative representative)

2.3.5 Critical Analysis: Gmunden

Small towns in Austria face structural difficulties within the federal system, as extensive responsibilities in land-use planning and local implementation are combined with limited fiscal autonomy, fragmented competences across governance levels, and strong dependence on provincial and national regulatory frameworks and subsidy schemes. This section provides a critical analysis of the town of Gmunden by examining how the different green transition

typologies (densification, retrofit, and NBS) intersect with local housing dynamics and governance constraints. It situates densification, retrofitting, and nature-based solutions within a context shaped by land scarcity, tourism pressure and limited municipal capacity. Rather than treating green transitions as uniform processes, the section highlights their uneven implementation and the partial detachment of governance from housing policies geared towards affordability. In doing so, it foregrounds the structural tensions between ecological ambitions, market-driven development, and housing affordability in a small, tourism-oriented town.

2.3.5.1 Differentiated Green Transition Dynamics and Housing Implications in Gmunden

Hard densification through a non-intervention

Densification emerges as the most contested spatial dynamic in Gmunden, yet interviewees do not perceive it as a deliberate green transition strategy. Instead, densification is widely understood as an outcome of structural land scarcity, high landscape amenity, and sustained real estate demand for high-end housing, particularly in prime lakeside locations. While in Austria, it is essential to highlight the urgent need for more effective policies such as brownfield development, land mobilisation strategies, higher land taxes, and urban agreements to achieve sustainable land use (Getzner & Kadi, 2019). Gmunden is already struggling with land scarcity, which is driving densification measures. Hard densification predominantly takes the form of replacing lower-density residential structures with multi-storey apartment buildings, often oriented towards affluent buyers, investors or second-home users. This process is closely intertwined with tourism and lifestyle-related pressures, reinforcing the perception that land is increasingly allocated to non-local or non-permanent residents. Policy approaches to restrict secondary homes, such as requesting the title of 'reserved municipality' (*Vorbehaltsgemeinde),* were rejected by the state of Upper Austria in 2024.

Housing inequalities associated with densification are already felt and expected to intensify. Interviewees consistently describe a perception of unfair land distribution and growing resistance, primarily where new developments are associated with luxury housing or secondary residences rather than local housing needs.

> "*On both sides of the lake shore, where there are villa districts. It's zoned for that, and at the moment, there's a villa there. When people die, it's sold and then densified. (…) One plot after another. And it's really being exploited to the maximum there. I find that relatively difficult, especially in our region, because we are also subject to what you have to call speculation, land speculation, concrete gold."* (Civil servant)

At the same time, densification reveals a structural paradox in local housing policy: while higher density is a precondition for the construction of social or subsidised housing projects (e.g. by limited-profit housing associations), these same projects encounter strong opposition due to concerns about building height, volume and perceived overdevelopment. Politicians and civil servants repeatedly emphasise their limited room for manoeuvre, citing zoning regulations, legal appeal procedures, and market-driven land prices that constrain municipal intervention. As a result, densification reinforces existing inequalities by favouring capital-

intensive development while leaving little scope for expanding affordable or decommodified housing, despite political recognition of the problem.

Site-specific retrofit solutions in Gmunden's historic centre

In contrast to densification, retrofitting and decarbonisation of the existing housing stock are clearly framed by interviewees as core green transition measures and a possible option for decreasing housing costs. In general, in Austria, publicly funded financial tools that operate through market mechanisms by incentivising private investment in renovation and heating system upgrades are complemented by information-based tools. While monetary incentives remain the dominant policy instrument—channelled through national and housing subsidies of the federal states—the governance structure in Austria remains fragmented. Regulatory mandates are limited, and implementation is hindered by ownership structures and administrative challenges, especially in the condominium and rental sectors. As a result, retrofitting remains a strategically ambitious yet structurally constrained policy field in Austria, as evidenced in cities such as Gmunden. For Gmunden, the planned retrofitting and decarbonization interventions were site-specific and spatially concentrated, with a strong focus on the historic city centre through the subsidised project "*Altstadt Impuls*". In this area, retrofitting is characterised by complex ownership structures, including a mix of owner-occupiers, private landlords, vacant properties, and secondary homes that were inherited by family members who are no longer residents. Heritage protection requirements compound this complexity, rigid building codes and fragmented subsidy schemes, which collectively raise financial and administrative barriers to renovation.

> "*I believe that this pressure [on low-income groups] is already increasing, and the public sector must ensure that social or affordable housing can be built, let's say on the outskirts or perhaps 500 metres away, rather than directly in the city centre.*" (Civil servant)

Potential distributional effects of retrofitting are acknowledged, but not perceived as an immediate or acute driver of housing inequality. Low-income homeowners and small private landlords are described as struggling with the costs and uncertainties of meeting new energy-efficiency standards, which could deepen spatial inequalities in the longer term. At the same time, owners of secondary homes in the historic centre are frequently described as lacking motivation to invest in renovation, reflecting weaker social embeddedness and limited everyday use of the buildings. However, interviews reveal little concern about displacement or rent increases linked to retrofitting at present, even though the pressure on low-income groups in the city centre in terms of affordability is acknowledged.

Besides this, retrofitting is primarily framed as a tool to counteract vacancy, physical deterioration, and functional decline in the city centre. Concerns focus less on affordability and more on demographic and economic stagnation, including declining commercial activity and shrinking school enrolments. In this sense, the effects of retrofitting in terms of possible displacement of tenants are responded to with solutions of social housing provision (with two projects being planned in close vicinity), even though retrofitting long-term affordability impacts remain largely unreflected and unexamined.

Networked nature-based solutions disconnected from local settings.

While federal ministries and federal states in Austria shape the strategic direction and provide (limited) support (e.g., through the Biodiversity Fund), municipalities are central to land-use decisions and the implementation of initiatives. They, however, essentially need to stem investments within existing budgets, which are tight in smaller municipalities such as Gmunden, restricting the institutionalisation of NBS across Austria. Nature-based solutions in Gmunden encompass renaturalisation (lake-shore at Seeviertel) and resilience-oriented public space interventions (sponge city) with an emphasis on climate adaptation. However, interviewees highlight a substantial mismatch between generic NBS concepts and local conditions, with already existing natural green-blue infrastructure in the form of the lake and forests. The sponge city project, frequently cited in interviews, is perceived by several actors as a symbolic, small-scale intervention derived from dense urban contexts characterised by heat stress and extensive soil sealing. In a town surrounded by forests, mountains and a large lake, such measures are questioned on relevance, priority and cost-effectiveness grounds.

"*Exactly, the sponge city. That's always the first thing that comes to mind in Gmunden when we talk about greening. (…) On the subject of sponge city and extensive greening, I mean, you can see for yourselves outside, we are actually quite green outside, with trees and so on. Whether such a sponge city makes sense for Gmunden – I doubt it.*" (Civil servant)

Moreover, NBS implementation is described as inconsistent and sometimes contradictory. Examples include promoting small greening projects alongside large-scale tree removal, or the renaturalisation of public lakeshore areas that simultaneously enable high-density real estate development elsewhere, such as in the *Seeviertel* area. These trade-offs fuel scepticism and reinforce perceptions that NBS function more as visible showcases than as integrated, networked systems addressing local socio-ecological challenges. About housing inequalities, NBS are not directly associated with displacement or affordability pressures. Instead, their indirect role lies in how environmental upgrades can be selectively mobilised to legitimise high-value development, potentially reinforcing spatial inequalities without delivering broadly shared benefits.

Key critical points defining housing justice/inequalities in the case in conversation with local/national context and histories

The case of Gmunden demonstrates marked differences in the dynamics generated by distinct green transition typologies. Densification operates largely outside the framing of climate mitigation, driven by land scarcity and market pressures rather than ecological objectives, and it is the typology most clearly associated with existing and future housing inequalities. By contrast, retrofitting and decarbonisation are widely recognised as necessary components of the green transition. Still, they are slowed by regulatory complexity, limited public funding, and unresolved landlord–tenant dilemmas that exceed municipal competencies. Nature-based solutions occupy an ambiguous position: while aligned in principle with climate adaptation goals, they are often perceived as insufficiently tailored to the local context and risk remaining symbolic.

In terms of national-local governance tensions, far-reaching competences in land zoning (and therefore also connected to densification) for municipalities stand in sharp contrast to unresolved housing regulations on a national level (tenancy law, etc.) as well as housing policy

assigned to the federal states (budgets assigned, regulations and quality frameworks for social housing construction, etc.). In addition to the complexity of responsibilities and limitations in municipal governance, coupled with a complex subsidy landscape, budgetary constraints are aggravating the ability to implement green transitions as a comprehensive measure (and not just a small-scale intervention) in coherence with an affordable housing strategy.

Taken together, housing inequalities in Gmunden are more difficult to grasp through the sole lenses of the three typologies than through how specific intervention types intersect with local market pressures, governance constraints, and geographical conditions. The case highlights the importance of distinguishing between typologies of green transition when assessing their distributive implications in small, tourism-oriented towns, and opening the spectrum of typologies towards interrelations rather than viewing uniform socio-spatial effects.

Rural Governance Under Pressure: Housing, Tourism and the Limits of Local Action

Across the different intervention typologies discussed in the preceding sections, housing-related stress in Gmunden is primarily shaped by external market pressures rather than by green transition measures themselves. The dominant stressors are tourism, second-home ownership, and intensified real estate investment over the past few years, which have reinforced demand for high-end housing and contributed to rising land and property prices. These dynamics intersect unevenly with green policies, often amplifying existing inequalities rather than generating new ones.

Area-specific characteristics play a central role in shaping these outcomes and strongly condition how green transition measures and housing dynamics unfold in Gmunden, also revealing structural vulnerabilities. As a small municipality in a predominantly rural and alpine-lacustrine setting, Gmunden operates with limited administrative, financial, and strategic capacity. Despite its status as a district capital, the local public authority remains structurally weak vis-à-vis market forces, relying heavily on higher-level regulatory frameworks and external funding streams. This limited capacity constrains the municipality's ability to proactively shape housing and land-use outcomes. It reinforces a reactive mode of governance, particularly in the face of sustained real estate pressure. Historical development as a tourism-oriented town further entrenches this imbalance, as landscape amenity continues to attract external demand that systematically outweighs local housing needs. At the same time, the municipality lacks effective instruments to counteract speculative development or second-home expansion.

These challenges are compounded by a complex and fragmented funding landscape that disproportionately affects small and rural municipalities. Interviews highlight that EU-level funding schemes are often administratively burdensome and poorly aligned with local capacities, while shifting eligibility criteria and reduced funding rates undermine planning security. Although provincial funding instruments are perceived as more accessible, navigating the overall subsidy landscape requires substantial administrative effort, exceeding the staffing resources of small municipal administrations. This dependence on external funding not only slows implementation of retrofitting and climate measures but also reinforces uneven development, as projects advance primarily where funding conditions temporarily align, rather than where social or housing needs are most pressing. The complex subsidy landscape is aggravated by the fact that the climate policy landscape in Austria relies heavily

on “soft” instruments, such as voluntary measures, market-based tools, and advisory services, rather than effective legislative policies and binding planning instruments (Brad et al., 2025).

The local actor constellation reflects and reproduces these constraints. Long-term political dominance by a conservative party has translated into a comparatively liberal approach to housing regulation, prioritising negotiation with private developers over restrictive intervention, even as housing affordability has become an acknowledged concern. Efforts to support social housing through limited-profit providers exist but remain structurally marginal due to land scarcity, high prices and resistance to the densities required for economic feasibility. The coalition with the Green Party has expanded the focus on climate policy, particularly through the implementation of the Climate Strategy and the introduction of nature-based solutions, such as sponge cities and participatory events on biodiversity. However, this ecological agenda operates primarily alongside, rather than in integration with, housing policy, limiting its capacity to address distributional effects. Civil society involvement is somewhat limited: the active initiative interviewed describes their engagement as exhausting and challenging to sustain, given the absence of continuous participatory structures and the predominance of one-off consultation formats that offer limited influence over strategic decisions.

The case of Gmunden illustrates how green transition initiatives unfold in a small Austrian town where housing shortages are primarily driven by tourism, second-home demand, and real estate investment rather than by climate policy itself. A central problem perception concerns what is being built and for whom: new construction is primarily oriented toward high-end housing and secondary residences, while affordable and socially oriented housing remains structurally marginal despite political acknowledgement of local need. Governance of this development is fragmented and constrained, with local authorities operating within tight regulatory frameworks, limited administrative capacity, and strong market dominance that curtails effective municipal steering. As a result, green transition measures tend to coexist with, rather than counteract, housing inequalities, raising critical questions about who ultimately benefits from both urban development and climate action in a rural-touristic context.

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2.3.7 Appendix 1 – Glossary

Terms and Concepts

Environmental Impact Assessment
(Umweltverträglichkeitsprüfung, UVP)
The Environmental Impact Assessment in Austria is a legally mandated procedure that evaluates the significant environmental effects of major projects before approval. It systematically assesses impacts on people, nature, climate, landscape, and cultural assets and ensures public participation and transparency. The UVP serves to integrate environmental protection into planning and decision-making at an early stage.

LPHA
(Limited-profit housing association) are nonprofit-oriented housing providers in Austria that develop and manage affordable housing under strict cost, rent, and profit regulations set by law (Limited-Profit Housing Act).

Klimabündnis Oberösterreich
(Climate Alliance Upper Austria) It is a regional climate protection network in Upper Austria that supports municipalities, schools, and organisations in implementing climate action measures.

Klimastrategie Gmunden 2030
(Climate Strategy Gmunden 2030) is a strategy developed through a participatory process between March and July 2022 in Gmunden (Upper Austria), including eight thematic workshops supported by Klimabündnis Oberösterreich, involving citizens, experts from regional institutions, members of the municipal council, *and civil servants*.

ÖGUT
(Österreichische Gesellschaft für Umwelt und Technik) is an independent, non-profit organisation whose agency lies in promoting sustainable development by acting as a bridge between policy, science, business, and civil society. The agency is financed through a diversified, project-based funding structure that combines public-sector contracts with European Union program funding. Additional revenues arise from commissioned studies, program management, and advisory services, supplemented by membership fees and contributions.

Reference Value Rent
(Richtwertmiete) is a legally regulated rent system in Austria that applies to specific residential properties, primarily older buildings constructed before 1945 and subject to the Austrian Tenancy Act (Mietrechtsgesetz). It sets a standardised base rent per square meter, defined at the federal state level, which may be adjusted through legally specified

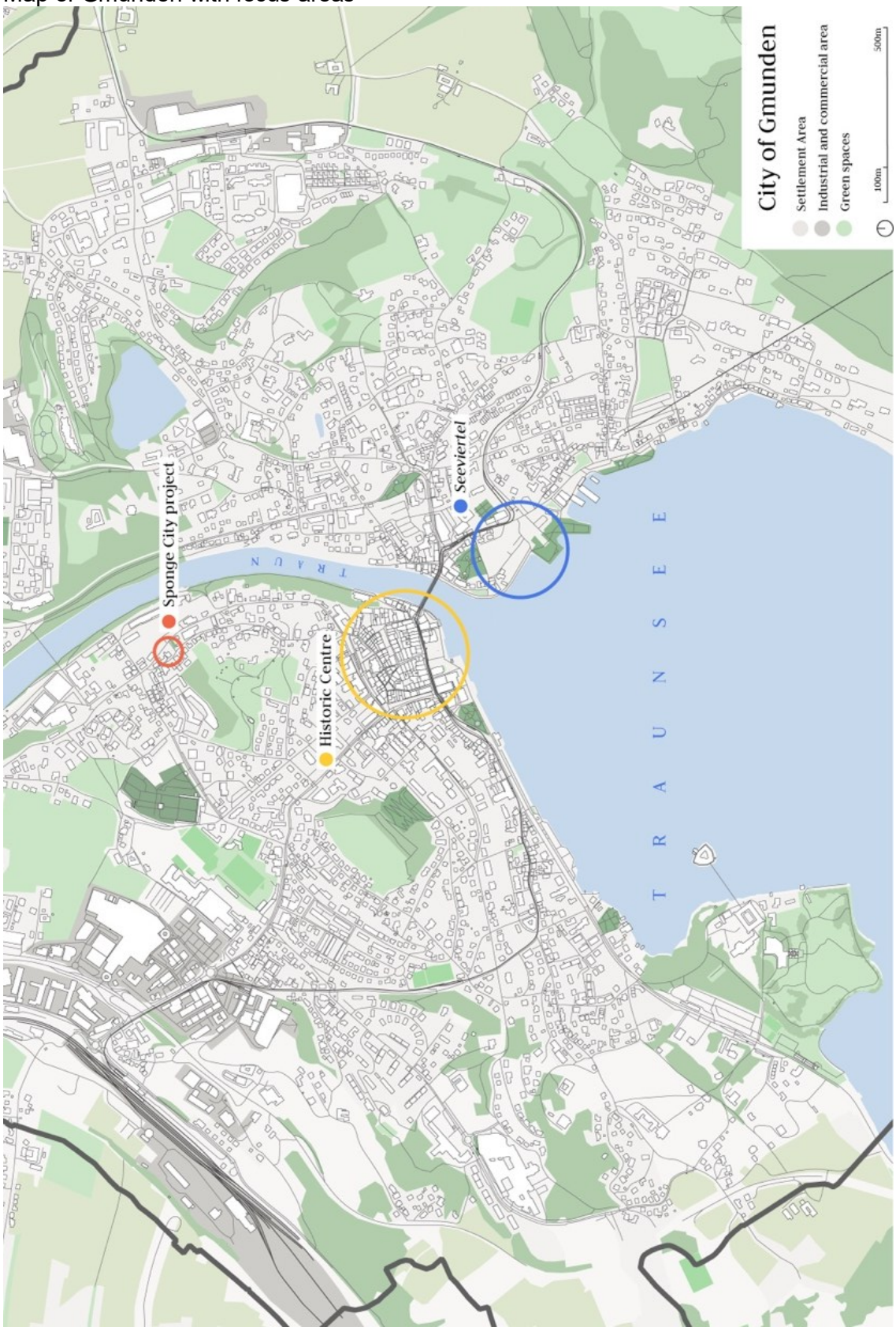
	supplements or deductions based on the apartment's features, condition, and location. The purpose of the Richtwertmiete is to ensure affordability, transparency, and tenant protection while allowing limited, rule-based differentiation in rent levels.
Reserved Municipality *(Vorbehaltsgemeinde)*	A municipality designated under the Land Transactions Act in which the acquisition of real estate for use as a second or holiday home is subject to restrictions. It is a spatial planning and land-use policy tool designed to protect residential housing for the local population. In such municipalities, the establishment of new holiday homes generally requires official approval. It is permitted only under narrowly defined exceptions (e.g., long-standing holiday use or transfers between close relatives).
Replanning Area *(Neuplanungsgebiet)*	A temporarily designated area established by the municipal ordinance under the spatial planning legislation of the respective Austrian federal state, when a zoning plan is to be adopted or amended. It serves to safeguard the intended future planning framework by permitting only building projects that are compatible with both the existing legal situation and the proposed new plan. The replanning area expires upon the entry into force of the new plan or after a maximum period of two years, with limited possibilities for extension.
Renewable energy community *(Energiegemeinschaft)*	is a local group of citizens, businesses, or authorities that jointly produce, manage, and share renewable energy for collective environmental, social, and economic benefit.
Sponge City Project *(Schwammstadt Konzept)*	It is an urban planning approach that uses natural and engineered systems to absorb, store, and reuse rainwater, reducing flooding and improving water sustainability.
Solar cadastre *(Solarkadaster)*	A digital map or database that shows the solar energy potential of buildings or land, helping identify suitable locations for solar installations.

2.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Mayor / Politician	Public Administration	24.06.2025	In person
2	Civil servant	Public Administration	24.06.2025	In person
3	Regional Planner	Public Body	15.07.2025	In person
4	Vice-Mayor / Politician	Public Administration	15.07.2025	In person
5	Civil servant	Public Administration	15.07.2025	In person
6	Citizen initiative representative	Citizen Initiative	05.11.2025	In person
7	Citizen initiative representative	Citizen Initiative	05.11.2025	In person
8	Employee of Tenants Association	Civic/ Housing	19.01.2026	In person
9	Employee of LPHA	Housing Provider	23.01.2026	In person
10	Director of LPHA	Housing	29.01.2026	In person

2.3.9 Appendix 3 – Visuals

Map of Gmunden with focus areas



Photos of the historic city centre (Source: Judith M. Lehner):

Photo of retrofits and thermal renewal in the city (Source: Michael Friesenecker):

Photo of social housing stock (Source: Judith M. Lehner):

Photo of densification through high-end apartments with lake-view (Source: Judith M. Lehner):

3 FRANCE

3.1 CASE STUDY (LARGE): PARIS

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3.1.1 City profile, challenges around just (housing and ecological) transition

With more than 20,000 hab/km^2, the City of Paris is **one of the densest cities in Europe**. While population density has tended to erode lately due to the decrease of inhabitants since 2012, built density has increased, with the addition of 30,000 housing units between 2013-2019 (Apur, 2022). The city's dense built environment makes it one of the deadliest cities in Europe due to urban heating island (Masselot et al., 2023). It has one of the lowest canopy in the world among capital cities, and provides under 4 sq. m. of green space per capita, well below the threshold (10 sq.m.) recommended by the World Health Organization (Deschamps, 2024). This built environment is the object of a **very buoyant real estate market**, particularly in the owner-occupied market for existing apartments, where prices have increased by 2,5 to

3 in the past two decades (Paris Notaires, 2024). Rental prices have also followed an upward trend, but to a lesser extent (+76% over 1999-2014 according to OLAP cited in Driant, 2015).

Paris has a **unique governance structure**. Its municipal level is twofold, with strategic competences (e.g. zoning, housing, urban development, transport, energy and environmental policy) held by the central council, and everyday issues managed by the 20 different council districts. It is also both a municipality and a departmental council, therefore combining attributions, technical and fiscal resources that would otherwise be separate across different tiers of government[23]. The concentration of these resources also results from a lack of institutional integration at the metropolitan level until recently, contrary to other major city-regions in the country[24]. However, owing to its capital status, political history, and economic weight, the central State has sought to retain an important role in its governance – but this has been challenged, with the City gaining more autonomy in the past two decades (Le Galès and Mouchard, 2023).

Since 2001, the City of Paris has been governed by a centre-left mayor supported by a left majority within the council (running from the socialist party to the communist party, including the greens). The two successive mayors, Bertrand Delanoë (2001-2014), followed by his former deputy Anne Hidalgo (2014-2026), have made **housing a key priority** of the municipal agenda, including through the significant production of social housing, in stark contrast with the previous right-wing mayors. The production of social housing is legitimized in the name of the **"social mix"**, a very broad catchword that assumes that it is important to achieve a balance in population in various dimensions – most notably social-economic, through preserving the ability of the "middle class" to access housing despite the continuous rise in prices (Bacqué et al., 2011; Clerval, 2013). This can also be seen as a way to comply with the national framework of the SRU law, which set a target of 25% of social housing to be reached by 2025. It resulted in a significant increase of the supply of social housing in Paris over the past three decades, almost reaching the 25% quota according to other studies (Apur, 2024a).

However, this policy has raised several issues. Clerval (2013) has discussed how, in the name of the "social mix", it contributed to **accelerate the ongoing gentrification**. Firstly, she underlines that this housing policy tended to create fewer opportunities for the working class, as the new social housing did not compensate for the destruction of the stock serving *as a de facto* home to poor residents (*logement social de fait*) through smaller and overpopulated units. Furthermore, she contrasts the significant amount of money dedicated to social housing with the regulation of the private market, where prices have skyrocketed despite attempts to introduce rent controls. Secondly, she highlights the imbalance between the type of social

[23] This provides the City with a key revenue, namely the tax on real estate transaction which represented up to one fifth of operating revenue as of 2019 (source: Denis Cosnard, « Le coronavirus fait chuter les recettes de la Ville de Paris », *Le Monde*, 14/04/2020.)

[24] While Paris is part of the metropolitan institution (*Métropole du Grand Paris*, MGP) created in 2016, it does not have the same status as other intermunicipal districts (*établissements publics territoriaux*) that are also members.

housing produced in Paris and the local population's actual needs[25]. For instance, the upper tier (PLS) represented 26% of social housing authorisations in 2001-2011, whereas only 5% of the applicants could afford it; meanwhile, the lower tier (PLAI) stood at 25%, with 71% of the applicants being eligible. Recent studies confirmed this trend: the lower tier of social housing (PLAI) only accounted for less than a third of the construction, and the upper (PLS) accounting for another third (Apur, 2024a). They also show that while there was an effort in targeting the most affluent neighbourhoods (1st to 8th and 15th to 17th districts), the bulk of the stock remains in the Eastern (above 40% in the 19th, 20th, and 13th) due to historical location and land availability for large-scale regeneration projects.

Moreover, the municipality has been a pioneer in the **introduction of rent control** as early as 2014, sparking intense outcry from the property industry, especially from property agents against the incumbent Minister of Housing. Its outcomes appear to be timid, however: it led to slow down the rental increase of 4,2% from 2019 to 2023 (Apur, 2024b); while earlier studies highlighted its "limited efficiency" given the stability of the number of cases (ca. 25%) where the rent exceeds the legal threshold (Bosvieux, 2020). This can be seen as the result of several factors, from the political orientation of the majority (more reformist than radical) to its fiscal dependence over real estate transactions, including the structural constraints linked to private property being a constitutional right in France.

Lately, under A. Hidalgo's second term (2022-2026), the housing policy has been updated in two main directions. First, there has been a political and technical effort to **better articulate housing affordability and climate concerns**, culminating in the adoption of the new bioclimatic zoning plan (PLU-B) in 2023[26]. It was inspired by "bioclimatic" architecture, and presented as a "paradigmatic shift" that sought to "do better with less, with the existing" through climate adaptation and attenuation (Interview 1). It is based on two pillars: adapting the built environment to climate change, while taking into account the economic logic of different actors; and producing "public housing" up to 40% of the stock[27], in a context of falling demographics due to the rise in prices, in unoccupied housing, and size of households. As such, it can be seen as the result of trying to adjust the housing policy to climate concerns in a context of land and fiscal scarcity, while trying to balance public intervention with market logics.

Second, new issues have emerged onto the housing agenda. While private rental dominates the tenure structure (44% as of 2021 according to INSEE), its supply has been **shrinking** over

[25] Currently, there are three "tiers" of rent ceilings, corresponding to different type of financing conditions and level of rents (from the lower to the upper: *prêt locatif aidé d'intégration*, PLAI; *prêt locatif à usage social*, PLUS; *prêt locatif social*, PLS).
[26] This effort is also reflected by the fact that the City Deputy for the Green transition of the built environment elected in 2020 also became responsible for Housing in 2023 (following the resignation of the former deputy responsible for housing after its election in the Senate).
[27] In that context, public housing means municipally-owned social and non-social housing, such as intermediate rental housing.

the past years[28]. This partly results from the strong growth of short-term rental accommodation such as Airbnb, that the City of Paris has sought to regulate (Aguilera et al., 2025), but also from individual strategies to navigate a changing fiscal environment. At the same time, studies have shown a **great concentration of housing ownership**: in Paris, individual multi-owners of 5 or more units own 58% of the rental supply (André et al., 2021). Therefore, the municipality has embarked in advocacy for a reform of the tax on vacant housing in order to make it costlier for individual landlords to withhold their properties. Due to the lack of interest from institutional investors into private rentals, the City also decided to create its own municipally-owned property trust (*Foncière de logement abordable*) to fund the production of "affordable housing" through the purchase of the existing stock, and its upgrade through energy retrofits.

3.1.2 Green Transition Interventions in Paris : Orgues de Flandre

The **Orgues de Flandres project** combines the **housing retrofit of the highest residential buildings in Paris** with **urban design transformations partly built on nature-based solutions (NBS)**. Located in northern Paris (19th district), the complex sits on the former '*îlot Riquet*' which was destructed to make way for a mix of mid- and high-rises built according to postmodern architectural codes. During the 1970s, 2000 dwellings were built on these 6,5 ha, combining a diversity of tenure supposed to accommodate social mix (private and social housing, including intermediate), along with several public facilities (including schools, playgrounds, a swimming pool and a sport centre). In 2018, the complex was home to 4,900 residents, and 1,190 jobs (Apur, 2018). It concentrates pressing social issues in a very dense environment (660 inhabitants/ha). On the one hand, its population is ageing, with more than a third of residents having lived here since two decades, making it a place of "anchor" (Authier et al., 2021). This population is experiencing significant economic difficulties, be it in terms of poverty level, unemployment, or growth of wages which are all under the average numbers for Paris (Apur, 2019). The area also suffers from a bad reputation from being a hotspot for drug consumption, as well as youth violence (Harroussi et al., 2021). On the other one, the complex is located in a district undergoing socio-spatial change with the creation of a nearby park (Eole) following the mobilization of residents (Newman, 2011) and of cultural facilities through the reconversion of municipal and industrial property (Clerval, 2013). In the Orgues, the share of executives have increased from 12% to 19% over 2009-2014, while employees and blue-collar workers has decreased more significantly than in the rest of Paris (Apur, 2019). Real estate agents noted how the two private condominiums have become "extremely popular and sell like hotcakes" (cited in El Azzouzi, 2020). This makes the project that was officially launched by the City of Paris in 2017 a major vantage point to examine the synergies and/or trade-offs between green transition policies and housing inequalities.

[28] Official statistics show a decrease of 4% of the stock (see report D4.1), while city officials argue that this figure underestimates the magnitude of the phenomenon (see "À Paris, le parc locatif s'effondre car les multipropriétaires refusent de louer", *Mediapart*, October 3rd, 2024, https://www.mediapart.fr/journal/france/031024/paris-le-parc-locatif-s-effondre-car-des-multiproprietaires-refusent-de-louer).

Table 1 – Key data on the case study area in Paris.

	Orgues de Flandre
Neighbourhood characteristics (general social type, economic activities, density etc)	Very dense residential complex built in the 1970s in a formerly industrial area of northeastern Paris, experiencing gradual socio-spatial change (ageing population, impoverishment, growth of white-collar workers)
Duration	First energy retrofits: 2006-2012 Masterplan: 2017-2018 Implementation: 2011-present.
Funding	Paris City Hall, central state agencies (ANAH for private housing, ANRU for social housing and NBS), Île-de-France regional council (match funding for park, and "*résidentialisation*"), social housing providers (limited profit: I3F, municipally-owned Élogie-SIEMP), CDC (state-owned), European Investment Bank (for private housing)
Actor constellation	See "funding", plus various local tenant associations (mostly affiliated with CNL), and neighbourhood associations, architecture firms, engineering offices, etc.
Aims and objectives	1) Restoring the neighbourhood's appeal and pride in living there; 2) Reversing the deterioration of the site, by i) providing structural solutions to the difficulties in public spaces in terms of cleanliness and safety, and ii) by renovating housing and public spaces, drawing on the site's potential for greenery and the architectural quality of the buildings.
Specific physical measures	Partial demolition of a building (12 apartments) to reorganize the central space, enclosure of ground floors around building to delineate public/private uses (aka "*résidentialisation*"), creation of larger pavement with green spaces (incl. pedestrianisation of 1 street), creation of green roof), residents' community garden
Accompanying housing policy/ regulatory measures	Private housing: reinforced technical and financial support supported by the shift from the municipal policy for retrofit (ERP) to substandard housing (OAHD), rent controls (but exceptions apply) Social housing: significant financial support to social housing providers from the municipality

3.1.3 Methods

This research relies on qualitative methods, combining semi-structured interviews, document analysis, and limited observational approaches. The analysis aims to examine local green initiatives and their implications for housing inequalities.

Interviews were conducted between 2023 and 2025. In the case of the Orgues de Flandre, interviews were the primary method for collecting qualitative data. In total, we conducted 20 semi-directed interviews (average length: 88 minutes). Most of them were face-to-face and took place during October-December 2025. The main type of actors interviewed were: representatives from the City of Paris (administration, elected official); a social housing provider which is a major landlord in the area under study; residents (local tenant union representatives, condominium representative); and several experts involved in the design of the masterplan (municipal planning agency) and energy retrofitting of public and private housing. Their identification combined reputational and snowballing sampling, particularly within the municipal administration and local tenant unions. All interviews were conducted in French. Interviews were recorded with participants' consent and transcribed in their original language using the open source, AI-based software Noscribe. After the removal of personal identifiers, transcripts were translated with the aid of translation tools.

We have also carried out desk research by collecting and analyzing numerous documents, including decisions voted by the council of the City of Paris since 2007 (n=18), minutes of public meetings, and official documentation from the urban regeneration project overseen by the national Agency for urban renewal (ANRU). Additional contextual information was derived from the existing academic literature on socio-spatial change in the 19th district (Clerval, 2013; Newman, 2011; Vivant, 2007) and social relationships in the Orgues de Flandre area (Authier et al., 2021; USH, 2017).

Several limitations should be acknowledged. While the interview sample covers a broad range of actors, preliminary findings require corroboration through further interview as well as documentary and quantitative data to allow for triangulation. Moreover, findings reflect ongoing processes rather than stabilised outcomes, given the evolving nature of the policies and projects under analysis.

A secondary case study, the Clichy-Batignolles project, is analysed as a backdrop for further developing the critical analysis and discussion. A brief presentation and the related critical evaluation are included with this document. The research team has examined the Batignolles case over several years. In 2019, 17 interviews with park users and 19 semi-structured interviews with residents and local community stakeholders (e.g., facility managers, associations) were carried out; in addition, a student's capstone project gathered 105 online questionnaires (SCP 2019). A subsequent student's capstone at the Urban School in 2024 was dedicated to this project, with further observations and interviews (Dubois et al., 2025). The analysis is also supported by existing literature on socio-spatial change (Adisson, 2013; Piganiol, 2021) and energy transition (Berthelot, 2020; Tardieu, 2017).

3.1.4 Civic and institutional Perceptions of Green Initiatives in Orgues de Flandre

As of 2018, the Orgues de Flandre was home to 4,900 residents living in 2,000 apartments. While social rentals form a significant part of these, the complex also includes intermediate housing owned by social housing providers, and two private condominiums. In its initial diagnosis of the NPNRU project, the municipality highlighted the "social degradation" of the area, due to the deteroriation of the built environment, as well as the impoverishment of its residents (Ville de Paris et al., 2017). Against this, maintaining the diversity of tenures was identified as a key lever to **preserve the social mix** that was initially present. In this context, the different buildings have undergone a series of major energy retrofitting operations since the early 2000s, for more than €43 millions of cost (see Table 2 below). They have operated under different policy frameworks depending on their private or social status.

Table 2 – Overview of the main energy retrofit schemes in the Orgues de Flandre

Building	Constr. yr	# of apts	Tenure (subtype)	Owner	Retrofitting targets	Total cost	% subsidies from City
Flandre (Orgues VI)	1980	376	SR	I3F	Energy label: from E to D (energy), C to B (GHG) Label: *HQE Rénovation* Certification: *développement durable Patrimoine et Habitat (Cerqual)*	15 079 721 €	13%
Flandre (Orgues V)	1973	187	SR (ILN)	I3F			
Résidence Mathis	1967	200	SR (PLAI)	Élogie-SIEMP	Energy gain: 60%	6 060 858 €	39%
Prélude (T1)	1979	254	PR	I3F	Expected overall energy saving: 46%	13 920 000 €	16%
Sonate (T5)	1972	212	SR (TBC)	I3F			
Cantate (T3)	1970	179	OO, PR (condominium)	Co-owners	Energy gain: 60%		21%
Carré Mathis	1974	145	SR (PLUS), PR (ILN)	I3F	Energy gain: >60% Emission gain (GHG): >60% Labels: *BBC Effinergie Basse consommation-bas carbone, NF Habitat Paris (économie circulaire)*	6 226 846 €	41%
32-34 Riquet	1960	67	SR	I3F	Energy gain: > 30% (primary) Emission gain (GHG) >61%	2 439 469 €	4%
Archereau-Lamaze	1971	240	SR (PLAI)	I3F	Energy label: from D to B Energy gain: > 70% Label: *Effinergie Basse consommation-bas carbone* Certification: *NF Habitat Paris (économie circulaire)*	TBD	TBD
Fugue (T4)	1973-1980	198	OO, PR (condominium)	Co-owners	Energy gain: 40%		14%
TOTAL		**2058**				**43 726 894 €**	

Sources: Decisions voted by the municipal council, interviews, press reviews

Nature-based solutions also form a significant part of the Orgues de Flandre redevelopment project. They include an **array of urban design interventions**, such as: the greening of public space (streets, park, plaza) and amenities (swimming pool), including the creation of a central garden ("*Jardin de l'îlot Riquet*") through the redesign of a former one; the greening of roofs (e.g. "Carré Mathis" building, municipally-owned swimming pool); community garden and urban farming (3,600 sq.m.) in the "Résidence Mathis" building (see Table 3 below).

Table 3 – Overview of the main NBS interventions in the Orgues de Flandre project

Type	Date	Surface	Owner	Cost	Detail	Funding
Public spaces (4 streets)	2024-2025	6,733 m²	City of Paris	8 M€	2291 m² of greening 23 planted trees Bike lanes (Curial Street), and station (Mathis Street) Pedestrianisation (Mathis Street)	City of Paris (via *France Nation Verte* program funded by the central state) Regional council (PRIR)
Mathis Sport Centre	2020-2023		City of Paris	4,6 M€	Renovation of technical installations for heating, ventilation and water treatment Partial renovation of tiling, false ceilings and paintwork Energy performance of the swimming pool - GHG reduction: 41.6% - Energy consumption: 34.7% - Water consumption: -31.9% Roof greening (Parisculteurs)	City of Paris
Extension of the central "îlot Riquet" garden	2024-2025	3,800 m²	City of Paris		Net creation of 3,800 m² of green space (out of a total of 7,900 m²)	Regional council (PRIR): 985 772€
Creation of an entrance to the central garden	2024		I3F		Transformation of a supermarket delivery bay to allow better access	Région Île-de-France (PRIR): 214 228€
Urban agriculture (Mathis building)	2020	3,600 m²	Élogie-SIEMP		Growing mushrooms, fruit and vegetables in a garden on a slab reserved for residents of the building (with technical assistance from Vergers urbains association) Urban farm in an underground car parking reserved for the operating company (Cycloponics)	ANRU (*Quartiers fertiles* program), city of Paris (*Parisculteurs* program)

Sources: Decisions voted by the municipal council, interviews, press reviews

These were established with the masterplan (2017-2018), and later refined through additional community workshops (2021-2022) to tackle different perceived issues. Safety was perceived by residents as a major concern, with some of them regularly complaining about bikelife, squatting linked to drug sale and consumption, homelessness, and prostitution. Cleanliness also appeared to be a main issue, that the municipality attributed to the complex landownership pattern leading to an unclear division of task between its departments, and with the main social housing provider I3F. For residents, both issues fed into a feeling of "abandonment" by public powers. Relatedly, the closed architecture contributed to make the area unwelcoming for residents – particularly women (Abdelalim, 2025) – and visitors, as well as to the police and firefighters. One of the **main aims of the masterplan was thus to make the area more attractive by "reopening" it** and improving the appeal of its central green

space. Finally, urban heat islands were identified as an issue, both by planners (Apur, 2018) and residents during workshops (Ville de Paris, 2023b).

3.1.4.1 Precedents and implementation

While official documentation of the City of Paris designates the "Orgues de Flandre project" as a single and coherent initiative launched in 2017 under the urban regeneration framework (NPNRU), our interviews and document analysis show that it follows a more complex, and patchwork-like dynamic.

The official project has built on a set of precedent initiatives that came together during a **first phase (2007-2014)**. Prior to the design of the masterplan, social housing providers had already engaged in retrofitting their buildings, including two of the high rises owned by I3F. In one of the two other privately-owned residential towers, the co-owners had also engaged in a global audit for energy retrofit. While the City of Paris provided technical and financial assistance to these initiatives as we will detail below, they seem to have resulted from a piecemeal approach that was only integrated a few years later. Additionally, the municipality had established a local governance committee (*gestion urbaine de proximité*, GUP) in 2012.

> "So, in practical terms, the GUP served to reclaim the [public] space within the residential complex that had been taken over by cars by putting barriers, with the agreements of the fire brigade and others. Anyway, we did some good things, and… but somehow, for the next step, we needed to put together an urban planning initiative. And so, the people I mobilised were those who were, in fact (…) participants to the GUP" (City of Paris, urban development department, Interview 5).

It led to the identification of several issues – summed up as "rats, scooters, youngsters" – that residents attributed to a feeling of abandonment by public officials. It also helped to establish relationships between the different stakeholders, that likely helped the dialogue with residents in later stages.

> "Residents seemed somewhat demoralized (…) [they] felt truly left behind. And they said 'anyway, there's no point in doing a big project when what's needed is basically good upkeep" (City of Paris, urban development department, Interview 5).

These different elements fed into the **second phase of urban transformations (2015-2019)** during which the project as such was established, with the design of a masterplan. The elaboration of the project has been undertaken under the urban regeneration framework (*nouveau programme de renovation urbaine*, NPNRU) operated by the national agency (ANRU). The Orgues de Flandre area was selected by the municipality in its application to the program[29]. It was included in the preliminary agreement signed between the City of Paris and

[29] Along with 4 other sites all located in the outer districts, namely Porte de Bagnolet – Porte de Montreuil (20th district), Bédier – Oudiné (13th district), Goutte d'Or sud (18th district), Portes du 18ème (18th district).

the ANRU in 2017 (Ville de Paris et al., 2017). As an "area of regional interest" (*quartier d'intérêt regional*), it would benefit from grants and subsidized loans from the national agency, but within a limited envelope compared to other "national interest" projects. Reducing the amount requested by applying as a "regional interest area" was perceived by the municipality as a way to maximize the success of its application for the Orgues area (Interview 5). In 2020, the final agreement attributed €3,4 millions of subsidies from ANRU (including €2,8 millions in grants) to the area, for a total estimated cost of above €30 millions (ANRU et al., 2020).

Within this framework, the municipality tasked its planning agency (APUR) to establish a masterplan through the conduction of studies and workshops with local stakeholders, including residents. Conducted between 2017-2018, they led to the formulation of scenarios that included options for different parts of the area (e.g. public space and facilities). As reported by the municipal planning agency:

> "We carried out a standard urban project, starting with diagnostic phases, and then moving on. At the time, something quite new emerged: we began developing workshop-based activities. This might be one of the first projects where we genuinely adopted a co-design approach with the residents. Looking back, I think so; in any case, it was the period when we really put this kind of approach into practice. These are methods we've used again since, and they work very well " (Municipal planning agency, Interview 4).

The analysis of the reports published for each workshops and the conducted interviews shows that most of the issues revolved around urban design, leaving energy retrofit in the background (Apur, 2018). The final masterplan included the creation of a new garden, the partial demolition of a building (12 apartments) to make the area less closed, as well as the gating ("*résidentialisation*") of several social housing buildings (see section **Error! Reference source not found.** below).

These orientations and the implementation of the project were refined through a **third phase (2021-present)**. The municipality organized a new series of consultations with residents through workshops dedicated to public spaces (2021), as well as several public meetings with elected officials and the different administrative departments involved in the project. It also signed an agreement with I3F, the main social housing provider in the area, in order to address the "structural causes of urban management issues by renovating and restructuring spaces open to the public and making land adjustments" (Ville de Paris, 2023a). At the same time, energy retrofit for social and private housing made progress under the national and municipal frameworks, as we will now detail.

3.1.4.2 Participation and governance

This patchwork dynamic of the project has translated in a **very complex governance architecture**, with energy retrofit and nature-based solutions (NBS) operating mostly under parallel policy frameworks with their own scale, rules, and temporality. While the urban regeneration (NPNRU) framework was instrumental in developing a strategy for the site that included energy retrofit program, its financial contribution remains limited in that regard (only 1 building) since most of the funding goes to other expenses related to urban design (partial demolition and related resident relocation, "*résidentialisation*", etc.). Instead, energy retrofit programs operate under common law, i.e. national legislation and priorities set by the municipal policy. The housing department (DLH) manages energy retrofit programs and

funding schemes combining sources and coordinates with specific national agencies dedicated to social (ANRU) and private (ANAH) housing.

The coordination of these different frameworks is undertaken by the **City of Paris, through the Urban planning department** (DU). Contrary to other similar initiatives, the municipality chose to retain **direct, in-house project management**, mainly because of the limited number of landowners, and what was perceived as a "shared will" between the most important (I3F owns 7 out of 8 social housing buildings, see Figure 20 below in orange) and the City (Ville de Paris, 2023a). Accordingly, a municipal chef project officer coordinates the action of the different city departments involved in the project, and of all the public and private partners.

Figure 20 – Landownership in the Orgues de Flandre neighbourhood (prior to the project)

Source: Atelier parisien d'urbanisme (2018)

These include residents, which are either directly involved or through organizations related to housing (local tenant unions, condominium associations), youth activities, culture or employment. Three main modes of community involvement can be identified: (i) **regular participation** to the local governance committee (GUP) which holds several meetings per year focused on everyday issues (see 3.1.4.8 above); (ii) **punctual consultation** through ad-hoc workshops coordinated by the municipal planning agency or the municipality itself, as well as through tenant consultation in the event of energy retrofits (*concertation locative*, see glossary in Appendix 1); and (iii) **grassroots initiatives** whereby residents have attempted to put issues on the agenda (see 3.1.4.4).

According to several interviewees with urban regeneration and planning expertise, the **involvement of residents and/or local tenant unions was significant**, and even more important than elsewhere (City of Paris, urban development department, Interviews 5 and social housing provider 14b). While this view was generally shared by several representatives of local tenant unions we have met with, this does not prevented disagreement over parts of the project as we will explain below. In addition, while experts involved in the project highlighted that residents were involved through "co-conception", their explanations clearly indicated how they perceived that the latter somehow needed guidance from planners, suggesting an imbalance in expertise, and therefore legitimacy:

> "We couldn't just arrive and say 'what do you want?'. Even though there is a popular education aspect to it, I believe that project planning is a profession. You can't just ask residents 'what do you want? And tell us what to do'. Because it's too much… just ask architecture students: you realize how difficult it is to come up with something that makes sense. Because it's a profession, in fact. And so, we made suggestions to them." (Municipal planning agency, Interview 4).

3.1.4.3 (In)equity (distributional)

As for housing retrofit, it seems that the potential trade-offs between green interventions and housing equity are not fully appreciated among policymakers. At the municipal scale, green councilmen and women have called attention to the potential consequences of energy retrofitting for housing prices (Ville de Paris, 2014, 2015). This issue was even raised regarding social housing in the Orgues de Flandre, even though the centre-left executive brushed concerns aside (Ville de Paris, 2013). It seems to be more salient among the administration (housing department), which was instrumental in finding ways to try to guarantee that the energy retrofit of private housing in the Orgues would not be detrimental to low-income households (see 3.1.4.5 below for more detail).

> "One of [the City's] mission is to main [social] diversity, which is very much at stake for owner-occupiers who are on modest or very modest incomes, by helping them to finance a larger share of the costs of works so that they are not forced to sell and leave their homes to live further away" (City of Paris, housing department, Interview 7b).

In any case, beyond ordinary municipal policy and a belief in the effectivity of rent controls, there are no area-based, specific instruments implemented to safeguard population displacement.

Moreover, the **long-term effects of nature-based solutions over housing prices remain a pending issue**. On the one hand, they may contribute to the pre-existing gentrification that was reported by interviewees and observers in the private housing part of the area, and in the district more largely (Clerval, 2013: 219). On the other one, the significance of social housing might limit this process. But it remains to be seen how it could play out in the intermediate part (ILN), where rents are less regulated. In any case, the potential link between green interventions and such socio-spatial change seems to be unevenly appreciated by the municipal administration, with one member stating that:

> "Urban planning [*l'aménagement*] has no impact on rents! Except that there are fewer vacancies, so landlords are better off. For owners, it's a bonus because their property is now

worth more" (City of Paris, urban development department, Interview 5).

3.1.4.4 Political mobilization

The Orgues have been home to political mobilization for a long time, as one representative from a local tenant union recalled, citing grassroot activism in the late 1960s-early 1970s against the initial project of turning the Flandre street which borders the residential complex as a highway – successfully leading to its transformation into an avenue with a central, tree-planted pedestrian lane (Local tenant union, Interview 13). By that time, residents also engaged in a rent strike to protest the lack of school facilities that were supposed to be built to meet the needs of the dramatic increase of population caused by the construction of the project.

In the case of the contemporary redevelopment project, political mobilization has first and foremost been **articulated through local tenant unions (*amicales de locataires*)**. There are 10 of them (sometimes 2 per building), most of which are affililated with the National housing confederation (*Confédération nationale du logement*, CNL), one of the major "representative" tenant associations that was historically close to the French communist party (see Delfini, 2023). Some of their representatives have been invited to participate to the workshops organised by the municipality. They have also been involved in the energy retrofit of social housing in two main ways. The **legal obligation of consultation provided the room for negotiations on a case-by-case basis**. In some cases, this led providers to consider tenants' requests by adjusting their initial plans on various aspects, including energy issues at times (e.g. shifting from collective to individual heating in the Flandres buildings). However, local tenant unions also **mobilized to push for their own agenda** by getting together to issue a series of statements and to circulate a petition in 2018.

"It was in October 2018 that we had put together a document in which all the resident associations contributed, each one outlining its own building-related issues. The idea was to say, together, that these points needed to be taken into account in the NPNRU project. By October 2018, we had managed to secure a meeting at the Paris City Hall" (local tenant union, Interview 13).

The petition was against the partial demolition of a building (12 apartments) that was justified by planners and the City as instrumental to opening the architecture of the residential complex. It also advocated for an improvement of what they considered to be poor housing conditions of living, which they listed in a comprehensive survey sent to the project manager, and later to elected officials. The unions considered that the workshop for the design of the masterplan did not leave room to discuss these and pushed for a more ambitious energy retrofit action plan, citing the different municipal policy framework as well as legal action at EU level[30]. For

[30] In one document, they argued that " The European Union Court has just announced to the European Parliament and the Member States of the European Union that they are accused of taking insufficient action to protect European citizens against climate change", probably referring the appeal made by 11 families from

instance, they criticized some of the technical choices made by I3F (e.g. insulation techniques that reinforced heat feeling during summers), and requested additional measures (e.g. green roofs, photovoltaic production). They also supported the extension of energy retrofit to buildings that were not initially included in planned operations, and succeeded for one of them.

> "They saw that we were united and then we voiced our needs: in winter we are cold, in summer it is too hot – we need insulation! Now we talk about it more than we did back then, well, we were already starting to talk about it (…) We had to get our everyday expertise recongnised. Even so, from time to time, project managers ignore it. Our experience is recognized but that's not enough to really bring it to life! (…) We didn't just sit back and wait for this to happen!" (local tenant union, Interview 13).

3.1.4.5 Socio-ecological impacts/benefits (positive)

Private housing

Our research shows that the implementation of energy retrofit in private condominiums, and to **help their low-income residents supporting its prohibitive cost was perceived as a key priority by the municipality**, which developed a **strong commitment** on political, technical, and financial grounds. Two of the four high rises retrofitted are private housing, namely the Cantate (T3) and Fugue (T4) towers[31]. Both buildings are mostly owner-occupied[32]. Despite the difference in tenure, the profile of their residents is said to be close to the social housing, since they were initially sold as subsidized housing[33]. Interviewees described the population at the time of the renovation works as mixed, including long-time residents that were first-time purchasers in the 1970s, and Asian residents that grew more important in the 1990s-2000s:

> "And when it came to carrying out the renovation, there was a group of residents who, let's say, had bought their apartments early on and didn't have very high incomes. We could estimate them at about a quarter of the owners. Then there were residents who arrived later, like me, who had somewhat higher incomes when we bought. There was also a population of Asian buyers between roughly 1990 and 2010" (condominium association, Interview 6a).

Europe, Fiji, and Kenya, which wanted to sue the European Parliament and Council for violating their fundamental rights – a lawsuit that was finally dismissed in 2019.

[31] There is a third condominium building (located at 30, Rue Riquet) that is significantly smaller and is the only one that has not undergone energy retrofit. This is attributed to a lack of willingness from residents (Interview 5).

[32] 151 owner-occupiers out of 180 residents for Cantate, 151 out of 196 for Fugue (Interview 2).

[33] Initially, I3F did not plan to sell the buildings, but had to because of financial difficulties (Interviews 6a, 7a, 14a). In the case of the Cantate tower, purchasers could benefit from a special loan distributed by the *Crédit Foncier de France* if they met income ceiling criteria.

They also noted the recent growth of more middle-class residents (e.g. architects), attracted by the lowest prices in the whole city (Consultancy, Interview 15)[34]. This corroborates recent sociological studies that have noted the significance of managerial professionals – particularly from the cultural industry – in these buildings, due to an ongoing turnover in the ownership, contributing to an increase in the overall share of white-collars in the neighbourhood (Authier et al., 2021: 314).

For their residents, energy retrofit increasingly **came to be perceived as an issue in the early 2010s due to three factors**. First, the Prefect of Paris who threatened to issue a hazard notice because the building did not comply with security standards. Second, the energy retrofit operations launched by I3F in the two other towers made the issue more salient and generated mixed feelings among residents: while some resented the discrepancy between the brand new aspect of these social housing buildings and the decaying of the privately-owned one, the architectural choices made for the former were perceived as setting an aesthetical precedent that not all residents approved of. Third, the municipality itself pushed for energy retrofitting by providing incentives (e.g. subsidies to fund a global audit), but also making clear that these may not last forever.

These operations were **identified by the municipality as a key lever to maintain the social mix in the area** (Ville de Paris et al., 2017). Given the number of residents, they were also an opportunity to make progress over the target set for the new retrofit municipal program "Éco-Rénovons Paris" (ERP)[35]. However, it was also clear that the magnitude of investment requested – not only for energy retrofit, but also to comply with security rules – would result in an unsustainable financial burden for many households, particularly the lower income, as interviewees from the municipal housing department and a consultancy recalled (Interviews 7b, 15). This concern was supported by what interviewees identified as the **"social" approach of retrofitting** held by experts involved in the implementation of the citywide policy (Soliha) and working with residents of the Cantate tower (Courtoisie Urbaine). Therefore, the municipality decided to shift the operation from energy retrofit only to a more global approach focused on the remediation of substandard housing[36].

"the two I3F towers began their renovation first, followed by the Cantate tower and then the Fugue tower. Cantate and Fugue underwent substantial energy retrofit works, but in each case they also had to address compliance upgrades, particularly for fire safety, as well as various

[34] As of 2025, the mean price per sq. m. for an apartment in the Cantate tower was €5,193 (+15% in 10 years) and €4,800 for Fugue (Source: https://www.meilleursagents.com/prix-immobilier/paris-75000/rue-archereau-1635/22/). For the record, the average price in Paris was a bit under €10,000.

[35] ERP is the citywide program launched by the municipality in 2016 to achieve the energy retrofit of 1,000 buildings by 2020, operating as a request for proposals to which condominiums associations (*syndicat de copropriété*) can apply for under certain socio-economic and energetic conditions, enabling them to access technical and financial assistance from the municipal agency (see Snapshot Report).

[36] In practical terms, this meant that criteria and subsidies were not defined by the ERP program, but by the *Opération d'amélioration de l'habitat dégradé* (OAHD) created in 2003, and revised in 2019 to incorporate energy efficient retrofitting.

other improvements to their overall building stock. It was necessary to find ways to finance the parts of the work that were not related to energy renovation, and to do so, these were included in the degraded housing improvement program, which could fund all the remaining works" (City of Paris, housing department, Interview 7a).

This shift was key as it allowed to **unlock larger amount of grants** from the City of Paris and the national agency (ANAH) to diminish the cost for low-income residents. As of 2019, these subsidies would cover more than 50% of the planned €10 million budget for the Cantate tower, for example (ANRU et al., 2020: 614). The support of the City Deputy for Housing was key in securing this shift with local representatives of the state such as the Prefect, since it would amount to a massive drain on the grant envelope attributed by the central state. It also required to defuse some of residents' initial reluctance, as they feared that being labelled as substandard housing would stigmatize their building that had been distinguished for its architectural heritage a few years before. This led to the approval of the energy retrofitting of the Cantate (2018) and Fugue (2022) towers, and to actual works in the following years.

When discussing their potential outcomes, representatives of the municipal housing department insisted that the **prevention of displacement** was a key concern of the municipal policy for housing retrofit as part of its general policy objective, also through the mobilization of municipal resources to support low income homeowners.

"And this is one of the most important points we implement in all our projects: it is absolutely essential to avoid displacement effects caused by service charge increases that some co-owners would not be able to afford" (City of Paris, housing department, Interview 7b).

For example, a council decision also supported the launch of a study to explore possible citywide tools to avoid "speculative behaviours" for the buildings that benefited from municipal subsidies (Ville de Paris, 2015). In its policy framework, the municipality aims to cover 80% of the cost for "modest" owner-occupiers (up to 100% in some cases) (City of Paris, housing department, Interview 7b). This rests on the perception that alleviating the financial burden of households is supposed to help them benefit from the energy retrofit by being able to stay in their homes. Or, in other words, to avoid "renovictions" – a term that is not yet popular in France (Barry and Sabrinni-Chatelard, 2024).

Less is known about landlords, who did not commit to the process to the same extent as owner-occupiers (Consultancy, Interview 15). The municipality has **several safeguards** that it may activate: in exchange for additional subsidies, landlords have to commit to certain rental ceilings (*conventionnement des loyers*); but this scheme is not very much used, and it remains to be seen if it was at all in the Orgues case (City of Paris, housing department, Interview 7b). Interviewees also cited the rent control system that applies in the city. Nevertheless, there are loopholes that landlords may action (e.g. view over Paris that particularly applies in the high

rises); and the system should end in 2026 as it was created as an experiment (see glossary)[37]. Therefore, the risk of rent increases for tenants of private housing was not perceived as a likely scenario by the municipal administration (City of Paris, housing department, Interview 7a).

Social housing

In the case of social housing, the **process and results of energy retrofit appears more complex and heterogeneous**, notably in its distributional outcomes. 8 of the 10 buildings in the residential complex are owned by social housing organisations, mostly by one of the largest private providers in France (I3F)[38]. Although they are frequently labelled as "social housing", these buildings operate in fact under different statuses: some are actual social housing (of the lower- and middle-tier), while others – including the two towers ("Prélude" and "Sonate") – were built and are still operated as intermediate housing[39]. Similar to private buildings, a lot of households are long-time residents (USH, 2017). The share of blue-collar workers, employees and unemployed is lower than in social housing estates located in other cities, however (Authier et al., 2021). By the end of the project, all of the 8 buildings social housing buildings will have undergone energy retrofit, which is expected to translate into significant energy savings for households (from 30% up to 70%), as well as better living conditions since works often include other improvements.

Energy retrofit in social housing was motivated by particular perceptions respective to different stakeholders. As landlords, social housing providers are constrained by recent legislative changes to upgrade the most energy-intensive buildings that they otherwise will not be able to rent (up to E labels by 2034, see Rotondo et al. 2025). The typical financing plan combines a mix of their own equity (10% by I3F's standards), long-term loans, and public grants (here

[37] At the time of writing, there were ongoing parliamentary discussions to extend and improve the rent control system (Echaniz, 2025).

[38] I3F (Immobilière 3F) is part of the 3F holding, a social housing provider operating under private status (*entreprise sociale pour l'habitat*, ESH). As such, its ability to distribute dividends to shareholders is capped by the law (see D4.1 report). The main shareholder of 3F is Action Logement, which is responsible for the "1% housing", a tax paid by companies (with a workforce over 50 employees) as a proportion to their salary mass (formerly 1%, hence the name; now 0,45%). As of 2024, 3F owned more than 311,111 social housing units, seats in hostels (*foyers*), and shops, including 167,000 in the Paris region through I3F.
Elogie-SIEMP is a mixed-economy company (*société d'économie mixte*) co-owned by the City of Paris (65%), the national development bank *Caisse des Dépôts et Consignations* (20%), and other shareholders.

[39] Social housing buildings were initially financed as "*HLM ordinaires*" (HLM-O) and are therefore considered either as lower-tier (PLAI) or middle-tier (PLUS) – even though official guidelines recommend that this should be the latter case (DHUP, 2010). Intermediate housing buildings were financed as "*immeubles à loyer normal*" (ILN), a status created in 1961.

with a substantial share provided by the City of Paris). They can also recoup some of the costs either by raising rents, or by recovering some of the energy savings[40].

> " There are two possible contribution systems. The first is a rent increase with a cap of 5%: you can increase the rent by up to 5%, but if the full 5% would push it above the maximum allowed, you can only increase it up to the ceiling. That is, if you are 2% below the maximum, you only increase by 2%. This was one form of contribution, but we did not implement it on Carré Mathis, as specified in the ANRU agreement, and we did not touch it. The second contribution is the third line on the rent receipt, where tenants are asked to contribute to the reduction of charges, calculated according to a highly theoretical formula. Depending on the energy savings achieved, a certain percentage of those savings is recovered through the charges" (social housing provider, Interview 14a).

In the case of the Orgues, where 46% of social housing were under the E label as of 2016 (Apur, 2019: 35), the two **social housing providers seemed proactive in retrofitting their buildings**. The first operations from I3F were launched as early as 2002 for the Flandre buildings, and 2010 for the two towers. In hindsight, energy retrofit on these old (i.e. already amortized) types of buildings is perceived to be profitable and may even help to cross-subsidy new production elsewhere (social housing provider, Interview 14a). For its part, the municipally owned Élogie-SIEMP was motivated by the implementation of the municipal climate plan.

Furthermore, the **City of Paris was key in supporting these operations at various levels**. Most of them benefited from a significant financial contribution, averaging 47% of the total cost according to our calculations. These grants are distributed according to specific rules that set various standards (energy consumption, circular economy, urban heat island, etc.), the scope and level of which have been reinforced over the years. In addition to this, the municipality also underwrote most of the loans contracted by social housing providers. In exchange, it enjoys a reservation right (totalling here 291 units), thereby gaining control over the type of tenants who can benefit from the retrofitting. Social housing providers must also agree not to sell the units without authorisation from the City, a political priority for the current ruling coalition that goes against the trend in recent years facilitated by reforms (Gimat and Marot, 2020). Additionally, the municipality also pushed for the integration of one building within the NPNRU framework, which therefore could benefit from subsidies provided by the national agency for urban regeneration (ANRU). Given the extraordinary financial contribution of the municipality and its political status as the capital city, some stakeholders have underlined its significant weight in the negotiations (Social housing provider, Interview 14b).

[40] According to the *Building and Housing Code*, in the event of building refurbishment, social housing providers can increase rents by 5% if they are authorised by the Prefect; and more provided local tenant unions agree (art. L442-1, *Code la construction et de l'habitat*). They can also implement a contribution towards recovering the monetary savings generated by the decrease of energy consumption resulting from energy retrofitting, provided the building achieves a minimum level of performance, and that tenant representatives were consulted (art. L442-3, *Ibid.*). This contribution is limited to 50% of the monetary savings that benefit tenants, and to 15 years.

> "The City is extremely demanding when it comes to the quality of the works, but like all local authorities. That's not unusual – they are all very demanding. Here, however, the level of requirement is perhaps even higher, since they are putting in 40% of the funding. Everything has to be done according to best practice, and we respect their specifications as closely as possible" (social housing provider, Interview 14b).

Finally, **local tenant unions have also been involved in these operations**, either through the legal obligation of consultation or through grassroot action. While they welcomed energy retrofit in general, some citing how it translated into less expensive bills for the first years (Interview 12), they also pushed for more ambitious interventions (see 3.1.4.4 above).

Nature-based solutions

Overall, it seems that **many NBS interventions can be understood as a "greening" of preexisting norms guiding urban regeneration policy**, which are designed to restore law and order. Indeed, several of these interventions are characterized by a **design of closure**, which seeks to control the access to green spaces and reduce unwanted uses through situational prevention. For example, while the central garden involved a significant extension of former green space (+3,800 sq.m.), it is now closed by a gate. The surroundings of most social housing buildings will be gated, following the doctrine of "*résidentialisation*" which seeks to normalize behaviours based on the idea of private property (see glossary in Appendix 1, and quote below). Similarly, access to the community garden is restricted to the residents of the building where it is located; while the underground part operates as a privately-run urban farm. In this latter case, using parking space to grow organic food is presented by its operating company (Cycloponics) as a way to contribute to better health and shorter production cycles, but at the same time it is promoted to make space for a commercial activity against squatting and other unwanted activities.

> "[The garden] will be closed because, in fact, we know that good management of a space also means being able to close it. That's it (…) But that's also what was done in many areas at that time. I'm thinking of the Michelet [area] next door, for example: well, sure, we've put up lots of fences, but it clarifies things a lot and it's a bit better to live there now. And the spaces that were bad public spaces and bad green spaces, well, by separating them, suddenly they (…) work, when they're managed, etc." (Municipal planning agency, Interview 4).

All in all, many of the NBS interventions are thus driven by a security concern, which has been a growing aim of the urban regeneration policy for the past two decades (Gosselin, 2015). In the case of the Orgues, our research found a **strong consensus between the municipality and the main social housing landlord** regarding how urban design should support social

control over space in the name of fighting against what is labelled as "misuses"[41]. Closing the garden also seems to be **supported by many of the residents** – at least the most vocal who have participated in the workshops. Interviews with local tenant union representatives and reports from the workshops published by the planning agency (Apur, 2018), indicate that the closure of the garden was welcomed by many of them. According to local tenant union representatives, the issue was less perceived to be about the closure of the garden itself, rather than maintaining the ability for pedestrians to walk across the residential complex (rather than having to go around) in order to run their daily errands (local tenant union, Interview 13). This seems to have been partly taken into account in the design laid out by the masterplan. Our material also shows that while there seems to be a general support among residents for the closure of the garden and building surroundings based on a concern for security issues, some of them also advocate that youth and homeless people should benefit from social policy.

3.1.4.6 Socio-ecological impacts/harms (negative)

Private housing

In the case of the two private condominiums, informants acknowledged that **the retrofit operations may had led some residents to sell** (Interviews 9, 15), even though it remains hard to know their exact motives (i.e. financial burden, or inconvenience caused by several years of construction disruption, etc.). This echoes one journalist who reported some cases of aged residents that had to turn to life annuity (*viager*) to meet the costs of renovation, while another had to leave (El Azzouzi, 2020). In any case, statistical data would be needed to triangulate this information.

Social housing

In terms of potential affordability conditions, a key finding of our research is that **social housing providers have implemented measures to partly share the cost of investment with their tenants** (see glossary in Appendix 1). In 6 out of 8 buildings, the monetary savings expected from energy retrofit were partly recovered from tenants by social housing providers (including the municipally-owned Élogie Siemp). For instance, it may amount from 7 to 9 additional euros per month, up to 15 euros for a 60 sq. m. apartment (local tenant unions, Interviews 12, 20)[42]. However, due to the subsequent rise of energy prices, the **actual savings**

[41] This view also supports the transformation of retail shops located on the ground floor of the one building: extending their area by building new walls is directly linked to restricting the ability of homeless people to benefit from the corbel of the first floor; in the medium term this upgrade of retail space is likely to lead to rent increases, which may displace some of the current tenants (Interviews 5, 14a).

[42] In the case of the "Prélude" tower (renovated in 2015-2018), energy savings were expected to amount to 78 kWhEP/sq. m./year, i.e. €5,48 (based on energy cost in 2009), so that the contribution set at 30% would amount to €1,64/sq. m./year. This represents less than 5% of the total cost (Immobilière 3F, 2013). In the case of the "Flandre" buildings (renovated in 2009-2012), rent increase was set to a maximum of €15/unit/month, contrary

for tenants might end up being very thin. Several representatives of the local tenant unions emphasized that they felt that energy retrofitting in social housing did not result in less costly bills (Interviews 12, 18, 20).

In any case, the use of energy savings recovery schemes did not seem to be an issue for most stakeholders. In 2013, the centre-left executive supported the decision of I3F to apply this against the critique of right-wing municipal councillors, on the account that the social housing provider would capture only 30% of the savings whereas the law allows up to 50% (Ville de Paris, 2013). Likewise, when applying for municipal grants, social housing providers are just asked to disclose to the administration whether they plan to activate this (City of Paris, housing department, Interview 16a)[43]. For I3F, energy saving sharing was mostly decided on a case-by-case basis; however, it is increasingly considered as a key revenue source in the face of financial stress put on social housing, leading to the ongoing elaboration of a strategy (see quote below). While controlling the annual rental expenses is a traditional mission of the local tenant unions, and these were vocal regarding housing conditions, they **did not engage in significant bargaining over energy savings recovery schemes** (Interviews 12, 19a, 20). Our interviews with them indicated several possible reasons to this: the amount is not deemed very significant; they may perceive a lack of expertise on this as personal communication shows; and/or information given by I3F, which was not as responsive as they expected it to be.

> "At the time we were less attentive to these things [the revenues from cost sharing], (…) But when you zoom out a little bit and see the revenue that it can generate for the company across our entire refurbishment operations, that's when you start to ask yourself the question" (Social housing provider, Interview 14a).

Relatedly, **energy retrofits do not straightforwardly translate into better living conditions**. According to representatives of local tenant unions, renovation works have led to several defects (e.g. window falling). They even had counterproductive effects in terms of energy consumption: in the Flandres building renovated in 2002, the temperature was not felt high enough, leading some households to use additional electric heaters that resulted in costly bills; while in the towers, the new water heating system implies a greater consumption to access hot water. As a result, representatives perceive energy retrofit as ambivalent policy, that may even run contrary to energy sobriety (Interviews 12, 20). They attribute these counterproductive effects to a cost-saving rationale that translates into bad technical choices, and into a system of outsourcing implementation to a cascade of enterprises detrimental to accountability. Against this, local tenant unions have repeatedly called in the City's elected officials and administration to put pressure on social housing providers.

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to the €30 initially planned by I3F, and offset for more than 60% of households by public subsidies (Ville de Paris, 2007).

[43] This was supported by a council decision introduced by representatives of the Green party (Ville de Paris, 2014).

Nature-based solutions

If many of the residents seemed to adhere to the closed design of the central garden, others attributed this more directly to the willing of the municipality, as one long-time resident involved in the workshops claimed:

> "In fact, the central garden is a real concern because it is part of our living environment (...) I don't recall people helping to come up with ideas for the central garden. The main idea for the central garden – in fact, from the outset, the garden was invaded by cars driving into the alleys. It was used as a car park. (...) So there were regular meetings of the GUP [local governance committee], which brought together various stakeholders from the neighbourhood (…) and a lot of the discussion revolved around the insecurity of the garden, which had become a car park. We fought hard to get barriers installed (...) so we ended up with barriers, and at that point the garden became a garden (...) Today, the garden is closed. And I think we should be honest, it wasn't necessarily the idea of the co-owners or residents, it was the idea of [policymakers] to secure this garden, which is closed at night" (Condominium association, Interview 6a).

Other greening interventions cause mixed feelings among residents: some regret that the enlargement of pavement associated with public space greening has reduced space for car parking; whereas the local tenant unions have unsuccessfully advocated for the installation of green roofs over social housing buildings to improve thermal insulation.

3.1.4.7 Tensions and power dynamics between stakeholders/actors

In addition to the analysis of relations between actors around energy retrofitting of private and social housing, and of the development nature-based solutions laid above (see sections 3.1.4.5 and 3.1.4.6), tension and power dynamics in the Orgues project can be summed up as follows:

- **City/social housing provider(s)**: overall there seems to be a consensus between the major landlord (I3F) and the City of Paris. For instance, both share the idea that one of the aims of the project is to regulate, if not supress what they perceive as "misuses" (City of Paris, urban development department Interviews 5 and Social housing provider, Interview 14a). In order to improve safety and cleanliness without increasing the burden of tenants[44], they also agreed over exchanging land parcels for a minimal cost, as stipulated in the agreement protocol that they signed (Ville de Paris, 2023a).
- **City/residents**: several interviewees from the municipal administration, social housing, and local tenant unions acknowledged that there was a good relationship between the City and the local population (Interviews 4, 5, 14b, 19a, 19b, 20).

[44] For instance, this is the case for the "Flandres portal", which will be transferred by I3F to the City of Paris so that the cost of upkeeping will not be paid by tenants, but rather taxpayers.

However, there were periodic conflicts over specific issues. In private housing, the implementation of the (still ongoing) energy retrofit in the Fugue tower was more difficult than the other, due to the reluctance of the board president of the condominium association. In social housing, the main conflict revolved the planned partial demolition of a building, against which local tenant unions unsuccessfully petitioned (see section 3.1.4.6).

- **Residents/social housing provider(s)**: this is where the tensions are the most palpable. Local tenant union representatives regret a lack of communication and transparency, which they partly perceive as due to a high turnover in the I3F workforce. While they welcome the idea of energy retrofit, they are also critical of the way it is implemented (i.e. defects, additional energy consumption, see section 3.1.4.6), and would like to see more investment into additional operations (e.g. green roofs).

Last but not least, it should be noted that the project also implies tensions and power dynamics **between residents** themselves. While local tenant unions appear as an important actor in the governance of the project, they admittedly struggle to be representative of all the residents, as seen elsewhere (Delfini, 2023). As such, they only voice the concern of a fraction of them. Moreover, NBS are part of a larger set of urban design interventions that seeks to address tensions between some residents and unwanted people (e.g. drug sellers and consumers, homeless, “youngsters”) whom are deemed as being responsible for contributing to insecurity and/or bad reputation. As a result, as seen in the case of the gating the central garden, these interventions might result in shifting patterns of public space use.

3.1.4.8 Innovative governance mechanisms

The Orgues project combines different governance instruments and mechanisms in a complex way. Part of them have to do with urban regeneration policy (*politique de renovation urbaine*), such as the NPNRU framework which organizes relationships between the central state (through national agency ANRU), the municipality, and the social housing provider I3F. This is also the case of the local committee governance (GUP), which was set up several years before the official launch of the project. It includes a range of stakeholders in the area: elected and administrative representatives of the City of Paris and the district town hall; the local representative of the state (Prefect); the police; landlords; local tenant unions, other associations and residents. They hold regular meetings to address everyday problems, such as public space maintenance, road congestion, drug trafficking, etc. This coordination tool has been launched in numerous low-income neighbourhoods undergoing urban regeneration, as it was held as a best practice by experts to remedy against the degradation of these areas (Roche, 2013). It is built on the perception that without fixing everyday issues, public investment into the built environment would not function in the long term as one planner explained (Interview 5).

The definition of the masterplan was also based on a series of workshops coordinated by the municipal planning agency (APUR). Between 40 to 50 participants (including residents and local union representatives) gathered for these workshops, a lot of them coming from the preexisting GUP committee as we explained above (section 3.1.4.1). In hindsight, these workshops are claimed to be innovative, to the point that they were extended to other projects later:

> "And that was perhaps one of the first times that we really had a co-design approach with the residents. I'm thinking about it, and I think so; in any case, it was the period when we really implemented this kind of thing. These are things that we have done again and that work very well. And it worked very well for Orgues de Flandre. (…) It wasn't a consultation in the usual sense, which is a bit formal and standardised, etc., but was more a case of saying, 'we're not going to do a project without the residents'" (Municipal planning agency, Interview 4).

However, the same sources clearly indicated how experts perceived that residents somehow needed guidance from planners, suggesting an imbalance in expertise, and therefore legitimacy (see the quote in section 3.1.4.2 above). Moreover, a local tenant union representative reported that there was some cherry-picking in terms of who got invited (or not) to the workshops.

3.1.4.9 Tourism and market pressures

The Orgues de Flandres project takes place in an area where **tourism and market pressures still remain limited compared** to other part of Paris. On the one hand, it is located in the 19th district where, according to previous research, "all the ingredients are in place to promote the gentrification of the older housing stock, while allowing public powers to claim an increase in the social mix – to the detriment of working classes" (Clerval, 2013: 219). Closer to the residential complex is the municipally-owned *Cenquatre* cultural facility, which partly aimed to attract a more affluent population from other districts (Vivant, 2007). In the past years, the two private condominium of the Orgues ("Cantate" and "Fugue" towers) have increasingly attracted interest from middle-class residents (e.g. architects), due to the lowest prices in the whole city. This corroborates recent sociological studies (Authier et al., 2021: 314) and news reports (El Azzouzi, 2020). On the other one, such market dynamics are likely to remain limited to these two buildings, given that many other buildings are social rentals.

3.1.4.10 Gaps in perception between civic groups and public agencies

There were no significant gaps in perception between civic groups and public agencies besides what has been explained above.

3.1.5 Critical Analysis: Paris

3.1.5.1 Cases overview

Overall, cases show different and complex interactions between green transition initiatives and housing inequalities. In the case of the **Orgues de Flandre**, the combination of energy retrofitting and NBS are taking place in a district that some authors have described as prone to gentrification (Clerval, 2013). Given the recent completion of these green initiatives, it is yet too early to tell. However, our research shows that these **interactions will be potentially filtered by housing tenures**:

- In **private housing, the project might accelerate socio-spatial change** associated with the turnover in homeownership, resulting in the increase of higher income residents. While this is issue is not as clearly expressed in how the City is framing this specific project, the municipal intervention is nonetheless committed to prevent displacement of poor homeowners, thanks to a significant financial

support seeking to offset prohibitive costs that may result in residents having to leave.

- In **social housing, there are mixed effects**. On the one hand, energy retrofitting is not associated with higher rents, thus confirming the key role of social housing in redistributing benefits. On the other hand, its benefits do not entirely go to tenants, due to social housing providers actioning cost sharing tools to recoup part of their investments. Altogether with an increase in energy price, the savings for tenants end up being more limited than what could be expected. In addition, due to what tenants perceive as cost-saving decisions, retrofitting has not necessarily led to better housing conditions. In other words, **national trends do not straightforwardly translate on the ground**: while one could expect that the ongoing austerity policy is likely to push social housing providers to compensate the investment cost by raising rents (Gimat et al., 2025; Herrault, 2025) – not to mention maintaining new production, as it has been advocated (Bernigaud, 2025) –, it is not the case. This could be a matter of time (i.e. still too soon), and/or result from the legal framework that safeguards significant rent increases and capital accumulation for private social housing providers.
- It remains to be seen how this will play out in **intermediate housing**, where rent setting is more flexible. Besides the rise of rent, one mechanism triggering socio-spatial change is also be how the City of Paris will make use of the significant rights of reservation it has acquired in exchange for its financial support, i.e. what types of applicants will be selected and therefore gain access to the newly renovated apartments. More research is needed in that regard.

In the **Clichy-Batignolles ecodistrict** case, the consequences for housing provision of combining densification and NBS through large-scale brownfield redevelopment are threefold.

At first sight, the politically consensual and highly symbolic share 50% of social housing can be considered as a major contribution to affordability. However, there are **cross-tenure trade-offs** to this, since this came out at the expense of the affordability of private housing. Due to the constraint of limiting public spending, the loss of revenues associated with significant social housing had to be compensated through higher prices in private housing (Piganiol, 2021). As a result, the selling prices for these units were significant (ca. 25% above the area in 2012 according to Adisson, 2013). Relatedly, this also implied that in order to guarantee its implementation, the design of the project had to make way for the upper class known for its segregating habits (e.g. “poor doors”, reserving best views for private housing, etc.). Similarly, the design and management of public space may contribute to preserve the interests of the wealthiest residents: the design of the park sought to regulate the “multiplicity of uses” to make sure that these stayed within socially accepted boundaries. NIMBY movements also erupted amongst residents to contest the 24/7 opening of the park authorized by the City against heatwaves, in the name of preserving the tranquility of residents that paid high prices (Piganiol, 2021).

Moreover, the contribution of social housing towards alleviating inequality depends on its ability to meet actual needs. In that regard, the 50% share of social rentals includes different tiers, which **do not match local needs**: whereas the lower tier (PLAI) represented 71% of the applications in the 17th district, the project only included 10% of it (Piganiol, 2021). Instead of

the official figures, the analysis of the subtypes of rental housing shows an equilibrium between actually social (30%), intermediate (30%), and private (30%) (Adisson, 2013).

Last but not least, the contribution of the Clichy-Batignolles project to social mix through re-balancing the population in this area of Paris depends on the **scale of analysis**: while the increase in social housing is significant (+18 percentage points) at the scale of the district (especially for the lower- and upper-tiers), it is way less so (+3.3 percentage points) if one considers the more immediate area, given the presence of social housing estate in the Epinettes neighbourhood (Ibid.). Meanwhile, due to the fact that the new office buildings are mainly home to white collar jobs, the project could have spillover effects on the surrounding private real estate market.

3.1.5.2 Cross-cases comparison

The **comparison between these two cases** reveals patterns of similarities and differences. On the one hand, both cases are in northern Paris, in areas historically characterized by industrialization and the related presence of blue-collar population, but which have underwent gentrification over the past decades – although to a more significant extent in the case of the 17th district adjacent to Clichy-Batignolles (Pinçon and Pinçon-Charlot, 2014: 4). Both projects are also part of the same municipal agenda centred around preserving the "social mix" through housing policy and market regulation. As such, they have received a significant political, technical, and financial commitment from the City of Paris – even though, due to its nature and scale, but also role as a showcase for the municipal policy, Clichy-Batignolles (ca. €900m in subsidies) dwarfs the Orgues de Flandre (€18m in municipal subsidies).

On the other hand, these cases illustrate **different types of interventions, in a slightly different timing context**. Clichy-Batignolles combines hard densification and NBS as is typical of many large-scale brownfield redevelopment initiatives. Its implementation over former railway land implies that its distributional effect have less to do with displacements of former residents, and needs be set against a wider context (Adisson, 2013). The Orgues de Flandre does not operate on a *tabula rasa* basis, but instead seeks to implement green transition through site-specific housing retrofitting and NBS. It shows a different mode of intervention on the existing built environment through improving building envelope and preexisting public space and facilities. Its implementation is also more recent (2 buildings are still to be completed). The combination of these two factors might explain why changes may be more gradual than in large-scale projects. This is likely to be also reinforced by their different positions on the real estate market, with Clichy-Batignolles being close to a very, historically attractive area for the upper class – reinforced by the new transport infrastructure – while the Orgues de Flandre remains one of the less pricy areas of the city.

Relatedly, both **areas showcase different generations of municipal policy at the larger scale of the city**. Clichy-Batignolles has to do with large-scale redevelopment, that is a type of intervention that was crucial in housing production and green transition in the past two decades, but which may be less so in the current (and future) one(s) due to the lack of brownfield opportunities identified by the City (Rainaldi, 2024). The Orgues de Flandre case might be **more representative of the kind of interventions that now prevail in municipal housing policy which focuses on the existing built environment**, as epitomized by the new zoning bioclimatic plan (PLU-B). However, as some interviewees underscored, its scale and some of the policy tools used (i.e. shift from municipal retrofitting policy to

remediatiosubstandard housing) might be exceptional compared to other smaller, frgmented initiatives.

3.1.6 References

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3.1.7 Appendix 1 – Glossary

Abbreviations

ANAH — *Agence nationale de l'habitat* (National agency for housing) – public body established in 1971

ANRU — *Agence nationale de la rénovation urbaine* (National agency for urban regeneration policy) – public body established in 2004, responsible for piloting the NPNRU framework

CDC — *Caisse des Dépôts et Consignations* (Deposit and Consignment Fund) – state-owned financial institution established in 1816, responsible for the distribution of long-term loans for social housing construction and refurbishment through the collection of saving and loans deposits

GUP — *Gestion urbaine de proximité* – local governance committee set up in numerous social housing areas undergoing urban regeneration; considered as a "best practice"

NPNRU — *Nouveau programme de rénovation urbaine* (National program for urban regeneration) – New framework for the urban regeneration policy (2014-2030), targeting 447 areas (216 of "national importance", 264 of "regional importance" such as the Orgues de Flandre)

Terms and Concepts

Energy saving recovering: In France, since the MOLLE law (2009), social housing providers can implement what is known as a "third line of receipt" (*troisième ligne de quittance*), a tool which allows them to recover part of the monetary savings (capped at 50% of the value, for 15 years) generated by the decrease of energy consumption resulting from retrofitting that residents would otherwise pocket.

Rent controls: In addition to existing tools in regulation on rent increases (which are capped by a national, yearly index), rent controls were introduced by the ALUR law in 2014 as an experiment in Paris, and reintroduced in 2018 after suspension (then renewed in 2022). It now applies in Paris and adjacent intercommunal institutions (Plaine Commune, Est Ensemble), as well as other metropolitan regions (Lille, Lyon and Villeurbanne, Bordeaux, Montpellier). The system caps rent levels at 20% of median rents, but can be bypassed by landlords based on locational and comfort characteristics of the dwellings (which are not further specified by the law).

Reservation right: In exchange for funding of a given social housing building, different institutions (central State, local authorities, but

	also Action Logement) enjoy a right to select applicants that the social housing provider decide to lease (or not) the unit to. Since 2018, these rights have shift from a management based on stock to flux: the funding of a given operation will open rights at the scale of the provider's inventory.
Residentialization:	Popular planning doctrine in urban regeneration policy that seeks to reinforce the private characters of multifamily, large-scale buildings (e.g. through gating,), especially social housing, in order to improve security and community life.
Tenant consultation:	By the law, if a landlord plans to implement renovation works that will impact the rent or operating expenses, it must organize a meeting with tenants to inform them, and consult with their representatives in its design of the operation, notably on the issues of foreseeable increase on the cost of living (art. 44 quarter, law n°86-1290 of 23 December 1986). A similar specific system existed for the former grants for refurbishment of social housing units known as PALULOS (circular n°93-60 of 6 August 1993).

3.1.8 Appendix 2 – Key interview data

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Cabinet member	City of Paris	28/04/2025	In-person
2	Expert	Housing association	16/10/2025	In-person
3a	CEO	Architecture company	20/10/2025	In-person
3b	Architect	Architecture company	20/10/2025	In-person
4	Expert	Municipal planning agency	23/10/2025	In-person
5	Project manager	City of Paris, urban development department	23/10/2025	Zoom
6a	Member, former president	Condominium association	10/11/2025	In-person
6b	Member	Condominium association	10/11/2025	In-person
7a	Project officer	City of Paris, housing department	13/11/2025	In-person
7b	Head of one bureau	City of Paris, housing department	13/11/2025	In-person
8	Elected official	City of Paris	14/11/2025	In-person
9	Resident	Private condominium	17/11/2025	In-person
10	Expert	Municipal planning agency	18/11/2025	In-person
11	Project manager	City of Paris, housing department	20/11/2025	In-person
12	Member	Local tenant union	20/11/2025	In-person
13	Member	Local tenant union	24/11/2025	In-person
14a	Project manager	Social housing provider	25/11/2025	In-person
14b	Head of one department	Social housing provider	25/11/2025	In-person
15	Expert	Consultancy	28/11/2025	Zoom
16a	Head of one bureau	City of Paris, housing department	01/12/2025	In-person
16b	Deputy head of one bureau	City of Paris, housing department	01/12/2025	In-person

17	Project manager	City of Paris, housing department	01/12/2025	In-person
18	Member	Local tenant union	02/12/2025	In-person
19a	Member	Local tenant union	11/12/2025	In-person
19b	Member	Local tenant union	11/12/2025	In-person
20	Member	Local tenant union	12/12/2025	In-person

3.1.9 Appendix 3 – The case of Clichy-Batignolles

The **Clichy-Batignolles large-scale redevelopment project** transformed former railway land into a mixed-use eco-district. Located in the northwestern Paris (17th district), the project involved the redevelopment of former railway land that acted as a "infrastructural barreer" between southern bourgeois neighbourhoods (*Saint Lazare*, *Batignolles*) and northern working class areas with a high share of social housing (Adisson, 2013). Now complete, the redevelopment of the area has been driven by the combination of deindustrialization and its implication over railway freight; the shift of state-owned railway landlords towards rent-seeking strategies to cope with financial pressure; and municipal urban development policies (Adisson, 2018). It has been put forward by the centre-left municipal executive in office since 2001 as a showcase of its agenda combining housing-based social mix and sustainable development. Completed in 2024, the municipally-led project delivered 3,400 new dwellings (officially 50% social housing), offices, retail, and public facilities, centred around the 10-hectare Martin Luther King Park. The latter is part of a larger implementation of NBS, such as green roofs (ca. 30% of roof areas), geothermal heating, rooftop solar panels (40,000 sq.m.) and a pilot, EU-funded smart grid system (Tardieu, 2017). It also won several awards and labels, including the state-sponsored "eco-district" (stage 4) in 2020.

Case study overview

Clichy-Batignolles is a newly developed eco-district structured around a large public park on a formerly enclosed site located between a railway corridor and the Paris ring road, at the northwestern edge of the municipality. In 2001, the area was proposed for the Olympic Village, gaining political visibility and strategic legitimacy; although Paris ultimately lost the bids, the project's momentum was maintained, and the objectives defined in 2002 were preserved by the municipal council. In parallel, the City of Paris formally launched the planning process in 2001 by commissioning the municipal planning agency APUR to conduct a comprehensive study of the area. In 2002, the city council adopted decisions incorporating the study's main orientations, defining a large-scale redevelopment project of approximately 54 hectares, including a 10-hectare central park.

The development was embedded within a broader metropolitan strategy for northern Paris following the political shift of the municipal administration in 2001. Mayor Bertrand Delanoë articulated a strong vision aimed at rebalancing development toward the city's northern periphery, formalized through the *Grand Projet de renouvellement urbain* (GPRU) launched in 2002. Within this framework, Clichy-Batignolles was conceived as a multifunctional neighbourhood combining residential development, environmental performance, and metropolitan attractiveness. The decision to reclaim a polluted railway brownfield and allocate a substantial share of the site to green open space—despite high remediation costs—reflected this political and policy reorientation. Although the area was already relatively well served by public transport, its accessibility is being further strengthened by the Grand Paris Express, reinforcing its integration into the metropolitan system.

The project evolved through negotiation among elected officials, planning agencies, state and railway institutions, designers, developers, and local residents. The City of Paris played a

central role in steering the project. The mayoral vision embedded Batignolles within a wider strategy targeting the less affluent northern sectors of the city and framed the project as both a local redevelopment initiative and a metropolitan intervention. APUR provided technical studies that informed political choices. Operationally, the project was implemented through a highly centralized and unitary development process. Public development entities coordinated land reclamation, parcelization, and negotiations with developers within a ZAC, ensuring public control over use, density, and program balance.

Land ownership and transfer constituted a critical structural issue. In 2006, a fundamental agreement was reached among public actors—the State, the City of Paris, and railway-related institutions (SNCF and RFF)—to transfer the former railway land to municipal control. Private developers entered the process at a later stage and their role was constrained by public objectives, including social housing targets (50%) and remediation costs. Procedural participation is generally perceived as formalized but weak in terms of actual influence (Dalix et al. 2019). Civic groups report being consulted through public meetings, workshops, and information sessions, especially during the planning phase.

Design selection followed a "competitive dialogue" procedure combining restricted competition with open workshops. Four design teams participated in a six-month process involving policymakers, elected officials, and residents. The final design by François Grether and Jacqueline Osty integrated the park with surrounding buildings. Spatial trade-offs balanced density and open space, with later regulatory changes further adjusting layouts[45]. At the core of the project lies the 10-acre Martin Luther King Park, conceived as a linear ecological corridor and progressively opened from 2007 onwards. Its design foregrounds permeability, ecological functions, and recreational uses.

Equity emerges as a central concern. While the provision of social housing and public amenities is widely recognized as positive, civic actors note that access disproportionately benefits middle- and upper-middle-class households (Dalix et al. 2019). In the Cesbron micro-neighbourhood, residents report perceived segregation, with social housing concentrated in this sector of the ZAC, while other areas—particularly the western sector—are seen as favored for market-rate housing (Dalix et al. 2019). Residents describe the neighbourhood as "the bobo dormitory of the 17th arrondissement" and point to a gentrification process marked by housing price increases of approximately 5% within a single year (Dalix et al. 2019).

Political mobilization around the project has been moderate and issue-specific. Unlike other redevelopment projects in Paris, Clichy-Batignolles did not generate large-scale opposition movements. Mobilization focused primarily on housing allocation, school capacity, and park management. Residents' associations played an intermediary role, generally adopting a

[45] including a 2009 increase in allowable building heights and a height exemption for the new courthouse

reactive rather than transformative posture (Dalix et al. 2019). For example, residents mobilized against 24-hour park access, citing “multiple social, ecological, and environmental nuisances,” often adopting a NIMBY stance (Dalix et al. 2019).

Critical analysis

In the Clichy-Batignolles ecodistrict case, the consequences for housing provision of combining densification and NBS through large-scale brownfield redevelopment are threefold.

At first sight, the politically consensual and highly symbolic share 50% of social housing can be considered as a major contribution to affordability. However, there are cross-tenure trade-offs to this, since this came out at the expense of the affordability of private housing. Due to the constraint of limiting public spending, the loss of revenues associated with significant social housing had to be compensated through higher prices in private housing (Piganiol, 2021). As a result, the selling prices for these units were significant (ca. 25% above the area in 2012 according to Adisson, 2013). Relatedly, this also implied that in order to guarantee its implementation, the design of the project had to make way for the upper class known for its segregating habits (e.g. “poor doors”, reserving best views for private housing, etc.). Similarly, the design and management of public space may contribute to preserve the interests of the wealthiest residents: the design of the park sought to regulate the “multiplicity of uses” to make sure that these stayed within socially accepted boundaries. NIMBY movements also erupted amongst residents to contest the 24/7 opening of the park authorized by the City against heatwaves, in the name of preserving the tranquility of residents that paid high prices (Piganiol, 2021).

Moreover, the contribution of social housing towards alleviating inequality depends on its ability to meet actual needs. In that regard, the 50% share of social rentals includes different tiers, which do not match local needs: whereas the lower tier (PLAI) represented 71% of the applications in the 17th district, the project only included 10% of it (Piganiol, 2021). Instead of the official figures, the analysis of the subtypes of rental housing shows an equilibrium between actually social (30%), intermediate (30%), and private (30%) (Adisson, 2013).

Last but not least, the contribution of the Clichy-Batignolles project to social mix through re-balancing the population in this area of Paris depends on the scale of analysis: while the increase in social housing is significant (+18 percentage points) at the scale of the district (especially for the lower- and upper-tiers), it is way less so (+3.3 percentage points) if one considers the more immediate area, given the presence of social housing estate in the Epinettes neighbourhood (Ibid.). Meanwhile, due to the fact that the new office buildings are mainly home to white collar jobs, the project could have spill over effects on the surrounding private real estate market.

3.1.10 Appendix 4 – Visuals

Figure 21 – Aerial view of the Orgues de Flandre area

Source: © Ville de Paris

Figure 22 – Entrance to the Orgues de Flandre residential complex before renovation

Source: © Christophe Jacquet / Ville de Paris

Figure 23 – Ongoing housing retrofit on the Fugue tower

Source: Antoine Guironnet, October 2025

Figure 24 – Housing developments in Clichy-Batignolles

Source: Federica Rotondo, March 2025

3.2 CASE STUDY (MEDIUM): ORLÉANS

Authors: Federica Rotondo & Marco Cremaschi (Sciences Po)

3.2.1 City profile, housing inequality and policy context

The city of Orléans belongs to Orléans Métropole, an agglomeration comprising 22 municipalities and 293,673 inhabitants (INSEE, 2022). The total population of the municipality alone is 116,344 inhabitants in 2022 showing a slight increase compared to 114,185 in 2011 (INSEE, 2022)[46]. Since 2023, Orléans has been classified as a *zone tendue* (high housing pressure area) [47], corresponding to the B1 zoning category. At the intermunicipal level, governance has evolved towards metropolitan status, formally established in 2017. Since then, the Mayor of Orléans has generally also served as President of the Métropole, with a short exception of about one year when the position was held by the Mayor of Saint-Jean-de-la-Ruelle.

The city's government is moderately right-wing and the current mayor served two consecutive terms from 2002 to 2014 and then got re-elected in 2020. At current times, the main opposition

[46] https://www.insee.fr/fr/statistiques/2011101?geo=COM-45234

[47] https://www.francebleu.fr/infos/economie-social/loyers-encadres-preavis-raccourci-orleans-passe-en-zone-tendue-pour-l-immobilier-6564372

group in the city council is formed by a left-wing and ecologist coalition, bringing together the green, the socialist and the communist parties. Recently, in the context of the upcoming 2026 municipal elections, the left-wing opposition group (*Maintenant Orléans*) underlined the importance of making housing as central issue in the local political debate[48]. The local tenants' association (*Amicale des Locataires d'Orléans Nord de Loire*) highlighted the difficulties in accessing housing and the mismatch between supply and demand. Additionally, the French association (*Fédération du Loiret de la Confederation Nationale du Logement - CNL*) pointed out some concerns concerning the maintenance of the existing housing stock, with particular emphasis on the social rental sector.

In the municipality of Orléans in 2022, 58,397 housing units are main residences, representing 86,2% of the total housing stock, while 10% of the dwellings are vacant[49]. At the metropolitan level, the share of secondary housing and vacant housing is slightly lower than the municipality level (see Table 4 of Appendix 3 – Tables and visuals). Among first residences, 36% of the total stock at the municipal was owner-occupied, corresponding to 21,348 housing units; this share rises to over 50% at the metropolitan level. As a result, renters account for more than 60% of housing units in the municipality, compared to around 47% at the metropolitan level (see Table 5 of Appendix 3 – Tables and visuals)[50].

The main objectives of Orléans Métropole's housing policy focus on the promotion of 'social mix' through housing production, the regeneration of existing neighbourhoods, and large-scale energy retrofitting of the residential buildings (Orléans Métropole, 2023a).

First, the current local housing plan of Orléans Métrople PLH42023–2028[51] affirms the commitment to producing a diverse range of housing types across all municipalities to promote '**social mix'**. In 2023, the overall share of social housing in Orléans Métropole stands at 27.84% in 2023, above the legal requirement by the SRU law (*Solidarité et Renouvellement Urbain*). However, in 2021 some municipalities remain below the threshold[52], with eight of them subject to catch-up obligations. At the Métropole level, most funding goes to middle tier units (PLUS), which account for 78% of the total, compared to 4% for lower tier units (PLAI) (PLH4 - Diagnostic, see Orléans Métropole, 2023a), even though 65% of applicants are eligible for PLAI. In fact, the **overall pressure rate** reached 4.1 in 2021, representing an increase of more than 50% compared to 2015 (ibidem). This increase can be explained by multiple factors,

[48] https://www.larep.fr/orleans-45100/actualites/le-logement-un-dossier-brulant_14693898/
[49] Ibidem.
[50] See Zaninetti (2023) for an analysis of Orléans households 'outward movements and their implications for housing supply.
[51] Main axis of the PLH4 include embedding housing policy in the ecological transition; reducing imbalances in favor of social mix and dignity; enhancing territorial attractiveness through the housing supply; monitoring and fostering a shared housing policy.
[52]Including Chécy, Ingré, La Chapelle Saint-Mesmin, Olivet, Ormes, Saint-Denis-en-Val, Saint-Jean-le-Blanc and Saint-Pryvé-Saint-Mesmin (PLH4, Diagnostic, 2023).

including a rise in applications, a decline in allocations due to low turnover, rising real estate prices and insufficient supply of social housin (PLH4 - Diagnostic, see Orléans Métropole, 2023a). At the municipal level of Orléans, the share for PLUS is even higher, reaching 84%[53]. According to a representative from the *Union Sociale pour l'Habitat – Centre Val de Loire,* the strategy of prioritizing PLUS enables the city to formally comply with the targets set by the SRU law while avoiding a genuine commitment to addressing the most urgent housing needs of the lowest income residents (Dubois et al.2025).

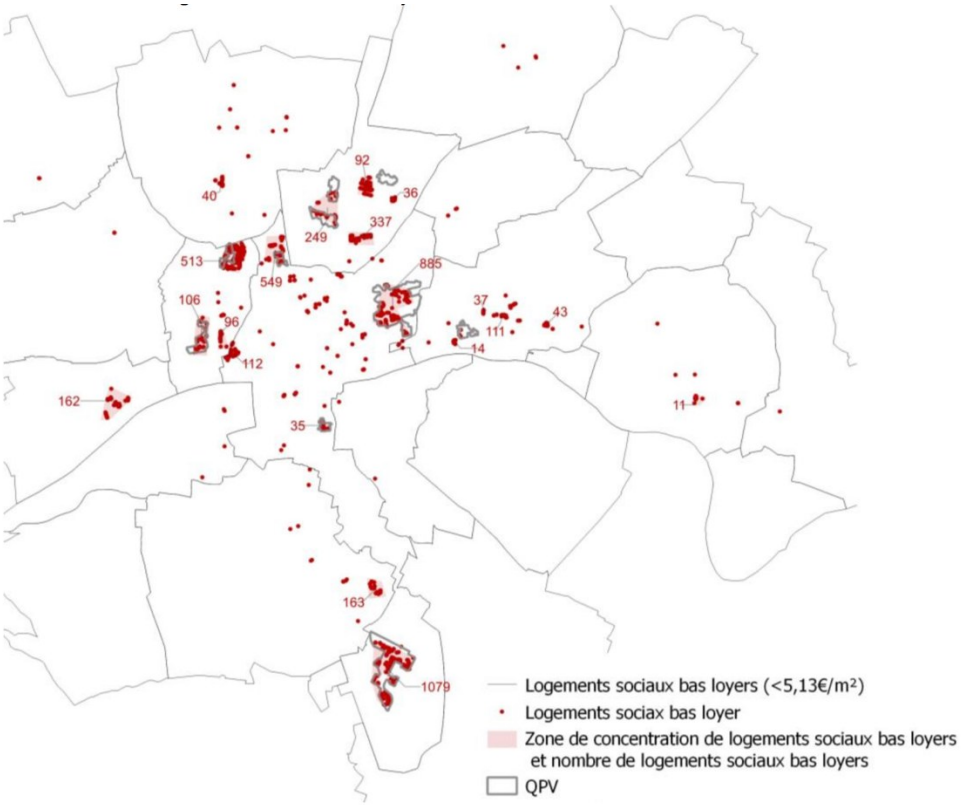

Figure 1: map showing the location of social housing units at the metropolitan level and the boundaries of the priority neighbourhoods (*Quartiers Prioritaires de la Ville*, QPV). Source: PLH4, Diagnostic, 2023

Second, **urban regeneration** plays a key role in the metropolitan policy. This orientation was reflected in the previous housing plan PLH3, 2016-2021, with the aims to enhance the

[53] https://www.orleans-metropole.fr/fileadmin/orleans-metropole/MEDIA/document/urbanisme/habitat/plh4/6_22_fiches_communales.pdf

"attractiveness of neighbourhoods", the rehabilitation of private and social housing and the "social mix". In 2019, a multi-annual agreement[54] was signed between the metropolitan authority, the cities of Orléans and Saint-Jean-de-la Ruelle, the social housing providers, the region, the state and the national agency ANRU for the urban regeneration of three priority neighbourhoods, including Argonne, La Source and Les Chaises[55]. Together, the three sites mobilize 285 M€ (among which 138 for Argonne only) around common objectives including positioning these neighborhoods within the metropolitan area, enhancing their image, improving attractiveness and excellence, and promoting 'mixité sociale'[56].

Thirdly, the Métropole supports the **large-scale housing retrofitting of the old housing stock**, with the objectives of eradicating energy-inefficient dwelling and improving thermal performance (see the Plan Climat Air Énergie Territorial, Orléans Métropole, 2019). The housing stock includes 51,493 apartments and 15,134 houses (respectively 76.4% and 22.5% of the housing stock) (PLH4, 2023). 74.8% of the main residences were built before 1990, highlighting the prevalence of older housing and 35% were built before 1970, i.e. prior to the first thermal regulations. To this end, the metropolitan authority, the municipal authority, the ANAH and the State signed an agreement to implement *Opérations Programmées d'Amelioration de l'Habitat* (OPAH). Special attention is given to the central Carmes neighbourhood in the Orleans municipality, where housing prices have increased proportionally more than in the rest of the city in recent years[57].

3.2.2 Green Transition Interventions in Orléans: Argonne

The urban regeneration of the Argonne residential complex combines the energy retrofit of social housing with NBSs measures. The project also involves partial demolition and housing reconstruction in the name of 'social mix'. This combination of measures, together with the coexistence of different housing typologies reflecting historical layering managed by a single housing provider makes this as an interesting case for investigating relations and trade-offs between housing inequalities and ecological transition initiatives.

Located in the north-eastern part of the city, a few kilometres from the city centre, the neighbourhood hosts approximately 8,000 inhabitants. To the east, it borders the Saint-Jean

[54] Available at: https://www.orleans-metropole.fr/fileadmin/orleans-metropole/MEDIA/document/urbanisme/regeneration-urbaine-argonne/Convention-NPNRU-Orleans-Metropole.pdf

[55] https://www.orleans-metropole.fr/actualites/detail/les-quartiers-prioritaires-en-plein-renouvellement-urbain

[56] For further insights about urban regeneration, local housing plans, and the objective of mixité see Driant, 2015, Chapter 4

[57] https://www.larep.fr/orleans-45000/actualites/le-prix-du-metre-carre-aux-carmes-l-un-des-plus-eleves-d-orleans-comment-en-est-on-arrive-la_14333031/

de Braye municipality, while to the north it is adjacent to an urban regeneration scheme strongly focused on urban nature and biodiversity preservation (ZAC *Fil de Soie*). The neighbourhood presents a mixed urban fabric, combining single home housing and multifamily apartment buildings, reflecting a historical layering. Prior to the 1920s, it consisted mainly of traditional farmhouses, later integrated into the first single home developments for the working-class families. Between the 1950s and 1980s, collective apartment blocks were developed, mainly north and south of Rue Argonne and in the southwest of the neighbourhood. In the 1990s, the neighbourhood was included in the *Développement Social du Quartier* (DSQ) program (David, 2001).

For more than 20 years, Argonne has undergone a process of urban transformation. The area is included in the *Politique de la Ville* and selected in 2004 as part of the **first national urban regeneration program (*Programme de rénovation urbaine*, PNRU)**[58](David, 2001). The agreement *Convention Territoriale Argonne* (CTA)[59], signed in the mid-2000s, led to a number of interventions, including the introduction of Tram B, a key public transport axis connecting east-west in Orléans Métropole. A monitoring report of the program, published in 1994 by the *Centre de Recherche pour l'Étude et l'Observation des Conditions de Vie* CRéDOC, described the context as follow:

> *a neighborhood whose popular identity gradually evolved in the 1960s and 1970s. It was initially populated by working-class families for whom access to HLM housing was both a form of social advancement and a step toward owning a single-family home. There, as elsewhere, these first residents were replaced by more economically and socially disadvantaged households, while also attracting an increasingly large immigrant population. The dual process of impoverishment and an increase in the number of families of foreign origin accelerated during the 1970s, giving the original residents the impression that the neighborhood had suddenly changed completely (author's translation using DeepL Pro)* (**Error! Reference source not found.**

In 2014, Argonne was selected as part of the **second urban regeneration program (*Nouveau programme de rénouvellement urbain*, NPNRU)**. Within this frame, by 2016 the municipality begun consultation for the creation of ZAC (*Zone d'Aménagement Concerté*) Argonne. The neighbourhood was marked by increasing poverty and social disparities across sectors: low socio-professional diversity, limited qualification levels, and high unemployment, particularly among young people; low residential mobility and limited attractiveness;

[58] coordinated by the *Agence Nationale pour la Rénovation Urbaine* (ANRU)
[59] https://www.larep.fr/orleans-45000/actualites/le-quartier-de-l-argonne-a-orleans-poursuit-sa-transformation-de-nouveaux-batiments-en-construction_14497235/

phenomena of school avoidance; persistent issues of safety and tranquillity; and an increase in single-parent families (Métropole Orléans, 2017) [60].

A second agreement was signed in 2019 between the municipality, the region, and the state to continue the second phase of urban regeneration. This urban regeneration interventions in the Argonne neighbourhood includes multiple thematic axes, including one focusing on "the nature in the city" (*Nature en ville*). It aims to improve the ecological continuity between natural spaces, promote soil de-impermeabilization, and enhance courtyard greening to support biodiversity. In addition, a key thematic axis focuses on housing measures targeting social mix and diversification of housing supply, as well as retrofitting existing social housing buildings. According to the 2019 provisional timetable, the overall programme will run until the end of 2030.

Table 1. Key data on case study area of Orléans

	ARGONNE
Neighbourhood characteristics (general social type, economic activities, density etc)	Located in the north-eastern part of the city, a few kilometres from the city centre, the neighbourhood hosts approximately 8,000 inhabitants. The neighbourhood presents a mixed urban fabric, combining single home housing and multifamily apartment buildings, reflecting a historical layering.
Duration	from 2019 onwards, within the frame of the second ANRU Agreement, building on previous phases of urban regeneration. According to the 2019 provisional timetable, the overall programme will run until the end of 2030
Funding	Referred to urban regeneration starting from 2019: - municipality (proximity public facilities, including the interventions on the local school and the '*maison de projet*'), - central state agency ANRU (all types of interventions, excluding a part proximity public facilities and buildings devoted to economic activities) - EPCI (integrated urban development, replenishment of the social housing supply, social housing retrofitting) - region Centre Val-de-Loire (integrated urban development, replenishment of the social housing supply, social housing retrofitting, buildings devoted to economic activities) - social housing provider, shift from 100% municipally-owned to limited profit (demolition, replenishment of the social housing supply, social housing retrofitting) - Europe (social housing retrofitting) - CDC (state-owned) - Action Logement
Actor constellation	see "funding", plus local tenant associations, neighbourhood associations, architecture firms, engineering offices, etc.

[60] https://data.anru.fr/NPNRU/C0149/045_NPNRU_Orleans-Metropole_149_Protocole_13-09-2017.pdf

Aims and objectives	- social and functional mix, diversification of housing (types and tenure), quality and variety of public spaces - transformation of the urban landscape and development of the green network, nature in the city, and improvement of energy efficiency - strengthening economic activities related to entrepreneurship, provision of facilities adapted to the neighbourhood's associative dynamics, and strengthening local democracy
Specific physical measures	- habitat and housing: demolition of 410 housing units, retrofitting of 504 housing units, *residentialisation* of 485 housing units, construction of 250 housing units - public service and facilities: cultural facilities including media library, multipurpose hall and associative spaces. Redesign of school access and forecourt (Jean Piaget school). - proximity spaces: creation of green areas and micro-sites to reinforce the nature in the city, and active mobility networks to improve connectivity within the neighbourhood and with the city center. - economic attractiveness: construction of innovative economic activity buildings (3,000 m² "César Franck" hub and 700 m² OPH building) Physical measures are organized across five main sectors: Borde aux Mignons - Wichita; Clos Boudard-Argonaute; Clos Gauthier-Marie Stuart; Secteur Nord-Nécotin-Jean Rostand; Secteur Pot d'argent - Ambert - Saint-Marc (see Figure 3)
Accompanying housing policy/ regulatory measures	ZAC (*Zone d'Aménagement Concerté),* see Appendix 1 - Glossary Reduced VAT

3.2.3 Methods

This case study working paper draws on qualitative research combining semi-structured interviews as the primary source with desk research and site observation. The analysis aims to examine local green initiatives and their implications for housing inequalities.

Interviews were conducted between September 2025 and January 2026. In total, 11 interviews were carried out with 17 participants. Interviewees included representatives of municipal and metropolitan administrations, social housing providers, local tenant union representatives, planning agencies, and experts involved in the design and implementation of the project. All interviews were conducted in French.

The list of anonymised interviewees is provided in Appendix 2. The sampling of interviewees relied on a combination of preliminary desk research and snowball sampling. Participants were informed of the purpose of the study and were provided with a neighbourhood map to associate their discourse with specific locations. All interviews were recorded with participants' consent and transcribed in their original language using the open-source, AI-based software Noscribe. Respondents were assured of anonymity and, after the removal of personal identifiers, transcripts were translated using DeepL Pro.

Document collection combined desk analysis conducted prior to the interviews with complementary materials collected or indicated by interviewees. The documentary analysis included planning documents, policy reports, municipal deliberations, technical studies,

academic literature, and grey literature. These materials were used to familiarise with the case study, identify relevant interviewees, and complement and contextualise the empirical findings.

Several limitations should be acknowledged. While the interview sample covers a broad range of institutional and civic actors, the number of respondents is limited, and preliminary findings require corroboration through further interview as well as document analysis and quantitative data to allow for triangulation. Moreover, findings reflect ongoing processes rather than stabilised outcomes, given the evolving nature of the policies and projects under analysis.

3.2.4 Civic and institutional perceptions of green initiatives in Argonne, Orléans

3.2.4.1 Precedents and implementation

Interviewees and document analysis consistently situate the transformation of the Argonne within a long trajectory of urban regeneration policies. This trajectory appears to be closely intertwined with the evolution of regulatory frameworks, local political dynamics, financial and operational constraints.

The neighbourhood has been marked by continuous intervention within the framework of the *Politique de la Ville* since the 1990s. The *Plan National de Rénovation Urbaine* (PNRU), further supported the transformation of the neighbourhood and represented a major opportunity for "*the implementation of urgent operations to prevent rapid degradation and to initiate a transformation*" (Orléans Métropole, 2017)[61]. The program included the extension of the tramway line, the *résidentialisation* of more than 1,000 dwellings, and the demolition of around 200 housing units, while housing retrofitting operations played a more limited role. In parallel, the neighbourhood saw the requalification of the commercial area, the creation of public spaces, and the construction of new facilities, including the Argonaute sports center.

Later, a subsequent phase of transformation was launched, since "*several sectors still face significant difficulties, notably linked to housing degradation, leading the Metropolitan authority and the social housing provider to consider further interventions, including the demolition of obsolete or unsuitable buildings as part of the requalification process*" (ANRU, 2019). In 2014, the *Plan National de Renouvellement Urbain* (NPNRU) was initiated, and Argonne was selected as area of national interest within this framework. This led to a study phase where thematic studies were developed together with consultations of local actors aimed at designing a prefiguration protocol. The agreement was then signed in 2019, establishing a partnership

[61] The prefiguration protocol is available at: https://data.anru.fr/NPNRU/C0149/045_NPNRU_Orleans-Metropole_149_Protocole_13-09-2017.pdf

involving national agencies, the municipality and the Métropole d'Orléans, the Centre Val-de-Loire region, as well as social housing providers.

> There has been a political support to ensure that certain neighbourhoods as a priority in the urban policy are selected in the list of neighbourhoods in the NPNRU, which has been the case for three of our neighbourhoods, two of national interest, (...) which are Argonne and La Source, and of regional interest for chairs. (....) So, then, (...) within the framework established by the ANRU, there was a prefiguration protocol where there were a certain number of funded thematic and urban studies, to be carried out, to arrive at guide plans, and all this, in an ANRU agreement (interview 3).

The final agreement allocated €37,82 millions of subsidies from ANRU (including €29,16 millions in grants) to the area (ANRU, 2019). Alongside objectives of 'social mix' and the provision of affordable housing, ambitions related to nature in the city and energy efficiency strategy also emerged as transversal goals.

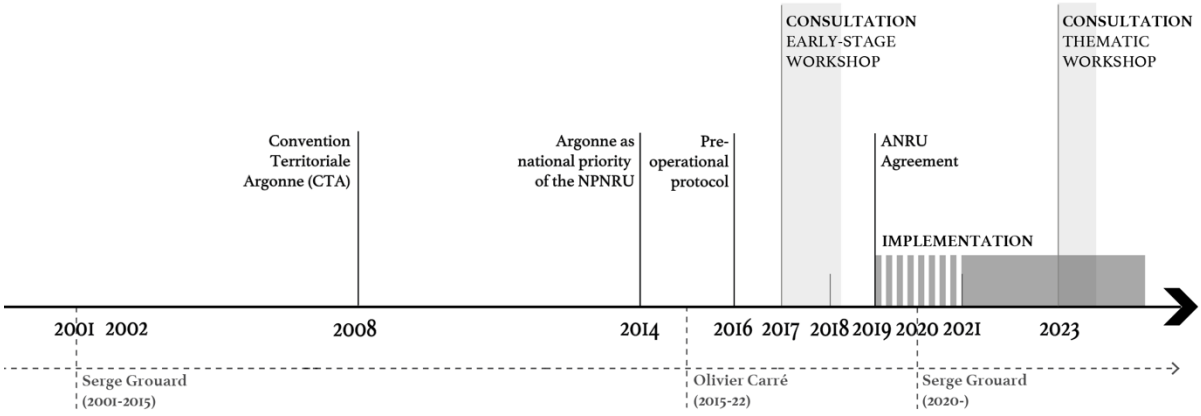

Figure 2: timeline showing key dates for the ANRU agreement, consultation and implementation phases, and political mandates. Source: author's elaboration.

As reported by the municipality and métropole (interviews 3) and the *aménageur* (interview 9), the implementation of the overall urban regeneration project coincided not only with the COVID-19 pandemic but also with the 2020 change in political mandate, which involved a partial renewal of the team leading both the municipality and the inter-municipal authority (see figure 2). These changes, together with local budgetary constraints and more limited investment capacities at the national level, resulted in a period of adjustment delaying the operational translation of some of the orientations initially envisaged. Implementation is still ongoing and include specific physical measures (see Figure 3) across different sectors of interventions.

Figure 3: neighbourhood map showing measures and sectors of intervention. Source: Orléans Métropole, 2023[62]

3.2.4.2 Governance and participation (procedural)

Governance

The interviews and document analysis reveal **a complex governance structure with public coordination throughout the process.** The project coordination is initially led by the Ville d'Orléans and later shared the Métropole through a dedicated office within the **urban planning department** (*Direction de la planification, de l'aménagement urbain et de l'habitat*) which is responsible for coordinating and implementing all urban regeneration projects located in the Métropole. As noted by the municipality and the métropole, **a shared management structure between the métropole and the municipality** has facilitated coordination and policy integration for a transversal urban regeneration project spanning multiple areas, including housing, services, green spaces, and mobility.

[62] Extract from public meeting slideshow available at the following link: https://www.orleans-metropole.fr/fileadmin/orleans-metropole/MEDIA/document/urbanisme/regeneration-urbaine-argonne/Reunion_publique_ANRU_2_Argonne-21.06.2023.pdf. The map is available at: https://participons.orleans-metropole.fr/media/default/0001/01/b3c8fbc0b48e6f9bd797280e2a13baa4b233d2b9.pdf

> Because the fact of being in the same department, mutualized, to carry out a project that, obviously, transversal, which intervenes on different public policies, it still allowed us to work more on it. And then, finally, in the maturation work, which led us to the multi-year agreement, the ANRU agreement (interview 3).

To implement the operations, the municipality established a ***Zone d'Aménagement Concerté* (ZAC)**, reflecting both the complexity and scale of the development (Délibération de la Métropole, 2016)[63]. The adoption of a ZAC entails preliminary and ongoing consultation with residents, local association and involved stakeholders (Article 103-2, Code de l'Urbanisme). As a standard practice for this kind of projects, the municipality grants a project management concession through a competitive process covering the overall development, including public spaces, urban infrastructure, and the coordination of all consultations with operators[64]. The concessionaire (*aménageur*) also revels to play a key role in managing land acquisition for new constructions, handling the purchase of land from social landlords and/or from the municipality and initiating consultations with interested operators. Unlike similar projects, and as reported by the *aménageur*, changes in political mandate and other factors such as the spread of the COVID-19 pandemics, meant that the concessionaire began its mandate in 2021, after some operations, such as demolitions, had already started.

> We didn't want to slow down a dynamic that was well underway. So, as a result, it was also a lot of catching up for us, setting up systems and rules, perceptions with the Métropole and the city too, because for the time being, it's the Métropole that is our grantor, but it's also a project that is largely supported by the city (interview 9).

As emerged transversally from interviews, the social housing provider remains the main reference for **managing housing-related operations**, including housing retrofitting, in parallel with the city-led coordination. **Two major shifts** affected the historical social housing provider: 1) it transitioned under the Métropole's governance in 2017, and 2) it evolved from the city's OPH (*Office Public de l'Habitat*) to the SEM (*Société d'économie mixte*), introducing private capital into its ownership. Although the municipality and Métropole retain a majority

[63] Available at: https://www.orleans-metropole.fr/fileadmin/orleans-metropole/MEDIA/document/urbanisme/regeneration-urbaine-argonne/delib_CM_2016.12.12_lancement_de_la_concertation_prealable_a_la_creation_d_une_ZAC_sur_le_site_de_l_Argonne.pdf

[64] a concession d'aménagement is a contract through which a municipality entrusts an urban development operation to a third party (the *aménageur*). The concessionaire may be public (e.g. SEM, SPL) or private. In the case of Argonne, the *aménageur* is a *Société d'économie mixte* (see Appendix 1).

shareholding, private investors, including CDC Habitat and Crédit Agricole, hold at least 15% of the shares. This shift introduces economic considerations alongside political governance.

> when you become a SEM, it means that there are 15%, minimum, 15% of private shareholders who come in. (..) So, we have within the, but you have it there, within the board of directors, you have CDC Habitat, and then Crédit Agricole (..) which is on the shareholding. There is still a good part (public) left. Yes, there are 84% left (interview 14).

Participation

Interviewees highlight a plurality of participatory tools mobilised throughout the transformation process, combining consultation, engagement and co-design with residents and other local stakeholders. This participatory architecture encompasses: 1) **instruments specifically designed for the urban regeneration proje**ct under investigation (notably the *Maison du Projet*) and, and 2) regular participatory tools, including the *Mairie de proximité* within the ***Gestion Urbaine et Sociale de Proximité*** **(GUSP)**[65].

Resident involvement took place early in the process between 2017 and 2018, with a focus on defining a general programmatic framework for the neighbourhood and strategic orientations for each sector[66]. The workshop reports reveal the diversity of issues addressed, such as the redesign of public spaces, the development of green areas, and the programming of new services and facilities. Main issues emerge from the workshop reports[67]. First, participants express **divergent perceptions of demolition** as a way to promote social mix and reduce the enclave character of the neighbourhood, alongside concerns about the social implications associated with relocating residents. Second, **a feeling of spatial overcrowding** highlights the demand for green spaces with particular attention to plots freed by demolitions, which serve as breathing spaces at the heart of the neighbourhood and key sites for social interaction. Third, the discussions reveal a lack of consensus and raise questions about potential *résidentialisation* processes (workshop reports 2017, available as annexes to the ANRU agreement) (Chédiac, 2009).

A second phase resident's involvement follows the implementation of the project, focusing on specific intervention sectors and thematic issues, particularly public spaces and green areas. Participatory activities include urban walks, public meetings, and thematic workshops of possible intervention scenarios for newly created neighbourhoods' parks and gardens.

[65] a dedicated office within the citizenship and proximity department (*Direction de la citoyenneté et de la proximité*)
[66] Main activities included both meetings and discussion sessions, as well as public gatherings for feedback
[67] Available as annexes to the ANRU agreement

Recognition justice issues appear to emerge in the second phase resident's involvement a part oft he urban regeneration project[68]. As emerged from municipality and the metropole interviewees and from the public sector communication and participatory consultation agency (interviewee 2), main issues stand out: 1) **participation appears uneven**, with stronger involvement of children and young people and limited engagement of adults; 2) consultation tends to **focus on interventions in public spaces and green areas** over issues related to demolitions and housing retrofitting.

> [...] With the inhabitants we had really said to each other the green spaces and especially the gardens... It's really a good subject to have consultation to find out what the inhabitants want in these spaces because there's no point in drawing things ourselves if they don't correspond to the population that lives there and what already exists around it and things (interview 9)

Throughout the process, the ***Maison du Projet*** emerged as the central instrument for engaging residents and other local actors, similarly to other urban regeneration initiatives (USH, 2018 [69]). In the case of Argonne, it operates through regular drop-in sessions in a multi-site and itinerant format, both at the neighbourhood market and at the *Mairie de proximité*, serving as point for information, dialogue, and mediation. According to the municipality and the métropole, the main challenges in the case in Argonne include the risk of engaging the same participants, the presence of non-target' audiences (e.g., people from outside the neighbourhood), and difficulties in reaching young people and young adults.

> And then, with our observations, we noticed that in the end, either we were reaching the same people, or people when we saw that we were there but who didn't necessarily want to stop or sometimes, they were also people from outside the city and the neighbourhood. […] So, in the end, we didn't have a big... // It wasn't necessarily // the audience we wanted to reach (interview 16)

3.2.4.3 (In)equity (distributional)

Collected data highlight several issues of distributional (in) equity, particularly concerning the costs of social housing retrofitting, access to new green areas and 'public' spaces, and the spatial distribution of the social housing offer. Outcomes vary across sectors and types of

[68] See Donzelot and Epstein (2006) for insights about the participatory processes in urban regeneration

[69] https://www.union-habitat.org/sites/default/files/dossiers-cr/documents/2018-06/synthese_finale_maisons_du_projet_juin_2018.pdf

intervention and appear to be shaped by a combination of spatial, political, and institutional mechanisms influencing who benefits and who bears the costs of interventions.

Social housing retrofitting

Social housing retrofitting operations vary across sectors in terms of technical solutions, costs, and implementation timelines. From a distributional perspective, key issues refer to **the allocation of the costs, the evolution of housing fees and rents, as well as the support of residents** during the retrofitting process. In terms of overall costs, **housing** retrofitting is largely financed by the social housing provider[70], with a contribution from the ANRU and additional support from the metropolitan authority. Contributions from regional and European levels remain marginal.

> When we negotiated a new agreement with the ANRU, the Métropole wanted to allocate funds into improving the energy regeneration of certain programmes. And as part of its local housing programme (PLH), it has set aside funds, indeed. And so, there were 2 million euros for the Argonne (interview 4).

Several interviews pointed to the case of the 58 dwellings of small houses built in the 1920s, classified as heritage buildings and located in the *Ribot-Loucheur* sector, as particularly challenging. Prior to housing retrofitting, **heating charges were perceived by residents as especially high relative to rent** (according to interview 5 accounting for more than half of the monthly rent). Retrofitting operations here aimed to upgrade the buildings from energy G to energy class C, but face constraints. First, the use of external thermal insulation was constrained by heritage protection requirements linked to the site's remarkable character. Second, efforts were made to maintain residents on site through temporary housing solutions, given a population characterised by very low turnover and ageing profile (see section 3.4 on political mobilisation). As noted by the local tenant union:

> the project to renovate an entire sector that is old, which are old houses, small houses, but which date back to the 20s. So, in terms of, in terms of DPE, it's the rottenest. (..) And here, the lady I met is a little 80-year-old granny because most of the tenants in that area are elderly. And they pay 250 euros in heating and electricity charges per month. (..) That's more than half of the rent (interview 5)

[70] As mentioned above, the main social housing provider in the neighbourhood is currently structured as a *Société d'économie mixte* (SEM). See Appendix 1 - Glossary

Among the solutions proposed in the *Ribot-Loucheur* sector by the social housing provider, **internal insulation, which reduces usable floor space, was compensated by modest extensions of the apartments**. The social housing provider highlighted the very high costs of retrofitting for a relatively small number of units, due both to the insulation works and to the provision of temporary housing solutions for residents. For this specific sector, approximately 80% of these **costs are borne by the social housing providers** (including around 17% from their own funds, 9% through *Action Logement* loans, and the remainder via borrowing[71]). As reported by the social housing provider (Interview 15) and local tenant association (interview 5).

> But here, I have a project at 10 million euros, because it's 10 million euros for 58 houses, so it's about 160,000 euros, 170,000 euros per house, that I don't put into building new housing, because there, I don't create offers, we agree. I had a family in a home, and I put the same family back in the same home (interview 15).

> It's very, very large sums of money because regeneration projects, even major regeneration projects, in general, it's fine, it goes up to 30,000, 40,000, when it goes up to 30,000 or 40,000 euros per dwelling, it's already a big, big regeneration. Here, we are on more than 100,000 euros per house. It's almost, it's overhaul, in fact (interview 5).

Nature-Based Solutions

As emerged from interviews, in the Argonne neighbourhood the urban regeneration project places emphasis on the promotion of *nature in the city*, with new parks and gardens planned across different sectors. Participatory activities with residents have been undertaken to define intervention scenarios; however, as **implementation is still ongoing**, it remains difficult to assess current patterns of distributional access and use across groups and locations.

In parallel, as underlined by one of the social housing provider involved in the project (interviewee 11), the greening objectives also inform the design of **new housing *blocks en contropartie foncière***[72] intended for social access to home ownership (see also section 3.5.3 Diversification of housing offer, the eco-district program in the Bords aux Mignons-Wichita sector). In this case, however, green areas, characterized by diverse vegetation and shading

[71] According to the provisional financing plan, additional data collected following interview 15
[72] In the Within the framework of the ANRU, land contributions were transferred to a subsidiary of the Action Logement Group, in exchange for building new housing designed to enable social access to home ownership

elements, are designed as **private or semi-private amenities for future homeowners**. This raises questions about the environmental and social benefits being potentially concentrated among a limited group.

2015 2020 2025

Figure 4: satellite images showing the Bords aux Mignons-Wichita sector over time (2015, 2020, 2025). Source: Google Earth.

Replenishment of the social housing supply (*reconstitution de l'offre*)

In terms of distributional aspects of the social housing offer, several issues emerged, showing that the criteria guiding the geographical distribution of reconstituted units are closely linked to broader housing policy objectives, including the need to **rebalance social housing provision across municipalities.**

The replenishment of the social housing supply is primarily organised at the metropolitan scale, mainly outside the neighbourhoods targeted by urban regeneration projects, in line with the constraints embedded in the ANRU framework. This process is managed through **a ten-year programming framework (2015-2025)** and a mutualised approach covering the three neighbourhoods included in the ANRU convention signed in 2019[73]. Overall, 844 social housing units were demolished in three sites[74], while 738 new social housing units were reconstituted across 17 different municipalities within the metropolitan area. Notably, among

[73] Including two neighbourhoods of national interest: La Source and Argonne in Orléans; and of one of regional interest: Les Chaises in Saint-Jean-de-la-Ruelle.

[74] For the Argonne neighborhood, a total of 410 housing units were demolished across different sectors. The vacated lots were redeveloped in three ways: a small portion for on-site reconstruction of social housing (around 50 units); the provision of approximately 200 new, diversified housing units; and, in part, the creation of new green spaces (e.g., Clos Boudard).

these municipalities, six were subject to catch-up obligations under the SRU law, while only slightly more than 20% of the reconstituted units were built within the city of Orléans itself (complementary data after Interview 13). The municipality and the métropole reported that this phase **required significant negotiation efforts with municipalities, reflecting political and institutional** complexity of redistributing social housing at the metropolitan level:

> But it was an obligation, we had it in mind, and it was not easy to negotiate it with certain municipalities, but the ANRU had been very clear about this objective. It was to reconstitute the supply outside the city, (outside of) cities that today host the most social housing (Interview 7).

As previously mentioned, on-site replenishment of the social housing supply is possible only through specific derogation granted at the national level. This is the case for the intergenerational social housing scheme developed in the Borde aux Mignons sector by the main social housing provider. The project includes 21 dwellings for seniors and 20 units for first-time social renters[75]. However, the *aménageur* points to trade-offs **between the initial objectives of such operations and their financial viability, particularly with regard to the provision and maintenance of shared spaces**:

> We were all facing difficulties where financial constraints weighed on our operations, including construction […]. An anecdote related to this is that the Wichita East operation was initially planned as 40 intergenerational housing units with a shared activity room, specifically intended to bring different generations together. Today, it has 41 units, and the common room has been removed, because a bit more revenue was needed (Interview 9).

3.2.4.4 Political mobilization

Political mobilization around the overall project has been moderate and issue-specific, focusing primarily on housing retrofitting, resident relocation, and rent and charges adjustments, channelled through tenant associations. On the one hand, these associations are part of an **historic national network** of local tenants, originally established to defend tenants' rights and operating at multiple levels (through departmental delegations and neighbourhood associations). On the other hand, they are **institutionally recognized** and actively engaged to represent tenants on the boards of the main social housing organizations in the area and at

[75] https://www.orleans.fr/actualites/detail/une-residence-intergenerationnelle-pensee-comme-un-petit-village

the departmental level (participating in cases of appeal, for example, representing tenants' interests). As reported by the local tenant union:

> Therefore, the tenants' association, is present on the boards of directors of the main landlords. So, every four years, a bit like the political election system, all tenants of the social rental stock are called upon to vote for their representatives on the boards of directors. Every four years. The last election was held in December 2022. The next one will take place in November-December 2026. So now, it's going to happen quickly. […] And so, the fact that we are elected to these boards of directors gives us rights (interview 5).

However, the l**ocal tenants' association covering the northern area of Orléans Métropole** (including the Argonne neighbourhood), **is relatively recent,** being established in 2023 in response to strong tenant demands[76]. Its current operations face several challenges. Among these, the association operates from temporary offices at the *Argonaute* site while awaiting a permanent location, which limits its ability to engage with tenants. Interviewee also highlighted **difficulties in mobilising tenants for elections**, as reflected in low participation rates in tenant representative votes. Additionally, although tenant representatives sit on the boards of the main housing providers of the Métropole, they remain a minority[77]:

> So well, when you are elected, you have a vote on the board of directors, which means that you don't have a majority. So, all the rent increases, all these things, (.....) it goes without our opinion. We give our opinion, in general we vote against, but despite everything, the board of directors decides. But we are informed, we participate in consultation bodies. Whenever there are renewal or regeneration projects, they consult with the tenants' associations. And we also have funding through these elections that allows us, that allows the associations to live and support projects (interview 5).

In the housing retrofitting of the *Ribot-Loucheur* sector, the local tenant association has played a crucial role in several respects: 1) **ensuring that residents can remain on-site after retrofitting**, this was done 2) supporting tenants in transitioning to temporary housing solutions, 3) assessing the potential impacts of retrofitting on tenants (including APL allowances, rent, and service charges), and 4) ensuring that service charges and rents remain

[76] As reported at: https://www.larep.fr/orleans-45100/actualites/une-amicale-au-nord-en-plus-de-la-source_14335707/

[77] in the case of the main social housing provider of the Métropole, the board of directors includes 11 members appointed by the Orléans Council, 2 members elected by the tenants, 2 members from CDC Habitat, and 1 member from Crédit Agricole

at the same level by **securing formal guarantees from social housing providers**.As reported by a member of the local tenant union:

> Here, we have this very specific example of this small cite (*Ribot-Loucheur* sector). We receive people who are elderly, who are always with the neighbourhood. They panicked! So, the landlord plays the game, we have a good dialogue with them. Each time, we have new questions. It's going to be APL (*Aide personalisée au logement*), it's going to be electricity, it's going to be fiber. [Did I pay more? Did I pay less? So, for us, the fight we are waging is 0 cents more for the tenant (interview 13).

3.2.4.5 Socio-ecological impacts

Social housing retrofitting

Regarding housing retrofitting, the socio-ecological impacts vary depending on the sector and the type of operations involved, such as internal or external insulation, replacement of heating systems, **residents' relocation**. In the Argonne neighbourhood, most housing retrofitting operations were implemented without requiring the relocation of residents. One sector, however, proved particularly sensitive, as it involved internal insulation and the temporary on-site relocation of a predominantly elderly population (see below).

Referring to the *Ribot-Loucheur* sector, according to the local tenant union, rent increases of around **1–3% correspond to an increase in living space of approximately 20 square meters, which is expected to be largely offset by energy savings** (Interview 5). However, a key issue remains the time lag between rent increases and the actual realization of energy savings for tenants. Since charges are paid with a delay of roughly two years, tenants may face short-term financial burdens before the energy savings fully compensate for higher rents.

> People tell you that your charges will go down. And until it's done, they don't know it. (..) There are no guarantees. There is no simulation that can be done. That is to say, it's specialized stuff, after all. And that you would have to ask people, well, that's fine... Yes, the charges, in any case, they are paid with a 2-year delay. So now, people, they will pay the charges for the year 2023 in 2025. A year, or even 2 years later (interview 13).

From the social landlord's perspective, housing retrofitting costs are perceived as very high, particularly in relation to the number of dwellings upgraded and the proportion of subsidies received. **Trade-offs also arise between retrofitting the existing housing stock and new construction priorities.** These tensions are mentioned to be further intensified by national obligations, such as the mandatory upgrades of E, F, and G-rated rental housing by 2034, which constrain financial resources and **limit the capacity to invest in new social housing**. As reported by the social housing provider:

> the thing in France today is that, in any case, there is a law. There is a law that imposes. Which requires that all housing E, F, G, with a horizon... So, the Gs were on January 1,

> 2025, the Fs in 2028, and then 2034, it seems to me, for the E. So there, roughly speaking, me, on energy retrofitting, we have no choice [...] Well, this taxation, it monopolizes finances. And from the moment it monopolizes finances, these are finances that you do not put on the production of new offers, new housing. So, it raises questions. (..) We keep saying that we are in a housing crisis, if you will (Interview 15).

Nature-Based Solutions

As previously noted, the implementation of green areas and parks is still ongoing, which currently limits the possibility to assess their socio-ecological impacts. Nevertheless, the interviews point to two key emerging issues.

First, **trade-offs arise between (re)vegetalisation strategies of urban regeneration projects and national densification and zero land take objectives under the *Zéro Artificialisation Nette* (ZAN) law** (Rotondo et al, 2025). As emphasized by the social housing provider, the transformation of the Argonne neighbourhood follows a logic of localized de-densification. This approach takes shape through the introduction of new housing typologies, where collective housing is partially replaced by smaller, low-rise dwellings, and through the conversion of demolished buildings into new public and green spaces.

> We have solved a local social problem, but not a global social problem, because we have not created new offers. All right? We talk about the planet with the *Zéro Artificialisation Nette*, but in fact, we have de-densified, whereas with the ZAN, we want to densify. (...) It's a lack of coherence (Interview 15),

Second, local tenant associations express concerns about the temporal **mismatch between the pace of housing retrofitting and the implementation of nearby green** and public spaces, as observed in the Clos Boudard sector. This misalignment, linked to different implementation timelines and the involvement of distinct actors, is perceived by interview as having a direct impact on residents' daily lives, particularly during construction phases.

> But look at Clos Baudard as a specific example. The pitch... remained a wasteland for 6 to 9 months. They have retrofitted the buidlings and people stayed in... and the green spaces weren't completed. We had to intervene so that the streets were made [...] We wrote to the town hall; we wrote to the landlord (Interview 13).

2015 2020 2025

Figure 5: satellite images showing the Clos Boudard-Argonaute sector over time (2015, 2020, 2025). Source: Google Earth.

Diversification of housing offer

Interviewees report some difficulty in assessing the effects of the urban regeneration project on neighbourhood repopulation, as the transformation is still ongoing and new construction operations are only partially occupied or under construction.

> So today, the renewal of the neighbourhood through the diversification of housing, it is happening little by little and it is not the first thing that happens in the neighbourhood because we have to reinforce the transformation of the image of the neighbourhood which can be an obstacle to the installation of new people, it is necessary that public space operations also contribute to all this (...) (interview 3).

Nonetheless, based on the collected data, some issues emerge, with particular attention to the *La Borde aux Mignons* sector, where the demolition program involves 230 housing units out of 410 in the overall Argonne. Approximately 186 new units are planned in this sector, including: two plots for social homeownership (named 'eco-district'[78] and Wichita Ouest[79],) and one plot

[78] named *Îlot Cité Jardin*, this project concerns a 4,800 square meter plot previously owned partly by the main social housing provider of the Métropole and partly by the municipality. The plot was transferred to Action Logement (with a promise of sale recorded in 2020) to develop 60 'affordable' homeownership units (accession sociale à la propriété).
[79] currently in the concession phase, 85 'affordable' homeownership units (*accession sociale à la propriété*) are planned.

for on-site replenishment of the social housing supply (see section *3.3.3* Replenishment of the social housing supply (*reconstitution de l'offre*)[80].

In this regard, questions have been raised r**egarding the overall affordability of social homeownership units**. More specifically, the local tenant association highlighted that **the selling prices may not match the financial capacities of residents** already living on site. As reported by a member of the local tenant union:

> And then the *mixite social*, I can see in the Argonne, ok, they have made pavilions. 200,000 bales per pavilion, 250,000 euros per pavilion. There is not a single inhabitant of a social housing project who can afford this house. So, that's all there, that's all that's wrong. We renovate. Except that instead, they are not offered an alternative new building in the neighbourhood (Interview 13).

As a matter of fact, with specific reference to the eco-district program it emerges that selling prices are relatively high compared to the surrounding market[81] and, that a portion of the units **had to be temporarily converted into renting units LLI** (*logement locatif intermédiaire*)[82] due to difficulties in selling them. According to one of the social housing providers involved in the project (interviews 11 and 12), the difficulty can be explained by several factors, including the real estate crisis, increased loan interest rates and eligibility restrictions for potential buyers. Furthermore, regarding the overall population homeownership buyers, interviews reveal that only **a small percentage of units (7%) were purchased by residents** from the Argonne sector.

> knowing that we managed to sell all our homes, except 16 homes, which we had to transform on the home straight into LLI. […] When we saw that in April 2024, given the pace of sales we had on the program, well we said to ourselves, with this pace of sales, we will inevitably have stock. And to avoid this stock, we made this choice (interview 11 and 12).

[80] for insights into for a critical overview of urban regeneration policies and the social and spatial implications of urban regeneration processes, see Epstein (2013) and Gilbert (2014).

[81] According to Interviews 11 and 12, sale prices averaged around €3,000 per square meter, benefiting from the reduced VAT rate. Slightly further from the city center, market prices were approximately €3,400–€3,500 per square meter.

[82] After a derogation request to ANRU in 2024, the operator obtained permission to resume marketing and sale of these units starting from the 11th year

Finally, regarding Wichicta Ouest, the developer raised issues related to market dynamics and construction costs in recent years, which affected acquisition processes during negotiations and discouraged some operators.

> At the moment, it's a real estate market that isn't working. In fact, this is also what you absolutely have to integrate into your… It's a variant, it's a variable, well, it's not even a variable. But today, I think that comparing something that comes out in urban renewal operations, we can't deny the problem of the real estate market today and how it influences and how it influences the capacity of... (...) the buyers who have loans (Interview 9).

Tensions and power dynamics between stakeholders/actors

See previous sections, in particular:

- the section 3.4 on political mobilization, for power asymmetries and dynamics in the **relationship between tenants and social housing providers**, with a specific focus on the mediating role of the local tenants association in general and specifically in housing retrofitting operations.
- the section 3.2 on governance and participation, which examines the **relations between municipalities and operators** (such as *Action Logement*) and the role of the *aménageur* in and managing trade-offs across competing interests.

See previous sections, in particular:

- See section 3.2.1 on governance about the **shared management between the Ville d'Orléans and Métropole** together with national agencies, and social housing providers, integrating transversal interventions across housing, mobility, green spaces, and services.
- See section 3.2.1 on governance about **the formal agreement in the frame of the national NPNRU** by ANRU, enabling the elaboration of thematic studies, prefiguration protocols, and coordinated implementation.
- See section 3.2.2 on participation about **the plurality of participatory tools**: workshops, urban walks and public meetings supported by multi-site and itinerant engagement platform for information, dialogue, and co-design with residents.

3.2.4.6 Tourisms and market pressure

See the section 3.5 on socio-ecological impacts, and the sub-section on the diversification of the housing offer, which examines how **market dynamics**, combined with regulatory, financial, and social factors, affect **the types of housing provided, selling prices, and overall affordability.**

3.2.5 Critical analysis: Orléans

The working paper presents and discusses the case of Argonne, Orléans, an urban regeneration project that includes housing retrofitting of social housing, the végétalisation of

spaces as well as social mix and diversification of housing offer. The Argonne neighbourhood has a long-standing history, anchoring the origin and development of the area and embedded in urban regeneration frameworks since the early 2000s.

The urban regeneration project is still under implementation. The COVID-19 pandemic, the 2020 change in political mandate, and local budgetary constraints - along more limited investment capacities at the national level - resulted in a period of adjustment, delaying the operational translation. Below some trends and hypotheses are discussed in relation to the implications of green interventions for housing inequalities.

3.2.5.1 Housing retrofitting

Outcomes of social housing retrofitting operations vary depending on the sector and type of intervention. Key issues include:

- **Risk exposure for vulnerable households.** Particular attention is given to the impacts of temporary rehousing and prolonged works on vulnerable residents, especially the elderly and those with low mobility.
- Tenant associations play a crucial role in advocacy and decision-making, though some power imbalances exist. They assess the impacts of retrofitting works on tenants and help secure formal **guarantees from social housing providers** to maintain service charges and rents at stable levels.
- **Rent increases are limited**, as social housing rents remain regulated and subject to legal ceilings. The main (positive) effects for residents are reductions in energy-related charges. However, tenants face **a time lag before realizing energy savings**, as charges are typically billed with a delay of a few years.
- **Trade-offs arise between retrofitting existing housing stock and prioritizing new construction**. National obligations, such as the mandatory upgrades of E, F, and G-rated rental housing, further constrain resources and limit the capacity to invest in new social housing.

3.2.5.2 Nature-Based Solutions

The implementation of green areas and parks is ongoing, limiting current assessment of their impact on housing inequalities. Nevertheless, key issues emerge:

- In urban regeneration projects, **NBS (Nature-Based Solutions)** are located in public spaces and on newly reconstructed plots. These latter are often **privatized of semiprivate**, raising questions about potential concentration of environmental and social benefits among a limited group.
- **Trade-offs arise between (re) vegetation strategies and national objectives for densification and zero land take**. The Argonne neighbourhood transformation follows a localized de-densification approach: collective housing is partially replaced by smaller, low-rise dwellings, and demolished buildings are converted into public and green spaces.

- concerns emerge about **mismatches between the pace of housing retrofitting and the implementation of nearby green areas** within the same area and their impacts on residents' daily life

3.2.5.3 Diversification of the housing offer

The transformation is still ongoing and new construction operations are only partially occupied or under construction. Though emerging issues include:

- **Selling prices for social homeownership units may not match the financial capacities of existing residents**; so far, only a small percentage of units have been purchased by Argonne residents.
- **reorientation of affordable ownership toward intermediate rental segments**. Some units originally intended for social access to homeownership had to be temporarily converted into intermediate rental units (LLI) due to sales difficulties related to real estate crisis and increased loan interest rates.
- **Constraints on new "affordable" housing**. Overall market dynamics and construction costs might limit the provision of new affordable housing units.

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3.2.7 Appendix 1 – Glossary

Abbreviations

ANAH	*Agence nationale de l'habitat* (National agency for housing) – public body established in 1971
ANRU	*Agence nationale de la rénovation urbaine* (National agency for urban regeneration) – public body established in 2004, responsible for piloting the NPNRU framework
CDC	*Caisse des Dépôts et Consignations* (Deposit and Consignment Fund) – state-owned financial institution
CNL	*Confédération Nationale du Logement*
CTA	*Convention Territoriale Argonne*
DPE	Diagnostic de Performance Énergétique - energy performance audit providing energy label (A to G) and climate label – GHG emissions (A to G)
DSQ	Développement Social du Quartier
ESH	*Entreprises Sociales de l'Habitat*, private social housing providers
INSEE	Institut National de la Statistique et des Études Économiques, the national institute of statistics
LLI	*Logement locatif intermédiaire,* intermediate housing
PLH	*Programme Local de l'Habitat,* local housing program
PLAI	*Prêt Locatif Aidé d'Intégration*. there are different types of social housing schemes linked to different level of affordability. PLAI is the more 'social'
PNRU	*Programme national de rénovation urbaine* (National program for urban regeneration) –framework for the urban regeneration policy (2004-2021),
NPNRU	*Nouveau programme de rénovation urbaine* (National program for estate regeneration) – New framework for the urban regeneration policy (2014-2030),
OAHD	*Opération d'Amélioration de l'Habitat Dégradé*
OPAH	*Opération Programmée d'Amélioration de l'Habitat*
OPH	*Office Public de l'Habitat*, public social housing providers

QPV	*Quartier Prioritaire de la Politique de la Ville,* priority neighbourhood of urban policy
SEM	*Société d'Économie Mixte*, a company whose majority shareholders are public authorities, holding between 50% and 80% of the capital. The remaining capital is held by private actors.
SRU	*Solidarité et Renouvellement Urbain* (law), includuing the creation of social housing quotas for urban municipalities in 2000
ZAC	*Zone d'Aménagement Concerté*
ZAN	*Zéro Artificialisation Nette,* Net Zero land take (law)
SEM	*Société d'Économie Mixte*, a company whose majority shareholders are public authorities, holding between 50% and 80% of the capital. The remaining capital is held by private actors.
SRU	*Solidarité et Renouvellement Urbain* (law)

Terms and Concepts

Diversification of the housing offer: Referring to the provision of different housing types and tenures (e.g., rental, ownership, social housing) to meet the needs of different social groups. See USH, 2023.

Energy saving sharing: In France, since the MOLLE law (2009), social housing providers can implement what is known as a "third line of receipt" (*troisième ligne de quittance*), a tool which allows them to capture some of the monetary savings generated by the decrease of energy consumption resulting from retrofitting.

Reservation right: In exchange for funding of a given social housing building, different institutions (central State, local authorities, but also Action Logement) enjoy a right to select applicants that the social housing provider decide to lease (or not) the unit to. Since 2018, these rights have shift from a management based on stock to flux: the funding of a given operation will open rights at the scale of the provider's inventory.

Replenishment of the social housing supply (*reconstitution de l'offre*): The restoration of demolished social housing units, to maintain the available housing stock for resident

Tenant consultation: By the law, if a landlord plans to implement regeneration works that will impact the rent or operating expenses, it must organize a meeting with tenants to inform them, and consult with their representatives in its design of the

	operation, notably on the issues of foreseeable increase on the cost of living (art. 44 quarter, law n°86-1290 of 23 December 1986). A similar specific system existed for the former grants for refurbishment of social housing units known as PALULOS (circular n°93-60 of 6 August 1993)
Zone d'aménagement concerté (ZAC)	Public urban development operation aimed at carrying out, or commissioning, the servicing and preparation of building land, with a view to its subsequent sale or concession to public or private users (CEREMA, 2020). See also Garcia-Lamacrca et al.2021)

3.2.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	President	Public-sector communication and participatory consultation agency	14/10/2025	In-person
2	Senior consultant	Public-sector communication and participatory consultation agency	15/10/2025	Zoom
3	Project manager	City and Métropole of Orleans, urban planning and housing department-urban regeneration	22/10/2025	In-person
4	Project manager	City and Métropole of Orleans, urban planning and housing department -urban regeneration	22/10/2025	In-person
5	President	Local tenant union	22/10/2025	In-person
6	Member	Local tenant union	22/10/2025	In-person
7	Head of one sub-department	City and Métropole of Orleans, urban planning and housing department- living and housing	30/10/2025	Zoom
8	Head of one unit	City and Métropole of Orleans, urban planning and housing department - private housing	30/10/2025	Zoom
9	Project director	Semi-public company (SEM)	24/11/2025	Zoom
10	Architect	Architecture company	01/11/2012	In-person
11	Program manager	Social housing provider	05/12/2025	Zoom
12	Director and project manager	Social housing provider	05/12/2025	Zoom
13	Member	Local tenant union	11/12/2025	In-person
14	Program manager	Social housing provider	15/12/2025	Zoom
15	Director	Social housing provider	25/12/2025	In-person
16	Project officer	City and Métropole of Orleans, citizenship and proximity department	07/01/2026	Zoom
17	Project manager	City and Métropole of Orleans, citizenship and proximity department	07/01/2026	Zoom

18	Community engagement facilitator	City and metropole of Orleans, citizenship and proximity department	07/01/2026	Zoom

3.2.9 Appendix 3 – Tables

	Orléans municipality		Orléans Métropole	
	Absolute number	% of total stock	Absolute number	% of total stock
First residences	58 397	86,2%	135 245	89,9%
Secondary residences	2 557	3,8%	3 746	2,5%
Vacant	6 777	10%	11 397	7,6%
TOTAL	67 731	100%	150 388	100%

Table 4. Housing types at the municipal and metropolitan scale in 2022. INSEE, 2022

	Orléans municipality		Orléans Métropole	
	Absolute number	% of total stock	Absolute number	% of total stock
Owner occupation	21 348	36%	69 355	51,3%
Renters	35 840	61,4%	63 735	47,1%
Living rent-free	1 209	2,1%	2154	1,6%
TOTAL (first residences)	58 397	100%	135 245	100%

Table 5. Distribution of first residences by tenure in 2022. INSEE, 2022

3.2.10 Appendix 4 – Figures

Figure 6. Small houses built in the 1920s, classified as heritage buildings, located in the Ribot-Loucheur sector, and subject to housing retrofitting operations.

Source: Federica Rotondo, October 2025

Figure 7. Retrofitted social housing in the Boudard–Argonaute area, where construction is ongoing for the new Jardin Clos Boudard.

Source: Federica Rotondo, October 2025

Figure 8. The redevelopment of Jardin du Clos Notre-Dame and the new housing unit nearby, in the Pot d'Argent – Ambert – St-Marc sector

Source: Federica Rotondo, October 2025

3.3 CASE STUDY (SMALL): SENS

Authors: Federica Rotondo & Marco Cremaschi (Sciences Po)

3.3.1 City profile, housing inequality and policy context

The municipality of Sens belongs to the *Communauté d'Agglomération Grand Sénonais* (CAGS), an agglomeration comprising 27 municipalities and 59,911 inhabitants (INSEE, 2022). The population of Sens alone was 27,275 in 2022 (INSEE, 2022), accounting for approximately 45% of the agglomeration total population, making it the second-largest municipality in the department, after Auxerre. Despite a decline in population since 1990s, the city experiences a light recovery in recent years, gaining new residents (INSEE, 2022).

The city government is moderately right-wing, and the current mayor succeeded internally in 2022 the former mayor after its two terms (2014-2020). He is also the vice-president of the CAGS. The opposition groups in the city council include moderately left-wing, far-right, and ecologist representatives. The current mayor has made housing a key priority in the urban agenda. At the beginning of 2025, the mayor reaffirmed the intention to reduce the share of

social housing in the city (from 34% to below 30% by 2035) to foster greater 'social mixing'[8384]. These statements sparked reactions from the opposition, particularly in the contexts of upcoming municipal elections, who argued that such a policy could force the most vulnerable residents to move outside the city and encourage the proliferation of private landlords providing substandard housing.

As of 2022, Sens had 14,868 dwellings, comprising 13,044 main residences, 363 secondary residences, and 1,461 vacant homes. The percentage of secondary residences at the agglomeration level is nearly double that at the municipal level (see Table 4 of Appendix 3 – Tables and visuals). The vacancy rate at the municipal and intermunicipal level is part of a broader supra-local trend, with the proportion of vacant housing in the Yonne department reaching 12% in 2020 (INSEE) - thus exceeding the national average (8.2% in 2023 according to INSEE).The rental housing stock in the municipality of Sens represents more than 60% of the main residences, compared to 42% for the agglomeration (see Table 2 of Appendix 3 – Tables and visuals). According to the PLUi-h Diagnostic (2017), the municipality of Sens has the highest share of social housing in the agglomeration compared to other municipalities.

Housing policies in the municipality focus on several aspects, among which: reducing housing vacancy, especially in the city centre; tackling substandard housing (*habitat indigne*) through renovation and, in some cases, reconstruction; considering the aging population; supporting homeownership (*accession à la propriété*) (Magazine municipal, February 2024)[85]. In 2017, the CAGS launched the elaboration of an integrated the intermunicipal urban plan and housing plan (*Plan Local D'Urbanisme Intercommunal Habitat*, PLUi-H), later adopted in 2022, with the aim of strengthening the identity of municipalities and territories and enhancing attractiveness through a comprehensive approach (ANRU, 2019).

Refering to the city of Sens, housing policies include two major national programs the *Action Coeur de Ville* program and the *Nouveau Programme National de Renovation Urbaine* (NPNRU) as well as the large-scale energy retrofitting.

First, as part of the ***Action Cœur de Ville*** program, launched in 2018 and overseen by the central agency *Agence Nationale de la Cohésion des Territoires* (ANCT), the city of Sens is committed to revitalizing its historic centre[86]. Vacancy issues of city centres are present at the

[83]https://france3-regions.franceinfo.fr/bourgogne-franche-comte/yonne/cette-ville-veut-baisser-son-nombre-de-logements-sociaux-l-opposition-vent-debout-cela-va-favoriser-les-marchants-de-sommeil-3091750.html

[84] For further insights about urban regeneration, local housing plans, and the objective of mixité see Driant, 2015, Chapter 4

[85] https://www.ville-sens.fr/sens_medias/2024/12/a_sens_fevrier_2024.pdf

[86] The program includes support from the ANCT for policies aimed at improving accessibility in rural town centres, as well as reducing the carbon footprint of buildings through the rehabilitation and restructuring of the urban fabric to create an attractive residential supply (ANCT, 2018)

intermunicipal level, and specifically in Sens city centre, where: the vacancy rate accounts for 17%, i.e. double the national share (around 8%). Renters account for 52% of household compared to 27% owner-occupiers, and there is a considerable of low-income households (Municipal Magazine, February 2024). Against this backdrop, an agreement was signed between the municipality, the intermunicipal institution and the *Agence national de l'Habitat* ANAH in 2022 to implement an *Opération Programmée d'Amélioration de l'Habitat* (OPAH-RU) to restore housing offer in the city centre. Within this frame, since 2020 the city of Sens has also launched a façade renovation program targeting owners and co-owners, with a particular focus on the city centre[87]. Since 2023, *Action Cœur de Ville* has entered its second phase, which allows for the expansion of its scope to include new areas such as train station districts.

Second, the urban regeneration of *Politique de la Ville* neighbourhoods under the *Programme National de Rénovation Urbaine* PNRU first and the ***Nouveau Programme National de Rénovation Urbaine*** **NPNRU framework** then includes demolition and reconstruction, housing retrofitting and public space redesign (David, 2001). This latter specifically concerns the *Champs Plaisant* and *Arènes* neighbourhoods, which represent strategic components of local housing policies. According to the metropolitan local housing plan (2022):

*la ville de Sens poursuit la politique de renouvellement urbain avec le souci de sortir durablement les quartiers concernés des processus de stigmatisation qui les affectaient et de produire un changement d'image susceptible de redonner à ces territoires une nouvelle attractivité (*PLUi-H, 2022)	*the city of Sens is pursuing its urban regeneration policy with a view to overcoming the affected neighborhoods from the stigmatization processes that have affected them and changing their image to restore their attractiveness (author's translation using DeepL Pro)*

Thirdly, the intermunicipal climate plan *Plan Climat Air Énergie Territorial* (PCAET), approved in 2023, of the agglomeration aims to accelerate **the retrofitting of housing and office buildings**, as well as to support owners in carrying out works and acting on the replacement of energy-consuming heating systems. To this end, the **one-stop shop** *Maison de l'Habitat* du Grand Sénonais is created as a joint initiative between the city of Sens and the agglomeration du Grand Sénonais to **support to homeowners** (including *copropriétés*) to carry out adaptation or thermal improvement works, while facilitating access to financial aid and tax incentive (Municipal Magazine, February 2024). It also supports people who wish to apply to social housing[88].

[87] https://www.ville-sens.fr/infos/le-developpement-urbain-de-la-ville-de-sens/
[88] https://www.grand-senonais.fr/habiter-et-resider/maison-de-lhabitat/

3.3.2 Green Transition Interventions

Champs-Plaisants and Les Arènes are the focus of an urban regeneration project encompassing a range of measures, including housing retrofitting, nature-based solutions, and the reuse of and existing building. The project also involves partial demolition and housing reconstruction to promote "social mix". This combination of interventions makes these neighbourhoods an interesting case for examining the relationships and trade-offs between housing inequalities and ecological transition initiatives.

The neighbourhoods of *Champs-Plaisants and Les Arènes* hosted approximately 5,800 inhabitants in 2024[89] and are in the north-eastern part of the city. Around 90% is by collective housing, with individual pavilions located in the north-east and north-west areas. Champs-Plaisants and Arènes also have the highest concentration of social housing in the city, ranging from 68% to 89% of total housing (PLUi-H Diagnostic, 2017). The Arènes neighbourhood was built in the 1950s and comprises approximately 232 social housing units. The area suffers from marked isolation due to its urban layout. The Champs-Plaisants neighbourhood, built in the 1960s, belongs to a second generation of social housing ("grands ensembles") (ANRU, 2019). Historically, it was considered a desirable area to live, offering a high density of facilities and public services, and proximity to main roads where the most attractive houses were located.

At present, the two neighbourhoods are part of the national program NPNRU defined as a single intervention perimeter named Arènes–Champs-Plaisants. According to the 2020 ANRU agreement (ANRU, 2019), the project leaders (*maîtres d'ouvrage*) include the *CAGS* and the municipality of Sens, the social housing provider formerly knowns as Brennus Habitat and today called Habellis (ESH) and local association *Pénélope*[90]. With a total investment of over €117 million, of which around €50 million funded by ANRU, the project is structured around three pillars: the modernization of public facilities, the improvement of the living environment, and the retrofitting of social housing[91].

A key axis of the urban regeneration of Champs-Plaisants and Arenes focus on housing (more than 70%)[92], including planned demolition of 592 social housing units, the housing retrofitting

[89] https://sig.ville.gouv.fr/territoire/QN08906M

[90] https://www.yonne.gouv.fr/Actions-de-l-Etat/Accessibilite-Amenagement-du-territoire-et-Construction/Logement/Nouveau-Programme-National-de-Renouvellement-Urbain-2014-2024-dans-le-departement-de-l-Yonne/Les-conventions-pluriannuelles-de-renouvellement-urbain/La-convention-ANRU-du-quartier-Arenes-Champs-Plaisants-a-Sens

[91] https://www.ville-sens.fr/infos/renouvellement-urbain-des-champs-plaisants-et-des-arenes/

[92] https://www.yonne.gouv.fr/Actions-de-l-Etat/Accessibilite-Amenagement-du-territoire-et-Construction/Logement/Nouveau-Programme-National-de-Renouvellement-Urbain-2014-2024-dans-le-departement-de-l-Yonne/Les-conventions-pluriannuelles-de-renouvellement-urbain/La-convention-ANRU-du-quartier-Arenes-Champs-Plaisants-a-Sens

of 530 social housing units, the *residentialisation* of 850 social housing units and construction of 119 new housing units (84 market-rate units, 27 units under social homeownership schemes (PLSA), and 8 PLS units). Some of these operations, such as demolitions and *residentialisations*, have already begun and are expected to continue until 2030. The urban regeneration project also supports the retrofitting of co-owned buildings and promotes the reuse of an existing vacant building.

Additionally, since 2021, the neighbourhood benefited from the *Quartiers Fertiles*[93] program, receiving financial, technical, and operational support from ANRU. Within this framework, the The Le Jardin Corneille project, led mainly by the municipality, aims to create a central green space for residents on a plot left empty after a housing tower was demolished during the first urban renewal program. The project includes a micro-forest, a shared park/green space, and an innovative micro-farm in the centra area of Champs-Plaisants neighbourhood.

Table 1. Key data on case study area of Champs-Plaisants and Les Arènes

	CHAMPS-PLAISANTS AND LES ARÈNES
Neighbourhood characteristics (general social type, economic activities, density etc)	The neighbourhoods of Champs-Plaisants and Les Arènes hosted approximately 5,800 inhabitants in 2024 and are located in the north-eastern part of the city. They are characterized mainly (about 90%) by the presence of collective housing units, with individual pavilions in the north-east and north-west areas
Duration	from 2019 onwards, both districts are included in the same perimeter of intervention within the frame of the second ANRU Agreement
Funding	Referred to urban regeneration from 2019: - municipality - central state agency ANRU - region - social housing provider (ESH) - Europe - CDC (state-owned) - Action Logement - Pénélope association
Actor constellation	see “funding”, plus tenant associations, neighbourhood associations, architecture and urban planning agencies, etc.
Aims and objectives	- improvement of residential quality and diversification of housing types - enhancement of neighbourhood accessibility and image - development of green spaces and connection to existing green networks - support for local economic and commercial activities, entrepreneurship, and functional diversification - support access to employment, youth facilities and services, reconfigure provision of facilities, promote social cohesion

[93] It was launched by ANRU in 2019 with the aim of accelerating urban agriculture in the neighbourhoods included in the estate regeneration program (NPNRU). A total of 100 neighbourhoods received support through the *Quartiers Fertiles* initiative.

Specific physical measures	- planned demolition of 592 social housing units; retrofitting of 530 social housing units; *residentialisation* of 850 social housing units; construction of 119 new housing units (84 market-rate units, 27 units under social homeownership schemes (PLSA), and 8 PLS units). - retrofitting of public and co-owned residential buildings; connection of new facilities to the existing district heating network, supplied 80% by renewable energy. - public services and facilities: construction of a new school cluster; implementation of a *Cité éducative* project; development of a new socio-cultural facility replacing the former social centre and integrating the renovated library. - development of recycling and reuse activities, led by a major actor of the social and solidarity economy, the association Pénélope. - creation of new green areas and extension of existing ones to reduce urban heat islands; experimentation with urban agriculture.
Accompanying housing policy/ regulatory measures	*Plan Local D'Urbanimsme Intercommunal Habitat*, PLUi-H

3.3.3 Methods

This case study working paper draws on qualitative research combining document analysis with a limited number of semi-structured interviews and on-site observations. The analysis aims to examine local green initiatives and their implications for housing inequalities.

Interviewees included representatives of municipal and metropolitan administrations, local associations, and experts. Interviews were conducted in French between November 2025 and February 2026. The list interviewees, anonymised in accordance with ethical guidelines, is provided in Appendix 2. The sampling strategy combined preliminary desk research and snowball sampling. All interviews were recorded with participants' consent and transcribed in their original language using the open source, AI-based software Noscribe. Respondents were assured of anonymity and, after the removal of personal identifiers, transcripts were translated using DeepL Pro.

Document collection combined desk-based analysis conducted prior to the interviews with complementary materials collected or indicated by interviewees. The documentary analysis included planning documents, policy reports, municipal deliberations, technical studies, academic literature, and grey literature. In addition, a press review drawing on both departmental and municipal newspapers was carried out. These materials were used to familiarise with the case study, identify relevant interviewees, and complement and contextualise the empirical findings.

The research also draws on the contribution of the work carried out by five Master's students enrolled in the Governing Ecological Transitions in Cities programme at the Urban School of Sciences Po during the academic year 2024–2025. As part of a year-long capstone project, the students analysed how urban ecological policies are implemented, experienced, and contested in practice. The study focused on five case study cities—Paris, Orléans, Sens, Milan, and London (see Dubois et al. 2025).

Several limitations should be acknowledged. Fieldwork constraints affected the conduct of interviews, particularly in relation to the upcoming municipal elections and varying degrees of willingness among potential respondents to participate. The number of respondents is limited, and preliminary findings require corroboration through further interview as well as documentary and quantitative data to allow for triangulation. Moreover, findings reflect ongoing processes rather than stabilised outcomes, given the evolving nature of the policies and projects under analysis.

3.3.4 Civic and institutional perceptions of green initiatives in Champs-Plaisants, Sens

3.3.4.1 Precedents and implementation

Interviewees and document analysis highlight that the transformation of the Champs-Plaisants and Les Arènes neighbourhoods results from a **layered dynamic, combining ANRU-led national urban regeneration operations with complementary initiatives**. These include energy retrofit of co-owner buildings as well as the re-use on existing building and urban agriculture experimentation, integrated into the overall vision, yet each operating with their own logics, and temporalities.

In an early phase, Champs Plaisants was targeted by the *Politique de la Ville* and the *Programme National de Renouvellement Urbain* (PNRU), which allowed for a partial reduction of residential density and the introduction of a diversified housing offer, both in terms of architectural form and tenure type. In contrast, the Arènes neighbourhood was not included in the first PNRU. Between 2007 and 2017, some retrofitting and *residentialisation* operations were carried out but these were considered as "*insufficient to improve housing quality and the neighbourhood's attractiveness*"(ANRU, 2019).

Regarding the *Plan National de Renouvellement Urbain* (NPNRU), interviewees reported that the municipality and agglomeration of Sens initially attempted to propose Les Arènes as a separate neighbourhood with its own urban regeneration project. However, the area did not meet some ANRU funding eligibility criteria, particularly referring to population density. Consequently, the **two neighbourhoods were merged into a single perimeter of intervention**. As reported by the municipality of Sens and CAGS:

> at the beginning, we had presented it (Les Arènes) as a separate district, and it could not pass in terms of population density and number of inhabitants. And so, what made it possible by considering it as only one neighbourhood, in the end, with Champs-Plaisants. That's why it's called Champs-Plasiant-Arènes on the agreement (interview 2)

Alongside the objective of enhancing the neighbourhood's structuring role within the city, the project addresses key factors such as proximity to the city centre, a significant youth population, a dense local associative network, and available land and landscape quality. It also integrates "**excellence objectives**," including energy efficiency strategies for social and co-

owned housing, combined with ambitions for urban agriculture experimentation and innovative waste management practices (ANRU, 2019).

According to the provisional 2019 financial plan, ANRU allocated €45.86 million to the area (including €32.7 million in grants) (ANRU, 2019) [94]. In addition, the 2022 provisional financial table shows approximately €230,000 in grants allocated by ANRU specifically for the urban agriculture project. Overall, ANRU's contribution for the current programme is perceived by the municipality as more substantial than the previous PNRU:

> The second plan is much more ambitious. I think the first one was three times less in terms of amount. It was really (...) both energetically and in terms of public development and equipment, we were not at all on the same ambition (interview 2)

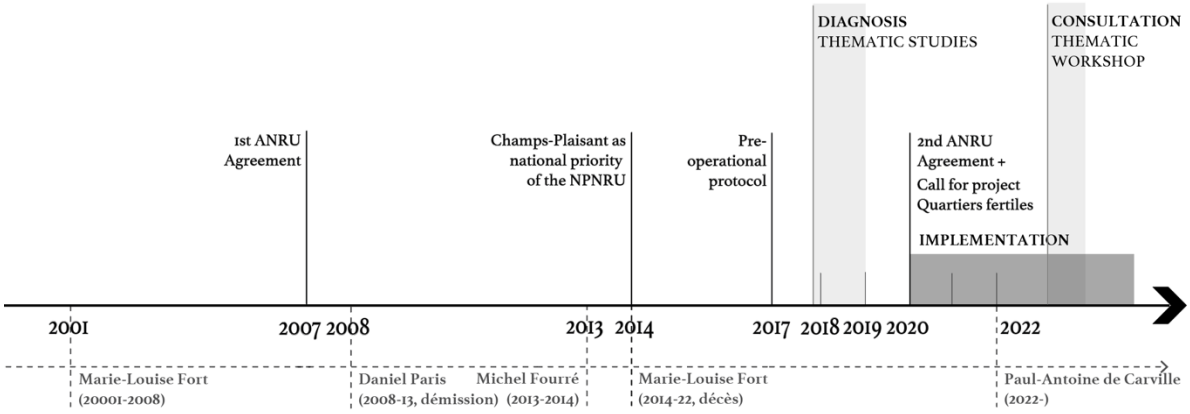


Figure 1: timeline showing key dates for the ANRU agreement, implementation phases, and political mandates. Source: author's elaboration.

3.3.4.2 Governance and participation (procedural)

Governance

The project is characterised by a **multi-level governance structure** combining public coordination with issue-specific arenas of interaction among actors, notably around, housing retrofit, the implementation of the *Quartiers Fertiles* programme, and the reuse of a vacant building.

[94] https://data.anru.fr/NPNRU/C0944/089_NNPNRU_CA-SENS_Courrier-OPPC_QF_du_01-04-2022.pdf

Overall, the project is **coordinated by the intermunicipal authority CAGS and the Municipality of Sens, through a mutualised department** (the *Direction Habitat, Rénovation Urbaine et* Foncier) within the territorial planning and cohesion unit (Pôle Aménagement et Cohésion du Territoire). This department brings together competences related to urban planning, urban renewal, private and social housing. The involvement of architecture and urban planning consultancies seems to be limited to the design phase, focusing on the definition of the project's *plan guide*, the preparation of operational guidelines for each intervention, and the production of thematic studies.

As highlighted in the interviews, the **social housing provider remains the primary reference for housing-related operations**, including housing retrofitting, demolition, reconstruction of the social housing stock, and *résidentialisation*[95]. However, the municipality plays key roles in these operations, primarily monitoring support provided to residents during on-site retrofitting works, ensuring compliance with the project timetable, and coordinating exchanges about construction materials. In this regard, interviewees emphasized the strong interdependence and sequencing of operations, making the coordination between the municipality and the social housing provider crucial. As the municipality stated:

> It's a bit of a domino game, that is to say that as long as the social housing provider hasn't demolished its building, for example, we can't do our road project, as long as we haven't done our road project, we can't do *résidentialisation*. So now we're getting to half of the program, so the main attention now is the one in the calendar (Interview 1)

Within the framework of the *Quartiers Fertiles* programme[96], while the new park and the urban forest initiative were mainly managed by Municipality of Sens, the urban agriculture initiative entailed the creation of an association to menage the urban farm as well as the coordination with other local associations to foster local synergies (e.g. with local commercial actors). However, a local association highlighted limited synergies and some challenges in exploring potential interaction with other local associations:

> These are actors who already have their way of operating, who already have their actions in place. When we finally come up with a new project, they are rather motivated and ready for the idea. On the other hand, they will not try to invest themselves and take part. So, in

[95] two housing providers coexist: a departmental OPH and an ESH affiliated with the *Action Logement* group. The latter is largely dominant, with approximately 3,602 social housing units in the city, compared to just under one hundred for the departmental OPH.

[96] It was launched by ANRU in 2019 with the aim of accelerating urban agriculture in the neighbourhoods included in the estate regeneration program (NPNRU). A total of 100 neighbourhoods received support through the *Quartiers Fertiles* initiative.

fact, you have to get to them with a ready-made, turnkey project, and all they have to do is say yes, etc. And that's a little complicated because today, we don't have enough resources to carry out a project alone (Interview 4)

Finally, regarding the reuse of a vacant building, an existing local association acted as the main project lead (*maître d'ouvrage*). The municipality supported the project by assisting in the identification of a suitable space, organizing the maintenance of surrounding streets, and liaising with national agency ANRU on reuse conditions, as well as with the *Banque des Territoires*, which provided partial financing. Meanwhile, the association reported limited interaction with other local associations and residents during the design and implementation phases (Interview 5).

So, it had been vacant for about five or six years. (…) It was brought to our attention by the municipality—although I'm not sure whether it was the city itself or the agglomeration authority. (…) In any case, they were the ones who involved us and brought us into the process. We then went to visit the building, and I really liked it. For me, it was well suited to our activities: it had a retail area, office space, a work area, and a storage area. (Interview 5)

Participation

It emerges that community involvement mainly takes place through 1) the ***Maison du Projet***, serving as a space exchange within the framework of the urban regeneration project and coordinated by the municipality; 2) pre-existing local governance and participation mechanism, such as the **GUSP (*Gestion Urbaine et Social de Proximité*)**[97] and 3) **ad hoc workshops** coordinated targeting specific areas and thematic issues.

Overall, and as underlined by the municipality of Sens and CAGS, participation is systematically integrated in public space and green areas interventions, mostly ex ante during the diagnostic phase, and less frequently during implementation. Interactions with residents included not only informational meetings but also collective discussions around possible future scenarios. As underlined by the municipality:

During the diagnostic phase for the square, consultation was carried out: we worked closely

[97] The *Maison du Projet* hosts monthly meetings that are generally divided into two parts. The first part focuses on local urban management (GUSP) and everyday life in the neighbourhood, while the second part is dedicated to a specific topic, such as sharing updates on ongoing projects, redesigning the neighbourhood square, or deciding on names for new social and cultural centres.

with residents, who explained to us how they use—or misuse—the space. This enabled us to identify their needs and try to address them or correct existing issues (Interview 1),

As part of *Quartier Fertiles* program, different community groups participated in the Jardin Corneille project (see USH, 2022). The urban forest, inaugurated in 2023, was developed through a collaborative project between the municipality, the local social center, and schools, enabling the planting of 1,800 trees. More than 500 students took part in the co-design and partial implementation of the forest, in collaboration with facilitators from the neighborhood social center (L'Indépendant de l'Yonne, 2025)[98]. Additionally, elderly residents were also involved in designing the new park adjacent to the urban forest, particularly in defining the park's furniture and overall layout.

So, this was work we carried out mainly with schools from the neighbourhood, although among the 19 groups involved, many also came from elsewhere in the city. We organised another event this year, two years on, so they could see how the project had evolved. The space is now very well used, and some children keep coming back. At the back, we created a small garden and a sensory path. All the work on street furniture, pathways, and the small wooden play elements was carried out with a group of older residents (Interview 1).

Considering housing-related operations, as previously mentioned, these are primarily managed by the social housing provider. From the municipality's perspective, it emerges that, while relocation processes and the replenishment of the social housing supply involve public meetings followed by individual household support, no co-design workshops are carried out for the technical solutions of retrofitting operations.

In any case, the information meetings that initiate the relocation process were systematically organised, followed by individual assessments and diagnostics—nothing unusual there. can this be described as consultation? When it comes to refurbishment, residents are not asked for their views on how the retrofitting will be carried out (Interview 1).

3.3.4.3 (In)equity (distributional)

Collected data point to several dimensions of distributional (in)equity, particularly concerning the residents' access of green areas and urban agriculture sites, the beneficiaries of the

[98] https://www.ville-sens.fr/actualite/le-jardin-corneille-un-nouveau-parc-urbain-au-coeur-des-champs-plaisants/

intervention involving the re-use of vacant buildings, and the spatial distribution of the reconstituted social housing supply following demolitions.

Nature-Based Solutions

As previously mentioned, the urban regeneration project places particular emphasis on 1) the **experimentations in urban agriculture**, combined with the creation and expansions of green areas, particularly the reuses of vacant plots resulting from demolitions; 2) the connection with eixtsinf green network.

In both target neighbourhoods, the project foresees the development of a public park, reflecting the principle "**one neighbourhood, one park, each with its own identity**" (Interview 4). In both cases, the parks are planned on vacant public lots resulting from previous demolition operations. At present, while the park in the Arènes neighbourhood remains under definition, the Champs-Plaisants Park has reached a more advanced stage of implementation.

In Champs-Plaisants, the **Jardin Corneille** is conceived as a new green core for the neighbourhood, bringing together public green spaces, an urban forest and urban agriculture functions. The project covers approximately 11,000 square metres. The total is around €450,000, of which around half is funded by the ANRU, with the remainder covered by the municipality (Yonne Républicaine, 2023) [99]. Within this budget, €150,000 are allocated to urban agriculture activities, while €300,000 are dedicated to the park and urban forest.

As emerged for interviews, the implementation of urban agriculture **component faced several challenges, particularly regarding the plot characteristics and operational delays**. The municipality's first expression of interest, aimed at selecting associations to implement and manage the urban farm, encountered difficulties because the initially proposed plot was considered too small to support farming activities. Subsequently, the cooperation with the intermunicipal authority led to the identification of a larger plot outsides the QPV neighbourhoods, resulting in a second call allocating two sites: one in the heart of the Champs-Plaisants neighbourhood and the other in a neighbouring municipality.

At current times, the selected association started its activity in the latter due du delays with the first lot. The project was partly affected by the political mobilisation related to the social centre reconstruction (see section 3.4), which slowed down the implementation of the urban farm within the Champs-Plaisants neighbourhood. In fact, the site initially intended for the urban farm was temporarily occupied by modular structures housing the relocated social centre and a childcare facility. As the local association stated:

[99] https://www.lyonne.fr/sens-89100/actualites/a-sens-la-micro-foret-des-champs-plaisants-prend-forme-grace-a-500-enfants_14250730/

In the end, we were allocated two plots: one located in a peri-urban area, which we accessed in early 2025 and where we started working straight away; and another in the heart of the Champs-Plaisants neighbourhood, which has been delayed. At the moment, that site is hosting the social centre, which could not be relocated due to damage to the building that was under construction. As a result, we are still not operating in Champs-Plaisants, even though it has been more than a year and a half since the association was created. (…) This situation inevitably led us to rethink and slightly reposition our activities and the association's development strategy (Interview 4).

Re-use of an existing building

The project includes the re-use of an abandoned commercial building for social and solidarity-based economic activities. On one hand, it addresses the expansion needs of the local association *Penelope*[100], active in the neighbourhood since the 1990s; on the other hand, it aligns with the broader objectives of the urban regeneration project to foster social economy initiatives.

Implemented at an early stage of the urban regeneration programme, **this operation benefitted from several favourable conditions:** the presence of a well-established local association with an activity expansion need defined prior to the ANRU agreement; the availability of a vacant building of approximately 3,000 m², unused for five to six year; and its strategic location, ensuring accessibility both from within the neighbourhood and from the wider city.

The project **combines social and environmental objectives**, attracting the interests of multiple actors, including the Region, national agencies, the intermunicipal authority, and ADEME. This convergence enabled a co-financing scheme for the acquisition[101] and refurbishment of the building: approximately 50% of the total costs were covered through public subsidies, while the remaining part relied on the association itself, requiring the preparation of dedicated funding applications and loans from several institutions[102].

Overall, the re-use of an abandoned building was framed by the ANRU agreement as contributing to the social economic pillar of the urban regeneration project, enabling access to

[100] founded in the 1990s with the legal status of an ***atelier chantier d'insertion*** Its main objective is to welcome long-term unemployed and vulnerable individuals, hire them under a proper employment contract, and support them through training toward more stable and lasting labor market integration. This is carried out through its core activity as a generalist and repair-oriented ***ressourcerie.***

[101] The building was privately owned and its re-use required direct negotiation with the owners.

[102] including France Active Bourgogne, *Banque des Territoires*, and Caisse d'Épargne.

public support. However, its implementation also relies on **the capacity of a single, relatively established association to mobilise resources and navigate co-financing arrangements**.

> We aligned well with the economic component of the urban development plan—at least, that is how it was presented to us. Why? Being located here and employing staff from the neighbourhoods was part of that plan. (…) On that basis, we were invited to take part in the urban development plan, which meant access to a substantial subsidy. (…) That subsidy made it possible for us to consider purchasing this building. Without this project, we would not have been able to do so (Interview 5).

Replenishment of the social housing supply (reconstitution de l'offre)

In terms of distributional aspects of the social housing offer, several issues emerged. First, the **geographical allocation of reconstituted units is shaped both by national regulations and local housing policy objectives**. Secondly, the replenishment of the social housing supply operations related to evolving residential needs, including post-COVID changes in demand and household composition.

Social housing replenishment is in effect organized at the metropolitan scale, mostly outside the neighbourhoods targeted by urban regeneration projects, following the conditions of the ANRU framework. Main criteria for tenant relocation include: the provision of access to *parcours résidentiels positifs* ("positive residential pathways"), particularly through newly or recently built social housing; control of the tenant's overall payment assuring that tenants do not face increases in their overall housing costs when moved to new accommodations under constant tenant conditions (household composition, economic situation, etc).

In the case of the Champs-Plaisants and Les Arènes, the **demolition/reconstruction ratio set by the NPNRU for the is 0.5 to 1**, differing from the previous PNRU framework, where the standard ratio is 1 to 1. This adjustment reflects the local housing policy objectives of reducing the share of social housing in the municipality of Sens while promoting greater 'social mixing' (see section 1.1). The 0.5 to 1 ratio was justified by "*weak demand for social housing, the small gap between social and private sector rents, the significant challenge of addressing vacancies, and low demographic growth*" (PLUi-H, Diagnostic).

As reported by Interview 2, the replanishment operations became more complex during the implementation phase mainly due to changes in market dynamics post-COVID and issues related to evacuations. In fact, at the time of the agreement, Sens was not classified as a "*zone tendue*" (high housing pressure area), but this classification has since changed. This shift has slowed down the replenishment of the social housing supply (*reconstitution de l'offre*), as it now competes with rehabilitation operations, making the latter a higher priority for the municipality. As mentioned by this latter:

> This was initially a very low-pressure housing market, which explains why the programme set a reconstruction rate of 0.5: more demolition than construction. However, post-COVID, with various processes of household fragmentation and the arrival of new residents from the Île-de-France region —particularly single mothers—the area has become a high-pressure

housing market (Interview 2).

Overall, as of February 2024, 617 social housing units were demolished, while only 309 were reconstituted (Municipal Magazine, February 2024). According to the collected data, the city of Sens accounted for approximately half of the replenishment of the social housing supply (*reconstitution de l'offre*), with 57 social housing units rebuilt on-site: 32 at the Les Arènes site and 25 in the Champs-Plaisants neighbourhood (Municipal Magazine, February 2024). The remaining units were reconstituted across other municipalities within the agglomeration.

3.3.4.4 Political mobilization

Political mobilization around the project was issue-specific and intersected with broader national events. The urban regeneration project initially includes the demolition and reconstruction of a social-cultural and early childhood centre, *La Maison des 3 Sens*[103], with reconstruction works starting in 2022. However, the city of Sens was among the French municipalities heavily affected by the June 2023 riots, following the death of Nahel Merzouk during a police check in Nanterre. These events led to the arson of the social-cultural centre that was still under construction at the time.

The event led to a redesign of the project, adjustments to the overall budget, and the search for a new location for the socio-cultural centre. Additionally, these events also caused delays in the urban farm operations, as the originally planned site was partially occupied by the temporary relocation of the socio-cultural center and childcare facilities (see section 3.3.1).

The 3,000 m² site, initially intended for the centre was transformed into an area to expand the neighbourhood's central square and host a biweekly market. This reconfiguration is integrated into a broader redesign of the square, including solutions aimed at enhancing urban biodiversity, reducing summer heat islands, and improving the overall quality of life for residents[104].

Finally, a new shared facility was built on a plot of over 2,000 m², located north of the square, and renamed *La Ruche*. Rather than constructing the two initially planned buildings, a single multi-purpose building of approximately 1,400 m² was developed, preserving public services while controlling costs (Municipal Magazine, July-August 2024)[105]. The new shared facility houses a social centre, a library, a nursery and early childhood support centre, as well as

[103]https://www.lyonne.fr/sens-89100/actualites/a-sens-le-nouveau-centre-social-des-champs-plaisants-sera-livre-en-2024_14280607/

[104] https://www.ville-sens.fr/realisation/une-nouvelle-place-pour-les-champs-plaisants-un-projet-ambitieux-pour-renforcer-le-coeur-de-quartier/

[105] https://www.ville-sens.fr/sens_medias/2024/10/mag-juillet-aout-2024.pdf

flexible spaces that can be shared among the different services. Construction was completed by the end of 2025.

3.3.4.5 Socio-ecological impacts

Nature Based Solutions

As mentioned, the implementation of green areas is still ongoing, which currently limits the possibility to assess their socio-ecological impacts. Nevertheless, the interviews point key issues, including potential benefits for residents and long-term management considerations.

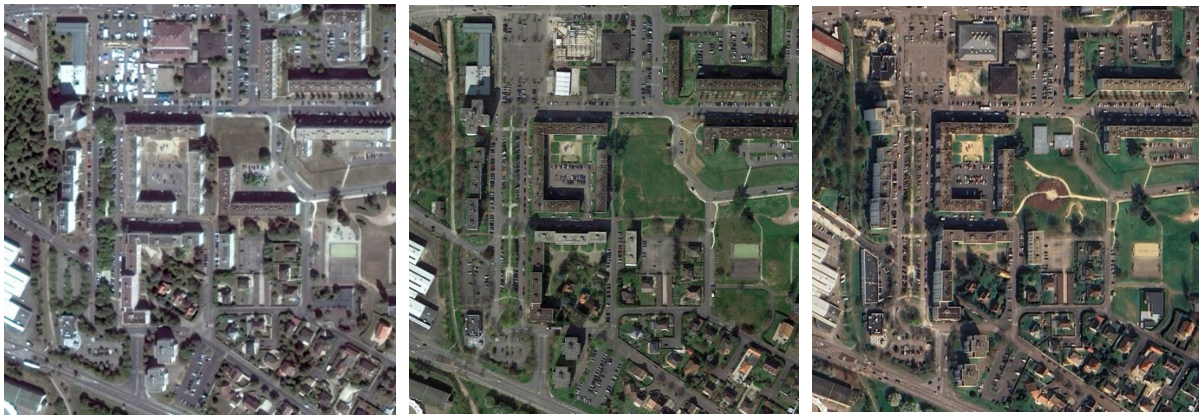
Considering the Jardin Corneille initiative, the urban forest was inaugurated at the beginning of 2023, and the development of the **adjacent park** is scheduled to continue until 2026. Interviews indicate a generally positive reception of the new green spaces, which benefited from co-design and co-construction processes involving both students and elderly residents (see section 3.3.1).

The urban farm has not yet been implemented in the neighbourhood. However, the association leading the initiative has already begun activities on a parcel located outside QPV. Based on these, the local association emphasized the **potential positive impacts on community cohesion and social ties, particularly through intergenerational interactions**.

> For me, there is a strong intention to create social ties that are also intergenerational. First of all, our group of volunteers includes both working-age people and retired individuals. It is quite a diverse environment, especially since activities take place on Friday afternoons: there are active workers, including self-employed entrepreneurs who can attend, but also unemployed people and retirees, as I mentioned. So, it's a fairly broad age range. (…) There is also a link with younger people, as we host groups of children at the garden and also intervene in institutional settings. This really makes it possible to build connections with them (Interview 4).

On the other hand, **some challenges emerge, particularly regarding the temporal and economic sustainability of the project**. While the municipality's 18-year lease agreements provide continuity, limited resources and local constraints pose challenges to the long-term viability of the initiative. Costs associated with planting and ongoing maintenance currently fall on the association and interviews also highlighted difficulties in recruiting volunteers to support the activities. As noted by the local association:

> We do not receive subsidies either. So, we cannot rely entirely on voluntary work while also investing in trees, equipment, and so on. That's where things become complicated. There is sometimes a lack of mutual understanding between municipalities and associations: local authorities have significant resources in terms of staff, equipment, and funding, whereas at the scale of an association, it is up to us to find all these resources ourselves—and they are not always available. As a result, actions are harder to implement and sustain (Interview 4).



2015 2020 2025

Figure 2: satellite images showing the future Jardin Corneille site and its surroundings over time (2015, 2020, 2025). Source: Google Earth.

Re-use of an existing building

Overall, the project involving the acquisition and reuse of the existing building has enabled an expansion of the association Penelope's activities, with both social and ecological implications. From an environmental perspective, the local association highlighted that the reuse of an abandoned building reduces the need for new construction, while the expansion of sorting and repair activities has significantly increased the number of materials recycled[106]. In fact, the tonnage of products collected nearly doubled over two years, rising from 605 tons in 2021 to 1,007 tons in 2023.

From a social perspective, the local association emphasized several benefits resulting from the relocation and expansion. The new site improves accessibility both within the neighbourhood and at the municipal level, being closer to the QPV residents and public transport stops. Following the relocation, membership grew substantially, reaching roughly three times the 2018 level by 2024. The expanded facilities also increased the association's capacity to host individuals participating in professional reintegration programs.

> (…) Most of our members come from the neighbourhoods, as do most of the employees we recruit. Many of them walk here to work, because we are located next to a priority neighbourhood. That is also why we benefited from the project and became part of the urban

[106] The association promotes the reuse of recyclable products at low cost, making them accessible to a broader public.

development plan: because we were at the very heart of the neighbourhood (Interview 5).

However, some uncertainties remain regarding the long-term continuity of state and departmental subsidies. The organization feels fragile, as funding must be defended every year. In the context of austerity policies and shifting priorities for social funding, the association perceives that these uncertainties could put the project's sustainability at risk.

We are fragile. With the State, the Departmental Council, budgets… we simply don't know from one year to the next. Every year, we have to defend our subsidies. If, tomorrow, the State decides—through the finance law—that social funding should stop, they have the right to do so. And for us, it just stops (Interview 5).

Social housing retrofitting

Social housing retrofitting operations are only partially completed, with some ongoing and others not yet started. In terms of potential impacts, concerns were expressed by the municipality regarding: 1) the trade-offs between **relocated residents and those who remain in the neighbourhood**; 2) how housing retrofitting might affect housing mobility.

In effect, relocated households generally benefit from cost-neutral move to newer or recently renovated units (see section 3.3.4). For residents remaining in the QPV, the retrofitting of their apartment on the overall implementation and schedule of the urban regeneration project. As noted by the municipality of Sens and CAGS, some tenants have already experienced increases in charges set by social landlords even before retrofitting works, and there is concern that these costs could rise further following retrofitting[107]. However, interviewees emphasized that rents are capped under national regulations, limiting the scope for increases.

Additionally, long-term issues were also raised regarding **housing mobility after retrofitting works**. When families move, for example due to changes in household composition, finding affordable housing may become more difficult, as renovated buildings are expected to have higher rents. According to the municipality of Sens and CAGS, this could reduce accessibility for low-income tenants and, in some cases, lead to disparities between more renovated and less renovated housing.

As long as people do not have to move, things work relatively well for them. But the moment they move—because of changes in household composition or a desire to change housing—the question of whether they will be able to afford a rent within their budget becomes much

[107] This is the case of a social housing building that is not retrofitted yet.

more delicate. Otherwise, we risk creating a form *seconds zones*, with the last buildings to be renovated concentrating the poorest tenants. And that is something that seems very difficult to accept (Interview 1).

Diversification of housing offer

Interviewees reported some difficulty in assessing the effects of the urban regeneration project on neighbourhood repopulation, as demolitions are still ongoing and new construction is only partially underway. Some underlined challenges refer to: the tendency to concentrate diversification efforts in the Arenes neighbourhoods and the way to diversify the housing in a. contexts of **evolving housing demand**.

In terms of location, to the municipality of Sens and CAGS emphasize **Arènes as key area for diversification strategy**, highlighting how demolition and reconstruction operations will significantly transform the neighbourhood's image. In fact, in Arènes, approximatively 230 housing units are demolished (out of a total of 617 demolished across the two neighbourhoods). These will partly replace by social housing (32 units), partly by social-access housing (PLSA) and market-rate.

However, the implementation process is ongoing. Regarding housing typologies, the municipality consults with promoters and builders, revealing an evolving housing demand in the neighbourhood, increasingly focused on individual housing, such as detached houses (pavillons) with private gardens.

Three years later, after consulting a number of developers and builders, it became clear that no one wanted collective housing in the neighbourhood. So we decided to rethink the project and launch a new phase, focusing instead on single-family homes for private housing. There is strong demand for detached houses with small plots of land. Practices and aspirations have evolved. The objective now is to include houses with gardens and small outdoor spaces (Interview 1).

3.3.4.6 Tensions and power dynamics between stakeholders/actors

See previous section 3.2 and 3.4. and in particular:

- **layered and multilevel dynamics**: the transformation of the Champs-Plaisants and Arènes neighbourhoods results from a combination of the national ANRU (urban regeneration) framework and complementary initiatives each with its own logics and timelines.
- **municipality and social housing provider**: the central role of the municipality as the overall project coordinator, with the social housing providers playing a key role in decision-making related to housing operations potentially leading to challenges in aligning their actions

3.3.4.7 Innovative governance mechanisms

See previous sections. In particular

- section 3.2.1 on governance about the **multi-level coordination between the Municipality of Sens, CAGS, national agencies (notably ANRU), and the social housing provider**, ensuring sequencing and operational interdependence across demolition, retrofit, public space and résidentialisation.
- section 3.2.1 on governance about the **issue-specific arenas** (housing retrofit, Quartiers Fertiles, reuse of vacant buildings), including the creation of an association to manage the urban farm and partnerships with ANRU and *Banque des Territoires* for building reuse.
- section 3.2.2 on participation about the combination of **permanent and ad hoc participatory tools** (Maison du Projet, GUSP, thematic workshops), with co-design practices mainly in public and green space projects, and more consultative approaches in housing retrofitting processes.

3.3.4.8 Tourisms and market pressure

No significant tourism pressure emerged.

Regarding market pressure, two dynamics emerge. First, the **shift of the municipality from a non-stressed to a stressed housing area** appears to have impacted the process of reconstituting of the social housing offer. Additionally, the diversification of the housing offer is increasingly shaped by **evolving demand, with a growing preference for individual housing** forms, such as detached houses with gardens.

3.3.5 Critical analysis: Sens

This working paper presents and discusses the case of Champs-Plaisants and Les Arènes in Sens, an urban regeneration project that incorporates urban agriculture initiatives, the re-use of existing buildings, housing retrofitting, and the diversification of the housing offer in the name of 'social mix.' The outcomes stem from a layered dynamic that combines ANRU-led national urban regeneration initiatives with complementary actions, each operating within its own logic and timeframe.

The project is still ongoing; some operations have already begun, while others are yet to start. Below, some trends and hypotheses are discussed in relation to the implications of green interventions for housing inequalities.

3.3.5.1 Nature-Based Solutions

The implementation of green areas and urban agriculture initiative is ongoing, limiting current assessment of their impact on housing inequalities. Emerging issues include:

- **Community engagement and recognition**: the project engages various populations, including schoolchildren and elderly residents, through diagnostic and co-design

processes. While this model and local governance mechanism creates opportunities for participation, it remains unclear whose needs might be excluded. Further research is needed[108].

- **Budget constraints and long-term sustainability**: the management of urban agriculture initiatives relies partly on local associations and volunteer efforts. However, the financial capacity to cover ongoing operational costs remains uncertain in the long term. This poses a risk of undermining the continuity of the initiate as well as associated the social and economic benefits.
- **Trade-offs between greening and densification:** The neighbourhoods transformation follows a de-densification approach: collective housing is partially replaced by smaller, low-rise dwellings, and demolished buildings are converted into green spaces.

3.3.5.2 Re-use of a vacant building

Key issues surrounding the re-use of a vacant building include:

- **Synergies and co-financing**: the project integrates social and environmental objectives, attracting the interest of multiple stakeholders. This collaboration facilitated co-financing scheme for the reuse of a vacant building, reducing the need for new construction while enabling the expansion of the association's activities.
- **Exceptional favourable conditions:** the project implementation partly relies on the capacity of a single, relatively established association to mobilize resources and navigate co-financing arrangements. Additionally, contextual factors, such as the availability of space, the ongoing urban regeneration project, and the alignment with broader policy goals, have played a significant role in its success.
- **Uncertainties and long-term sustainability:** the association faces annual challenges in securing public funding, particularly in the context of austerity policies and shifting priorities for social funding. Theis raises concerns about the association’s ability to sustain its activities and continue generating socio-ecological impacts over time.

3.3.5.3 Housing retrofitting

Outcomes of housing retrofitting operations are still to be fully explored. Some hypotheses have emerged for the social housing sector, while co-ownership schemes require further research. Key issues for social housing include:

- **Relocated/remaining households**: relocated households benefit from a cost-neutral move to newer or recently renovated units. Concerns emerge for residents who remain

[108] For further insights about urban agricultural, recognition issues and social exlusion see also Paddeu (2021)

in the neighbourhood and whose apartment are to be retrofitted, as they are affected by on-site retrofitting works and subject to timing of other operations within the urban regeneration project.

- **Potential rent increases**: although national rent caps limit the extent of rent increases, there are concerns that these costs could rise following retrofitting works which may make housing less affordable for low-income tenants in the absence of tenant protection measures.
- **Housing mobility post-retrofit:** in the long-term housing mobility could become more challenging as renovated units are expected to have higher rents. This might reduce accessibility for low-income tenants, particularly those who experience changes in the household composition or conditions and need to relocate. This dynamic could also disparities between well-renovated and less-renovated social housing (see Ledez and Hainout, 2024).

3.3.5.4 Replenishment of the social housing supply (reconstitution de l'offre)

The demolition/rehabilitation ratio reflects local housing policies aimed at reducing the stock of social housing while promoting 'social mixing'. However, reconstitution operations are now facing difficulties due to shifts in housing demand post-COVID and challenges related to evacuations. These changes and pressures have slowed down the replenishment of the social housing supply (*reconstitution de l'offre*), which competes with rehabilitation projects for limited resources and space.

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3.3.7 Appendix 1 – Glossary

Abbreviations

ANAH	*Agence nationale de l'habitat* (National agency for housing) – public body established in 1971
ANRU	*Agence nationale de la rénovation urbaine* (National agency for estate regeneration policy) – public body established in 2004, responsible for piloting the NPNRU framework
CAGS	*Communauté d'Agglomération Grand Sénonais*
CDC	*Caisse des Dépôts et Consignations* (Deposit and Consignment Fund) – state-owned financial institution
CNL	*Confédération Nationale du Logement,* national organization that represents tenants' interests
ESH	*Entreprises Sociales de l'Habitat*, private social housing providers
GUSP	*Gestion Urbaine et Social de Proximité*, local governance and participation mechanism
INSEE	Institut National de la Statistique et des Études Économiques, the national institute of statistics
PLUi-H	*Plan Local D'Urbanimsme Intercommunal Habitat*, intermunicipal planning housing program.
PLAI	*Prêt Locatif Aidé d'Intégration.* there are different types of social housing schemes linked to different level of affordability. PLAI is the more 'social'
PNRU	*Programme national de rénovation urbaine* (National program for estate regeneration) –framework for the urban regeneration policy (2004-2021),
NPNRU	*Nouveau programme de rénovation urbaine* (National program for estate regeneration) – New framework for the urban regeneration policy (2014-2030),
OPAH - RU	*Opération Programmée d'Amélioration de l'Habitat, Renouvellement Urbain,* planned housing improvement program, urban renewal
OPH	*Office Public de l'Habitat*, public social housing provider
QPV	*Quartier Prioritaire de la Politique de la Ville,* priority neighbourhood of urban policy
SRU	*Solidarité et Renouvellement Urbain* (law), includuing the creation of social housing quotas for urban municipalities in 2000 and the promotion of densification (see Rotondo et al. 2025)

Terms and Concepts

Diversification of the housing offer: Referring to the provision of different housing types and tenures (e.g., rental, ownership, social housing) to meet the needs of different social groups

Replenishment of the social housing supply (*reconstitution de l'offre*): The restoration of demolished social housing units, to maintain the available housing stock for resident

Energy saving sharing: In France, since the MOLLE law (2009), social housing providers can implement what is known as a "third line of receipt" (*troisième ligne de quittance*), a tool which allows them to capture some of the monetary savings generated by the decrease of energy consumption resulting from retrofitting.

Reservation right: In exchange for funding of a given social housing building, different institutions (central State, local authorities, but also *Action Logement*) enjoy a right to select applicants that the social housing provider decide to lease (or not) the unit to. Since 2018, these rights have shift from a management based on stock to flux: the funding of a given operation will open rights at the scale of the provider's inventory.

Tenant consultation: By the law, if a landlord plans to implement renovation works that will impact the rent or operating expenses, it must organize a meeting with tenants to inform them, and consult with their representatives in its design of the operation, notably on the issues of foreseeable increase on the cost of living (art. 44 quarter, law n°86-1290 of 23 December 1986). A similar specific system existed for the former grants for refurbishment of social housing units known as PALULOS (circular n°93-60 of 6 August 1993)

3.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Project manager	City of Sens and CAGS, Pole Aménagement et Cohésion Des territoires.	12/11/2025	In-person
2	Department director	City of Sens and CAGS, Pole Aménagement et Cohésion Des territoires.	12/11/2025	In-person
3	Department director	City of Sens and CAGS, Pole Aménagement et Cohésion Des territoires.	12/11/2025	In-person
4	Funder and member	Local association	25/11/2025	Zoom
5	Director	Local association	09/12/2025	In-person
6	Architect	City of Sens and CAGS	19/02/2026	Zoom

3.3.9 Appendix 3 – Tables

	Sens municipality		Grand Sénonais	
	Absolute number	% of total stock	Absolute number	% of total stock
First residences	13 044	87,7%	27 564	86%
Secondary residences	363	2,4%	1 371	4,3%
Vacant	1 461	9,9%	1 188	9,7%
TOTAL	14 868	100%	32 052	100%

Table 1. Housing types at the municipal and agglomeration scale in 2022. INSEE, 2022

	Sens municipality		Grand Sénonais	
	Absolute number	% of total stock	Absolute number	% of total stock
Owner occupation	4 696	36%	15 462	56,2%
Renters	8 106	62,1%	11 617	42,1%
Living rent-free	242	1,9%	485	1,8%
TOTAL (first residences)	13 044	100%	27 564	100%

Table 2. Distribution of first residences by tenures in 2022. INSEE, 2022

3.3.10 Appendix 4 – Figures

Figure 3. The Jardin Corneille, with the urban forest on the left and to the public green space on the right.

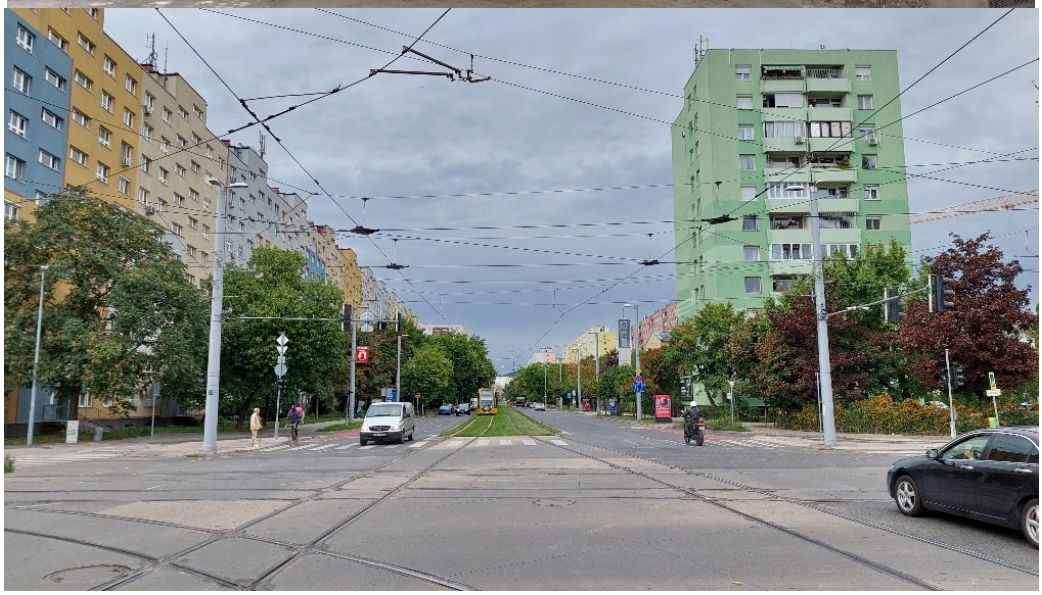
Source: Federica Rotondo, December 2025

Figure 4. The former commercial building converted for a new use, now hosting social and solidarity-based economic activities, with a repair and reuse centre as its core function

Source: Federica Rotondo, December 2025

4 HUNGARY

4.1 CASE STUDY (LARGE): BUDAPEST



Authors: Éva Gerőházi, Nóra Teller and Julianna Szabó (MRI)

4.1.1 City profile, challenges around just (housing and ecological) transition

Budapest, as Hungary's capital and largest city (1.7 million inhabitants), concentrates both the country's greatest housing opportunities and its most pressing housing challenges (MNB, 2023). The housing market reflects broader national trends, e.g. an overwhelmingly owner-occupied system shaped by large-scale privatization after 1990, limited municipal capacity in rental housing, and growing affordability pressures due to rapidly rising prices. Yet Budapest also faces unique dynamics: strong population demand for housing, a highly polarized housing

stock with regard to their physical state, and sharp inequalities between social groups and neighborhoods. The municipality of Budapest and the district municipalities are formally tasked with housing responsibilities, like providing public hosuing, housing allowances and homeless services but have limited resources, legal authority, and financial instruments to shape outcomes..

Budapest's housing stock is diverse in terms of age, type, and condition. The city has a large share of pre-1945 buildings, particularly in the inner districts, many of which suffer from aging infrastructure, low energy efficiency, and inadequate maintenance. Post-war socialist-era panel housing estates also form a substantial part of the stock; while these provide relatively standardized housing, they are now several decades old and require costly modernization. At the same time, new construction is limited, although highly visible with new residential areas emerging in former brownfields and small densification investments in transitory districts and rehabilitation areas. Still, the number of annually completed dwellings is far below current demand (altogether app. 6 400 new dwellings were completed in 2023, and 4 600 in 2024[109], in a housing market of app. 974 000 units[110]).

Due to the two-tier municipal system of Budapest, the public housing policy direction is governed by basically 24 independent bodies' policy directions (23 districts and the capital city municipality). The privatization of the municipal housing stock after the regime change left Budapest with a drastically reduced public sector. **While the municipality** (both the main municipality and the districts) **once held a significant portfolio of dwellings, today only around 2–3% of the stock is municipally owned** (15-20% of the overall stock is estimated to be private rental[111], while about 80% is owner-occupied.) The remaining municipal units are often of low quality, located in less desirable areas, and require substantial renovation. This weakens the city's capacity to provide social housing. Long waiting lists are common, and many of the dwellings that do become available are not immediately inhabitable without investment. The district municipalities also possess a few thousands of dwellings, but access to social (very cheap and affordable) housing remains limited to a small fraction of those in need, and accessing social rented housing is often requires local habitation and minimum income thresholds of the households.

In terms of quality, Budapest households face mixed conditions. Overcrowding has eased somewhat in recent years, but problems such as poor insulation, leaking roofs, insufficient light, and noise pollution remain significant. The energy efficiency of the stock is generally low, contributing to higher utility costs and vulnerability to energy price fluctuations. **While**

[109] https://www.ksh.hu/gyorstajekoztatok/lak/lak2412.html
[110] https://www.ksh.hu/stadat_files/lak/hu/lak0017.html
[111] There are no exact and punctual data on the size of the private rental sector, as many of the rental contracts are not registered and not surveyed either.

Hungary's national 'utility price cap' introduced in 2013 resulted in the lowest gas and electricity unit costs in the EU and reduced household energy burdens, this policy did little to improve the physical efficiency of dwellings, meaning structural vulnerabilities persist (ODYSEE-MURE, 2025).

Budapest has experienced sharp increases in both house prices and rents, particularly since the mid-2010s. Prices have risen faster than incomes, creating a widening affordability gap. The house price-to-income ratio can be consistently considered seriously unaffordable, and rental affordability is even more strained. Rent-to-income ratios for private tenants regularly exceed 30%, making rental housing inaccessible for many low- and middle-income households. The affordability crisis is particularly severe for young people, newcomers to the city, and households without family support. As access to ownership requires significant initial capital, many must rely on the rental market, which is poorly regulated and offers little security. Inner districts' rental housing comprises high shares of Airbnb/short term rentals (Csizmady&Kőszeghy, 2022).

Housing costs as a share of household income show some decline nationally due to regulated energy prices, but this masks the reality in Budapest: while energy costs are capped, housing acquisition and rental costs have soared. For single-person households, single parents, and lower-educated or unemployed residents, the burden remains disproportionately high. Pensioners are divided: some benefit from owning homes acquired under socialism, while others—particularly those with lower pensions and poor-quality dwellings—struggle with costs.

Budapest's housing challenges are deeply intertwined with social inequalities. Wealthier households are concentrated in central and Buda districts with higher-quality housing and access to services, while disadvantaged groups, including many Roma families, are overrepresented in poor-quality stock, peripheral districts, and segregated neighborhoods. One of the inner districts – District 8 - also faces such a challenge (Czirfusz et al, 2015).

Segregation is reinforced by both market forces and the limited public housing sector. Especially in District 8, a district which kept a higher share of public rental housing, municipal dwellings cluster in less attractive areas, compounding stigma and limiting financial means for moving out (Teller 2019). Gentrification in central districts has encouraged low-income residents to move to outer districts, further polarizing the city. Meanwhile, vacant housing units exist; some 25% of Hungary's non-occupied dwellings are in Budapest; but many are held for speculative purposes, short-term rentals, or in poor condition, making them unavailable for affordable rental.

Several additional policy factors limit the efficiency of the housing sector in Hungary (Hegedüs, 2023):

1. **Financial constraints**: housing policies at the national level prioritize homeowners and family subsidies, with very little funding allocated for social housing or rental support. Municipalities do not receive systematic central transfers for housing management, making them dependent on their own strained budgets. Budapest faces additional fiscal restrictions imposed by the central government, which curtails its financial autonomy.

2. **Policy and legal environment**: national housing policy emphasizes ownership and demographic incentives (such as subsidies for families with children), leaving little space for local rental initiatives, but fuelling investments into second homes for the wealthy, and thus creating more supply on the (expensive) private rental market.[112] Some municipalities inside and outside Budapest have experimented with innovative programs, e.g. cost-based rental schemes, non-profit housing, or partnerships with NGOs, very small-scale housing agencies, but these remain marginal without significant public funding. Local housing policies are arbitrary and often lack transparency.
3. **Market dynamics beyond local control**: rising property values, foreign investment, and speculative demand have pushed housing costs beyond the reach of local policy instruments. Short-term rentals (such as Airbnb) have intensified pressures in central districts of Budapest, reducing the long-term rental supply. The municipality has limited regulatory tools to intervene in these markets without national legislation.
4. **Social responsibilities without means**: municipalities are tasked with addressing homelessness and providing emergency housing, but without adequate resources, they struggle to meet demand. Budapest operates shelters and temporary accommodations, and districts run a few services (which are compulsory to be run because of their population size), but the scale of need far exceeds available capacity.

The two neighbourhoods under investigation (Magdolna and Kelenföld) have been hit by these issues too - at the same time they represent two extremes of housing market and population dynamics (stagnation and growth), and the policy responses by their respective district municipalities also differ. Therefore, they are useful to explore quite different challenges in the capital city landscape.

District 11 is located in the Buda side, in the south-western gate of the city. The district is characterized by traditional inner city neighbourhoods shaped in the beginning of the XX. century, large housing estates (as Kelenföld), highly ranked family house areas and rapidly transforming former industrial sites along the Duna river. **The district has a high prestige in the housing market of the city** and the district municipality has a relatively bigger room of financial manoeuvre compared to many other districts of Budapest due to its income from business tax. **On the contrary, district 8, where Magdolna quarter is located, has been stigmatized for centuries housing the poorest layer of inhabitants** (many of them of Roma origin). In the last two decades, however this image has significantly changed due to large-scale urban interventions and the general restructuring of the housing market in Budapest, that revalued the inner parts of the city.

[112] https://eltinga.hu/wp-content/uploads/2024/07/BLR_ujlakas_2024q2.pdf

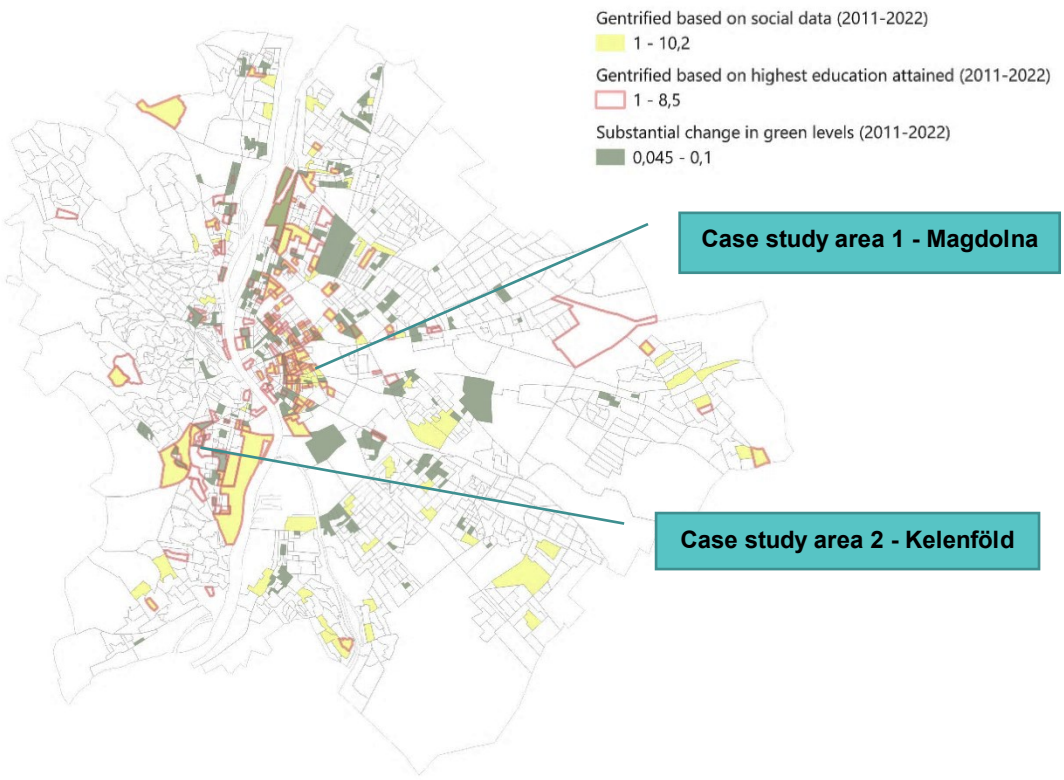


Figure 25.The location of the two case study areas embedded into a gentrification and green context[113]

4.1.2 Green Transition Interventions in Budapest: Magdolna quarter and Kelenföld housing estate

Magdolna quarter

The Magdolna Quarter is part of Budapest's 8th district, located in the city's outer inner-city area. From a strategic planning perspective, the district is divided into 11 sub-areas, of which the Magdolna Quarter represents the least favourable social and physical conditions. The quarter is characterized by a closed-block urban fabric with enclosed courtyards and locates numerous vacant plots and low-rise buildings; consequently, its building density is lower than

[113] The indexes are based on the difference of 2011 and 2022 Census data regarding certain social indicators complied into gentrification indexes. The change in green surfaces is generated from NDVA data.

that of the inner-city districts. At the district level, unemployment rates were highest in the Magdolna Quarter, reaching 16.5% in 2011, during the period of the global financial crisis.

Between 2005 and 2015, three waves of social urban rehabilitation programmes were implemented in the quarter. These programmes included interventions in both municipal and privately owned residential buildings—affecting several dozen properties—as well as improvements to public buildings and public spaces. In addition, 'soft' interventions were introduced with the aim of enhancing the social capacities of local residents. A fourth wave of rehabilitation was carried out between 2018 and 2023 and covered three urban blocks inside the Magdolna Quarter and the neighbouring Orczy Quarter. This programme focused on the comprehensive reconstruction of two municipal buildings, small-scale technical improvements in approximately 300 municipal flats, the creation of green courtyards in ten municipal buildings, and the strengthening of communication between municipal tenants and municipal departments.

The regeneration programme in the Magdolna Quarter including all green elements (retrofitting, nature-based interventions and new buildings in empty plots) provides an instructive case for examining the effects of green policies on housing inequalities. The area combines a historically low socio-economic status with a latent potential for gentrification, while the interventions implemented over the past 25 years offer a sufficiently long timeframe to assess measurable outcomes in both environmental and housing-related dimensions.

Kelenföld

Budapest' 11th district, and within it the Kelenföld housing estate, has profited from inwards migration of younger households, and large private investments, given that it is the western gate of the capital city, with large so-far underutilised areas (including brownfields). The dynamics of the processes fuelled house price increase, the district being one the most growingly priced areas of the capital city over the last 20 years**. Besides the general trends in the housing market of Budapest, Kelenföld profited from specific additional investments**; majority of the large building blocks were substantially renovated, the tramline number 1 was extended to reach the area directly from the Pest side, so was the Metro line number 4 constructed to provide fast access to the city centre. In addition, a new shopping mall was built in the western border of the housing estate. These investments, together with the green interventions in public spaces made this originally favourable location even more preferred.

From the point of view of the research in ReHousIn this housing estate was chosen to collect evidence on the impacts of energy efficient retrofits of the privately-owned panel buildings, that started already in the 2000s based on a generous state subsidy programme. The area provides us the possibility to record the perceptions of local stakeholders on how relevant these renovation interventions are in light of the general housing market trends in Budapest.

	Magdolna quarter	Kelenföld housing estate
Neighbour-hood	The area is the most segregated one in District 8 with the least favourable social parameters.	Kelenföld is a neighbourhood of app 7 km², in the south-central part of District 11, with a population of about 50 000 people.

characteristics	The quarter has a high proportion of low-quality and one-room flats, which, after significant improvements, still exceeds 50%. In addition to the higher apartment buildings that almost dominate along the main roads, there are many smaller houses on side streets, up to 150 years old, as well as workshops and a large number of small vacant lots.	The area comprises a large share of prefabricated housing constructed between 1965 and 1983, and is very well connected with public transportation, and has a number of green parks, commercial sites, and is also well served with public services.
Duration	2005-2015 (2024)	2001-2025 (with intense phase until 2009, then individual projects afterwards), the municipality launched its local program back in 1998
Funding	The first phase of the rehabilitation was supported by the Municipality of Budapest, for the upcoming phases the main funding came from EU structural funds. Both were coupled by district municipality funds. Private interventions in new builds were also accomplished.	The first phase was based on ⅓-⅓-⅓ financing shared between the state, the district municipality and the individual home-owners, where this latter ⅓ share could be covered from a preferential loan and a Housing Savings scheme. Currently the municipality provides small scale grants and national preferential loan to condominiums is still available.
Actor constellation	The main stakeholder is the district municipality and its satellite organisations. Civil activities are weak, however stronger than in any other parts of Budapest.	Initially, the condominiums (owners), the municipality and the state were equally important stakeholders in building renovation, more recently, condominiums remain the major actors. For green spaces Budapest municipality and district municipality are responsible.
Aims and objectives	The ultimate aim in the 2000s was to stop further social and physical deterioration by the implementation of social rehabilitation measures	The goal has been to improve energy efficiency of the prefab buildings through insulation, change of mechanical system and doors and windows. It was coupled by green investments in public spaces by the local municipality.
Specific physical measures	28 municipal buildings and 16 condominiums were mostly partially renovated. Reduced traffic was introduced with the regreening of some small streets, creation of community gardens and the multiple reconstruction of the main green square of the area (Mátyás square)	App. three quarters of the buildings were renovated in the course of the past 25 years, the renewal of the main park (Bikás park) was accomplished and the public green spaces between housing blocks were renovated as well
Accompanying housing policy/ regulatory measures	The physical interventions were accompanied by soft measures, like the establishment of a new community centre, employment and social programmes as well us drug and violence prevention programmes	The local regulations for green infrastructure have been fostering an increasing share of green.
Key social tensions or/and benefits between greening and housing	The environmental and somewhat the housing quality has improved without major deficits in accessibility and affordability. New inhabitants came by the new constructions but the former inhabitants did not leave the area. Gentrification did not start (yet).	Housing renovation and green developments contributed to the organic value increase of the area that was also fostered by infrastructure developments.

Table 6.Key data on the two case study areas in Budapest

4.1.3 Methods

The present case study report is based on a mixed-methods research design. Background information, including contextual data, was collected through desk research encompassing academic literature and local planning documents, while stakeholders' perceptions were explored through a series of semi-structured interviews.

In total, 14 interviews were conducted in Budapest between May and December 2025, involving 15 participants across two study areas: Kelenföld (8 participants) and the Magdolna Quarter (7 participants) (see Appendix 1). The interviewees were selected to reflect the diversity of local stakeholders as well as different phases of the interventions; for example, experts with professional experience dating back 20–25 years were also included. Given that the tradition of establishing and maintaining civic movements is relatively weak in Hungary, representatives of residential communities were primarily included among the interviewees.

In Hungary, residential building communities are predominantly organized as condominiums, with housing cooperatives operating in a similar manner. Consequently, housing managers—who possess in-depth knowledge of the technical, financial, and social processes within residential buildings—were interviewed. In Kelenföld, half of the interviews were conducted with housing managers, reflecting the research focus on energy-efficient retrofitting of the residential building stock. In contrast, interventions in the Magdolna Quarter were more complex; therefore, the distribution of interviewees was more balanced among municipal actors, civil society representatives, and housing managers. Interviewees were selected based on their expertise, and a snowball method was additionally applied to identify actors who could provide complementary perspectives.

Both projects examined in this study have long timeframes, having commenced in the early 2000s. As a result, it was not feasible to capture all narrative shifts or the perspectives of the numerous actors involved through only 14 interviews. Instead, the research focused on stakeholders with sustained and comprehensive involvement in the projects, enabling the representation of a broad range of perceptions as well as their evolution over time.

Most interviews were conducted in person and were complemented by site visits and in-field observations. Interviewees received explanations on how their personal data would be handled and approval was gained for quotations and audio-recordings. The approval was audio-recorded as well. The recordings were transcribed using Alrite software and subsequently reviewed and corrected by a native speaker. The coding process followed the guidelines developed by UAB and was based on interview transcripts imported into MAXQDA software.

4.1.4 Stakeholders' Perceptions of Green Initiatives in Case Study Areas: Magdolna quarter

4.1.4.1 Precedents and implementation

The rehabilitation programme in the Magdolna Quarter was initiated in the early 2000s. As municipal experts expressed, the quarter had a strategic position in the development of the district. The municipality had to take into account two key starting conditions: the limited financial capacity of the public sector and the strong stigma associated with Budapest's 8th district as a whole. As emphasized by local municipal experts, a strategic decision was made to follow two distinct redevelopment approaches within the district. The Corvin Quarter, which occupies a more favourable urban position within Budapest, was designated for comprehensive redevelopment through demolition and new construction, largely financed by private investment. In contrast**, the Magdolna Quarter—characterized by a less advantageous location—was primarily planned to be protected from large-scale reconstruction, while efforts focused on improving residents' quality of life**.

The redevelopment of the Corvin Quarter aimed to enhance the overall image of the district and achieved this objective, albeit at the cost of substantial gentrification. By contrast, the Magdolna Quarter was consciously protected from such transformative pressures. The original rehabilitation concept for Magdolna was implemented as planned and came to be widely acknowledged and shared by both municipal and civil society actors as a common framework.

As municipal experts expressed, the initial phases of rehabilitation concentrated on municipally owned properties, with the explicit aim of establishing direct personal contact with as many tenants as possible. At the outset of the programme, the municipality lacked both the financial resources and the political commitment to engage with privately owned condominiums, despite the fact that 88% of housing units in the district were privately owned (Census 2022). Condominiums were incorporated into the rehabilitation process only later, when the availability of European Union funding both enabled and required their inclusion.

Between 2005 and the present, several changes occurred in the district's political leadership—from liberal governance to right-wing leadership in late 2009, and subsequently to left-wing leadership in 2019—which resulted in changes among the implementing actors. Nevertheless, municipal experts consistently emphasized the persistence of a shared principle: interventions in municipal rental buildings—entirely occupied by municipal tenants—should remain relatively small in scale, but should affect as many buildings as possible in order to ensure broadly distributed improvements in housing quality. Accordingly, most interventions focused on essential structural upgrades, such as roof and pipe replacements, as well as the installation of individual bathrooms and toilets. Energy-efficiency measures were treated as secondary priorities and were limited mainly to window replacements and the insulation of selected building elements, such as firewalls.

Renovations carried out in condominiums within the framework of the Magdolna Programme were similarly partial in nature. As housing managers noted, **during the late 2000s and mid-**

2010s energy efficiency was not yet considered a major policy concern. Moreover, the age and condition of these buildings necessitated other urgent forms of intervention. Early political priorities focused on the 'beautification' of the building stock through façade renovations, alongside the remediation of major structural deficiencies, including roofs, pipes, chimneys, and hanging corridors.

> "Yes, at the beginning there was an SZDSZ (liberal) city administration, and several investments were made there that improved the quality of life for residents, and then with the Fidesz (right-wing) city administration, the city's landscape, yes, the landscape, that's the best word. So, along the line of bus 99, they renovated 30 facades with that money. And no interior renovations were carried out during that wave; the concept was to make it look better from the outside." - representative of an NGO

In the final phase of the rehabilitation programme—which also included the neighbouring Orczy Quarter—the insulation of two residential buildings and the replacement of windows in 180 flats were completed. In this phase, the primary objective was to achieve measurable improvements in energy efficiency. As municipal interviewees indicated, this shift in renovation priorities was driven less by local strategic considerations than by the requirements linked to European Union funding calls in the late 2010s.

In addition, two municipal rental buildings were constructed in the 2000s following the energy requirements of that time, to accommodate tenants relocated from the Corvin area.

With regard to green investments, the main public space of the Magdolna Quarter, Mátyás Square, underwent renovation in two major phases. This was complemented by several smaller-scale interventions, including the establishment of two community gardens on Czinka Panna Street and Magdolna Street (initiated by the local government). Similar to the approach adopted in housing renewal, the emphasis was placed on small-scale improvements rather than large-scale transformations, aiming to create a network of small green spaces, including the temporary use of vacant plots.

As the Magdolna Programme was conceived as a social urban rehabilitation initiative, it incorporated extensive social interventions alongside physical improvements. Particular emphasis was placed on community development, employment support, and public safety programmes. The rehabilitation process began with the establishment of a community centre, which remains in operation today. Although its mode of operation has varied across different political periods, the centre has consistently been highly valued by local residents and their representatives.

4.1.4.2 Participation and governance (procedural)

The rehabilitation programme was implemented and managed by the municipal rehabilitation company RÉV8. While formal decision-making authority belonged to the district municipality,

the preparation and technical elaboration of decisions were carried out by RÉV8. From the outset, the programme was based on the principle of deep involvement of municipal tenants; however, according to local implementers, this proved challenging in practice. Both municipal actors and non-governmental organisations emphasized that public participation processes tended to mobilize middle-class groups more effectively, whereas engagement with vulnerable populations requires specific skills and tailored methods, which were not applied in all cases. Discussions surrounding the creation of improved green spaces within residential buildings—most of which include internal courtyards—served as one means of activating residents and fostering a shared understanding of collective goals.

At the start of the programme, a new civil organisation, KÖZÖD, was established to represent the interests of municipal tenants. Such a formalized representation of vulnerable groups is relatively uncommon in Hungarian urban development processes. The organisation functioned primarily as a watchdog overseeing the activities of the rehabilitation programme, although during certain phases it also became part of the implementation coalition. Cooperation between the civil organisation and the municipality was generally assessed as beneficial by both parties, albeit not without tensions during implementation. As their representative expressed, and was also noted by a municipal expert, one notable outcome of KÖZÖD's activities was its support for municipal tenants in identifying the causes of a sharp increase in gas bills in a newly constructed municipal rental building; after several years of investigation, the extra costs were paid back to the tenants.

Interviewees' perceptions varied with regard to participation in the planning and creation of green spaces. While RÉV8, as the main implementer of green space interventions, placed strong emphasis on involving residents living near the targeted sites, other interviewees from the municipal and civil sectors highlighted the insufficient inclusion of highly vulnerable groups who also use public spaces, such as homeless people or individuals with drug addiction problems. As a result, tensions between long-term residents and the most vulnerable users of public spaces persisted over an extended period.

4.1.4.3 (In)equity (distributional)

As noted earlier, the founding concept of the Magdolna Quarter rehabilitation was to retain the area's original residents—including vulnerable groups—while simultaneously attracting new inhabitants through new construction activities. These efforts by the municipality were also acknowledged by civil society organisations. Social organisations were strongly involved from the outset of the programme, with the overarching aim of improving housing conditions and public spaces for all residents. Accordingly, rather than undertaking comprehensive renovations of a limited number of buildings, the programme prioritised smaller-scale interventions distributed across several dozen properties.

> "I think the technical arguments would have been in favor of moving everyone out of the entire apartment building and then renovating it from the basement to the attic, but the principles of fairness are against this." - municipal civil servant

Still, with the intention of just distribution of efforts, there were social groups and renovation issues that were not properly handled according to some interviewees:

- The focus of the programme shifted across different political periods. In both the initial and the final phases of the rehabilitation process, municipal efforts were primarily directed at municipal buildings and tenants. Despite the fact that private condominium owners in the area are nearly as socioeconomically vulnerable as tenants, and that the technical condition of these buildings is often comparable to fully municipally owned tenement buildings, **insufficient funding and attention were allocated to private properties.** This limitation was acknowledged by all stakeholders but was particularly criticised by housing managers. In the 2010s, however, the focus expanded to include private condominium buildings that were able to access European and municipal funding to a greater extent.
- The district is heavily 'loaded' with social institutions, including approximately ten homeless shelters. Homeless individuals are a visible and enduring part of everyday life in the area, and their presence poses challenges for local management. Drug use and addiction in public spaces is also a significant concern, which is inadequately addressed due to a shortage of police personnel; policing services are centralised by the national government, leaving local authorities with limited capacity to intervene. These issues were raised by all interviewees, regardless of their social profile.
- **Energy efficiency was not a primary focus of the rehabilitation interventions**. This was partly due to the more urgent structural deficiencies of the buildings and partly because energy poverty is relatively less severe, given the small flat sizes and thick walls characteristic of these older structures. Nevertheless, the most serious issues—such as damp walls caused by inadequate waterproofing and deteriorating pipes—could not be fully remedied in all cases and remain persistent problems.
- As part of the project, traffic management measures were introduced, including the pedestrianisation of certain streets and reductions of speed in others. These interventions led to decreased traffic in smaller streets but, conversely, increased traffic on major ones.

4.1.4.4 Political mobilization

The role of civil movements and organisations in Hungary is relatively limited, reflecting the country's weak tradition of bottom-up advocacy for local interests. **Nevertheless, a civil organisation (KÖZÖD) was established to represent the interests of municipal tenants and, with the support of the Lutheran Church**, continues to participate in negotiations between vulnerable groups and the municipality.

In the 2000s, the District 8 municipality sought to engage intensively with local residents through its urban regeneration company, RÉV8. Since 2019, under left-wing district leadership, the municipality has established a public participation department responsible for implementing extensive participatory processes. In autumn 2025, the municipality also created a dedicated office, LAKÓTÉR, staffed with social workers tasked with daily engagement with

municipal tenants. The intensity of these social participation initiatives is unusual in Hungary, and the civil interviewees acknowledged the district municipality's exceptional performance in this regard. However, civil organisations question whether the forms of mediation and communication institutionalised within the municipal structure are sufficiently independent to represent the interests of vulnerable groups against public and private actors.

> "So, we have community organizer statuses, which we use to organize the tenant community, and this is a kind of interest group. And then they also created Lakótér, and then there were community organizers employed as well, so they discussed things among themselves." – NGO representative

Thanks to ongoing communication and participatory planning processes, as well as the gradual pace of changes in the area, **there have been no major expressions of public disinterest over the past 20 years**, with one notable exception: the proposal to establish a drug addiction centre in the heart of the quarter, at Mátyás Square, as part of the rehabilitation programme. Local residents expressed concern that the centre could lead to an increase in the number of drug users and related crime. In the end, however, the centre did not generate significant conflict and was eventually accepted. One interviewee noted however, that only right-wing local politicians succeeded in maintaining support in the local elections in the area during this episode.

The local civil organisation representing municipal tenants had its most significant impact by investigating a sharp increase in gas bills in a newly constructed municipal tenement building. After resolving the issue with the utility company, tenants received reimbursement for the overcharged amounts as was noted both by the local civil representative and the municipal expert.

4.1.4.5 Socio-ecological impacts/benefits (positive)

The rehabilitation process in the Magdolna Quarter was implemented over a period of 20 years, yet its outcomes remain limited both regarding physical changes and social changes. This fact can be interpreted both positively and negatively. The slow pace and modest results prevented large-scale gentrification but also constrained the overall positive impact on the area. All interviewees agreed that the quality of public spaces has improved, with the creation of more green areas serving diverse functions, as well as improvements to several municipal residential buildings and the physical condition of some condominium properties.

Only a few municipal buildings were demolished and replaced with new constructions, and all tenants were guaranteed the right to a new rental home. There were no forced displacements from the area, except for one group of tenants who occupied apartments without formal title. These individuals were either granted official rental contracts or received compensation to relocate.

The quality of municipal residential buildings that were part of the programme has generally improved, with the most severe physical deficiencies addressed—ensuring modest improvements for all rather than high-quality upgrades for a select few. Municipal actors emphasised that a primary goal was to reduce utility costs for municipal tenants. In all tenement buildings that underwent renovation, the greening of common courtyards was carried out in consultation with residents. These green spaces continue to be maintained by the inhabitants themselves as was emphasized by the municipal experts.

According to all interviewees, the original social structure of the quarter has largely been preserved: long-term residents remain in the area, and community networks have persisted. These community networks are conceived useful, as a local inhabitant expressed, while conceived also negative by others, with the potential to remain criminal activities.

> "These are still the same Roma families sitting in Mátyás square"... "The old communities remained in their original forms" - representative of an NGO
>
> "The people remained the same. There are families in each building that are hard to handle. The community is relieved if some of them go to jail." - a housing manager

Newcomers are present, primarily in newly constructed blocks, but their arrival has not been opposed by the original inhabitants.

New, locally 'fancy' places were formulated around the main square of the area (Mátyás square). With the new pedestrian streets new cafes and bakeries opened that serve mostly the newcomers that have mostly higher social status. As was mentioned by one of the municipal experts, the benefit of Mátyás square is that it has a strong social life.

The new community centre in the heart of the area provides social and cultural services from the start of the project for vulnerable inhabitants but also for middle-class residents. NGOs believe that occasionally it manages to create direct links between inhabitants with different social status.

> "… that there is a gallery there, that they bring in the Fidó [the municipal participation office], thus connecting the district a little bit, linking the very poor part of the neighbourhood with people of very high social status." – a Roma representative

4.1.4.6 Socio-ecological impacts/harms (negative)

As was mentioned before, all interviewees emphasized that gentrification remained moderate in the area as there were no significant demolitions and the old communities remained. However, several small plots were sold for developers and new blocks appeared with new residents. **Most of the interviewees consider that the quarter is currently at the turning point: the newcomers came on top of the original residents without breaking the social structures, but it may change in the future** as the whole area is about to be revalued in the

real estate map of Budapest - mostly due to the lack of affordable places in other parts of the city.

> "Gentrification is an integral part of urban development, and even if it happens it should not prevent the public actors from providing increased services for the ones living there." - urban development expert of the local rehabilitation company

Technical deficiencies were observed in the renovation processes. For example, in earlier interventions, windows were replaced along with their wooden frames. However, in the most recent programmes between 2018 and 2024—which also included the neighbouring Orczy Quarter—180 windows were replaced with plastic-framed units. In the absence of proper ventilation and with unresolved water retention issues, this change caused severe mould problems in the apartments. Technical experts emphasised that 'blind' energy efficiency interventions, undertaken without corresponding structural improvements, can cause more harm than benefit.

> "So, if I may say so, I don't think we should emphasize such a green idea on its own, because then the consequence will be that they will actually come up with the idea of replacing windows, and replacing windows on its own doesn't help much…… Especially in these old houses and small houses, window replacement should only be done if you also modify the heating and ventilation system." – municipal development expert

Regarding housing affordability, including rents and utility costs, conditions generally improved as a result of the renovations. **Utility costs mostly decreased while municipal rents remained stable,** as the municipality covered major structural works while tenants made internal improvements; thus, tenants did not incur higher rents for increased comfort. Some negative cases were noted, however. These included the building with increased gas bills due to administrative deficiencies and apartments converted to electric heating, primarily via air conditioners. While electricity prices in Hungary are relatively low below a certain consumption threshold, costs rise sharply above this level, making electricity-based heating expensive unless highly efficient systems are used. Affordability pressures became more visible in 2025, when, after 13 years, municipal rents increased by an average of 33%. The increase affected units differently, with those that had already undergone significant renovation experiencing the full 33% rise. **Nevertheless, rents remain highly affordable, averaging only 12–15% of market rates.**

The situation of private tenants is largely unknown. None of the interviewees had a clear understanding of the effects of renovation in the private rental sector. While private rentals constitute a significant and reportedly growing share of the housing stock, precise figures are unavailable due to the prevalence of informal rental arrangements. Typical tenants are either students, young professionals, or vulnerable families who cannot access housing elsewhere in the city (for example, due to Roma origin). Market rents range from approximately €7–10 per square metre, which is only affordable for vulnerable families if the apartments are small. There are no national or local regulations on the possible rent increase in case renovation is

implemented in the private rental sector. In most cases, the costs of renovations—particularly when incorporated into common fees—are passed on to private tenants, according to housing managers. Managers also observe that some tenants, however, refuse to pay fees associated with increases in the property's value, which remain with the owners. **In the absence of clear legal guidance, the allocation of renovation costs between landlords and tenants in the private market remains a matter of negotiation and power dynamics.**

Housing managers, who have an overview of both the renovation processes and the financial capacity of property owners, reported that the **works generally do not create payment difficulties.** This is partly because most renovation works involve limited technical interventions to avoid high upfront costs, and partly because housing communities structure financial obligations in a manner acceptable to the majority of owners. Legally, decisions require the approval of 50% of owners present at a General Assembly, providing a mechanism to ensure affordability and consensus.

> "The ones who are in arrears for the building operational fees are the ones who may be in arrears with the renovation fees. The renovation cost itself does not generate extra arrears. The municipality provides allowance and some tricky people really get use of it, even we see them using new cars…" - a housing manager

The positive side of the narrative is that renovation works hardly generate renoviction and affordability problems. The negative side of the narrative is that the technical interventions are limited except substantial subsidies can be achieved. As property managers expressed, most of the old buildings in the neighbourhood follow a cautious staged renovation process, concentrating on the most essential next steps. It covers the pipes, the roof, the hanging corridors and chimneys, but energy efficiency is hardly included.

> "Insulation of the buildings will never pay off. We have thick walls and the savings are negligible. Insulating the roof would have an effect only on people living on the top floor, but this is not convincing enough for the whole community" - a housing manager

Some elements of energy efficiency based retrofits, however, are considered a much more urgent topic these days than they were 10 years ago. It is still not about insulation or installation of renewables, as it is considered unrealistic by the housing managers in current times, and less prioritized in these buildings, but electrification became a high priority. Partly due to the European obligations from 2015 (following the Directive 2009/125/EC on space heaters) that in case a traditional gas heater has to be replaced, only condensational gas boilers can be installed, which is a costly intervention taking into account the needs for chimney lining. In order to avoid that, people install heating/cooling air conditioners that require additional electricity that the wiring neither inside the flats nor outside the buildings can handle. In case the demand for additional electricity occurs from several buildings, the grids on the streets may also be overloaded. Currently the collapse of the electricity system in the buildings is an everyday phenomena and housing managers (but also the local municipality that operates

municipal buildings having the same problems) miss the forward-looking national concepts and financial sources to handle this problem.

4.1.4.7 Tensions and power dynamics between stakeholders/actors

A complex renovation process is often marked by ongoing conflicts among various stakeholders within the public sphere, between public and private actors, and between public actors and local residents. **Political interests of local politicians and the professional priorities of municipal experts and civil servants frequently diverge**. Even during periods of liberal and left-wing district leadership (prior to 2009 and after 2019), experts from the local rehabilitation company, RÉV8, reported applying tricks to convince politicians of the political advantages of the rehabilitation process.

The project was prepared for funding and implementation in the 2000s and EU funds were already awarded. Consequently, politicians during the subsequent right-wing administration (under the FIDESZ party) were constrained by path dependency and largely continued to implement the social rehabilitation concept. **Nevertheless, most interviewees regarded this period as a setback in terms of the project's social objectives.** While façades of dozens of municipal buildings along main roads were renovated, their engineering structures were not addressed. The programming of the community centre was restricted with regard to social activities. New 'civil' organisations were established that focused on urban beautification but opposed social development initiatives, such as playgrounds and community gardens. At the same time, the urban rehabilitation company was nearly closed. The strong social character of the rehabilitation process was softened so did the general management approach of the municipal building stock.

> "We sold a lot of tenement buildings and FIDESZ (right-wing party) did so, but we sold them to finance the renovation of the others, while they sold it to clear the poor.„ - current municipal expert

On the other hand housing managers argue that condominium buildings were much more supported at the time of the right-wing local government as funds were mostly dedicated to them, instead of strong social measures. And the administrative procedures were much less complicated than these days, when the municipality provides much lower funds but with much more hustle.

> "We have negative experiences with the municipality. We submitted an application for subsidies in the Magdolna programme, but the process was not transparent. We were rejected but did not know why. We had to wait a year for nothing!" - a housing manager

There were - and are still - debates about the building renovation concept of the municipality. Some technical experts consider it useless to partially renovate the old (100-150 years old) buildings and conserve the unsustainable conditions - like small flats without proper sunshine.

While other municipal actors think that everyone deserves a somewhat better quality flat and due to the lack of resources this is the maximum the municipality can provide.

The interviewees mentioned several conflicting points between the municipality and the inhabitants (or their organisation) even if both parties acknowledge the other. Still, the municipality complains (and the NGOs are also aware) that the communication with the inhabitants is a very complicated task, and the involvement is hard.

> "There are much tougher communities nowadays than there were in the 2000s. We would not be able to make the renovation again this way. …. The green areas are not sustained by the inhabitants anymore. They rather come to the municipality to complain." - a representative of the renovation company

On the other hand, the NGOs would require a higher level of transparency and lower level of administration. They could imagine a more direct involvement of the inhabitants into the renovation works, as many of them are working in the construction sector. Still, as the municipality lacks the human resources for quality control but has to take the responsibility for the results of the renovation works, the active involvement of residents is limited.

4.1.4.8 Innovative governance mechanisms

One of the keys to avoid harsh housing inequality consequences of retrofitting **turned out to be the significant subsidy provided either by the state (EU) or the local government**. Housing managers emphasize that as long as the subsidy content is substantial (at least 50%), the remaining co-funding can be provided by the owners, even the vulnerable ones. In the absence of subsidies, the renovation process terminates as the inhabitants are not able to finance even the maintenance works.

The key to avoid gentrification seems to be the step-by-step approach through which the changes happen at a slower pace and the inhabitants are able to adapt to it. According to some interviewees the pace is so slow that it is nearly invisible compared to the needs, but all interviews acknowledge that the area (mostly the public spaces and the crime situation) has been improved and cannot be compared to the 1990s.

> "The green investments in Népszínház street were limited in order to avoid sharp price increase there. Even if you plant trees, it is a big step ahead, and you can not do less than that." - a representative of the renovation company

The step-by-step approach was also reflected in the renovation works in the tenement buildings: the main systems were renovated and rebuilt like water, sewer and electricity and the inhabitants had the possibility to connect to it at their own pace with the help of the municipality.

Strong social assistance was considered a major tool to avoid unintended social consequences. The families were prepared for the changes and in case movement was

necessary they were strongly assisted. This feature was valued by the local NGOs, labeling the local renovation concept much more socially sensitive than anywhere else in the city.

The renovation process was considered a constant learning curve in which values had to be adjusted to possibilities. As a current municipal expert expressed, by now the real estate management is based on a more holistic approach: it is precisely written down in the local real estate management plan which buildings will be renovated, demolished and plots to be sold (with the obligation of construction to avoid speculation).

4.1.4.9 Tourism and market pressures

The market pressure in Magdolna is perceived much less than in other quarters of District 8. There may be two major reasons behind: 1) the less favourable location of the area inside the district - a bit further away from the main transportation lines and the downtown of Budapest, and 2) smaller size of empty plots due to the original layout of the buildings, that provide less perspectives for developers.

> "There were six empty plots. In case we propose to demolish the big building standing in the middle, then the whole area would have been sold." - expert of the local rehabilitation company

There were occasional private developments in the area (besides the few new municipal residential buildings) but these can rather be considered as pilots. It is not yet proved by the market that it is worth investing into the area. E.g. as a municipal expert noted, in Dobozi street the municipality was not able to sell a plot due to the lack of demand. However, this may change in the future. New inhabitants coming to the area (not only to new buildings) mention that as real estate prices all over Budapest increased sharply, district 8 and primarily Magdolna quarter is the one that is somewhat affordable. Which generates growing demand for the area. In addition, new public developments are foreseen in the quarter neighbouring Magdolna (Orczy quarter). New university buildings are foreseen, that will most probably have an impact in the whole neighbourhood. Students already like the area and their presence is expected to increase in the future. (There is already a new dormitory under construction in the heart of Magdolna, at Mátyás square.)

All interviewees, who formulated an opinion on the real estate market expressed that the coming years may represent a turning point in the trends as Magdolna may become more popular. It means that the municipality may have to make extra efforts to keep at least part of the residents mostly through the municipal tenement buildings.

4.1.4.10 Gaps in perceptions between civic groups and public agencies

The rehabilitation of the Magdolna quarter seems to be the rare case where the gaps in perceptions are less between the public agencies (of the 2000s and the current) and the civic groups but between certain groups of inhabitants and the public and civic organisations. The major issue is what the desired social composition of the area should look like. While public

authorities (in the liberal and left-wing times) and civil actors (like KÖZÖD resident organisation or Roma representatives) prefer working for the vulnerable inhabitants and try to preserve the social composition as much as possible, middle-class citizens are rather in favour of the social changes. The right-wing local government in the 2010s supported those social groups that were more affluent and had higher social capacities. The debates are still about the values of the middle-class and the needs of vulnerable people and the environment. A hot topic in this regard is the reduction of parking spaces by the current left-wing government, the increase in parking prices for the inhabitants and the reduction of traffic in certain smaller streets. These interventions (together with services for drug addicts or homeless people) are welcomed by left-wing politicians and NGOs but highly criticized by many local residents.

> "Because right now it's impossible to get around, since nothing has really been cleared away. The fact is that it's even harder now, but you'd expect there to be more public space supervisors, trying to sort out the issues related to the homeless a little better. There should be more police officers in the district. We have problems with drug addicts in this regard." - a housing manager

From these it becomes obvious that the desired way of rehabilitation is far not objective, but a matter of values and political approaches.

4.1.5 Stakeholders' Perceptions of Green Initiatives in Case Study Areas: Kelenföld housing estate

4.1.5.1 Precedents and implementation

As reported by the interviewees, Kelenföld's energy sufficiency interventions started around 2000, when the neighbourhood - dominated by prefabricated houses, accommodating over 50,000 people - witnessed the first upgrading programs. **The interventions intensified around 2005, and covered - until today - app. two thirds of the stock of the neighbourhood**. These programs often utilized a tripartite funding model involving the state, the municipality, and the residents, as seen with the Etele 73 building, the first large multi-entrance building to participate in 2006.

Pressure to launch any energy efficiency interventions came from a number of components according to the housing managers; it comprised environmental protection (through less energy consumption), more economic/affordable heating and a reduction in housing costs in general. Moreover, improved livability of the neighbourhood through the improved aesthetics of the buildings was also expected. Historically, the funds allocated by the municipality were primarily targeting interventions that tackled life-threatening situations (e.g. issues with chimneys and roofs, or gas and electricity networks), but when the national prefab-refurbishment program was established in 2001 (the one that provided 1/3 of the costs by the state in case the local municipality provides another 1/3), the district consciously took a pioneer role in its implementation. Thus, while early initiatives of the municipality, like the 1998 residential renovation tender, focused on urgent priorities such as gas and chimney safety, the

district eventually became a leader in the field - which was a conscious political decision by the local government as reported by a number of interviewees – both municipal actors and housing managers. Political interest in times of pre-elections are even today described as especially relevant in boosting support for owners/condominium associations to address energy efficiency and to challenge environmental issues, e.g. with small scale nature-based solutions.

> „Actually, we push it a little bit before every election year, but in general, if I take it down to a five-year cycle, it's pretty much constant.“ – municipal civil servant

When the first investments were accomplished (in 2006), a sort of snow-ball effect facilitated increased participation of the condominiums in the programs on the go, and word of mouth among the residents contributed to a growing interest in participating in the schemes.

Condominium managers also perceived that generally increasing energy consumption levels were a great source of pressure for getting engaged in refurbishment interventions: investments into building engineering technology grew as the general demand for more climate resilient solutions (e.g. air condoning to tackle very high temperatures in summer, and dilapidation of old wooden doors and windows that caused loss of heat especially in cold winter days) grew, also by the expectation that refurbished housing and neighbourhood appearance would sell better on the market.

At the same time, the initial high levels of state co-funding vanished after 2009 due to the financial crisis, and the local municipality's added resources were very limited. Still, by that time, while the housing market itself seemed to reposition the neighbourhood, more and more condominiums engaged in (visible) refurbishment processes, which caused a kind of tipping: as reported by condominium managers and the (former) chief architect, the general expectations toward valorising the invested (and still broadly affordable) investments in the price of housing, created even more pressure to launch retrofits in large prefabs that were lagging behind. **As claimed by condominium managers, property value increases are a primary driver for retrofits** (for comparison, a modernised prefab in District 11 can reach prices of up to 2 million HUF - € 5,000 - per square meter, and Kelenföld housing prices have been following this trend) . Residents often value the aesthetic improvement and increased comfort more than the actual energy savings, which are sometimes seen as negligible due to the utility price cap (rezsicsökkentés) policies since 2013.

> "So I don't think savings are the point. Because they calculate that, I don't know, in 20 years this will pay for itself in heating or whatever, so you shouldn't count on that. What you should count on is that I live in a beautiful house … So I think that with these panels, savings are not the main issue, in my opinion." – housing manager

Private construction and management companies became also more active in generating retrofit packages, and condominium managers acted as brokers to make these interventions work. In addition, the municipality itself launched investments into public spaces, which, due to the multi-tear governance system, is largely limited to investments around the prefab housing estates' green areas (as this is in district municipal ownership and hence under municipal control).

The greening interventions in public areas launched by the municipality are limited - e.g. simply to the fact that the municipality controls only a fraction of the surface in the district, e.g. one larger park in the center of Kelenföld, and otherwise the green areas in the large housing estates. **Still, the municipality sees its role as a 'pioneer', to show how small-scale transformations of the built environment can contribute to climate aware design**:

> „They have come to the fore. Yes. It may not have been 8 years, but I would say that it is in the last 5-6 years that these nature-based solutions have really come to the fore, both in stormwater treatment and in the establishment of biologically active surfaces in general, or I don't know what the right word is for this, that the surface exists, but that we make it better so that it still works." – municipality/green area management department

District 11 focuses on 'nature-based' solutions through programs like 'Betonból zöld' (From Concrete to Green), which identifies and removes redundant paved surfaces in housing estates to restore biological activity. These efforts aim to replace asphalt with green islands that can absorb water and improve the local microclimate. While these projects are often small-scale (200–300 square meters), they collectively increase the district's green surface ratio. Although the 'Sponge City' (szivacsváros) concept is a key strategic goal according to the local green space development plan (2019), emphasizing the retention of rainwater for local cooling and irrigation rather than letting it run off into sewers, large-scale implementation by the municipality is still lacking. In terms of needs for further greening in large housing estates, we are witnessing now the outcomes of long-term tree growth in older estates like Kelenföld.

4.1.5.2 Participation and governance (procedural)

Based on the interview with a former municipal civil servant **the municipality was a key player in fostering the renovation works** not only due to the fact, that municipal co-financing and preliminary decision was an obligation in the 2000s, but also the municipality was eager to support the condominium managers through a number of channels to be prepared to mobilise the owners of the flats to come on board - regular info sessions, with high level and well informed speakers supported informing these stakeholders.

> „So that was ultimately part of the panel programme. We got so involved here that we invited different entrepreneurs to the general assemblies of condominiums, so we didn't direct them, we invited entrepreneurs, and that is the way, here's the track, you can choose from it. So they introduced themselves with references, and based on that, they knew whom to choose." - former chief architect

Due to the conditions set out in the condominium law, owners need to agree on any investments (with 50%+ votes of the owners being present in the condominium assembly), thus, it was and is vital to make sure that there is interest and understanding at the household level about the works, the potential benefits, and costs associated with the interventions (e.g. costs of the loans). Oftentimes, however, open discussions with owners are replaced by written voting mechanisms (e.g. also to ensure a broader representation of interests through more voters). The condominiums' organisational settings are decisive in planning and implementing retrofits - e.g. the controlling body (which is also an elected body, consisting of owners, and supervising the finances of the condominium) is often well trusted, so any ideas promoted by it would be also supported by the majority of owners with a higher probability.

In the case of greening interventions, where the municipality itself creates new/upgrades existing green space, participation and consultation in their design and implementation was perceived limited even by the municipal employees. In more recent years, a 'community budget' program was launched where neighbourhood level initiatives are also welcome. Whereas a locally committed green NGO perceives this as a "propaganda", it seems that in one of the yards in Kelenföld, where a particular (petanque) open space was created with the help of this fund back in 2019, neighbours got used to it, and it seems to mobilise elderly to go and have some recreation time while socializing, as it is stated by a municipal expert.

In case of densification issues there is a key bottleneck, emphasized by the former chief architect, to having a transparent framework for participation and governance, which is the system of 'National High Priority Investments', which essentially overwrites local rules, planning, strategies and hence local urban development, moreover it fully neglects civic will. This is a legislation by the state that selects certain urban development projects and elevates them from local spatial plans and zoning legislations. The district's current urban development strategy is defined by a tension between market-driven densification and municipal efforts to restrain it in order to reduce the density of new investments, protect green spaces and be able to provide proper services to the new residents. In 2022, the municipality imposed a 'building ban' (prohibition of changes) on over 50 properties in the eastern part of the district to stop rapid, uncontrolled intensification, but the government facilitated large scale residential and office constructions have overruled these efforts. Thus, in the district, a number of new investments - beyond Kelenföld - are characterized by such a framework, even ignoring the 2022 local rule on the 'prohibition of changes' in designated areas of the district. At the same time, in Kelenföld, the municipality applied some control on retrofit design through its chief architect's competence; even in cases where no public funds were allocated for the retrofits, the municipality could define e.g. the colour of the building facades. Moreover, once the municipality co-funds any of the interventions, there is a tighter control on both the condominiums and the contractors - e.g. condominiums are obliged to employ a technical inspector and need to correspond with the most current standards for energy retrofits.

However, there is a reported heterogeneity of responses to civic voice at the level of local decision making: while the slogan quoting that the district is full also contributed to the intention to halt further housing investments through the prohibition of changes, the NGO working for

voicing environmental concerns reported being cornered, and ignored by the municipality. **In terms of greening interventions, civic participation remains limited to individual concerns** (like no mowing of grass, dangerous trees).

> „I have been in the Újbuda [district 11] Media TV studio several times regarding the overbuilding of Újbuda, so several such reports have been made, and after an encouraging start, we have now been experiencing a downward spiral for more than a year, because this Újbuda is full, I think you have come across this slogan, at the time during the local government elections this was Imre László's [local mayor] slogan to the voters, that we want a Green Újbuda, and that we protect our environment. Now we are experiencing the exact opposite of this." - representative of local pro-environment NGO

Civil organizations like Védegylet emphasize that NBS must be part of a complex urban forest concept rather than just planting a few trees. They argue that current developments often lack a cohesive ecological strategy, focusing more on aesthetic "greenwashing" or propaganda.

4.1.5.3 (In)equity (distributional)

While retrofits and improvements to public areas are welcome across Kelenföld, the spill over effects are observed with criticism from the residents: e.g. once a public area, a recreational park or a playground is renovated or created, that would attract visitors and users from beyond the close neighbourhood, people would voice objection.

> "But people feel that no matter how many tens of thousands live in a housing estate, they are not really happy when outsiders come in." – municipal green policy expert

Similarly, the new shopping mall investment in Kelenföld serves primarily non-residents, while seems to weaken the neighbourhoods' central hub services' survival potential.

In the case of the energy efficiency retrofits, there are cases - and also the opposite cases - of tensions within the condominium or housing cooperative community, where those who are poorer or would benefit less than other residents objected the retrofit (e.g. the surface of the house that get insulated is much smaller than that of other owners, but given that the costs are shared based on ownership share / floor space, some pay proportionally more for the retrofit than how much they anticipate to benefit from the effects).

> „Then there were those who said that they wouldn't pay [for it], because they made a calculation, what do I know, now I don't want to say anything stupid, how much it was, that it was his share, he calculated how many square meters of wall there were, that they insulated it for him, it was only 16-1800 forints, he would pay the rest, no. So, there were those people. Well, there are those people. Well, like this, how can I say, people with worse leaks, who don't pay." - condominium manager

Whereas municipal interviewees reported that equalisation of the investments across the poorer or richer neighbourhoods was not in the forefront of all perspectives to follow, simply due to the fact that any energy efficiency retrofit investment had to be initiated by the condominiums and cooperatives, thus, they are being mainly bottom-up organised. Thus, there was limited room for equalising efforts at the public policy level, and the policy impact of the municipality was largely limited to raising interest, and providing technical assistance, and then the co-funding to the extent it was available.

Nowadays, in the (limited budget) case of the nature based solutions run by the municipality, the selection of places for interventions is largely focused on where the most residents could benefit from the small scale programs (as there are budget constraints at the level of the municipalities, and their competence is also limited). E.g. green updates would primarily go to the large prefabs, which is also driven by the fact that historically, green areas are located in the large housing estates anyway.

The investments beyond the control of the municipality (outside Kelenföld, mainly in brownfield areas) predict some other dynamics with regard to distributional equity of the benefits of densification, though. At the same time, these investments have been stabilizing or even contributing to the growth of the market position of Kelenföld.

> "The scale of new boosting - and locally uncontrollable, due to state level regulations - developments outside the Kelenföld area, but in close vicinity of it, showcases that the benefits of investments accrue to investors, while environmental damage (e.g. heat island effect, traffic) falls on residents." - representative of local pro-environment NGO

The municipality has been negotiating with investors in the district areas under its control to serve a more even territorial distribution of the benefits of the investments. It has been pooling the so-called 'investment contribution' requested from each new housing project in the district, independent of where it takes place (except those under the government special regime) - and a part of the funds collected is reallocated for NBS or other projects (including public service development). Also for new developments, the district enforces strict greening standards. Municipal officials also negotiate with developers: This tool, the so-called Town Planning Agreement (TRSZ), allows the district to limit developers to build only if they agree to a 20% reduction in volume and a 5% increase in green space compared to original zoning. This model forces developers to make trade-offs between profit and public amenities like community spaces or ground-floor retail. On the other hand, as town planners emphasized, none of these tools can be applied in case an investment is considered by the state a 'National High Priority Investments'.

4.1.5.4 Political mobilization

Political mobilisation around energy efficiency, densification and nature based solutions investments in Kelenföld has rarely been observed. However, as reported by the interviewed NGO active in the field of environmental protection, they successfully mobilised civic voice against the demolition of the neighbourhood center, itself a large complex built from

concrete between 1974 and 79 (it accommodates some shops, a library, formerly also a cinema), while close by, at the edge of the neighbourhood, a new shopping mall was planned and then finally opened. Thus, they essentially could halt creating a new plot for densification against the local political will of the municipality.

> “Regarding the Bikás Park, what I can say is that for now, we have saved this city center. One politician said, "This time, it didn't happen for us. You succeeded this time, we didn't; next time we will." …. So long as—and this is a global problem—an area is considered valuable and a huge profit can be squeezed out of it, they are going to grind it down. We are seeing in countless places that they buy up properties with buildings that could be renovated or repurposed, but they can make a much larger profit if they turn them into, for example, an office building or a shopping mall…. I don’t know how much further this can be pushed—this overdevelopment—but it is a fact that if they say an area is "valuable," it will be bought up. This "buying up" process works in two ways: either they make the living conditions for those residing there impossible so that they sell, or—and this happens less frequently—they receive an offer that makes it worth their while to move.
>
> Essentially, what I see here is that the concept of urban development is being primarily overridden by economic interests.” – NGO representative

On the other hand, alternative civic voices can become also loud while opposing transformation of dilapidated common space into green and recreation area which was based on community led planning: the yard area between two large buildings in Kelenföld was transformed into a petanque field, mainly attracting elderly to socialize in open air, still, residents from the lower floors wanted it to close down due to the “noise” it was making. There the municipality wanted to address the issues of public space design efficiently. Originally, the housing estate had some sports fields, but with the demographic transformation these fields became redundant and also dilapidated, so basically out of use, but at the same time covered with concrete. The park/recreation function was then achieved by replacing the “loud sports” function, the upgrading of which would have generated opposition by the residents by a “silent sports” area, a petanque field. At the end of the day, some residents formulated objections, but with time, they got used to it.

> „This was a grassroots initiative. It was supported by the capital's participatory budgeting, and that’s where the idea for a petanque court was pitched. They didn't originally imagine it for this specific spot; it was only when we were looking for a location that the idea came up that we have this sports court here that we ought to do something with.
>
> The interesting thing is that I can’t imagine a quieter sport than petanque, yet there were still people from the two buildings on either side asking, "Why put this here? It’s going to be loud." No. Actually, petanque is generally not [loud]—that's just not true.
>
> Those who play it say it brings all age groups together, but typically it's the elderly who play or use it most. It is incredibly important to provide some kind of quality leisure opportunity for the retired age group. It doesn't even matter if they aren't playing sports; just that they

go down, meet, and socialize with others so they don't become isolated. These housing estates are like "human factories," yet people are still lonely. So, it's vital that these community functions exist." - municipality's greening department

The residents often oppose the reduction of parking slots for the favour of creating new green spaces, as municipal experts experience, especially if it's the free parking slots that are available for local residents. Such interventions are always planned with care (and in a rather silent manner), and no radical changes are proposed, just e.g. making sure that cars do not park on the soil of the trees. This is to mitigate the "inherited" shortcoming of the housing estates in general: with the large-scale motorisation, there is a severe shortage of parking lots, because at the time of the planning and construction of the housing estates, only few people had cars.

Neighbourhood level issues are often ventilated and communicated through local facebook groups, but the addressee is seldom a designated political decision maker. Especially regarding the retrofits, the condominium managers could represent the residents' interests, and some very local communities, like the informal groups of dog owners or people keen on protecting animals may raise their voice. E.g., in the central park of the neighbourhood, Bikás park, some conflicts between the dog owners, families with young children and those who otherwise want to use the park need to be mediated (e.g. dogs should primarily use fenced areas).

Issues around tenancy rights are seldom explicated in the stakeholder interviews. As for the condominiums' owners' assembly, increase of common costs is always negotiated, but that is normally the platform for criticisms and compromises, or addressing arrears and outstanding payments, and the parties in the process are owners with equal decision rights. Given that the share of social housing is minimal, and the municipality has been generally acting as an "owner who cares", watching that complaints about municipal tenants are also collected (if at all), and costs decided by the condominiums are covered without objections, as managers expressed, condominiums are mostly fine if there is a share of dwelling owned by the municipality.

Civic mobilization around/opposing investment that would potentially have a bad/contestable environmental impact are normally limited to beyond the borders of the Kelenföld neighbourhood, except for one case: civic objection was made to the extension of tram line 1 that connects the neighbourhood with the train station and the new shopping mall, across the Danube bank to Pest. The main concern was that the tram would be loud - then it turned out that the technical solution chosen basically prevented any increase of the noise associated with the tram, and people are now happy with it, as one of the managers, representing the residents exposed.

4.1.5.5 Socio-ecological impacts (positive)

According to most interviewees, one of the most significant social outcomes of the retrofits and the green area development (along with the new transportation hub of Metro line 4, the

extended tramline and the new shopping mall) **is the 'renaissance' of the housing estate of Kelenföld**. Young house-buyers especially have been attracted by the area, along with micro-landlords. Energy-efficient modernizations and renovations make these apartments attractive investments - thus, worth to be kept in the broader household portfolio (e.g. children helping their parents to fund the investments, or parents helping their children to acquire housing here). The expectation to be able to 'invest' achievable utility savings into the buildings improves the physical state of the housing stock, while keeping the energy retrofit investments at an affordable level (either through the former ⅓-⅓-⅓ funding scheme or more recently through supported loans). This creates a stabilizing effect on the local population, as young adults are able to purchase homes in the same neighbourhoods where they grew up, supported by family proximity and stable property values that now rival district averages.

> "So it's like that, and these places are somehow transforming, but I also tend to think that I think panel apartments are having a renaissance again among first-time home seekers."
>
> Probably because of affordability? So what can you buy on the housing market? I think that [affordability] is one thing. The other is that it turned out that they're no worse than new condominiums, and they're cheaper compared to them." - former real estate manager of the municipality

Retrofit investments aim to achieve the technical modernization of residential buildings that directly impacts the physical well-being of inhabitants. Beyond the insulation of facades, the replacement windows and doors, and in some buildings also ventilation motors have led to improvements in indoor air quality and temperature regulation according to the observation of housing managers. By reducing mould growth and the need for constant air conditioning, these upgrades create a healthier living environment. **Residents report a higher sense of comfort in their homes**, which are now quieter and more aesthetically pleasing, directly contributing to a higher standard of daily living.

In Kelenföld, the most appreciated green improvement is that of the central park, Bikás-park. It is not only a visually attractive place, but it hosts recreational functions, and serves a number of different groups, including families with young children, dog owners, a variety of sports activities, and also youngsters or other age groups with a number of social backgrounds who would attend various events/festivals organised in the park throughout the year. At the same time, the green quality of the housing estate has been maturing with the time without any radical interventions: the long-term tree growth in any of the older housing estates like Kelenföld is now reaching its 'best condition', with trees reaching up to the 8th floor. This "beligetesítés" (making the area park-like) significantly contributes to the microclimate and property values, although it was a process that took 30 to 50 years to mature - and it went on step-by-step. In addition, some further improvements to formerly concrete-covered plots also contribute to the attractiveness of the area, and its improved microclimate.

The area has always been well served by public services: education facilities, the hospital, child care and commercial sites have been present since the early years, and now a few

community based spaces are also available (fitness parks next to the playgrounds, the petanque field).

Interviewees acknowledge that Kelenföld's spatial position is excellent within the capital city and the district, too: it is well connected with public and road transportation and well covered by public infrastructure. The densification effort through demolishing the former neighbourhood center service building (that hosts a few shops, the library and the former movie) was successfully challenged, and opposed to the neighbouring areas where 'National High Priority Investment' status investments are promoted by the central government. That bypass local building bans and green standards, Kelenföld remained a compact neighbourhood with only few housing but many other types of investments. This creates a 'dual city' appearance where state-backed projects are significantly denser than those governed by local municipal rules (note that as of the end of 2025, there were 19 such investments, producing app. 10,000 new dwellings - compared to the current total of app. 83,600 counted in the 2022 Census, this adds 12% new housing stock to the district, mostly in public service-poor former brownfield areas).

4.1.5.6 Socio-ecological impacts (negative)

The intense housing price increase has been affecting Kelenföld to no lesser extent than other well-connected housing estates of district 11. There is also a spill-over effect: new investments in the close neighbourhood - along with the current ongoing home-buyers support schemes - drives prices up to 1.5 or even 2 million HUF (€ 5,000) per square meter. This may effectively be pricing out first-time buyers and creating a market of private tenants in some areas. In Kelenföld, this dynamic is observable only partially, but that may be also connected with the general demographic processes of the residents (the first generation of residents has generally become very old, and their property was sold off, or inherited by their children who love to remain here). At the same time, those who grew wealthier while living in the housing estates may have left for other housing options, up the housing ladder.

As observed by the housing managers, those who can buy the Kelenföld dwellings, **the new residents represent a better-off social stratum** - they have a better job market position, and they are younger, too, and they can also profit from the rich network of public services. At the same time, in some buildings, there are quite a few private micro-landlords who bought the dwellings as investments (e.g. to make profits based on the expected real estate price increase of the neighbourhood and the district in general), and their tenants care less about the buildings, the (social) behaviour and the upkeep.

In the Kelenföld housing estate there were very few densification activities for the last two decades, thus, ecologically no tangible impact was affecting the neighbourhood. The large-scale housing investments are in the neighboring area next to the Danube bank, the residents of which may then in the future increasingly use the public services in Kelenföld - but no impact has yet been visible in this respect. In those areas, there is a visible conflict between greening and densification policies; as developers build vertically to preserve minimal green surface ratios, the resulting buildings can block wind corridors, worsening the urban heat island effect. This, however, is not a threat to Kelenföld according to the former chief architect.

In general, access to (more) affordable housing in Kelenföld is hampered by the real estate price development of the whole neighbourhood, irrespective of the fact whether the building was refurbished or not, as housing managers perceive. Formerly, this may have played a role, but today close to two-third of all housing has been upgraded to some extent, and costs have been borne by the owners at rather affordable levels, with a few years of increased common costs related investment financing that has been 'paid off' as a 'windfall gain' due to the general price increase on the Budapest housing market. Also, primarily, it is the location within Budapest, as the south-western gate of the city, that is decisive for the massive price increase of housing. Reportedly, a large share of the residents has remained the same and they benefit from the increase of their ownership's value as sitting tenants.

On the building level the cost of investment as a pressure for "renoviction" may be considered. The financial burden of retrofits on residents may be significant, but there are a few household strategies to mitigate these risks based on the experiences of housing managers: adult children of pensioners take over costs (e.g. with the expectation that they will inherit the dwelling anyway), or **the interventions are kept modest to stay affordable**; common costs often double for a period of 5 to 10 years to repay loans. In more affluent estates in District 11, like Gazdagrét, residents manage this better, but in parts of Kelenföld, some perceive it as a risk that may lead to 'renoviction,' where lower-income residents or pensioners are forced to sell their apartments due to the increased costs. However, no evidence is available for this transformation, other than at the pace of demographic change.

Condominium managers also reported about a further component of reluctance to contribute to the investments: landlords (who are nearly exclusively micro-landlords of one dwelling that they rent out) normally would pass on the increased costs to the tenants, but fear that the tenants would potentially be behind with payments and hence they would end up in arrears / belayed payments of the loans. Thus, their interest to participate in investments seems to be more limited. The installation of heat cost allocators (költségmegosztók) is also a standard but debated technical solution. In some cases, residents refuse to use them and prefer flat-rate payments, while in others, the high cost of remote reading services reportedly cancels out the energy savings. Retrofitting becomes truly effective only when insulation and regulation are combined.

The first tenants of the housing estate are now becoming older, and while many have left the housing estate either by selling off, or inheriting the dwellings to their children, there is still a considerable share of elderly. For them, and the lower middle class residents, the primary effect of retrofit interventions launched by the condominiums is an increase of the common costs associated with the investments and the loans. Thus, formerly, but also nowadays, managers experience, that there may be a reluctance to go for large retrofit packages in the future, in case there is no family network to support and mitigate increased costs.

However, condominium managers have diverging views about the impact of this issue: while some claim that in general, pensioners have been also supportive of retrofit investments (e.g. by having the motivation of an increased value ownership), others reported that in buildings with higher share of retired owners, it was less successful to launch interventions. Although

especially in the years after the great financial crisis, people faced difficulties to pay common costs, no mass evictions happened.

> „No, no, at least I haven't heard of such a thing [mass evictions], and perhaps another thing that might be related to this is that in most cases, if it was an older person, there was a child behind them who supported them in some way and was interested if something happened, they would have a valuable property. So that also played a role." - urban development expert

4.1.5.7 Tensions and power dynamics between stakeholders/actors

In Kelenföld, stakeholders at the local level, and owners living in the area, are largely on the same page, when it comes about the appearance of the area, and that the large prefabs visual appearance and the quality of life in the building needed support, stabilisation, in general, more attention. At the same time, there are some conflicting goals that are apparent at a more abstract level - whether the interventions remain at the level of 'greenwashing', whether the most climate relevant solutions are promoted and implemented. These conflicts become tangible when the technical solutions of the retrofits and the greening interventions are taken more under the loop.

For example, while residents and owners expect an improvement of their quality of life (and rise in the housing value), the retrofits' technical features demand adaptation and change of everyday routines - e.g. ventilation capacity of the new plastic windows is limited compared to the old wooden ones, therefore, there is often mould in the dwellings where people wash and hang their clothes as they used to. The increase in energy costs that hit condominiums over-proportionally, made central ventilation be stopped, and therefore, moulding may speed up. So, the personal health and sense of quality of life may deteriorate instead of an improvement to residents' general well-being into which they have invested capital/savings, and would be very easy to achieve if they were more aware of how to ensure that they get the most out of the upgrading.

At a more general level, whereas climate aware local regulations that promote more green space and biodiversity in public spaces in large housing estates, locals would often be critical about the loss of (free) parking spaces, so **whereas there is consensus that more green creates less heat islands, residents would still be complaining about a minor reduction of parking opportunities.** Also, there is a conflict between the stakeholders in charge for public space design: more diverse flora in public space creates essentially less green areas for recreational activities, leisure and sports or just free walking for families who are otherwise locked up in a small space as the majority of housing is in large prefabs. They also need floor space in parks just to 'step on', or be available for children who spend summer holidays in the city, but their families do not have any holiday homes in the rural areas, nor financial means to travel. It is essential to create useful space for them, and not only fenced green areas that are biodiverse and hence more sustainable.

> „But regardless of that, yes, our goal is to go green as much as possible. We often run into conflicts because, for example, we like to build surfaces that aren't paving stones or asphalt,

but stabilized, permeable surfaces. Well, there's always trouble with those; people complain they're either dusty or muddy. Actually, they aren't really muddy because they drain quite well, but people absolutely hate them.

However, there are times when we stand our ground and say it doesn't matter if they hate it, because it's necessary. It's usable 90% of the time—maybe just not when it's actually pouring rain. So, we have instances like that. And then, as I mentioned, there's the 'greening' aspect.

We're really struggling with the lawns. My view on this isn't exactly 'trendy' right now, but I believe that where we crowd tens of thousands of people together in housing estates, we have to provide functional green space. We can start from the idea of biodiverse, near-natural grasslands, but those simply don't tolerate intensive use. I believe that in a housing estate, I must provide green areas that can withstand heavy foot traffic and wear-and-tear, while also providing a place for those people to actually relax." - municipal department responsible for green policies

The municipality's different departments also essentially have diverting interests: intensive green solutions are costly to be maintained, so the local greening departments also needs to struggle with the financial pressure caused by budgetary constraints.

The district also utilizes 'bee pastures' (méhlegelők), though these have faced mixed public reception. While ecologically beneficial, residents sometimes perceive them as neglected patches of weeds due to a lack of professional maintenance or communication about their purpose. Water-permeable pavements are another implemented solution, though they are often unpopular with residents because they can become dusty or muddy. Despite this resistance, the local department continues to advocate for them as necessary for sustainable water management.

At the residents' levels, the financial interest of micro-landlords vs. interests of owners in condominiums can diverge as managers perceive that: whereas the first group is often only interested in maximising profit from the rental unit, and not particularly interested in improving housing quality, sitting tenant owners' voice in common decisions can be sometimes more silent, and then the condominium community may opt out from upgrading activities.

A further conflicting interest is related to the prescribed quality frameworks of co-funded projects: whereas **the centrally co-funded investments set technical standards that end up being extremely costly** - factually, for good reasons, as such investments are needed for and effective reduction of energy consumption -, **but owners rather go for cheaper or partial solutions that on the long run would have only limited effects but are affordable for them at this moment**. Condominium managers report that the reason behind such behaviour would be that the co-funding levels cannot compensate for the increased costs of the larger-scale renovations.

„So, as soon as an energy expert/technical specialist came out, he told us that yes, you have to replace all 720 windows, whether you want to or not. You have to replace the roof; you have to do this, that, and the other. This is because, you see, the windows must have a certificate of compliance. Now, regarding windows with certificates versus standard market windows, the latter have certificates too, but since we're talking about 'free money' [subsidies], they demand that every single piece of paperwork be perfectly in order.

While this might sound great in theory, it's certain that the residents don't have the money for it. For example, if we take a normal window like this one, which according to its specs has a thermal transmittance of 0.75, it costs 230,000 forints. But if we want a 1.0 or 1.1 rated window that the expert quite rightly prescribes because that's what current standards require, then that price immediately jumps to 800,000 or 900,000 forints." - condominium manager

In addition, the case of heating meters is also a particular one according to the housing managers. Whereas the meters are essential to measure the actual district heating consumption within a dwelling. However, the meters are not only costly to be installed - the investment is higher than any potential savings from the reduced (metered) consumption -, but there is also a genuine disincentive to use the meters as the primary source for information for the billing: those living on lower floors (e.g. first or second floor), vs the top floors have different temperatures due to the heating water's temperature, and those who have more facade vs dwellings that are surrounded by other dwellings need to heat less. Therefore, owners would opt for billing options where floor space defines 60-70% of the heating costs and only the rest is calculated based on the actual consumption measured by the meters.

Investors are also reported to be reluctant to create more green space, because it reduces their profits. Whereas the municipality seems to be successful in negotiating the share of green space in the design, the overwhelming majority of housing investments in the district is beyond its control as they are classified as special investment projects for national interest (see above).

The most visible conflict between stakeholders concerns the whole district area - not Kelenföld particularly: **the new housing investments contribute to a rapid population growth, without any further capacity extension of public services**, including public transportation or health and public education services, and the municipality does not have any control on the building parameters and green investments that should accompany the housing project. Therefore, the core conflict is between the municipality and the investors whose projects are promoted by the government, and can be largely translated as a tension between professional interests and (central) political interests in urban development. This means that in addition to the problems caused by the general two-tier government system of Budapest, the highest tier, the central government, has become the most powerful player in urban development in the district, indirectly affecting Kelenföld's position.

„But then, for instance, a developer of a 200-unit residential complex showed up to negotiate, and we asked what the situation was. He said, fine, he'd heard there were other ways to do things—and then, all of a sudden, we received the government decree regarding

'priority status.' We looked at it, and there it was: a 200-unit residential development. Which is nonsense, because it simply isn't one." - urban development expert

4.1.5.8 Innovative governance mechanisms

In Kelenföld, there are no innovative governance mechanisms at play that would particularly support civic perceptions to be articulated and conveyed beyond the regular participatory mechanisms designed and run 'as business as usual' e.g. by the municipality, or within the owners' communities in condominiums and cooperatives. These mechanisms have limitations: some NGOs dealing with environmental protection or loose civic networks lose momentum quite easily, or their activities get very limited (e.g. to channelling information into local groups via facebook groups). Védegylet, a civic voice for example, could achieve blocking the demolition of the neighbourhood centre in Kelenföld, to prevent further investments (see above), and halting the development of a train track extension investment until it got all environmental permissions, that is beyond the neighbourhood, but ever since it has not been invited to consultations, nor is there any formalised platform for planning where such organisations could play a role.

The local interests vs central government driven large housing investments put the large (politically better connected) investors into better positions, so there is absolutely no room for negotiations initiated by the civil society or the municipal government either. In case the municipality has the control over the investment, then they ensure via a series of negotiations and contracting that the level of greening is more extensive, and e.g. there is also attention that the depth of the soil above the underground garages enable trees to grow, so sustainable green areas can be created.

Back in the early 2000s, when the prefab-retrofits were launched, the settings were much more controlled and steered by the local government. The municipal government launched a regular platform for information exchange, technical assistance, networking and sharing, in order to facilitate the participation of the condominiums in retrofit projects, and to generate investments into the energy efficiency of the housing stock in the district.

"Well, if I get two-thirds funding just by scraping together one-third myself, then if I don't do it, I'm missing out on a great deal—pardon me for oversimplifying things. This is how many people and many housing cooperatives thought. And because of that, from what I know and have heard, one of the most successful 'Panel Programs' was implemented right here in the 11th District. The municipality put insane amounts of energy into it. I mean, we worked together with the municipality's housing department back then, and I remember it well: the endless briefing events, the mountain of information materials, the 'let me help you, let me hold your hand' approach..." - urban development expert of the municipality

It was also so more important and relevant in the first decade of the century, as the funding model was ⅓-⅓-⅓, which meant that the three stakeholders were interdependent, each taking

the same risk and responsibility for the interventions (the ⅓ share of the owners could be also paid if backed by a loan, so financial institutions were also genuinely interested in the scheme).

4.1.5.9 Tourism and market pressures

Market pressures are especially relevant in district 11, at two levels: as local inhabitants see it, there is an estimated large share of private rentals also in the prefabs of Kelenföld (condominium managers report of app. 20-25%), on the one hand, and on the other hand, the massive investments into the district's housing stock (currently app. 10,000 dwellings are being built only in the framework of the special priority investments projects) have a spillover effect on this area, too.

Historically, the district has always been a high demand area, and with the launch of the metro line 4, the adjustment of the public transportation connection, the upgrading of the hospital and various education facilities, and some investments into commercial sites, along with the central park of Kelenföld, there was a strong stabilisation of the neighbourhood. **Thus, primarily the location effect has been a driving factor in the housing price development.**

> "So, in my opinion, people buying here for investment do so because the area is excellent in terms of proximity to everything. Especially now, with the tram and the metro right here, not to mention the universities—practically X number of universities are within a 15-minute reach. The University of Technology, even the Medical School via the two metro lines, Corvinus, and so on. [ ] I think it was the fact that certain people were pushed out of the area, plus the infrastructure. It's not just the plaza and the tram; basically every shopping center is just 5 minutes away by car—the ones in Budaörs might be 8 minutes, but Savoya Park and Campona are right here. I think these had a very, very big impact."
> (condominium manager)

4.1.5.10 Gaps in perceptions between civic groups and public agencies

The core gaps in perception of the main stakeholders, that is, the NGO sector, condominiums (through the lens of condominium managers), and the municipality and the public agencies in general can be grouped around seven main topics.

Participation and transparency

The Municipality claims that urban development agreements are transparent and highlights successful community planning projects in a few areas of the district, including some bottom-up initiatives regarding upgrades of the public areas in the neighbourhood, however, interviews also confirm that participation is low. Similarly, condominium managers struggle with low resident engagement, noting that decisions often depend solely on a few active committee members. Civil groups argue that participation initiatives coming from the municipality are merely 'brainstorming' propaganda, claiming the local government isolates critical voices more recently.

Densification vs. green spaces

The local government views development contracts as tools to limit density and increase green space, promoting their 'Green from Concrete' program. However, building managers point out that mandatory parking requirements (one space per flat) often consume potential green areas in overbuilt residential complexes. Environmental activists dismiss new 'bee pastures' as unkept weeds used to mask budget cuts (although they are presented as ecological solutions enhancing bio-diversity), arguing that economic interests always override ecological goals.

Renovation: savings vs. financial burdens

The Municipality highlights the success of the 'Panel Program,' stating that 80% of the Kelenföld housing estate has been modernized. Condominium managers counter that actual savings on district heating are minimal because high meter-reading fees often offset the benefits of insulation. Civil advocates warn of 'green gentrification,' where increased common costs driven by renovations push out low-income residents and retirees, but also admit that that may be more prevalent in other parts of the district, not in Kelenföld particularly.

Technical traps of modernization

Strict energy efficiency regulations are seen by the municipality as a necessary guarantee of construction quality. Managers argue that these state mandates, such as requiring windows with corresponding technical features would cost up to 800,000 HUF (€2,000), are unaffordable for residents. Also, electrical grid overloads from an ever increasing number of air conditioners cause technical difficulties that can be only tackled if large-scale investments are undertaken to retrofits. Civil critics highlight technical failures, noting that insulation without proper ventilation causes mould, while AC units cool interiors but further heat the outdoor 'urban heat islands.'

Local vs. state control

The Municipality complains that 'priority government investments' bypass local green regulations and density limits entirely. While managers find local municipal subsidies helpful, they note that slow post-financing processes may create severe cash-flow problems for contractors. Civil groups feel completely disenfranchised, stating that neither local referendums nor public protests matter when it comes to high-priority state-backed projects.

Resident demographics and marketability

The local government sees the district as stable and attractive, with local youth primarily purchasing the new apartments. Condominium managers paint a different picture, reporting that high rental rates (20-25%) may lead to property neglect since owners prioritize profit over maintenance. Civil organizations argue that in general, the new luxury developments off but still in proximity of the neighbourhood are not built for the average citizen, as prices have become completely detached from the reality of those living on standard wages. As a spillover effect, the prices in Kelenföld have also been on the rise.

Conflicts in public spaces

The Municipality admits that popular locations like the extensive central park of the neighbourhood (Bikás Park) are “overused" by major events, and that it generally also attracts people beyond the neighbourhood residents, which degrades the quality of the grass. Managers report constant social friction between dog owners, and families with children, who equally want to use the public green spaces. Also, harassment from public space inspectors towards people experiencing homelessness, or youth being present at late hours are recurring perceptions reported by them. Civil activists criticize the lack of genuine green infrastructure, claiming projects are visually flashy but ecologically hollow.

4.1.6 Critical analysis: Budapest

4.1.6.1 The role of green policies in influencing social transformation in Budapest

The two neighbourhoods under investigation have been hit by the general issues of housing market pressure in Budapest. At the same time, they represent two extremes of housing market and population dynamics, and the policy responses by their respective district municipalities also differ. Therefore, they are useful to explore quite different challenges in the capital city landscape.

District 8 has been running the most comprehensive rehabilitation program since the start of the 2000s with a combination of financial resources, which also included social housing investments, new urban functions, large-scale private investments. In Magdolna quarter, the case study area, the so called ‘social rehabilitation’ programme strived for keeping as many marginalised households in the neighbourhood in upgraded or newly constructed housing, with improved services, whereas in other parts of the district, other strategies dominated.

District 11, and within it Kelenföld, has profited from inwards migration of younger households, and large private investments, given that it is the western gate of the capital city, with large so-far underutilised areas (including brownfields). The dynamics of the processes fuelled house price increase, the district being one the most growingly priced areas of the capital city. The public housing stock is managed with social targeting, but no investments were undertaken in terms of increasing the numbers of affordable flats.

To sum up, the two cases is Budapest - Kelenföld housing estate in District 11 and Magdolna quarter in District 8 - represent two ways of urban transformation. Green policies are not standalone interventions in these areas, but they are technical tools that contribute to the transformation of the territories.

Primarily, densification and nature-based solutions operate through a territory-based logic. While energy efficiency can follow its own independent logic (aiming for the highest possible number of energy-efficient buildings), it ultimately integrates into these territory-based policies. Consequently, the physical and social transformation of these areas is generally not driven by ‘green’ initiatives, but rather by other factors, such as large-scale investments (e.g., the Kelenföld tram, metro, and Etele Plaza as the new shopping mall situated within the

neighbourhood) or, in the case of the Magdolna quarter, the transformation of neighbouring areas, the redevelopment of public spaces (not exclusively green areas), and traffic calming measures.

Beyond direct local investments, social dynamics in the target areas are fundamentally influenced by the broader housing market shifts in Budapest. This includes the continuous appreciation of the 11th District, which attracts residents of increasingly higher social status, and the general decline in housing affordability across the city. The latter has pushed the Magdolna quarter into a 'just affordable' category, attracting young families starting out (often referred to by the phrase, "the 8th District is the new 7th District").

Housing market potential fundamentally determines the extent to which green (or other) investments contribute to property value and, through this, to territorial transformation. Previous studies (Ertl et al., 2021) have shown that while energy status (energy performance certificates) generally contributes to property value, this is less true in large cities, especially in Budapest, where location is a more decisive factor for increased demand than energy efficiency. Therefore, energy-efficient renovations result in higher value appreciation in high-status areas, while their impact is barely perceptible in lower-status neighbourhoods.

4.1.6.2 The role of green policies in influencing housing inequalities in Budapest

Housing inequalities are evaluated through the lens of housing accessibility, housing affordability, housing quality and the spatial distribution of housing for vulnerable inhabitants, focusing on the three core types of interventions:

The impact of energy-efficient retrofits

In the case of old (100-150 years old) buildings, energy-efficient investments are/were inherently scarce because they are not a priority; these communities (run as condominiums) struggle simply for survival and operational functionality. Furthermore, the thick walls reduce the immediate need for insulation, and the small apartment sizes (characteristic of the 8th District, though large downtown flats also exist) result in naturally low energy costs. From the perspective of the municipality, as a housing provider, it is not only scarce resources that make any interventions be postponed in general, but also more recent regulations as of what types of upgrades can be funded - e.g. no gas based heating systems can be installed anymore from subsidies, but electric heating is costly to tenants and technically it is unfeasible to be installed due to building regulations or lack of funds for any further capacity extensions of the electric grid in the old buildings, which limits/postpones further energy efficient retrofits.

For prefabricated panel buildings, maintaining functionality is easier and cheaper. Energy-efficient investments are proportionately more affordable, and since major subsidy sources were concentrated here in the 2000s, investments in this sector are far more visible.

In neither area (Kelenföld, Magdolna) did we find that energy-efficient renovations had a meaningful impact on affordability:

- On the savings side, the impact was negligible because energy prices have been capped by the 'utility cost reduction' (rezsicsökkentés) policy since 2013.
- On the cost side, the impact was also limited due to high subsidy intensity (substantial renovations simply did not occur without subsidies, except where the building or cooperative had significant additional revenue).

The phenomenon of 'renoviction' was not supported by the interviews. This is primarily due to the moderate cost burdens resulting from subsidies and the tendency of residential communities to make risk-minimizing financial decisions. The required majority rarely makes decisions that would fundamentally harm the minority, as that would jeopardize the project's financiability. Housing managers unanimously stated that renovations did not lead to relocation or eviction; arrears only appeared where they had already existed prior to the renovation.

Many interviewees in both areas confirmed that renovations led to quality issues, most typically mould, if the airtight sealing of the buildings was not followed by a redesign of ventilation systems or if behavioral changes (proper ventilation habits) were not sufficiently established.

The impact of nature-based solutions (NBS)

Qualitative research reinforced the anticipated finding from the quantitative analysis undertaken previously that suggested that NBS has a weak impact on housing inequality in most cases in Budapest. In fact, by improving environmental quality, NBS can actually enhance the quality of housing.

Experience shows that green space development can influence property values through improved quality, but this does not necessarily trigger sales; instead, it manifests as a higher quality of life for the existing owner-occupiers, who therefore may want to stay on and not to sell off their ownership (and e.g. make use of the windfall gain, if any). Value increases and market pressure are more significant where development is highly visible and large-scale. Such 'mega-projects' do not just improve but reposition an area, for example, the renovation of Mátyás Square in the Magdolna quarter, or, as a spill-over effect, recent (high density and low green level) investments into the brownfields adjacent to Kelenföld would contribute to housing price increase or stabilisation.

However, the nature of the NBS intervention matters. Until recent years, green space development in Hungary was rarely driven by NBS goals; rather, it aimed at tidying up areas and adding functions. This introduced new activities that, in some cases, "disturbed" residents, leading them to perceive a decline rather than an improvement in housing quality (e.g., playgrounds and sports courts in Magdolna). Additionally, the intensive use of green spaces by socially marginalized groups was a point of criticism in both Magdolna and Kelenföld, but that shows rather the failure of social provision systems and that some people experiencing homelessness tend to opt for using these public spaces that are safe for people to stay over day (and sometimes night).

The impact of densification

Of the three 'green' policies, densification has the greatest impact on spatial inequality. New construction is very expensive, partly due to strict energy requirements (though currently not

significantly more expensive than secondary market homes), and only the affluent can afford it. This social stratification is visible even in 'infill' developments (though there, social mixing could theoretically occur in schools). However, total separation is driven by brownfield developments, which create large, isolated and dense housing enclaves - but these did not happen in our selected project areas, rather in neighbouring areas.

Plot size fundamentally influences the impact of densification: the Orczy area (neighboring Magdolna) can gentrify more easily than Magdolna because it possesses large vacant lots suitable for massive buildings, bringing a high volume of new residents to the area. In Magdolna, plots are fragmented, so only small-scale infill developments have an impact. Next to Kelenföld, in a new neighbourhood called Budapart, massive new developments reshape the district, producing app. 10,000 new dwellings (which, compared to the total number of housing in the district, means a 12% increase).

Finally, the gentrifying effects of NBS and renovations are weakened by the high rate of homeownership in the housing sector, as high transaction costs significantly reduce residential mobility. The information about the turnover in the private rented sector in the areas is largely missing, but reportedly, financial expectations from rent revenues have positioned dwellings especially in Kelenföld always quite high on the market.

Inspiring policies and lack of policies for influencing housing inequalities caused by green policies

In the two-tier system of Budapest, some policies have essentially had added value, especially when fuelled by (former) well designed central government retrofit schemes. These retrofit policies shared the risks and the resources needed for renovations, and made the interventions affordable for the vast majority of the owners (sitting tenants themselves). Thus, the scale of subsidies is, of course, a key issue; this is why residential building renovations were able to function without causing displacement.

We also found that the timeframe of changes also matters, as it determines whether there is sufficient time for adaptation, and as to what pace is there for the valorisation of the retrofits, how much that is then a motivation to sell off, or, on the contrary, to stay and "enjoy" from the improved quality.

The volume of changes is a similar concern; if the scale of change is large, it quickly triggers market reactions. This holds true for all three green policies (NBS, energy efficiency, and densification).

At the same time, the two selected cases also showcase that local municipalities are becoming increasingly less significant actors in Hungary as their room for manoeuvre is continuously shrinking. High-priority government investments (especially in Budapest) strip municipalities of their regulatory roles, there are no subsidies for social rental housing, and there are constant budget diversions. Consequently, municipalities have very little capacity to take action in the interest of vulnerable communities, or to themselves initiate large-scale and impactful

investments: there is a general lack of public housing in new constructions, which is why densification has such a powerful impact on housing inequalities.

Despite the lack of resources, the integration of social considerations into green and housing policies remains primarily a political question (e.g., the change of leadership in District 8, or the decision to take on the coordination of condominium renovations in Kelenföld). Even with a limited margin for maneuver, an administration can choose to be more or less socially conscious.

4.1.7 References

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4.1.8 Appendix 1 – Key interview data

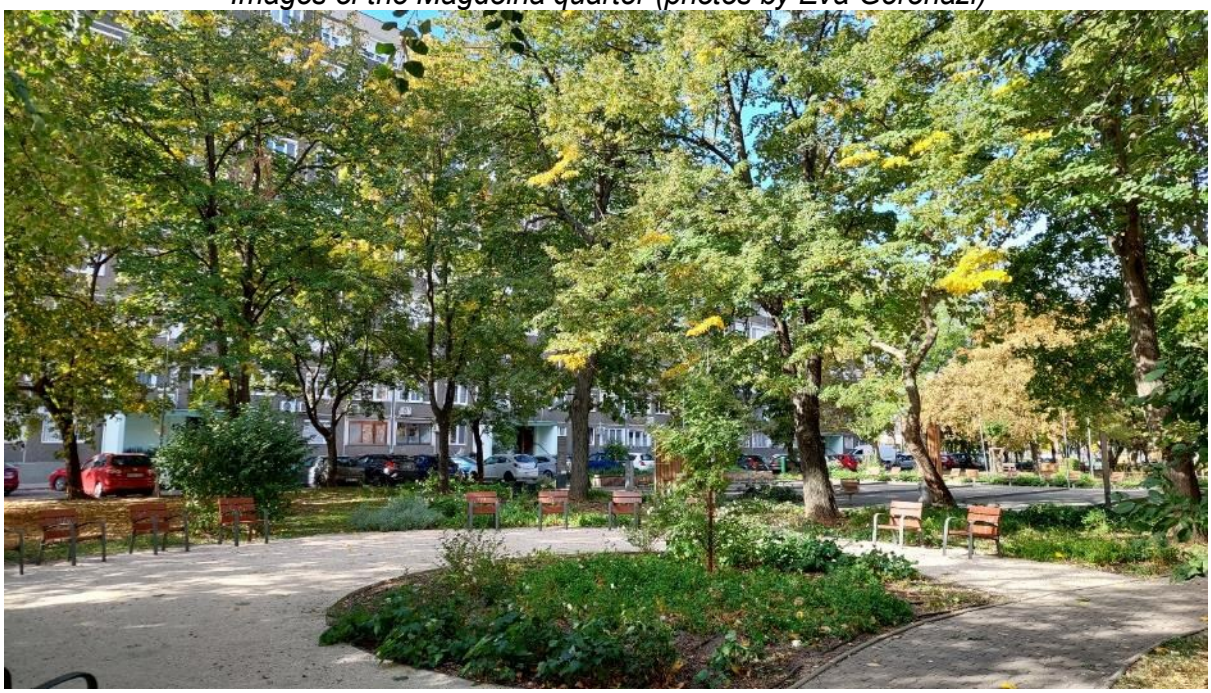
#	Position of Interviewee	Sector/company	Date of interview	Form
1	Senior expert	RÉV8 urban development company of District 8 of Budapest	05/5/2025	In-person
2	Chief architect	Municipality of District 11 of Budapest	07/05/2025	In-person
3	Head of unit and a social planner	Housing and property management department of the municipality of District 8 of Budapest	01/09/2025	In-person
4	Head of NGO	NGO dealing with sustainable urban development issues	10/09/2025	In-person
5	Housing manager of a building in Kelenföld	Property management company	16/09/2025	In-person
6	Inhabitant and Roma activist	NGO dealing with just transition issues	24/09/2025	Online
7	Housing manager of a building in Kelenföld	Property management company	29/09/2025	In-person
8	Former civil servant responsible for housing renovation strategy	Municipality of District 11 of Budapest	07/10/2025	In-person
9	Housing manager of a building in Kelenföld	Property management company	14/10/2025	In-person
10	Housing manager of a building in Kelenföld	Property management company	15/10/2025	In-person
11	Head of department	Municipality of District 11 of Budapest, green policy department	27/10/2025	In-person
12	Head of NGO	NGO representing the interests of municipal tenants in District 8 of Budapest	25/11/2025	online
13	Housing manager of a building in Magdolna quarter	Property management company	02/12/2025	Online

14	Housing manager of a building in Magdolna quarter	Property management company	04/12/2025	Online

4.1.9 Appendix 2 – Visuals

Images of Kelenföld housing estate (photos by Éva Gerőházi)

Images of the Magdolna quarter (photos by Éva Gerőházi)



4.2 CASE STUDY (MEDIUM): VESZPRÉM

Authors: Nóra Teller, Julianna Szabó, Éva Gerőházi, (MRI)

4.2.1 City/Town profile, challenges around just (housing and ecological) transition

Veszprém is a historical city in Hungary, located 120 km west from Budapest, and 10 km north from Lake Balaton in a heavily fragmented karst landscape of hills and valleys.

The city was home to one of Hungary's first bishoprics and later became an archiepiscopal center. The Catholic Church, with its historical buildings and ongoing developments, is today once again a key player in the city's urban development.

Until the mid-20th century, the Church significantly hindered industrial growth, and the city was even bypassed by the railway. Veszprém was a sleepy agricultural town with a small urban center and rural neighborhoods.

After World War II and the subsequent nationalizations, a period of forced industrialization began, causing the population to grow from 24,000 in 1941 to 64,000 by 1990. This transformation was accompanied by the construction of a new, modernist city center and housing estates built with industrialized technology (Egyetemváros, Jutasi, Cholnoky, Haszkovó). As a result, today approximately about half of the current population lives in these housing estates. With the shift in historical educational traditions, Veszprém once again became a university city—this time with a focus on heavy industry. Due to increasing

motorization, a bypass road was built around the city to relieve traffic congestion in the densely built-up downtown area.

Following the change of regime in 1990, local industry and the academic-university scene fell into crisis, but as the most recent Integrated Urban Development Plan (2021-2027) of the city describes, its economic revitalisation was successful and the transfer for manufacturing and services resulted in a significant increase in business taxes and workplaces. Currently the city is an attractive economic and touristic centre in the proximity of Balaton, and it may be one of the reasons while its **real estate price level is close to that of Budapest**, while income levels are significantly lower causing an affordability gap in the housing market.

Like most medium-sized Hungarian cities, the population began to decline from the 1990s, partly due to a decreasing birth rate and partly because of suburbanization toward the surrounding villages. **However, in recent years the population has stabilized around 55,000 inhabitants**.

The number of housing units in Veszprém is 27,362 (2020), but only 180 of them is owned by the municipality (129 of which is appointed for sale), and 27 is owned by the Malta Charity Organisation. Veszprém is one of the pioneering municipalities, which manages its 180 housing units in the framework of a social rental agency, which is founded by the city and Malta Charity Organisation.

Except for these few units, all housing stock is in private hands, an unknown share of which is rented out to private tenants. In case of multi-family buildings the building is organised either as a condominium or a cooperative. In all cases the apartments are owned by the private families, but in case of a condominium the common parts are owned proportionally by the individual flat owners, while in a cooperative the common parts are owned by the cooperative. A condominium is always a single building, while a cooperative may consist of several buildings. In each case, the flat owners contribute to the monthly operational and renovation costs of the buildings (labelled as ‘common costs’). In practice, there is not much difference between a condominium and a cooperative, except the fact, that cooperatives were privately owned since their construction having a professional management, while most of the condominiums were created in the privatisation process, thus municipal tenants became new owners. After 30 years of privatisation, this difference is still tangible.

Since the change of regime in 1990, Veszprém has almost continuously had a political leadership aligned with the central government (left-wing until 2006, and Fidesz-led since then). The mayor leading the city since 2010, Gyula Porga, enjoys strong government support, which is reflected in the city's development opportunities.

The city's annual budget is around €106 million per year, of which roughly €18.5–€21 million is for development. To supplement own resources, since Hungary's accession to the European Union, the city has been actively applying for and conducting strategic planning for development projects:

- The first major integrated project was the “Monasteries and gardens” projekt, **the rehabilitation of the central section of the Séd valley** in 2010, with a budget of roughly €3.6 million, of which 80% came from EU funds.
- This was followed by **the downtown rehabilitation** from 2013–2015, with similar funding, for a total of approximately €13.1 million.
- The "Smaragdváros" (Emerald City) project in 2014 involved **the complex rehabilitation of part of the Jutasi út housing estate** with €3.9 million in EU support.

In 2023, the city, in partnership with the region, was awarded the title of **European Capital of Culture.** For this, Veszprém received approximately €185.3 million in support, while the Veszprém Archdiocese received an additional €106 million for the reconstruction of the historical monuments on Castle Hill.

4.2.2 Green Transition Interventions in Veszprém: Housing estate renovation and the restoration of the the Séd stream

Housing estate renovation

The construction of Jutasi/Haszkovó housing estate began in 1970 on roughly 35 to 60 hectares of agricultural land, driven by the urgent need to house thousands of workers for the nearby ‘chemical quintagon’ industrial sites and the growing military and academic sectors. By the 1980s, the estate had successfully inflated the city's population, eventually housing nearly 30,000 people — roughly one-third of Veszprém's total residents. The construction proceeded in three distinct phases: the first two utilized Győr-produced panels for massive 10-story blocks, while the third phase used locally manufactured VÁÉV panels and introduced more varied building heights, including four-story structures to mitigate the "oppressive" atmosphere of the concrete monoliths.

The urban layout of Jutasi contains distinctive wide green corridor that exist only because the planned M8 motorway, which was intended to bisect the estate, was eventually elided from national infrastructure plans. These open spaces later facilitated the development of essential services, including schools, a sport center, and the Agóra (a cultural hub formerly known as the HeMO military center). The Jutas ABC became a local icon of modernity, being the first supermarket in the city to introduce shopping carts, which attracted shoppers from across Veszprém.

Socially, the estate has experienced a dramatic shift in prestige and demographics. During its early years, living in Jutasi was considered "sikk" (fashionable), attracting a diverse mix of elite professionals such as doctors, lawyers, and engineers who lacked other modern housing options. Following the regime change, increased mobility allowed wealthier families to migrate to the suburbs or higher-prestige areas like the Cholnoky estate, leading to a more homogeneous ‘working-class’ resident base in Jutasi. **Today, it often serves as a "stepping stone" for young families and renters**, though residents of unrenovated panels struggle with high energy costs that consume a significant portion of their income.

In the modern era, Jutasi remains an integral but challenged part of Veszprém. While real estate prices in the city have risen to levels comparable to Budapest, the estate's technical progress has been slow, with **only an estimated 10% of the panel stock fully modernized.** The modernisation included the insulation of the building envelop, the change of windows and doors and the upgrade of the district heating system inside the buildings. Despite the hurdles, a strong sense of local patriotism and 'Jutasi identity' has emerged among long-term residents. Recent efforts, including public space rehabilitations and projects linked to the European Capital of Culture programme, have aimed to 'breathe new life' into the district, acknowledging its permanent place in the city's social and architectural fabric. The prefab retrofits from 2001 till 2009 were of moderate scale in Veszprém compared to other main cities of Hungary, despite the fact, that 1/3 of the costs were covered by the state, 1/3 by the local municipality and 1/3 had to be covered by the owners that may have benefitted also from interest rate subsidised renovation loans and housing savings schemes. The high subsidy level returned once in April 2015, and later on only private savings and loan programs for owners, condominiums and cooperatives were available for retrofits. Available EU funds aimed at social rehabilitation (launched in 2013 and completed in 2015) were capturing four buildings in total in the housing estate, mainly resulting in insulation of the facades of buildings.

Reconstruction of the Séd stream bank

One of the most impactful interventions in the city was the renewal of the downtown section of the Séd Valley in 2010. The Séd stream winds through a deep gorge directly beneath the Castle Hill in the morphologically fragmented city center. The valley historically contained numerous ruined ecclesiastical monuments (Gothic convent, Jesuit church, ruins of the Bishop's retreat). In the 1960s, new recreational functions were established in the valley (amusement park, miniature railway, fish pond); however, over the decades, the financing and operation of these ceased, the infrastructure deteriorated, and the valley's utilization steadily declined.

The objective of the 'Monasteries and Gardens' programme (supported by Operational Programme of Central-Transdanubia) was to **reverse this process through the renewal of the monuments and green spaces, and the introduction of new functions along the existing promenade**. Compromises were necessary during implementation, which unfortunately often came at the expense of infrastructure and ecological considerations. (The renovation of the Viaduct and the water management project, which would have enabled the ecological enhancement of the stream, were omitted.) Key outcomes of the rehabilitation project included the renewal of the monuments, which led to the creation of new cultural and hospitality venues, as well as the establishment of three playgrounds. As the riverbank is directly operated by state authorities, more attractive green developments were implemented in the form of public parks besides the stream by the municipality. As a result of the programme, the Séd Valley has returned to the mental map of both tourists and locals, becoming one of the most important city-level recreational sites.

	Jutasi/Housing estate renovation	Restoration of the Séd stream bank
Neighbourhood characteristics (general social type, economic activities, density, etc.)	Jutasi comprises app. a third of Veszprém's population (18-20,000 people in 9,000 flats). The estate is a prefab that was constructed between 1970-1980, in a few phases, and includes condos and cooperatives.	A deep river valley in the city center, directly below the castle. The streets on the rising sides of the valley feature traditional small-town and more recent family house-style buildings.
Duration	State/municipal subsidy programme for energy efficient renovation in 2001-2009 and 2015. Social rehabilitation in 2013-2015, small-scale interventions since then	Rehabilitation programme in three waves: 2010, 2013-2015, 2023-2025
Funding	State, EU and local funding, private resources and loan products	80% from EU funds (Territorial Operational Programmes)
Actor constellation	State - municipality - owners (condos and cooperatives)	Municipality led, small enterprises contributed
Aims and objectives	Energy efficiency retrofits of buildings and upgrading of green areas	Renewal of the recreational functions of the banks of Séd stream, with a minor focus on ecologic change (refreshment of plants and creation of public parks)
Specific physical measures	Insulation of the envelop, change of windows and doors, upgrade of central heating system	Renewal of the green spaces and built heritage elements, creation of new functions
Accompanying housing policy/regulatory measures	-	-
Key social tensions or/and benefits	Increasing housing quality, modest and selective house price increase, cost inequalities generated by individual	Positively affects the value of properties in directly connected streets.

between greening and housing	metering, no renoviction or displacement	Creates new touristic functions and conversions from residential to business.

Table 7. Key data on case study areas of Veszprém.

4.2.3 Methods

The present case study report is based on a mixed-methods research design. Background information, including contextual data, was collected through desk research focusing mostly on local strategic and programming documents. Stakeholders' perceptions were explored through a series of semi-structured interviews.

In total, 9 interviews were conducted in Veszprém between July and September 2025, involving 14 participants in the two case study topics. The interviewees were selected to reflect the diversity of local stakeholders as well as different phases of the interventions; for example, experts, housing managers with professional experience dating back 20–25 years were also included. A special attention was given to discover the relevance of the European Cultural Capital project in shaping the local economic trends and green space interventions.

Given that the tradition of establishing and maintaining civic movements is relatively weak in Hungary, representatives of residential communities were primarily included among the interviewees in the form of condominium and cooperative management to incorporate the view of the local residents. Green interventions were captured mostly by municipal experts and a housing developer.

The qualitative interviews we conducted for assessing the stakeholders' perceptions on green initiatives were organised in several stages. The interviewees' recruitment built on two methods: snowballing and recruitment through the first policy lab that was held in Budapest and where a few Veszprém based participants expressed further interest to share their insights. Moreover, key stakeholders were recruited through targeted invitations, e.g. through information on their previous works from literature or the website on the implementation of previous strategic developments of the city.

Both the energy efficient renovation of the prefabricated housing stock and the revitalisation of the Séd river bank started 15-20 years ago. Thus it was not feasible to capture all narrative shifts or the perspectives of the numerous actors involved through only 14 interviewees. Instead, the research focused on stakeholders with sustained and comprehensive involvement in the projects, enabling the representation of a broad range of perceptions as well as their evolution over time. Nevertheless, we have to admit that one of the key stakeholders (the municipal expert working on the Panel programmes in the 2000s) was not possible to include into the research due to a physical accident.

All interviews were conducted in person and were complemented by site visits and in-field observations. Interviewees received explanations on how their personal data would be handled and approval was gained for quotations and audio-recordings. The approval was

audio-recorded as well. The recordings were transcribed using Alrite software and subsequently reviewed and corrected by a native speaker. The coding process followed the guidelines developed by UAB and was based on interview transcripts imported into MAXQDA software[114].

4.2.4 Stakeholders' Perceptions of Green Initiatives in Case Study Areas: housing estate renovation

4.2.4.1 Precedents and implementation

According to the housing cooperative managers, historically, the newer phases of Jutasi were of an improved quality, still, there was a clear need to address many deficiencies, especially regarding the heating system, thus, the funding that came after 2001 was well placed to address the retrofit needs. Beyond the energy efficiency needs, Jutasi's common areas - although large and green - also needed care and investments.

The same stakeholders reported that the implementation of **building level retrofits was often planned step-by-steck** to tackle the financial hardship that such investments would cause to residents. For example, not all facades of the buildings were insulated in all cases, only the northern ones to reduce the cool north wind's impact on the temperatures in the dwellings. In other cases, only select components of the district heating run systems were renewed. Such interventions are therefore only partially effective in terms of reducing energy consumption.

> "Back then, when these panel buildings were constructed, they carried with them several elements that have since become obsolete or are no longer usable as intended—primarily mechanical systems, which cause serious problems—but the thermal properties of the structural elements and the windows no longer meet today's requirements either. Therefore, we were looking for solutions for their modernization. [...] We started primarily with mechanical renovations because they were mostly single-pipe systems without bypass sections. [...] With the money received and the corresponding co-payment, we were only able to insulate three facades. The apartment owners were not willing to commit to it. In reality, they didn't have to pay anything... they weren't even willing to contribute a single penny so that the insulation of the southern facade could be completed." - cooperative manager about a building participating in the EU financed social rehabilitation programme, that provided nearly 100% subsidy

[114] Language editing and translation of quotes was facilitated by GeminiAI and ChatGPT.

4.2.4.2 Participation and governance

Given that a third of the population of Veszprém lives in Jutasi, it was clear that in the process of the large investments connected with the “Cultural Capital of Europe” project also some bits should be dedicated to the housing estate. This was an important moment when the strategic planning team - as reported by them - had to create a local goal and support the community in the neighbourhood to think of a project element, especially in regard to public space. Mobilisation of the local community was not easy - **there was no tradition of bottom-up planning at all**, and articulating and addressing various needs was also a new process in Veszprém.

> “It was about functions that included playgrounds, what emerged were small benches, essentially determining which public space functions should appear in the housing estate.
>
> Yes, and then money was set aside for Táborállás Park, meaning larger investments, and there was also money set aside specifically for deciding where the benches should be placed. This ensured it wouldn't just be VKSZ [Veszprém Public Utility Service] dictating that because a bench was here before, it must stay here, because it turned out that elderly ladies were constantly complaining about young people drinking, reveling at dawn, and smoking there.By placing the bench 20 meters away, it made no difference to the youth where they sat, but they no longer disturbed anyone. These are the kinds of conversations that took place; it was a facilitated process to ensure information reached the right people.
>
> Naturally, this received a mixed reception because the funding was designated for these small interventions, yet issues like the lack of parking spaces—the big things that were not goals of the development itself and for which there was no budget—continually came up.
>
> Regarding those large public spaces, such as the one by the district heating center, that was not an EKF [European Capital of Culture] project; however, it was always on the radar, so whenever there was money for playground renovation, some was always allocated there as well.” - strategic planning team member of Cultural Capital programme

The small-scale greening investment, that turned out essentially a jogger’s circle with some new pavement sections, and a few benches were created in this framework, along with some programs in the local community center Agóra.

The energy efficiency retrofits are characterized by a completely different structure, that is, the **participation in any of the schemes depends on two stakeholders: the owners’ community and the housing manager (either of the condominium or of the cooperative),** who can pitch on the available program funding or financial schemes. (It is important to note, that practically all residential units in the city are privately owned. There is no official information however, which share of them are rented out in the private market.)

According to the cooperative manager active in Jutasi, the owners' communities are rather passive, and often their priorities may be elsewhere than around investments into more climate resilient dwellings, with which one can obviously sympathize with when it comes to deficiencies of the general building structure. This is then reflected in the common decisions made regarding the energy efficiency investments (or the lack thereof).

> "...We had an elevator that was out for 2-3 weeks, unfortunately due to a part. I went out there to hold a residents' meeting. It was tough. So there, when the resident feels it on their own skin—how they take out the trash, how they take out their small dog, when they can't walk. That arrogance and aggressiveness from someone who has a sick wife or sick husband and needs to go for blood work, needs to go to chemo, needs to go somewhere—people really lose it there. It was very difficult to communicate with a resident who was kind before but couldn't go down for chemotherapy afterward. So, for me at the moment, the most important thing is that the elevators run. I can feel this myself. Therefore, I think that whether we insulate [the building] or not, in high-rise buildings, the elevator is the cardinal issue." - cooperative manager

Moreover, as presented by the interviewees, some technical barriers also halt the planning and engagement with energy retrofits by the residents: as long as metering of heating is not resolved, which is the case in most buildings, the interest to participate in retrofits is reduced. All such decisions must be made by the owner's community, and getting the majority of votes.

The **municipality's role was unfortunately very limited in the retrofits**, although the state run program also created interest in Veszprém between 2001-2009. The so-called Warmth of Home retrofit program that had only one call in April 2015 – and that boosted participation in Budapest but also in smaller cities - was practically the most considerable resource across the country, but remained very limited in Veszprém. According to the former building authority officer (and current strategic planner) of the city, and also confirmed by housing cooperative managers, who reported that approximately 10% of the value of the investment could have been co-funded by the municipality.

> "During my time at the municipality, I was also responsible for smaller projects, which I also mentioned over the phone; this is the Otthon Melege Program [Warmth of Homes Programme], which is also a state resource, but it was a small amount of funding. So, the total budget here was 20 million HUF, which was distributed among the residential communities. [...] In the Otthon Melege Program housing cooperatives and condominiums applied for energy modernization, so that is also a green policy, if you will. It included insulation and window replacements. […]
>
> Every housing cooperative had savings, usually Fundamenta-based [housing savings accounts], and they were looking for supplements to those [alongside the Otthon Melege Program], and that is how the municipality was able to contribute a minimal amount, a few million HUF." former building authority officer

4.2.4.3 (In)equity (distributional)

More recent housing market dynamics seem to be generated outside of the city (Veszprém is easily accessible by car even from the capital city), e.g. when homes are purchased without the intention to live in the city and then put on the private rental market, contributing to a housing price increase. However, most of the sitting tenants' concerns remain to be resolved within the existing decision making bodies of the condominiums and cooperatives (in which e.g. private tenants are not represented at all).

Regarding the Jutasi housing estates' retrofits, not only at the levels of hardship caused by demanded co-financing of the investments, but also in terms of the outcomes (gains) by the residents, condominium managers report an important caveat that had to be bridged: **The installation of individual heat meters, without proper insulation** did not create a more equal access to equitable housing quality and more comfort, by making it possible to control for one's consumption, on the contrary, it **created much more expenses for those who lived on edges of the houses** and were physically more exposed to lower temperatures simply by having a comparably larger facade around them.

> "[In Germany], if it is one of these edge apartments with poor thermal properties, it might cost half or a third as much as a well-situated apartment. Thus, this difference manifests in the apartment price. Well, [in Veszprém] here it is more of a tension between people because there were really extreme cases with heating where hundreds of thousands of forints had to be paid. With the amendment of the district heating regulation, they managed to modify the government decree to establish an upper limit. No one can pay for consumption more than two and a half times the average consumption. The rest was then redistributed among the others. So, we aren't actually talking about an exact meter, but a cost allocator, which establishes a relative ratio." - cooperative manager

Another distributional concern shared by most of the cooperative and condominium managers is that elderly owners tend not to support infrastructure upgrading. In addition, even after 30 years since privatisation, it is a common concern of housing managers, that people do not care much about the common spaces but they concentrate rather on their own units.

> "At least what I see is that when people don't live in their own detached house, they have this attitude: 'this is fine, I live here, but I'm in the apartment, and I'll buy an air conditioner for myself, I'll put up wallpaper, I'll paint, or whatever,' and that's it. So somehow it doesn't register for them that we have a common responsibility. The building's insulation can fail just the same, the electricity needs to be replaced just the same, 'but that's still not mine, and I won't spend on it. I don't want to deal with this, and I won't give money for it,' not to mention many saying, 'I'm not going to pay you guys more money.' 'Man, you're not paying me, you're paying yourself, it's just not in your account, but...' So, this is the mindset. I think the age factor adds to this, where there are many elderly people who say, 'It's good enough for me as it is!' - housing manager

Condominiums and cooperatives in Veszprém do not get any technical assistance in preparing for the renovation works. Thus the fact whether a building community is able to benefit from state or local funds (when subsidy schemes occur), or whether they are able to take a joint loan with a subsidized interest content strongly depends on the capabilities of the housing managers and the devotedness of the building community. For example as housing managers indicated, the buildings that are insulated in the edge of the housing estate were distributed to former military employees that are more disciplined in their decisions. Also buildings belonging to cooperatives have higher chances to be renovated as cooperatives are more professional housing managers than private companies that manage individual condominiums.

4.2.4.4 Political mobilization

In Jutasi, the representation of the housing estate's interest in general - e.g. benefiting from the Cultural Capital developments - as reported by the former strategic manager of the large scale project, was normally provided by the local political representative. Otherwise, no political mobilisation or further participation of the local residents was achieved in Veszprém in general from the mid-2000s till nowadays.

> "Honestly, I think back in 2008 when this was implemented, and preparations started in 2006, I don't think the term 'social participation' even existed in Hungary. I remember when we went to hold these forums, the attitude was: 'Let's have a forum, no one will show up anyway.' Simply put, this methodology didn't exist yet. I'm only saying this because I don't have factual knowledge on the matter, but I would be surprised if this had been a consciously structured process, simply because there was no culture for it in Hungary back then, and even less so in the countryside." - former manager of the Cultural Capital project

As regards the retrofits, no interviewee mentioned any political movement around any issue to promote more equal access to funds for the energy efficiency investments. Rather, the cooperative managers have to proactively build up the community's interest in any upgrading investments, and also e.g. to share the responsibility for fixing the common areas' issues. As reported, people seem to be reluctant to deal with issues that go beyond their very private interests.

> "The biggest problem is, as Péter also mentioned, that while a resident is willing to spend money on their own apartment, they don't want to spend on the stairwell if a step is broken. In such cases, I usually tell the owner that I want what's best for them, and when they ask what that is, I say: there would be an opportunity to move into a detached house. Because many people have the attitude that they just shut their own front door and expect the community to deal with everything else." - condominium manager

4.2.4.5 Socio-ecological impacts/benefits (positive)

The energy efficiency retrofits and investments in the public areas in a prefab housing estate *per se* have ecological benefits to the residents: such investments improve living conditions, comfort levels of the dwellings, improved quality of the recreational functions within the neighbourhood.

"And of course, energy savings can be measured in an exact way here regarding heating. We are talking about district-heated apartments. We had buildings where, on average, a 20-25% saving could be expected after the heating modernization; this is a building-level saving." - housing manager

Such savings are not necessarily visible in the energy bills, partly as in case of individual metering, flats with less favourable locations inside the buildings have to consume over the average, and partly due to the fact, that most of the district heating expenditure consists of fix costs and only the smaller part is a variable cost, from which energy savings can be materialised.

Jutasi was always perceived as a housing estate with large and good quality green areas, used for leisure activities as reported by the representative of the urban development company. **Thus, the latest improvements of green spaces connected to the Cultural Capital programme contributed to a higher comfort level, but it may not have an impact on real estate prices.**

In Jutasi, as reported by our interviewees, a more relevant factor for real estate price value would be rather whether the building went through a large scale insulation (of which there are only rather few in the housing estate), as reported by the cooperative managers.

"I just wanted to add that precisely because of those past disputes over who pays how much and how, I'm not sure whether having a cost allocator installed is an advantage or a disadvantage when someone chooses an apartment. I don't think that's what determines the decision; rather, it's about which building is insulated and which is not. I'm certain there's a difference in value there. As for whether there's a cost allocator or not, I'm not sure that the units in our Damjanich building are worth less. It adds something, but I don't think it's a decisive factor, so people don't decide based on that. Instead, they look at the renovation quality of the apartment itself, the appearance of the stairwell, the common costs, and the building's overall condition. I assume anyone who does a bit of research takes these factors into account. Controllability is certainly an advantage, but I don't think it's such a massive one that we could quantify it like that in forints." - cooperative manager

4.2.4.6 Socio-ecological impacts (negative)

Whereas retrofits should on the long run theoretically reduce the housing/energy costs, the up-front expenses are often perceived as high and non-lucrative. As condominium managers perceive, a relatively nominal increase of the common costs (that includes also the shared costs of the retrofits) may create objections, but it was not the case when high subsidy levels were available in the 2000s. (80-90% subsidy at the end of the day results in affordable own-contributions.) However, **due to the lack of any further subsidy schemes, these large prefabs are unlikely to engage in larger scale projects**.

"I have been here for three years, and in my experience, in 2-3 cases we held written

votes... it is very difficult; in fact, so far it has been a failure for me to get the residents to agree to an increase in the common cost by 5-10 or 10-odd thousand forints. [...]
I think the residential community that lived here, say, 20 years ago, was a much more conscientious generation... The retiree says that it's all the same to them now, they don't want this on top of their pension anymore. So, the mindset has changed." (condominium manager)

Generally, however, **non-payments are not perceived to be linked with retrofits committed to by the owners, but to generally lower payment disciplines**. Housing managers emphasize that elderly people are harder to involve into renovation but when it happens they are the best payers. On the other hand, those families that fall in arrears with general utility costs are the ones who may have problems with financing the renovation. But as managers reported, these are only a few exceptional cases.

As reported, around the transition, the state owned stock of Jutasi was privatised and many households sold their dwellings. This contributed to a change in the composition of the residents. With the time, Jutasi's position within the urban fabric of Veszprém became a kind of entry point for inward migration, and often the housing estate serves as a temporary housing solution for younger families in (at Veszprém price levels still cheaper) private rentals. However, in case landlords pass on the shared costs of such investments to the tenants by increasing the rent levels, some private tenants may face housing cost overburden.

A further issue that was raised by the cooperative managers was linked to housing quality outcomes of the retrofits. Although improved warmth and comfort should contribute to better living conditions, residents are reported to be slow in adjusting and learning how to maintain the air quality within the refurbished buildings, causing mould problems.

"Well, we tell everyone that when you 'wrap up' a house [insulate it], you simply have to channel out the internal humidity. [...] There were regulations in the grant applications that vents or trickle vents must be installed in the windows. But that is not really a good thing because people usually block them so that the heat doesn't go out, and so that drafts don't come in or the wind doesn't blow in. Often it is so sealed off—the apartment door is replaced for perfect thermal insulation, there is no air movement through it at all, and with the windows too, there is a vacuum in the apartment. If they would just open the window a little bit, a draft would start immediately, and then it would ventilate. [...] Not for a long time; just open it, and then close it after two minutes. [...] Those who learn it don't come back [to complain], but generally, people are not quick learners. [They think] 'Why should I save money if I'm letting the heat out?' Because they always complain that it's leaking instead—that is what they complain about." - cooperative manager

4.2.4.7 Tensions and power dynamics between stakeholders/actors

In Jutasi, there are four key stakeholders that are needed for the energy efficiency retrofits or green investments: the municipality (which also dedicated some funding to the condos/cooperatives in the early 2000s for upgrading), the condominium/cooperative

managers, the owners (represented by the managers), and the actual project implementing businesses.

The municipality's role was visible in the small-scale investment into the public areas in Jutasi in the 2020s, linked to the Cultural Capital project, where mobilisation of residents was not easy (see previous sections) to co-design the local project components for which there was a limited budget. The proactivity of owners to make use of the retrofit program run/co-funded by the municipality in the 2000s and in 2015 was also limited as reported by the managers (see above) - and also the total available budget for that was limited. The businesses that would be capable of implementing large-scale projects are also becoming more and more expensive as construction materials and construction services are becoming expensive, as reported by the managers. In this framework the energy efficient upgrading and retrofit of homes seems to be a challenge that is taken up by the condo managers, who need to persuade owners - especially pensioners and landlords - to be on board and take part in the projects.

> "Construction costs and the construction price index have jumped to such an extent that we cannot currently... Or rather, I think that in the current economic situation, it is very difficult to persuade this retiree group, as well as those I mentioned—the 'stepping-stone' owners or those renting out their apartments—to agree to a 10,000-forint increase. Either my communication is very weak—I've already wondered how they could be convinced—or it's just the situation. We are still trying to push the idea that this represents value for them, that they can sell it more easily, or that the grandchild will inherit more. We try to present all kinds of information at these partial general meetings. So far, over the past three years, I haven't been successful in convincing the residents." - cooperative manager

As reported by the condominium managers in Jutasi, a key tension within the buildings is associated with tensions among the owners. There is an uncontrolled presence of private micro-landlords who rent out the dwellings for income generation (not specifically for tourists but rather for students or families) and are genuinely not interested in any refurbishments at the condominium or cooperative level. Tenants typically cannot influence owners' decisions, and many would just stay for short periods in the housing estate before moving on to higher prestige areas in Veszprém.

> "I have it out for rent, I don't give a s*it that it's a rental, yes. Because the tenant is fine in this too, it doesn't need modernizing. So that inner motivation is missing—that sense of ownership that this stairwell is also mine, and the roof is mine too. And that's why I think it's very difficult to get the message across that you have to spend on this too, and you should think about this too, because there's a feeling that I'm not doing it for myself, it's just not like that. So, this is how I can summarize it." - condominium manager

In addition, the stakeholders identify a growing generational divide that paralyzes decision-making. Older residents often refuse retrofits, stating "it's good enough for me as it is," while younger 'stepping-stone' owners refuse to invest in a property they plan to leave within five years.

4.2.4.8 Innovative governance mechanisms

The general setting where the retrofit projects can be implemented is defined by law: condominiums and cooperatives have to organise an assembly of the owners and the owners need to vote to organise any investment and share the costs. In Jutasi, according to the interviewees, no particular facilitation was there by either stakeholder to enhance the commitment or improve the information levels of the owners. The municipality's small scale incentives were important, but not the primary driver for the investments.

4.2.4.9 Tourism and market pressures

Veszprém in general is the largest town in the proximity of lake Balaton, which explains the relatively high housing prices in the city. However, Veszprém is more attractive for cultural tourism than the Balaton-centered recreational tourism, which was also at the core of the Cultural Capital project implementation.

The high pressure on the Veszprém housing market is reported by our interviewees to be linked with the presence of university students who create considerable demand, also in Jutasi housing estate. But at the same time Jutasi is still the most affordable housing market segment in Veszprém.

> "But otherwise, they said at the beginning that the fluctuation is relatively high because it's a sort of entry-level location. So if you come here as a university student or a starting employee, then on one hand, while rental prices are very high there too, they are even higher everywhere else. So, that is what you can afford. And I think it's like this now, meaning eventually everyone—you don't want to stay in a housing estate. Some do, some don't want to leave, but it's one of those things where [you want to move] closer to the city center, to a better location, somewhere larger, whatever; there are spatial limitations, after all, so there are no giant panel apartments like that. The size of the family grows, or their income potential grows and changes, then of course, [they move] on." - former manager of the Cultural Capital project

4.2.4.10 Gaps in Stakeholder Perceptions

Regarding the renovation process in Jutasi housing estate, there are a few friction points among the stakeholders' perceptions.

The municipality (through the lens of the urban development expert and the current leader of the strategic planning division) expressed that former attention to the Jutasi developments and the funding that the municipality could make available have vanished. Moreover, what was achievable within the Cultural Capital framework was tangible, but also limited (as expressed by the former lead of the Cultural Capital Programme).

While the municipality celebrates the good quality of the Jutasi estate's green spaces, managers highlight that these "giant spaces" are somewhat neglected by city maintenance services.

4.2.5 Stakeholders' Perceptions of Green Initiatives in Case Study Areas: restoration of the Séd stream

4.2.5.1 Green strategies and implementation

Despite the fact that Veszprém possesses numerous development strategies, ecological and climate objectives were not emphasized until the adoption of the 2024 Green Space Strategy. Furthermore, the few conceptual goals that sporadically appeared were never linked to specific projects or locations. The renewal of green spaces remained a secondary political priority for the city. One of our interviewees expressed a lack of 'green' motivation in the city's development:

> "My general experience - whether it's the Séd stream area or anywhere else - is that ecological design was almost never the starting point. If the design team, or an intermediary like Veszprém 2030 (the project management company), happened to have enough budget and the will for it, then these aspects were squeezed in as an afterthought. I'm not saying they didn't pay any attention to it, but usually, other priorities just swallowed it up. To be honest, I haven't seen a single development in Veszprém where this was the actual starting point or where it appeared as a strictly defined design principle." - former manager of the Cultural Capital Programme

Large-scale revitalizations occurred only when mandated by the eligibility criteria of available grant applications. Consequently, the reconstruction of certain green areas in the Jutasi út housing estate took place within the framework of a complex residential rehabilitation project (2014), while the renewal of downtown parks and gardens alongside the Séd stream was carried out under the 'Monasteries and gardens' in 2010 and the 'Green City' program (2023), in conjunction with the European Capital of Culture initiative.

4.2.5.2 Participation and governance

The implementation of the restoration programme (in 2010 and later on as part of the Cultural Capital programme) was executed by a specific programme management organisation, the municipally owned Veszprém 2030 urban development company. It aimed to introduce new participatory methods (and some of those methods were also required by the support programmes themselves). **After a while these participatory processes were embedded into the general urban development processes irrespective of the founding source.**

> "This whole thing started with a strategic plan back in 2015. …We're talking about a seven-and-a-half-hectare area right in the city center that's home to several major cultural institutions, like the University of Pannonia, the Laczkó Dezső Museum, the Petőfi Theater, and the County Hall. The city commissioned a full design team to create a development plan for it. This team started a dialogue with local businesses and residents, and the result of all that back-and-forth was a concrete strategic plan - and I mean a real plan with drawings, showing exactly where the parking garage should go or where the green spaces should be." - representative of the urban development company

During the Cultural Capital Programme the city employed a large staff of professionals, some specifically trained for participation of the inhabitants in the event series.

"We launched architectural design competitions for the development of the St. Nicholas area. ……. Once the competitions were over and the plans were on the table, we opened things up to the public. We held forums, design presentations, and talks with the architects. This was where we gathered feedback from the neighborhood and the city. After synthesizing what the architects and the community thought, we moved forward and wrote a concrete brief: That's when we handed out the contracts for the actual technical plans.

But it's important to note that it didn't end there. We kept iterating on the designs with the community - the people we managed to pull in and who were active in the brainstorming. We kept them informed and constantly asked for feedback. When the final plans were ready, we presented them; when the construction tenders were closed, we reached out again to say, 'We're done, the diggers are coming.' Even during construction, we organized site visits". - representative of the urban development company

However, in the time of the first wave of Séd-revitalisation, this participatory approach has not yet gained ground in green space planning, a situation exacerbated by the tight deadlines imposed by EU funding and public procurement systems. As a result, **participatory processes were limited to statutory requirements**. According to the designer of the Séd Valley project, there was minimal interest in the public consultations; only a few entrepreneurs seeking to develop hotels, restaurants or cafés in the valley attended consistently, while the affected local population remained inactive.

4.2.5.3 (In)equity (distributional)

Séd Valley had a specific status before the change of the regime in 1989. **The surrounding streets in its outer parts were characterised by hardly-accessible neglected residential areas**, while its central part was considered as a marginalised area inhabited by municipal tenants of Roma origin.

Based on the personal lived experiences of our interviewees, the Séd Valley was perceived as a scaring area by the local population until the 1990s, primarily due to concerns regarding public safety. Following the relocations of the local municipal tenant population (most of them of Roma origin) in the 1990s, the valley's image underwent a gradual transformation within the residents' mental maps, leading to the progressive return of the urban middle class to the area. Initially, due to the lack of infrastructure and the presence of extensive green spaces, the space was predominantly used by adolescents, couples, and dog owners.

"When I first moved here, my friends from Veszprém all told me that when they were growing up, that area was where the teenagers would go to hide out—you know, the boys and girls and whatever. But otherwise, people would sometimes set their dogs on them because it was full of these private allotments and stuff, like a real 'wild west' area... so they were just like, 'we don't go down to the valley". - former manager of the Cultural Capital Programme

"Back in the 80s, the saying was that the bottom of Dózsaváros, near the Séd stream, was full of Roma settlements. There were shacks, crumbling houses, and loud parties - people felt they took away from the charm of the area. This was officially noted in the 80s, a program was launched in the 90s, and by the end of that decade, the lower part of Dózsaváros and the Séd area had been 'cleared out.' It was surprising to me because, as a kid, I avoided going there, but then later I started hearing that everyone was gone. And when I actually went there - true enough, there was nobody left. It was dead quiet. It turns out everyone had moved to Szentkirályszabadja (neighbouring settlement). They didn't really have a choice; it wasn't a matter of whether they were welcomed or not,they were basically 'relocated' there. " - real estate developer

As the quotations illustrate, the neighbourhoods by the Séd stream started to change already in the 1980s and 1990s as a result of intense urban development processes, like the improvement of public transportation, investments in the Zoo that is located besides the Séd, and the forced displacement of Roma families from the downtown area mostly to neighbouring settlements. Still, by the time, the EU/state financed rehabilitation of the Séd bank has started in 2010 the area was on people's mental map, but rather as an overgrown green area where couples in love went to be hidden.

Following the revitalization program after 2010, the demographic of urban users expanded significantly, with the emergence of families with children and attendees of cultural events, etc. In alignment with the development objectives, the park has also evolved into a tourist attraction; consequently, the valley is now frequented by a substantial number of external visitors alongside the local population.

4.2.5.4 Political mobilization

The renewal of green spaces met with general public approval and even enthusiasm. However, noise from events held at the venues created in the Séd Valley triggered resistance from local residents, who initiated litigation against the municipality.

"They renovated the area, and then obviously, everyone wanted to organize everything there. Small concerts, big concerts, this meetup, that meetup... you've got VeszprémFest there, of course. People started using it for more than just dog walking - the city, the entrepreneurs, you name it. … It wasn't really a consideration that, hey, people actually live there. I don't think they even had an official association or anything, I think the residents just teamed up. They sued the city, saying, 'Look, we live here, it's supposed to be a quiet green area,' and so on.

It ended in a settlement, I think. I don't recall it reaching a final verdict, but there was a lawsuit and they reached an agreement in the meantime. And then it was capped - like, only one amplified event per month. Even when we organized something, we started by calling the CEO of 'Monasteries and Gardens' right away, like, 'Hey, listen, we want to do this. First, is the space free? Second, start softening up the residents, asking them how they feel about it.

And actually, we managed to bring events there that drew a lot of people, but they were like, for example, we had this 'Long Table Picnic,' which is this big community thing - bring food, eat together - and they said, 'Wow, this is great, come on in, because this is exactly what it should be used for.' Not for gated, paid concerts or some 'party-party' music blasting through the mic, but for community building. But this was all happening while we were bidding for the EKF (ECoC). I remember them saying, 'Fine, you can plan projects, but just keep in mind that people live there, and there's a contract or an agreement between the city and the residents". - former manager of the Cultural Capital Programme

The conflict ended in a juridical decision that restricted the organisation of events; this was partly why a suitable area for such functions was later established on the site of a former furniture factory during the Cultural Capital year.

4.2.5.5 Socio-ecological impacts/benefits (positive)

In line with typical Hungarian practice, the renewal of green spaces was driven not by an increase in ecological value, but by the installation of new recreational functions, the reconstruction and construction of built elements, paving, parking lots, lighting, and the placement of public furniture. According to our interview with the designer, ecological interventions were precisely what were omitted during the implementation in the Séd Valley. The Séd stream receives the entire city's stormwater; prior to the regime change, it caused flooding, leading to works in the 1980s to accelerate its runoff. According to our interview with the designer of the park, the original renewal plans for the valley would have restored a more natural riverbed morphology, but this was cut from the budget. The former vice-major also mentioned this in her article presenting the history and results of the project, and emphasizing the functional gains the project has brought in.

"The most contentious issue concerned the construction of a reservoir on the section of the Séd river along the eastern slope of Csatár Hill—enabling water level regulation—and the establishment of a dam on the Aranyos Valley section of the Séd. While a controllable water level would have been a primary benefit, the complexity of the design, the difficulties inherent in the permitting process, and the magnitude of the required financial resources necessitated a more restricted spatial delimitation of the project area. The renewed parks of the Séd Valley, which were considered a rarity at the time, received significant publicity and acclaim in both local and national media, becoming not only city-wide recreational destinations but also tourist attractions". - former vice mayor

The downtown friction of the Séd Valley has no directly adjacent residential area that the renovation could impact.

The revitalization of the Séd Valley clearly increased the value of surrounding real estate, though perceptions of this process varied among interviewees. Until the regime change, the streets at the valley floor were characterized by low prestige due to poor accessibility, lack of public transport, and generally aging population and especially an emerging slum in certain municipal buildings. In the 1990s, the municipality liquidated social housing in the area's most

dilapidated buildings (e.g. Jókai Mór St.) and relocated the residents mostly to neighbouring villages, which facilitated the neighborhood's transformation. The street has since gained significant value, supported by further public investments related to the Cultural Capital Programme, such as the renewal of the Ruttner House and institutions around Ranolder János Square. **However, in many cases, this renewal led to the disappearance of residential functions.** A similar, but private-market-driven transformation characterized properties directly connected to the park, which had low value and often consisted of abandoned, ruined buildings prior to the renewal. Real estate appreciation was most spectacular here; however, **the renovated buildings primarily became hotels and hospitality venues rather than residential units**.

Opinions were divided regarding the detached-housing streets connected to the Séd Valley (primarily Veszprémvölgyi and Fenyves streets). One interviewee claimed Veszprémvölgyi Street is now the most expensive street in the city. However, our field survey supports the view of another interviewee, who argued that **residential prestige and price are proportional to the view (specifically the view of the Castle) rather than a direct connection to renovated green spaces**. This is reflected in the high-prestige Kertalja and Pajta streets, which are undergoing transformation and appreciation. Conversely, the lower section of Veszprémvölgyi Street features middle-class, and occasionally quite modest, housing from the 1970s and 80s, which is being renewed sporadically to accommodate new tourism-related businesses. As the street ascends, the proportion of new or renovated buildings increases noticeably. The wealthy villa constructions of the post-millennium era are actually found at the upper end of the street and the connected Próder Ferenc Street. The same pattern is to follow in Buhim and Fenyves streets, which have become significantly more expensive according to one interviewee. In Buhim Street and the lower half of Fenyves Street, where the development directly connects to the renewed section of the Séd Valley, the renewal of properties and functions is only sporadically perceptible. On the ascending section of Fenyves Street—which was only affected by point-like Cultural Capital developments—we observed increasingly larger, newer, and more expensive detached houses.

4.2.5.6 Socio-ecological impacts/harms (negative)

Interviewees perceived no disadvantages related to the green space renewals; they considered the disruptive noise of events to be negligible or a resolved issue following Cultural Capital developments. This perception was aided by the fact that groups displaced from the renewing areas (occurring prior to the renewal) found housing outside the area, or even outside the city, in Szentkirályszabadja. Nevertheless, **indirect references were made in the interviews suggesting that the original residents also had left the area due to its increased value**.

"Imagine it like this: there's a small family home, a 'Kádár-cube' (*typical 1960s socialist-era square house*) —maybe inherited from the original owner—but the person living there doesn't have the means to upgrade it; they just can't afford it. Then someone else comes along who *does* have the money, and they buy it at a price the owner can't refuse. At that moment, you see this shift in social classes, or I'm not sure how to put it. Basically, the

original owner moves out to the outskirts or the suburbs, and the new owner moves in. They tear it down, rebuild, renovate, landscape the garden, and so on. They end up creating an environment that's on a completely different level." - representative of the urban development company

4.2.5.7 Tensions and power dynamics between stakeholders/actors

During the reconstruction of the Séd Valley, the municipality effectively integrated the interests of property owners. The only significant challenge arose from a change in the ownership of the 'Püspökkert' (Bishop's Garden) during the process. Ultimately, however, an agreement was reached regarding a utilization plan that aligned with the project's functional concept.

"There was a budget of about 200 million forints (approx. 526,000 EUR) to fix up the old bishop's garden and the surrounding greenery. It was church property back then, but it changed hands by the time the work was finishing up. The investor who bought it from the Catholic Church went ahead with the renovation under the same conditions. And honestly, it's still open to everyone today - it's not fenced off. He manages it and keeps it tidy, but we still walk there, relax, and lie out on the grass just the same. Most people walking through probably don't even realize they're on private property". - former vice-mayor

In general, the relationship between the city's political leadership and the national government is strong, as indicated by the scale of financial government support for the Cultural Capital Programme. Consequently, the government's role in Cultural Capital developments has intensified, occasionally at the expense of the city's planning autonomy. The Catholic Church is a similarly powerful development actor, due to its extensive local real estate holdings and significantly increased development funds since 2012. **These two powerful actors often define the city's development directions from the outside**. Their priorities primarily include enhancing national prestige, renewing the historical fabric, and boosting tourism. Ecological considerations and housing are not among their objectives.

4.2.5.8 Innovative governance mechanisms

Alternative governance techniques, such as volunteer programs, appeared first in Veszprém in connection with the Cultural Capital event organisation. However, this did not alter the highly centralized, voluntaristic decision-making processes of state, church, and municipal developments.

4.2.5.9 Tourism and market pressures

Given the steep slopes of the Séd Valley, the fragmented parcel structure, and the predominantly rural and small-town character of the built environment, **our interviewees associated only few new construction projects with the revitalization of the valley**. Furthermore, professional real estate market actors played no role in these developments:

"I'd say the impact of these developments can be measured in hundreds of meters. So, if we're looking at the Séd riverbed, I'd say that within 300 to 500 meters of it, the change is really tangible. The standard of entire neighborhoods has gone up, and you can see it in how people buy old houses, renovate them, add extensions, and modernize them for today's needs before moving in. This isn't about investment property; it's specifically private individuals who have the financial means to take the plunge. We don't really see big market players here who develop just to sell or work based on some algorithm; that's just not the case here". - representative of the urban development company

Several interviewees noted that the expected appreciation and subsequent development of a hilltop site in the western entrance of Séd into the city, that was designated for construction in the local spatial plans, failed to materialize. This outcome was contrary to expectations, as the area has long been designated for development, offering panoramic views and a natural green setting. Furthermore, many of the larger parcels in this area are currently held by institutional and economic actors.

A significant number of new accommodations and hospitality units opened in Veszprém, especially in the Séd Valley, for the Cultural Capital year. In 2023, the number of guest nights increased by approximately 20%, though it is doubtful whether this level can be sustained. According to interviewees, tourism businesses are already feeling a decrease in visitor numbers as the Cultural Capital year is over. Due to shifting strategies, it is expected that some of these accommodations and properties will return to the residential housing market, either temporarily or permanently.

4.2.5.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Similarly to other Hungarian cases, there is generally a lack of thematic civil society organizations associated with urban development in Veszprém. While civic engagement does emerge in relation to specific issues or initiatives, these communities are generally characterized by a lack of longevity, typically disbanding once the immediate objective is addressed. Thus the view of the residents is hardly expressed among the interviewees.

4.2.6 Critical Analysis: Veszprém

4.2.6.1 The role of green policies in influencing social transformation in Veszprém

Green policies, implemented through energy retrofitting programs and the introduction of nature-based solutions along the Séd stream, **have had a limited impact on shaping the local housing market and social structures in Veszprém. One reason for this lies in the restricted scope of these interventions; another is that other public policies and urban development measures appear to have exerted a more substantial influence**.

Regarding the city's socio-spatial composition, the replacement of municipal tenants—predominantly of Roma origin—from downtown areas between the late 1980s and 2004 played

a decisive role in the revaluation of these neighbourhoods, transforming them into high-prestige residential areas with exceptionally favourable locations. In contrast, energy-efficient renovations in the Jutasi housing estate resulted in a far more modest shift in social status. The Jutasi estate continues to be perceived as a low-prestige, 'entry-level' residential area characterised by high residential turnover. Today, the municipality identifies the high cost of housing in Veszprém as a key factor driving local residents toward suburban locations, while the Jutasi estate remains a stagnant zone in which, according to urban development experts, only approximately 10% of the housing stock has been modernised and due to the lack of state and local subsidies further major renovations are not foreseen.

In several cities—some in close proximity to Veszprém, such as Ajka or Várpalota—municipal leadership placed energy-efficient retrofitting of the residential stock high on the political agenda. Veszprém did not belong to this group, although its achievements would still be considered satisfactory by the standards of many other Hungarian cities and Budapest districts. At present, renovated (at least insulated) buildings are clearly visible within housing estates: they appear in relatively high density in more prestigious areas such as the Cholnoky housing estate, and in much lower density in less popular areas like Jutasi. **Nevertheless, the overall visual impact of these renovations remains sporadic rather than transformative**.

With regard to the role of the Séd stream reconstruction in urban development, it can be stated that it has had a tangible impact, though not primarily on adjacent residential areas as the stream is loosely connected mostly to the back of family houses. **Instead, its main effect has been as a tourist attraction.** While the area already attracted visitors following the initial reconstruction phase in the 2010s, its popularity increased significantly after subsequent renovation waves associated with the European Capital of Culture events in 2023. Although the area remains popular among local residents, the continuous reconstruction and functional enrichment stretching from the city's western boundary toward the downtown area—culminating in a prominent public garden in the city centre—has transformed it into a major tourist destination.

The factor putting a stronger influence on the local housing market stems from Veszprém's distinctive topographical characteristics. Elite residential areas embedded within the historic urban fabric are defined not by direct proximity to green spaces, but by visual qualities, most notably views of the Castle. Consequently, green space interventions carried out in the valley areas do not substantially alter the spatial distribution of elite residential neighbourhoods.

4.2.6.2 The role of green policies in influencing housing inequalities in Veszprém

Energy retrofitting

Energy retrofitting has had a limited impact on housing inequalities in Veszprém, at least in the way in which it was implemented in the Jutasi housing estate.

Energy-efficient interventions initially imposed only moderate financial burdens on homeowners due to the high level of public subsidies available during the 2000s, when the state covered one-third of investment costs and the local municipality contributed an additional one-third. By 2015, the subsidy level declined to 50%, although in specific cases—such as social rehabilitation projects—it reached as high as 90%. Residents' own contributions were typically financed through interest-rate-subsidised commercial loans and housing savings schemes (Bausparkasse), which were available until 2018. **Under these arrangements, the financial burden was relatively low.** According to housing managers, even low-income households were generally able to afford the costs; the interventions did not result in debt accumulation, and relatively comprehensive renovations could be carried out.

This favourable financing environment has changed in recent years for several reasons. Public subsidies for the renovation of multi-family buildings have practically disappeared. In addition, the period of economic growth that characterised the 2010s has ended, making it more difficult for households to cover even everyday expenses. At the same time, construction costs have increased sharply, rendering upfront investment costs unaffordable for many residents. Hungary also experienced one of the highest inflation rates in Europe during the 2020s, which further undermined affordability, even in the case of subsidised loans with variable interest rates.

As a result, **condominium and cooperative managers now operate at the intersection of resident apathy and financial stagnation**. They report that the era of large-scale panel renovation programmes has effectively come to an end: without substantial state or municipal subsidies, comprehensive retrofits—such as full thermal insulation—are unfeasible, as residents are unwilling or unable to finance the required costs themselves. In this context, managers increasingly describe their role as resembling that of "psychologists" rather than technical experts, as they struggle to persuade retirees and investment-oriented owners to accept even modest increases in common charges for essential maintenance tasks, such as elevator repairs or pipe replacements. In the Jutasi estate, large-scale energy retrofits would therefore not be feasible without renewed financial support.

A pronounced tension exists between the pursuit of visible "green" upgrades and the urgent need for basic mechanical repairs. Condominium managers question the rationale of investing hundreds of millions of forints in insulation when elevators and sewage systems—often 40 to 50 years old—are nearing failure. These buildings are described as technical "time bombs," in which even fundamental electrical upgrades must take precedence over energy-saving interventions to prevent serious safety risks such as fires.

Although energy-efficient interventions did not significantly affect housing affordability due to high subsidy levels, one specific measure generated considerable debate: **the installation of individual heat consumption meters on radiators**. Housing managers generally reported energy savings of 10–20% on building level as a result of this measure; however, **these savings were unevenly distributed.** Apartments in less favourable positions within the buildings—such as those located on corners, above basements, below roofs, or adjacent to vacant units—often faced higher district heating costs than before the intervention. This redistribution of costs carried the potential to contribute to energy poverty. Over time, however,

initial conflicts appear to have subsided as residents became accustomed to individual metering and as mandatory cost-sharing formulas were applied. These regulations require that at least 30–50% of heating costs be allocated based on apartment size rather than consumption alone.

From January 2027 onwards, the installation of individual metering systems will become mandatory for all multi-family residential buildings, unless deemed financially or technically unfeasible. This regulation may give rise to further disputes in the future.

Another technical side effect of building insulation and window replacement has been the emergence of mould problems in cases where residents failed to ventilate adequately. Addressing this issue required behavioural change, specifically the regular airing of apartments.

With regard to green gentrification, the Jutasi case does not support this hypothesis. Interviewees expressed differing views on whether energy-efficient interventions affected property values in the area; however, **there was broad agreement that the housing estate continues to be regarded as low-prestige, and that substantial windfall gains have rarely materialised**.

Séd stream reconstruction

The reconstruction of the Séd stream also appears to have had a limited impact on housing inequalities. One reason is that, due to its central location, only a small number of residential areas are directly adjacent to the renewed green spaces; consequently, these areas do not significantly affect overall housing market accessibility. Nonetheless, the appreciation of properties located immediately next to the Séd is perceptible both through field observations and in interviews with local residents. Despite this, residential turnover remains slow, largely due to the dominance of private ownership.

Major green space renewal projects in Veszprém—similarly to those in other Hungarian small and medium-sized cities—primarily target parks and green areas with a city-wide catchment area. In response to public demand, **these interventions prioritise functional enhancement over ecological restoration**. As a result, public use has increased and overall perceptions of these projects are positive. However, the increased pedestrian traffic generated by reconstruction and functional diversification has already created tensions with nearby residents and does not necessarily translate into improved residential quality of life.

What can be observed more clearly is **the repositioning of the Séd area from a primarily natural space to a touristic destination**. This transformation has encouraged the development of tourism-oriented services—such as hotels, cafés, and restaurants—either through the conversion of former residential buildings or the construction of new facilities. Consequently, the revaluation of the Séd Valley has had a stronger impact on commercial activities than on local households.

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4.2.8 Appendix 1 – Key interview data

#	Position of Interviewee	Sector/company	Date of interview	Form of interview
1	Head of company	Urban rehabilitation company	19 June 2025 and 1 July 2025	Online and in-person
2	Renovation expert	Urban rehabilitation company	1 July 2025	in-person
3	Former vice-mayor	Municipality of Veszprém	1 July 2025	in-person
4	Housing expert	Local social rental agency	8 September 2025	in-person
5	Former manager of the Cultural Capital project	Urban rehabilitation company	8 September 2025	in-person
6	Head of NGO	NGO on cultural heritage of the city	8 September 2025	in-person
7	Head of company	Housing development company	8 September 2025	in-person
8	Former and current heads of the cooperative	Housing cooperative	8 September 2025	in-person
9	Five housing managers	Property management companies	25 September 2025	in-person

4.2.9 Appendix 2 – Visuals

Picture 1. Insulated panel building in Jutasi/Haszkovó housing estate (by Éva Gerőházi)

Picture 2. Buildings without major renovation in Jutasi/Haszkovó estate (by Éva Gerőházi)

Picture 3.Upgraded green area in Jutasi/Haszkovó housing estate (by Éva Gerőházi)

Picture 4.Séd stream as a nature-based object (by Éva Gerőházi)

Picture 5.Playground by the Séd (by Éva Gerőházi)

Picture 6. Public park besides the Séd with the view to the castle hill (by Éva Gerőházi)

4.3 CASE STUDY (SMALL): AJKA

Authors: Éva Gerőházi & Julianna Szabó (MRI)

4.3.1 City/Town profile, challenges around just (housing and ecological) transition

Ajka is a small industrial town (28,000 inhabitants) in Hungary, located half an hour north of Lake Balaton, two hours west from Budapest, in the valley that bisects the Bakony Mountains. The development of this large village began in the 19th century with the opening of a local coal mine. This resource, along with bauxite discovered later, led to the establishment of diverse industries before World War II, including a glass factory, an alumina plant, an aluminum smelter, and a coal-fired power plant.

Industrialization accelerated significantly after World War II. Correspondingly, the population, which had grown slowly until then, surged from 9,000 (1941) to 34,000 (1990). The transformation of the town was marked by the construction of a new, modernist town center and housing estates built with industrialized technology, while the single-family housing areas of the connecting villages were also modernized.

Following the change of regime (1989/1990), heavy industry entered a crisis, and the volume of both glass and aluminum production decreased. The fate of aluminum production was ultimately sealed by the 2010 red mud disaster, in which the dam of one of the factory's tailing ponds broke, causing immense human, environmental, and material damage.

Concurrently with the decline of its industrial functions, out-migration began, and Ajka's population has since shrunk from its peak of 34,000 (1990) to 28,000 today. Aging accelerated more than on national or county level reaching well over 25% of people over 65 years by now.

According to the real estate registration of 2019 there are 9,364 residential units in Ajka, 78% which are in multi-family buildings (currently condominiums and cooperatives) built in stages from the second world war. All of the housing units are privately owned, except 100 apartments that are owned by the local municipality. The share of private rental sector is unknown due to the lack of official data.

The town has maintained its left-wing political traditions. The mayor, Béla Schwartz, (being the head of the local council in the socialist times) has led the town again since 2002, representing first the Socialist Party and later an independent local association.

The town is considered a front-runner in building rehabilitation and nature-based solutions, and - despite the different political orientations of the local leadership compared to the nation state - it was able to implement several development projects in the last decades financed from European and state resources.

4.3.2 Green Transition Interventions in Ajka: energy efficient retrofitting of the housing stock and the renewal of green public spaces

In the following sections the process of green interventions and their potential consequences will be presented through the examples of two major green programmes, each discussed in separate chapters: the energy retrofitting of the prefabricated housing stock and the public interventions in green areas.

Energy efficient renovation of the housing stock

Ajka is a forerunner city in the renovation of its multi-family building stock, with nearly 90% of buildings having undergone either energy-efficient or structural renovations over the past two decades. Since the early 2000s, when the national panel rehabilitation programme was launched, the renovation process in Ajka has continued steadily.

The municipality of Ajka has played an active role in supporting the renovation of multi-family buildings since the launch of the Panel Programme in 2001. At that time, the state provided one-third of the renovation costs, one-third was provided by the municipality and one-third by the owners. The municipality provided its share even when such support was not compulsory and homeowners' associations could apply directly to the state for funding. Between 2003 and 2009, the municipality spent HUF 677.7 million (approximately EUR 1.8 million) to support multi-family buildings, affecting 133 out of the 231 multi-family buildings in the town. The municipality also provided co-funding for the 2015 national programme 'Warmth of Homes,' even though municipal contributions were not required.

In addition, the municipality has implemented separate programmes to support buildings constructed using traditional (non-industrialized) technologies and has financed non-energy-related interventions. Large-scale renovation subsidy calls were also launched in 2019 and 2024 using municipal funds. However, due to limited municipal resources, the results of the most recent call have not yet been announced.

Altogether, renovations with a total budget of HUF 6.1 billion (approximately EUR 16 million) were carried out in the town between 2003 and 2024, of which the municipality contributed HUF 2.37 billion (approximately EUR 6.3 million[115]).

In addition to renovating individual condominium and cooperative buildings, the municipality implemented two waves of social rehabilitation programmes. The first wave (2009–2011) included the renovation of five condominium buildings, comprising 218 flats, besides other physical and social interventions.

Green development in public spaces

A definitive element of Ajka's urban identity is its 'green self-image,' which serves to partially offset the stigma associated with its industrial heritage, the resulting environmental degradation - primarily air pollution - and the red bauxit-mud disaster of 2010. This green self-image is rooted in the surrounding forests of the Bakony Mountains and the extensive green spaces of the city, characterized by mature tree populations. Since the turn of the millennium, the revitalization and development of green spaces have occupied a central role in the city's development strategy. Within this framework, our interviews consistently highlighted three key environmental interventions:

- The continuous renewal of green spaces within housing estates since the 2000s;
- The redevelopment of the City Park (Városliget), including the dredging of its lake (2021–25);
- The planned near-natural restoration of the Torna Creek, which remains only partially implemented to date.

The central area of the city contains extensive green spaces integrated into its housing estates. While these green areas were established concurrently with the construction of the housing estates (1950-1980), by the turn of the millennium, their functions, built infrastructure, and vegetation had significantly deteriorated, necessitating comprehensive renewal. Since the 2000s, the local municipality has prioritized the revitalization of these green spaces, integrating their renewal into every EU-funded urban development initiative. These include the rehabilitation of the city centre and the local spa (2004–06, ROP 2.2), the general downtown

[115] The data were provided by the local municipality

rehabilitation (2007–14), the social urban renewal projects (2009-2011; 2014–21), the "Ajka Links" Community Led Local Development Programme (2018–22), an Interreg program (2018), as the "Ajka, Livable City" program (Territorial Operational Programme Plusz, 2022–26). The actual planned restoration of the Torna Creek is also partially EU-funded: completed elements were realized through the Regional Operational Programmes, while the upcoming phases will be financed via the Environmental Operational Programme.

Beyond the mandatory co-financing requirements, the municipality also funds smaller-scale green space renewals from its own budget. One such initiative is the "Házunk tája" (Our Home's Surroundings) program, through which the local government renovates green areas directly adjacent to condominiums that have participated in the municipal facade and energy efficiency retrofit programs.

Similar to the green areas of socialist-era housing estates, the City Park was developed in the 1970s and 1980s as a city-wide green zone on low-lying, marshy terrain that was largely unsuitable for construction. The creation of the lake aligned with the geographical characteristics of the site; however, following the planning principles of the era, it was also integrated into the district-level storm water management system. Functional units typical of that period were established around the lake, including a public bath, a youth camp, a traffic education park for children, an open-air stage, and a café. A legacy of this period is that while the areas remain under municipal ownership, several parcels are registered as building plots rather than public spaces.

The revitalization of the City Park (Városliget), Ajka's central green space, was necessitated by factors similar to those driving the renewal of the housing estates: shifting management structures and changing public demands, alongside aging functional elements, technical infrastructure, and vegetation. Furthermore, the disruption of the lake's ecological balance in 2021 created a pressing urgency for intervention. Consequently, the dredging and revitalization of the lake in 2021 were followed by the large-scale renewal of the surrounding green areas in 2024–25.

While urban ecological considerations emerged only out of necessity or as pilot projects- such as the installation of experimental rain gardens - during the City Park's redevelopment, the planning of the Torna Creek and its environs already prioritized a climate-conscious and ecologically-driven transformation of the city's storm water- and green space management. Regarding the downtown section of the creek, the structural elements were successfully implemented in 2025 through the Regional Operational Programme; however, the modification of the creek bed and the comprehensive ecological renewal of the green corridor remain contingent upon the opening of TOP (Territorial and Settlement Development Operational Programme) resources.

	EE renovation of housing	Greenspace renewal
Neighbourhood characteristics (general social type, economic activities, density, etc.)	Housing estates throughout the city consisting of housing units built from the 1950s till 1980s	Central and small-scale neighbourhood green spaces connected to residential areas

Duration	2001-2024	2004-25
Funding	State, EU (ROP) and local funds	various EU funding sources (ROP, TOP, CLLD) supplemented by municipal resources
Actor constellation	Municipality led interventions	Municipality led interventions
Aims and objectives	Improvement of the structural and energy-related characteristics of privately owned multi-family buildings and improvement of the city landscape	Renewal of park functions and infrastructure, revitalisation of the City Lake
Specific physical measures	Renovation of the common spaces of multi-family buildings (building envelope and engineering)	(Re)construction of parking lots, playgrounds, lighting, café, rain gardens, partial renewal of plant stock.
Accompanying housing policy/regulatory measures	No accompanying measures are identified (except for the social rehabilitation components)	New condominium development adjacent to the upgraded green areas
Key social tensions or/and benefits between greening and housing	No significant tensions were detected. Trade-off between the quality and the affordability of renovation is observed.	No significant tensions were detected. Distribution of new condominium flats and the functions of green areas were debated.

Table 8.Key data on the two case study themes in Ajka

4.3.3 Methods

The present case study report is based on a mixed-methods research design. Background information, including contextual data, was collected through desk research focusing mostly on local strategic and programming documents, as well as internal municipal data provision. Stakeholders' perceptions were explored through a series of semi-structured interviews.

In total, nine interviews were conducted in Ajka between June and November 2025, involving 10 participants concerning the two case study topics. The interviewees were selected to reflect the diversity of local stakeholders as well as different phases of the interventions; for example, experts with professional experience dating back 20–25 years were also included. Given that the tradition of establishing and maintaining civic movements is relatively weak in Hungary, representatives of residential communities were primarily included among the interviewees in the form of condominium and cooperative management. These managers —who possess in-depth knowledge of the technical, financial, and social processes within residential buildings— were interviewed to gather information on the perception of the flat owners. Green interventions were captured mostly by municipal experts and a housing developer, while the political opposition was also addressed concerning both two topics under analysis. Interviewees were selected based on their expertise, and a snowball method was additionally applied to identify actors who could provide complementary perspectives.

Both two topics have long timeframes, having commenced in the early 2000s. As a result, it was not feasible to capture all narrative shifts or the perspectives of the numerous actors involved through only 10 interviewees. Instead, the research focused on stakeholders with sustained and comprehensive involvement in the projects, enabling the representation of a broad range of perceptions as well as their evolution over time.

All interviews were conducted in person and were complemented by site visits and in-field observations. Interviewees received explanations on how their personal data would be handled and approval was gained for quotations and audio-recordings. The approval was audio-recorded as well. The recordings were transcribed using Alrite software and subsequently reviewed and corrected by a native speaker. The coding process followed the guidelines developed by UAB and was based on interview transcripts imported into MAXQDA software.

4.3.4 Stakeholders' Perceptions of Green Initiatives in Case Study Areas: energy efficient retrofitting of the housing stock

4.3.4.1 Precedents and implementation

All interviewees emphasized the long-term commitment of the municipality to supporting building communities in financing and implementing renovation works. This commitment proved to be long-standing, extending from the first wave of the state-funded panel rehabilitation programme in the early 2000s to recent years. According to municipal experts, the key to this success was the mayor himself.

At the same time, interviewees questioned the sustainability of this long-term political commitment. The municipality had to take out substantial loans and prioritised private multi-family residential buildings over, for example, public buildings. In recent years, the subsidy scheme has been terminated due to a lack of municipal resources.

> "Last year we have announced a call. The deadline was September. The leaders did not decide since last (2024) September whether they support the applications or not. On paper, according to the decree, it should have been decided within 45 or 60 days, but we have not decided since. The residents are just waiting." - municipal expert at the construction department.
>
> "But in the last round, for example, we had the feeling that we heard this as a quasi-fact, that although the tender had been announced, no winners had been announced yet, and there were not really any resources to do so. So it exists and doesn't exist at the same time. So now it seems, and it seemed this way before, that this is a tremendous burden on the city, it is a preference, against everything else, against many other things. " - advisor to the mayor

Another side effect of the political commitment concerned the technical requirements of the renovation schemes. In the case of co-financed state subsidies, technical standards were defined by the state, and they were considered challenging. In contrast, **local schemes primarily aimed to improve the visual appearance of buildings and enhance the urban landscape**. As a result, façade painting without insulation was also supported, and energy-efficiency interventions were allowed at lower standards.

This condition generated debate among stakeholders. Technical experts tended to favour higher energy-efficiency requirements, whereas representatives of residents (both housing managers and political activists) were satisfied with lower standards, as these were more affordable. Nevertheless all interviewees acknowledged the importance of the city's visual appearance as a major objective of renovation.

In addition, housing managers considered energy-efficiency interventions as tools to address essential technical problems. For example, insulation can help resolve issues such as leaking roofs or façades and can stabilise deteriorating wall elements. However, most brick buildings were not insulated but merely repainted, which leaves them exposed to risks such as falling plaster, unlike panel buildings.

Another factor contributing to residents' satisfaction was that, once a residential building had been sufficiently renovated, the municipality took the responsibility for upgrading the surrounding public spaces.

The administrative simplicity of the municipal renovation programme was also highly appreciated by local actors. In contrast to state programmes—which were considered extremely complex and often required hiring paid experts to prepare applications—**municipal calls could usually be managed directly by housing managers,** sometimes for an additional management fee.

> " (in state tenders) There were too much additional costs that are not an essential part of it, thus not an insulation. The garnishing was too much" - cooperative manager

Applying for municipal (and state) funds became a routine activity for building communities. A cooperative representative reported that only a few buildings within their stock (which is approximately 200 buildings) had not yet participated in renovation programmes. Some buildings had already received funding three times and were able to renovate gradually. Housing managers reported pressure from residential communities, which were eager to apply for calls and continue the renovation process.

> "I think that the culture of application is already here. Thus it is the case for 20 years, thus it is part of the story. ….. Communities are expecting from us to monitor the calls and tell them if there is anything appearing." - cooperative manager

4.3.4.2 Participation and governance (procedural)

Governance mechanisms in the renovation process combine top-down and bottom-up approaches. The primary drivers of renovation are state and municipal subsidies, which are decided at the respective administrative levels. As noted earlier, interviewees are aware that municipal requirements reflect both technical considerations and objectives related to urban beautification.

According to housing managers, building communities retain some room for manoeuvre in deciding which elements of the subsidy scheme to implement and whether to pursue more comprehensive or more limited energy-efficiency measures. These decisions largely depend on costs. Housing managers typically prepare a list of proposed and interconnected interventions, while the community votes on the final decision.

> "We always go to the general meeting and propose what we think is the best. Whether they accept it or not is obviously up to them….there were a couple of owners who said they didn't want insulation, just painting, but the others voted them down. Generally, the vast majority would prefer insulation.." - housing manager

In case of multi-family buildings the buildings in Ajka are organised either as a condominium or a cooperative. In all cases the apartments are owned by the private families, but in case of a condominium the common parts are owned proportionally by the individual flat owners, while in a cooperative the common parts are owned by the cooperative. A condominium is always a single building, while a cooperative may consist of several buildings. In each case, the flat owners contribute to the monthly operational and renovation costs of the buildings (labelled as 'common costs'). In practice, there is not much difference between a condominium and a cooperative, except the fact, that cooperatives were privately owned since their construction having a professional management, while most of the condominiums were created in the privatisation process, thus municipal tenants became new owners. After 30 years of privatisation, this difference is still tangible.

Under legislation governing cooperatives and condominiums, **renovation decisions are valid if at least 50% + 1 of owners vote in favour at a valid general assembly**. A general assembly may be legally convened even if fewer than half of the owners are present; furthermore, a second assembly is considered valid regardless of attendance, even if held 15 minutes after an invalid first meeting. Consequently, it is theoretically possible for a minority of owners to decide on renovation measures that are financially binding for all residents.

In practice, however, housing managers report that funding authorities—local governments, state agencies, or commercial banks—typically require higher levels of consent, often between 66% and 75% of owners.

In order to understand in details the role of the decision making rate, it is important to note that joint renovation loan from commercial banks to buildings is a common product. Renovation loans are not taken individually by the owners, but are taken by the community as an individual

entity. The instalments of the loan are paid back from the common costs collected from the owners. This way the owners indirectly make a kind of guarantee for each other, but in order that the commercial bank feels to be on the safe side often the decision of at least two-third of the owners is required.

4.3.4.3 (In)equity (distributional)

Interviewees generally described the social landscape of Ajka as relatively homogeneous. They identified some marginalised areas further from the town centre (notably Csingervölgy) and more prestigious zones in newly built complexes and family housing areas. Otherwise, the town is dominated by housing estates of different sizes with broadly similar social structures.

As a result, the **spatial distribution of renovations across the town is relatively even.** Nevertheless, several additional factors influence communities' ability to benefit from subsidies, including tenure structure. In Ajka, the Tornamenti Lakásfenntartó Szövetkezet (Tornamenti housing cooperative) owns the common parts of about half of the building stock and also manages nearly 50 condominiums. Cooperatives are legal entities, have professional management teams, and tend to have better access to commercial loans that complement subsidies.

According to the cooperative's representative, nearly all cooperative-managed buildings have undergone some level of renovation, whereas a representative of a private condominium management company reported that approximately 30% of their stock remains unrenovated.

> "So perhaps communication was good too, so I feel that the cooperative houses applied very well at the beginning, so they won, so they were renovated, and the remaining buildings started in the 2019th tender. And when I think about it, those who really wanted it, those who were financially stable, are already over it. … Except in places where it was financially more difficult to collect the money, or where residents saw that there was a problem, or in places where individual residents had a lot of influence." - cooperative manager

Differences in participation also appear to be related to the physical condition of buildings—newer buildings (30–35 years old) were less likely to renovate. Social composition was also mentioned by the managers as a crucial component of participation, emphasizing that communities with high rate of low income people, or some owners that have a high voice to express their opinion against renovation were less likely to participate in the process. Certain technical requirements, such as removing later-added enclosed balconies, also discouraged participation in some cases.

Despite these differences, **housing managers reported that nearly all communities are now eager to initiate or continue renovations, inspired by completed projects**. However, municipal funds have been exhausted, and rising variable interest rates have made commercial loans more expensive and unpredictable. These factors currently represent major barriers to further renovation.

4.3.4.4 Political mobilization

The renovation of multi-family buildings in Ajka did not generate significant bottom-up political mobilisation. One reason may be that renovation is broadly supported across political parties, including the opposition in the General Assembly. Nearly all interviewees reported on a lack of active civic organisations related to housing or urban issues, reflecting the generally weak civil sector in the town.

> "At times like this, they always mention how many hundreds of civic associations operate in the city. Zero in practice. And I miss that so much. I, too, and our party would very much like to connect with civil movements. There are no city protectors, city beautifiers, interest groups, no civic organizations whatsoever in the city. Only the pensioners' clubs. It must be said that the pensioners' clubs are very strong and have very strong lobbying activities. The members are very active, and there are 25-26 pensioners' organizations in the city." - political activist and member of the local general assembly

One exception is the Kristályvölgy Association, which focuses on social and cultural issues and is closely linked to the municipality. The organisation played an active role in social rehabilitation programmes affecting both the inner city and marginalised areas such as Csingervölgy. Its activities included involving residents in decisions about public-space renovations, operating street-level social contact points, and organising community-building events such as neighbourhood picnics. While these initiatives were effective in activating communities, they ceased once the associated programmes ended and funding was withdrawn.

4.3.4.5 Socio-ecological impacts/benefits (positive)

Most interviewees identified several positive outcomes of the renovation processes. One of the most frequently mentioned effects was the stabilisation of inner-city neighbourhoods that had previously been somewhat threatened by marginalisation. As noted earlier, Ajka exhibits no specific social disparities between neighbourhoods (with the exception of the peripheral area of Csingervölgy). However, certain residential blocks—with a bit higher proportion of municipally owned dwellings—tended to concentrate social problems to a greater extent. According to municipal interviewees, the renovation of residential buildings and their surrounding public spaces contributed to the stabilisation of these neighbourhoods.

> "The biggest achievement was not the revaluation of the renovated parts, but the renovation of panel buildings combined with the renewal of green spaces around was able to stop the social deterioration in the downtown areas like in Kossuth street." – municipal development expert

Changes in the social composition of residents were still observed in some of these areas. However, civil society representatives emphasised that these changes were not primarily driven by renovation but rather by the financial crisis, which compelled some families to move

from inner-city areas to neighbouring villages. In several cases, households benefited financially from selling their flats during this period.

Regarding the financial implications of renovation, interview data from housing managers indicate that neither the costs nor the financial benefits were substantial. This is partly explained by the fact that most multi-family buildings in Ajka are connected to district heating systems. Heat is supplied by a local heating plant that relies mainly on wood and lignite, resulting in significant air pollution. Due to the relatively low efficiency of this system, approximately 70% of district heating bills consist of fixed charges, while only 30% is variable and thus subject to potential savings.

> "Those who insulate their facades will gain about 30 percent. But people are not aware of what remains. So many people think that they have paid, say, twenty thousand forints per month (appr. 50 EUR) to the district heating provider for heating, and then 30 percent of that remains, but damn it, it doesn't remain. Only the heating fee remains. … So if I say that we don't look at the hot water, only the heating, then let's say I pay 20,000 forints (appr. 50 EUR), then the fixed part is about 12,000, 8,000 for heating, depending on the size... We lived in buildings next to each other. We insulated our house before Tóni (a friend) did, and my winter bill was about 2,000 forints (appr. 5 EUR) lower than Tóni's.." - municipal renovation expert

Overall, interviews with housing managers suggest that most residents were not particularly concerned with energy cost savings resulting from renovation. Notably, none of the housing managers could estimate the approximate level of energy savings achieved, indicating that this issue was rarely discussed at general assemblies. One municipal expert who conducted a monitoring programme found that energy savings of 25–35% were achieved in the initial years following renovation, but these savings diminished over time. According to this expert, residents gradually became less attentive to regulating indoor temperatures and ensuring proper ventilation.

Instead, housing manager highlight that residents valued improvements in comfort—such as reduced noise, cooler indoor temperatures during summer, and more evenly distributed thermal comfort between floors—as well as the improved visual appearance of buildings.

> "I never noticed anyone here getting so excited about insulating their house because, wow, it will be so much cheaper to heat. I think they saw that their neighbor's house looked nice, so they wanted theirs to look nice too. That's what dominates." - housing manager

Interviewees expressed divergent views regarding the impact of renovation on property values. Some, regardless of their professional background, argued that, because the majority of buildings in Ajka have already been renovated, renovation has become a baseline expectation in the housing market. In this interpretation, renovation status primarily affects the time required to sell a flat, with renovated dwellings selling more quickly. Others contended that

precisely because most buildings have been renovated, unrenovated properties are increasingly disadvantaged in the market.

4.3.4.6 Socio-ecological impacts/harms (negative)

From a research perspective, there is a concern that owners' financial contributions to renovation costs could lead to significant increases in common charges, potentially resulting in eviction or renoviction. However, data provided by municipal experts and housing managers do not support these assumptions.

Under the local subsidy scheme, 50% of renovation costs for both condominiums and cooperatives were covered by public funding, while the remaining 50% had to be financed either through lump-sum payments or collective loans taken out by building communities for periods ranging from five to ten years. (This interest-rate-subsidised loan scheme for condominiums and cooperatives has existed since the 1980s.) Housing managers reported that a surprisingly high proportion of owners paid their contributions in cash, while others relied on loans. As a result, increases in monthly common charges were generally modest.

> "So, a small apartment, for example, a 28-square-meter apartment, cost 312,000 forints (780 EUR), as I mentioned earlier. He paid 4,200 forints (10.5 EUR) per month for a 6 year loan. A 55-square-meter apartment with an extra two rooms cost 613,000 forints (1,530 EUR), and his monthly payment was 8,000 forints (20 EUR), while a 69-square-meter apartment cost 770,000 forints (1,925 EUR). They paid 9,900, or 10,000 forints (25 EUR) per month." - municipal expert

Housing managers also reported that renovation-related costs did not lead to extraordinary levels of debt or eviction. In their experience, arrears in common charges were typically not caused by renovation itself; rather, owners already accumulating debts in common costs and in utility costs were less able/eager to meet renovation-related payments. Even so, such cases were very limited, usually affecting no more than one or two households per building.

However, this situation has changed in recent years. With the termination of municipal subsidies, renovations must now be financed from reserve funds or subsidised loans with variable interest rates. Due to high inflation, loan instalments have increased substantially—often doubling—making this financing option increasingly unrealistic. **As a consequence, the renovation process has largely come to a halt.**

Housing managers reported limited insight into the private rental sector. While property owners are legally required to contribute to maintenance and renovation costs of the condominium or cooperative building, these expenses are likely passed on to tenants. Given the high turnover among tenants, little is known about the longer-term impacts of renovation-related costs on this group.

As discussed in previous sections, opinions regarding increases in property values vary indicating that renovation may have or may not have contributed to price differences. Neither of the interviewees did report gentrification as a consequence of renovation. Population outflows from inner-city areas were observed during the financial crisis, but these were attributed to job losses rather than renovation-related pressures.

Nevertheless, some negative effects related to housing quality were identified. In particular, the emergence of mould due to full insulation combined with inadequate ventilation was mentioned as an unintended consequence of renovation.

Finally, cooperative representatives reported an artificial inflation of construction prices as a further negative externality of the subsidy scheme. Delays in subsidy decisions were also said to contribute to rising construction costs, occasionally rendering planned renovations financially unviable.

4.3.4.7 Tensions and power dynamics between stakeholders/actors

As emphasised in previous chapters, the planning and implementation of the renovation process appear to be characterised by broad mutual support among stakeholders. Only limited tensions were identified, most notably in relation to the introduction of individual metering of heating consumption at the apartment level.

In several buildings, individual heat metering was introduced prior to the completion of insulation works. According to both housing managers and municipal experts, this sequencing generated considerable conflict within building communities. Residents living in less favourable positions within buildings—such as corner apartments, top-floor units beneath the roof, or flats above basements—tended to consume more energy than average. Even though mandatory calculation formulas exist to limit the proportion of heating costs charged based on individual consumption, these households often experienced substantial increases in heating expenses, despite having already contributed financially to the installation of metering devices.

Furthermore, while individual metering initially resulted in lower heating bills for many residents, these reductions were typically temporary. Municipal experts observed that consumption levels increased again after the initial adjustment period. In addition, cooperative representatives reported that the cost of monitoring individual consumption is so high that it often exceeds the potential financial savings generated by metering.

> “It is certain that here, where the house is not insulated, residents like temperatures of 26-27 degrees, and they tend to settle for a little less than that. So, it would be important to take action here, to turn it down a little, so that we don't let the heat escape through the windows.“ - cooperative manager

4.3.4.8 Innovative governance mechanisms

According to municipal interviewees, the **key factor behind the successful implementation of the renovation process has been the sustained political commitment of the local municipality**. Ajka has been governed by the same left-wing mayor since 2002, who had also held leadership positions during the socialist period. This long-term political continuity has translated into a strong and consistent commitment to building renovation.

Importantly, this commitment has been driven less by concerns about energy efficiency and more by the objective of creating a more modern and visually attractive urban environment. To achieve this goal, the municipality allocated substantial financial resources, with subsidies serving as the primary engine of renovation. While this approach may not be innovative in institutional terms, it has proven highly effective.

> "No one will renovate on their own. That would be very costly for the apartments. ...Subsidies are definitely needed, of course." - housing manager

Interviewees also appreciated the degree of autonomy granted to building communities in selecting renovation measures, as well as the administrative simplicity of the application process. These features contributed to a smoother implementation and helped reduce tensions within residential communities.

4.3.4.9 Tourism and market pressures

Ajka developed historically as an industrial town, but following the collapse of heavy industry after the socialist period, it was forced to restructure its economy. Tourism has not emerged as a dominant sector; instead, it plays a complementary role, drawing primarily on the town's industrial heritage. Key tourist attractions are associated with former mining sites and a krypton factory. As a result, interviewees did not report any tourism-related pressure on the local housing market.

Interviewees expressed differing views regarding the significance of the private rental sector. Official statistics indicate a gradual decline in Ajka's population. However, some municipal interviewees noted an influx of young and middle-aged families during the economic boom of the 2010s, when employment opportunities attracted workers to the town who were largely accommodated in the private rental sector. According to these respondents, the number of such households has since declined.

In contrast, other interviewees of different profile argued that the private rental sector has expanded and now accounts for approximately 10–20% of the housing stock. This trend was said to generate tensions within cooperative and condominium buildings**, as landlords owning one or two apartments in a building are perceived to be less concerned with the physical condition of buildings than owner-occupiers**.

> “There are fewer people at the general meeting, yes. Tenants don't usually give the invitation to the owner.... It is not a problem in terms of decisions, because if one person is present at the general meeting, then one person votes on it. Of course, half an hour has passed, so from then on they have a quorum, but it's more that there is a lack of information in the condominium, and subsequent disturbances due to misunderstandings.” - housing manager

4.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Given the relative weakness of the civil sector in Ajka and its close alignment with the local municipality, tensions between civic organisations and public authorities are limited. Instead, disagreements tend to emerge between political parties within the municipal government itself. The most visible opposition is represented by the ‘Hungarian Two-Tailed Dog Party’, whose representatives have criticised certain new construction projects and the implementation of some green initiatives. Nevertheless, they do not question the overall relevance or legitimacy of the residential building renovation programme.

> “It's expensive (supporting the renovation), but I think it's important. On the one hand, because of the climate crisis, and on the other hand, because it serves the satisfaction of residents. And then, of course, there is a third reason, which is the importance of the city outlook, but I think it is important to have money for this, and I have always supported spending more money on this if necessary. I would rather spend money on this than on building parking lots.” - representative of the political opposition

4.3.5 Stakeholders’ Perceptions of Green Initiatives in Case Study Areas: renewal of green public spaces

4.3.5.1 Implementation

According to the city’s development expert, aesthetic considerations dominate the planning process of green spaces due to public demand, meaning that ecological perspectives and innovations can only be introduced cautiously, almost 'covertly.' At the same time, the employee of the department responsible for the maintenance of urban green spaces stated that the impacts of climate change have been increasingly felt in their operations over recent years. Since this department carries out small-scale green renewals in-house, they are effectively able to integrate maintenance-related criteria into these processes.

The revitalization of the City Park was also necessitated by deteriorating technical conditions of the infrastructure and shifting social demands in recreation. According to the interview with the person responsible for development strategies of the municipality, the functions and infrastructure have been renewed incrementally: the public bath in 2006, and the outdoor sports facilities (BMX and skate park, tartan running track, outdoor fitness park) within the framework of the 2024–2025 green space renewal project.

According to municipal experts, another catalyst for the renewal was the disruption of the lake's ecological balance. Due to decades of neglected dredging and the climate change, the lake's depth decreased significantly, and the open water surface was increasingly overtaken by sedge and reeds. By 2021, a critical state emerged. This was initially addressed by draining the water and dredging the bed; subsequently, as sustainable results were not immediately achieved, the issue was resolved by reconstructing the shoreline, installing artificial water-aeration, and introducing a specialized fish population.

Despite the ecological aspect, the design still appeared to be aesthetically focused from the perspective of an external expert:

> "So, in my view, the starting point for the city leadership was aesthetics. There was an ecological component hidden in the background, but it wasn't particularly emphasized. It's much more prominent now. …… But originally, regarding the City Park, I think this appeared only implicitly. What I saw coming from the city leadership was primarily an aesthetic approach." - external development specialist

According to this external urban development consultant, the primary catalyst for the restoration of the Torna Creek was the major flood of 2018, which threatened the entire downtown area. However, during the design phase of the revitalization, the objectives of water retention and mitigating the urban heat island effect played also a central role. This shift was driven partly by the specific criteria of EU funding applications and partly by a gradual change in perspective among the city's political leadership and the general public.

4.3.5.2 Participation and governance

The diverse interests of stakeholders first are aligned inside the municipality with the involvement of different expertise and sectors.

> "Incidentally, the city administration is involved in every project. The project management working committee always includes the city administration, a political leader, all the professional leaders from the city hall who are involved in this. It also includes external experts, designers, and now, for example, external contractors and external experts involved in awareness raising who are interested in this. …… The city has signed a consortium agreement with EKM (Ministry for construction and transport) to take part in the preparation process." - advisor to the mayor

According to interviews conducted at the City Hall, **significant emphasis is placed on involving the local population**—particularly civil society organizations in the affected neighborhoods—during the planning phase, especially regarding the definition of functional elements in green space renewals. Ajka comprises numerous historical neighborhoods, each with its own unique history and identity; the mayor views urban development as a strategic tool to preserve these local identities while simultaneously strengthening a unified sense of belonging to Ajka as a whole. To this end, the municipality regularly organizes environmental awareness competitions between the neighborhoods (e.g., maintenance of green spaces,

promotion of soft mobility, rainwater harvesting), where winners receive funding for small-scale local open space developments.

In the project of social urban renewal in the inner city there was substantial money devoted for public participation, and therefore it received greater emphasis:

> "There, we tried to encourage people to actually use the public spaces. In the next phase, we organized these 'block picnics' to get people involved - you know, to foster a bit of cooperation and get them to help one another….. . So, we wanted to facilitate this process somehow, to allow a kind of community to form. We wanted them to take the flowers they were given, plant them, care for them, and try to live and behave in a way that's based on solidarity and mutual aid. These initiatives went quite well back then; we had many events of this type and services where people knew where to turn. When they had a problem, they had a point of contact. We held quite a few 'street office hours' as well, where residents would come in droves to report the issues they noticed. So, there were a lot of these well-functioning things that were useful, and in my opinion, it's a pity they can't be maintained as a continuous process." - community development expert of the city

However, large-scale, EU-funded projects—such as the lake reclamation and the city park renewal—partially diverge from this participatory framework. Municipal experts argue that due to the urgency of the ecological crisis and strict EU grant deadlines, **these projects were executed within a compressed timeframe, limiting public participation to mandatory statutory requirements**. Consequently, as noted by an interviewee (an urban development expert involved in local projects), certain functional elements—such as the dog park in the City Park (Városliget)—triggered public protests.

During the planning phase of the Torna Creek revitalization, public participation was more pronounced, with various stakeholder groups being consulted regarding green space functions. The process aimed not only to implement participatory design but also, admittedly, to shape the ecological mindset of the local population.

> "Regarding the Torna Creek, a process of awareness-raising has begun: they are trying to map the needs of residents and users. ……. For instance, in the case of the Torna Creek: a public hearing was held in October and early November during the grant application period. There were already licensed plans in place (the stakeholders were involved in those too, with local meetings held in the various districts). Even prior to that, a survey was conducted among the youth." - external development expert

4.3.5.3 Distributional inequity

Ajka is a green city, which is confirmed not only by local impressions, but also by statistical data and professional analysis. As the Ajka Green Infrastructure Network Development and Maintenance Action Plan (2023, page 56) emphasizes: "In terms of green space accessibility recommendations (of the United Nations), Ajka meets the established requirements according to nearly all indicators. The city's two public parks (Városliget and Bányakert) are accessible from 95% of residential areas within a distance of 2,000 meters.

However, public gardens - a category that includes the green spaces of housing estates - still require development in terms of both extent and accessibility; these are reachable within 300 meters from only 36% of residential areas - those living in housing estates. The territories of the former villages are primarily the most underserved regarding accessible public green spaces; however, in these areas, daily recreational needs are predominantly met by private gardens."

Ajka's unique urban structure fundamentally defines the population's needs for green space and their patterns of accessibility as municipal experts observed. While residents of the housing estates are strongly dependent on public green functions in the immediate vicinity of their homes, this demand is less pronounced among those living in the detached houses of the city's annexed, rural-style districts. Due to the city's scale, both the surrounding recreational forests and the city-level central park (Városliget) remain easily accessible to all inhabitants. Given the overall green character of the city and the proximity of these forests, the renovation of the central park places a higher premium on functional utility - specifically as a venue for sports, public events, and as a social agora. Overall, Ajka's green space renovation programs did not change the amount, spatial structure, or accessibility of urban green spaces.

4.3.5.4 Political mobilization

The City Park renewal and in general the strategy for renewing green spaces was viewed positively by both the public and the interviewees. Based on our interview with the local government's development manager, any contentious issues that arose were resolved either during community consultations (e.g., hospitality functions in the City Park) or through further developments (neighborhood impact of sludge disposal), but generally did not reach the level of political protest.

However, a representative of the opposition 'Hungarian Two-Tailed Dog Party' (MKKP) protested during council meetings and in the local press regarding the way the newly built apartments in the vicinity of the City Park are distributed. **The activist stated that those who have good connections to the leaders of the local municipality have higher chances to obtain newly built units at a reasonable price.**

> "Actually, I'm currently involved in a lawsuit with the mayor over this very issue, because I conducted an investigative report on the matter. What we uncovered was that AVÉP Kft.—which, by the way, is the name of the municipal company, Ajka Urban Development Ltd. (Ajkai Városépítési Kft.)—was involved." - political activist and member of the local general assembly

4.3.5.5 Positive socio-ecological impacts

Interviewees evaluated the strategy of the systemic renewal of the green spaces as unequivocally positive. All interviewees praised the City Park project, as it provides modern recreational services for the entire city. According to the people responsible for the municipal developments, they are noting a marked increase in usage intensity, especially in the City Park where the quantitative data collected by the municipality support this trend. **At the same time,**

younger inhabitants noted a lack of entertainment venues in the City Park; it was a deliberate planning decision to exclude functions associated with high noise pollution (such as clubs or event spaces). While the role of ecosystem services and the novel rain gardens received less emphasis in interviews, the municipality development manager hopes these features will have a long-term 'mindset-shaping' (environmental awareness) effect.

Our interviewees did not perceive any particular impact on the value of apartments as a result of the renovation of small green areas in the housing estates.

The City Park directly borders existing residential areas only along Korányi Street, where the gardens of 7- (8)m small-scale apartment buildings (built in the 1970s and 80s) sit adjacent to the park. Interviews suggest these properties have always maintained high prestige within Ajka:

> "In those areas, the residents are specifically well-to-do; in fact, that side of the lakeside area is basically the local 'Rózsadomb' [an affluent hilltop district in Budapest]." - external development expert

Based on field observations, these properties are currently undergoing renovation, a process in which the effects of natural intergenerational turnover, inherent prestige, and the value-added impact of the green space renewal are difficult to disentangle.

The renewal has also increased the value of municipally owned land along Liget Street, where AVÉP Kft. (a municipal construction company) has been developing apartment buildings since 2015. According to the company's representative, the units are sold via an email list of interested parties.

> "Once the prices are set—when the budget is finalized and we have the actual figures—we send them out to all interested parties at the same time, or we might even issue a public call/advertisement." – representative of the construction company

Opposition figures claim that the apartments are sold below market value to members of the local political and economic elite, who typically purchase them as investments.

> "These were bought as investments, and that's actually the most interesting part of the whole thing. To be honest, I don't even know if people are actually living there right now. One of our local councilors has three apartments in their name in that building. And get this: they already have one apartment at 1 Liget Street, another at number 3, and then three more at number 5. Of course, they're all registered under the kids' or other family members' names." - political activist and member of the local general assembly

The city's current land-use plan allows for further residential construction along the Liget–Unna Street axis, besides the City Park. According to the developer, units in the first building represent the highest-priced apartments in Ajka's secondary market, a fact attributed to the proximity and tranquility of the City Park even prior to the renovation of the park.

Due to their limited scale and fragmented distribution across the city, these green space renewals generally do not play a significant role in increasing property values or altering the spatial patterns of the local housing market. The sole exception is the revitalization of the City Park (Városliget), which facilitates the emergence of a new type of elite residential development.

4.3.5.6 Negative socio-ecological impacts

As the municipal green department representative noted, during the revitalisation of the lake in the City Park, approximately 30,000 m³ of sludge from the dredging was deposited in drying plots created between the lake and Korányi Frigyes Street, which resulted in the destruction of the existing grove vegetation. The loss of green space, the ongoing works, and the odors from the deposited sludge negatively impacted the quality of life for residents in the apartment buildings along Korányi Frigyes Street until the 2024 reclamation.

Beyond the lack of the entertainment venues and the perceived 'insider' nature of the Liget Street residential developments, no significant negative impacts regarding the City Park renewal were identified.

4.3.5.7 Tensions and power dynamics between stakeholders

The tensions with regard to the development of green spaces are linked with the goals of development (ecological vs. functional; private benefits vs. public benefits) and the side effects of developments, like the handling of hazardous waste.

The development expert to the mayor pointed out that the City Park project highlighted a typical contradiction between European Union climate goals and public demand. **In such renewals, the expansion of recreational functions** - demanded by both the public and political leadership - **often leads to a reduction in the actual size and biological intensity of green areas, contrary to declared environmental objectives.**

In addition, the criteria for small-scale green space renewal closely align with the priorities of the political leadership - as a municipal representative in our interview noted. According to him, the mayor has made the regulation and expansion of the parking in public spaces a personal priority; consequently, numerous parking lots were established during green space renovations - at times at the expense of active green surfaces.

"For me, it's really the prioritization that is always a subject of criticism. In our case, a huge amount of money is funneled into 'road renovations'—and let's put that in heavy quotation marks, because it actually means building parking lots. And this is happening despite the fact that the city leadership's stated goal is to scale back the use of motor vehicles…. During the last council meeting of the past year, this idea came up: what if we simply stopped building more parking spaces? …. At the time, he promised that there would be no more parking construction - unless, of course, the residents specifically requested it. Obviously, residents will ask for more parking so they can park right in front of their buildings. Then, at the very end of the meeting, he announced that it's quite possible we'll be building a multi-storey

parking garage in the city within the next five years." - political activist and member of the local general assembly

Tensions can be observed in private housing developments that are closely connected to green spaces. AVÉP Kft. is a unique actor in Ajka's residential development sector. This 100% municipally owned construction firm now exclusively develops apartment buildings on plots purchased from the municipality.

"The municipality has these plots that are perfect for building apartment blocks. You just won't find private land in Ajka on this scale. For example, the one we just bought is 5,000 square meters—there isn't a single private plot like that in the whole city." -construction company representative

According to the representative of the AVÉP and also the member of the assembly, the municipality officially sets no housing policy requirements for the company - only withdrawing corporate profits, which are modest relative to the city's budget - **the objective of these developments is market-rate sale rather than increasing the social housing stock**.

In Ajka's housing market, which is dominated by socialist-era estates and detached houses, these new apartments represent a new market segment. According to the representative, the company acts a regulator on the local housing market:

"We can actually control housing prices this way. I mean, you couldn't sell an apartment for 2 million forints here in Ajka, and honestly, we wouldn't even be able to find buyers for that. Prices just don't shoot up here like they do in Veszprém. For the exact same type of building, while it might cost 1.5 million per square meter in Veszprém, it's only 850,000 or 900,000 forints here. In a way, this is how the city supports homebuyers - by not forcing us to chase extra profits." - construction company representative.

The buyers are primarily the local political and economic elite, purchasing for personal use or investment (thereby expanding the private rental sector). Conversely, the representative argued that by offering these units at lower prices, they help keep the overall price per square meter in Ajka at a more affordable level.

According to the informations gained in the interview with Ajka's development manager, a forced decision arose during the lake dredging due to contradictions in environmental regulations. Had the dredged sludge been transported off-site, it would have been classified as hazardous waste, incurring significant disposal costs. Therefore, the municipality opted for on-site drying and reclamation, which sacrificed an existing, ecologically valuable green area.

4.3.5.8 Innovative governance mechanisms

Innovation in green space development can hardly be identified in interviewees responses. The slight shift from functional aspects of development to ecological considerations can be observed in recent years in line with the requirements of EU funded urban greening calls. The

strong involvement of neighbourhood communities in defining their local priorities of development is also considered by the municipal actors as novel.

With regard to the private housing construction linked to green spaces, the representative of the AVÉP talked about innovative tools used by the company, such as the targeted designation and utilization of municipal land, the involvement of buyers as a 'building community' (építőközösség) in the construction process, allowing the company to develop with lower equity and reduced financing costs. A third innovation - enabled by the building community model - is "shell and core" development, which allows for customization to buyer needs and pricing below general market rates (though this makes it difficult to verify if sales prices are truly below market value).

4.3.5.9 Tourism and market pressures

Neither tourism nor financialization exerts significant pressure on Ajka's housing market. Alongside the predominant model of owner-occupation, a private rental segment is beginning to emerge through the investments of the local elite in one or two flats in both the housing estates and the new apartment complexes.

According to the developer's interview, the construction costs and, as a result, the drastic increase in housing prices are also characteristic in Ajka, which is why the demand in the market for newly built apartments has shifted towards smaller apartments.

> "Our apartments are smaller now. It's because of the price, of course. Construction costs have skyrocketed so much that, for instance, four or five years ago, we were selling a 54-square-meter apartment for 19 million HUF (€47,500); today, that same unit goes for 54 million HUF (€135,000). That's where we are now. Labor, building materials, and other expenses have become so expensive that it's just impossible … Back when we started, the typical layout was one bedroom plus two half-rooms. Now, it's a mix - anywhere from 75 down to 34 square meters - but people are leaning toward the smaller ones. One or one-and-a-half-bedroom apartments are the bestsellers here. At most, a one-plus-two-half-room setup. In this building, for example, there are four four-bedroom apartments, but I'm afraid we won't be able to sell them." - construction company representative

4.3.5.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Similar to other Hungarian small towns, Ajka's civil society is organized primarily around sports and culture. Due to the city's unique historical development, organizations involved in urban development are structured not by thematic interests, but by neighborhoods, manifesting a strong sense of local identity within the city. The municipal leadership is cognizant of this fragmentation and leverages it in local awareness-raising efforts (as seen in the competitions among neighborhoods). Consequently, divergences in opinion regarding the direction of urban development do not typically arise between the civil sector and the local government as the interviews reflect; instead, they manifest at the political level through debates within the municipal council. The current mayor possesses significant expertise and extensive experience, enjoying broad public support for his urban development policies:

"Our mayor is actually an urban planning engineer. You see, he even served as the council president back in the day, then he was re-elected in 2002, and he's been our mayor continuously ever since—there's simply no alternative at the moment….. By the way, I don't know if you've visited Ajka before, but if you had been here, say, 25 years ago, you'd see the massive progress now. It's huge…This used to be a typical factory town with those four-story brick buildings from the late fifties, but now it's become a modern, green city. I'm sure you've seen the developments the mayor has spearheaded? For instance, the area around the Boating Lake used to be completely neglected, but in the last three years, they've turned it into the true heart of the city." - construction company representative

Ajka's Integrated Urban Development Strategy (2015) does not include objectives for increasing the municipal or affordable housing stock. Given the current housing property conditions, emphasis is placed on improving residential environments and supporting the energy-efficiency retrofitting of housing estate buildings. Additionally, the 2016 Urban Development Concept aims to create an urban housing stock that facilitates labor mobility—a goal exactly realized by the Liget Street residential project.

The preservation and renewal of municipal social housing stock and the provision of housing for youth are themes championed by the representative of the Two-Tailed Dog Party, though currently with limited impact on the political dialogue.

4.3.6 Critical Analysis: Ajka

4.3.6.1 The role of green policies in influencing social transformation in Ajka

Ajka is a relatively small town in Hungary, with 28,000 residents, that experience slow but constant decrease in population. Besides, the town is not specifically attractive neither from a tourist nor from an educational point of view, thus it does not lure immigration. Interviewees rather complain about young people leaving the town and elderly remaining. Despite these negative demographic tendencies, Ajka is not particularly fragile from an economic point of view as it is located in the western part of Hungary, close to industrial hubs, thus was able to transform its economy from heavy industry to industrial services based on small and medium sized enterprises.

The economic and demographic situation result in a modest housing market pressure, with low demand for new construction and lower differences in housing prices among neighbourhoods (except for Csingervölgy, which is an external former mining colony linked to Ajka, located in a forest environment).

In addition, Ajka (being a typical industrial town that started to develop after the second world war artificially) has integrated a substantial share of greenery decades ago into its layout. Spacious design of housing estates, family house areas in the outskirts, green parks in the heart of the city were always remarkable characteristics of the city. Consequently the value of green is not measured by its quantity but rather by its quality. And this quality has improved significantly in the last decades.

The implementation of the consistent green space renewal strategy in Ajka has served as an effective instrument for transforming the city's image from a "polluted industrial town" into a more favorable one. As a result of several years of sustained efforts, nearly all green spaces have been revitalized by now. Due in part to the mature tree canopy, the city now possesses a distinct "green" character. Thanks to the comprehensive implementation of the green projects, the resulting socio-economic appreciation shows no significant disparities across different neighbourhoods.

The renovation of multi-family buildings all around the town had similar connotations: Ajka is not an industrial town anymore but a pleasant place to live, however it does not generate mobility, but provides an improved quality of life for the local residents.

4.3.6.2 The role of green policies in influencing housing inequalities in Ajka

Housing retrofitting

There are hardly any towns in Hungary that reach such a high renovation rate of multi-family buildings than Ajka does. As nearly 90% of the communities accessed local/state subsidy schemes and were able to benefit from the renovation, and the ones that did not are already queuing for the next round of subsidy, it is fair to say that access to the renovation is not a specific feature generating housing inequalities.

With regard to the affordability of housing, the renovation process does not seem to have a significant impact. Partly due to that fact, that cost savings on energy efficient retrofitting are marginal as the fixed share of heating is 70% in the price, leaving only 30% variable for savings. In addition the utility prices are capped in Hungary since 2013 (including district heating) thus even the 30% share savings can be materialised on a moderate cost level. With regard to the price of renovation, it is implemented from subsidies, either with a combination of state and local subsidies as was in the 2000s, or from local municipal subsidies that reach 50% of the investment costs. These non-repayable subsidies, coupled with interest rate subsidized renovation loans from commercial banks resulted in modest increase in the contribution to the common costs of the residential buildings. According to the experiences of housing managers, evictions or debt accumulations due to the increased renovation fees are practically non-existent. The communities of the buildings vote for an increase in renovation costs up to an extent the owners are able to finance in general.

This fact however results in a risk of renovation even in current times. As the financial model is based on subsidies and low interest rate loans. If any of these is not available the renovation process is terminated. This is the case currently, when the local municipality ran out of funds and the local support scheme is suspended. In addition the renovation loans, even with interest rate subsidies, are expensive due to the high inflation rate. Consequently the renovation process is hibernated.

The impact of the renovation process on housing quality is considered positive in general. Inhabitants mention the increased comfort level first and the nicer outlook as a result. Energy efficiency is less of a value for most of the owners. Occasional problems however appear with

regard to mold appearing in case ventilation is not properly secured after insulation and change of windows.

The Ajka case study points to a specific feature of the renovation process, which is the trade-off between quality and quantity. The major goal of the municipality with the subsidy scheme was to support the renovation of buildings whatever the renovation is considered by the owners. For this the technical and administrative requirements were limited in case of schemes exclusively financed by the municipality and not coupled with state financing.These relatively low level of requirements made the preparation and implementation process relatively smooth and did not require extra efforts from the communities. (While state financed subsidy schemes required paid professionals who are able to write an application and the energy requirements were also higher in state financed schemes that generated higher upfront costs). The manageability of the local schemes resulted in more simple technical solutions (paintings of walls instead of insulation, thicker insulation than optimal, lower standard windows to install, insulation without calibrating the heating systems, etc.). These more simple technical solutions can create a lock-in effect: the communities use up their resources and will be stuck in an energy efficiency level that will be very costly to improve in the future.

Nature-based solutions (urban greening)

As was mentioned before, Ajka is considered a green town with an equal distribution of green areas in all neighbourhoods and central parks that are easily accessible for most inhabitants. Green in Ajka is not a specific value, rather a natural part of life. Consequently the development in green infrastructure does have a limited impact on real estate values and the real estate decision of inhabitants. There are diverging impressions of the interviewees on this matter, some of them considering attractive green spaces as triggers for real estate prices while others argue that the quality of green spaces is an essential expectation of the inhabitants towards the local government.

Nevertheless the housing complexes and plots for development besides the City Park were always considered as valuable, and their potential seems to increase in the market as the upgrade of the park was completed recently.

A notable lesson from the renewal of the Városliget (City Park) is the case of the Liget Street residential complex. In this instance, the municipality leveraged all available instruments—including large-scale municipal land ownership, regulatory concessions, a quasi-non-profit development company, and the further enhancement of green infrastructure—within a location characterized by an inherently favorable urban structure (central yet tranquil and green). Consequently, a new typology of apartment buildings is being developed, which is novel for the city. However, these units do not serve to expand the social or affordable housing stock; instead, they cater to the investment interests of the local economic and political elite.

Inspiring policies for influencing housing inequalities caused by green policies

Based on the desk research and interviews we concluded that green policies had limited impact on housing inequalities in Ajka. This is not the result of specific mitigation policies implemented by the local municipality, rather the consequence of the specific context that does

not have a shortage of housing and greenery, thus improvements in the condition of the residential buildings and green public spaces do not lead to tensions between demand and supply.

However, it is important to note, that green interventions may have created tensions in the housing market at least in spatial context, in case they would not have been implemented in a spatially equalized way. The most inspiring policy message from the Ajka case is the consistency of urban development policy in the last two decades that aimed to provide renovation subsidies for the vast majority of residential buildings and renovated most public green spaces in all neighbourhoods of the town. This forward-looking concept, which was not questioned by any of the stakeholders (even if some elements are criticized) could have resulted the fact that currently Ajka is considered to be a model to follow in green development throughout the country.

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4.3.8 Appendix 1 – Key interview data

#	Position of Interviewee	Sector/company	Date of interview	Form of interview
1	Strategic and urban development department	Municipality of Ajka	11.06.2025	in-person
2	Construction and city management department	Municipality of Ajka	11.06.2025	in-person
3	Head of NGO	Cultural and social NGO	11.06.2025	in-person
4	Head of management	Housing cooperative	11.06.2025	in-person
5	Green space development experts (group interview)	Municipality of Ajka	23.09.2025	in-person
6	Head of company	Real estate development	23.09.2025	in-person
7	Housing manager	Property management	23.09.2025	in-person
8	Party activist and member of the municipal council	Political party	23.09.2025	in-person
9	Advisor to the mayor, external development expert	Municipality of Ajka	19.11.2025	in-person

4.3.9 Appendix 2 – Visuals

Picture 7. View of a typical housing estate with renovated buildings (by Éva Gerőházi)

Picture 8. A building of the 1950s – paining without insulation (by Éva Gerőházi)

Picture 9. Green is already settled for decades (by Éva Gerőházi)

Picture 10. View of the upgraded City Park (by Éva Gerőházi)

Picture 11. Traditional housing by the City Park (by Éva Gerőházi)

Picture 12. New complexes by the City Park (by Éva Gerőházi)

5 ITALY

5.1 CASE STUDY (LARGE): MILAN

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5.1.1 City profile, challenges around just (housing and ecological) transition

Milan is the capital city of the northern-Italian region of Lombardy, and the second largest city in the country (after Rome). The core municipality has around 1,4 million inhabitants (ISTAT, 2025) within a rather small area of around 181 km². However, it is part of the higher administrative level (in between the national and local level) of the greater Metropolitan Area of Milan (*Città Metropolitana di Milano*), which includes 133 municipalities with a total population of 3.247.623 inhabitants in 1.620 km² (ISTAT, 2025). As we will see in more detail, the Municipality of Milan highly depends on a vast hinterland for the localization of functions (e.g. residential, productive, commercial) which is not limited to the Metropolitan Area but encompasses a larger post-metropolitan “urban region” (see Balducci, 2016; Bricocoli et al.,

2025). Moreover, Milan´s metropolitan region recorded the highest level of GDP per person employed (95.300 PPS) among Italian metropolitan regions, around 1.2 times higher than Rome (Eurostat, 2024). The per capita income is among the highest of the country, with almost € 38.000 per capita gross.

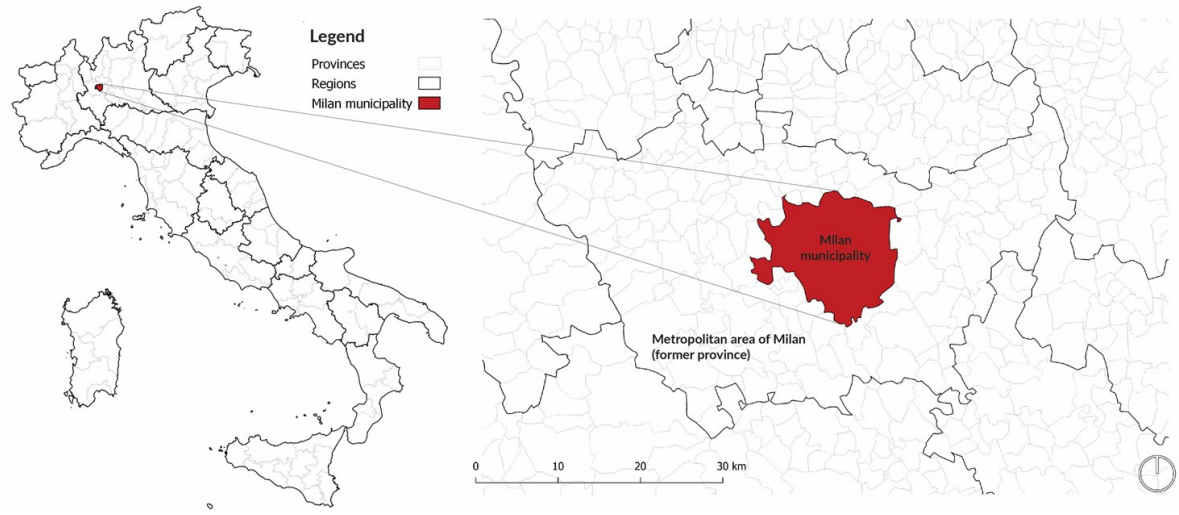

Figure 1: Milan and the Metropolitan area

The Milanese housing system[116] has followed a trajectory related to the economic and political developments of the country and to its specific role as one of the main poles in the 19th and early 20th century industrialization of the country, and one summit of the so-called "industrial triangle" (*Triangolo Industriale*) with Turin and Genoa. The most intense population growth occurred during the post-WWII period, when reconstruction of the heavily bombed housing stock happened together with intense new expansion and housing construction and mass migration from the poorer regions of southern Italy and Veneto. In the 1950s and '60s, Milan was the most dynamic urban region in Italy and labelled as the "economic capital" of Italy (Dalmasso, 1972). In this period, private housing construction, though being prevalent, was complemented by the various public housing schemes of the period, creating a stock that still provides the city with a ratio of public housing higher than in most Italian cities.

Despite the Italian national context, Milan has pursued a more active role in the production of public and social housing in the past century, which is reflected by its significantly higher share of public housing stock in comparison to the national one (8% in Milan against 3% in Italy). This is in part due to the industrial past of the city and the peculiar nature of the local government, which has long invested in municipal welfare. Additionally, a land policy tool for

[116] The following paragraphs are based on Peverini (2023).

public and affordable housing, based on compulsory purchase of plots at below market price, was introduced in the 1960s as an instrument to implement the PEEP plans *Piani di Edilizia Economica e Popolare* (Public and Economic housing programs). In that time, the private rental sector was still owning the largest part of the stock and was heavily rent regulated to prevent excessive social unrest (Padovani, 1996). The 1960s was also a decade of political mobilization and conflict, and in 1969 a general strike was organized around the housing issue.

From the mid 1970s, the city's industrial role begun to decline, with factories increasing delocalizing elsewhere together with part of the working-class population that relocated in the hinterland, mainly in the search of better environmental conditions and in the search of a more safe and protected living environment. In two decades, the core municipality lost almost half million inhabitants, most of which moved to the suburban areas in a suburbanization process due to a mix of many factors, among those: high housing costs in the core municipality; changed housing preferences and the congestion of the central core; labor market restructuring with decreasing manufacturing (blue collars in the municipality reduced around 40% between 1961 and 1981) and increasing tertiary-oriented local economy.

The increased importance of the hinterland, however, was always lacking effective governance and coordination and only recognized by the planning system as a voluntary-based form of cooperation among municipalities, through associations of municipalities for planning (Milan Intermunicipal Plan or PIM) and public housing (Intermunicipal Consortium of Milan for Public Housing or CIMEP). In later times, the transformation of the province into a "Metropolitan City" in 2014 did not improve the situation (Balducci et al., 2016). Yet the dependence of the central municipality to its hinterland in terms of relocation of functions has continued increasing during the 2000s: most employment growth concentrated in the core municipality and most population growth was hosted in the hinterland, producing an increasing phenomenon of commuting (Camagni, 2020).

The 1990s saw important changes in urban planning and housing policies, both at the national and local level. The production of public housing was drastically reduced, and urban regeneration became a main challenge. With many factories relocating out of Milan, **redeveloping brownfields and vacant industrial sites became a central theme of the local political debate**, affecting urban development until today. In this process, differential land rent accumulated during the city expansion by now well-located industrial sites has been exploited by public authorities and real estate actors through the transformation into residential, commercial, and tertiary use (see Bricocoli, Savoldi, 2010; Bricocoli, Salento, 2019). The first major example of this is the conversion of the former Pirelli factory in the North of Milan into the new Bicocca neighborhood along with the foundation of Pirelli Real Estate, a daughter company focused on real estate and development, inaugurating a transformation of the productive sectors into a financial and real estate-oriented one (Kaika, Ruggiero, 2016).

In this process, public and affordable housing were not a main aim in the conversion of former factory sites, initially because municipalities could still count to develop housing on the remaining greenfield land of the existing PEEP plans in peripheral areas, and then due to a focus on "regeneration" at any cost – even that of allowing full appropriation of development

gains by landowners and developers (Peverini, 2023). The "Clean Hands" (*mani pulite*)[117] investigations and the Tangentopoli corruption scandal within the locally ruling socialist party in 1993 – which evolved into a nation-wide scandal – paved the way for fifteen years of right-wing local government, until 2011. In this period, the real estate sector continued to grow in the framework of the booming real estate cycle (Bellicini, 2011) while the city undertook a series of strategies to re-centralize tertiary functions and middle-class residential development that was described as the dream to make the "downtown" of northern Italy (Bricocoli e Savoldi, 2010). One important part of this strategy is the introduction of the Integrated Intervention Plans (PII), local urban planning implementation instruments that act as variants of the general urban plan and are proposed by landowners and private developers, aimed at fostering redevelopment of the urban fabric of specific localized areas introduced under Law 179/1992 (Comune di Milano, 2005; 2006).

While the metropolitan dimension continued to be increasingly important, at the turn of the 21st century housing prices grew rapidly in Milan which determined polarized conditions of access to housing (Bellicini, 2011). On one side, home ownership increased, due to processes common to Southern European welfare systems, mainly: an increased role of the market in housing provision; and a huge growth of mortgage lending. On the other hand, households in the rental sector suffered from increasing problems due to rising rents and ceased public housing construction. Additionally, Milan became increasingly affected by important internal inequalities, both in terms of income and in real estate values (Manzoli, Mocetti, 2016). The consequences of social exclusion provoked by polarized conditions of access to housing were exacerbated by the financial crisis and the application of neoliberal policy recipes imposed during the crisis and the unleashed housing need in the aftermath of the crisis, including evictions.

Despite these dynamics, the city saw important trends of real estate acceleration following its international repositioning of Milan during the 2010s, now pushed by a center-left coalition, and especially following the momentum produced by the International Exposition *Expo 2015* (Bricocoli and Peverini, 2025). In this decade, the urban agglomeration of Milan experienced a new attractiveness for people and capital, especially due to a new role of finance and tertiary sector, tourism and real estate (Camagni, 2020). The housing market has since then observed skyrocketing housing prices in central locations and strongly hiking prices in former peripheral neighborhoods subject to requalification, while incomes and wages stagnated (Bricocoli and Peverini, 2025). **Gentrification has spread extensively, starting from the city core across many of the city districts.**

[117] For reference: https://en.wikipedia.org/wiki/Mani_pulite

Within the framework of Italy's housing context, Milan represents nationwide a paradigmatic case as the city attractiveness fosters increasing unaffordability and housing inequalities in a national context featuring pronounced regional imbalances that foster depopulation and downward development trajectories. As Italy's most expensive housing market, Milan exhibits extreme tensions between housing costs and residents' purchasing power, with stagnant wages and increasingly polarized income distributions exacerbating the affordability crisis. This dynamic is acutely evident in the mismatch between rapidly rising housing prices—especially in the rental sector—and modest or declining real wages, with the average net cost of access to a minimum dwelling now often exceeding 30% of household income, a threshold commonly used to define affordability stress (Bricocoli et al., 2025). Milan, while active in the production of social housing operates within a marketized framework and is subject to national austerity measures which obstruct de-commodification, such as the reduction of public funding, re-commodification through right-to-buy policies, and prioritization of market-driven solutions.

As in the rest of the Country, policies aligned with a familistic welfare model have produced a high rate of homeownership also in Milan, which has been accelerated since the 90s due to changes in banking regulations that favored financial liberalization and privatization (from 51% in 1991 to 70% in 2021). Tenure has shifted further to owner-occupation while both rental tenure and public housing have shrunk (44% in 1991 to 17% in 2021 and 14,3% in 1991 to 7,1% in 2021, respectively). This re-commodification and erosion of the public housing stock, together with the decrease in rental tenure overall, has led to an increasingly residual rental sector, heavily concentrated among lower-income and more vulnerable populations. Moreover, given this scarcity of social housing stock and high market values, the middle-class people belonging to the so-called "gray strata" (*fascia grigia*, those whose income exceeds the public housing access limits, but doesn't suffice to afford housing at market rates) are increasingly facing unaffordability and economic distress due to housing expenses. This issue is particularly true in Milan, as one of the most attractive cities in Italy (Bricocoli & Peverini, 2024b).

Housing tenure (Milan, census)		1991	2001	2011	2021
Absolute value	Total households	576.777	583.335	604.507	720.523
	Owner Occupation	294.982	347.353	387.710	504.563
	Renting (PRS + SR)	255.231	203.419	174.542	183.227
	Other	26.564	32.563	42.255	32.733
	(Public housing)	82.343	70.759	54.215	57.498
%	% Owner Occupation	51,1%	59,5%	64,1%	70,0%
	% renting (PRS + SR)	44,3%	34,9%	28,9%	25,4%
	% other	4,6%	5,6%	7,0%	4,5%
	(% public housing)	14,3%	12,1%	9,0%	8,0%

Table 1: tenure in Milan (absolute and relative) 1991-2021. Source: authors' elaboration on census data.

More recently the city experimented with public-private partnerships and financial tools to produce social housing that have been upscaled to the national level, making Milan a breeding ground for policy innovation. However, while more active in the production of social housing,

Milan still operates within a marketized framework and is subject to national austerity measures which obstruct de-commodification, such as the reduction of public funding, re-commodification through right-to-buy policies, and prioritization of market-driven solutions.

5.1.2 Green Transition Interventions in Milan

In the Italian context, the implementation of greening strategies such as densification, Nature-Based Solutions (NBS), and energy-efficient retrofitting reveals a fragmented and often contradictory landscape shaped by competing objectives, uneven governance capacities, and divergent socio-spatial outcomes. **While all three approaches are integral to the national and EU-level green transition agendas, their deployment often reflects a tension between ecological aspirations and market-oriented imperatives.**

- Densification, though formally embedded in the broader framework of "urban regeneration," frequently serves as a vehicle for valorizing urban land rather than enhancing housing equity, especially in metropolitan areas like Milan.
- NBS, increasingly promoted through both top-down and community-based initiatives, oscillates between inclusive public green spaces and exclusive, commodified developments.
- Energy-efficient retrofitting, meanwhile, has been propelled by ambitious fiscal incentives, such as the Superbonus 110%, yet has disproportionately benefited affluent homeowners and exacerbated regional and tenure-based inequalities.

5.1.2.1 Densification

Differently from other contexts, there is no clear definition of „**urban** densification“in Italian policy, and it is instead included within the broader framework of “rigenerazione urbana“ (urban regeneration). This framing, while offering a certain degree of flexibility in addressing socio-spatial transformation, also reveals critical ambiguities in the objectives, instruments, and outcomes of densification policies. Especially when it is pursued as a process of financialization, involving large-scale, market-driven redevelopment projects, where densification takes place, but does not necessarily lead to increased housing accessibility, often causing the opposing effect of fueling gentrification. In some cases, policies involving regeneration have revolved around peripheral and deteriorated urban areas and have involved public housing, with the intent of mitigating physical, social and economic shortcomings (Wolfgring, 2024). These cases are typically financed through public funds coming from the European, national or regional level, but rarely include densification interventions – and typically the number of public housing units is either maintained or reduced, rarely increased.

In the city of Milan, **intense regeneration and densification activity has sprung in recent decades**, much of which has taken place on brownfield sites formerly occupied by infrastructure or industry, aligning with sustainability goals articulated in both local and national planning frameworks. Yet, this process has been deeply shaped by market logics and international capital flows, producing highly uneven effects on housing affordability, social inclusion, and access to green amenities (Lanzani, 2024).

On one hand, large-scale projects, such as the **Porta Nuova redevelopment (case 1)**, illustrate a paradigm of top-down, market-led densification. Initially a publicly owned railyard, the area was transferred to private developers, most notably the multinational Developer Hines, under favorable regulatory conditions. The resulting transformation led to a new

development with high densities, accompanied by high-profile architectural interventions and green infrastructure such as the privately managed BAM Park (Biblioteca degli Alberi Milano) the core green development in the Porta Nuova development. While such interventions are frequently presented as successful models of sustainable urbanism, they have also been critiqued for catalyzing processes of socio-spatial exclusion and green gentrification (Di Paola, 2021), particularly given the absence of affordable housing provisions and the privatized nature of public space management. Furthermore, criticism on ambiguous and superficial ecological framing point to a vague reference to sustainability which is often deemed as greenwashing. These dynamics raise important questions regarding the redistributive capacity of densification policies when aligned primarily with real estate valorization.

On the other hand, alternative models of densification rooted in civic engagement and negotiated planning have also emerged in Milan. The case of the **Baden Powell and Segantini parks, in the Navigli neighborhood (case 2),** exemplifies how community-led resistance to speculative redevelopment can yield inclusive outcomes. Originally slated for high-density residential construction, the site was reclaimed through the activism of local associations, resulting in a system of two connected public parks and a significantly reduced building footprint. Notably, the surrounding area includes public housing (ERP) and cooperative housing, allowing for a more socially mixed urban environment. This case highlights the potential of participatory planning processes to reshape the spatial logic of densification, orienting it towards social equity and ecological integration rather than exclusive value extraction. However, such examples remain exceptions rather than the rule and are contingent on strong civil society's mobilization and political responsiveness.

In sum, in Milan, densification has primarily operated as a vehicle for urban valorization, often at the expense of inclusivity and long-term affordability. Nonetheless, emergent practices of civic engagement and alternative governance models suggest that more equitable and sustainable pathways are possible, provided that densification is conceived not merely as a quantitative increase in built form but as a qualitatively transformative process grounded in principles of social and environmental justice, putting ecological concerns in the center of regeneration efforts.

5.1.2.2 Greening and Nature Based Solutions

In recent years, green interventions in urban areas – rarely framed as Nature-Based Solutions (NBS) in the public discourse – have gained some increased interest in Italy. Laws such as Law 10/2013 have led to urban greening and forestation interventions to grow notably, especially in metropolitan areas such as Milan. The data suggests that this law has led to increasing municipal efforts in terms of urban greening, as the number of greening initiatives has increased from less than 30 in 2014 to more than 60 between 2014 and 2021. At the metropolitan scale, Milan has also engaged in broader ecological planning through citizens' and local initiatives such as the pioneering cases of "Boscoincittà", initiated and implemented by Italia Nostra in the 1970s, an NGO engaged in the protection, promotion and valorization of cultural heritage (https://www.boscoincitta.it/), and the Parco Nord, experimenting effective intercommunal cooperation in the northern area of the city (https://parconord.milano.it/). More recently, "Forestami", a project promoted by Politecnico di Milano in 2018, activated partnerships with public administrations, private foundations and social cooperatives that up to now have planted 45.000 trees in 20 hectares across the metropolitan city of Milan (https://forestami.org/).

The case of Milan reveals also a hybrid landscape of NBS implementation, characterized by a mix of high-profile, market-aligned greening projects and more grassroots, participatory interventions. One of the most emblematic examples is the Biblioteca degli Alberi di Milano (BAM), part of the Porta Nuova redevelopment—a NBS-labelled park developed in the context of one of Europe's largest privately funded urban regeneration projects. Although BAM contributed to provide better open spaces in a formerly vacant area —by introducing some green and offering recreational space—, many question its ecological value, being basically a "giardino urbano", in the definition of the municipality, which is stressing more an ornamental character rather than a public park. Moreover, its private management and location within a luxury real estate enclave are recurrently questioned. As such, it exemplifies the commodification of green under the guise of sustainability, raising critical concerns about the socio-spatial distribution of environmental benefits in contemporary NBS discourse.

The same can be said of the Bosco Verticale, two high-end residential towers with hanging gardens and planted terraces, designed by star acrhitect Stefano Boeri and often celebrated as symbols of green architecture. Conversely, projects like Parco Segantini illustrate an alternative model of NBS deployment grounded in civic engagement and collaborative governance. Developed through a protracted participatory process led by residents and local associations, the Segantini park (studied under case study 2) transformed a former industrial site into an ecologically integrated public space. Crucially, the initiative resisted and mitigated speculative densification pressures and facilitated the creation of a green infrastructure that serves a socially mixed community—including adjacent public and cooperative housing complexes. This case underscores the capacity of NBS to function not merely as aesthetic or technical interventions, but as platforms for democratic engagement and spatial justice when embedded in inclusive governance frameworks. However, such participatory processes are challenged in a city increasingly shaped by private capital and top-down planning.

Finally, it is safe to say that housing policies and environmental policies in Italy are not strongly correlated, and although NBS programmes reflect a growing alignment between environmental and housing policies overall, there is no direct link between environmental policies and housing affordability policies. Moreover, according to some evidence, there is a weak association between the presence and growth of green spaces and the increase in housing prices

Retrofitting

Italy's residential sector accounts for a substantial share (27%) of the country's final energy consumption (Cresme 2024, p. 24). The high energy demand can be attributed to several factors, among which the fact that much of the housing stock is outdated, the predominance of single-family homes (51.7% of residential buildings) – which consume more energy compared to multi-family buildings – and the fact that 42.9% of the residential buildings are located in climate zone E (covering northern regions such as Lombardy, Piedmont, and Veneto), where heating needs are significantly higher (ibid.). Important challenges thus persist, particularly in the post-war housing stock, which suffers from deteriorating building materials, substandard quality, and poor energy efficiency (Daglio/Zanfi 2023). This issue is further reinforced by the fact that 72% of residential buildings had been built before 1980, with almost all of these predating the introduction of Italy's first energy efficiency law (373/1976) (Norme per il contenimento del consumo energetico per usi termici negli edifici – Regulations for reducing energy consumption for heating in buildings) (Cresme, 2024).

For this reason, retrofitting has become a critical policy lever in Italy's response to the climate crisis, particularly in the residential sector. Furthermore, national policy frameworks have played a central role in shaping retrofitting trends in the whole country. Among these has been the ***Superbonus 110%,*** largely discussed in the recent housing debate, introduced by the "Decreto Rilancio" in 2020 as part of COVID 19 economic recovery efforts. This policy allowed for tax deductions exceeding the total value of retrofitting works—covering up to 110% of eligible expenses. **The measure triggered a significant surge in retrofit investments, with national figures reaching €67.1 billion in 2021 and peaking at €94.6 billion in 2022**, before being phased out in 2023 due to budgetary constraints and criticisms of inefficiency and inequity (Cresme, 2014). However, its main objective provided results as energy retrofitting incentives played a key role in the national economy, contributing 9,9% to GDP growth in 2021 and 25,8% in 2022 (ibid.)

Concerning this type of so-called 'bonus edilizi' (like the Ecobonus, Superbonus 110%, etc.), Zanfi et al. (2021) highlight that while their implementation has overall produced some positive results, interventions funded through these bonuses have generally been small-scale and sporadic. The authors moreover stress that these programmes have been distributed indiscriminately, without consideration for setting priorities and for specific regional or local contexts. **This has resulted in investments being concentrated in economically advantaged regions with robust real estate markets and more proactive recipients**, which risks exacerbating territorial inequalities by failing to address disadvantaged areas and the more energy-inefficient housing stock.

Regarding retrofitting, in Milan, as in other northern cities, the uptake of the Superbonus 110% - the main retrofitting policy - was highest among private homeowners with the financial capacity to front the costs or engage third-party credit institutions, thereby excluding low-income populations and public housing providers from full participation. Furthermore, incentives for energy retrofitting have predominantly focused on private housing stock rather than on public housing (Daglio, Zanfi 2023). **This reflects one of the key elements of criticism of retrofitting schemes, namely that they perpetuate social inequity among the recipients.** However, in recent years, the retrofit and regeneration of public housing has emerged as a relevant issue that has received some attention on the political agenda, and some programmes at national level have been set up accordingly (Wolfgring, 2024). Together with the National Recovery and Resilience Plan, national programmes, led by the Ministry for Infrastructures, have been targeting the retrofitting or regeneration of public and social housing. These include the "PINQuA" (Programma innovativo per la qualità dell'abitare)established in 2020 and the "Sicuro, verde, sociale" (safe, green, social) programme established in 2021.

In sum, national incentives such as the Superbonus 110% catalyzed unprecedented investment in building renovation. However, the governance architecture and socio-economic stratification of the housing system have restricted equitable access to these benefits. This manifests in Milan because of its status as a main metropolitan area and economic hub.

5.1.2.3 The Isola / Porta Nuova case

The Isola district is situated close to the north-west of the center of Milan; it has grown as a „central-peripheral“ industrial neighbourhood of Milan along most of the 20th Century, starting with the location of the TIBB (Tecnomasio Italiano Brown-Bovery) factory in 1908, stimulated by the presence of an important railway yard (Bottini, 2016). Isola has long been a working-class neighbourhood featuring the typical hallway-type small-sized dwellings in privately built housing courtyard buildings (*case di ringhiera*); its name means „island“ and derives precisely from the fact that it was isolated from the city by the railway network and for most of its history could only be reached from the more central Garibaldi district via a single bridge over the railway (Boffi et al., 1972). In such isolation, community life grew more than in other comparable districts: „a local culture is formed, with fairly strong roots, as demonstrated by the neighborhood's united opposition to fascism, participation in the resistance, and, in the postwar period, the population's attempts to oppose disruptive political interventions“(ibidem, p.75).

From the 1950s and 1960s many factories closed, causing significant concern among local governments. The first attempt to tackle the large abandoned area separating Isola from the city center dates back to the drafting of the 1953 General Urban Development Plan, in which the Municipality of Milan envisaged the construction of a new large business district, a visible sign of the city's transition from an industrial economy to one based on the service sector, that for long remained on paper also for the inhabitants‘ resistance (Bottini, 2016). The TIBB factory, a 22.000 square meter site, closed in 1965 and was later acquired by the public to create a green public space, much-demanded by the residents: meanwhile the residents‘ composition had been changing in a process described as „gentrification without exclusion“, pushed by a combination of proximity to the city center, new mobility connection and relatively low real estate value due to physical separation from the city center due to abandoned ex-industrial and railway plots (Diappi et al., 2013). In the 2001 urban plan, amidst the real estate boom, the Albertini center-right administration gave a new impulse to the plan by adopting a new urban development plan that foresaw a new fashion district and infrastructural investments, including a new urban highway on the Confalonieri green space that was stopped after residents‘ protests (Bottini, 2016). In this breeding ground, a very significant experience of creative occupation and self-organization of the abandoned space in the former TIBB factory by associations, artisans, and artists, known as “Stecca degli Artigiani” (artisans‘ slab), animated the area for some years (2001-2007).

Figure 1 The Confalonieri gardens and the Stecca building. Source: https://www.lastecca.org/chi-siamo/

While the fashion district project vanished, the real estate boom and the repositioning of Milan as a tertiary city attracted the attention of international investors, with the Texas-based real estate multinational Hines acquiring the area. An Agreement Program in 2004 and implementation agreement in 2005 with the Municipality of Milan finally kickstarted the redevelopment of the area following the Garibaldi-Repubblica Integrated Intervention Program[118] (hereafter, the P.I.I.), a project labelled „Porta Nuova" – alluding to the proximity to the more central adjacent district at the end of the recently requalified Corso Como commercial district –, which provided the following functional mix: 63% offices (public and private), 20% residential, 10% functions related to services of general interest and hospitality, and 7% commercial functions. The program covers an area of 300,000 square meters and provides for a maximum gross floor area of around 230.000 square meters, divided into three project coordination units: U1 Public and private office complex; U2 Institutional complex including the headquarters of the Lombardy Region and public and private offices; U3, which includes the public park. Transformation also involves the integrated redevelopment of the contiguous Isola

[118] Citations in the following paragraphs are our translation by the official article in the website of the municipality of Milan: https://www.comune.milano.it/argomenti/rigenerazione-urbana/mappa-dei-progetti-di-rigenerazione-urbana/garibaldi-repubblica-programma-integrato-di-intervento#stato-del-procedimento

De Castillia PII and the former Varesine area, covering a total area of approximately 290,000 square meters.

The main objectives stated in the P.I.I. are: „the creation of a place of great prestige for the city and the entire region; the creation of a new institutional hub; the creation of the Porta Nuova Gardens (*Giardini di Porta Nuova*), a modern urban garden designed on the model of the most qualified examples in the city and the best international examples; the enhancement of public transport and the improvement of the road network and parking system through a radical redesign that rationalizes and rebalances the current layout“ (Comune di Milano, 2024). The P.I.I. „has defined the new morphological structure of the area, focusing on principles of connectivity, pedestrianization, architectural excellence, and new centrality“ (Comune di Milano, 2024), also thanks to now consolidate public transportation infrastructures – including regional and suburban rail services, two metro lines (M2 and M5), and the local public transport network.

After some changes to the Implementation agreement in 2012, the plan is today in a very advanced stage of implementation, with only the intervention unit U2B remaining under realization. As in a municipal document, „The blocks and urban fabrics around the area overlap different rules and layouts, pre-existing traces and interrupted plans, which have found in the 90,000 m² urban garden [*giardino urbano* in the definition by the municipality, authors‘ note] the unifying and connecting element” The unifying and connecting elements of the entire Plan are the public spaces, represented by Piazza Gae Aulenti and the new ‘Biblioteca degli Alberi’ (Library of Trees) urban garden“ (Comune di Milano, 2024) by the Dutch firm Inside-Outside, the latter the result of an international design competition, and hosts some functions of public interest, such as the Casa della Memoria (House of Memory) and the Stecca 3, and the Fondazione Riccardo Catella (Riccardo Catella Foundation), intended for socio-cultural activities.

The Administration has also committed for developing a Children's Pavilion („a playroom for all children and in particular for children with disabilities“), the Isola neighborhood Civic Center, and the redevelopment and repurposing of the Bussa Overpass – the remaining of an urban highway project that was abandoned – in an open public space. The Porta Nuova urban transformation has featured projects by star architects as a result of international design competitions, such as the master plan for Unit U1 by architect Cesar Pelli and the new headquarters of the Lombardy Region by the consortium led by Pei Cobb Freed & Partners Architects with Paolo Caputo. The latter was built on a plot formerly hosting the so called “Bosco di Gioia” (“Gioia forest”): what used to be a tree nursery donated by the landowner to a public hospital zoned as public green, and was later rezoned as part of the business center project and sold by the same hospital as part of the redevelopment – although it become a

spontaneous forest, it was finally destined to be the new seat of the Lombardy Region, despite resistance of a local civic group[119].

Since the beginning, some residents and local civic groups manifested dissent with many aspects of the project: „Local associations became increasingly aggressive, and a lot of energy was used to defend the last remaining fragment of Isola's industrial past, the **Stecca degli Artigiani, or artisans' incubator, located on what remained of the historic TIBB**" (Bottini, 2016: 100, authors' translation). Radically alternative visions emerged in the process: while the main objectives stated by the Municipality in the P.I.I. are „the creation of a place of great prestige for the city and the entire region … focusing on principles of connectivity, pedestrianization, architectural excellence, and new centrality", local civic groups "place affordability, inclusion, transparency and equality at the center of sustainability" (Di Paola, 2022: 32).

An alternative "Possible Park" project was presented in 2007, maintaining similar levels of cubage but a more extensive park and less towers, but this was ignored. Parallelly to the demolition of the Stecca building and park, now hosting the famous "Bosco Verticale" ("vertical forest") -a luxury housing building with a small public garden–, new (smaller) collective spaces were created right adjacent to the building site of Porta Nuova, such as:

- **Piano Terra** ("ground floor") – an empty commercial space on the ground floor of a municipal housing building squatted by various countercultural collective, developing a multi-faceted critique and alternative to the adjacent "vertical" urban development –
- and **Isola Pepe Verde** – a community garden in a small municipal vacant plot squatted and then authorized for temporary use, developing initiatives around sociability and conviviality for the neighbors.

Instead, the Porta Nuova project included some part of the Stecca collecting by agreeing to find a new space within the new development, a sort of community space for local associations then named "Stecca 3.0", in a process that was felt as divisive by many civic activists as some described it as "a political move of social washing" (Di Paola, 2022: 29) and pacification, as some journalist said that thought the new Stecca 3.0 "Isola has made peace with its [industrial] tradition".

[119] See: https://it.wikipedia.org/wiki/Bosco_di_Gioia ; https://gianlucabresciablog.wordpress.com/2021/05/18/boschi-milanesi/

Figure 2 The Garibaldi-Repubblica Integrated Intervention Plan in 1998 and today. Source: Lombardy orthophoto and Google Earth

Regarding the relationship between the project and the Isola neighbourhood, scholars found evidence of gentrification going on already before the start of the redevelopment: Caselli and Ferreri (2013: 3-4), argue that

"the period from the 1960s to the early 1970s could be interpreted as a first wave of classic gentrification, which was limited by a combination of local resistance and interventions by the first left-wing city council, which implemented the Piano integrativo per l'edilizia popolare … in the early 1980s several planning decisions began to have an impact on the neighbourhood. In 1984 the decision was taken to build the Passante Ferroviario (Milan's urban railway) to connect Garibaldi station to Repubblica … the idea of developing new transport infrastructures and increasing the connectivity of the area translates from the logic of the Passante to the M5 Underground line, which caused a direct increase in the value of residential properties, as observed by many local real estate agents"

Gentrification was still happening shortly before the start of redevelopment – when the only green area was being dismantled and the new urban garden was only a promise –, mainly through the "effects of social exclusion" of lower-income from the now heated housing market, rather than "expulsion" (Diappi et al., 2013) and a process of "soft densification" linked to a renewed interest in old-fashioned buildings and a specialization on "pleasure" (Semi, 2011): due to the high levels of owner-occupation even on lower-middle income households, the interest of young families and increase housing prices in the neighbourhood was often capitalized by housing owners willing to move to better flats in other/outer parts of the city. The role of the redevelopment project in this gentrification process has often been discussed, with different positions (See e.g.: Caselli and Ferreri, 2013; Garcia-Lamarca et al., 2019; Bottini, 2016; Diappi et al., 2013):

"Besides important shifts in urban governance, from the end of the 1990s until the first half of the 2000s, Milan was also marked by a staggering increase in real estate values … At Isola, the consequences of

these trends were particularly evident. From commercial to residential properties, from public green areas to common areas in apartment blocks, all social spaces were subjected to often conflictual intervention that resulted from diverging views and interests expressed by different factions of the population on issues such as residential spaces, public spaces and leisure activities" (Caselli and Ferreri, 2013: 4)

"Today, the neighborhood has undergone profound physical, symbolic, and social changes, certainly due to the redevelopment project, but also through a contextual symbolic transformation that has led the neighborhood to become the recent urban reference point for cultural consumption oriented towards alternative culture. The reasonable hypothesis that can be put forward is that this allure seems to have been at the origin of the neighborhood's renewed attractiveness, arousing the interest of populations completely different from those that constituted the social structure of the industrial island. The visible effect of this symbolic change has been a process that many have identified as a textbook example of gentrification, although the debate is still very much open" (Bottini, 2016: 101, authors' translation).

Nowadays, the Porta Nuova or Garibaldi-Repubblica transformation can be considered a sort of "hinge" or gate between the city center (via the adjacent Corso Como) and Isola, that has become a new consumption district – with a big amount of new bars and restaurants that appeal to middle-income and affluent Milanese rather than neighbors (Semi, 2011) –, but also between other relevant transformations happening at a wider scale, such as: that of the square of Loreto, today a huge roundabout expected to become a new "green" commercial center, to the East; the big new mixed development on the Farini railway yard to the West.

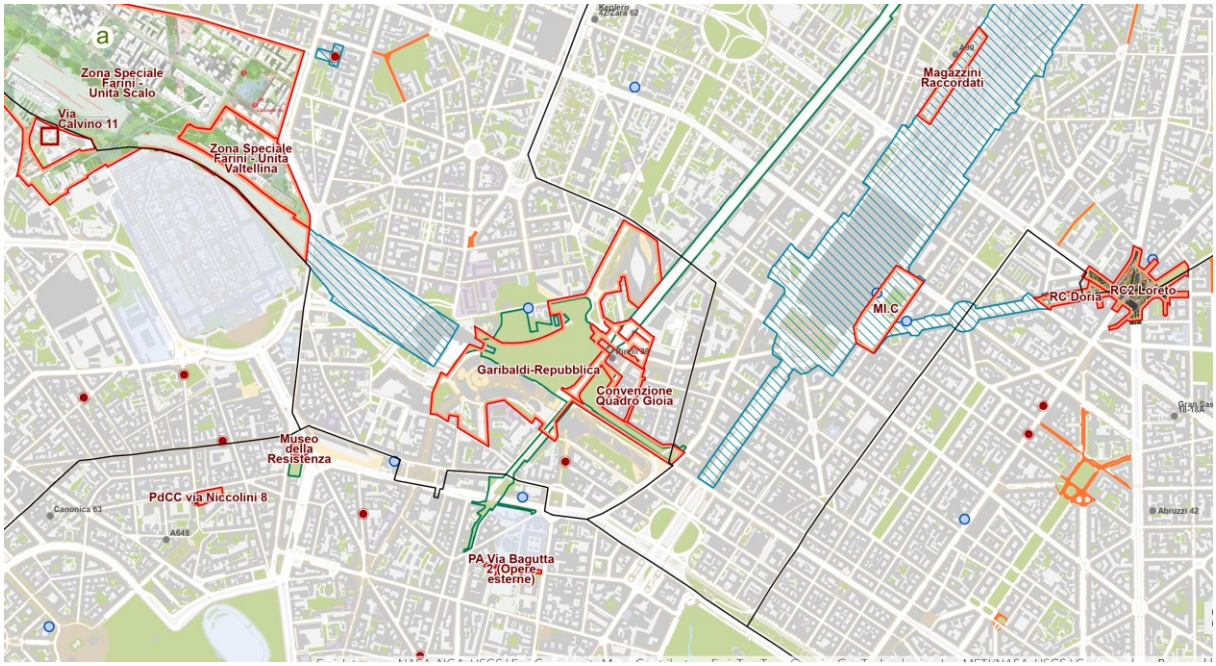

Figure 3 The Porta Nuova regeneration plans amidst the main urban transformations in the northern part of the center of Milan. Source: Municipality of Milan, Atlante della rigenerazione urbana.

5.1.2.4 The Baden Powell - Segantini / Navigli case

Figure 4 Aerial view of the Navigli District in 2003 and in 2021, with Baden-Powell Park and Segantini Park. Source: Ortofoto Regione Lombardia

The Navigli district extends within Municipality 6, south of the city centre, along the banks of the Naviglio Pavese and Naviglio Grande, the two navigable canals that converge to the north in the Darsena, the city's historic commercial port and a key node in the wider canal system that once served as a fundamental network for the transport and trade of goods and materials. The morphological configuration of the urban fabric is historically marked by irrigation ditches, canals, and water infrastructures. The Segantini–Navigli case study examines a portion of the city characterized by a process of regeneration and functional restructuring that has unfolded in successive stages, in a capillary manner, and through the involvement of a wide range of actors.

The green system composed today of the two parks — Baden Powell and Segantini (connected by a pedestrian–cycle path completed in 2024) — is located in an area historically lacking in green spaces, with a dense built fabric that in the past featured a high degree of functional mixture: dense working class and public housing buildings, industrial and manufacturing activities, widespread artisanal production, and local services. Among the most significant structures was the large complex of the Istituto Sieroterapico, a prestigious research institute for the production of serums and vaccines founded in 1896. The complex extended over a large land plot between the two canals and comprised a series of buildings (offices and laboratories) as well as stables and fields for the cultivation of forage for the animals involved in laboratory research. Over the course of the twentieth century, it developed into a centre of excellence, before going bankrupt in the 1990s. Further reinforcing the strong working-class character of the area—already marked by a substantial stock of private residential buildings for workers and lower middle classes—a large public housing estate (702 units) was built in the 30's across Via Gola, Via Pichi, and Via Orsi. This housing estate, almost entirely publicly

owned (with only a portion sold off), is currently in state of physical decay and lack of maintenance and is partly subject to illegal occupation.

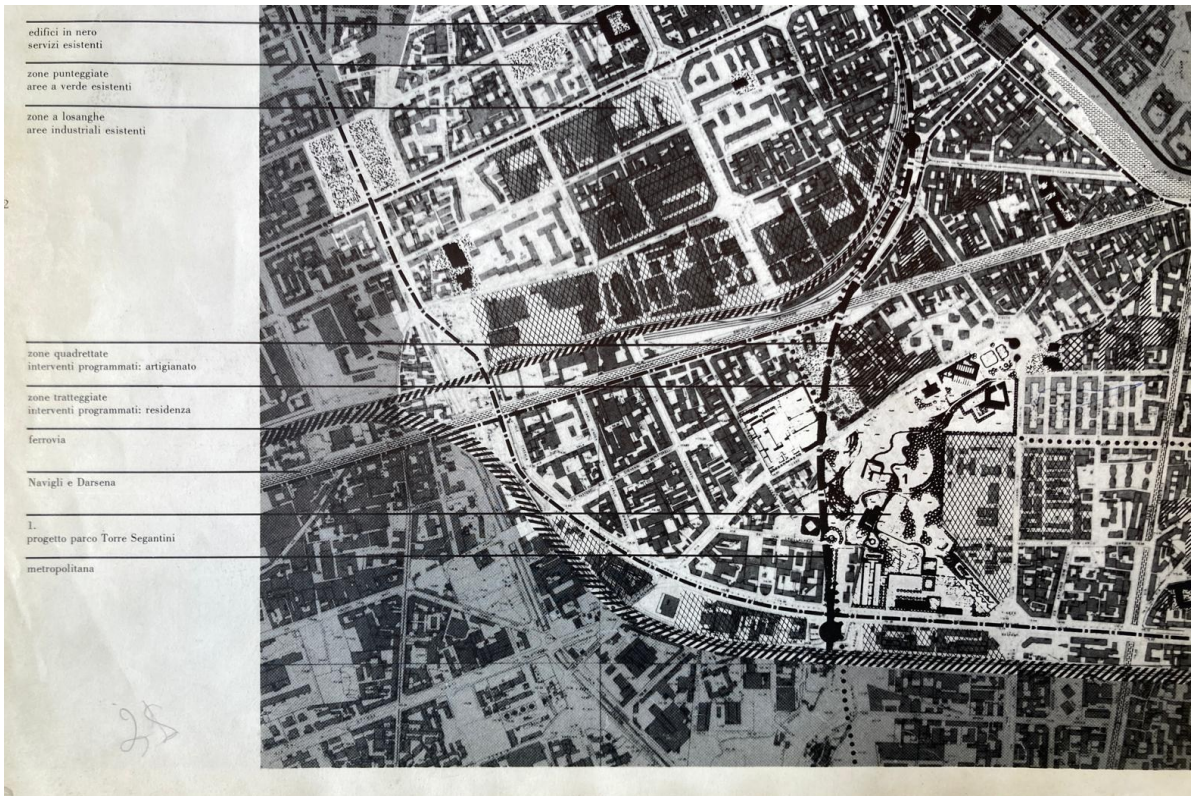

Figure 5 Image of the plan for Segantini. Source: Piano di inquadramento operativo 1979-1982 (Comune di Milano, 1982).

In the 1980s a series of programs (*Piano di inquadramento operativo 1979-1982*) regulated the extensive renewal of several blocks that according to the analysis of the general city plan featured very poor housing conditions (overcrowding, no private wc, no central heating). The plan stands as one of the first programmes in which the city negotiated (through *Piani di recupero*, a negotiated planning implementation instrument) with private owners the benefits of public intervention in restructuring and renewal of the area in exchange of a ratio of dwellings and spaces for artisanal and small enterprises at moderate rent (Comune di Milano, 1982). Within the broader Plan, several areas were designated for new private housing developments, complemented by a substantial expansion of public services intended to enhance the overall provision of facilities for the growing residential population (including nurseries, a covered swimming pool near the existing open air one, and other services). As part of this public component, the western section of the former Sieroterapico compound was earmarked for conversion into a public park.

In the following decade, a key urban planning document for reconstructing the history of the area's transformation is the Detailed Plan "Parco Urbano dei Navigli", an implementation tool approved by the Milan City Council in 1991. It covers an area of historical and landscape value within the Navigli territory, with objectives related to the redevelopment, conservation, and

enhancement of its historical and environmental heritage. Alongside the protection of historic structures along the canals, the plan prescribed the decommissioning and remediation of the former Istituto Sieroterapico and envisaged initial transformations aimed at recovering degraded areas, expanding green space and public accessibility through the creation of two new parks (Baden Powell, inaugurated in 2005, and Segantini, in 2015), and enhancing the visual and landscape identity of the Navigli. The plan also established specific guidelines concerning restoration, conservation, and the introduction of compatible uses. In a densely built context, it declared among its objectives: ecological continuity, a balance between human activities and the protection of canal banks, and the integration of public, cultural, and recreational functions.

Over the years, urban regeneration in this context has been marked by a pervasive reuse of buildings and structures whose functions gradually shifted from industrial and artisanal activities toward residential uses and the creative and design-oriented tertiary sector. From the early 2000s, the area underwent significant change driven by new functions in the creative–cultural and educational sectors. Following the decline of manufacturing activities located along the Navigli, new uses emerged, particularly those linked to the so-called creative and innovative tertiary sector, associated with design and fashion, including niche clusters of artistic and artisanal production.

Within the urban context, the largest new development intervention concerns the former Istituto Sieroterapico area. In 2000, the complex was acquired by Brioschi Finanziaria, a company belonging to the Cabassi group (an established local familiy-owned real estate development company). The site was renovated and converted into office spaces and facilities for creative activities, as well as the new campus of the Nuova Accademia di Belle Arti (NABA), a higher education institution in design and fashion. The larger portion of the complex, located east of Via Segantini, experienced a more protracted development process and various project setbacks. Ultimately, following broad civic mobilization and an interesting co-design process, the site was transformed to include private residential buildings and the creation of Parco Segantini. Initially named “Parco del Sieroterapico,” the park was supposed to be built concurrently with the real estate development but remained incomplete for years and was only inaugurated in 2015.

Other residential redevelopment interventions in the area were carried out under the Magolfa redevelopment plan promoted by the City of Milan. These concerned former industrial buildings converted into residential units, artisanal spaces, and an underground parking facility. The project, known as Opificio di via Magolfa, restored historic structures, removed incongruous additions, and preserved the residential–artisanal character of the area. Works were completed between 2012 and 2017. The area was part of the 1991 Detailed Plan “Parco Urbano dei Navigli,” and the intervention comprised the redevelopment of small buildings and warehouses with roughly 1,300 m² allocated to a functional mix, including 21 public housing units (ERP). More recently, three additional housing projectshave been promoted by housing cooperatives associated to the CCL consortium: overlooking Baden Powell Park (85 units, completed in 2021), towards Segantini Park (55 units, completed in 2022), and to the east, Via Pichi (30 units, completed in 2023). CCL constitutes a pillar of the governance framework. Through the 3 projects, the cooperative introduced approximately 170 new households into

the area, mainly in below-cost owner-occupation, and sought to create connections with the surrounding neighborhood. In via Pichi, a privately owned but publicly accessible square was realized and is maintained by the condominium under a public use agreement.

In a formal presentation of the “Navigli urban commerce district”, the City of Milano labels the area as the “Mesopotamia Milanese,” a term coined in 2008 by an association founded that year by businesses located between the Naviglio Grande and Naviglio Pavese. The association aimed to promote and influence the process of urban regeneration in the area enclosed by the two canals (Morandi, Rabbiosi, 2012). In 2008, the Lombardy Region had introduced the Urban Commerce Districts, a tool assigning urban revitalization to initiatives based on commercial reorganization achieved through cooperative networking among public and private actors (Morandi, Rabbiosi, 2008). Throughout 2007, the proponents of Mesopotamia Milanese organized numerous events to present the project and rally potential members. Their vision embodied an approach to bottom-up urban regeneration, a process through which, alongside the retreat of productive activities, a wide variety of individual and collective actors—representing institutional interests or simply civil society—came together to interact and pool resources.

Baden Powell Park is located on the right bank of the Naviglio Grande, between Ripa di Porta Ticinese and Via Argelati, and covers approximately 35,000 m². Until the early 2000s, the area was occupied by sheds, warehouses, informal activities, and widespread degradation in a neighbourhood lacking structured green spaces. The park was gradually reclaimed from informal and semi-private uses—such as a nursery—and from various additions that limited its full public accessibility. Development began in 2000 and was completed in 2005. Compared to Segantini Park, its design followed a more conventional and linear process, with typical landscape-architectural features: undulating terrain, winding pedestrian paths, a large, stepped connection to adjacent residences, a pergola structure, playground areas, and bocce courts. In the following years, however, the site suffered episodes of degradation and vandalism. In 2018, a group of residents and employees from the nearby “Samsung District” promoted cleanup initiatives, requalification efforts, and new plantings (including a bamboo grove), contributing to the enhancement of the park and supporting the vision of an ecological connection with Segantini Park, completed in 2024.

In the case of Segantini, the green area emerged from the intense activity of a citizen committee that advocated for preserving as public green space a large portion of the former Istituto Sieroterapico grounds, decommissioned in 1993 and later acquired by a private developer for a residential project that underwent multiple negotiations and revisions. The result is a green area of roughly 100,000 m² whose history dates to the 1980s and 1990s. During that time, a vigorous debate and strong confrontation arose between residents and the developer who had been granted permission by the municipality to build on the extensive open space previously used for forage cultivation supporting animals laboratory. The project was eventually halted, leaving the site in a state of degradation but also opening the possibility for its redefinition in favour of greater public interest.

The integrated urban plan (PII) approved in 2002 by the municipal administration envisaged the redevelopment of the area through the construction of an urban park of approximately

100,000 m², designed by landscape architect Michel Desvigne, together with predominantly residential developments. After many years and once the major construction and remediation works were completed around 2010, the municipality initiated the implementation of the park layout. The project was approved in 2013, following prolonged administrative procedures. It included: a large central lawn ("Radura"), a protected naturalistic area along the Roggia Boniforti, a wooded zone to the west, and a network of pedestrian–cycle paths. In the meantime, residents had mobilized to demand acceleration of the park's realization, and the involvement of Italia Nostra – a nation-wide civic association focused on environment and heritage protection – in redefining the project proved essential both as a mediator between citizen demands and the municipal technical-administrative structure, and in ensuring the quality of the process and its outcomes. The Segantini Committee was founded, later becoming the Associazione Parco Segantini ONLUS (ngo) in 2013. The association proposed a realistic project compatible with the limited public resources available and initiated a co-design process with the municipality, in which citizens played an active role in the care and transformation of the area and in the direct implementation and management of specific sections—such as the naturalistic area and edible gardens—supported, as required by the municipality, by expert stakeholders. **Today, the park stands as the green heart of a complex area, bordered by residences, productive activities, and educational institutions. Its location within a district strongly geared toward leisure and entertainment (Navigli, the renovated Darsena) enhances its role as a public asset of great value**.

The development of the Baden Powell–Segantini system of public parks is particularly interesting for our research also because the slow timelines and incremental implementation paradoxically fostered extensive civic engagement and a co-design process involving multiple actors in collaboration with the municipal administration. In both cases, though with different characteristics, the parks emerged within a densely built context by defending and enhancing open spaces preserved from construction yet strongly shaped by the surrounding environment.

Table 1. Key data on two case study areas in Milano (see Appendices 1 and 3).

	Isola - Porta Nuova	**– Baden Powell – Segantini / Navigli**
Neighborhood characteristics (general social type, economic activities, density etc)	Dense built fabric, low-mid-rise housing (before 1960s), some public housing (around 1970s), mid-high rise buildings from the 2010s on. Medium degree of functional mixture: formerly, railway yards and medium-big industries and working-class housing; now, middle-class housing, manufacturing activities and	Dense built fabric, low-mid-rise housing (before 1920s), public housing (1930-40s), mid-high rise buildings from the 1950s-1970s, coop housing. Medium degree of functional mixture: working class housing, manufacturing activities/artisanal production, creative industry, Art Academy.

	artisanal production, creative industry. Dense population, around 22.000 inhabitants in the entire district of Isola. Socio-economically transformed. Working class neighbourhood until the 1960s, then underwent a process of gentrification, now mixed income. Well-connected and central district, renown for leisure and night life and now full of corporate and office buildings	Sparse population preceding redevelopment: 1,137 in 2015, 2,800 in 2025; projected at 6,000 in 2027, 28,000 in mid-2030s. 2015 population density: 3,100 per km² Projected density: 37,000 per km² Socio-economically vulnerable area, residents more likely to have been born in Spain than city average. Low income and high unemployment rates. Well-connected and central district, renown for leisure and night life in the northern part
Duration	Strategy: ideas for a new business district there already in the 1953 urban plan, then various changes (e.g. „fashion city“) until early 2000s confirmation Implementation: from around 2008 to present. First completion around 2015, in advanced state (only some buildings remain under construction)	Strategy: 1991 General integrated plan and 2002 park project, Implementation: from 2008, opened in 2015 (still in completion)
Institutional funding (counting right-of-use of public land, see glossary in Appendix 1)	City of Milano, Railway company, Lombardy Region (for the regional administration tower)	City of Milano
Actor constellation (in addition to “Institutional funding”)	Hines Italia, then Coima (from 2015) International investors (the fund is 100% owned by the Qatar Investment Authority) Other minor landowners and developers Catella foundation for the park management	Associazione Parco Segantini Italia Nostra - Boscoincittà Comitato Navigli Brioschi – Cabassi group (developers) CCL (housing cooperative consortium) NABA (Art Academy)

	Various civic groups	
Aims and objectives	Redevelopment of a series of underutilized plots (mainly publicly owned) in a very central position. Realization of a new business district foreseen by urban plans since decades	Reuse of the abandoned premises of a research institute, recompositing of fragmented green areas, development of new private and coop housing, reclaiming of a large park through extensive citizen engagement
Specific physical measures	Realization of a park/garden overpassing an urban highway	Decommissioning and remediation of a former Research Institute compound, recovering degraded areas, expanding green space and public accessibility through the creation of two new parks
Accompanying housing policy/ regulatory measures (see Glossary in Appendix 1)	No, mainly luxury and market housing built by private developers	Cooperative and private actors building interspersed subsidized, and market-rate housing for sale.
Key social tensions or/and benefits between greening and housing	Relevant densification (mainly corporate offices, but also commercial and market housing) with positive and negative impacts on the neighbouring district of Isola	The development process of the main park and the maintainance of the green areas play a key role in reactivating social ties and intensive mixed use by different social groups

5.1.3 Methods

This case study draws on qualitative research conducted between Summer 2025 and the beginning of 2026 combining 19 semi-structured interviews, documentary analysis and participatory observation through on-site visits.

The methodological approach was designed to capture civic and institutional perceptions of green transition initiatives and their relationship to housing inequalities in Milan, with particular attention to governance processes and neighborhood-scale impacts.

The 19 interviews involved 21 respondents (one interview involved three interviewees). The interviewee sample included representatives from the public sector (public employees from the city administration, both in operational and political functions), members of civic associations and NGOs involved in environmental and/or social issues, activists from different associations, representatives from the private and real-estate sector and academic experts. All interviews were carried out in Italian. A more detailed account on the interview sample with anonymized profiles is provided in Appendix 2.

All interviews were audio recorded with participants' consent and transcribed using TurboScribe. The transcripts were coded deductively in MAXQDA based on a shared codebook developed within the research team. Where necessary, additional codes specific to the Milan context and to the two case studies were added inductively. The coding focused on recurring themes related to housing access and affordability, perceptions of green transition initiatives, participation and governance processes, distribution of benefits and burdens, and neighborhood identity and recognition. The final code system, including coding frequencies, is provided in Appendix 3.

Following coding, transcripts and coded excerpts were anonymized to ensure participants' privacy. The research team then conducted an in-depth reading of the material to identify key themes and establish a shared analytical framing. Through collective discussion, recurring patterns and preliminary interpretations were refined.

An LLM tool was subsequently used as a complementary analytical support. The anonymized coding results were compiled into a Microsoft Word file containing all relevant quotes alongside their codes, with interviewees identified only by alphanumeric labels such as M1, M2, and M3. The table linking these labels to identities was stored securely and separately.

For each of the nine main codes, a team member reviewed the associated excerpts and summarized the main findings emerging from the interviews. A structured prompt was then developed, asking the LLM tool to draft a summary of interviewees' perspectives based exclusively on the anonymized empirical material. The tool was instructed to introduce new thematic insights only if supported by at least two distinct quotes.

The LLM output was carefully reviewed, edited, and expanded by the research team. All statements not clearly grounded in the empirical material were removed. In this way, the LLM functioned as an additional analytical agent that supported but did not replace the researchers' interpretative work.

Background research undertaken ahead of the interviews involved various sources, including academic publications, grey literature, legal and policy documents including, but not limited to, planning documents released by the municipality in recent years.

In addition, on April 11 2025 we conducted a policy lab where we invited representatives of key local actors of different types (see dedicated report) and collected suggestions about additional interviewees. Furthermore, fieldwork was conducted, including visits to sites of interest and photo documentation.

Limitations in the methodology include some lacks in the interviewees' sample, mainly:

- Public actors are less represented than civic actors (only 2 out of 19 interviews pertain to public actor representatives). Despite several attempts to arrange an interview, there was no availability from representatives of the City of Milano Department of Green and Environment;

- Some interviewees simultaneously held multiple roles during the processes examined, at times in a somewhat blurred way. For this reason, for the sake of clarity, we sought to ask for and highlight the main role they played in relation to the specific case study;
- Perceptions of members from more marginalized communities, such as social housing residents, have been collected only indirectly and may worth some extra and deeper analysis.

5.1.4 Stakeholder perspective on Green Initiatives in Case Study Areas: Isola - Porta Nuova

5.1.4.1 Precedents and Implementation

Interviewees consistently frame Isola as a historically working-class neighborhood, inhabited since the late nineteenth century by industrial workers and later shaped by strong internal migration flows from Southern Italy during the 1950s and 1960s (M9, 57-62). This socio-demographic background is described as foundational to the neighborhood's identity and to its collective memory. The physical separation of Isola from the rest of the city, due to the presence of a large urban void, reinforced this distinctiveness and contributed to the emergence of a particularly strong local identity (M7, 22-23).

> *"And the Isola neighborhood used to have characteristics that were very different from those it has today. It was a neighborhood that had always coexisted with the issue of urban void. The Porta Nuova project represented precisely a boundary of the neighborhood and a major rupture toward the city center. It was the typical large urban void in the middle of the city, which had long contributed to a certain isolation of Isola from the center. In fact, the so-called 'cavalcavia Bussa,' which historically crossed not only the railway but also this void, functioned as a sort of gateway from the center into the neighborhood." Scholar and former Stecca degli Artigiani Activist (M4, 12)*

At the beginning of the 2000s, the neighborhood is remembered as a dense ecosystem of self-organized spaces, political initiatives, and cultural activities. Several interviewees recall the presence of historical self-organized spaces dating back to the 1970s, as well as artists' studios and artisan workshops that were active in the area (M7, 9-12). The artistic community, which extended toward Corso Como, is described as having increased the attractiveness of the vacant areas, paradoxically enhancing the appeal of spaces that were otherwise perceived as marginal (M19, 17-25).

At the same time, accounts of the early 2000s highlight the coexistence of this vibrant socio-cultural fabric with narratives of insecurity. Some interviewees report on the presence of drug dealing and micro-criminality in the area (M19, 17-25). According to several accounts, the regeneration agenda was justified in part by portraying the neighborhood as unsafe and in need of "reclamation". This framing played a significant role in legitimizing large-scale transformation projects.

The large urban void separating Isola from other parts of Milan became the focal point of multiple regeneration proposals from the early 2000s onward. The area's fragmented property structure made coordinated intervention difficult, contributing to uncertainty about the future of the Garibaldi–Repubblica area. Interviewees report that, over time, the municipality progressively transferred development rights for parts of the area to investment funds (M1, 9-10). Among these, Hines emerged as the primary interlocutor in the regeneration process. Several respondents recall participating in informational meetings organized by the municipality and the investment fund. Hines Italia, together with its CEO and the architect of the Bosco Verticale, are repeatedly identified as the key actors who took control of the regeneration of the area and of the BAM Biblioteca degli Alberi Park. The BAM project was initially conceived with the expectation that, after land remediation, it would be managed by the municipality (M3, 23-25). Ultimately, however, it became the first example of a public park in Milan managed by a private actor.

Isola hosted many factories, including the former Brown Boveri (TIBB) steel factory, abandoned, acquired by the municipality and spontaneously transformed into a central socio-cultural hub in the early 2000s, including part of a public garden. Known as the "Stecca degli Artigiani," (artisans' slab) it hosted artisan workshops rented from the municipality, reflecting and renewing the neighborhood's artisan tradition. From 2001 onward, a group of architect-activists organized in this space the event "La strada rovescia la Città," presenting proposals for an inclusive regeneration of the neighborhood. Within three years, 14 to 15 groups were active there, and the space became increasingly self-organized. Activities ranged from artistic production to bicycle repair and organic markets.

Because it was a building owned by the municipality. The municipality had rented out spaces to artisans: there was someone who repaired shutters, a blacksmith, people who were truly craftspeople, and there was also an office of the old Communist Refoundation party. They all had regular rental contracts. But as you can see, it was an enormous space. It was a former Brown Boveri factory, with very large rooms spread over two or maybe three floors. The ground floor was mainly used by the artisans, while the upper floors remained empty. Gradually, those empty spaces were occupied by all kinds of cultural activities. There were initiatives teaching Italian to migrants and activities run by various cultural associations." Activist and Association Representative (M9, 66–67)

Forum Isola, an activist group founded by parents from a nearby elementary school, also played a significant role. Aware of impending transformations, they mobilized to defend green areas and historical spaces in the neighborhood and organized exhibitions and public initiatives (M3, 25-32; M9, 66). Forum Isola opposed several regeneration proposals, through legal appeals to the administrative court. The Stecca also hosted an information point aimed at keeping residents informed about ongoing changes.

From 2005 onward, major regeneration actors communicated to the groups active in the Stecca their intention to demolish the former factory to make space for the Bosco Verticale and other components of the project. This announcement generated internal divisions among the activists, who were split in their positions toward the regeneration plans. Meanwhile, the public perception of problems related to drug dealing and criminality in the broader area

intensified. In 2007, following an attempted occupation by activists, the former factory was cleared and later demolished. Interviewees identify this moment as a decisive turning point in the history of Isola's regeneration.

> *"Therefore, in my view, the decisive moment here comes even before the opening of the park in 2014; it is 2007, the moment when Volturno 33* [The historical base from the Communist party, which then was occupied by activists and has now been regenerated in a residential building] *was cleared out and the Stecca was demolished. That is the point. The point of no return is 2007. It is also the year in which Pergola* [another historical self-organized space] *was lost, so it is the year when everything happened, in my opinion. Even if many other things occurred later, they happened subsequently." Activist and District Resident (M7, 59–62)*

> *"We all rushed there at six to watch them smashing everything. The night before, we had held a vernissage, we had organized an exhibition inside the Stecca degli Artigiani, with artworks including pieces by Pistoletto. So we had a fully installed exhibition, inaugurated just the day before. That was the moment when the bulldozers came in and started tearing everything down, ripping it open and destroying everything, including the art exhibition we had organized, with Pistoletto's work, who was the most renowned among them. We documented everything: we filmed, we recorded, but it was useless. The Stecca was sealed off completely, no one could enter anymore, and the whole area of the small gardens remained a construction site for years. Forum Isola then found itself in the neighborhood without a space, without a place anymore. The museum was gone. There had been a neon sign above it reading 'New Museum'; what we had created there was truly impressive." Activist and Association Representative (M9, 99–104)*

Subsequent developments demonstrate both conflict and negotiation. A group of architects engaged with institutions and private regeneration actors to negotiate the creation of a new space for their activities, which remains active today as a multifunctional space in the neighborhood (Stecca 3). Other Forum Isola activists searched for an alternative location and identified an abandoned municipal warehouse in Via Pepe. They proposed the creation of a self-organized garden, a project later approved by the municipality. This initiative, known as **Isola Pepe Verde**, remains active today as a biodynamic self-organized garden in the neighborhood. Both initiatives had to wait until 2013, with the arrival of the center-left municipal administration under Giuliano Pisapia, for their proposals to be formally approved and for relocation to take place (M9, 119-123).

Overall, stakeholder accounts reveal a regeneration trajectory characterized by strong tensions between grassroots initiatives and municipality-backed large private actors, evolving forms of negotiation, and shifting governance arrangements. Precedents of activism, self-organization, and local identity played a crucial role in shaping responses to implementation processes. At the same time, the consolidation of private-led regeneration, exemplified by the management model of BAM and the demolition of the Stecca, marked a structural transformation in the governance of urban space in Isola.

5.1.4.2 Participation and governance (procedural)

The institutional governance structure of the Isola district regeneration which is highlighted in the interviews is the one of a public-private partnership between the Municipality of Milan and the global real estate actors involved in the redevelopment of the area. Indeed, three key stakeholder groups are emerging from the interviews.

First, the main private stakeholder is the real estate company Coima Sgr, formerly Hines Italia, which managed the regeneration through three separate real estate investment funds corresponding to the areas Porta Nuova-Garibaldi, Varesine and Isola (M1, 4-6). These funds were established due to distinct ownership structures and administrative procedures. Over time, the sovereign wealth fund of Qatar progressively acquired the investment vehicles and today represents the sole owner of the Porta Nuova-Garibaldi area and its assets (M1, 22). Coima acted as an asset manager and operational coordinator of the overall redevelopment.

Second, the key public actor was the Municipality of Milan, in particular the city directorate for Urban Planning, which oversaw planning instruments, negotiated agreements and formalized public-private arrangements.

Third, a broad constellation of civil society actors from the neighborhood played a significant role in the regeneration process and is still actively shaping the district's life through socio-political activities. From the interviews, several key groups emerge, including the association of architects Cantiere Isola active in the Stecca between 2003 and 2007 on themes of participative urban planning (M4, 24; M3, 35), the neighborhood association Forum Isola formed by merging multiple groups including the parents' committee Associazione Genitori Confalonieri and artistic collectives such as Out and Isola Art Center (M9, 29; M9, 32-34; M10, 5-6), the occupied and self-organized space Piano Terra (M7, 6-8), and the community garden Isola Pepe Verde (M9, 149-152). A more detailed outlook of the power dynamics between these stakeholders is given in section 4.7.

As far as participatory processes are concerned, most interviewees outline that consultation processes have been formally present in the first years of the Porta Nuova regeneration development but substantially limited in allowing civic actors to influence decision-making over the regeneration plan. A great number of "Participation tables" is reported to have been organized by the Urban Planning department of the municipality in partnership with the real estate company and its architects. These arenas are described as performative spaces in which citizen involvement was emphasised rhetorically, while perceived alignments between public authorities and project proponents undermined trust in the neutrality of the process (M9, 74-76).

"So, they would have us sit around a table like this, the Urban Planning Manager would show up […] and we citizens would come too […]. One time the Urban Planning Manager invited us, and the CEO of the real estate company was there as well. Before starting the presentations, he opened by saying: 'Good morning, let me introduce to you, the citizens, my friend, the CEO of the real estate company.' I mean, are you the friend of the CEO, or are you the friend of the citizens? Because at that moment, you're supposed to be representing me - you're there to defend me. Instead, he introduces himself as the CEO's friend. At that point we already felt

like getting up and leaving that so-called participation table. There was absolutely nothing participatory about it." Activist and Association Representative (M9, 74-76)

As a result, some stakeholders gradually disengaged from official participatory forums, questioning their capacity to produce meaningful influence. Publicly promoted narratives of extensive consultation are described as misleading, especially where fundamental conflicts of interest remain unresolved:

"But the real-estate development firm's C.E.O was the one, the first - at least in this city - to say, before even arriving, before laying a single brick: I'll hold 300 meetings, I'll prove my ability to listen. This turned out to be a big sham, in the sense that not all interests are compatible. I mean, if I live here on the first floor, whether you build the skyscraper 22 or 25 stories high, whether you price it at 18 or 30 thousand euros per square meter, I still won't see the sun anymore." Activist and District Resident (M7, 18)

Members of la Stecca report to have been in contact with the real-estate company regarding its plans to demolish the ex-Brown Boveri factory and to have tried to negotiate solutions that maintain the old factory building and its green area, without success. One respondent recounts discussions regarding the potential demolition of the Stecca as a particularly difficult phase, highlighting the concentration of decision-making power in a small circle of actors (M4, 52). This perception frames participation as reactive rather than co-decisional.

In contrast, interviewees bellowing to the world of associations and civil society attribute greater legitimacy to self-organised governance practices. Isola Pepe Verde, the self-organized garden born after the demolition of La Stecca, operates through open assemblies accessible to all participants, structured around consensus-building rather than majority voting. This approach is presented as inclusive and oriented toward maintaining cohesion, even though it requires extended deliberation and time investment (M9, 167-169). The maintenance of flexible, non-prescriptive spaces is also framed as a participatory principle, enabling adaptive and user-driven appropriation rather than predefined uses (M7, 114).

Overall, in the context of the Porta Nuova Regeneration, interviewed stakeholders perceive participation within urban governance as characterized by limited decision-making transfer, contested legitimacy and significant asymmetries of influence, while attributing stronger deliberative qualities to autonomous, community-based governance practices

5.1.4.3 (In)equity (distributional)

Interviewees consistently frame the regeneration of the Porta Nuova-Garibaldi area as a process characterized by uneven distribution of benefits and burdens. Perceived inequities relate to access to housing, the social selectivity of new public spaces, rising living costs, and differentiated impacts on vulnerable groups.

A central theme concerns the residential offer of the regenerated district. Respondents underline that the new residential towers were conceived and marketed as luxury products, with no quotas for social housing in key parts of the development (M1, 14). This absence of housing mix is described as a "total failure" from the perspective of those who had advocated

for more inclusive outcomes (M3, 93-95). While some compensatory socio-cultural spaces were eventually delivered, the residential dimension remained almost exclusively market-oriented (M3, 93-95).

The resulting housing prices are perceived as structurally exclusionary. One respondent observes that apartments in the area were sold at prices starting at 9,000 euros per square meter and up to 25,000–30,000 euros, generating a service ecosystem calibrated to affluent residents and progressively filtering out lower-income groups (M7, 121). Another notes that, even when searching across the entire city, the regenerated area was already "completely out of scale" in terms of affordability (M5, 54-55).

The cumulative effect is described as a broader process of expulsion. Rising rents are said to have prevented previous residents from remaining in Isola (M5, 54-55), while the neighborhood increasingly attracts affluent families drawn by new amenities and schools (M19, 48-49). This transformation is not perceived as neutral. As one interviewee remarks, the project "hit everyone," but especially "the weaker groups because of the general increase in prices," while also simplifying the cultural and commercial offer of the district (M7, 71).

The Biblioteca degli Alberi Park is at one central point of distributional critiques. Although formally public, it is widely perceived as embedded within a logic of private valorization. One interviewee states that the park functions as "the condominium garden of the real estate operations built around it," financed through urbanization charges but primarily enhancing surrounding property values (M5, 54-55). The design itself is described as oriented towards representation rather than everyday use. One interviewee living in the district emphasizes that the park appears to have been conceived to be viewed from above, from the surrounding towers:

> *"That park was designed to be seen from above from the skyscrapers. To appreciate the project, it has to be viewed from above, obviously only by the private residents who can do so. This already makes it evident that the park was not designed with the public who would cross it in mind, but rather its visual representation for those who paid a lot of money." Isola District Resident and Journalist (M19, 39-40)*

This perception reinforces the idea that the space, while open, is symbolically aligned with affluent residents.

Moreover, the park's governance model, based on private management under contract, is associated with an event-driven programming that partially subtracts space from everyday users (M7, 68; M19, 42). Events, installations and sponsored activities are described as occupying significant portions of the already limited green area, effectively reducing accessible space for residents (M19, 42).

Distributional concerns also relate to who can effectively use the park. While the area has become attractive to families with children (M19, 48-49), several interviewees underline the lack of basic facilities. As one respondent states:

"A child who needs to go to the bathroom doesn't know where to go. Three weeks ago, an elderly woman was under the sun asking where she could find a toilet. The only solution was to buy a 3-euro coffee in a bar… And then, what are we talking about?" President of Citizens' Committee (M10, 40)

The absence of public toilets and shaded areas is perceived as disadvantaging both children and elderly users (M10, 35; M10, 40). Although the park is frequently associated with families, its design and services are considered insufficiently inclusive for other groups, including teenagers and low-income residents.

Interviewees further note that designing spaces "for children" does not automatically translate into broader inclusivity. On the contrary, the emphasis on safety and decorum associated with affluent families is perceived as contributing to the expulsion of other fragile or marginal groups (M19, 54). In this sense, child-oriented design can inadvertently reinforce exclusionary dynamics.

The regeneration has also been accompanied by the generation of a vibrant nightlife in Isola, described as centered on high-consumption social groups (M19, 74). This nightlife affects residents through noise, overcrowding and tensions over public space use. Simultaneously, intensified use is said to degrade the green areas: lawns deteriorate; trees suffer, and cars encroach upon planted areas and open spaces (M19, 74).

Commercialization is perceived as another distributional mechanism. High-end residential development is described as producing an induced service landscape catering primarily to affluent consumers, with spillover effects on the wider neighborhood (M7, 121). Smaller retailers are perceived as struggling, mainly due to high rents, while standardized leisure-oriented retail formats – primarily bars and restaurants – expand (M7, 121).

Finally, several interviewees frame the transformation as an externally imposed rupture. The regeneration is described as a "project from above" that introduced "a million cubic meters of cement" into a historically working-class area (M9, 108-111). The cancellation of the former Bosco di Gioia, originally donated to remain a public forest, is cited as emblematic of broken promises regarding public green space (M7, 29-31).

5.1.4.4 Political mobilization

Interviewees describe the Isola district as characterized by sustained and high levels of political mobilization, both during the years of major regeneration and in more recent phases of transformation. Mobilization is framed as a constitutive feature of the neighborhood's civic identity, emerging in response to perceived threats to green areas, public space, and the social fabric of a historically popular district.

During the regeneration years, political mobilization combined legal action, public campaigning, assemblies, and cultural initiatives. A key role is attributed to civic formations such as the *Comitato dei Mille*, which rapidly organized petitions and legal appeals when large-scale redevelopment proposals became public (M9, 30; M9, 32-34). As one interviewee explains:

"There is this Committee of the Thousand - why 'of the Thousand'? Because they immediately collected a thousand signatures to strengthen themselves, to organize eight appeals to the Administrative Court, to create friction - I don't call it struggle, I call it friction - against the project that was about to arrive from Hines America." Activist and Association Representative (M9, 32-34)

Legal mobilization is remembered as financially demanding and logistically complex, yet also effective. Interviewees recount that multiple appeals to the administrative court contributed to preventing the realization of a fast-flow traffic artery that would have physically split the neighborhood (M9, 71). In this sense, recourse to institutional channels is presented as a central strategy of neighborhood advocacy.

Political mobilization also took more direct forms. At a critical juncture in the negotiations over land swaps and redevelopment plans, activists decided to occupy the Stecca degli Artigiani (M9, 77). This occupation is described as a symbolic and practical act aimed at asserting collective presence and contesting decisions perceived as imposed. The Stecca became a nodal point of mobilization, hosting assemblies and serving as a platform for coordination among different associations.

Mobilization was not limited to reactive protests. It also involved structured practices of advocacy planning and counter-expertise. Interviewees recall how small groups of young professionals and residents studied masterplans in detail, drafted formal observations and created information points to translate technical planning documents into accessible language (M3, 20-22). As described in one account, the approach was to activate "different tools" simultaneously: traditional planning observations, public information campaigns and the development of alternative visions grounded in local knowledge (M3, 20-22). This process included mapping associations, engaging experts and non-experts, organizing public events to widen participation, and even drafting an alternative regeneration plan.

Communication and awareness-raising were central components of mobilization. Forum Isola organized assemblies, cineforums and conferences to inform residents about the transformations underway and their implications (M9, 63-64). The objective was to extend political consciousness across the neighborhood and to articulate a collective response to redevelopment proposals perceived as potentially disruptive for a working-class district adjacent to more affluent areas.

Over time, some mobilization practices evolved into stable forms of collective organization. The experience of Isola Pepe Verde illustrates how political mobilization transitioned into ongoing community governance. The garden is described as hosting open assemblies every two weeks, structured around consensus-based decision-making rather than majority voting (M9, 167-169). This organizational model is portrayed as demanding in terms of time and commitment, yet inclusive and cohesion oriented.

Interviewees also reflect the broader impacts of political mobilization on urban outcomes. Although one petition addressed to the municipality reportedly received a negative response and no institutional backing (M6, 15-17), civic action is nevertheless perceived as capable of

influencing the trajectory of transformation. According to one perspective, the built environment today reflects the cumulative effects of conflict and negotiation. As one interviewee notes:

> *"The space that surrounds you does not resemble what it would have been if all these processes and conflicts had not taken place. It's one thing to say they wanted to build a skyscraper and they built a skyscraper. But it could have been profoundly different." Activist and District Resident (M7, 132-133)*

From this viewpoint, even when mobilization does not fully prevent redevelopment, it shapes its form, timing, and conditions.

At the same time, some initiatives are interpreted as strategic concessions aimed at fragmenting collective resistance. The allocation of alternative spaces to selected groups is described by some as having "broken the front" of protest (M19, 56). This perception underscores that political mobilization unfolded within a dynamic field of negotiation, in which civic pressure, institutional responses, and private interests interacted.

Overall, stakeholder perceptions depict Isola as a district where political mobilization has been intense, diversified, and persistent. It has combined legal recourse, occupation, advocacy planning, cultural programming, and consensus-based self-organization. While outcomes are assessed as uneven, mobilization is widely regarded as having left a tangible imprint on the regeneration process and on the present configuration of the neighborhood.

5.1.4.5 Socio-ecological impacts/benefits (positive)

Several positive socio-ecological impacts are associated by interviewees with the regeneration of the district, particularly in relation to improved walkability, enhanced accessibility, and the transformation of a former urban void into a large open garden. These impacts are described both in terms of spatial connectivity and in terms of social use and environmental quality.

A recurrent theme concerns the reconnection of the Isola district with the surrounding urban fabric. Historically perceived as physically separated, the area is described as having been reintegrated through new pedestrian infrastructures and spatial continuity. One interviewee emphasizes that the pedestrianization of the area above major traffic arteries represents a substantial qualitative shift:

> *"When you are on Gae Aulenti you are above one of the main east-west roads of Milan, where 6-7,000 cars pass per day, in total silence, in full pedestrian safety and with maximum security. There is a north-south connection from Corso Como to Isola in total safety and in a very soft way" Private Sector Representative (M1, 10).*

The success of this intervention is framed as almost invisible in everyday perception, which is interpreted as a sign of its effective integration into daily life. Improved access is also described at a broader urban scale. The creation of a main entrance through the park is perceived as having reoriented flows from Corso Como toward Isola, contributing to a seamless connection between previously separated areas. As one interviewee explains, the project created "a main access, a gateway to the neighborhood," connecting Isola's urban fabric without interruptions

and increasing its accessibility for residents and visitors alike (M1, 27-28). This reconnection is associated not only with physical permeability but also with an enlarged user base for local commerce and services.

The filling of what had long been an underused or infrastructural void with a garden surrounded by commercial spaces is acknowledged by part of interviewees as a qualitative upgrade. The new green space is described as offering facilities for families, children, and cultural activities. According to one account, families can now "*bring their children to BAM to play, go to a concert in BAM, or walk to the supermarket*," indicating the emergence of a mixed-use, walkable environment where daily needs and leisure activities coexist (M1, 27-28). The garden is thus perceived as contributing to both environmental enhancement and everyday convenience.

Interviewees also highlight the garden's programming and capacity to attract diverse publics. Cultural events, workshops, and large-scale installations are described as well attended and positively received. One respondent recalls events for children and families as "beautiful for the city and very well attended," underlining both their popularity and their symbolic value as urban amenities (M2, 71-73). These activities are framed as contributing to social vitality and to a renewed image of the area. At the same time, the garden is now considered "self-sufficient" in terms of funding, as revenues from event started to fully cover the cost last year, saving money of the municipality (M1).

Environmental improvements are further mentioned in relation to vegetation and seasonal landscapes. Flowering meadows and reduced mowing practices are described as having altered the visual perception of the district. One interviewee remarks that in spring "*with those millions of square meters of flowering lawns, your heart opens*," emphasizing the affective and perceptual dimension of the intervention (M2, 76-77).

Positive social impacts of green areas are also widely associated with the self-organized garden Isola Pepe Verde, which serves the neighborhood community as an area to gather, organize social events including birthdays, weddings and even funerals, and socialize, especially for elderly people and kids (M9, 149-152; M19, 55).

5.1.4.6 Socio-ecological impacts/harms (negative)

The regeneration of Porta Nuova is widely associated with processes of gentrification and pricing out. These dynamics are described as unevenly distributed, generating advantages for some groups while producing displacement and restructuring for others.

A first dimension concerns the appreciation of real estate values. The regeneration works are described by a private actor representative as having acted as a lever for further investments, enabling both major developers and third parties to reposition assets at significantly higher rental levels (M1,29). Rising property values are portrayed as beneficial primarily for owners and developers by most interviewees. The subdivision of larger flats into smaller units for resale or rent is mentioned as a typical effect of value increase. Conversely, tenants in private rental housing are described as particularly vulnerable. According to one account, "those who had private rental contracts were pushed out" (M19,27-29), indicating direct displacement linked to rent escalation.

Gentrification is reported as being felt most acutely at ground-floor level, where commercial activities are located. Interviewees distinguish clearly between those who owned their premises and those who rented. Property owners are described as having dramatically increased rents, in some cases attempting to multiply them rather than adjust them incrementally (M19,33-34). This dynamic is associated with the closure of historical artisans and neighborhood services. The disappearance of traditional crafts is described in stark terms:

> *"Of the artisans of Isola, apart from two goldsmiths, basically there is nothing left. Maybe one framemaker. That thing has disappeared. It remains written only in the Lonely Planet [travel guide, note by the authors], it doesn't exist anymore." Activist and District Resident (M7,65-65)*

Similarly, the closure of a neighborhood bookstore, very active and central in the community, following a proposed tripling of rent is presented as emblematic of the new economic conditions (M7,66-67; M9,206-208). One account recalls that the bookstore, which had become a cultural reference point for the neighborhood, was asked to move from paying 2,000 euros per month to 6,000 euros, making continuation impossible (M9,206-208). Interviewees underline that such activities operate with fixed-price goods and limited margins, making them structurally unable to absorb sharp rent increases (M7,66-67). In parallel, a proliferation of bars and restaurants is described, contributing to a transformation of the commercial landscape and to what is framed as a simplification of the local economic ecosystem (M7,65-65; M9,209-211).

At the same time, not all ground-floor actors are portrayed as passive victims. Some second-generation entrepreneurs who had acquired their premises are described as resisting speculative offers, framing their presence as a form of self-organized containment of gentrification (M3,74-75). Nevertheless, this containment is depicted as fragile and dependent on ownership rather than public regulation (M3,75-75).

A further dimension relates to the interaction between environmental upgrading and real estate valorization. Some accounts explicitly connect the creation of the garden and of iconic green architecture to surrounding price increases. One interviewee recalls a statement made by an architect during the early phases of the project, which clarified the underlying logic:

> *"He told me that the cool thing about building the Bosco Verticale will be that when the park will be there, they will be the most beautiful houses in Milan." District Resident and Journalist (M19,38-38)*

In the interviewee's narration, this sentence is presented as revealing the basic principle of that development model: public space and green amenities are not produced as independent collective goods, but as elements that enhance the value of adjacent private real estate (M19,38-38). In this perspective, green areas are interpreted as assets embedded within a real estate development strategy. Another account reinforces this view, suggesting that the garden functions less as a service to the wider city and more as an added value for surrounding investments, contributing to the steep rise of rents and sale prices in Isola (M5,54-55).

Finally, a paradox emerges in relation to community vitality. The presence of vibrant social and cultural spaces, including those that were critical of redevelopment, is reported to have increased the attractiveness of the area and therefore to have indirectly contributed to rising

property values. As one interviewee notes, these actors risk becoming "*monkeys in a zoo*," part of the aesthetic and symbolic capital that enhances the neighborhood's market appeal (M3,82-83). This reflects the perception that gentrification is not driven exclusively by large investors, but also by cumulative processes of small-scale speculation and symbolic valorization (M3,82-83).

Several interviewees stress that sustainability-oriented interventions such as energy retrofitting upgrades or technological enhancements in housing buildings risk widening inequalities. Some highlight that high-tech systems increase maintenance costs and service charges, which fall heavily on lower income residents in mixed tenure buildings (M16, 131–135). Others stress that energy retrofits may increase property values, potentially pushing owner-occupiers to sell their flat and putting tenants at risk of eviction, also considering that improvements may also raise condominium costs, contributing to displacement of longstanding residents who cannot sustain rising fees (M19, 101–102).

5.1.4.7 Tensions and power dynamics between stakeholders/actors

The redevelopment of Isola-Porta Nuova-Garibaldi is described by interviewees as a field characterized by asymmetrical resources, hybrid governance arrangements, and shifting alliances between private capital, public authorities, and organized civil society.

A recurrent theme concerns the progressive centrality of large-scale real estate capital in steering the transformation process. The redevelopment was structured through three investment funds corresponding to different property areas, later consolidated under the control of the sovereign wealth fund of Qatar (M1, 4-6; M1, 22). This financial architecture concentrated ownership and operational coordination in the hands of a single private asset manager, strengthening its negotiating position vis-à-vis the municipality. The arrival of substantial international capital is described as a turning point that altered previous balances and reduced the margin of maneuver for actors who had previously operated in more informal or tolerated conditions (M3, 43).

The management of Biblioteca degli Alberi exemplifies the hybrid configuration of authority that emerged. Although the garden is publicly owned, its realization and ongoing management are based on a contractual arrangement with a foundation linked to the investment fund (M1, 22; M1, 25). Interviewees report that the municipality requested the private actor to implement the garden directly, citing administrative and maintenance constraints (M1, 25). Maintenance expenditure levels far exceed those typical of municipal parks, resulting in higher standards of upkeep and extensive cultural programming (M2, 66-70). At the same time, several accounts describe the garden as a "public" space with distinctive governance features, including intensive surveillance and regulated uses (M19, 42; M9, 254-255). Private sector representatives frame this model as a mechanism that simultaneously safeguards investment value and produces public benefits (M1, 49-50; M1, 35).

"The park is public, so normally it should be cleaned by the municipal waste company and maintained by the municipality. But there is a reason why other parks in Milan were fenced in the 1980s and 1990s: issues of nighttime security, vandalism, maintenance. A park like this

could have turned into a boomerang. If it became a receptacle for micro-criminality, it would also deter property values. Managing it directly, investing money in it, gives an image of tranquility and safety that the municipality would not have been able to guarantee." Private Sector Representative (M1, 22)

Critical voices interpret it as a strategy that reinforces asset valorization and shapes neighborhood perception through curated placemaking (M7, 69-70).

Relations between civil society and the municipality are portrayed as ambivalent. On the one hand, the municipality is depicted as having delegated substantial decision-making power to private actors during the main redevelopment phases. On the other hand, it is also described as having tolerated and, in part, enabled self-organized activities within the area, effectively "closing one eye" in certain periods (M19, 50-54). Civic actors report that their relationship with public authorities oscillates between cooperation and conflict. Dialogue tends to improve when associations coordinate and exercise collective pressure, suggesting that institutional responsiveness is linked to the capacity of civil society to act as a unified interlocutor (M19, 50-54).

The demolition of the Stecca degli Artigiani remains a central reference point in understanding power asymmetries. Negotiations over its preservation revealed both the concentration of decision-making authority and internal fractures within civic coalitions (M4, 29; M4, 62). The final demolition episode is described as abrupt and emblematic of the limited capacity of local actors to counter decisions supported by aligned public and private interests (M9, 99-104). While the Stecca case is situated in the mid-2000s, it is repeatedly invoked to illustrate enduring asymmetries in bargaining power. One account reflects the perception that decisive regulatory choices ultimately rested with public authorities:

"It was up to the public authorities to set the rules, to require that there be a park and to maintain a share of public and social housing. If you do not put those rules in place, you cannot complain afterwards. Who was supposed to do it? Us from the Stecca? We tried, but we were told: 'That's how it is.'" Urban Planner and former Stecca degli Artigiani Activist (M3, 113)

Relatedly, the coexistence of public housing in the district within a rapidly appreciating environment is described as contradictory and insufficiently addressed by public policy (M10, 63). A further dimension concerns the governance of security, public space, and neighborhood image. The private management model integrates surveillance systems, control rooms, and coordinated services across publicly accessible areas (M1, 20; M19, 42). Some interviewees regard this as enhancing safety and functionality; others describe it as producing selective inclusion, with certain groups being discouraged from lingering in highly curated spaces (M9, 254-255).

Overall, stakeholder perceptions point to a governance landscape in which financial capacity and ownership concentration provide private actors with significant leverage, municipal authorities operate through negotiated and hybrid arrangements, and civil society influence depends largely on its ability to consolidate pressure and maintain visibility within a highly capitalized urban transformation process.

5.1.4.8 Innovative governance mechanisms

Milan[120] is described as a city undergoing continuous regeneration, with former industrial and vacant areas progressively transformed through structured governance mechanisms. A central instrument frequently mentioned is the Integrated Intervention Plan, framed as a complex planning tool capable of aligning public and private actors within a shared regulatory framework. As one interviewee explains:

> *"The PII is a complex urban and territorial planning instrument. It brings numerous private and public actors to the table and requires environmental, mobility and infrastructural impact assessments in order to converge on a set of rules integrated into the city" (M1, 7). Private Sector Representative*

From this perspective, negotiated planning instruments are presented as a way to structure urban transformation through formalized procedures, impact assessments, and binding obligations.

Public private partnerships play a major role in regeneration processes, including that of Porta Nuova. Given the scale of the municipally-owned public housing stock, estimated at around 200 fully municipal complexes, full energy upgrading would require approximately one billion euros, a level of investment that cannot be covered solely by the municipal budget (M17, 86). Consequently, access to European, national, and regional funds is considered essential.

However, while institutional actors present partnerships as pragmatic solutions to fiscal constraints, other accounts in the broader material raise concerns about the imbalance of power between public authorities and large private developers. In flagship regeneration areas such as Porta Nuova, public private collaboration is perceived by some civic actors as asymmetrical, with private financial actors exerting significant influence over urban agendas. Thus, although governance mechanisms are described as innovative and structured, they remain embedded in contested power relations.

Green building and retrofit policies represent another key area of governance innovation. Interviewees underline that regulatory margins for maneuvering in new construction are limited. This distinction between marketing-oriented sustainability labels and legally mandated energy classes illustrates how regulatory frameworks shape development practices. Over

[120] Note: The accounts that refer to specific governance mechanisms for the Isola district are reported in section 3.2.

time, increasingly stringent regional and municipal regulations have made high energy standards the norm rather than the exception (M1, 18). As one private actor states:

> *"Today it is almost automatic to build at the highest energy standards. The LEED certification is more a marketing tool than pure energy efficiency. Energy certification is something else, embedded in legal requirements that measure actual dispersion and consumption" (M1, 18). Private Sector Representative*

Overall, stakeholder perceptions from institutional and private actors portray Milan's governance mechanisms as procedurally sophisticated and increasingly integrated. At the same time, critical perspectives highlight that these innovations operate within broader structural tensions, where financial capacity and regulatory power remain unevenly distributed among stakeholders.

5.1.4.9 Tourism and market pressures

This section is complementary to the sections on inequity and negative social impacts. While those sections addressed distributional imbalances and social displacement more broadly, the focus here is on the relationship between urban regeneration and intensified market pressure, particularly in relation to speculation, short-term rentals, and financialization dynamics. Within the wider city trajectory, Isola and Porta Nuova are repeatedly described as exemplary cases.

A first recurrent theme concerns the proliferation of short-term rentals and B&Bs. Interviewees stress that this phenomenon cannot be reduced to tourism alone but is embedded in regulatory gaps and speculative incentives. Attempts by local actors to engage with platforms and institutions are portrayed as insufficient, as the scale of the issue exceeds local governance capacity. One interviewee underlines both the structural dimension of the problem and the lack of effective regulation:

> *"We had also met the top management of Airbnb and the administration, to understand whether there were possible ways to intervene. But it soon became clear that it is a problem too big for a single committee or even for a single district. Specific regulations would be needed, at a higher level. And there is another big issue: there is no complete public mapping of short-term rentals. It's not just Airbnb; there are a thousand platforms, many of which are not controlled, sometimes not even controllable. So yes, there is a very strong phenomenon of speculation also from this point of view"* Representative of a Citizens Committee (M10,64-65).

The absence of enforceable limits is described as enabling a dynamic in which the financial value of housing increasingly dominates its use value. Several accounts emphasize the loss of community life associated with this transformation. Long term residents describe a shift from stable neighborhood relations to transient occupancy patterns dominated by tourists. Others report that entire buildings have progressively turned into short term rentals, leaving only a handful of permanent residents and altering the social composition of the neighborhood (M8,112-114). Touristification is therefore linked not only to housing accessibility, but also to a perceived erosion of everyday relational networks. One interviewee explains:

"You go downstairs and you do not know who you will meet, because everything has become B&B. I am not against it, but I am describing a transition" (M10,37-38). President of Citizen's committee

Speculative expectations are widely reported. Property owners frequently acknowledge that selling their apartments would generate substantial profits (M6,71; M6,124). Real estate agencies are described as persistently contacting residents with updated valuations, reinforcing a culture of continuous asset appreciation (M5,103). These dynamics are framed as the outcome of policies that prioritize valorization and attractiveness over housing rights (M6,98-101). An additional mechanism concerns the commodification of vibrant community life. Districts characterized by active associations, community gardens, and cultural initiatives, such as Isola, are increasingly marketed on this basis (M5,61-67; M5,149). This creates a paradox whereby community life and civic engagement become drivers of rising property values, potentially reinforcing gentrification pressures.

A second theme relates to the steep increase in real estate values and the resulting speculative environment. Interviewees describe dramatic appreciation of property prices over the last decade, with homeowners witnessing their apartments triple or quadruple in value (M3,71-71). While this created gains for some owners, it also generated a context in which buying or renting became increasingly inaccessible. In one detailed account, the district is described as subject to a "*very strong speculative push*," with prices rising from approximately 2,000–2,500 euros per square meter to levels considered extraordinary and inaccessible (M10,56-60). This has led older residents to leave, heirs to monetize inherited properties, and new buyers to treat housing primarily as investment rather than long-term residence.

Speculation is not attributed exclusively to large-scale developers. On the contrary, several accounts emphasize the role of small agencies and individual landlords in inflating prices and pushing rents beyond sustainable levels. As one interviewee states:

"Speculators are not only the big investors. The big investors have already done their business and had to follow certain rules. The problem is the small sharks, who can cause a massacre. Gentrification is not made by one big investor; it is made by the many small ones who speculate. That's why the public sector is fundamental" Urban Planner and former Stecca degli Artigiani Activist (M3,82-83).

This perspective frames gentrification as a cumulative process, driven by everyday speculative practices across multiple actors.

Green infrastructure is perceived as part of this broader speculative climate. While some actors defend projects such as BAM as environmentally beneficial regardless of their surroundings (M1,45-45), others interpret placemaking strategies, curated greenery, and event programming as embedded in investment logics aimed at enhancing property value and perceived attractiveness (M7,69-70). In this interpretation, ecological upgrading does not automatically generate exclusion, but it can function as leverage within an already financialized urban environment.

5.1.4.10 Gaps in perceptions between civic groups and public agencies

Across the material collected in this study, clear perception gaps emerge between institutional, private, and civic actors regarding the transformation of Isola and Porta Nuova. These gaps concern the interpretation of green infrastructure, the role of market dynamics, and the meaning of regeneration for the neighborhood community.

Institutional perspectives tend to frame the intervention in terms of environmental upgrade, public accessibility, and urban quality. Emphasis is placed on pedestrianization, programming, and aesthetic improvement. For instance, flowering meadows and reduced mowing are described as small but powerful elements that positively affect the perception of the city, with seasonal color seen as "priceless" for counterbalancing urban greyness (M2,76-77). Similarly, cultural events in BAM are portrayed as well-attended and beneficial for the city as a whole (M2,71-73). In this framing, green space is understood primarily as public amenity and environmental enhancement.

Private sector accounts highlight accessibility, connectivity, and ecosystem benefits, while also situating green infrastructure within broader development strategies. The regeneration is presented as having reconnected the district and increased its attractiveness and user base (M1,27-28). Green space is described as providing ecological value "*totally free in terms of opportunity cost*" (M1,45-45). This perspective acknowledges environmental gains but does not problematize their interaction with real estate valorization.

The green dimension is understood by most activists as a rather secondary factor in triggering urban transformations, while primary factors have been security and public order, the rise in property value, and a recurrent discourse about "unblocking" areas that had been vacant for decades (e.g. the railway yards). Instead, many activist started seeing in these "blocked" areas the possibility for nature to grow.

In my opinion, the park did not appease people. If anything, paradoxically, it was another small park created by the same group of protesters that appeased people, namely the garden on Via Pepe…This garden has been managed in the Berlin style, making it very green and shaded with all these plants and trees... It is open to the neighborhood and, even before the other park was opened, it became the place where children's parties were held, for example (M19, 55, activist)

I don't believe that green spaces are a factor in gentrification. Whereas, for example, I think pedestrian zones are (M13, 220, Activist)

Now we are so crazy as to think that a park is made for gentrification. I mean, a park is a park. Before, there was a hole full of unexploded bombs, Roma camps, and drug dealing. Now there is a park! Then, of course, the value of the surrounding real estate increases. We ourselves probably increase property values, that bar increases property values, but without that bar, without the pool table, without a park, it's bad, in the sense of 'Do we want to be bad then?' and say that there is no gentrification, but then the ones who are doing well are the usual bourgeoisie who own property (M3, 108, Urban planning expert)

If we look at the major transformation processes of recent years, like Maciachini, Citylife, Porta Nuova, the railway yards and a few other projects earlier, I don't think that greening, outside of the discursive dimension, has played such a strong role (M14, 115, activist)

Civic actors articulate a markedly different interpretation. While not rejecting regeneration projects or new green spaces per se, they repeatedly link the regeneration of the Porta Nuova and Isola district interventions to speculation, displacement and social restructuring. One interviewee explicitly describes "*an enormous uncontrolled speculation*" driven by skyrocketing property values and short-term rentals, noting that apartments are increasingly converted into B&Bs and that long-term residents leave (M10,56-60). Another reflects on how small real estate agencies capitalize on neighborhood amenities, warning that "*gentrification is not driven by one large investor, it is driven by many small actors who speculate*" (M3,82-83). Here, green and cultural assets are seen as embedded in market pressures.

From the analysis, it also emerges that civic actors appear to struggle to clearly differentiate the financial actors involved in these processes. This difficulty can be linked to the complex and shifting ownership structures of the investment funds and development vehicles behind the projects, where layered shareholdings, international capital flows and frequent changes in fund management make lines of control and responsibility difficult to trace.

5.1.5 Stakeholder perspective on Green Initiatives in Case Study Areas: Baden Powell – Segantini / Navigli

5.1.5.1 Precedents and implementation

The formation of the Baden Powell and Segantini parks is described by interviewees as the outcome of a long sequence of precedents, interrupted projects, and civic mobilization, rather than the linear delivery of a unitary and broad plan. Many accounts are provided by residents of the area, who recall both the historical functions of the site and the conditions that preceded the parks' realization. These narratives foreground a local memory of institutional decline, post-industrial decay, contested land use, and gradual implementation through negotiated and participatory arrangements.

A recurring reference point is the former Sieroterapico complex, described as a major research and production hub for anti-venom serums, linked to non-profit research and to a broad social life connected to the workplace. One resident recalls that the institution had extensive land holdings and hosted research facilities that included animal testing, with “vipers” and “monkeys” mentioned among the elements remembered from childhood visits (M11,6-7). Another account situates the Sieroterapico as a large employer and a socially meaningful institution, with a workers’ recreational center and communal events, and interprets its decline as tied to financial fragility and structural shifts in the pharmaceutical sector (M11,11). These recollections frame the area not only as a vacant site later converted to new functions, housing and green space, but as a place marked by the disappearance of civic and high-end research functions.

Several interviewees also underline that the remediation and redevelopment of the large open – but yet fenced by high walls - spaces was not immediate, and that abandonment produced degradation for years. When civic actors approached the space, it was described as “degraded, full of rubble, waste, and informal settlements” (M12,15-18). The condition of neglect, together with uncertainty about ownership and redevelopment trajectories, is depicted as one of the factors that enabled residents to frame the park as a matter of collective entitlement, including in relation to urbanization charges and the responsibilities of both the municipality and the operator involved in surrounding developments (M12,15-18).

The area’s redevelopment is repeatedly linked to earlier private development proposals that included green space but were perceived as oriented toward closure or privatized control. One interviewee recalls that earlier schemes envisioned a park that was not clearly public and could have become “a private park in some way, through fences or similar devices” (M15,26). These plans are further connected to the wider political and judicial context of Milan in the 1990s. Multiple accounts describe how corruption scandals associated with the Clean Hands investigations and the Tangentopoli corruption scandal blocked and allowed deep revision of the proposed interventions, forcing changes in design teams and reducing building volumes relative to earlier proposals (M13,56; M15,25). In these narratives, legal disruption is not presented as an external episode but as a decisive precedent that allowed a review and more public-oriented and qualified balance between construction and open space.

Interviewees describe civic organization as pivotal in shifting the project trajectory. Accounts refer to committees mobilizing around the Sieroterapico area, developing protest actions and communication strategies, and later presenting concrete objectives to municipal representatives (M13,72-74; M15,43-45). This civic pressure is depicted as creating a context in which the municipality, when it re-entered the process after judicial events, had to confront both expressed public demands and pragmatic proposals developed by residents (M15,26).

A key perception emerging from the accounts is that the difficulty of “making the park” was not primarily technical planting work, but the elaboration of a coherent project addressing future uses and beneficiaries. This theme is strongly articulated through references to an earlier best practice, the Boscoincittà, a large urban forest park in western Milan, Italy’s first major urban

reforestation project, created in 1974 by the ngo Italia Nostra. One main actor involved in that experience explains that simple requests for planting trees often concealed more complex social and governance questions, and argues how relevant it was to set up a more qualified debate and project that required decisions about users, management, and desired or discouraged uses, not only a formal drawing (M12,11-12). This understanding is mirrored in narratives of the Segantini Park's implementation, where early interventions began with cleaning, selective ordering of the terrain, and building collective attachment before any stable design was possible (M12,15-18).

> *"I remember saying, provocatively, that planting trees is the most useless thing in the world. Not because trees are not needed, but because if you leave a piece of land as it is, in this climate, it becomes a forest anyway. The point is not to plant trees, but to understand where, which ones, and with what project." Park NGO Representative (M12,11-12)*

Implementation is also described as incremental and adaptive, shaped by limited funding and by learning through practice. One account emphasizes that civic promoters advanced a simplified and feasible plan precisely because "there was no money," proposing a progressive park, to be built piece by piece over time and privileging temporary, reversible solutions over fixed infrastructures (M15,43-45). This approach is framed as politically effective because it countered the institutional argument that lack of funds implied inaction. The "process" dimension is repeatedly contrasted with earlier large-scale design proposals that remained unrealized, including a major project commissioned to Michel Desvigne that was perceived as ambitious but ultimately unsupported by municipal resources (M13,73-74).

Finally, several narratives stress that the Baden Powell and Segantini parks emerged within a broader landscape of dense urbanization and contested connections between parks, water systems, small vacant industrial plots and new residential development. Institutional actors highlight that the two projects were valued for their potential to connect with nearby parks and waterways, even as housing built around the area is explicitly described as high end rather than socially regulated (M2,57). In this sense, Segantini is perceived as both a local civic achievement and a negotiated element within wider redevelopment pressures.

> *"We arrived at a meeting with the deputy mayors with a projector, maps, and a project, while they had nothing in hand. Our proposal was based on two ideas: progressivity, because there was no money, and temporariness, because the territory and its users change over time." Park NGO Representative (M15,43-45)*

Best practice examples such as Bosco in Città are reported to have provided both practical guidance and a conceptual frame, shifting the focus from tree planting to governance, use, and long-term stewardship as the core challenges of implementation (M12,11-12; M12,15-18).

5.1.5.2 Participation and governance

While in the interviews a main focus is on the Segantini Park, the involvement of citizens and civic actors in the development of the district is very broad. By some interviewees, individual

and collective committment has been devoluted to a variety of initiatives across the district, with the aim of controlling and preserving green areas and a slow pace of development in a time of deep and extensive restructuring of the district.

More specifically, stakeholders describe Segantini Park as a paradigmatic example of a “parco partecipato”, a participatory park developed through sustained collaboration between municipal actors, civic initiatives, and cooperative housing developers. The governance framework that emerged in this context is portrayed as both contingent and innovative, shaped by mutual adaptation between bottom-up mobilization and institutional openness. Interviewees identify three main actor groups as central to the park’s realization and management: the municipality, the civic committee and subsequent association linked to Segantini park, and the housing cooperative CCL, which developed adjacent housing complexes. According to one institutional actor, the process evolved into a fully shared design approach. This perception is echoed in accounts that describe how the initial municipal stance, oriented toward waiting for funding, was gradually replaced by an incremental logic made possible by dialogue with citizens and technical staff (M12,28-30).

“For Segantini, the Municipality was forced to change approach. Not being able to develop everything at once, we started step by step, as in Bosconcittà or Parco Nord, creating a synergy between institutions, citizens and technicians.” Park NGO Representative (M12,28-30)

Civic actors are consistently portrayed as agenda setters. Their mobilization after the judicial and planning controversies created a context in which municipal authorities had to engage with organized citizen proposals and “good ideas” (M15,26). Interviewees underline that this interaction was not merely oppositional but constructive. The civic committees contributed to defining design priorities and governance arrangements and later formalized its role through an association that obtained a concession to manage parts of the park (M14,40).

The association’s activities extend beyond maintenance. Shared urban gardens constitute a core element of the participatory model. As one member explains, cultivation of the shared community gardens is collective rather than individual, and distribution of products becomes an occasion for social interaction and community building (M14,40). This emphasis on relational value is reinforced by collaborations with external actors. The association has worked with Italia Nostra and with prison institutions for the realization of specific areas, including the shared gardens (M13,90).

We had just been to Amsterdam and The Hague, where we saw urban gardens even in front of the Queen's palace. And we thought, 'Let's do that here too'. When we started proposing them, from 1985 to 1988, we found ourselves up against everyone: politicians, officials, even some of our own volunteers. The gardens were seen as a legacy of poverty, something to be ashamed of. People need to get their hands dirty in nature: some came to volunteer at Bosco in Città, others cultivated a vegetable garden. In those contexts, we learned that more than "participatory design," what is needed is the ability to read the territory: to understand that if a vegetable garden springs up spontaneously in an abandoned area, then there is a real need there (M12, 13-14, activist)

More recently, it has been involved in a European research project on pollinators and biodiversity with a university department, which is perceived as recognition of its growing competence and legitimacy (M14,41). The work with primary schools especially is of interest as the aim is to involve children living in vulnerable neighbourhoods and to provide that they can benefit from open air and nature-related activities. At the same time, several interviewees acknowledge the fragility of volunteer-based governance. The original core group is described as cohesive and highly motivated, but generational turnover is proving difficult (M12,34). Maintaining long term engagement, recruiting new members, and sustaining the energy required for management tasks represent ongoing challenges. Despite these difficulties, the park is widely perceived as functioning effectively and as offering a high level of shared quality (M13,335-344).

For several cooperative members, proximity to Segantini Park represented a decisive factor in choosing to live there (M16,29). In this sense, the park operates both as a collectively managed green space and as a structuring element of residential attractiveness. Nevertheless, participation is not evenly distributed across adjacent areas. One interviewee notes that nearby social housing zones remain weakly connected to park activities, despite broader territorial initiatives (M14,61). This indicates that while the participatory model has achieved internal cohesion, its capacity to bridge socio spatial divides remains partial.

Overall, stakeholder perceptions portray Segantini Park as the product of a virtuous collaboration between the municipality and civic associations. The case illustrates how participatory arrangements can reshape institutional routines, generate hybrid management forms, and embed research and community practices within an urban green space. At the same time, long term sustainability depends on maintaining volunteer commitment and on extending inclusion beyond the most active constituencies.

5.1.5.3 (In)equity (distribution)

Accounts related to Segantini Park and the adjacent Baden Powell Park largely converge on the perception that the green areas function as an inclusive and widely appreciated public space. Interviewees consistently describe them as highly frequented, socially mixed, and accessible to diverse groups, with no major processes of exclusion reported.

Several respondents emphasize the parks' everyday inclusiveness. It is described as intensely used by families, children, dog owners, and residents of surrounding streets. One interviewee characterizes it as a particularly virtuous operation that has generated strong local aggregation:

> *"It has created an incredible aggregation of mothers and children. The park is extremely well used, and I think it is very much loved. It coexists with artisans, a capoeira gym, and dog owners. There is still a very nice exchange." Activist and District Resident (M8,50-51)*

The physical design and maintenance of the park are frequently mentioned as contributing to its inclusive character. Interviewees refer to benches, shaded areas, paths through bamboo groves, and well-maintained but loosely designed green areas as elements that encourage

diverse forms of use (M8,50-51; M8,83-85). The presence of dog areas, urban gardens, and informal spaces for teenagers is seen as supporting coexistence among different age groups. Although one account suggests that young people may be less present in Segantini compared to Baden Powell (M12,37-38), other testimonies highlight the strong youth presence in the broader park system, particularly at Baden Powell, which is described as highly frequented by diverse groups of young people, including university students (M16,39-41).

Perceptions of exclusion are generally minimal. One interviewee explicitly states: *"My feeling is that no one is excluded*" (M12,37-38). Even when acknowledging that the association managing the gardens has a somewhat closed internal structure, respondents underline that the park as a physical space remains open and accessible to anyone (M12,39-40). The active presence of volunteers is perceived as an additional layer of informal oversight rather than a mechanism of control.

At the same time, interviewees recognize that proximity matters. Residents whose homes overlook the park benefit more directly in terms of daily access and increased property values (M12,37-38; M15,80-81). However, these advantages are not framed as structural inequalities. One respondent questions whether having to walk a few hundred meters should be considered a real form of disadvantage (M15,80-81). The overall tone suggests that while benefits are unevenly distributed in spatial terms, this does not translate into systematic exclusion.

The surrounding area is described as socially heterogeneous. Interviewees repeatedly refer to the public housing estate in Via Gola, known for social vulnerability, squatted housing, and criminality (M14,61). Other nearby zones include cooperative housing, newly built middle-class housing, higher education facilities such as NABA, and more affluent developments (M14,61-63). This diversity is presented as a defining feature of the park's context. However, participation from the most vulnerable parts of the neighborhood appears limited, with only a few residents from Via Gola reportedly engaging regularly with park activities (M14,61).

Educational initiatives and collaborations with local schools further contribute to perceptions of inclusiveness. A school with a high percentage of children from migrant backgrounds is described as one of the most successful partners in environmental and garden related activities (M14,115). This is interpreted as evidence that social diversity does not prevent active participation.

Finally, interviewees acknowledge that aggregation can generate tensions, particularly in the evenings when public spaces attract different forms of use. Nevertheless, such dynamics are framed as inherent to open public spaces rather than as evidence of exclusion (M14,131-132).

Overall, stakeholder perceptions indicate that Segantini Park distributes socio ecological benefits broadly across social groups. While proximity and real estate appreciation create differentiated advantages, no significant patterns of exclusion emerge in the interviews. The park is widely regarded as appreciated, frequented, and socially mixed within a highly heterogeneous urban environment.

5.1.5.4 Political mobilization

Stakeholder accounts situate the Segantini case within a broader Milanese context characterized by active neighborhood committees and sustained civic engagement across districts. Political mobilization around the former Sieroterapico area is described as decisive for the creation and public character of the park. Interviewees consistently emphasize that without persistent collective action, the area would likely have followed a different trajectory.

Early mobilization took the form of public demonstrations, symbolic actions, and direct confrontation with institutional actors. One interviewee recalls organizing protests and staging a demonstration with a coffin to symbolize the "death of a park," adding that without the Tangentopoli investigations the speculative project might not have been halted (M13,72). In retrospect, this phase is framed as a turning point in which civic pressure intersected with judicial developments, strengthening the demand for a public green space.

Grassroots initiatives combined protest with neighborhood organizing. Residents describe posting notices on building doors, organizing Sunday meetings, and forming groups with distinct motivations, ranging from property-related interests to broader civic promotion of a public park (M15,32-33). Over time, a shared objective consolidated: ensuring that the area would remain green and become publicly accessible. As one interviewee summarizes, "We had to fight so that it remained green and became public green" (M13,90).

Mobilization also extended to environmental monitoring and air quality advocacy. Residents collaborated with research institutions and used portable monitoring devices to collect data on fine particulate matter, questioning official measurements and pressing authorities for action (M8,141). More recent initiatives aim to aggregate schools and associations around localized air quality mapping to support municipal decision making (M14,176-181).

Overall, political mobilization is portrayed as the enabling condition of the park's existence. It combined protest, negotiation, and technical advocacy, embedding Segantini Park within Milan's broader tradition of neighborhood environmental activism.

5.1.5.5 Socio-ecological impacts/benefits (positive)

Stakeholders' accounts concerning the transformations in the Segantini Park and surrounding Navigli area consistently emphasize a range of positive socio-ecological impacts. These relate to strengthened community life, improved access to affordable housing, environmental quality, and the park's role as a site for education and biodiversity enhancement.

A central theme concerns the park's capacity to foster socialization and everyday interaction. Interviewees describe it as a highly frequented and socially vibrant space, used by families, dog owners, and young people. The park is portrayed as one of the few open spaces in the area where different groups regularly encounter each other. As one participant notes:

"It is one of the few places in Milan where you see the sky because it is open. It is a place where families bring children to play, where dog owners meet every morning." Park NGO Representative (M14,52)

This spatial openness and accessibility are perceived as generating informal social networks and recurring interactions. The park is described as a setting where diverse social backgrounds converge and where professional or economic status becomes secondary to shared use of space (M14,42). The experience of proximity to green space is associated with everyday well-being and a sense of joy, particularly for residents living in adjacent housing (M14,41).

Several accounts emphasize the park's contribution to a broader sense of neighborhood community. Green spaces are framed as anchors that transform potentially anonymous residential developments into recognizable places of encounter. According to one interviewee, parks contribute to making urban areas "less like dormitory neighborhoods" and more community-oriented (M16,99). The integration of Segantini Park with the nearby Baden Powell Park further strengthens its role within a larger system of public spaces that attract users of different ages, including younger groups and teenagers (M13,335-344).

Housing affordability emerges as another important positive impact. Cooperative housing initiatives developed in proximity to the park are described as having enabled long-term residents to remain in the district despite increasing real estate values. One interviewee reflects that the cooperative intervention provided "the opportunity to remain in the neighborhood" for people who would otherwise have been forced to move due to the city's rising prices (M16,74). In this perspective, the cooperative model acted as a counterbalance to exclusionary market dynamics, aligning with principles of affordability and social continuity.

Environmental benefits are also highlighted. Stakeholders refer to measurable microclimatic improvements linked to the presence of extensive greenery. As reported by one interviewee involved in environmental monitoring, the area experiences a summer temperature reduction of three to four degrees and a winter increase of two to three degrees compared to surrounding built-up zones (M15,88). These climatic effects are interpreted as collective gains, benefiting both frequent users and residents living nearby.

The park also functions as an educational and research platform. Citizen science initiatives and collaborations with universities have focused on pollinators, biodiversity and air pollution measurements (M14,41). Educational projects with schools and potential collaborations with higher education institutions such as NABA are described as contributing to environmental awareness and intergenerational exchange (M14,41).

5.1.5.6 Socio-ecological impacts/harms (negative)

Stakeholder accounts concerning Segantini Park and the Navigli area identify limited negative socio-ecological impacts directly attributable to the park itself. Rather, concerns focus on broader processes of urban transformation and housing market dynamics that characterize the district and the city.

Several interviewees describe the Navigli area as historically working class and since years featuring strong gentrification pressures. One respondent notes that the neighborhood, once composed largely of modest housing from the early twentieth century, has undergone “very accentuated gentrification dynamics” linked to intense urbanization and speculative pressures (M10,9). Rising housing prices are perceived as generating a form of housing emergency, with costs sometimes considered disproportionate to building quality and environmental performance (M10,9). In this perspective, displacement and pricing-out are understood as structural dynamics affecting the wider district.

At the same time, stakeholders tend to distinguish these processes from the specific role of Segantini Park. While acknowledging that the park has contributed to increased real estate values in its immediate vicinity, most accounts reject the idea that it constitutes an example of green gentrification. As one interviewee explicitly states: “Using green space for real estate development is not automatically gentrification. It depends on what kind of green you create and how you create it. A green space like Segantini does not produce gentrification” (M15,55). The participatory governance model and the public ownership of the green area are seen as crucial differences from other cases where parks are embedded in private development logics (M15,58-61).

Nevertheless, interviewees recognize that the park has been used symbolically in real estate marketing. Online advertisements highlighting “apartments with park view” illustrate how green amenities can be mobilized commercially (M15,58-61). One respondent remarks the substantial increase in property values over time, asking to what extent this increment is due to the park itself or to broader improvements in southern Milan (M15,70). This uncertainty underscores the difficulty of isolating the park’s specific economic impact from metropolitan trends.

Another perspective emphasizes that structural urban factors, such as public transport infrastructure, may have had a stronger influence on property values than the park (M15,85-86). In this sense, the Segantini Park is portrayed less as a driver of transformation and more as an amenity inserted into an already changing urban context.

Overall, stakeholder perceptions suggest that while the Navigli district is embedded in wider gentrification processes, Segantini Park is not viewed as a primary cause of exclusion. Its public character and participatory governance are instead framed as mitigating factors within a broader, speculative urban environment.

5.1.5.7 Tensions and power dynamics between stakeholders/actors

Stakeholder accounts identify tensions primarily in relation to everyday management issues and the division of responsibilities between citizen volunteers and public authorities. While Segantini Park is widely described as a successful example of participatory governance, its implementation and construction took long time and civic efforts, while maintenance reveals not always straightforward institutional arrangements and blurred boundaries between public and associative domains.

A recurrent source of tension concerns waste management and the practical consequences of the park's open and natural character. As a public space, the park attracts diverse uses, including informal settlements and nighttime activities, which generate additional maintenance burdens. One institutional actor reflects on the recurring dilemma:

> *"Every time something is thrown in: who cleans it? Who removes it? Who puts it back? There is water, isn't there water?… It is a place that needs to be kept under close control and every intervention is complex, both for the administration and for the volunteers, who continue with enthusiasm". City Manager in Public Greening (M2,62-63).*

Similarly, volunteers report ongoing coordination difficulties with municipal services, MM, AMSA (the municipal waste management company), and the police in relation to waste, drug residues, and dog management (M14,48). The association's role often extends beyond its formal mandate, leading to ambiguities about where civic responsibility ends, and public duty begins. Such administrative complexity translates into practical uncertainty regarding maintenance responsibilities.

At a broader scale, some contrast the Navigli and Porta Genova context with highly financialized regeneration areas such as Porta Nuova. While criticizing Milan's political leadership as increasingly aligned with real estate finance (M8,146), interviewees note that their neighborhood has been less directly affected by those large-scale dynamics. Overall, tensions in Segantini appear more operational than structural, centered on governance coordination rather than on pronounced conflicts over urban transformation.

5.1.5.8 Innovative governance mechanisms

The accounts that refer to specific governance mechanisms for the Segantini and Navigli area are reported in section 4.2.

5.1.5.9 Tourism and market pressures

Stakeholder accounts situate the Segantini Park and Navigli area within broader dynamics of tourism growth and real estate speculation affecting Milan. The Navigli district is described as independently gentrified (mostly by tourism and nightlife) and increasingly shaped by short term rentals, student mobility, and investment-driven housing markets. These pressures are perceived as structural features of the area rather than direct consequences of the park itself.

Short-term rentals are frequently mentioned as a visible sign of transformation. One interviewee describes a progressive "heavy distortion" of residential life, noting that many former long-term units have been converted into Airbnb apartments:

> *"They buy them, gather them, and then put them on Airbnb… we were only two fixed tenants left and all the others with their trolleys" Activist and District Resident (M8,112-114).*

This process is associated with a loss of neighborhood continuity and a weakening of collective identity. Interviewees underline that these dynamics are not counterbalanced by strong

collective resistance, and that collective awareness around housing issues remains fragmented (M8,112-114).

Beyond tourism, speculative pressures are also linked to large scale urban projects and university expansions in the wider quadrant of the city. Past conflicts around development proposals, including projects near the Navigli and university campuses, are recalled as moments where green spaces were defended against privatization or infrastructural encroachment (M13,54). These accounts suggest that public green areas are often embedded in broader negotiations over land value and institutional expansion.

Financial mechanisms underlying housing production are described as central drivers of speculation. As one interviewee states:

> *"If upstream I set up a financial mechanism that must produce returns, then I will find those returns everywhere" Park NGO Representative (M15,75-77).*

This perspective frames market pressures as structurally embedded in funding models rather than as effects of specific amenities.

Housing cooperatives are portrayed ambivalently. While intended to provide affordable access to housing, some units (delivered at below-market costs but under free market legal conditions) were later resold at significantly higher prices, generating private gains (M16,82; M16,90). These speculative episodes are acknowledged as distortive effects of broader market conditions, but not as directly caused by the presence of Segantini Park. Meanwhile, following the episode, the housing cooperative has started reflecting on whether to adopt countermeasures aimed at safeguarding its mutualistic values and preventing any similar speculative behavior by cooperative members in the future.

5.1.5.10 Gaps in perceptions between civic groups and public agencies

In comparison to the other case study, the Segantini experience is characterized by relatively limited divergences in perception between public stakeholders and civic groups. Nonetheless, some nuanced differences emerge regarding the origin of the park, the interpretation of governance processes, and the relationship between green space and broader urban dynamics.

Public stakeholders, particularly municipal representatives, tend to frame Segantini Park as the outcome of a constructive and shared governance process. Emphasis is placed on collaboration between the Municipality, designers, and local associations. In this narrative, the park is presented as a virtuous example of participatory planning embedded within institutional procedures.

Civic actors acknowledge this collaboration but place stronger emphasis on the earlier phase of conflict and mobilization that preceded institutional alignment. From their perspective, the park would not exist in its current form without sustained grassroots pressure. As one

interviewee recalls, “We had to fight so that it remained green and that it became public green” (M13,90). The role of protests, neighborhood committees, and even the broader political context is highlighted as decisive in shaping municipal decisions (M13,72; M15,26-27). Nevertheless, the long-term closure of the adjacent public swimming pool (Piscina Argelati) has created tensions and protests among citizens, increasingly claiming for larger and better public investment in public accessible and affordable summer facilities, while arguing that the municipality has favoured privatization and the development of private profit-driven swimming pools. More broadly, some interviewees highlighted a gap in the perception of green between citizens and civic groups – expressing and organizing the need for appropriable green space – and public officials and politicians – rather attached to an aesthetic vision of green spaces.

We had just been to Amsterdam and The Hague, where we saw urban gardens even in front of the Queen's palace. And we thought, 'Let's do that here too'. When we started proposing them, from 1985 to 1988, we found ourselves up against everyone: politicians, officials, even some of our own volunteers. The gardens were seen as a legacy of poverty, something to be ashamed of. People need to get their hands dirty in nature: some came to volunteer at Bosco in Città, others cultivated a vegetable garden. In those contexts, we learned that more than "participatory design," what is needed is the ability to read the territory: to understand that if a vegetable garden springs up spontaneously in an abandoned area, then there is a real need there (M12, 13-14, activist)

I saw, I think two or three years ago, an advertisement for "forestami" [an urban forestation project in Milan], which explicitly stated that more greenery increased property values…That is, more explicit than that, how can we not make the ecological transition desirable? (M5, 118, Activist)

Urban voids are not only physical, morphological, and spatial opportunities, but also opportunities to create cities. And creating cities means first and foremost understanding what the right to the city is. Everyone must have the right to the city, and therefore that "mixité" and those buildings within a public service - as a park must always be publicly owned… Depending on where you are, of course, understanding the desires of citizens, but also those who already know the area, so understanding "there's no swimming pool, no nursery school, no…" and then rebuilding that area with a park at its center and an urban fabric that has these kinds of characteristics (M3, 13, Resident and Activist)

A further difference concerns market dynamics. While public actors focus on the inclusiveness and shared management of the park, civic voices are more attentive to speculative pressures and the risk of symbolic appropriation of the park in real estate narratives (M15,58-61). However, even here, perceptions converge on the idea that Segantini has not generated exclusionary dynamics comparable to other areas.

Overall, the Segantini case displays a relatively high degree of alignment between institutional and civic narratives. Differences concern emphasis and interpretation rather than fundamentally conflicting visions.

5.1.6 Critical Analysis: Milan

Milan is nationally and widely considered the *"city in the forefront"*: anything that may happen nationwide is likely to occur first in Milan. In many respects, within a national landscape marked by widening disparities between attractive regions and cities on the one hand, and peripheral or shrinking contexts on the other, Milan stands out as an emblematic case of attractive city where inequalities are rising, starting with housing inequalities (Coppola et al. 2021; Bricocoli and Peverini, 2024). In these notes, we leave in the background the pervasive effects that energy efficiency policies – first and foremost the Superbonus 110% scheme – have produced throughout the country, and therefore also in Milan, in terms of distributing benefits according to technical and economic capacities rather than social and technical priorities[121]. In these concluding notes, we focus instead on the critical issues emerging in relation to urban regeneration and interventions aimed at expanding the supply of green and public spaces.

5.1.6.1 Intervention Typologies, Stressors, and the Uneven Production of Housing Justice

Many interviewees agree that in Milan there is an increasing housing crisis, that includes mechanisms of gentrification.

> *Milan expels people and only welcomes those who can afford it. […] it's so obvious now in all areas, absolutely all of them. They're all gentrified now. So it expands and expels and creates commuters. So there's been a lot of that here, and certainly, how can I put it, neighborhood life has suffered as a result... Unfortunately, it is a slow death (M8, 96, Activist)*

Besides common sense narratives, Milan has indeed experienced multiple seasons of intense change and transformation. Our analysis has examined projects which, in several ways, have challenged the very possibility for urban planning to remain under the direct governance and leadership of the city administration. In the increasingly close interaction with large-scale actors and financially driven economic players, the capacity of the municipal administration to effectively regulate the public benefits of private investments is significantly tested. Equally complex is the distribution of the effects and the benefits produced by housing supply and the public services and amenities delivered through such projects. **Investments deployed through urban regeneration processes in Milan do create extraordinary, high-quality**

[121] Milan makes no exception, despite its substantial public housing stock, which could have enabled the allocation of public expenditure towards durable and socially just investments on public assets, often in poor condition, and for the benefit of the most vulnerable groups. Huge energy efficiency interventions remain challenging for the public housing stock: financial challenges (1 bn euros would be needed solely for the municipal ERP), displacement challenges, and educational challenges (teaching tenants how to use new technologies and ensuring their engagement).

spaces, including public and green areas, yet they can also contribute to increasing polarization between the attractive central city and the broader urban region, where those who can no longer afford to live in the central areas are progressively displaced, with the risk of exacerbating inequalities that already characterize the city and its wider urban region**. This depends on various factors – landownership, nature of capital invested and developed, etc. – as well as on the process deployed and the civic involvement in the planning and implementation phase.**

The green dimension is understood by most activists as a rather secondary factor in triggering negative impact of urban transformations, while primary factors are identified in land speculation backed by claims for security and public order, the rise in property value, and a recurrent discourse about "unblocking" areas that had been vacant for decades (e.g. the railway yards). Instead, many activist started seeing in these "blocked" areas the possibility for nature to grow and for promoting public green areas, public facilities and public housing. Some interviewees highlighted a gap in the perception of green between citizens and civic groups – expressing and organizing the need for appropriable green space – and public officials and politicians – rather attached to an aesthetic vision of green spaces.

Densification is primarily performed by private developers, mostly as brownfield redevelopment projects and change of zoning from industrial to residential. In this sense, it is uncommon that housing buildings are densified, except for some extra floor elevation contextual to renovation of roofs. Within public housing providers, densification is an almost unknown practice, and the few cases of demolition and reconstruction most of the time only preserve the number of units of public housing stock, without increasing it. Private actors have a major role in regeneration projects in Milan, compared to other Italian case studies. Developers and forefront Real Estate actors are increasingly connected to big financial actors and take up decisional and managerial roles in shaping the city. The cases of densification and green amenities administered by private actors rises some questions of equity. While privately managed spaces can deliver high-quality maintenance and programming, they may also reinforce spatial hierarchies, access control, and value capture dynamics linked to surrounding real estate. More balanced projects in terms of equity, like the case that brought to the Segantini Park are instead achieved with a less performative and more substantial collaboration between the municipality and civil society actors. The role of green spaces in a community and its positive impacts are given by the fact that you can use this space in a spontaneous way, that you feel it like a public space and not as a perfect green space that looks like a postcard and is controlled with cameras.

5.1.6.2 Policy Leverage Points for Aligning Green Transition and Housing Justice

With reference to the two case studies examined, a series of critical questions emerge that are particularly relevant for research and its future directions.

Is it possible to increase equity in the distribution of green value (especially when co-produced with private developers)? When the delivery of public services, public spaces,

and green areas is strongly and directly connected to private developers, there is a clear risk that such spaces will be built only in proximity and functional to the development projects. It is evident that in more peripheral areas, which are less suited to new investment opportunities, the creation and maintenance of public and green spaces fall disproportionately on the public administration, with significant differences in spending capacity. The *resource asymmetry* in park management is striking in terms of magnitude: a key difference concerns financial investment and maintenance capacity resulting in constant maintenance, seasonal reseeding, and permanent on-site workers, producing an aesthetically "perfect" and highly programmed park. In a context in which public–private partnerships continue to expand, it appears crucial to explore whether and how the city's negotiation capacity in urban planning can be strengthened so as to redirect private contributions to the production and management of public/green spaces also in less valuable parts of the city. The case of Porta Nuova, promoted and administered by private actors, is a good example for raising questions of equity. Some interviews have highlighted a gap in the perception of green spaces between citizens and civic groups – expressing and organizing the need for appropriable green space – and public officials and politicians – rather attached to an aesthetic vision of green spaces, that could be linked to the Italian concept of "decoro" as conceptualized by Tamar Pitch (2013) ("decorum," "public decency") to describe how contemporary governments deploy moral language to justify forms of social control, especially targeting marginalized groups. While privately managed spaces can deliver high-quality maintenance and programming, they may also reinforce spatial hierarchies, access control, and value capture dynamics connected to surrounding real estate.

What conditions make it possible to safeguard project quality and promote greater equity in the distribution of the benefits produced by green investments? The Baden Powell – Segantini case is emblematic of a wide convergence among different stakeholders regarding its strong public function and the significant contributions of the green area in enhancing living conditions and cohesion across a wide range of populations and a territorial scope extending beyond the park's perimeter. Many of the initiatives undertaken benefit students and residents in disadvantaged contexts nearby. It is important to consider how decisive the long-term mobilization, and a rather positive attitude by the municipality to modify projects according to citizens' demand has been in creating the conditions for substantial co-design and in constraining design choices with respect to accessibility requirements for all. These valuable features, however, do not conceal the fact that **in the absence of regulation capable of introducing land value capture, the benefits of improved public and green spaces automatically reward those living closest to the intervention**. In this respect, Milan had been a forerunner back in the 1950s and 1960s, when it introduced the so-called "*tassa di miglioria*" (Improvement tax), a value-capture mechanism that enabled the municipality to require property owners in areas benefiting from the arrival of transportation improvements (e.g., a new metro line) to contribute financially in proportion to the increased land value generated by the infrastructure.

Yet it should also be noted that, in the absence of any form of rent regulation and given the increasing prevalence of short- and medium-term private rental contracts, increases in property values easily translate into higher rents. In this sense, the Milan case complicates the discourse on the greening–gentrification nexus – for which broader and more structural drivers

are clearly at play beyond the impact of new green areas – and points instead to the need to identify mechanisms for distributing the benefits that green amenities can generate, as well as to scrutinize the extensive use of greening strategies to produce urban flagships in what often amounts to *greenwashing* of projects that have little genuinely green or sustainable content. Some interviewees involved as activists, argue that a fundamental missing point is that greening policies – and, more in general, policies aimed at qualifying public space – should be accompanied by a contextual housing policy, as in the following examples:

The basic idea is that we want beautiful neighborhoods, but beautiful for those who live there, not those who invest in them (M5, 7-8, activist).

Our presence in that context helped many people who already lived there, who had lived in the neighborhood and who, because they had grown up there and why not, but who were inevitably being expelled from the neighborhood at that time because they were no longer in a position to buy, to buy a house…From this point of view, the intervention of cooperatives has not been exclusionary but, on the contrary, welcoming, or if you like, offering the possibility of remaining in one's own neighborhood (M16, 74, representeative of housing cooperative)

So, if I could insist on something with the municipality, I would say build more public housing because we need teachers, bus drivers, nurses, and they need a place to live (M14, 87, Park NGO Representative)

One of the proposals was that Milan should have a public agency with broader powers, which would set higher goals and be able to take over, if not entire buildings, then at least apartments scattered throughout the most problematic condominiums in the area … That is, you build that little square if you have the money to build the little square plus 30% - for example - to invest in the acquisition of empty apartments abandoned at auction, or you buy 10 apartments to put up for social rent so that in some way you are trying to compensate for the expulsion mechanisms that can be generated by such an intervention (M5, 21-89, activist)

5.1.6.3 Cross-Case Synthesis: Typology, Governance, and the Production of (In)Justice

Through our interviews, we identified three greening and densification models and related governance logics. The comparison between Segantini Park, BAM (Biblioteca degli Alberi Milano), and Isola Pepe Verde highlights three distinct approaches to nature-based solutions: a participatory public-driven residential park (Segantini), a privately managed flagship park (BAM), and a self-organized community garden (Isola Pepe Verde):

- **Segantini as participatory and residential park:** Segantini Park is embedded in a residential context and developed through participatory processes (M2,64-65). It represents a model where green infrastructure is closely tied to everyday neighborhood life and co-design practices.
- **BAM as privately managed "perfect" garden:** BAM is described as a highly curated, privately managed green space surrounded primarily by offices, banks, and tertiary-sector functions rather than residential uses. It is characterized by intensive maintenance, hyper-surveillance, non-native plant species, digital

advertising totems, and the presence of private security. High school students are reportedly often removed by security guards.

- **Isola Pepe Verde as self-organized alternative green space:** In contrast, Isola Pepe Verde operates as a biodynamic, self-managed garden organized by consensus rather than majority voting. It embodies a model of collective stewardship, informality, and low-budget maintenance. Governance is horizontal, and access is not mediated by private security.

Resource asymmetry in park management: A key difference concerns financial investment and maintenance capacity. As one account notes, private management invests approximately 10–12 euros per square meter, compared to about 1 euro per square meter under standard public contracts. This results in constant maintenance, seasonal reseeding, and permanent on-site workers, producing an aesthetically "perfect" and heavily programmed park. Another critique concerns spatial design and symbolic orientation, suggesting that it responds to real estate valorization and representation logics rather than to everyday use and needs.

Unlike the park at the Biblioteca degli Alberi, which is cold and impersonal, designed by a Dutch lady wearing high-heeled shoes, Segantini is a place where there are souls, people, life. And the design, the idea for the park was also adopted here not by architects, but by designers who were also citizens. (M15, 57, Park NGO Representative)

The comparison also points to two different conceptions of "publicness": a "governed spontaneity" in privately managed parks with high institutional capacity, and grassroots autonomy in self-organized spaces that rely on voluntary labor and shared norms.

5.1.6.4 Implications for Just Transition Debates in Milan

The Milanese cases analyzed shows that the green transition cannot be decoupled from broader questions of sociospatial justice, particularly in a context where financialized development, speculative pressures, and uneven governance capacities shape how environmental interventions unfold across neighbourhoods. The two case studies illustrate distinct governance models whose outcomes carry important implications for national and international discussions on how a just transition should be conceived and implemented. Milan's experience illustrates the limits of transition strategies that rely heavily on private actors. While public-private partnerships can deliver highquality spaces, they also risk consolidating power asymmetries and spatial hierarchies. Conversely, civic-driven models (as in Segantini or Isola Pepe Verde, as well as many other Milanese cases) show the potential of community stewardship but also its difficulties in growing in the absence of sustained support and protection from speculative pressures.

The Milan case underscores that green transition interventions inserted into highly financialized urban transformation processes risk reproducing or intensifying inequalities, and not contributing to residents' needs. In Porta Nuova, densification and green amenities contribute to the production of an aesthetically appealing environment, making it attractive for a city-wide and even global audience, while reinforcing value capture mechanisms: privately managed buildings and greenery, curated programming, and tightly controlled public space

feed into rising real estate prices. Here, environmental upgrading becomes part of a broader regime of urban valorization, where ecological narratives are folded into investment strategies and the symbolic capital of “sustainable” design. The resulting benefits (such as enhanced walkability, well designed open spaces, cultural events) are real, yet they disproportionately accrue to affluent residents and investors, while inhabitants and lower-income groups face displacement pressures and shrinking affordability. This dynamic highlights a critical tension in just transition debates: without binding redistribution mechanisms, green improvements can become instruments of exclusion – depending on the overall project they are part of. The Navigli–Segantini case suggests that more equitable pathways are possible when environmental efforts align with longterm civic mobilization, participatory governance, and public regulatory commitments. The emergence of Segantini Park (rooted in decades of activism, negotiation, and incremental implementation) illustrates how communities can have a voice in urban transformation, and how this creates the condition to bend processes in order to meet everyday needs, especially when institutional actors adopt flexible and (truly) collaborative approaches. Governance here is grounded in shared stewardship, lowcost interventions, and an ecological sensibility focused on use value rather than market valorization. This model suggests that just transition requires not only densification and environmental upgrading but also social infrastructures capable of distributing benefits across heterogeneous populations, together with housing policy mechanisms to mitigate or prevent displacement pressure and unaffordability.

5.1.6.5 Implications for Policy and Comparative Research

Ultimately, our analysis of Milan suggests that a just transition depends on integrating environmental goals with housing affordability, democratic governance, and landvalue redistribution, confirming and adding evidence to existing literature (Camagni, 2016; Carrosio and Cogliati Dezza, 2025). A first implication concerns the need to integrate environmental and housing policies more systematically, as proposed by many interviewees quoted above. In Milan, green transition interventions (from flagship parks to building retrofits) tend to operate within an increasingly financialized development system and housing market, where affordability gap with incomes/salaries is enlarging (Bricocoli and Peverini, 2024) and displacement pressures increasingly jeopardizes residents’ ability to benefit from ecological improvements. Our empirical material suggests that densification and new green spaces, when implemented without redistributive mechanisms or affordability safeguards, can unintentionally contribute to exclusionary dynamics – often by exacerbating processes that are linked to an increasingly tensed housing market. This highlights the need for a policy framework that explicitly connects densification strategies and greening to actions that promote housing security, tenure protections, antispeculation measures, and public or cooperative housing provision. There are already many civic initiatives in Milan that are reflecting and engaging people around a claim for such a policy framework: even though they do not yet mobilize very large crowds, they are slowly building a popular narrative combining environmental and housing objectives that could be upscaled by local and regional policymakers. Further research could stress on understanding their claims and proposals, while comparative research could explore how in cities with stronger rental regulations or land

value capture mechanisms the exclusionary effects of green transformation are mitigated in processes of densification and greening. Conversely, however, it could explore how in cities characterized by weaker housing policy (e.g., no public housing) these processes are even more intense, highlighting the need to protect and strengthen existing redistributive and housing policy mechanisms.

The case of Milan underscores a central tension in contemporary urban governance: the growing role of private actors, particularly investment funds and realestate developers, in delivering key components of the (broader understood) ecological transition. While such actors can mobilize significant capital and deliver densification and high quality public spaces, their involvement often embeds value capture logics, limiting (or even jeopardizing) the redistributive potential of urban transformation processes. While Milan has previously had policy mechanisms ensuring redistribution based on taxing windfall gains (*Tassa di miglioria*) or via direct housing provision through compulsory land purchase (*Piani di Edilizia Economica e Popolare*), now these kinds of policy instruments appear to be weakened and not often enforced. A broad reflection over the role of public administrations in managing and delivering equitable urban transformations in Milan that benefit most citizen – and not only investors – appears necessary in the light of stakeholders' perspectives expressed in this report. One key component suggested by the interviews regards the weight of public administrations (and especially the municipality) in planning and implementing urban transformations: in the Porta Nuova case, the protagonism of a single big developer seems with the municipality in a secondary role of negotiator seems to have weakened redistribution. Comparative research could examine variations in public–private governance models across European cities, identifying which institutional configurations allow municipalities and civic actors to negotiate stronger public returns, whether through binding affordability quotas, longterm public management of green spaces, more transparent planning agreements, or different land property/tenure systems. At the same time, our empirical material shows the value of civic and collaborative governance models, particularly in the Segantini case, where a more nuanced role of developers and municipality let civic demands emerge and have a role in defining objectives and implementation of the process. Longterm mobilization, coalition building, and the involvement of NGOs and cooperatives enabled an alternative transformation process to emerge: one articulated around everyday use, inclusivity, and ecological stewardship rather than symbolic urban branding. This suggests that participatory processes, when empowered rather than merely consultative, can shape more equitable environmental outcomes. Comparative research could therefore explore the conditions under which citizens' initiatives effectively influence urban transformation processes, and how these conditions differ in contexts with varying state capacities and political cultures.

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5.1.8 Appendix 1 – Glossary

Abbreviations

BAM	Biblioteca degli Alberi Milano is the main green area in the Porta Nuova development
CIMEP	"Intermunicipal Consortium of Milan for Public Housing" was a public intermunicipal body established in 1965 to plan, acquire, and develop land for affordable and public housing across the Milan metropolitan area.
MM	Metropolitana Milanese, is a publicly owned company of the Municipality of Milan that operates the subway and manages the public housing (ERP) stock owned by the city, water infrastructure, and engineering services.
NABA	Nuova Accademia di Belle Arti, Art and Design Academy.
NRRP / PNRR	National Recovery and Resilience Plan.
PEEP	Piani di Edilizia Economico Popolare, are urban development plans introduced in Italy by Law 167/1962 and further regulated by Law 65/1971, designed to identify, acquire, and regulate areas allocated for the construction of public, low-cost, or subsidized housing.
P.I.I.	Integrated Intervention Plans (PII) are local urban planning instruments aimed at redeveloping and improving the urban, architectural, and environmental fabric of specific areas (introduced under Law 179/1992).
PIM	The Milan Intermunicipal Plan was a strategic intermunicipal urban planning framework created to coordinate the spatial development of Milan and its surrounding municipalities, now restructured as a technical consulting institute.
ERP	Edilizia Residenziale Pubblica – public housing, allocated on the basis of income and needs criteria, owned and managed by public bodies (public housing agencies and municipalities.

Terms and Concepts

Superbonus 110%	EU funded national energy retrofitting program National instrument (partly funded through the NRRP) incentivising retrofitting in the residential sector.

5.1.9 Appendix 2 – Key interview data

#	Pseudonym & Position of Interviewee	Sector/Organization	Date of interview	Modality
M1	Private Sector Representative	Real Estate Development Isola – Porta Nuova District	27/01/2026	In person
M2	City Manager in Public Greening	Municipality of Milan	20/01/2026	In person
M3	Urban Planner and former Stecca degli Artigiani Activist	*Network of socio-cultural associations, with basis in the Isola Porta NuovaDistrict.*	09/10/2025	In person
M4	Affordable Housing Scholar and former Stecca degli Artigiani Activist	Scholar in Housing Policy and Urban Transformations	18/11/2025	Online
M5	Activist on affordable housing for district-based association	Activist association on housing affordability in North-east Milan	26/06/2025	In person
M6	Activist on affordable housing for district-based association	Activist association on housing affordability in North-east Milan	24/06/2025	In person
M7	Activist and District Resident	Self-organized socio-cultural space in Isola district	24/06/2025	In person
M8	Activist and District Resident	*Freelance professional*	11/06/2025	In person
M9	Activist and Association Representative	Self-organized green space in Isola District	16/12/2025	In person
M10	President of Citizen's committee	Citizen's committee in Isola District	14/04/2025	Online

M11	Navigli District Resident and Private Sector Representative	Architectural and Engineering Studio in the Navigli area	17/06/2025	In person
M12	Park NGO Representative	*NGO managing Green Spaces in South of Milan*	03/07/2025	In person
M13	Navigli District Resident and Activist	Member of citizens committees involved in the creation of Segantini Park	10/09/2025	In person
M14	Park NGO Representative	Association Managing Segantini Park	03/10/2025	In person
M15	Park NGO Representative	Association Managing Segantini Park	13/09/2025	Online
M16	Representative of Housing Cooperative in Navigli district	Housing Cooperative in the Navigli district, in the vicinity of Segantini Park	04/09/2025	In person
M17	• Civil Servant in social housing management unit • Civil Servant in energy efficiency of social housing stock unit • Assistant to City Manager	Municipality of Milan-Directorate for housing	14/10/2025	In person
M18	Bar Owner in Isola District (not coded)	Gastronomy Business in Isola District	23/09/2025	In person
M19	Isola District Resident and Journalist	*Journalist/Scholar in Urban Transformations*	14/07/2025	In person

5.1.10 Appendix 3 – Code system and Code frequencies

Code System	Frequency
Codes and Sub-codes	550
Milan-Specific Codes	
Milano housing system	17
Climate policy	4
Green Interventions	
NBS - Parks and Green Spaces	8
BAM	2
Segantini Park	14
Isola pepe verde	7
Urban Regeneration/ Densification	14
Isola district Regeneration	15
Retrofit / BONUS 110	10
HISTORY & IMPLEMENTATION	
Political Stability/Change	0
early development timeline	3
Segantini history	20
Isola history	15
Stecca history	15
Isola pepe verde history	2
triggers or catalysts for action	6
role of pilot or legacy projects	9
PARTICIPATION & GOVERNANCE	
quality of consultation/participation process	6
impacts of policy/legal frameworks	1
civic inclusion/exclusion	5
Impacts of civil action on institutional policies	5
(IN)JUSTICE & (IN)EQUITY	
effects on vulnerable groups	1
Isola effects on vulnerable groups	6
distribution of benefits and burdens	33
Isola distribution of benefits and burdens	17
Segantini distribution of benefits and burdens	9
perceived (un)fairness	7
POLITICAL MOBILIZATION	
protests and/or campaigns	1
Isola protests and/or campaigns	2
neighborhood advocacy	10
mobilization around housing rights	9
mobilization around environmental themes	6

SOCIAL IMPACTS - POSITIVE		
	improved housing accessibility	1
	green space and/or service upgrades	5
	Segantini green space and/or service upgrade	3
	Isola green space and/or service upgrade	8
	improved health/social wellbeing	8
SOCIAL IMPACTS - NEGATIVE		
	gentrification- displacement or pricing out	12
	Segantini area gentrification- displacement and or pricing out	6
	Isola gentrification-displacement or pricing out	17
	construction disruption	4
	Isola construction disruption	1
	reduced housing accessibility	1
CONTRADICTIONS & TENSIONS		
	mixed or unclear messaging	4
	disputes between actors	6
	Segantini disputes between actors	3
	Isola disputes between actors	14
	conflicting goals (e.g. green vs. affordable)	10
	Segantini conflicting goals	2
	Isola conflicting goals	4
	regulatory and competency barriers	16
STAKEHOLDERS & DYNAMICS		
	main actors involved	0
	Milano main actors	6
	Isola main actors	13
	Segantini main actors	11
	role of NGO or co-ops	14
	institutional coordination or conflict	12
	Isola institutional coordination	4
	Segantini institutional coordination/conflict	3
	private sector influence	3
	isola private sector influence	15
TOOLS & INNOVATIONS		
	public-private and public -commons/co-op models	6
	green building and retrofit techniques	5
	legal/policy instruments for housing security	16
TOURISM/MARKET PRESSURES		
	short-term rentals/AirBnB	4
	second/holiday home pressures	0
	market speculation/financialization	34

5.2 CASE STUDY (MEDIUM): REGGIO EMILIA

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in collaboration with Anita Susani (Polimi)

Contributors: Massimo Bricocoli & Marco Peverini (Polimi)

5.2.1 City/Town profile, challenges around just (housing and ecological) transition

Reggio Emilia, capital city of the province with the same name, is the fourth largest city in the northern Italian region of Emilia-Romagna (following Bologna, Modena, and Parma), with a population of 171.342 (ISTAT, 2024) – an increase of 18,3% since 2001 (144.877). The population of the FUA reached 286.000 in 2022 (OECD, 2022). The city's annual per capita income is well above the national average (€ 25.026 in 2022, as compared to € 21.752, INTWIG, 2024, based on MEF data). Reggio Emilia, the region's "manufacturing core" (Unindustria Reggio Emilia, 2024), has long been characterised by its industrial heritage, which is evident in its urban development and cityscape. An important example of this is the former "Officine Meccaniche Reggiane", one of the country's most important heavy-industry manufacturers in the 20th century, situated north of the train station and currently a main site of an urban regeneration intervention – the "Reggiane Parco Innovazione" – which is transforming the facility into a hub for innovative technology enterprises and research.

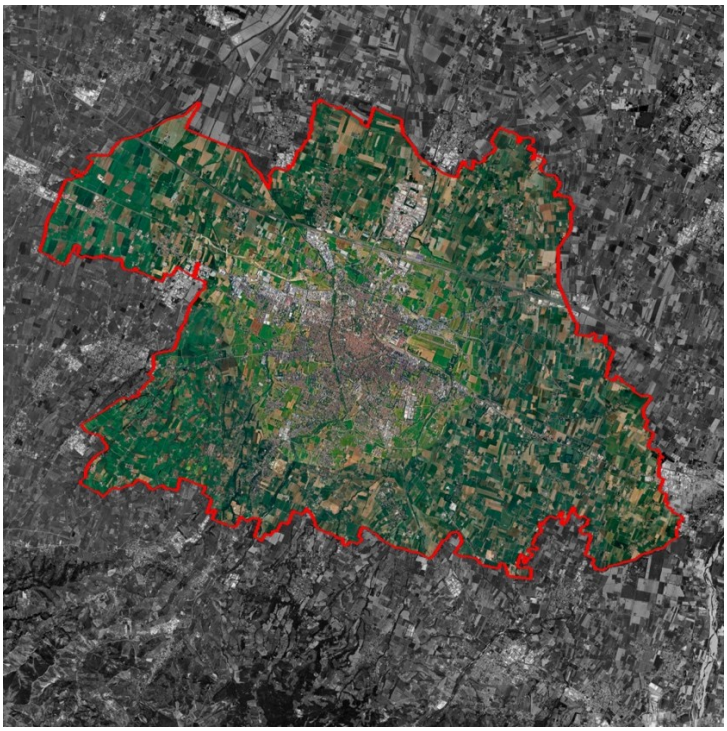

Fig. 1. Reggio Emilia municipality, by authors.

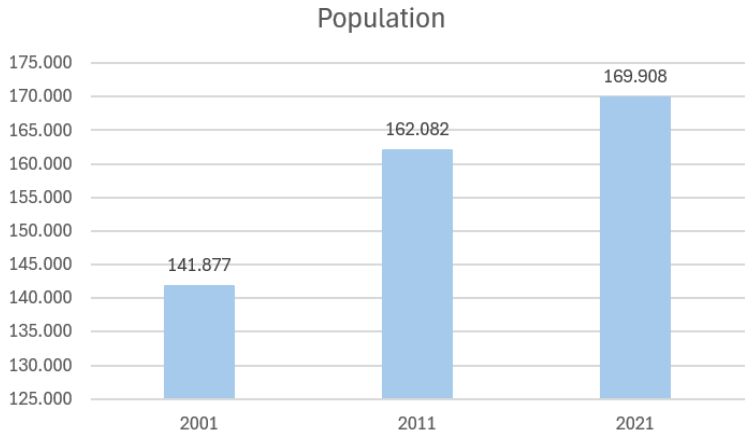

Fig. 2. Demographic development of Reggio Emilia, 2001-2021, by authors (Data sources: ISTAT 2001; 2011; 2021)

Within the region, Reggio Emilia is situated in the immediate vicinity (and thus in commuting distance) of cities of similar size: Parma, Modena and Bologna, the region's capital, which is situated 70 kilometers to the southeast. The vicinity to Bologna – a city that has experienced very strong housing market pressure in the past decade – appears to be a factor contributing to increasing rental demand and prices in Reggio Emilia (+32% since 2019 of platform prices, Immobiliare, 2026). Looking at data from the Agenzia delle Entrate (2025) – Italy's national tax authority – rental prices have grown from 2018 to 2024, with increases ranging from 10,5% (student contracts) over 24,8% (long-term), 27,5% (controlled rent), to 41,7% (mid-term) (see Fig. 3).

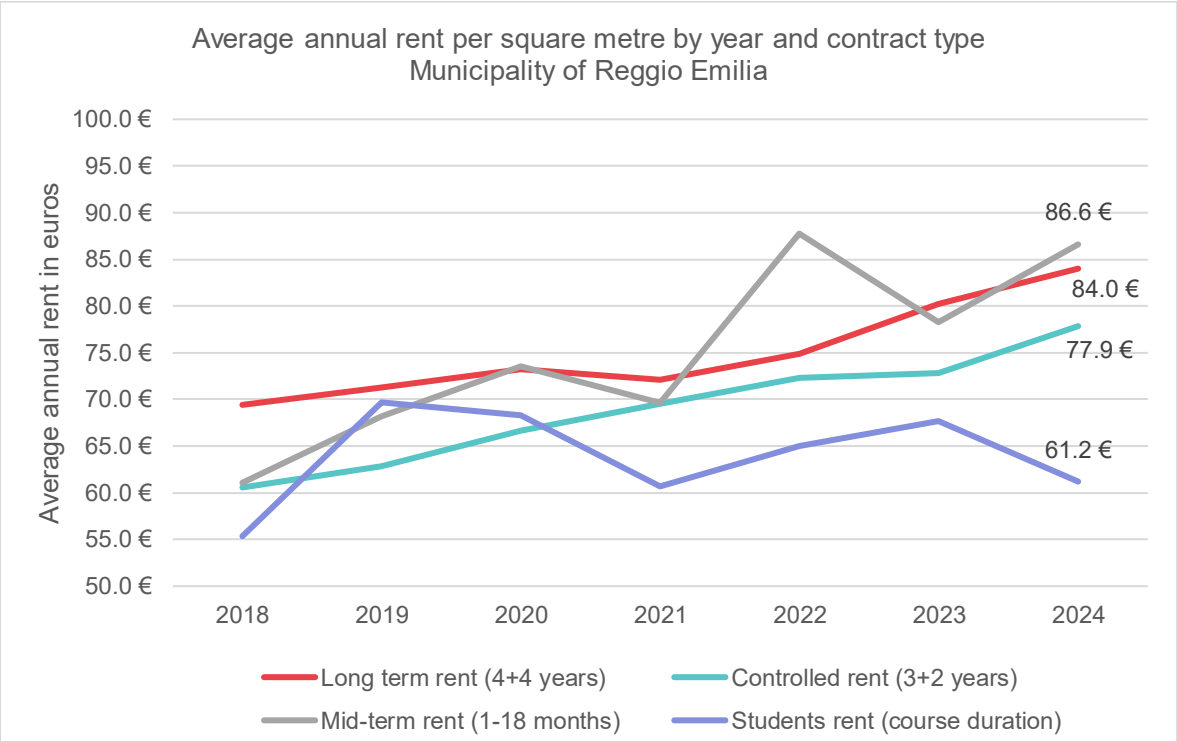

Fig. 3. Average annual rent per m² by year and contract type in Reggio Emilia, 2018-2024, by authors (Data source: Osservatorio Mercato Immobiliare, OMI, Agenzia delle Entrate 2025)

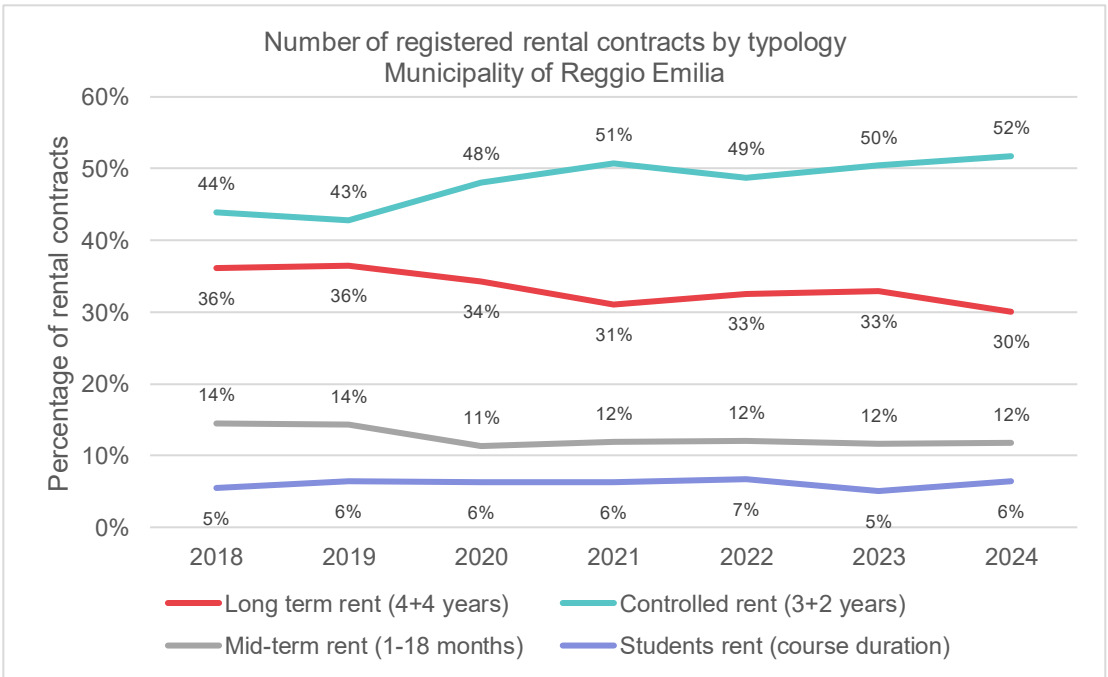

Fig. 4. Rental contracts by year and contract type in Reggio Emilia, 2018-2024, by authors (Data source: Osservatorio Mercato Immobiliare, OMI, Agenzia delle Entrate 2025)

Contrary to the national average, where controlled rental contracts (*canone concordato*, see appendix 5.2) constitute a low percentage of the private rental market (23,9% in 2024

according to OMI, 2025), in Reggio Emilia, this type of contract is predominant, accounting for 52% of the total (see Fig. 4). This figure is also significantly higher than the average for large cities (31% in 2024 according to calculations by the authors based on OMI data). This form of rental contract is very appealing to landlords in Reggio Emilia as the local agreement sets rents in this category just 7% lower than long-term contracts (see Fig. 3) with a relevant tax benefit on incomes. Indeed, landlords benefit from a national fiscal incentive, as the IMU (*Imposta Municipale Unica*) – the municipal property tax – is reduced for dwellings let under controlled rentals (a reduction of 25% of the taxable base, as per Decree Law 160/2019). In addition to the national incentive, the Municipality of Reggio Emilia has also confirmed a local fiscal incentive. This further reduces the IMU liability for 2026 for landlords that rent their properties under the controlled rent scheme (Municipal Resolution No. 11 of 2026, Municipal Budget 2026-2028). Taken together, these municipal and state-level tax concessions substantially reduce the fiscal burden on landlords participating in rent-controlled schemes.

The city's housing stock comprised 84.440 dwellings (occupied and unoccupied) in 2021. Over the past two decades, the growth of the housing stock has followed a relatively steady trajectory and has slightly outpaced population growth, increasing from 62.068 dwellings in 2001 (0.43 dwellings per capita) to 84.440 dwellings (0.50 per capita) in 2021. A strong increase of unoccupied dwellings in the same period can moreover be noted – from 3.342 to 8.434 (+152%) – with the share of vacant dwellings in the total residential stock increasing from 5% in 2001 to 10% in 2021 (ISTAT 2011; 2021).

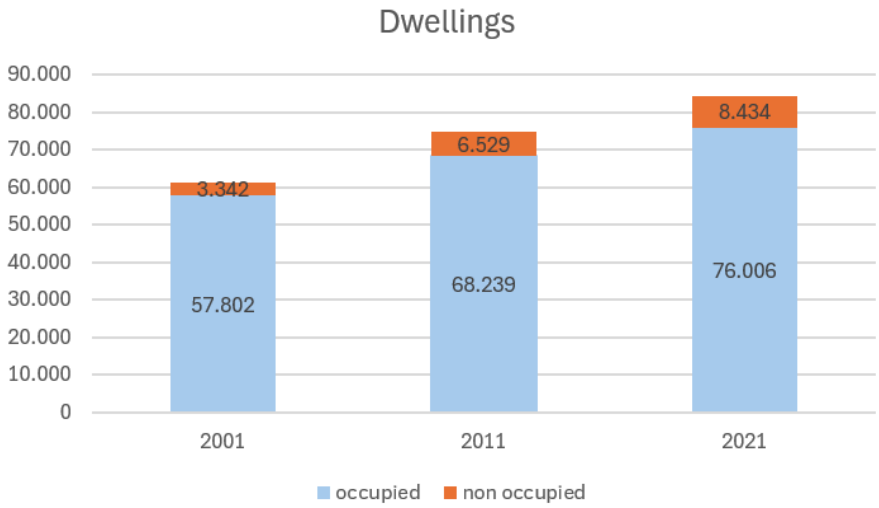

Fig. 5. Number of dwellings (occupied and non-occupied), 2001, 2011, 2021, by authors (Data sources: ISTAT 2001; 2011; 2021)

Owner occupation is by far the dominant tenure – and increasing – from 67% in 2011 to 74% in 2019. Rental tenure has decreased from 23% to 19% in the same period[122].

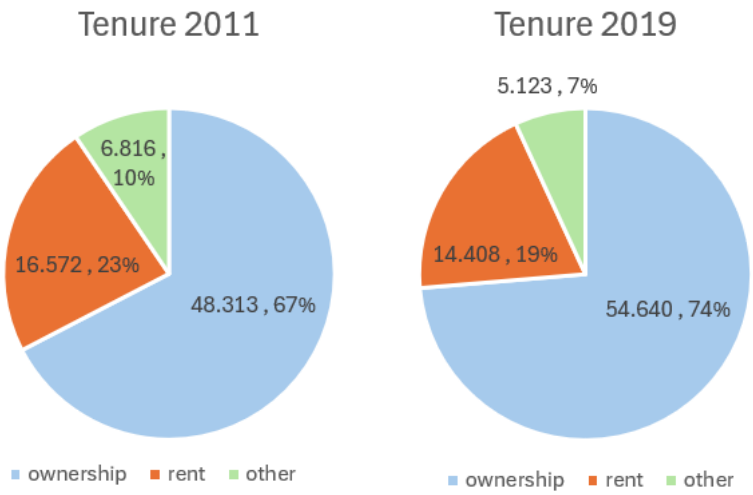

Fig. 6. Tenure change 2011 and 2019, by authors (Data sources: ISTAT 2011; 2019)

Politically, the city has historically been – and continues to be also in recent years – predominantly left oriented, largely in line with the regional level – Emilia Romagna, along with Tuscany, Umbria, and Marche, is considered Italy's "red zone" (Shin, 2001). From 2019 to 2024, the city has been governed by a centre-left coalition, headed by social democrat mayor Luca Vecchi. During his term, a new General Town Plan (PUG) entitled "For a more sustainable, attractive, and solidary city" was adopted in 2023. The plan formulates key objectives, the first of which concerns climate neutrality – strategies to reach this goal include a reduction of soil consumption (aimed at reaching zero soil consumption by 2050) and other measures to enhance environmental sustainability, including the further expansion of the slow mobility infrastructure, the incremental completion of green corridors, urban forestation and greening, as well as the requalification of the built stock, focusing in particular on the increase of energy efficiency and the use of renewable energy sources. In 2024, the independent candidate Marco Massari was elected as new mayor, again heading a centre-left coalition with the involvement of *Europa Verde* and *Possibile* – two parties with an explicit environmentalist orientation, therefore a continuation of this policy focus is to be expected.

As regards climate vulnerability, Emilia-Romagna has become one of Italy's most severely affected regions regarding extreme hydro-meteorological events in recent years, experiencing multiple severe floods in 2023 and 2024. In May 2023, two successive flood waves caused the overflow of 23 rivers and led to more than 50.000 evacuations. The region experienced further

[122] Note: 2011 data refer to the number of households by tenure, while 2019 data refer to the number of inhabited dwellings by tenure (while dwellings are typically inhabited by one household only, some minor statistical imprecision may still exist).

widespread severe flooding in September and October 2024 due to record-breaking rainfall, resulting in further damage to areas that had been devastated in the previous year, including parts of the Reggio Emilia province. These events have led to heightened public and political awareness of climate-driven risks, prompting regional and municipal authorities to focus more heavily on climate adaptation and green transition measures. In this context, Reggio Emilia's recent policy initiatives – ranging from energy-efficiency programmes to green-infrastructure strategies and neighbourhood-scale regeneration – must be understood as part of a broader institutional response to escalating climate hazards and the urgent need to safeguard communities and territorial systems from future shocks.

5.2.2 Green Transition Interventions in Reggio Emilia

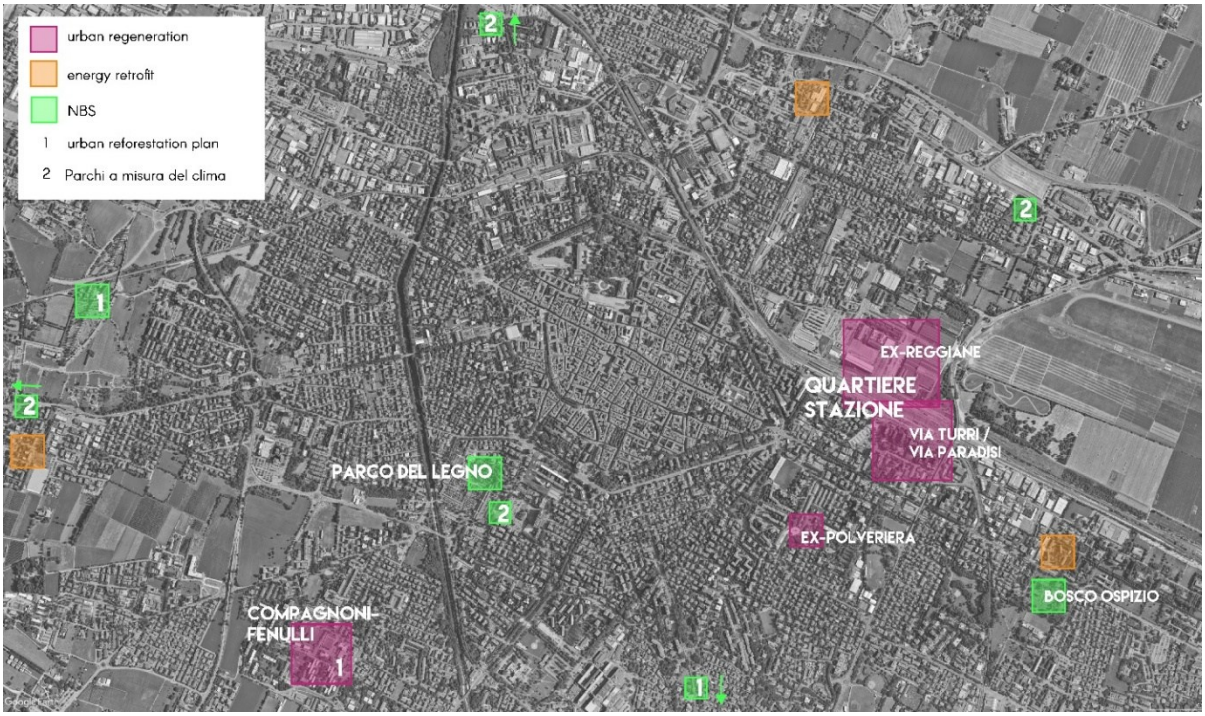

Fig. 7. Relevant retrofit, NBS, and urban regeneration interventions in Reggio Emilia, by authors

Densification and urban regeneration:

Residential densification has occurred in recent years in Reggio Emilia along with demographic development. From the 2010s onwards, densification, growth containment, and an explicit rejection of urban sprawl became a central strategic orientation in Reggio Emilia's planning framework. This orientation was implicitly established in the Piano Strutturale Comunale (PSC) adopted in 2009, and articulated through a main urban development strategy, under the principle "La città non si amplia, si trasforma" ("The city does not expand; it transforms") (Comune di Reggio Emilia, 2020). This strategic direction has been further underlined in the New General Plan (PUG) adopted in 2022 (receiving final approval in 2023) which – while not mentioning densification as such – emphasises the regeneration of the urban fabric and the reduction of soil consumption as main strategic objectives (Comune di Reggio Emilia, 2026). The development of new land is permitted only under very limited and specific circumstances. In the case of residential construction, this includes the realisation of social housing, and it

may be authorised only in areas experiencing demographic growth and with no residual residential stock (R02).

An important recent intervention of urban regeneration including housing – albeit resulting in its de-densification – concerns the neighbourhood of **Compagnoni-Fenulli**, situated in the southwest of the city, and characterised by a high density of public housing. The neighbourhood, built between 1955 and 1963 as part of a major national plan (INA Casa, see appendix 5.2), was subjected to a substantial urban regeneration programme over the past two decades. Before the intervention, the neighbourhood entailed 538 dwellings (of which 477 of public ownership and 61 privately owned). Over the decades, the neighbourhood had experienced physical and socioeconomic deterioration and was therefore selected as an intervention site for the *Programma di Riqualificazione Urbana* (PRU, see appendix 5.2), implementation of which started in 2004.

Fig. 8. Rebuilt public housing estate, Compagnoni neighbourhood, photo by authors

The programme involved the demolition of 22 buildings and the construction of new residential blocks. Given the nature of the intervention, residents had to be temporarily or permanently relocated, and 170 households moved, of which 49 outside the neighbourhood. Importantly, the public housing company actively accommodated tenants' requests – seeking to minimise displacement, enable return wherever possible, and take residents' preferences into account throughout the regeneration process. To this end, a dedicated service desk was set up to collect and manage individual relocation preferences (R03). Key objectives of the programme were to improve the quality of housing, upgrade energy performance, and create new public spaces and services, and to reduce building density, reorganising at the same time the relationship between public and private housing, thus increasing social mix. Today, after completion, the neighbourhood consists of 391 dwellings, of which 306 of public and 85 of

private ownership. Main interventions included the construction of energy-efficient housing (in energy Class A), the installation of solar and photovoltaic systems, the enhancement of insulation, and the transformation of green areas, pedestrian and cycling paths. The project (for a total cost of about € 42 million) was funded through national, regional, municipal, and ACER's (the city's public housing provider) resources. (ACER Reggio Emilia, 2019)

Currently, a large-scale regeneration process is furthermore ongoing in the immediate vicinity of the city's central train station. The neighbourhood – referred to as **"Quartiere Stazione" or "via Turri/via Paradisi"** – has long been identified as a strategic site for urban transformation. In 2022, the city government launched **"R60"**, a large-scale requalification scheme. It concerns the neighbourhood's north and south of the main train station and involves an overall investment of € 76 million.

Fig. 9. Via Turri, south of the main train station, photo by authors

The project is partially funded (€ 15 million) through the PINQuA – the "Innovative National Programme for the Quality of Housing" (see appendix 5.2), established within the framework of the European Recovery and Resilience Plan. Additionally, € 25 million are provided by the Council of Europe Bank (Comune di Reggio Emilia, 2026b). The PINQuA scheme, endowed with € 2.8 billion, was promoted by the Ministry of Infrastructure and Sustainable Mobility (MIMS) as part of the country's Recovery and Resilience Plan (PNRR) following the Covid pandemic. Its aim is to improve the quality of housing and urban spaces while at the same time putting emphasis on the requalification and expansion of public and social housing, as well as the adoption of innovative management models and social inclusion strategies.
The R60 project encompasses the requalification of a 60.000m² area through various interventions, including: (1) residential densification through demolition and reconstruction of existing – mostly private – residential buildings south of the train station, resulting in the construction of 147 new social housing units; (2) greening and nature-based solutions such as green roofs, 'hanging gardens', and the requalification of open and green spaces in both the

southern and northern project area (where the former “Officine Meccaniche Reggiane” buildings are being transformed into the “Reggiane Parco Innovation”) and (3) the enhancement of the slow mobility infrastructure, including the construction of an overpass for pedestrian and bicycle use to connect the currently separated neighbourhoods north and south of the station, effectively dismantling the barrier the station currently represents (Comune di Reggio Emilia & ACER, 2024).
The project ties in with ongoing policies, including the *Piano Periferie* and the *PIERS* (*Programma Integrato di Edilizia Residenziale Sociale*) (see appendix 5.2) (Comune di Reggio Emilia, 2021). Overall, the project is perceived in controversial ways, particularly regarding the area south of the train station, which over the past two decades has witnessed various conflictual dynamics: from private residential buildings left incomplete after the financial crisis of 2008 to phenomena of partial abandonment, followed by (partly, informal) occupation and arrears, largely involving low-income populations with migration backgrounds. Controversies moreover arise from the fact that the project foresees the expropriation of private owners and relocation of the remaining tenants, entailing significant social and economic costs, compounded by dissatisfaction with the communication strategies adopted by local authorities. At the same time, however, the necessity for public intervention in a context of substantial physical and social deterioration is widely acknowledged.

Nature-based solutions:

In the past years, the city administration has undertaken various efforts to enhance its environmental sustainability performance, with considerable outcomes. In the Legambiente Urban Ecosystem ranking (Laurenti & Trentin, 2023), Reggio Emilia has moved up from the 44th place in 2014 to 5th place in 2020, reaching particularly high values in terms of cyclability (2nd position in Italy regarding cycling infrastructure, to which contributed various incentives, such as the “bike to work” and cargo bike incentives), differentiated waste collection (82% of the urban waste produced vs. 62,7% on national average), and the ratio of trees by inhabitants (85 per 100). In 2019, the city adopted a Reforestation Plan (*Piano di Forestazione Urbana*) for the period of 2019 to 2024 (Comune di Reggio Emilia, 2025a), aimed at increasing greenery by 50.000 new plants within five years in various parts of the municipal territory. Between 2019 and 2022, around 11.000 trees and other plants have been planted in various parts of the city. The plan moreover ties in with the project “Life CITYAdap3”, a European project with Reggio Emilia as (the only) Italian partner city. In the context of this project, four parks were selected as pilot sites (“Parchi a misura di clima”) – Parco Grimaldi, Parco Primavera, Parco Biagi and via Ferravilla – for the implementation of measures to combat the effects of urban heat islands (Comune di Reggio Emilia, 2025b). The Reforestation Plan moreover ties in with a plan adopted by the Emilia-Romagna region (“Mettiamo radici per il futuro”), with the objective to arrive at 4,5 million new trees within the same period and to become Italy’s “green corridor” (Regione Emilia-Romagna, 2025).

Other recent initiatives include the requalification of the **“Parco del Legno”**, a 10.000 m² public green space with a history of agricultural use, situated between the historical centre and the city’s main cemetery (*Cimitero Monumentale*). In 2022, the area, closed to the public until its reopening in 2025 (Comune di Reggio Emilia, 2025c), was at the centre of a participatory process promoted by the municipality and involving neighbourhood associations, citizens, and local stakeholders, aimed at co-designing the strategy for its regeneration, animation, and future management. The process addressed both the physical regeneration of the green space

and its future uses, focusing on accessibility, environmental education, urban agriculture, and climate-related activities (Comune di Reggio Emilia, 2024a).

Fig. 10. Parco del Legno, photo by authors

A controversial situation has developed around another green space, the so-called "**Bosco Ospizio**" – a spontaneous forest of around 4 hectares in via Emilia all'Ospizio, which has grown over the past two decades on the site of a former hospice demolished in 2005. The site is owned by a private commercial owner, who was granted building rights within the framework of a broader regeneration project (the PRU Ospizio) adopted by the then municipal government in 2006 and formalised through a legally binding planning agreement (a *convenzione urbanistica*, see appendix 5.2*)* in 2007. The project foresees the construction of a supermarket, along with healthcare facilities and a public library. While its implementation was long delayed, broad civic opposition against the project has developed over time, driven by various local civic groups that have bundled their actions within the *Assemblea Permanente Bosco Ospizio*. In recent years, the municipality had sought to revoke previously granted building rights in separate legal proceedings concerning a different redevelopment site, invoking the protection of the collective interest. However, in 2024 the Italian Council of State (*Consiglio di Stato*) ruled this attempt legally inadmissible, reaffirming that consolidated building rights established through approved planning instruments cannot be unilaterally annulled by the municipality. Although the ruling did not directly concern Bosco Ospizio, it removed the legal grounds for reopening or revising the administrative procedure of the PRU Ospizio, effectively confirming the continuing validity of the private development rights linked to the site (Comune di Reggio Emilia, 2024b; ReggioOnline, 2024).

Fig. 11. Bosco Ospizio, photo by authors

Energy Retrofit

Substantial efforts have been undertaken in recent years throughout the country to renovate public housing estates (as well as private housing and mixed condominiums – buildings in which ownership is divided between public and private actors) in context with several incentivising policies, among which most importantly the *Superbonus 110%* (see appendix 5.2). The scheme, introduced in 2020 and closed in 2023, was based on tax deductions and funded mostly through the European Recovery and Resilience Facility. Renovation measures resulting in an upgrading of energy efficiency by at least two classes were eligible for funding. In Reggio Emilia, ten mixed condominiums with 512 flats (of which 107 public) were renovated with the Superbonus 110%, with an investment of € 75,5 mio (Comune di Reggio Emilia 2024c). Additionally, the *Bonus Facciate* scheme (also operating via tax deductions, see appendix 5.2) was used to renovate the facades of 19 buildings (€ 4,4 million) (ibid.). In addition, 17 public housing buildings were renovated in Reggio Emilia through the “Sicuro, verde e sociale” programme (established through a national fund, complementary to the PNRR, see appendix 5.2) at an overall cost of € 9 million. (ACER Reggio Emilia, 2024).

Fig. 12. Residential building after energy retrofit, Compagnoni neighbourhood, photo by authors

Table 1. Key data on case study area of Reggio Emilia

	Municipality-wide	Compagnoni-Fenulli	Quartiere Stazione
Neighborhood characteristics (general social type, economic activities, density, etc.)	Medium-sized city, compact centre, well-integrated first peripheries; overall high housing and environmental quality; strong green heritage	South-western peripheral neighbourhood, high density of public housing; built in the 1950s/60s; physical and socio-economic deterioration in recent decades and limited functional and social mix (pre-regeneration)	Central and semi-central neighbourhood around the main railway station; historically strategic urban area; mix of residential, infrastructural and former industrial uses; social vulnerability, large presence of immigrant population, unfinished and partly occupied private buildings, conflictual dynamics linked to informal occupation,

			arrears, and expropriation
Duration	PUG 2023 entails the reduction of soil, regeneration of already urbanised territory; “no sprawl” orientation	Strategy: early 2000s Implementation: 2004-2020 (completed recently)	currently ongoing
Funding	Various sources of public funds (EU, national, regional, local); housing retrofit through national tax incentives (Superbonus 110%, Bonus Facciate) and complementary funds (“Sicuro, verde e sociale”) for public housing	PRU (Programma di Riqualificazione Urbana), mixed funding, mostly public (national, regional municipal, ACER)	Mixed: PINQuA (national/European) € 15 million; Council of Europe Development Bank € 25 million; municipal funds
Actor constellation	Municipality, region, ACER, state (as regards PNRR), civic groups, private developers, intermediaries	Municipality; ACER; regional and national authorities; residents (temporarily or permanently relocated)	Municipality; ACER; national ministries; EU; Council of Europe Development Bank; private property owners; tenants; civic groups
Aims and objectives	regeneration of the existing urban fabric; upgrading and expansion of green infrastructure; climate adaptation; enhancement of housing quality and energy performance; strengthening of slow mobility;	Improvement of housing quality and energy performance; reduction of residential density; introduction of tenure and social mix; creation of public and green spaces and services	Urban regeneration and requalification; mitigation of social conflict and physical deterioration; increase of social housing; urban greening; reconnection of neighbourhoods north and south of the station; enhancement of accessibility

	increase of social housing (ERS)		
Specific physical measures	Reforestation and urban greening; regeneration of parks; energy retrofitting of public and mixed housing; enhancement of cycling infrastructure; neighbourhood regeneration	Demolition of 22 buildings; construction of new energy-efficient residential buildings; installation of PV systems; upgrading of green areas	Demolition and reconstruction of residential buildings; construction of 147 new social housing units; green roofs and hanging gardens; requalification of open and green spaces; adaptive reuse of former industrial buildings; pedestrian and bicycle overpass
Accompanying housing policy/regulatory measures	Restriction of new development; linkage of urban development to demographic conditions, neighbourhood accessibility, and presence of services; social housing quotas	Relocation of tenants (permanent or temporary); establishment of a helpdesk for collecting, addressing, and mediating tenants' concerns and needs	Expropriation, tenant relocation, construction of new social housing (ERS)
Key social tensions or/and benefits between greening and housing	Potential of rising affordability pressures in context with energy retrofit, but overall low presence of social tensions between greening and housing	Benefits: improved housing quality, energy efficiency, public space; tensions linked to relocation, but mitigated through accompanying measures	High level of controversy and conflict: expropriations, tenant relocation, communication failures; but also: recognition of necessity to intervene in a context of long-term physical and social deterioration

5.2.3 Methods

15 semi-structured interviews were conducted, involving 17 respondents (two interviews involved two interviewees). The interviewee sample included representatives from the public sector – including public housing associations and public employees from the city administration, both in operational and political functions –, members of civic associations and NGOs involved in environmental and/or social and housing-related issues, as well as academic experts. A key moment in terms of sampling was the Policy Lab held at Politecnico di Milano on April 11th, 2025, focusing on the ReHousIn case study cities of Milan and Reggio Emilia. We invited representatives of key national, local and regional actors of different types (see Rehousin, 2025), five of which participated from the (local or regional) context of Reggio Emilia. Some of these participants are among those interviewed later on. We furthermore used the opportunity of the Policy Lab to collect suggestions regarding additional interviewees. As regards gender balance, while the Policy Lab was relatively balanced – with 2 out of 5 participants related to Reggio Emilia being women –, only 5 out the 17 interviewees are female (29,4%), reflecting an unequal position of women in key positions in the region (including in civic groups).

Ahead of and in parallel with the interviews, background research was conducted, involving a structured review of academic literature, grey literature, municipal planning documents and regulatory frameworks. This included, among others, the General Town Plan (PUG 2023), earlier planning instruments (PSC, PRG), policy programmes such as the PINQuA and PRU, as well as reports by the public housing company ACER Reggio Emilia. Furthermore, publicly available data sources (ISTAT, OMI, municipal statistics) and media coverage on past and ongoing interventions (e.g., Bosco Ospizio, R60) were investigated. The desk research served three main purposes: firstly, to reconstruct the institutional framework shaping housing and environmental interventions in Reggio Emilia; secondly, to contextualise the statements of interviewees within broader policy trajectories and the public debate; and, lastly, to triangulate actors' perceptions with formal planning documents and publicly available data.

Interviews were conducted between June and November 2025, and in all but one cases in person. Furthermore, fieldwork was conducted in the same period in Reggio Emilia, which included visits to relevant case study sites, photo documentation, and informal conversations with residents. The interviews were semi-structured, following a template provided by the core group of WP5, and lasted approximately one hour each. All interviews were conducted by two researchers, with one researcher guiding the discussion and the other focusing on notetaking.

All interviews were recorded, transcribed using the software TurboScribe, summarized, and coded with the MAXQDA software deductively, following a shared codebook developed within the core group of WP5. Coding results were then pseudonymized, and a table containing aliases and corresponding interviewees was safely stored. In a next step, the team of researchers identified the key topics that emerged from the interviews through an in-depth reading and discussion of the empirical material – this was aimed at surfacing recurring themes and preliminary interpretations and at establishing a shared analytical framing. After that, an LLM tool was used – through a dedicated prompt – to perform the same exercise on the anonymised material, with the aim of identifying relevant quotes, overlaps, potential biases, and themes that may have been overlooked by the researchers. The LLM tool was thus used

as an additional analytical agent, supporting but not substituting the researchers' interpretative work. The pseudonymized coding results were then summarized (with the support of the LLM tool) around the main themes that are highlighted in this report. Regarding each of the ten predefined codes (see titles in chapter 3), a team researcher read all the quotes again and created a list of relevant results emerging from the interviews regarding the specific code. Lastly, the researchers working on the report integrated the additional results emerging from the LLM tool with their own analysis.

All interviewees were informed in advance about the purpose of the research, the use of the interview material, and their rights as participants. This was done verbally prior to each interview and through the provision of a written information sheet (*Informativa sulla raccolta e sul trattamento dei dati ai sensi del Regolamento UE 2016/679 – GDPR*). The information sheet specified the scope of data collection, storage procedures, and participants' rights to withdraw their consent at any time without consequences. All interviewees signed a written informed consent form (*consenso informato*) prior to the interview.

The research presents some limitations linked to methodological choices: firstly, it may display a certain governance bias – while we benefited from strong institutional access, which enabled detailed insights into governance mechanisms, this may also have shaped certain framings closer to administrative rationales. Secondly, one of the most controversial interventions investigated (R60 / Quartiere Stazione) is still under implementation – findings therefore reflect expectations and first impacts rather than longer-term socio-spatial outcomes. Lastly, the selection of Reggio Emilia as a case study – an exceptionally well-performing city in terms of green policies, as by national rankings – carries a potential "best-practice bias": analysing a relatively high-capacity and institutionally stable city may emphasise effectiveness, while structural constraints and deeper socio-economic tensions might be less visible than in more fragile or less consolidated contexts.

5.2.4 Actors' Perceptions of Green Initiatives in Case Study Areas: Reggio Emilia

5.2.4.1 Precedents and implementation

A green heritage shaped by frontline planning choices, advocacy, and the role of indicators

Reggio Emilia's rich heritage of green spaces is widely acknowledged, interpreted by most interviewees as the result of a long-term policy trajectory characterised by an early and sustained attention to green infrastructure as well as respective planning instruments. Urban plans preceding the current General Town Plan (PUG 2023) are described as crucial in this regard, as they enabled the municipality to secure substantial areas of public green space over time.

> "The city of Reggio Emilia, through the planning instruments that preceded the current PUG […] was somewhat of a forerunner, because it adopted the concept of land-use equalisation (*perequazione urbanistica,* see appendix 5.2) and the transfer of large green areas within the

framework of detailed implementation plans far before other cities. As a result, today the city has a very significant stock of green areas." (R02, senior municipal official, urban regeneration department)

This trajectory, the interviewee further stresses, is closely linked to the positive influence of specific individuals, most notably Giuseppe Campos Venuti, an urbanist and politician whose approach proved to be particularly foresighted:

"In a way, the driving force behind this planning strategy was Campos Venuti, who had overseen the design of our PRG as early as 1999. He introduced, on the one hand, functional mix, and on the other, equalisation mechanisms, land transfers, public green spaces, and so on." (R02)

At the same time, some respondents – civil society representatives – point to ambiguities in how improvements in green provision are measured and translated into performance indicators (R10; R05). They questioned whether increases in metrics (such as the quantity of public green space per inhabitant) are due to actual substantive ecological gains or rather attributable to accounting effects linked to land cessions.

"Green space has increased, yes, but this is a controversy I raise every year with Legambiente [note: Italy's largest environmental NGO], which produces its rankings using municipal data: green space has increased and public green space per inhabitant has increased as well, mainly thanks to land-transfer areas. Where there used to be a privately owned field that was not counted as green space, three buildings were built; in order to build those three buildings, 20% of the area was set aside. These 20% of grass are then added to the green areas, becomes public green space, and therefore leads to an increase in public green space. This is why, over the last 30 years, Reggio has tripled its green space per inhabitant. But I say: enough with increasing green space per inhabitant if that increase comes at a cost – because before it was green. If there was a field, it was green; you've just changed the label." (R10, environmental expert and civic activist)

Similar concerns have also been raised regarding figures on trees per inhabitant, which are based on estimates rather than a systematic census and may include shrubs as well as trees, as he further underlines (R10).

Irrespective of these ambiguities, environmental advocacy is without a doubt strongly rooted in Reggio Emilia, both reflected in institutional awareness and a long-standing presence of environmental advocacy actors. Most notably, Legambiente Reggio Emilia, the local branch of Italy's largest environmental NGO, has been active in the territory for around thirty years, engaging in a broad range of activities, including environmental education, territorial protection, active citizenship, and environmental and social justice, as explained by a senior representative (R05). Taken together, both institutional and civic attention to the topic have contributed to consolidating green infrastructure as a widely shared policy priority.

Structural transformations and increasing constraints in the local housing market over the past decades

Interviewees have described a series of structural transformations over the past decades that have strongly impacted the housing market, compounded by more recent disruptions, resulting in a current situation of growing housing pressure. An important phase occurred in the 1970s and 1980s, when rapid urban growth triggered an intense wave of construction. As one interviewee (an environmental expert and civic activist) recalls, "*in the 1970s and 1980s there was an incredible building expansion* […] *the city went from around 130.000 to 170.000 housing units over the course of 20–30 years*" (R10). Consequently, today's housing stock, the vast majority of which built before the 1980s, is increasingly ageing, while construction activities have strongly declined in subsequent decades. As another interviewee notes, "*the overwhelming majority of the city's housing stock predates the 1980s; in the 1990s and 2000s very little was built"* (R01, senior municipal officeholder, public works and housing). These overarching trends were compounded by a profound restructuring of the housing market in the aftermath of the Global Financial Crisis (2009). While the initial shock was delayed in Reggio Emilia by a few years, its effects eventually proved particularly severe for the cooperative housing sector, which had historically played a crucial role in the city.

> "In Reggio, the crisis – the shock – hit the cooperative sector later on. Even within the cooperative world, everyone thought they had come through the downturn unscathed; it was only around 2012 that the strongest effects were felt, continuing through to 2018–19, when many cooperatives closed, including some of the largest ones." (R08, executive representative of a local housing cooperative)

This is similarly underlined by a senior municipal officeholder (public works and housing):

> The crisis resulted in the near-total disappearance of this segment, with severe impacts in terms of housing affordability: "They were the actors that guaranteed access to housing at what we might call regulated or moderated prices, and in any case they were the last ones to build condominiums or similar types of housing. As a result, that entire segment of the market has effectively disappeared. By contrast, the high-end segment has continued to operate up to the present – though the new PUG may now curb it. In short, those looking for a quality home, not to say a luxury one, can still find one; but those looking for an affordable home cannot, neither on the rental market nor in terms of purchase." (R01)

Additionally, in recent years, market-related (short-term rentals) as well as socioeconomic and demographic challenges (an increased economic precarity and difficulties in accommodating migrants) have added to these structural imbalances, as the built fabric progressively reaches the limits of its housing capacity. This, as the interviewee further describes, affects both the rental and ownership markets:

> "We have moved towards a progressive exhaustion of capacity. A few years ago, there were no problems with rentals, but the rental market has since been exhausted through the forms you're familiar with – short-term rentals such as Airbnb, and various forms of dispersed migrant reception, which I personally consider a social value compared to using hotels or barracks. However, this has meant that several hundred dwellings have been withdrawn from the market. Then there was the whole issue of the Superbonus 110%, which pushed

additional people out of the rental market, as many owners renovated with the aim of re-letting at higher prices. After that, saturation gradually began to affect the sales market. As a result, today there is not only a crisis in finding rental housing, but also an objective crisis in finding homes for sale at 'human' prices or in acceptable conditions." (R01, senior municipal officeholder, public works and housing)

This is linked also to a structural gap in recent housing production, as private actors have largely withdrawn from the construction of condominiums. He further explains that

"the last condominiums built in Reggio have been entirely public projects carried out by Acer. […] there are no private economic actors who spontaneously wake up and say, 'now I'm going to build a condominium.' And I'm not talking about social housing (ERS) – there isn't even middle-income condominium housing being built. In other words, this housing typology simply no longer finds space." (R01, senior municipal officeholder, public works and housing)

These dynamics are further intensified by rising costs and declining affordability in other spheres of life, which increasingly affect not only low-income groups but also middle-income households. He further notes that "[…] *we are in a city where, with inflation, the cost of living is very high, and even a middle income is actually certainly at risk of energy poverty, food poverty, and housing poverty"* (R01).

Rising prices, moreover, are also linked to increasing costs of materials and energy as well as tighter credit conditions, which affect both construction and everyday management. As regards new construction, the executive representative of a local housing cooperative explains:

"We managed to finish two apartments; we could not carry out other building projects because they are not sustainable. This is a big problem, even for the large cooperatives. If we don't have interest rates below 3%, reductions in urbanisation charges, concessions on permits, you can't build housing […] So maintaining the existing stock is something you can manage with a spread-out and intelligent planning, looking for quotes, saving here and there, but as for new construction, we are all blocked" […] "the speculative bubble has had a very strong impact on material costs, on energy costs. I'll give a simple example: the maintenance of green areas – contract 2020 to 2024: 20.000 euros for four years. Contract from 2025 to 2029: 38.000 euros, almost double for the same service". (R08)

Taken together, these dynamics point to a housing market increasingly characterised by an ageing stock, rising costs, shrinking affordable supply, and a structural inability to reproduce intermediate housing forms, with significant implications in terms of both access and affordability.

Strong governance capacities, structural obstacles, and short institutional distances

Fieldwork and interviews clearly show that Reggio Emilia features strong institutional and governance capacities, which translate into a high level of readiness to respond to emerging policy opportunities. As emerges from a triangulation of interviews, policy documents, and project records, the municipality demonstrates a consistent ability to mobilise external

resources – most notably European and national funding – and to translate them into concrete projects. At the same time, a stable, continuous funding mechanism in the housing sector is missing in Italy, and the current system of ad hoc funding through (European, national, or regional) project calls disproportionately benefits already high-performing regions and cities, thereby contributing to growing inequalities within the country. As a senior municipal official (urban regeneration department) explains, while municipalities like Reggio Emilia possess the technical expertise to develop high-quality projects, national funding programmes tend to advantage those already equipped with such capacities, potentially widening inter-municipal inequalities:

> "If there were resources, there wouldn't be a problem; we now have a consolidated experience that would allow us to do it. […] Unfortunately, when it's done on a large scale, what happens is like with the PNRR [note: NRRP] – in the end, after four years, you just shrug your shoulders and say, 'we didn't do a damn thing, well done!' Because in the end there are the virtuous ones who managed to 'bring it home', and then there are those who didn't. In the general mass of Italy, I'd like to see how those percentages actually turn out." (R04).

Based on the interviews, an overall picture emerges of a local actor ecosystem characterised by a clear distribution of responsibilities and well-defined roles, enabling efficient coordination and communication between public institutions (for instance, the municipality and the public housing provider), private actors, intermediary organisations, and cooperative entities. Over the past decades, there has been a continuity of initiatives across the policy fields of interest, such as public housing retrofit, neighbourhood regeneration, and environmental projects. Governance arrangements appear to follow a consensus-oriented and quasi-corporatist logic, based on long-standing collaboration among organised actors and on negotiated problem-solving. This is further facilitated through short institutional distances, tied to the city's relatively compact dimensions and thus the presence of overlapping professional networks. Individuals working across different institutions typically know each other, collaborate on multiple projects, and in some cases move between roles over time.

> "[…] this is very much made up of the relationships between people, and people then change roles, change experiences, move around […] in this sense, the Reggio case is a bit emblematic, because the relationships are very tight, it's a small city, I know [R1], I know [XY], we found ourselves working together one year when we were all there, desk next to desk". (R08, executive representative of a local housing cooperative)

A long-standing trajectory of public housing regeneration and retrofit

Public housing regeneration in Reggio Emilia is a long-term, incremental process that has unfolded over several decades, and regeneration has concerned most of the city's public housing neighbourhoods. As an executive representative of the local public housing provider, ACER Reggio Emilia, which manages the city's public housing stock, underlines:

"Our main work over these years has been urban regeneration, so all public housing neighbourhoods have been transformed, through interventions in urban design, buildings, and a more general reorganisation of spaces […] Compagnoni is the most visible one because it was the most recent, but all the other neighbourhoods were redeveloped before as well, and always with the same logic. So basically, the old public housing neighbourhoods have all been redeveloped". (R03)

In addition, incremental improvements in building performance have been integrated into everyday management practices.

"[…] we [note: through ACER] manage 2.100 public housing units, so every time we intervene – even when just replacing a broken boiler – we obviously replace it with one that improves energy performance". (R01, senior municipal officeholder (public works and housing)

Over time, the approach has been continuously recalibrated in response to changing regulations, knowledge, and technical standards. It reflects a process of cumulative policy learning and calibration, demonstrating an adaptive approach to policy learning in terms of public housing retrofit and regeneration rather than a single moment of transformation. An executive representative of the local public housing provider explains that

"Energy efficiency is a relatively recent issue, and […] efficiency objectives have changed over time depending on regulations and the knowledge that developed over time […] we started with Class C interventions in 2005/2006/2007, and today we are talking about Class A interventions. In retrofitting, the aim has always been to achieve the maximum possible in each historical period – today, with current knowledge and technologies, the objective is near zero consumption, even if this is difficult to reach." (R03)

5.2.4.2 Participation and governance (procedural)

From participatory tradition to recent tensions: the limits of civic influence in contemporary governance

Reggio Emilia is widely recognised for a long-standing tradition of bottom-up participation, embedded in a political and administrative culture shaped by decades of left-wing governance across municipality, province and region. Interviewees frequently situate current debates within this historical trajectory, recalling how neighbourhood-based institutions – particularly

the *circoscrizioni*[123] – once served as the primary interface between local communities and the municipal administration. This multi-level political continuity has been shown to facilitate dense governance networks and a degree of vertical coordination that administrative personnel and members of civic groups still regard as distinctive to the Emilia-Romagna region, where civic voice is expected to travel through layered institutional channels rather than bypass them. However, representatives of groups organising both around the right to the city and environmental justice also observe that the ambition of participatory governance has gradually encountered structural constraints (linked to the progressive weakening of local authority autonomous action), institutional fragmentation and resource limitations, producing tensions between participatory ideals and contemporary governance.

Across several interviews, actors highlighted the abundance of formal participatory tools available in Reggio Emilia. A variety of experiences have been identified as contributing to a rich institutional repertoire in involving residents in regeneration processes. These include the co-design of public spaces in regeneration processes, social-management services that have been introduced almost two decades ago within the public housing system, and creative forms of micro-engagement, including projects co-developed with children. The local public housing provider, ACER Reggio Emilia, moreover, demonstrates a serious commitment to long-term investments in mediation, social needs assessment and conflict resolution. Such initiatives are designed to facilitate the involvement of tenants during the retrofitting and relocation phases in regeneration processes.

Nevertheless, numerous interviews with civic groups have repeatedly highlighted concerns regarding the effectiveness of participatory instruments in the city. A recurrent theme pertains to the selectivity and ritualisation of participatory processes, which are frequently characterised as lacking adequate resources, or centred on one-off events as opposed to sustained dialogue. Civic actors engaged in mobilisations related to climate, the right to housing and the right to the city have described institutional openings, including *Consigli Comunali Aperti* (open town council meetings), popular motions and climate-justice regulatory tools, as façade gestures whose practical influence remains limited.

[123] *Circoscrizioni comunali* were decentralised internal units of the municipality, created to bring local government closer to residents. These institutions were not to be considered autonomous local authorities, but rather as components of the *Comune*, characterised by a degree of functional autonomy. The purpose of the circoscrizioni was twofold: firstly, to facilitate participation, and secondly, to enable local consultation and the management of basic services at a neighbourhood scale. Over time the role of these institutions has undergone a progressive weakening. The result of these processes has been a loss of key institutional channels through which communities were able to exercise territorial voice and everyday democratic oversight. Today, in some cities they have been replaced by other participatory bodies, while in others they survive in modified forms with less power and autonomy.

"We know that talking about participation is easy, but doing it is difficult because it is a complex, multifaceted social composition in a society where the tendency to participate has also decreased compared to the past, and the means of communication have changed. It is not easy, but when we intervene, especially in a residential context, we believe it is essential not to take fictitious paths. If participation is to be done, it must be done, I think, by accepting contradictions and conflict, otherwise it can become a bit of a cosmetic measure that is applied on top, and then that is an area where many political forces seek their own consensus." (R12, Activist involved in a local civic group focused on housing, immigration, social inclusion)

This perception of non-responsiveness is particularly evident in the context of major regeneration projects, as evidenced by disputes regarding Bosco Ospizio and via Paradisi/via Turri (see chapter 1.2). Activists emphasised that proposals aimed at preserving spontaneous woodlands or maintaining ecological corridors were systematically overlooked. Furthermore, despite municipal commitments to climate discourse, NGOs and activists criticise that urban planning is not able to alter development decisions despite changing priorities and continues to prioritise land take and construction-led value creation, thus contradicting stated environmental objectives. Despite formal opportunities to present nature-based proposals or ecological evidence, interviewees recount that municipal responses reinforced the inevitability of already-approved projects, leaving little scope for renegotiation. Public-private arrangements – such as urban-transformation companies or private investors holding pre-existing legal agreements – further delimit institutional room for manoeuvre, contributing to the sense that participation cannot influence already-codified development trajectories. Such tensions have been cited by groups advocating for climate justice and housing rights movements, who frame participation as a "fetish" rather than a substantive opportunity for co-decision.

"…this difficulty, this communication deficit with regard to Via Paradisi and the redevelopment project, which in itself is not necessarily wrong, but the way in which it was proposed or imposed is certainly wrong in our opinion, because it did not involve the residents in the process. We would say that participation, as it was proposed, often seems like a "fetish" rather than something that truly offers the opportunity to participate." (R12, Activist involved in a local civic group focused on housing, immigration, social inclusion)

Furthermore, the structural underfunding of participation is presented as a significant governance constraint. Several project schemes – such as the PINQuA, financed through the NRRP – formally require social-dimension involvement yet provide no dedicated resources for immaterial measures like participation (Wolfgring 2023), leaving public administrations unable to accompany residents through complex regeneration transitions. Several interviewees have placed such challenges within a broader political context. The devolution of housing competencies to regional and municipal authorities without concomitant financial transfers creates governance bottlenecks and limits municipal capacity to maintain participatory commitments.

Overall, the findings portray a governance landscape where participatory infrastructures are abundant but frequently unable to shape substantial outcomes. The tension between Reggio Emilia's participatory tradition and contemporary experiences of procedural, selective or symbolic participation emerges as a central theme, particularly in contexts where environmental and housing justice claims intersect with redevelopment logics.

5.2.4.3 (In)equity (distributional)

Uneven access, mixed outcomes: the contradictory distributional effects of retrofitting incentives

Distributional inequities emerge across several domains of housing and environmental policy in Reggio Emilia, including affordability pressures, uneven access to retrofit incentives, and disproportionate impacts of regeneration on vulnerable residents. However, among all interventions discussed by interviewees, the Superbonus 110% scheme stands out as the most explicitly identified driver of distributional (in)justice. Across multiple accounts, the scheme is seen as producing significant unevenness in access, outcomes, and long-term benefits, reinforcing rather than alleviating existing inequalities at multiple scales.

Indeed, several interviewees expressed strong ambivalence about the Superbonus 110% – some stressed that it favoured those with the financial and administrative capacity, as well as organisational stability to access the incentives (R04, senior municipal officeholder; R11, representative of a local property owners' association). However, where it was implemented in multi-dwelling contexts – such as large condominiums and public and cooperative housing – the policy was found to have progressive distributional effects. A professional who has overseen numerous Superbonus projects positively notes that it has enabled energy retrofits that would otherwise have been economically unfeasible for residents of low-income private condominiums, public housing and rental housing cooperatives (R15). In these cases, residents experienced significant improvements in thermal comfort and energy expenditure, resulting in a substantial transformative impact.

> "We poked our noses into flats that you would say these people could never have afforded to renovate in their lifetime. We saw situations, flats that were in a truly appalling state, walls that were rotten, people who had no way of doing anything about it. So, from that point of view, it was an extremely positive thing because certain renovations could never have been done if it weren't for this system, which of course also had its problems". (R15, Technical professional involved in energy retrofit projects)

It is important to emphasise that energy inequality produces broader social inequality: renovated dwellings increase in value while non-upgraded units stagnate or decrease in value, thus reinforcing long-term differences in wealth, well-being and housing stability. In an attempt to address this issue, an executive representative of a local housing cooperative (R08) reported that they internalised redistribution by modestly increasing rents in properties where savings had been made, to finance works where incentives could not be deployed.

Both administrative personnel and professionals emphasised deficiencies in the design of the Superbonus 110% scheme, converging on the notion that its universal design, independent of income, social need or restrictions on the effective use of the dwelling, coupled with high administrative barriers, had regressive effects. As has been repeatedly commented also during the ReHousIn Policy Lab (see Rehousin, 2025), there is broad consensus that those who possessed both the financial means and the social capital to access funds more quickly have benefited more. As data moreover show (ENEA, 2024), the Superbonus was largely utilised by owners of single-family houses and functionally independent units, and in many cases regardless of whether the property served as their primary residence. However, as pointed out by several interviewees, in Reggio Emilia, the stakeholders' ecosystem was instrumental in shaping the allocation in a way that diverged markedly from the national trend.

In an effort to enhance the efficiency of the allocation of funds for the retrofitting of public housing estates, the local public sector has implemented measures to streamline the process. What proved to be crucial was the fact that the municipality supported retrofit interventions in condominiums with mixed (public and private) ownership situations, where private owners also were in favour of retrofitting. Furthermore, ACER Reggio Emilia, as the entity managing the city's public housing stock, played a key role in the implementation of the bonus. Nevertheless, the presence of an intermediary actor proved to be of pivotal significance. IREN (see appendix 5.2), a public-private multiutility in which the municipality holds a 50% stake, was responsible for coordinating all aspects of reporting and organising a network of local companies, acting as general contractor at the city level, as well as providing advance funding for all interventions. This allowed IREN to exert a significant influence on the construction sector. In this context, building contractors had a natural tendency to prioritise large-scale condominium projects over smaller, lower-risk alternatives. This decision was influenced by the financial security provided by a reliable partner reducing the risks associated with such ventures. IREN functioned as a direct financial intermediary between the central state – the Superbonus was designed in a highly top-down manner – and the beneficiaries (i.e., the private citizens, but also public and cooperative actors).

"The company coordinated all aspects of reporting and hiring companies, mainly in the local area. It acted as the general contractor for all 110 [note: Superbonus 110%] condominium initiatives, which were very significant projects. So, you could say that it was a tool used to coordinate and lend credibility to the 110 operations, which were very complex to manage in themselves. I won't hide the management difficulties from you – I encountered them all – because there were issues of administrative management interpretation and financial anticipation. It was necessary to anticipate all the financial interventions. Iren played that role, as did Eni and other multi-utility companies, but there were few private companies with this level of activity, as there was significant cash flow in terms of resources introduced, tens of millions invested, and then withdrawn when the credit was transferred. Advance funding is a delicate matter. It was an important role for the Turin, Reggio and Parma area, which comprises member municipalities. In my opinion, IREN played an important role in connecting the law and its complexity with end users, i.e. citizens who were experiencing difficulties. I imagine a condominium administrator who has to interpret the law and get started". (R04, Senior municipal officeholder, urban regeneration and sustainability)

The impact of incentives for energy retrofitting on tenure security in the private rental market is also a significant factor highlighted by interviewees. As a representative of a tenants' union (R06) has noted, renovation constitutes a rare exception to the prevailing norm of protecting tenants from eviction after the initial term of the rental contract has ended (the first term before tacit renewal is four years for standard contracts and three years for controlled rentals).

> "There is an issue: beyond the Superbonus, renovation that is incompatible with the tenant remaining in the property is one of the reasons – one of the few reasons – why I, as the owner, can terminate my tenancy agreement at the first expiry date, giving that type of justification". (R06)

The interviewee moreover reports that some landlords have been exerting pressure on tenants to vacate their apartment – prior to the termination of the initial contractual period –, as they wished to retrofit using the Superbonus incentive.

> "Linked to the 110%, we had a few cases where several tenants came here to talk because their landlords told them they had to leave because they had to renovate, even though the contract was still in force: it had not yet expired. So, they were trying to find a way to get rid of them for that reason". (R06)

Furthermore, representatives of both the landlords' association and the tenants' union (R11; R06) have reported that the energy class of dwellings was included among the criteria for requesting an increase in rent during the most recent open discussions on the territorial agreement (see *canone concordato* in appendix 5.2). This finding suggests that, even within the more regulated rental typology, energy retrofitting could be among the factors contributing to rising rents in the future. The distribution of benefits from energy retrofitting in Reggio Emilia is thus ambivalent. It is evident that tenants residing in dwellings that have undergone retrofitting measures experience a reduction in energy expenditure and increased thermal comfort. However, it must be noted that these financial benefits are eroded by less tenure security and by an increase in rents, even within the confines of regulated contractual agreements.

5.2.4.4 Political mobilization

Path-dependent conflicts and grass-roots mobilisation: How planning legacies shape contemporary conflict

Interviewees describe Reggio Emilia as a city with a long and stratified tradition of political mobilisation, particularly around the right to housing and more recently the right to the city and climate justice. Mobilisation takes multiple forms – environmental activism, housing-rights struggles, scholarly advocacy – often overlapping and reinforcing each other. Representatives of civic groups have emphasised the manner in which mobilisation around the issue of housing intensified during the years of the subprime crisis (R12). This period saw grassroots groups engaging in anti-eviction actions, mutualistic support, and the occupation of vacant properties. Civic groups nowadays frame their trajectories as moving from the right to housing towards a

broader right to the city – claiming not only access, but participation in the city's development and management – explicitly linking housing insecurity, welfare infrastructures, and ecological questions (R09; R12).

> "From the idea of the right to housing, we tried to expand on the right to the city, so the idea that if it is true that the city is built by the people who live there, then we can also try to claim not only a right of access but also a right to participate in some way in the development and management of the city. From this, we opened to a whole series of issues that necessarily intertwine with those concerning the environment and ecological issues, but also the whole sphere of welfare, including schools, healthcare, educational services and transport". (R12, activist involved in a local civic group focused on housing, immigration, social inclusion)

Parallel to housing struggles, there has been a growing mobilisation on environmental concerns. Traditional environmental associations such as Legambiente and WWF operate alongside more recent movements like Extinction Rebellion. These groups are joined by neighbourhood assemblies, informal committees and community-based social centres, creating hybrid forms of mobilisation. This results in campaigns that combine public demonstrations, research-informed advocacy, media engagement and formal institutional interaction.

The respondents describe a city in which institutional decision-making frequently triggers organised collective responses, especially when residents perceive tensions between long-standing planning decisions and current social or ecological priorities. It has been reported by both administrative and civic representatives that environmental conflicts are frequently rooted in long-standing, path-dependent planning decisions whose contemporary implementation clashes with current sustainability norms.

> "So, let's say that conflicts over environmental issues often arise, I would say almost all of them, over the implementation of previous urban planning decisions that are no longer considered appropriate for the present day. So, the latest major committees and public discussions in the city on environmental issues concern green areas that may have been designated 40 years ago for building expansion, but which have been forgotten over the years. Then the owner, the investor, let's say, decides to put their money into it. [...] interventions which, despite legal action by the municipality against the owners of the areas, have retained an irrevocable building right. This generates a fundamental misunderstanding among the population, because it is clear that today we all talk about sustainability, but then someone takes a 5-hectare area and builds a nice supermarket on it: this is difficult to understand from a common-sense point of view when it comes to the environment. On the other hand, there are legal constraints that are insurmountable for us, in the sense that when someone sues the developer and goes before a Regional Administrative Court, the Regional Administrative Court rules in favour of the developer". (R01, senior municipal officeholder, public works and housing)

Indeed, the dispute around Bosco Ospizio (see chapter 1.2) has emerged as the most emblematic contemporary case of political mobilisation in Reggio Emilia. In this initiative, various social actors have converged to protest the commercial development of a long-

abandoned plot where spontaneous woodland grew over the course of two decades. Legambiente, Extinction Rebellion, local residents, scholars, and long-standing environmental activists engaged in a dynamic organisational structure centred on the *Assemblea del Bosco Ospizio*. It is important to note that mobilisation in this context is not confined to the domain of 'green' protection. Rather, it is articulated as a struggle over integrated issues such as urban liveability, access to services, climate justice, and the distributive outcomes of regeneration.

> "It is also true that we are part of the Bosco Ospizio assembly. As far as the Ospizio issue is concerned, we always come back to the topic of land consumption in favour of large-scale distribution. [...] We have joined forces with other organisations and all the citizens who see this green area as a 'lung' of the city that should be protected, not only for us, but for future generations too. Unfortunately, dialogue with large retailers and even the municipality has not always been as fruitful as we had hoped. [...] Even though we collected more than 40,000 signatures from people who said they did not want it, and despite the efforts of so many citizens, top-down politics still leaves people feeling uninvolved and excluded." (R05, Senior representative of a local environmental NGO)

The range of actions encompasses institutional engagement, active participation in council debates, as well as sustained surveillance of the area and direct civil disobedience. Despite extensive public support, as well as the undertaking of local institutional justice action, "acquired building rights" (*Diritti edificatori acquisiti*) impose constraints on the municipal authorities' capacity to manoeuvre, thereby becoming both a legal argument and a political flashpoint in this dispute. The persistence of irrevocable development rights has been a source of frustration for residents, who find themselves unable to reconcile the construction of new commercial facilities on green areas of a high environmental value with the prevailing municipal discourse on sustainability.

Furthermore, environmental activists highlighted the historical lineage of this struggle (R09; R10). The Bosco Ospizio dispute has been influenced by the legacy of previous environmental conflicts in the city, including campaigns against developments at Via Luxemburg and the Quinzi–Piaggia park, where commercial development occurred on green corridors and former parks. The case thus represents a broader cycle of urban-environmental contestation extending over more than a decade. Consequently, Bosco Ospizio serves as a prime example of the potential for civic mobilisation, while simultaneously highlighting the inherent limitations of institutional responsiveness.

5.2.4.5 Socio-ecological impacts/benefits (positive)

Housing energy retrofit produces tangible socio-economic benefits and housing comfort

Housing energy retrofit in Reggio Emilia has been described as producing tangible socio-economic benefits, including for low-income households. Interviewees have underlined that even if actual energy savings often are below expected savings (particularly where energy price increases offset savings), retrofit interventions structurally reduce exposure to energy poverty by lowering consumption and improving comfort.

"Maybe we expect 100 and get 70, but 70 are achieved; that is, the improvement in terms of reduced bills is there when you replace a window, an old boiler, when you redo the external insulation, when you replace the roofing membrane with innovative materials. That is, the interventions in themselves always generate a positive impact; then of course we can discuss about the magnitude of the impact and whether it is commensurate with the investment made and with expectations." (R01, senior municipal officeholder, public works and housing)

Others emphasise that benefits not only regard environmental performance but also cost containment for economically vulnerable tenants in public housing contexts, whose energy expenses often outweigh the cost of rent itself. In Reggio Emilia, energy retrofit thus emerges as an important factor contributing to housing affordability in contexts of increased vulnerability.

"[…] it becomes above all an issue of countering the phenomenon of energy poverty; this is the main objective, thereby containing housing costs because they are not sustainable, especially since the type of users we have is very poor and pays very low rents but instead has very high running costs, particularly for energy for heating. […] wellbeing and savings are the two main things residents notice straight away". (R03, executive representative of the local public housing provider)

Collective redistribution of savings through energy interventions

Several interviewees have mentioned mechanisms through which the benefits of energy retrofit and other energy-related interventions are being redistributed to a more collective level. An example of this has occurred in a context of cooperative housing based on undivided ownership, where economic savings generated through the retrofit of some dwellings (financed through the Superbonus 110% scheme) were redistributed to support maintenance in non-retrofitted dwellings:

"We took two or three households as a sample and said, give us all your bills from previous years and the ones from this year; we saw that they were spending half, some even 70% less in costs. So then we said, let's redistribute some of these savings, so that the cooperative can carry out other maintenance works in the houses where the 110 interventions were not implemented. So, we therefore increased the rents a bit, especially in the buildings where the 110 actions were carried out. […] the increase was significant — around 60 to 100 euros — but starting from rents well below the agreed thresholds". (R08, executive representative of a local housing cooperative)

Similarly, in a public housing context, an energy community is being established (see also chapter 3.8), intended as a collective infrastructure rather than as means to generate cost-savings for individual households:

"The characteristic of this energy community […] will be not so much to leave the tenant an annual saving that does not make much difference – because we are talking about 100 euros per year – but rather to use it to develop resources that are then transformed into social activities in the area. So those resources that come from the activity of the energy community

will be used within that territorial context for activities shared with citizens and with the municipality's social services". (R03)

Green interventions and NBS as infrastructures enhancing wellbeing and social inclusion

Nature-based solutions and green infrastructures have been frequently associated with improved wellbeing. Interviewees underline the importance of NBS interventions for citizens, given conditions of increased climate stress:

"Depaving operations, reforestation, or other forms of adaptation of public space should certainly be pursued precisely for people's basic wellbeing – even just being able to leave the house in summer without dying from the heat, for the elderly, children, etc. – I think the benefits by now are obvious even to the most skeptical ones." (R01, senior municipal officeholder, public works and housing)

Similarly, community gardens and requalified public spaces have been mentioned as important for promoting social interaction, particularly for fragile groups:

"Community gardens, for instance in Compagnoni and in the Rosta Nuova, have encouraged social inclusion and contact with nature, especially for the most fragile groups, i.e., the elderly and low-income families". (R05, senior representative of a local environmental NGO)

Another recent positive example cited regards a former parking lot transformed into a *piazza*:

"The intervention carried out in Piazza del Popol Giost. It used to be a parking lot, on a somewhat sensitive street: close to Via Emilia, a spot where asylum seekers and immigrants would gather, a hotel that hosts asylum seekers…a very multicultural place considered problematic. They collaborated with the Via Roma committee and rebuilt the square in a "green" way: new seating, trees integrated into the seating…There has been a lot of criticism, but from the citizens' point of view the impact has been positive: from a parking area it has become a square." (R09, an activist involved in a local environmental civic group)

5.2.4.6 Socio-ecological impacts/harms (negative)

(Subtle) mechanisms of displacement and pricing out – but no green gentrification

Energy retrofit – including but not limited to the Superbonus 110% – has been mentioned as a clear price driver, since "*many renovated with the aim of re-entering the market at higher prices*" (R01, senior municipal officeholder, public works and housing)**.** This dynamic is further amplified by legal provisions which allow the early termination of rental contracts in cases of renovations incompatible with continued occupancy, which "*is one of the few reasons that allows landlords to terminate a lease at the first expiry*", as a representative of a tenants' union (R06) explains. He further elaborates on the landlords' perspective, highlighting an inherent

problem linked to public subsidy schemes like the Superbonus, namely that benefits are retained by private individuals instead of being collectively redistributed:

> "I receive an advantage from the state which I then turn into an additional advantage – when I carry out the works, I let the rental contract expire without renewal; at that point I have my renovated apartment, and at that point I ask for more. I can ask for more because the market is free." (R06)

While retrofit thus clearly appears to be contributing to increasing housing price dynamics, the hypothesis of green gentrification in Reggio Emilia has not been confirmed by the interviews. NBS and the element of green infrastructure within broader regeneration interventions appear to be much less relevant. The interviewee (R06) moreover acknowledged that "*if I redevelop a neighbourhood – also with green spaces – it is obvious that this has repercussions on the market*" (R06), however, most respondents don't believe that green infrastructure on its own plays a crucial role. This is linked also to the fact that Reggio Emilia has a rich and widely distributed green heritage, as the representative of a local property owners' association (R11) states: "*I don't think that's the case* [note: green gentrification] *in Reggio Emilia; we already have many parks, and I hope they will remain.*" One respondent, an activist involved in a local civic group focused on housing, immigration, and social inclusion (R12), further underlines the value of parks in Reggio Emilia as spaces that are used across the demographic and socioeconomic spectrum. He states that these spaces function as generators of encounters between

> "different worlds […] perhaps there are projects, not necessarily green ones, that can have this kind of effect, with a tendency to change the composition of certain neighbourhoods; but it seems to me that with green spaces this is not the case – there are parks that, the more I experience them, seem to me to be very heterogeneous in how they are used." (R12)

Regeneration through demolition

One of the most conflictual recent (and currently ongoing) interventions, as introduced in chapter 1.2, regards via Turri/via Paradisi (Quartiere Stazione), where the regeneration project "R60" foresees the expropriation and demolition of existing housing and its replacement with new – mostly social housing (ERS – *edilizia residenziale sociale*, see appendix 5.2). An affected resident – and member of a local residents' committee (R14) created to safeguard the present owners' interests – defines the operation as "*objectively anachronistic*", criticising both the criteria and legitimacy of the displacement plans:

> "Essentially, we are talking about replacing some people with other people. On what basis? What is the criterion that makes one person better than another? How do we decide that this person will take better care of the neighbourhood? Is it a punishment? Are we not good at managing the neighbourhood, so now it's time for someone else to do it in our place?". (R14)

He moreover contests the project's ecological rationale: "*from an ecological point of view, I see nothing ecological in demolishing houses that are perfectly standing*" (R14), and perceives compensation mechanisms as inadequate, resulting in worse housing conditions for those

affected: "*you give me €100.000 for 200m² and then ask €200,000 for 60m². This is the risk.*" (R14).

Other interviewees perceive the situation from different perspectives, stressing that the neighbourhood suffers from severe issues related to physical deterioration, public order, and informality. As argued by the representative of a tenants' union (R06), some owners have welcomed the opportunity for relocation, as their homes had become unsellable and living conditions deteriorated.

> "They said, 'we live badly here, but no one will buy this flat; what can we do?'… Which, in my view, having been given that possibility, they were quite happy, because at least it gave them a hand to get a flat elsewhere." (R06)

He further stresses that overcrowding and social vulnerability, particularly linked to the strong – and partly informal – influx of an immigrant population in the neighbourhood over the past years, have been produced by exploitative practices. He noted that "*it was Reggio residents themselves who took advantage of immigrants, their weakness and desperation – who didn't know where to go –, which created the phenomenon*" (R06). At the same time, institutional actors acknowledge governance and communicative failures that have contributed to intensifying the conflict.

> "Difficulties that have occurred so far are partly due to a mistake by the administration, for which I take responsibility – that is, my mistake, since I held the political mandate – in not having taken sufficient care of communication before the project became public. And so this immediately generated a non-positive climate." (R01, senior municipal officeholder, public works and housing)

The implementation of construction works

Negative impacts due to the implementation of interventions, particularly during construction phases, have moreover been noted by several interviewees. Substantial retrofit and regeneration work has generated extended disturbances, as a technical professional involved in energy retrofit projects (R15) explains:

> "We have had condominiums where people remained for months - not to say years - caged in by scaffolding, with residents so exasperated that at a certain point they even cut the scaffold netting because they wanted to see outside; sometimes the air conditioners were dismantled because work had to be done, so during the summer they were constantly without air conditioning". (R15)

Moreover, in some cases, temporary (or permanent) relocation has been necessary, proving particularly difficult for households with little economic resources and social support networks, as underlined by a senior municipal officeholder (public works and housing):

> "The real difficulty is making an invasive intervention coexist with residents who, in any case, do not have many resources – it's not like one can say, "they're fixing my house, so I'll go live

with my aunt, my mother, a friend." Often these are situations where there is no family support network, or the network is not able to provide the support that would be needed at that moment during construction; therefore, it's about managing the human side of construction work.". (R01)

5.2.4.7 Tensions and power dynamics between stakeholders/actors

Colliding priorities and unequal power in housing and environmental governance

Tensions among the different stakeholders in Reggio Emilia's housing and environmental domains influence policy outcomes and governance practices. These dynamics emerge from divergent interests and asymmetries in decision-making power among different levels of public institutions, as well as unequal access to information among residents, private actors, and environmental movements. The interviews reveal how these tensions culminate in environmental conflicts and tensions between affordability and sustainability goals, as well as in planning practices.

Environmental conflicts represent a primary category of tensions. Activists engaged in the defence of sites such as Bosco Ospizio have reported disputes with municipal authorities, who are perceived as reluctant to acknowledge the ecological value of contested areas.

"The most recent experience is of conflict with the local administration over an urban regeneration plan involving the destruction of four hectares of natural woodland that has developed in an uncultivated, urbanised area. Demolitions date back thirty years, and the area has been abandoned for twenty years. Nature has flourished there without any investment, planning or projects, and now they want to destroy it. We therefore presented these arguments to the City Council, but they essentially ignored them, stating that the planned scheme is sustainable and inevitable from an economic point of view because the investor and property are private and the agreements were in place when the property was sold twenty years ago. We pointed out that agreements can always be revised because the world has changed in the last twenty years". (R13, Academic researcher and environmental activist)

Public and political responsibility for environmental preservation is subject to regulatory constraints and market dynamics, generating frustration among civic groups and resulting in a loss of political engagement. Nonetheless, municipal authorities have limited options for redirecting existing building rights, even when specific developments are widely contested, as previously mentioned.

A "paradox of transition"

A further set of tensions arises from the structural contradictions between environmental objectives, affordability, and social equity in the housing sector. Professionals active in the public housing sector have articulated the challenges associated with adhering to stringent energy efficiency standards while ensuring that construction costs do not exceed available budgets and that the resulting technological systems do not present unnecessary burdens for low-income residents.

> "Is hyper-insulating a building really worth it in terms of investment costs? So, in my opinion, we need to take a considered approach to things. In fact, the buildings we have designed in this case seek to strike the right balance between the available resources. The primary objective is certainly to provide people with a roof over their heads, first and foremost, and then to reduce the running costs for families as much as possible, but without burdening them with additional costs. And that should be a crucial objective". (R07, Private-sector professional involved in urban regeneration)

As mentioned in several interviews (R01, senior municipal officeholder, public works and housing; R07), a "paradox of transition" has emerged, namely that sustainable options remain unaffordable, and ecological compliance increases building costs beyond what controlled rents can support. As one respondent highlighted, residents of public housing estates moreover encounter obstacles that are associated with the technical complexity of contemporary systems. Their limited familiarity with sophisticated ventilation and heating technologies often diminishes the efficacy of ecological upgrades and contributes to the premature failure or lack of usage of such systems, highlighting how technological infrastructures can perpetuate inequalities by presuming skills that not all users possess and increase drastically the costs. There is the risk that substantial resources will be transferred not to direct policy targets, with the actual benefit being marginal compared to the crucial value of the home, but to the technological and operational supply chain implementing the retrofit.

> "I believe that green logic must also include the sustainability of the overall resources at stake, which also include the social, economic and managerial resources that come downstream of users. [...] The risk is that resources will be transferred not to the primary beneficiary, the assignee or tenant of that dwelling, but to the economic-managerial and technological-industrial supply chains that create their long tail on that technology. Technology must certainly be at the service of man, first and foremost "homus habitantis". (R07, Private-sector professional involved in urban regeneration)

Finally, municipal officials (R01, senior municipal officeholder, public works and housing; R04, senior municipal officeholder, urban regeneration and sustainability) highlight a persistent misalignment between municipal-regional and national levels of governance. National funding frameworks tend to favour high-visibility projects over the routine maintenance essential to public housing management, while regional bodies (in the case of Reggio Emilia) share strategic goals with municipalities but lack stable financial resources. This results in implementation issues, where institutional actors converge on principles but diverge in practical capacity, generating delays, fragmentation, and uncertainty in long-term planning.

5.2.4.8 Innovative governance mechanisms

Innovation in planning tools and incremental policy-learning

Innovation in policymaking clearly emerges from the introduction of new quality-based and performance-oriented planning tools in Reggio Emilia in recent years. One of these instruments are the *accordi operativi* (operational agreements), which substitute fixed indexes

for specific sites with tailored project approvals, requiring the project applicant to demonstrate quality across different (social, environmental, spatial, landscape, and economic) dimensions (R02). As a senior municipal official (urban regeneration department) explains, *"the index results from the quality of the project"* instead of being a predefined entitlement (R02). As another interviewee (R15, technical professional involved in energy retrofit projects) confirms, "*With the instrument, you actually have the possibility to assert elements of quality; there is the possibility to implement it through competitions, including design competitions.*" The *accordi operativi* moreover require a social housing (ERS) quota of 20-30% to be realized by developers, thus directly linking planning approval to social and affordability-related aims.

A further innovative tool adopted in Reggio Emilia is the *Riduzione dell'Impatto Edilizio* (RIE, Reduction of Building Impact) index, which operationalises climate adaptation measures in a binding way:

> "It is primarily aimed at reducing the urban heat island effect and at addressing increasingly pressing issues related to flooding. In practical terms, it is an index that is calculated through an algorithm, which we have borrowed from the original model, from the Municipality of Bolzano. The index is calculated depending on the type of intervention and the use that is being introduced, and it must reach a minimum threshold. Therefore, I can no longer think, for example, of having a completely impermeable courtyard area. I must in any case leave deep, permeable portions or provide a certain number of trees. Alternatively, if I cannot do so in a traditional way, I can install a green roof. I can use rainwater harvesting systems as well". (R02, Senior municipal official, urban regeneration department)

Continuous ecological networks have moreover been introduced at the urban scale, consisting of a mapped system of green nodes and corridors across the municipal territory. These are accompanied by binding provisions for private owners, who are required to ensure that green spaces within their properties *"safeguard, restore or implement"* missing links in this network, thereby allowing its incremental completion over time (R02). Additionally, mobility-related regulations have been introduced, which allow for the complete waiver of mandatory parking requirements in areas of high accessibility (R02). A further innovative planning tool consists in incentivising temporary uses in areas where properties cannot yet be definitively transformed. In such contexts, the municipality actively promotes the installation of activities and services with a social character, intended as instruments to mitigate social tensions: by introducing services, cultural initiatives or community-oriented activities, they operate as social "presidia" or magnets, attracting people from outside the neighbourhood and fostering new forms of encounter and visibility (R02).

As regards public housing, social management tools have been introduced as early as 2007, as an executive representative of the local public housing provider (R03) explains. Initially, these were aimed at mitigating conflict and supporting tenants with fragilities, and subsequently broadened to include project-related tasks addressing social dimensions and implications, as well as the facilitation of transformation processes:

> "We have had a social management service since 2007. [….] we have three or four people whose profession is social management, which over time has also become social planning.

They started out as social mediators; today, it is much more developed, because it goes beyond social mediation activities – that is, conflict regulation – and today they also work on project design aimed at understanding problems and needs, and on prevention in relation to issues of social inclusion. All of this is also part of the interventions […] at the moment, we have a programme for adapting dwellings from the point of view of accessibility where older people with disabilities live, and therefore there is the issue of understanding what the problems and needs are, because this then has to be translated into projects related to accessibility […]." (R03, executive representative of the local public housing provider)

Lastly, an example of tentative innovative policymaking has been the introduction of a special zoning category for co-housing projects some years ago – foreseeing large, shared spaces and a form of indivisible ownership – in 'interim areas', "*areas of stitching or reconnection, perhaps between productive and residential zones*", where regular residential use was not permitted. The category was recently abandoned due to limited adequate proposals and regulatory misuse through potential developers.

"Unfortunately, over the years the proposals that came in were always trying to get around these rules. So they might say, yes, I'll give you a residential project with a shared laundry, a shared children's play area, but in the end they were private residences." (R02, senior municipal official, urban regeneration department)

However, the examples discussed above demonstrate a policy approach in which experimentation, trial and error, and policy learning is practiced, and planning evolves through incremental adaptation in response to feedback and transforming priorities and needs over time.

Innovation through collaboration and strong actor networks

Tying in with the previous section, a recurring and peculiar driver of innovation in Reggio Emilia lies not only in policy instruments but also in the actors' ecosystem, characterised by collaborative arrangements encompassing the public administration, housing providers, universities, civic groups, industry, and intermediary figures. Such collaborations have proven essential in overcoming typical bottlenecks in implementation. One example of this concerns the application and upscaling of the Superbonus 110% scheme, for which the role of the local multi-utility company IREN (see appendix 5.2, and chapter 3.3) demonstrated to be crucial. Acting as a general contractor, IREN bundled financial intermediation and technical coordination, enabling economies of scale and reducing risks for both public and private actors. IREN addressed one of the main structural obstacles of the Superbonus – i.e., cash-flow constraints and financial uncertainty for construction firms, substantially reducing their risks (R04, senior municipal officeholder, urban regeneration and sustainability) – by advancing payments and managing bank relations directly. As another interviewee, a technical professional involved in energy retrofit projects (R15) explains:

"IREN paid the companies every month, regardless, covering the progress of works […] and then independently handled the whole issue of credit transfer with the banks […] they

managed to find a financial balance, and that made them a very important." (R15, Technical professional involved in energy retrofit projects)

Collaboration was also crucial in terms of its application to mixed condominiums (combining public and private ownership), which are typically a major hampering factor in housing retrofit (both in reaching consensus and in implementation). To resolve this node, the municipality and the public housing provider ACER adopted a shared governance approach – wherever technical and legal conditions allowed, the public actor would systematically vote in favour of the intervention and co-finance it. This enabled the retrofitting of dozens of mixed condominiums in the city (R01, senior municipal officeholder, public works and housing).

Moreover, collaboration has proven to be an important driver of technical innovation and experimentation in the public housing sector. ACER has an outstanding leadership, is strongly rooted in various European housing policy networks (its former President being the current president of Housing Europe) and has engaged in various partnerships with universities through European projects, testing integrated retrofit approaches that combine energy efficiency, material innovation, thermal regulation, and indoor comfort. Experimental projects have moreover targeted the mitigation of heat stress and urban heat island effects, demonstrating that research-based collaboration has informed building-scale interventions and potentially contributes to broader urban climate change mitigation strategies (R03, executive representative of the local public housing provider). Similar activities have been pursued by the municipality through cooperation with industry actors, such as Confindustria Ceramiche, within the framework of an EU-funded LIFE project focusing on bio-based materials and climate-adaptive building envelopes (R01, senior municipal officeholder, public works and housing).

Currently, an energy community is being set up in a public housing context in Reggio Emilia – one of the first of its kind in the country – explicitly linking green transition aims with social objectives. The intervention foresees the reinvestment of savings achieved through the energy community in the neighbourhood, using them for social purposes. As various interviewees (R01, senior municipal officeholder, public works and housing; R03, executive representative of the local public housing provider) stress, the objective is to finance collectively defined social activities – for instance, educational, recreational, or welfare-related services. Apart from economic, ecological, and social benefits, the approach contains less tangible positive impacts as well:

"The idea that, within public housing, in a working-class neighbourhood, it is possible to install panels in the context of energy communities, with the aim of reducing energy costs as well as increasing sustainability, but also of generating a small, let's say, community return to be reinvested in social actions for the neighbourhood. Let's say, in the United States they call it energy democracy. Maybe we are a bit behind, but the idea, precisely, that something traditionally thought of as a weak point – that is, the fact that in working-class neighbourhoods there is often a concentration of public housing stock and therefore many social criticalities, and so on – can instead become a strength." (R01, senior municipal officeholder, public works and housing)

In parallel, local civic actors have sought to promote and facilitate access to knowledge on renewable energy communities through capacity-building measures. As the senior representative of a local environmental NGO (R05) underlines, efforts have focused on "*creating a general framework and supporting implementation*" through targeted training initiatives for technicians and the creation of collective solar purchasing schemes, intended to lower entry barriers for citizens and smaller actors.

Finally, collaboration is being discussed as a strategic horizon for future social housing (ERS) projects, particularly through potential attempts to combine the institutional role of public administration and ACER with the organisational and managerial expertise of the cooperative housing sector. This includes ongoing reflections on how cooperative practices – for instance, in terms of community organisation – might contribute to new public ERS developments. As an executive representative of a local housing cooperative notes (R08), this would require a coordinated effort among multiple actors, including ACER, cooperatives, and trade unions – "*there need to be many people who say, let's take a leap of faith and make a first test – the famous prototype*", while acknowledging that such an approach has so far remained difficult to implement in practice.

5.2.4.9 Tourism and market pressures

Affordability crisis and reconfiguring housing vulnerability

The interview material contributes to reconstructing a broader narrative of the changing socio-economic profiles of households affected by housing crisis in Reggio Emilia.

> "Over the last ten years, we have seen the city grow and become more densely populated. Above all, the issues that have emerged follow the trends seen in other Italian and European cities, i.e. problems related to rising rents and short-term rentals. Unlike in other cities, these are not only aimed at tourists, but also at other groups, such as temporary hospital workers and doctors. […] There are also problems such as the racialisation of the rental market, meaning that if you have a non-Italian surname, it is much more difficult to find a home to rent, even if you have one or two salaries and a full-time job. […] Reggio's population is changing: the university has expanded, and new faculties have been established. This has led to an increase in the number of students living away from home, who perhaps were not so numerous before. […] However, we can say that the problem is widespread: it is more difficult to find an affordable rental property, prices are very high, and it is an issue that creates a lot of debate and discussion, but it is difficult to find answers." (R12, Activist involved in a local civic group focused on housing, immigration, social inclusion)

During the 1990s and early 2000s, those most exposed to housing precarity were predominantly low-income families – typically single-earner households – who had been severely impacted by the economic downturn. A significant share of affected residents were migrants from North Africa, many of whom faced the paradox of being employed in the construction sector while simultaneously experiencing difficulties accessing adequate housing

and, in some cases, contributing directly to the development of the very neighbourhoods in which they could not afford to live. Since that period, the city has undergone substantial demographic and spatial transformations. Intensified urban development and increasing residential density have reshaped both housing demand and the social composition of those facing exclusion from the formal housing market. In line with trends observed in other European metropolitan areas, the profile of residents affected by housing vulnerability has progressively diversified. Today, even dual-income households struggle to access homeownership and are increasingly pushed into a private rental market characterised by rising costs, racialised patterns of exclusion, and early but significant impacts of studentification and touristification.

> "On the one hand, there is more than just the ecological transition; we should try to act for a just housing transition, away from the logic of the speculative market, where there are obviously many increasingly exclusionary dynamics that now prevail over ordinary housing rental options, even at free market values". (R07, Private-sector professional involved in urban regeneration)

Interviewees depict a long-term disconnection between housing costs and household resources that renders "affordability" a moving target and a source of routine injustice. Rising rents are perceived as structurally entrenched, with any downturns limited to moments of macroeconomic crisis, while purchasing power erodes in both nominal and real terms. This macro-backdrop inflects micro-practices in local Reggio Emilia rental market, inducing a general expulsion trend, in favor of new temporal forms of living in the city (e.g. students, temporal workers and, increasingly, tourists).

> "In my opinion, Reggio is a bit different: it's not like Milan, where at some point someone comes along and says, "I'm going to drive down property prices, buy it up, fix it up, kick out the poor people and speculate". No, that's not happening yet. But there is a creeping form of expulsion due to the dynamics of the cost of living and also inflation. […] because you're in a context where private salaries are historically very high, but they're very high in certain categories, such as metalworking, while in the service sector they're low and in line with the rest of Italy. […] let's say that being middle class in Reggio is definitely more difficult. It's a medium-sized city, but it has a very high cost of living. And so, if there is gentrification, it is due to this: that is, a housing market that is becoming increasingly elitist and tends to expel those who are struggling". (R01, senior municipal officeholder, public works and housing)

5.2.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

As has emerged, the relationship between the institutional sphere and civic actors is overall positive and cooperative but also entails moments of conflicts and frustrations. It has been observed by several activists for housing and environmental rights that top-down dynamics in participatory action limit the influence of bottom-up mobilisation (R09; R10; R12). Even large-scale campaigns – such as the collection of thousands of signatures, as has occurred in the Bosco Ospizio case – have limited impact in the face of existing legal obligations arising from

private development agreements. Respondents from both civic and institutional backgrounds highlight that communication failures have occurred (R01; R05) and that public consultation procedures are insufficient instruments to satisfy collective demands. Despite these tensions, political mobilisation has proven to be a persistent force in Reggio Emilia. Whether through environmental activism, housing rights advocacy, scholarly engagement or neighbourhood-level initiatives, collective action represents a crucial mechanism through which residents express opinions and concerns. While the capacity to change planning decisions (often taken by previous municipal governments) is limited, political mobilisation nevertheless plays a significant role in the public debate.

5.2.5 Critical Analysis: Reggio Emilia

Housing inequalities in Reggio Emilia are primarily structured along economic and tenure-based lines, with two groups emerging as particularly exposed – low-income households dependent on public housing or informal living situations and, increasingly, middle-income households against the backdrop of a widening mismatch between salaries and costs of living, and thus an ongoing erosion of purchasing power. Differently from larger metropolitan contexts, tourism and short-term rentals so far play a comparatively limited role. Instead, broader macroeconomic pressures – inflation, rising material and construction costs, and tighter credit conditions – are perceived as main stressors in determining access and affordability of housing. These dynamics are compounded by longer-term structural transformations, most notably the collapse of a substantial share of the cooperative housing sector in the city after the Global Financial Crisis, which historically provided affordable and intermediate housing solutions. The decrease in relevance of this intermediary segment has left a structural gap in the local housing system, alongside a near halt in the construction of new condominium housing.

At the same time, Reggio Emilia overall presents itself as a stable and well-functioning urban context. Most neighbourhoods investigated are of a decent quality, including a well-maintained housing stock, extensive greenery, and good mobility infrastructure. Its urban fabric is well composed and cohesive, with a compact city centre and adjacent first peripheries merging together relatively smoothly. Peripheral areas overall do not appear to exhibit extreme deterioration or socio-spatial marginalisation, reflecting a long-standing planning tradition, relative economic wellbeing, and continuous maintenance of the existing stock. The city moreover features a very rich ecosystem of actors, characterised by dense and recurring relationships, facilitated by the city's compact scale, political and institutional continuity, and long-standing personal acquaintance among key individuals. Cooperation is common, but conflicts also exist, for instance between public authorities and civic groups. Participation mechanisms are widespread but are sometimes perceived as formalistic, leading to frustration when civic demands are not substantively integrated into decision-making processes.

Against this broader structural backdrop, green transition policies interact unevenly with housing inequalities – as the analysis has shown, there are considerable differences between the types of policies and interventions that have been subject to this investigation – housing retrofit, nature-based solutions, and densification/urban regeneration.

Among the three, housing energy retrofit has demonstrated to be the most critical policy field as regards impacts on housing inequalities and distributive effects, as it has, as mentioned by several interviewees, contributed to the emergence of pricing out dynamics in some cases. The most recent example is the Superbonus 110%, a state subsidized tax incentive scheme, where no policy mechanisms ensuring a socially just redistribution or mitigation of negative impacts have been put in place – e.g., a temporary cap on rent increases, or rental contract cancellation protections.

However, the case of Reggio Emilia also reveals how the involvement of a powerful intermediary – IREN (see appendix 5.2) – coordinating reporting, organizing local contractors, and, importantly, advancing funds – has reshaped the distributive effect of the incentive by channeling the interventions toward large condominium projects and effectively mediating between the central state and final beneficiaries. In other parts of Italy, ENI (see appendix 5.2) – together with other multi-utility companies – implemented a comparable approach; however, only a limited number of public and private enterprises were sufficiently capitalised to support similar initiatives, even when repayment was backed by a state guarantee. At the local level, the presence of such actors and their interconnected ecosystems played a pivotal role in enabling the widespread distribution of the incentive, thereby extending access to a larger and more diverse group of beneficiaries. Nevertheless, at the national scale, this pattern further illustrates the instrument's inherently regressive nature. Marked territorial disparities have emerged between regions where consolidated public-private stakeholder ecosystems were able to operationalise and channel the incentives, and those where the absence of such actors significantly constrained implementation capacity. These asymmetries underscore structural differences in local institutional strength, market maturity, and the availability of intermediary actors – factors that together shape unequal access to state-supported measures and ultimately weaken the policy's distributive effectiveness.

However – again, differently from many other Italian contexts – retrofitting incentives in Reggio Emilia have been applied extensively within the protected housing stock – particularly public and cooperative housing – resulting in tangible positive outcomes for tenants, such as an increase in wellbeing, thermal comfort, and reductions in energy costs for economically vulnerable households. In these cases, energy retrofit has thus clearly acted as a protective measure against energy poverty. Again, the readiness and institutional capacities of actors involved have been key prerequisites for reaching this outcome – in particular ACER Reggio Emilia, the public housing provider, and the municipality as owner of the public stock – whose past experiences, built on incremental learning in retrofit and a gradual streamlining of procedures over the past decades, allowed them to take advantage of emerging opportunities. This, as previous research on public housing regeneration has shown (Wolfgring 2024), is by no means granted in a national comparison.

As regards green initiatives in the narrower sense – urban greening and nature-based solutions –, no negative impacts have been perceived by interviewees, who quite unanimously reject the notion that such interventions have triggered green gentrification and who overall don't consider the factor 'green' as particularly relevant in existing gentrification dynamics in Reggio Emilia. Green amenities are not perceived as drivers of displacement or rent increases, nor as a differentiating factor in neighbourhood attractiveness which would selectively benefit

higher-income groups. This perception appears to be linked to the fact that the city features an important green heritage of high quality, a large number of parks distributed across the city, allowing most residents to benefit from everyday green qualities within short reach. As has also been stressed by several interlocutors, parks are used intensely and by socially heterogeneous groups, catering to a broad demographic spectrum.

Gentrification tendencies – which are widely perceived as having intensified over the past years – instead rather appear to be the result of a convergence of different structural factors, including inflation and broader costs of living increases, an increase in material costs and therefore a reduction of construction, and rising socioeconomic pressures in periods of economic crisis. These dynamics are further reinforced by longer-term path dependencies, most notably the aforementioned decline of most local housing cooperatives in the aftermath of the Global Financial Crisis in Reggio Emilia, with important implications on middle-income housing. Nature-based solutions in the city, however, appear to be largely decoupled from housing market pressures, acting neither as a trigger nor as an accelerant of displacement dynamics or rent increases.

As regards the impacts of densification and urban regeneration on housing inequalities, the picture is more ambiguous. Firstly, hard residential densification at the neighbourhood scale has not been encountered in Reggio Emilia. While the housing stock has increased over recent decades, this growth has largely followed demographic growth and has been spatially distributed across the city rather than being concentrated in specific neighbourhoods. Large-scale redevelopment projects of the city's industrial heritage – such as the recent transformations of the ex Reggiane into a technology and innovation cluster, and of the Polveriera into a cultural, educational, and creative hub, have entailed no residential component and thus do not constitute cases of residential densification in the strict sense. While indirect or spill-over effects on the surrounding residential fabric cannot be excluded in the future, so far these interventions have not directly contributed to housing-related pressures.

Past (Compagnoni) and current (via Turri/Quartiere Stazione) urban regeneration projects with a significant residential component have focused primarily on the recomposition and diversification of the housing offer, the upgrading of public space, and addressing social issues, rather than increasing residential density. In the case of the Compagnoni neighbourhood – characterised by a large density of public housing – the project involved demolition and new construction, necessitating temporary and, in some cases, permanent relocation. While these processes generated disturbance and temporary uncertainties, interviewees largely describe them as having been resolved without major conflict, supported by negotiation and institutional mediation. Quartiere Stazione, on the other hand, is a far more conflictual case, and has produced strong controversies even ahead of its implementation. Here, the municipality is dealing with a highly complex situation of informal occupation, arrears, overcrowding and exploitation of an immigrant population, as well as physical and social deterioration. Strong measures, including expropriation, demolition, a recomposition of the housing fabric – entailing the substitution of private with mostly social housing – and substantially a thorough reorganisation of the neighbourhood are being taken by the municipality. The endeavour has triggered strong contestation, particularly among some of the remaining private owners. Expropriation and demolition measures entail forced displacement,

while the compensation offered is considered insufficient. In this case, even before implementation, tangible impacts in terms of housing inequalities can clearly be anticipated: while some households are likely to benefit from improved housing conditions and access to social housing, others face loss of property and displacement. Due to the delicate nature of the project, mitigation cannot rely on financial compensation alone, but also requires substantial efforts of communication, mediation, and social accompaniment both in managing the transition towards a newly composed neighbourhood and in addressing emerging grievances.

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5.2.7 Appendix 1 – Glossary

Abbreviations

ACER	Azienda Casa Emilia-Romagna, see also 5.2
ENI	Ente Nazionale Idrocarburi, globally operating Italian energy company focused on producing and supplying oil, gas, and low-carbon energy
ERP	Edilizia Residenziale Pubblica, (Public Housing), see also 5.2
ERS	Edilizia Residenziale Sociale (Social Housing), see also 5.2
Legambiente	Major Italian environmental NGO operating at the national and local levels
MEF	Ministero dell'Economia e delle Finanze (Ministry of Economy and Finances)
MIMS	Ministero delle Infrastrutture e della Mobilità Sostenibile (Ministry of Infrastructures and Sustainable Mobility)
PIERS	Programma Integrato di Edilizia Residenziale Sociale (Integrated Social Housing Programme), see also 5.2
PINQUA	Piano Innovativo Nazionale per la Qualità dell'Abitare (National Innovative Programme for Housing Quality), see also 5.2
PNRR	Piano Nazionale di Ripresa e Resilienza (National Recovery and Resilience Plan – NRRP)
PRU	Programma di Riqualificazione Urbana (Urban Regeneration Programme), see also 5.2
PRG	Piano Regolatore Generale (General Master Plan)
PSC	Piano Strutturale Comunale (Municipal Structural Plan)
PUG	Piano Urbanistico Generale (General Town Plan)

Terms and Concepts

ACER	Azienda Casa Emilia-Romagna, the network of provincially organised public housing agencies operating in the Emilia-Romagna region; in this study, ACER (or ACER Reggio Emilia) refers to the agency responsible for managing social housing in the province of Reggio Emilia.

Bonus facciate	A national Italian tax incentive (introduced in 2020) providing tax deductions for the renovation and restoration of building façades, aimed at improving urban building quality.
Canone concordato	Type of controlled rent contract. The Italian rental sector was reformed by Law 431 of 1998, which abolished rent control in the private market and introduced 4 new rental contracts typologies: a) The standard four-year lease (contratto ordinario), which automatically renews for more 4 years if not terminated; b) Mid-term rental rental (contratto transitorio), applicable only when temporary accommodation is required by tenants or landlords, lasting between one and 18 months; c) Student rentals, a specific and non-compulsory type of contract lasting the duration of the study plan; d) The 'controlled rent' (canone concordato) contract. This incentivised contract type, with rents set below market levels, can be stipulated for a minimum duration of three years with two years of tacit renewal, and is subject to lower taxation than ordinary contracts. Rents must be within a range defined by the territorial agreement: a document negotiated at a municipal level between tenant unions and landlord associations.
Convenzione urbanistica	A legally binding planning agreement between a municipality and a private developer, regulating the implementation of an urban development project and defining obligations such as infrastructure provision, public space, or affordable housing quotas.
ERP	Edilizia Residenziale Pubblica – public housing, allocated on the basis of income and needs criteria, owned and managed by public bodies (public housing agencies and municipalities
ERS	Edilizia Residenziale Sociale (social housing), a category of regulated affordable housing in Italy, targeting households that do not qualify for traditional public housing (ERP). ERS can be developed by public or private actors and often involves mixed funding or planning obligations.
IREN	Iren S.p.A. is a publicly controlled multi-utility company operating in Northern Italy (including Reggio Emilia), providing energy, water and environmental services. The company played a coordinating and financial intermediary role in the implementation of the Superbonus 110% scheme.
Perequazione urbanistica	"Land-use equalization" – An Italian urban planning instrument that redistributes development rights among all landowners within a designated planning area. Instead of assigning building rights only to specific plots, the total allowable development volume is calculated for the entire area and proportionally allocated to each owner, regardless of whether their parcel is designated for construction or public use. This allows municipalities to designate certain plots as public green space, infrastructure, or services

	without direct expropriation. Owners of land reserved for public purposes are compensated through transferable building rights that can be exercised on other buildable plots within the same planning unit. In this way, public land (including parks and green corridors) can be secured while maintaining equitable treatment among landowners.
Piano Periferie	"Programma straordinario di intervento per la riqualificazione urbana e la sicurezza delle periferie" (extraordinary intervention programme for urban regeneration and safety of the peripheries), a national funding scheme introduced 2016 to promote integrated regeneration, public space improvement and social inclusion initiatives in urban peripheries.
PIERS	Programma Integrato di Edilizia Residenziale Sociale (Integrated Social Housing Programme), see 5.2 a public programme promoted by the Emilia-Romagna region, fostering the increase of public (ERP) or social (ERS) housing, integrating residential development with urban regeneration measures
PINQUA	Piano Innovativo Nazionale per la Qualità dell'Abitare (National Innovative Programme for Housing Quality), see 5.2 a national funding programme established within the framework of Italy's Recovery and Resilience Plan (PNRR) to support urban regeneration, public (ERP) and social (ERS) housing and neighbourhood regeneration.
PRU	Programma di Riqualificazione Urbana, a national programme introduced in the 1990s (Law 179/1992) to finance integrated urban regeneration projects through agreements between municipalities and the state, typically combining public and private resources.
Sicuro, verde, sociale	A national programme (within the complementary plan to the PNRR) financing safety and energy-efficiency upgrades of public housing (ERP).
Superbonus 110%	National instrument (partly funded through the NRRP) incentivising retrofitting in the residential sector, based on tax deductions of up to 110% of the intervention costs, existing from 2020 to 2023
Canone concordato	Type of controlled rent contract. The Italian rental sector was reformed by Law 431 of 1998, which abolished rent control in the private market and introduced 4 new rental contracts typologies: a) The standard four-year lease (contratto ordinario), which automatically renews for more 4 years if not terminated; b) Mid-term rental rental (contratto transitorio), applicable only when temporary accommodation is required by tenants or landlords, lasting between one and 18 months; c) Student rentals, a specific

and non-compulsory type of contract lasting the duration of the study plan; d) The 'controlled rent' (canone concordato) contract. This incentivised contract type, with rents set below market levels, can be stipulated for a minimum duration of three years with two years of tacit renewal, and is subject to lower taxation than ordinary contracts. Rents must be within a range defined by the territorial agreement: a document negotiated at a municipal level between tenant unions and landlord associations.

INA Casa Plan National plan which linked the construction of workers' housing to economic recovery, existing from 1949 to 1963, producing around 355.000 dwellings, financed through contributions of employers and employees.

5.2.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
R1	Senior municipal officeholder (public works and housing)	Comune di Reggio Emilia	16/06/2025	In person
R2	Senior municipal official (urban regeneration department)	Comune di Reggio Emilia	16/06/2025	In person
R3	Executive representative of the local public housing provider	ACER Reggio Emilia	17/07/2025	In person
R4	Senior municipal officeholder (urban regeneration and sustainability)	Comune di Reggio Emilia	14/11/2025	In person
R5	Senior representative of a local environmental NGO	Legambiente	18/07/2025	In person
R6	Representative of a tenants' union	SUNIA Reggio Emilia	17/07/2025	In person
R7	Private-sector professional involved in urban regeneration	Officine Urbane	17/06/2025	In person
R8	Two executive representatives of a local housing cooperative	CCPMC	17/07/2025	In person
R9	Two activists involved in a local environmental civic group	Extinction rebellion	18/07/2025	In person
R10	Environmental expert and civic activist	-	15/09/2025	In person
R11	Representative of a local property owners' association	ASPPI Reggio Emilia	15/09/2025	In person
R12	Activist involved in a local civic group focused on housing, immigration, social inclusion	Casa Bettola	26/09/2025	Online (webex)
R13	Academic researcher and environmental activist	CER	16/09/2025	In person

R14	Member of a local residents' committee in an area undergoing regeneration	Comitato abitanti di via Paradisi	18/07/2025	In person
R15	Technical professional involved in energy retrofit projects	Centro cooperativo di progettazione	16/06/2025	In person

5.2.9 Appendix 3 – Visuals

Fig. 13. Via Turri, Quartiere Stazione, photo by authors

Fig. 14. Building after energy retrofit, Compagnoni, photo by authors

Fig. 15. Building after energy retrofit, via Selo, photo by authors

Fig. 16. Film screening in Parco del Legno, photo by authors

Fig. 17. Parts of the "ex-Reggiane" after transformation, photo by authors

. Fig. 18. Bosco Ospizio as a trigger of political mobilisation, photo by authors

5.3 CASE STUDY (SMALL): ASSISI

Authors: Marco Peverini, Massimo Bricocoli, Anita Susani (Polimi)

Contributors: Constanze Wolfgring & Lorenzo Caresana (Polimi)

5.3.1 City/Town profile, challenges around just (housing and ecological) transition

Assisi, a small city with around 27.400 inhabitants in a vast rural territory (including a natural park), is located in the rather inner and less-urbanized central region of Umbria. The city's economic focus is (religious) tourism, also driven by a peculiar history of forefront urban planning that preserved the medieval landscape, regulated the transformation of the historic city center and provided a qualified and sound extension of the city.

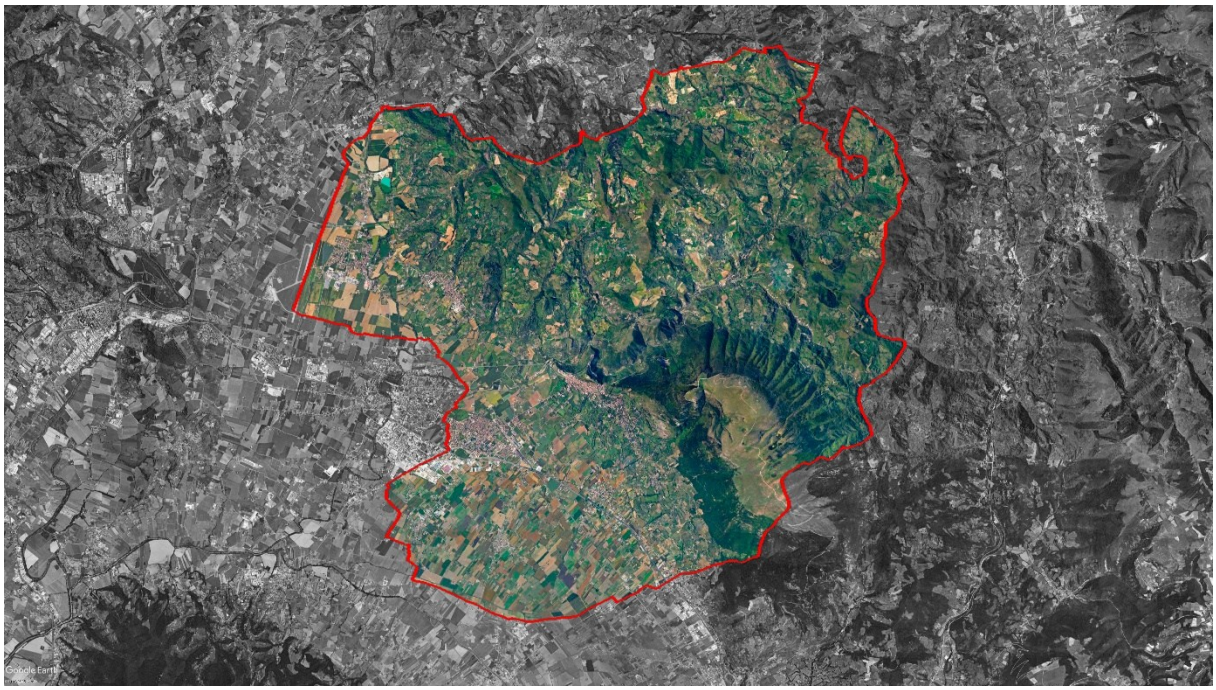

Figure 26 The municipal territory of Assisi. Source: Authors' elaboration on Google Earth

Assisi consists of two main cores: the medieval historic center uphill and the more modern expansions in the plain, mainly the residential neighbourood of Santa Maria degli Angeli, that features some industrial and commercial areas areas, and access to the train and highway networks. The city is somehow functionally organized into two main built areas: the mainly touristic historic center uphill; the center of daily life and housing stock of Santa Maria degli Angeli, including industrial, commercial and tourism infrastructures. Most residents are concentrated in Santa Maria degli Angeli that has seen its population increase in the last years, while the overall municipal population has been decreasing and ageing since 2018. Some smaller and old settlements are in the surrounding agricultural and natural land.

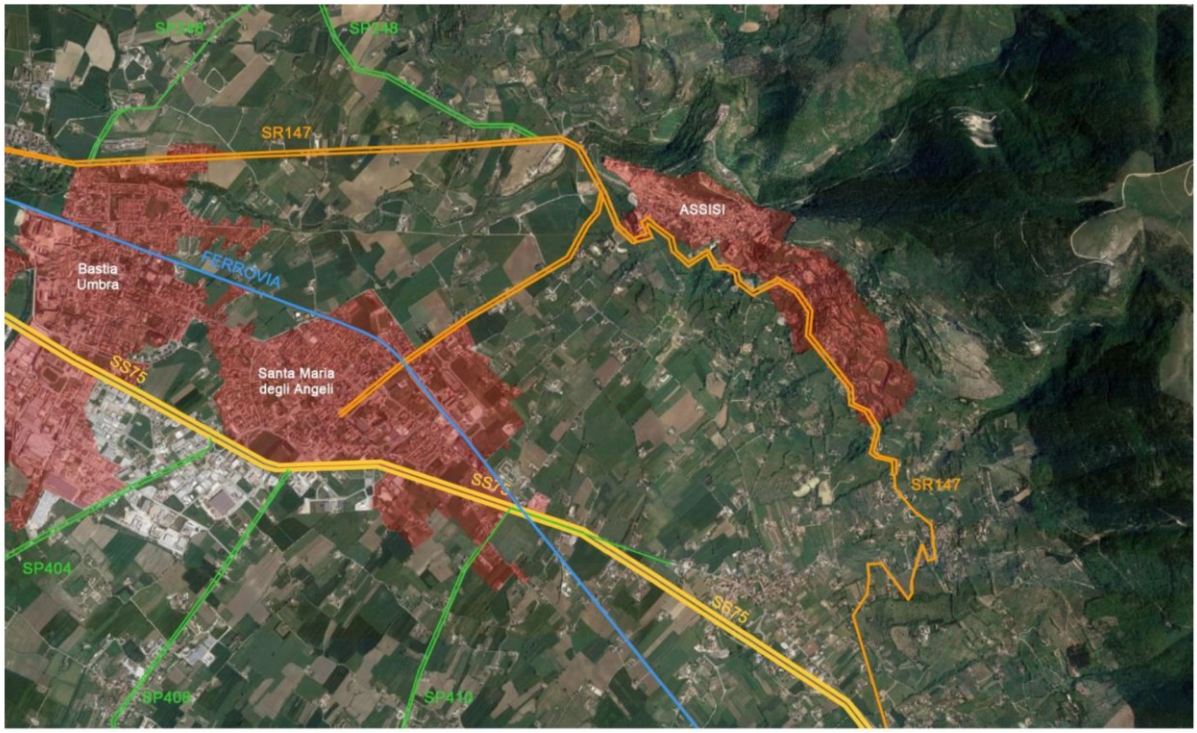

Figure 27 Assisi main built areas: historical center, Santa Maria degli Angeli, road (orange-yellow-green) and railway (blue) connections. Source: PAESC

The historical center is well known for its UNESCO World Heritage status and strong tourism economy, particularly pilgrimage based. Given the driving role of tourism, the city faces specific housing inequality and sustainability challenges, shaped by broader national trends in housing policy and socio-economic changes. The housing sector in Assisi features a tourism-driven gentrification affecting general housing affordability level, a high percentage of outdated housing stock in need of energy efficiency upgrades, a limited public housing availability, and government-led sustainability initiatives (e.g. Superbonus 110%) that indirectly contribute to housing inequalities. Strong heritage conservation rules – also linked to the 1957 Astengo urban plan that focused on landscape protection (Indovina, 1991), have anticipated the UNESCO preservation framework (Ricci, 2024). In recent years building activity has mostly taken place through a variety of small density increases across the building stock, often plot by plot (Berni, 2024; Mariucci, 2024). Outside of the historic city center, urban sprawl processes have continued,with increasing soil consumption (Peverini, 2024), mainly in the plain area closer to road infrastructures, without any connection to alternative mobility (Lanfaloni, 2024).

Figure 28 View of the historical center of Assisi from the main streetof Santa Maria degli Angeli. Source: Expedia

Regarding housing tenures, along with the national trends, Assisi features a vast majority of homeownership and a shrinking share of social/public housing. In Assisi, the percentage is even higher, with owner-occupation reaching 75,5% of all households, and tenants only representing 12,7% of all households, with other tenures representing 9,8%. This translates to a high rate of ownership of inherited properties that reduce mobility in the housing market and minimal rental and social housing supply, which, together with a highly competitive rental sector impacted by short-term tourism rentals driving up prices, make it difficult for low-income residents to access affordable homes.

Tenure 2021	Ownership	Rental	Other	All households	(of which public housing)	(of which companies)	(or which physical persons)
2021	8.944	1.471	1.127	11.541	(182)		
% 2021	77,5%	12,7%	9,8%	100%	(1,6%)		
2011	8.647	1.914	1.030	11.591	(122)	(146)	(1.646)
% 2011	74,6%	16,5%	8,9%	100%	(1,1%)	(1,3%)	(14,2%)

Table 9 Housing tenures in Assisi. Source: authors' elaboration based on Istat censuses. 2021 public housing data from local source

The housing stock in Assisi in on average significantly older than the Italian stock (Figure 4). In Assisi, 60% of the buildings rely on natural gas heating, almost 25% on wood or coal, and 10% on LPG (Liquified Petroleum Gas), making decarbonization highly challenging (Comune di Assisi, 2017). In particular, most of the buildings in the historic center have been built long before 1919, while the housing stock of thof Santa Maria degli Angeli has mainly been built before the adoption of Energy efficiency rules. This entails two different typologies of housing

that needs retrofitting: the protected medieval stock; and the inefficient modern housing. Mass housing is not a diffused typology in this territory.

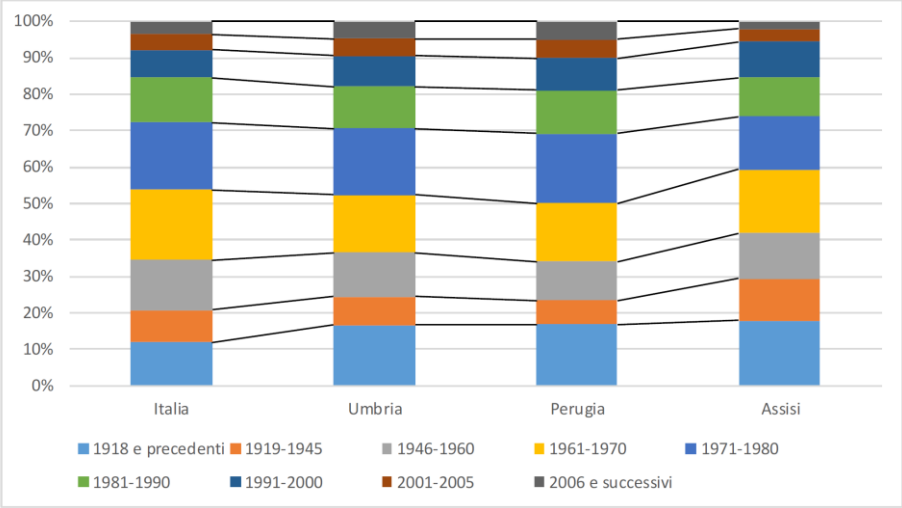

Figure 29 Building by age of construction in Assisi and other scales. Source: PAESC

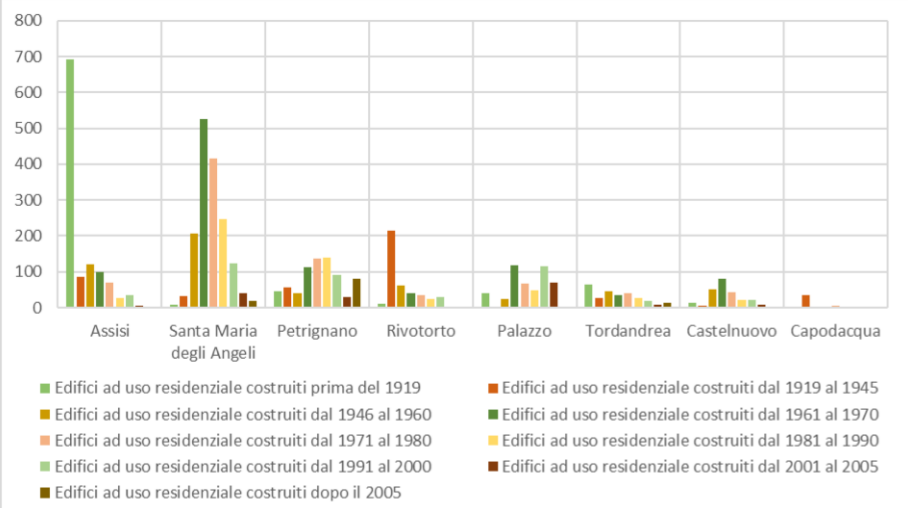

Figure 30 Building by age of construction in the different neighborhoods of Assisi. Source: PAESC

Umbria was hit by an earthquake in 1997 that damaged significant parts of the built stock in the region, including Assisi.

The reconstruction plan is widely recognized as very innovative and efficient, its implementation has been relatively fast (Nigro, Fazzio, 2007). According to data from the Umbria Region Reconstruction Observatory, as of 2014, 97% of the population living in

damaged buildings had returned to their homes[124]. As acknowledged by many scholars, in the case of Umbria in September 1997 it was possible for residents to return to the areas affected by the earthquake within a short time thanks: an efficient public coordinating structure; generous public subsidies; an innovative approach supporting and facilitating minor repairs to the involved buildings while ensuring a coordinated activity on minimum urban compartments (Nigro, Fazzio, 2007; Mecucci, 2016). Additionally, decisions by local institutions to safeguard residential and economic activities after the earthquake by local institutions were very distinctive and relevant. In Umbria (as well as in Emilia after the 2012 earthquake) no "new town" - for the resettlement of those who lost their homes - has been built, strengthened the sense of rootedness (Marincioni et al., 2017). Nevertheless, in Assisi, as well as in many other historical towns in central Italy, important parts of the population of the historical centers that had to leave their home temporarily did not actually come back: during the reconstruction phase, many bought or built new houses, while maintaining the property of damaged dwellings in historical centers, paving the way for depopulation of historical centers – and, where possible, for substitution with touristic functions.

Housing costs in Assisi have risen significantly due to tourism and a thriving real estate market (Mariucci, 2023). The strict heritage preservation regulations within the historical center limit new housing developments, further constraining supply. Urban expansion has happened mostly in the plain, as the area of the historic city center is strongly protected by a special safeguard zoning act since the1957 urban plan. Moreover, upgrading and modernization of existing old housing is limited by heritage protection regulations and extremely costly: both factors have been a driver for many to relocate in cheaper and more comfortable housing. The peculiar local housing crisis is intensified by the lack of public and social rental housing stock, the rise of short term rentals in the last decades (Mariucci, 2023), and the weakness of rent control measures (common issues across Italy, where rental assistance programs have been systematically underfunded). This has made it difficult for low-income residents to remain in the city, as private rental prices continue to increase, and the historic center increasingly resembles a touristified desert. The public housing stock, which was already limited, has not expanded, making access to affordable homes nearly impossible for vulnerable groups.

In Assisi and in its surroundings, the presence of "green" (agricultural fields, forests, mountain area) is perceived as pervasive by the interviewees, due to overall low density and outstanding landscape qualities, even though within the city neighborhoods public green areas and parks are few and rather small. Main ecological challenges identified by the local actors include: inverting sprawl in the plain and reducing land take, together with inverting the trend of growing

[124] For further references, see: https://www.regione.umbria.it/protezione-civile/pubblicazioni?p_p_id=101_INSTANCE_PU2zkUL42Nay&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_count=1&p_r_p_564233524_categoryId=224125

car dependency; reusing vacant buildings (often linked to abandoned industrial plants or service buildings, and failed entrepreneurial activities, such as hotels); retrofitting the older residential stock in the two different versions (heritage medieval stock; modern housing); difficulties in overall decarbonization strategies due to heritage protection in the historical center (e.g., entailing constraints of photovoltaic roofs); more widely, the issue of combining transition to renewal with landscape preservation (especially regarding wind turbines on top of hills and the allegedly looming proliferation of photovoltaic fields over agricultural areas) (Latterini et al., 2025).

5.3.2 Green Transition Interventions in Assisi

The green transition initiatives introduced at the national and local levels have had mixed effects on housing affordability. Housing retrofitting programs such as the Superbonus 110% - introduced by the national Relaunch Decree (Decree Law 34/2020, Article 119) and subsequently amended by various laws (such as the 2022 Budget Law and subsequent Decree Laws) – are fiscal welfare-based, which provided financial incentives for energy retrofitting. Previous research has shown that Italian fiscal welfare-based retrofitting and renovation schemes, which have become prevalent in the Italian policy landscape, have primarily benefited wealthier homeowners rather than low-income renters (Figari et al., 2019; Jessoula, Pavolini, 2022), in an overall policy context that is not fostering social justice through ecological transition policies (Peverini et al., 2023; Carrosio, Cogliati Dezza, 2025).

At the local level, the 2017 Assisi action plan for sustainability and climate outlines the city's comprehensive strategy for addressing climate change through sustainability initiatives (Moretti, Stamponi, 2023). The Sustainable Energy and Climate Action Plan (PAESC) in Assisi, named *Assisi 2050 a carbon neutral city* ("Assisi 2050 una città carbon neutral"), has mainly encouraged the adoption of renewable energy and improved energy efficiency in housing. According to Moretti and Stamponi (2023, p.6),

„In 2021, Assisi joined the European Horizon 2020 European City Facility (EUCF) program, which funded the project "Towards a climate neutral Assisi: the role of citizens and tourists in the city of Francesco in the post-COVID new normal". The obtained resources aim to accelerate the achievement of the goals outlined in the PAESC, thanks to an in-depth technical, economic, and legal analysis of specific actions. Despite being a public-driven project, it primarily targets citizens and private entities and develops through two main directions. The first is a comprehensive renovation of residential buildings, aiming to save 26,749 GWh/year, with 7791 energy refurbishment interventions planned by 2030. These interventions involve improving the building envelope, enhancing energy systems, and transitioning from fossil fuel-based heating systems to more environmentally friendly alternatives. The second direction focuses on significantly increasing renewable energy production through the installation of new photovoltaic systems on public and private buildings' rooftops and the creation of the first renewable energy community (REC) within the territory of Assisi, as explained below."

The PAESC is a dynamic plan, subject to continuous monitoring, assessment, and revisions to align with evolving environmental and technological developments. It aims at positioning Assisi as a model city for balancing cultural heritage preservation with ecological sustainability, setting a precedent for other historic towns striving for climate neutrality. The PAESC aims to reduce CO_2 emissions by 40% by 2030 while improving the city's resilience to climate change. The PAESC is structured around key mitigation and adaptation measures, addressing energy

efficiency, sustainable mobility, renewable energy adoption, waste management, and climate adaptation strategies. One of its fundamental goals is to enhance energy efficiency across residential, commercial, and public buildings and includes incentives for energy retrofitting, installation of solar photovoltaic systems, and upgrading heating and insulation systems in existing buildings. To achieve this, the plan establishes thirteen strategic emission mitigation actions involving different sectors. Five actions are related to energy efficiency in different sectors, one action is related to renewable sources, three actions are related to mobility and transport, one action relates to energy efficiency and upgrading of public lighting, another relates to tree planting, another action involving raising awareness and involvement of stakeholders. And finally, for efficient and proper implementation and coordination of the actions, the Energy Management Office and Energy Counter (Sportello Energia) are established.

The public sector is leading the process, favoring the retrofitting of municipal buildings, switching to efficient lighting for public illumination, and promoting the REC (Moretti, Stamponi, 2023). The PAESC places a strong emphasis on renewable energy adoption. It promotes the expansion of Renewable Energy Communities (REC, or CER in Italian), where local stakeholders, including residents and businesses, can produce, share, and consume green energy collectively (Moretti, Stamponi, 2023). The city is investing in solar photovoltaic installations and other renewable energy infrastructure to increase self-sufficiency and reduce dependency on fossil fuels.

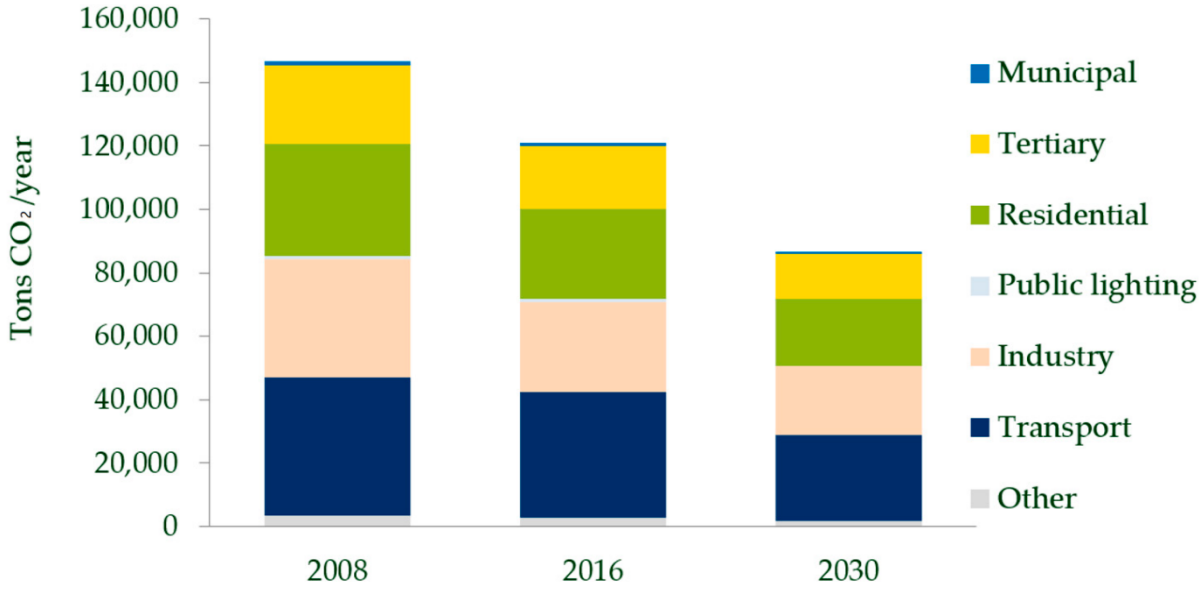

Figure 31 Outline of emissions in Assisi according to the PAESC. Source: Moretti, Stamponi, 2023.

Energy efficiency of residential buildings account for 19,5% of the reduction target of the PAESC – while, for example, mobility and transportation represent approximately 56%. According to the plan, residential retrofitting include:

The replacement of household appliances, lighting with LED lamps, efficient cooling systems, photovoltaic systems with storage systems to encourage self-consumption, etc.

All these actions are promoted by the Administration through territorial planning tools and communication with citizens, facilitated in particular by the energy help desk that the municipality is committed to setting up (actions S2 and S3, which will be a driving force for the action in question). The action will receive a significant boost thanks to incentive schemes (thermal account, energy efficiency certificates) and tax deductions, including the recently introduced 110% superbonus (PAESC, page 124).

The transport sector alone accounts for about 30% of total emissions, making it a major focus for achieving carbon reduction targets. A significant component of the plan is the sustainable mobility, as mobility and transportation represent approximately 56% of the reduction target of the PAESC. The PAESC envisions a transition toward low-emission transportation through policies like the renewal of private and municipal vehicle fleets, the promotion of electric vehicles, and the development of a Sustainable Urban Mobility Plan (PUMS). The PAESC highlights that “There are no dedicated cycle paths in the municipal area of Assisi”.

For the retrofitting of residential buildings, the PAESC seems mainly to rely on national instruments, such as the Superbonus 110%, and foresees a 4% yearly retrofitting rate. Therefore, within the social issues described of transition policies at the national level, the local translation of these initiatives has largely favored property owners rather than addressing the needs of renters, as highlighted also in the interviews (see below). As a result, the push for sustainability might have unintentionally contributed to housing inequalities. A partial correction could be the stress on public engagement and citizen participation Energy Management Office and Energy Counter (Sportello Energia) established to provide technical support for households and businesses in implementing energy-saving measures

A critical aspect of the PAESC is its approach to climate adaptation and risk mitigation. The plan identifies seven major climate risks, including heatwaves, floods, droughts, landslides, forest fires, and air and water pollution. Specific adaptation actions include reforestation efforts with the “Un Albero per Francesco” initiative, protection and restoration of Monte Subasio Park, and water conservation strategies like public water incentivization and the Zero Waste strategy.

In Assisi the main NBS intervention is the “Bosco di San Francesco”, a 64-hectares forested area open to paying visitors inaugurated in 2011 nearby the San Francesco Basilica. The park is owned and managed by Fondo Ambiente Italiano (FAI), a national NGO). The forest was already there, protected by the urban plan, but the project meant a more active management, the provision of small-scale infrastructures (e.g. trail paths, a restaurant, etc.) and featured an attractive land art piece by Michelangelo Pistoletto built using 121 olive trees. The main reasons for the project, in line with FAI policy and objectives, are the cultural and touristic valorization of historic and landscape heritage, mainly through donation- and ticket-based management. In this sense, this intervention has probably the effect of attracting visiting tourists, while not really contributing to daily use of green infrastructure which in fact is widespread all around in the Mount Subasio National park. Indeed, parks and gardens are a rare feature in the densely built historical centre, while the direct connection between compact urban “island” and the surrounding agricultural and natural land provides a rather high quality of the green infrastructure, being in itself a factor of housing price inflation.

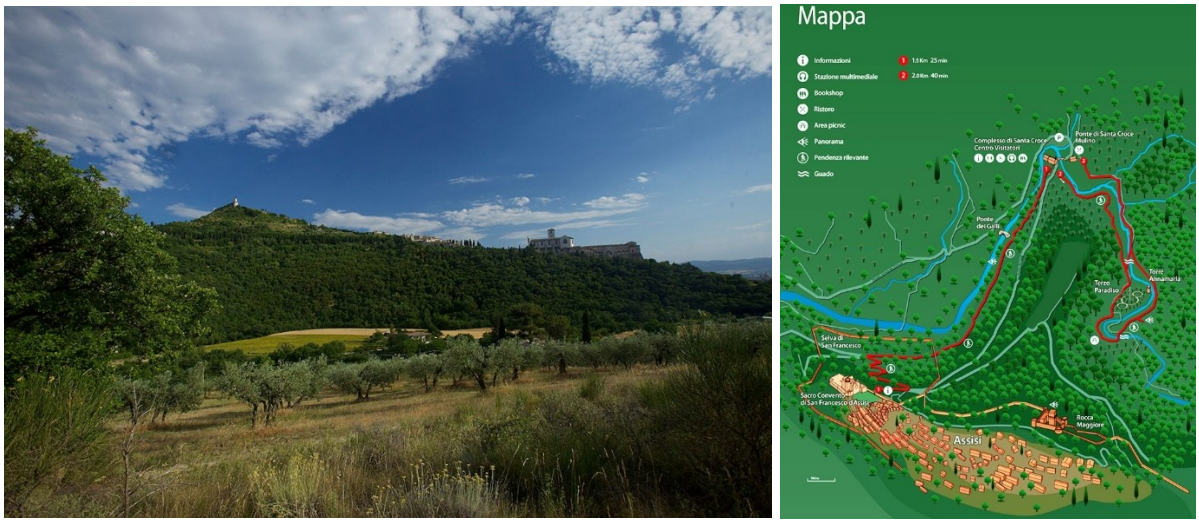

Figure 32 The Bosco di San Francesco. Source: Fondo Ambiente Italia

A grassroot project that is gaining increasing momentum is the so called “Parco della Piana”, The project was launched in 2022 by a network of local associations, with the aim of transforming the large valley-floor green area between Assisi and Bastia Umbra into an ecological, social, and landscape park, bringing together integral ecology, sustainable agriculture, slow mobility, and landscape regeneration. While the project is raising interest and gaining extensive citizen support, while there are signs of some political support, there are no binding regulations yet put in place to support its implementation.

The pressure of tourism is, however, acknowledged as the main driver of housing constraints due to heritage protection constraints in terms of new buildings and mainly features investments to turn residential buildings into hotel facilities or short-term rentals. This trend has also made it more difficult for younger generations and working-class families to secure stable housing in the city. Despite the economic benefits of tourism, its unregulated impact on the housing market has created significant affordability challenges, pushing many residents to the periphery or out of the city entirely. The absence of any significant housing policy initiative has made it difficult for low-income residents to remain in the historic city, as private rental prices continue to increase together with tourism rentals.

In conclusion, local policies for ecological transition of the building sector cannot display other resources and means and rely primarily on national (fiscally based) incentives for energy retrofitting, installation of solar photovoltaic systems, and upgrading heating and insulation systems in existing buildings. With the aim of counterbalancing some of the negative effects in terms of inequalities, the local plan promotes citizen engagement actions, and the creation of a municipality-driven Renewable Energy Community while the PAESC puts most effort on the transportation and mobility.

The city’s main green policy is, however, the strict heritage preservation regulation, limiting new building developments while allowing small-scale densification, in the city center and in many residential areas in the plain. Specifically, regional building regulations grant an increase

of 20% in building volume when a significant energy efficiency improvement is certified. This policy, valid for all building and not linked to local planning or mobility strategies, often results in an unregulated suburbanization process, as densified buildings are often far from sustainable mobility infrastructure, and might paradoxically induce extra car dependency (Mariucci, 2024; Lanfaloni, 2024).

Table 1. Key data on case study area of Assisi, focused on the PAESC.

	Municipality-wide	**Historic center**
Neighborhood characteristics (general social type, economic activities, density, etc.)	Historical city with strong tourism focus	Almost entirely dedicated to religious tourism
Duration	PAESC (municipality wide instrument) adopted in 2020, with target 2030	(as municipal)
Funding *(be explicit if public/private, nonprofit, etc.)*	Multiple sources (mostly relying on national level retrofitting incentives)	(as municipal)
Actor constellation *(aka stakeholders)*	Municipality, State, Private building owners	(as municipal)
Aims and objectives	Overall municipality-wide aims and objectives re: 40% reduction of CO_2 emissions	(as municipal)
Specific physical measures	Mainly: energy efficiency of mobility and transportation; retrofitting and energy efficiency of residential building through national incentives and regional density bonuses; a municipality-led Renewable Energy Community	(as municipal)
Accompanying housing policy/regulatory measures	Very few and small-scale housing policy measures (reuse of abandoned building for public housing)	(as municipal)
Key social tensions or/and benefits between	• Difficulties of retrofitting the old protected residential stock in the two different versions	As per municipal, plus high level

greening and housing	(protected medieval stock; housing of the boom); • difficulties in overall decarbonization strategies due to heritage protection in the historical center (e.g., entailing constraints of photovoltaic roofs); • Fiscal-based incentives for retrofitting might contribute to inequality, weak local correction measures; • location-blind retrofitting and densification policies might increase sprawl and car dependency (and some land take); • Difficulty in fostering reuse of vacant buildings (often linked to abandoned industrial plants or service buildings, and failed entrepreneurial activities, such as hotels) • tourism-focused greening initiatives might worsen touristification; • tourism promotion combined to planning limits to hotel expansion might push conversion of residential units into short term rentals; • more widely, the issue of combining transition to renewal with landscape preservation (especially regarding wind turbines on top of hills and the allegedly looming proliferation of photovoltaic fields over agricultural areas) (Latterini et al., 2025).	touristic desertification

5.3.3 Methods

In Assisi, twelve semi-structured interviews have been conducted involving fifteen respondents (two interviews were collective). The interviewee sample included representatives from the public sector (public housing associations and local and regional administrations), members of civic associations and NGOs involved in environmental and social issues, and representatives from the tourism industry. A key moment for the sampling was the Policy Lab held in Assisi on April 4th 2025[125], where we invited representatives of key local actors of

[125] The Policy Lab involved seventeen participants from Assisi and the regional context of Umbria. The methodology included a brief presentation of the project by the research team aimed at clarifying the objectives, research questions, methods, and case studies of Rehousin, tailored to the Italian context. Rehousin's research interests were broken down into a set of very open questions (see below), addressing both the positive and

different types (see dedicated report) and collected suggestions about additional interviewees. Concerning gender, while the Policy Lab was rather balanced, only 3 out 15 interviewees are female (20%), reflecting an unequal position of women in key positions in the region (including in civic groups). Interviews were conducted between April and September 2025, mostly in person. Furthermore, fieldwork has been conducted in Assisi, including visits to case study sites and photo documentation. Academic and grey literature on the case study sites was collected and analyzed and is referenced in the previous sections. Interviews were semi-structured, based on a template provided by the core group of WP5, and lasted approximately one hour each. All interviews have been transcribed, coded and summarized, and key quotations by interviewees have been extracted.

The interviews, together with relevant sections of the focus group transcripts, were coded via the MAXQDA software deductively, following a shared codebook developed within the core group of WP5. A few new codes were added for the specific context of Assisi, when relevant. The coding results were then pseudonymized.

In a next step, the researcher team identified the key topics that emerged from the interviews through an in-depth reading and discussion of the empirical material - this was aimed at establishing a shared analytical framing and at surfacing recurring themes and preliminary interpretations.

After that, an LLM tool was used - through a dedicated prompt - to perform the same exercise on the anonymized material, with the aim of identifying overlaps, potential biases, and themes that may have been overlooked by the researchers. The LLM tool was thus used as an additional analytical agent, supporting but not substituting the researchers' interpretative work.

The pseudonymized coding results were summarized (with the support of the LLM tool) around the main themes that are highlighted in this report. Key quotes from the coding exercise are reported in some of the following sections. LLM tool was used as follows:

- coding was summarized in a pseudonymized word file that included all relevant quotes with the related codes (interviewees were identified with a code "A1, A2, A3, etc."); the table with clarification of the alias was safely stored;
- regarding each of the nine codes (precedents and implementation, participation and governance, etc.), a researcher of the team read again all the quotes and created a list of relevant results emerging from the interviews regarding the code;

negative implications of ecological transition policies and programmes. Participants were divided into two equally sized groups, each guided by two members of the research team, allowing both greater depth and efficiency in the discussion, and more time for each participant to express their views. Free and open responses were encouraged, intervening only for the purpose of time management or to gently steer the conversation back on track when it drifted significantly from the topic.

- we created a prompt for the LLM tool, asking for a draft summary description of the interviewees' perspectives for each of the indicated results, based exclusively on the given empirical material (the file with anonymized quotes), giving the possibility to the LLM tool to indicate new results if based on at least two quotes;
- then, a researcher of the team has read, revised and expanded the summary of results – eliminating possible results that were not based on empirical evidence of the quotes.

5.3.4 Civic Perceptions of Green Initiatives in Case Study Areas: Assisi

5.3.4.1 Precedents and implementation

The analysis of precedents and implementation emerging from the interviews highlights a policy trajectory marked by structural constraints, institutional discontinuities, and place-specific legacies.

The **peculiar urban form** of the regional territory, with historical centers situated on top of steep hills, had several consequences on urban development trajectories. Especially in Assisi, the famous and celebrated **1957 Astengo urban plan** is very often referred to as a major strategic choice that paved the way to an extensive preservation of the landscape and of the medieval fabric of the city.

In this context of very sensitive and valuable heritage, **the 1997 earthquake** played a further relevant role in the regional and local trajectory of the city. The post-earthquake reconstruction planerred to for the high-quality building interventions and became a long-lasting catalyst for funding and technical capacity, while it also accelerated residential displacement from historic centers and their subsequent tourist-oriented reuse (A4, 29). This dual legacy - capacity-building in intervening on of a fragile and sensitive built environment on the one hand and socio-spatial restructuring on the other - continues to shape current implementation frameworks and policy debates in Assisi and, more broadly, in Umbria.

> *"When I was working at the historic center office, a specific law had been passed as it was realized that simply redeveloping physical appearance was not enough: vitality and economic activity had to be brought back to those areas. It was a commendable attempt, but I don't know if it really succeeded in reversing the trend. Meanwhile, businesses were moving out of the historic centers to abandoned industrial areas on the outskirts of the city, which were being transformed into shopping centers accessible by car. The historic centers were emptying."*
>
> *Civil servant in regional administration (A3, 111)*

This happened in **Assisi as well as in many other historic centers, depopulating as households moved to more recent urban fabric** in new or 20th century concrete buildings. The hollowing out of historic centers emerged as a long-term trend, driven by the relocation of residents and economic activities toward peripheral or commercially oriented areas (A3, 111). From a spatial perspective, several institutional interviewees discuss earlier shortcomings in

regulating land-use change following those transformations. **Insufficient attention to land speculation** in past planning phases led to the conversion of agricultural land into residential areas without adequate public returns, representing a missed opportunity to secure public housing as a planning gain (A2, 37):

> *"In the 1990s, urban planning standards (green spaces, parking, facilities) and equalization measures were introduced to reduce speculation in zoning changes. Today, there is greater focus on quantifying the public "quid pro quo" and recognizing the economic value of the building index. In the past, however, many agricultural areas were converted to residential use without obtaining sufficient public benefits: a missed opportunity. In the new plan forecasts, public housing could be better constrained as a territorial resource, imposing it when variations are requested."*
>
> *Public manager in urban planning (A2, 37-38).*

However, the earthquake and depopulation of historic towns also triggered some interesting exceptions and positive cases, such as the reconversion of empty buildings for public housing – as in the case of the former hospital in Assisi which in 2017 was converted into public housing, providing 28 dwellings.

Institutional discontinuity emerged as a critical issue. Interviewees contrasted earlier phases (in the 90's and early 2000's) characterized by more stable policy frameworks - particularly during the long season of complex urban programs - while the past ten years were marked by frequent political change and staff turnover. In the past, continuity in decision-making allowed administrative competences to consolidate and reporting procedures to become routine (A6, 95). By contrast, the various urban policy programs promoted in the recent years are described as burdened by fragmented responsibilities, high turnover of officials, and the loss of experienced personnel at both regional and national levels, weakening implementation capacity (A6, 101–102). Political shifts were consistently associated with intermittent policy priorities and abrupt changes in approach (A3, 22; A3, 104; A10, 7). A key structural turning point repeatedly mentioned is, at the end of the 1990s, the abolition of the GESCAL (Gestione Case Lavoratori - *Management of Housing for Workers*) the national public fund created in 1963 to finance the construction and allocation of housing for workers. The end of this stable state-financed mechanism for public housing led to a sharp reduction in new housing provision and forced a shift toward compensatory instruments such as schemes and programs for the regeneration of public housing estates and, later, finance-linked social housing funds. Several interviews underline that this transition resulted at the local level in an insufficient public housing **provision** and increasing reliance on episodic programs rather than long-term strategies (A2, 53; A6, 108–111).

> "*No new public housing has been built. Demand far exceeds supply: the situation is completely inadequate. Something could also be done about rents and existing housing, but this requires significant investment and, above all, political will."*
>
> *Public manager in urban planning (A2, 53)*

While the Region and some Municipalities attempted to mitigate this through the regeneration of the existing stock and the conversion into housing of existing buildings, the overall capacity to respond to rising demand remained inadequate. The words of the president of the regional public housing agency (ATER) are very clear:

"To properly frame the issue, we must start with one fact: the closure of GESCAL. Until then, public housing programs were financed by the state through regionalized funds (Umbria quota, Lombardy quota, Tuscany quota, etc.). With the end of GESCAL in the late 1990s, this system ceased to exist and had to be compensated for in other ways, such as through complex urban programs. During that period, attempts were made to give ATER new opportunities, including self-sustainability. Then, with the Prodi government (1998-2000) and later with Berlusconi, came the era of so-called social housing and the FIA Fund, in which what remained of GESCAL was used - in part as a non-repayable grant - to co-finance this new instrument. From then on, some regions more sensitive to the issue of housing, such as Umbria, tried to implement policies to enable ATER to renovate buildings for use as public housing. The idea was that even small villages could be revitalized through the presence of social housing."

Urban planning expert (A6, 108-111).

Concerning ecological transition policies, a recurring theme concerns the gap between policy intentions and actual outcomes, particularly in relation to the socio-economic conditions of beneficiaries. A paradigmatic example is the adoption of centralized heating systems in public housing. While technically grounded in principles of efficiency and standardization, interviewees stressed that these systems often fail in practice due to the very limited spending capacity of tenants, who are unable to afford heating costs even when infrastructure is provided. As one key informant noted, installations were celebrated as successes, yet later evaluations revealed that many systems were underused or not used at all (or even interrupted) because tenants could not pay for energy consumption (A6, 14–16). This highlights a broader mismatch between technical solutions and the economic realities of low-income households.

"At first, everything looks like a success … but then you check and discover that none of them really worked. I remember a manager saying, half-jokingly but not entirely, that there is no better example than a social housing tenant who gets a new boiler installed but, not having the money to pay for it, doesn't even turn it on"

Urban planning expert (A6, 14-16)

A similar mismatch was raised between the technical solutions used for the Superbonus 110% and the real environmental and energy improvements.

"However, the problem is that interventions are often limited to maintenance: photovoltaic panels or fixtures installed on buildings without adequate insulation or with incorrect exposure. This means that efficiency gains are not real. Even the software used to certify energy classes produces dubious results. Furthermore, the technical quality of designers varies greatly. For this reason, the actual impact of interventions remains a big question mark."

Public manager in urban planning (A2, 68)

5.3.4.2 Participation and governance (procedural)

The interviews converge on a critical assessment of participation and governance processes, revealing structural weaknesses in consultation practices, existing asymmetries of power among actors, and uneven inclusion of affected populations. While several policy initiatives rhetorically reference participation or bottom-up approaches, their implementation is often described as partial, selective, or overridden by top-down decisions. Overall, the interviews depict a governance landscape in which participation is formally recognized but unevenly practiced, constrained by hierarchical decision-making and selective inclusion. These dynamics limit the capacity of participatory processes to influence outcomes and raise questions about their role in addressing broader issues of social equity and territorial governance.

A first, recurrent theme concerns the **limited quality of consultation and participatory processes**. Professionals involved in preliminary policy design reported the tendency to be often excluded during later implementation phases, particularly when strategic decisions are taken without prior discussion with those who had contributed to project formulation. One respondent described the frustration of seeing a carefully developed project substantially altered without consultation, raising doubts about whether the project's objectives had been understood at all (A9, 26). This perception of symbolic rather than substantive participation suggests that consultation is often confined to early or formal stages, while key decisions remain centralized.

Closely related is the tension between **bottom-up initiatives and top-down governance**. In projects that explicitly aimed to adopt inclusive, bottom-up approaches - especially in the fields of tourism and territorial development - interviewees reported some difficulties with municipal authorities. Conflicts emerged when higher-level institutions-imposed investment priorities or external communication strategies that contradicted locally defined goals, such as social inclusion or mitigation of gentrification pressures (A9, 25). This dynamic illustrates how governance arrangements can neutralize participatory ambitions by reasserting hierarchical control at decisive moments.

A third theme concerns **civic inclusion and exclusion**, particularly regarding which social groups are effectively represented in governance processes. Several interviews highlight that participation processes tend to favor organized actors, professionals, or economically stronger stakeholders, while marginalized groups - such as low-income residents or those directly affected by housing and tourism pressures-remain underrepresented. The general framing of "green" or "sustainable" tourism - mainly referring to nature trails and outdoor activities in the outstanding resorts in the rural outskirts - as inherently positive was explicitly criticized for masking distributive effects that disproportionately benefit higher-income users while producing exclusionary outcomes for residents (A9, 25). This selective inclusion reinforces existing inequalities and limits the redistributive potential of participatory governance.

"Otherwise, green tourism is actually seen as an antithesis, as a force that conflicts with social livability. Because there is a push for it, since it is a push for green tourism, it has taken on a gentrifying aspect. We had a rather heated debate with the Municipality of Assisi because our entire project was based on this very bottom-up approach, seeking to include all those members of the population who normally suffer. One of the points of the project we are working on is an ethical charter for tourism, a kind of pact between all the parties involved, the stakeholders and also the population, in which we try to agree on a kind of shared protocol of values, principles, and rules of coexistence that allow this. However, there was a clash because at a certain point they imposed on us that, in addition to investing a large part of the funds in the restoration of the [hidden], they had this large company carry out this campaign…"

Urban planning expert (A9, 25)

The interviews also point to **weak feedback loops between civil action and institutional change**. While forms of civic engagement and advocacy exist - often driven by associations or informal networks - their impact on institutional policies appears uncertain. Even when bottom-up proposals are acknowledged, they do not consistently translate into binding policy adjustments, such as in the case of the Parco della Piana project (A12, 9; A4, 46). Given the extensive citizen support for the project, the lack of binding implications contributes to a perception that governance structures absorb participation rhetorically while remaining largely impermeable to substantive change.

Finally, governance challenges are compounded by **fragmentation across policy domains and institutions**. Participation is often organized on a project-by-project basis, without stable, institutionalized arenas for dialogue between public authorities, civil society, and residents. As a result, as argued by interviewees from civic groups and NGOs, participation heavily depends on individual projects or actors rather than being embedded in governance routines, increasing the risk of exclusion when political priorities or administrative leadership change.

5.3.4.3 (in)equity (distributional)

As mentioned, densification and greening are not highly relevant policy fields in Assisi, while energy retrofitting (sometimes through density bonuses) is acknowledged by interviewees as very relevant. The interview material collected in Assisi points to a relatively consistent perception of the Superbonus 110% as a policy instrument characterized by uneven distributive outcomes. Across interviews, respondents converge on the view that the measure interacted with existing social, economic, and housing structures in ways that favored specific groups, while leaving others marginally involved or excluded.

A first, strongly shared theme concerns the **social selectivity of access to Superbonus 110%**. Multiple interviewees state that the main beneficiaries were homeowners belonging to middle-high and high-income groups, who possessed the financial capacity, informational resources, and professional support required to engage with a complex incentive scheme (A4, 40; A5, 62; A5, 112; A4, 22; A11 ,3). The ability to anticipate costs, manage administrative uncertainty, or tolerate potential regulatory changes is repeatedly described as a decisive factor. Conversely, low-income households are depicted as structurally constrained by

insufficient tax capacity and limited access to technical assistance, conditions that restricted their effective participation even when formal eligibility existed (A11, 5; A12, 7).

A second recurring theme relates to the **limited provision of benefits for public and social housing**. Several respondents underline that the application of the Superbonus 110% to public housing stock was minimal, particularly outside major urban centers (A1, 56-58). This outcome is attributed to institutional and procedural barriers, including the complexity of public procurement, governance constraints, and difficulties in managing large-scale interventions within public ownership frameworks (A1, 61). As a result, the distribution of benefits remained concentrated in the private housing sector, reinforcing a perceived imbalance between public expenditure and social reach (A1, 56; A6, 34). Importantly, social housing dwellers and other groups excluded by the Superbonus 110% are highlighted by many interviewees (institutional, civic and related to tenant unions) to be the ones at higher risk of energy poverty.

"The superbonus was not a procurement, where you do something for me and I give you the money. The superbonus was: you do something for me, I pay you in 5 or 10 years (they changed it 20 times) in tax credit transfers. So you have to have the tax credits. But tax credits could be bought. And we had to find someone who, in exchange for carrying out the works eligible for financing, would buy the tax credits. So it wasn't just a case of "you do it and I pay you": you do it, I certify that you've done it, you deduct the tax credits, you finance it with the banks. So it's a very complicated procurement for the public."

Representaive of Regional Public Housing Institution (A1, 64)

A third theme concerns the **interaction between the Superbonus 110% and real estate dynamics**, especially in a city with strong touristic attractiveness such as Assisi. Interviewees frequently associate the measure with processes of property valorization, particularly for single-family homes and properties located in high-value or scenic areas (A4, 40-41; A4, 63; A11, 3). In several accounts, energy retrofits are described as contributing to speculative revaluation or facilitating the conversion of dwellings into tourist accommodations, rather than improving housing affordability or energy conditions for residents (A5, 62; A9, 45).

"Another aspect concerns energy retrofitting policies, such as the Superbonus 110%. We have seen that it had unequal outcomes: those who benefited were mainly property owners who could have afforded the works anyway, because they had the ability to advance the costs or to rely on professionals capable of handling such complex procedures. From an environmental point of view, it was positive, because reducing consumption is always beneficial, but from a social perspective it raised questions. In some cases, it led to speculative revaluation of properties rather than an equitable benefit for everyone. There are also people who were left 'halfway through' the works, unable to complete them."

Representative from Municipalities Network (A5, 62)

A fourth, widely shared perception concerns the **uneven distribution of benefits and burdens across tenure groups**. Property owners are consistently identified as advantaged, having benefited both from direct incentives and from longer-term increases in property value (A4, 63; A6, 34). Renters, young households, and those without property assets, by contrast,

are described as facing rising housing and energy costs, without access to comparable policy benefits (A6, 26; A4, 63; A6, 26). This dynamic is framed as contributing to broader socio-spatial inequalities within the local housing market.

Overall, the interviews depict the Superbonus 110% not primarily through its technical or environmental characteristics, but as a policy whose outcomes were strongly mediated by pre-existing inequalities in income, property ownership, and administrative capacity. Perceptions of inequity thus emerge not from isolated shortcomings of the instrument, but from its interaction with a local housing system characterized by unequal distributions of property ownership, financial resources, and access to technical expertise.

5.3.4.4 Political mobilization

Political mobilization in Assisi in relation to housing, regeneration, and environmental transitions is quite limited. Some historic and contextual factors – like an organized, dominant and extensive influential role of formalized political parties – result into a rather weak civic landscape in which mobilization exists, but is fragmented, reactive, and structurally constrained. Until recently, most local associations were mainly focused on the promotion of single events/project based on a direct relation with political representatives – providing resources or support, on an almost clientelism-based relation. However, the situation has changed, especially after the fall of the political majorities that had ruled for almost half a century (Latterini et al., 2025). However, overall political mobilization occurs to be as a defensive, uneven practice, shaped by immediate impacts, power asymmetries, and limited confidence in institutional receptiveness.

A first, clearly shared theme is the **overall weakness and fragmentation of collective mobilization**. Several interviewees noted that, despite growing pressures linked to tourism, housing affordability, and energy costs, overt mobilization has remained limited or episodic rather than sustained and collective (A4, 32–35). This absence of visible conflict was often explained by the facts that: conversion of dwellings into short-term rentals often benefitted previous owners, and happened on houses that were often left for being old or damaged by the earthquake; many interventions affected buildings or spaces that were already underused or distant from everyday residential life, thus dampening immediate reactions (A4, 32–35).

A second recurring theme concerns the **selective and uneven nature of mobilization**, which tends to emerge only when tangible and immediate inconveniences are perceived. Resistance was more clearly observed in cases where interventions affected daily practices, such as the reorganization of road space or the reduction of parking availability. In these contexts, interviewees reported strong opposition from residents accustomed to car-centered mobility, illustrating how mobilization is often reactive and focused on the defense of established routines rather than proactive engagement with broader policy goals (A12, 7). This pattern suggests a pragmatic, interest-driven form of civic action rather than ideologically or programmatically oriented mobilization.

Yet, the interviews highlight the **emergence of new localized advocacy and grassroots initiatives**, particularly around issues of environmental preservation (like in the case of the Parco della Piana association) and the menace of organized crime infiltration into the entrepreneurial fabric of the city – attracted by the money-laundering opportunities offered by tourism.

"Let's say that they are those with major economic interests which, in this case, were not the classic entrepreneurial ones, so to speak, but we probably also had entrepreneurial groups with unclear intentions, not to mention those involved in criminal economies, who, with large sums of money at their disposal, were able to assert themselves as primary buyers at a time of major change in the tourism market in the area. A market in which the small, family-run businesses that have always characterized the historic center of Assisi were not so ready to face this type of change… So, with [the association] Libera, to combat all uses of the city that are harmful to residential life, we promote many initiatives."

NGO-representative (A4, 13-63)

One example is the Parco della Piana d'Assisi, which is a grassroots project. It has been accepted by the administration but has not yet really got off the ground and there are still studies to be done. Basically, the project originated from the bottom up with the idea of stopping land consumption in the Piana d'Assisi, i.e., the area between Assisi, Santa Maria degli Angeli, and Bastia, but it goes further, let's say towards Spello, towards Cannara, let's say this whole area here, which can then be expanded because the damaging area also extends towards Perugia in some way and towards Foligno, so if desired, it could be expanded further. The idea was to maintain the agricultural vocation of the plain itself, but to ensure that a multifunctional park is created."

Representative from Park Association (A12, 9)

The issue of housing and tourism-related housing vulnerabilities is seen by interviewees as increasingly salient but still insufficiently translated into political leverage. Neighborhood committees and associations on these topics are described as still absent or gradually forming, often supported by research or advocacy work that provides residents with arguments and legitimacy to articulate claims (A4, 61; A9, 25).

"While in Assisi we usually talk about everything, like chatting at the bar, we then turn away from the topic of residentiality and the effects of tourism on residentiality. For the first time, perhaps thanks to this type of work, we have grassroots support to try to propose policies …This residents' committee is undoubtedly coming into being thanks in part to a discussion that I helped to initiate. The discussion has always been there, but the research behind it has helped to put it in place or rather provided the right tools to address the problem."

NGO-representative (A4, 61)

However, these forms of mobilization were perceived as fragile and highly dependent on individual actors or specific projects, rather than embedded in stable, long-term civic infrastructures, and some respondents emphasized that public debate often remains superficial, with housing impacts of tourism widely acknowledged in informal discussions but rarely addressed through strong political demands (A4, 61).

*"The perception of **asymmetrical power relations** also shapes civic attitudes toward mobilization. Interviewees express skepticism about the ability of grassroots action to influence decisions dominated by economic interests, external investors, or higher-level political agendas. This is particularly evident in accounts of conflicts over regeneration projects that resulted in the loss of social spaces, where mobilization was perceived as too weak or too late to prevent outcomes detrimental to community life (A4, 36–37). "one intervention that caused many problems and had a very serious impact on social life was the redevelopment, following the earthquake, of the former Santa Caterina prison, which was first the headquarters of one of the largest associations in the area and then the Arci club, and which was then transformed into a luxury accommodation facility."*

NGO-representative (A4, 36-37)

The interviews suggest a broader **fatigue in daily life of living in the historical center and normalization of exclusion**, especially among vulnerable groups and young people.

5.3.4.5 Socio-ecological impacts/benefits (positive)

Some of the interviewees highlight a set of positive socio-ecological impacts associated with energy retrofitting, collective energy solutions, and nature-based interventions. These informations are grounded in everyday experiences and focus on tangible improvements in living conditions, energy security, and community life.

A first recurring theme concerns the **benefits of energy retrofitting and improved energy performance of dwellings**. Interventions such as thermal insulation (the so called "cappotto termico") and the installation of new systems significantly reduce energy consumption, lower heating costs, and improve indoor comfort across seasons. Several interviewees focus on the older housing stock, particularly in historic centers, where external insulation cannot be applied due to historic and architectural preservation constraints. Retrofitting and higher energy classes translate into warmer homes, improved wellbeing and reduced reliance on inefficient or supplementary heating methods (A6,46–48; A8,31–32). These improvements are therefore framed not only as economic advantages but also as enhancements to overall quality of life.

"*One thing that truly surprised me was the thermal insulation: at first, I was against it because of the costs, but then I went ahead following my father-in-law's advice. The result is extraordinary: in summer the house stays cool without air conditioning - on the contrary, in the evening I must close the windows because cold air comes in. We installed it ten years ago, before any incentives, and I can say it was an investment that greatly improved our quality of life, even in winter, by reducing heating costs."*

Hotel Owner and Inhabitant (A8, 31)

A second theme relates to **energy communities as tools for energy security and social equity**. Collective energy arrangements are considered as a promising mechanism to reduce individual energy costs and address energy poverty, particularly when properly supported by regional authorities and public housing institutions. Ensuring affordable access to heating is explicitly framed as an objective that aligns ecological transition with social justice, reinforcing the perceived social value of such initiatives (A6,123–124).

Nature-based solutions also emerge as a key positive dimension. **Urban green spaces are described not merely as environmental assets but as social infrastructures**, especially in dense or car-dominated urban contexts. The presence of accessible green areas near housing is associated with improved livability, reduced cooling needs, and enhanced opportunities for social interaction, particularly for residents living in small dwellings (A12,13; A8,8). Green spaces are thus perceived as supporting both environmental adaptation and everyday social practices.

Similarly, **landscape care and green infrastructure are considered key factors in promoting more sustainable forms of tourism**. Investments in parks, cycling infrastructure, and the maintenance of natural and semi-natural areas are seen as enabling walking and cycling tourism, generating positive territorial impacts also off season and revitalizing otherwise marginal or declining areas. Such forms of tourism – as in the "Vivi Assisi" project funded by the Ministry of Tourism within the Recovery and under the UNESCO framework- are associated with longer stays, lower environmental pressure, and broader local benefits compared to mass tourism models (A4,46; A9,12; A9,24).

5.3.4.6 Socio-ecological impacts/harms (negative)

Negative social impacts in Assisi are largely associated with tourism dynamics and structural limitations in the provision of social housing, rather than with green interventions. Respondents consistently report that **gentrification and displacement in the historical center** are driven by high tourism demand and short-term rental proliferation. Properties increasingly serve as vacation homes or tourist accommodations, raising housing prices and reducing accessibility for long-term residents. Municipal incentives to encourage relocation to the center were deemed ineffective in countering these trends (A2, 20; A3, 111-113). The interviews further highlight **spatial inequality**, as high-income households occupy central areas while middle- and lower-income residents have been displaced, including older residents and immigrant communities (A4, 40-41; A4, 43-44; A9, 18-19, 28, 31). Notably, in the perception of respondents these effects, as in other historical centres, were already driven by the challenging uncomfortable conditions of the poorer old housing stock (and high costs needed for its upgrade) and the offer of more comfortable cheaper housing in the plain. Somehow these processes affected but not uniquely induced by ecological or retrofitting policies.

The availability of social housing remains structurally low due to chronic underinvestment. Demand far exceeds supply, and few new developments have been realized in recent decades (A2, 23-24, 53; A3, 68-69). Scarcity is exacerbated by tourism-driven price increases, which

further limit central urban living for low- and middle-income residents (A4, 43-44, 48, 57). Another, less-reported dimension of negative perceptions concerns **opposition to green interventions**. Interviewees reported resistance when urban redesign or retrofitting projects reduce parking lots or create any kind of inconvenience (A12, 7-7). In public housing specifically, some residents deactivated ventilation systems, likely due to noise or perceived operational burdens, highlighting a need for **passive retrofit solutions** that do not require user intervention or incur additional costs (A1, 38). These cases represent the main negative social effects directly linked to green interventions.

In summary, negative socio-ecological impacts are primarily **tourism- and housing-system related**, rather than induced or associated with environmental policies. Green interventions may generate short-term disruption, but broader social concerns stem from the interaction of high market pressures, inadequate public housing, and touristification.

5.3.4.7 Tensions and power dynamics between stakeholders/actors

Structural tensions and asymmetric power relations emerge among actors involved in housing, urban regeneration, and sustainability policies. These tensions feature both the operational level - between residents, public managers, and private actors - and the institutional level, across governance scales and administrative competences.

A first recurring theme concerns **contradictions and disputes between actors**, particularly at the level of implementation. Technically sound retrofit or energy-efficiency interventions are contested or undermined in practice by residents or co-owners. As mentioned above, in public housing contexts, residents have been reported to deactivate or physically block ventilation systems perceived as noisy or intrusive, revealing a misalignment between design assumptions and everyday use (A1,38). This points to broader tensions between expert-driven solutions and user practices, reinforcing the perception that some interventions should be “passive” and not dependent on residents’ capacity or willingness to manage them (A1,38).

Similar conflicts emerge in mixed-ownership condominiums, where decision-making rules grant veto power to both public and private owners, as the private owners - who generally gained ownership of the previously socially rented flat with a lot of economic effort and exposure - resist to further investments in the property. This controversies results in stalemates that prevent retrofitting despite public actors holding the majority of property shares (A1,51).

Institutional fragmentation and responsibility spread across governance levels is identified as a major concern. Energy and housing policies are designed at European and national levels, filtered through regions and municipalities, but ultimately implemented by public housing managers who lack adequate resources and decision-making power. This governance chain produces a structural responsibility gap: while strategic objectives are set “from above,” operational and financial risks are borne by the last link, often by ATER (the public housing company) or similar public bodies (A6,11–12). The inefficiency or ineffectiveness of policies is therefore never neutral, as it translates into concrete economic and managerial burdens for implementing entities, discouraging experimentation and making “green” policies appear as isolated, non-replicable cases (A6,11–12).

"This highlights a structural problem: policies originate at the European level, pass through Regions and Municipalities, but no actor assumes full responsibility for them. In the end, everything falls on the last link in the chain, often the public housing provider itself. The inefficiency or ineffectiveness of a policy is never neutral: it always impacts those who are tasked with implementing it. This is an issue that should be addressed seriously, because too often "green" policies remain isolated, non-replicable cases that ultimately fade away on their own. For the technical offices of public bodies, they become experiences to be avoided, for fear of generating further economic problems".

Urban Planning Expert (A6, 11-12)

A related tension concerns **financing mechanisms and access to subsidies**. Interviewees highlight how funding schemes for green housing operate on a "first-come, first-served" basis, favouring actors with greater administrative capacity and liquidity (A1,54). The Superbonus 110% is repeatedly cited as emblematic: its procedural complexity, reliance on tax credit mechanisms, and continuous regulatory changes made it largely inaccessible to social housing providers (A1,61; A6,34–35). As a result, social housing benefited little, if at all, from a measure that instead disproportionately favored private homeowners able to anticipate costs and navigate complex financial arrangements (A5,62).

Another core theme revolves around **conflicting policy goals**, particularly between environmental sustainability and housing affordability. Interviewees describe how energy-efficiency requirements, maintenance costs, and increased condominium expenses can paradoxically exacerbate financial vulnerability among low-income residents (A3,25; A6,9–10) while especially in historic centers, heritage protection authorities are perceived as obstructing the economic benefits of energy retrofitting by restricting solar panels or insulation measures to preserve architectural features and (A9,22).

Finally, several interviews underline the lack of integration between **urban regeneration and retrofitting policies**. While housing renovation is often accompanied by expectations to extensive upgrade public space, funding streams and institutional responsibilities remain fragmented, forcing actors to navigate parallel and poorly coordinated policy tracks (A3,39; A3,101). The result is that sometimes buildings are renovated but public space is not upgraded. Overall, civic perceptions depict a governance system marked by fragmented authority, uneven power relations, and persistent tensions between policy ambitions and socio-economic realities.

5.3.4.8 Innovative governance mechanisms

Across the interviews, innovative governance mechanisms are not framed primarily as the creation of new institutions, but rather as **recombinations of existing actors, regulatory tools, and financial instruments** to respond to structural constraints in housing, energy, and territorial management. Interviewees consistently referred to mechanisms operating at an intermediate scale - between individual buildings and comprehensive planning frameworks - as the most promising ones.

A first core mechanism relates to **"zero land take" objective through public acquisition and reuse of existing buildings**. In the last years, the public housing sector in Umbria has followed a strict policy framework of reduction of soil consumption and renovation of the existing heritage, mainly based on funding coming from upper levels of government. Practices of reusing historic or publicly owned buildings for different forms of affordable or public housing were identified as a distinctive feature of the Umbrian context (A5 e, 41–45; A6, 61; A6, 73). The expansion of the public housing stock by ATER Umbria has almost entirely happened by purchasing existing dwellings or buildings (A3, 51; A3, 57–58). This approach was supported by regional planning instruments that promote reuse within historic centers through regulatory exemptions, incentives, and targeted flexibility, while maintaining strict limits on urban expansion (A3, 52; A3, 86–87).

"Over the last ten years, the Umbria Region has implemented plans financed mainly with state or EU funds. This funding has almost always followed two guidelines: zero land consumption and restoration of existing heritage … "We have implemented the expansion [of the ERP public rental housing stock], but always in compliance with the rule of the last ten years: zero land consumption. In practice, this has been done mainly through the purchase of ready-made buildings. For example, Maria Elena mentioned the student residence earlier: in that case, these were apartments that had already been built, were vacant, and were privately owned. The purchase and renovation of these properties allows us to increase the ERP stock, but always without consuming new land".

Civil servant in regional administration (A3, 7-12)

"In Assisi, I was always struck by the case of the former hospital in Via San Francesco, which was converted into public housing. It was a unique case: a hospital that became public housing, right in the historic center. In Lombardy, for example, in Milan, I have never seen anything like it…"It is very interesting because the example of the hospital in Assisi predates complex urban programs by a long way. It was a specific intervention, a course of action that showed how a disused building could be effectively reused. This case demonstrates that significant examples of regeneration existed even before complex urban programs."

Urban Planning Expert (A6, 61-73)

However, this has not happened for the private building sector, which still relies heavily on greenfield development.

"Over the years, however, many agricultural areas have been converted into residential areas without sufficient public compensation. Today, however, there is more attention: when a variation is approved, significant compensation is required (offices, spaces for associations, public housing)."

Public manager in urban planning (A2, 46)

Regarding the **energy retrofitting of the public housing stock**, the policies "Conto Termico" (Thermal Account), Law 80/2014, and some funding linked to the National Recovery and Resilience Plan and the government-funded "Sicuro Verde Sociale" (Safe, Green Social)

national program - are mentioned by the public housing company as best practices, while there are also high expectations for the implementation of the Social Climate Plan that has to be implemented in order to access the EU Social Climate Funding in the period 2026–2032.

"There is one specific measure, the M7, in particular investment 17 and therefore the 'new PNRR' [the National Recovery and Resilience Plan, authors' note], formerly known as Repower EU. In this, approximately three and a half billion euros are earmarked for institutions, formerly autonomous institutions, to overcome the difficulties associated with energy poverty"

Representative of regional public housing institution (A1, 6)

"I would say that Law 80/2014, although now outdated, was fundamental because it guaranteed ATER constant annual funding. This is very important, given that ordinary and extraordinary maintenance are strongly affected by turnover in rentals. Having regular funds allows us to quickly put updated housing back on the market, for example by replacing boilers and systems."

Civil servant in regional administration (A3, 24)

The perspective of various institutional actors witnesses that more regular funding would be a fundamental key to assure efficient and continuous renovation of the public housing stock, in other words to make it fastly ready and energy efficient for beneficiaries.

"Today, a similar role is also performed by the "Sicuro Verde Sociale" program, which has a total budget of approximately €36 million allocated to routine and extraordinary maintenance and renovations, always in line with the principles of zero land consumption and energy efficiency. The program is progressing very quickly: according to the latest monitoring, approximately 50% of the work has already been completed. In the last two years, around 200 homes have been put back on the market, and the total estimate is almost 800 units."

Civil servant in regional administration (A3, 28).

A second theme concerns **institutional learning from past integrated programs**, particularly the legacy of Piani Urbani Complessi, PUC (Integrated neighbourhood regeneration programs). In many cases, these programs have been formative experiences that improved administrative coordination, reporting capacity, and community engagement skills across municipalities (A6, 57–60; A6, 95). Building on this legacy, some respondents suggested reclaiming a transformative role for ATER as a public urban regeneration agency capable of integrating housing provision and management, physical renovation, and social objectives (A6, 71; A6, 83–84).

A third theme concerns **community-scale governance for the energy transition**. Several respondents emphasized that building-by-building incentives are poorly suited to contexts such as public housing or historic centers, whereas meso-scale platforms could pool producers and consumers, manage complex administrative procedures, and capture public incentives more effectively (A1, 6; A2, 8). In Assisi, the Renewable Energy Community "Cantico" was

described as a virtuous associative structure capable of attracting public tenders and private investment, with objectives extending beyond short-term bill reductions toward longer-term public policy outcomes (A2, 8; A4, 16).

> *"We have also launched an energy community in Assisi called Cantico. It was established as an association (not a public body), promoted together with local entrepreneurs and associations. The goal is not so much to reduce bills as to create a tool for public policies and partnerships with private individuals, capable of managing investments in energy efficiency and responding to calls for tenders."*
>
> *Public manager in urban planning (A2, 8)*

Several interviewees stressed the need for regional oversight and the direct involvement of ATER as a guarantor, to ensure – by public guidance - that such mechanisms translate into real reductions in energy expenditure targeting low-income tenants (A6, 123–124). Similar logics underpin the philosophy of municipal energy helpdesks and Energy Service Company-based agreements for public lighting and buildings, which act as institutional intermediaries between technical expertise and everyday users (A11, 10; A2, 6–7).

Finally, s**oft governance instruments to manage tourism pressure**, such as ethical tourism charters and multi-stakeholder pacts aimed at developing a more ecological and socially sound form of tourism (against the monoculture of mass pilgrimages and event related tourism), are considered relevant to mitigate speculative dynamics and rebalance relationships between residents, operators, and institutions, particularly in UNESCO-designated contexts (A5 e, 67; A9, 25).

5.3.4.9 Tourism and market pressures

Since centuries, Assisi is a targeted destination for tourists, especially pilgrims. Moreover, the more recent and intensive conversion of many dwellings into short-term rentals in the historical center has contributed to its residential desertification: a wide range of residential services and commercial activities such as grocery stores, hardware stores and clothing shops have declined or relocated to the expanding residential and accessible areas in the plain (A2, 20; A4, 23). Property values in the historical center have increased, generating challenges for many tenants, such as elderly people and members of immigrant communities – with specific mentions to the Albanian community of Assisi – who were in some cases forced to move to peripheral areas due to rising costs (A4, 43; A9, 18).

> *"In the historic center, as in many Italian cities, a process of desertification is taking place: an increasing number of properties are being converted into holiday homes and tourist-related activities. As a result, residential services have declined and relocated to more accessible areas. The growth of tourist accommodation has driven up prices, making the historic center less accessible to residents. A municipal call issued a few years ago, which provided incentives for those relocating their residence to the historic center, had no significant effects compared to prevailing market dynamics."*

Public manager in urban planning (A2, 20)

The local administration has greatly invested in policies aimed at supporting and promoting touristic activities, yet many question the sustainability of such strategies. No regulatory measures currently exist to limit overtourism or the expansion of B&Bs (A5, 81; A7, 20-21), 11). Tourism is reported to cause high management costs on the city, including waste collection and processing, public transport, and security, which need to be scaled for tourist flows rather than the resident population (A5, 86). Additionally, although many property owners have opened B&Bs, the profitability is often limited due to intense competition and high operational demands (A7, 63; A8,19; A8, 23-24).

Touristification has also affected investments in retrofitting the historical housing stock. Because owners do not inhabit their properties, they have limited incentives to implement energy efficiency improvements, and the focus on tourist rental income has reduced long-term residential investment (A7, 20-21; A4, 23; A7, 19). Overall, tourism is reported as having distorted the housing market, leading to speculative behavior and aggressive pricing from owners of B&B activities (A9, 18).

A second form of tourism-driven gentrification which is reported is linked to international buyers, with specific mentions to US-American pensioners who, due to tax-break incentives, are encouraged to spend six months abroad and choose Umbria as a retirement destination. Given their higher purchasing power with respect to residents, their acquisitions, concentrated in historic centers and rural properties, are perceived to have contributed to rising property values and increased competition for housing (A5, 114-116; A9, 19).

Public incentives such as the Superbonus 110% have amplified speculative behavior in the housing market. While intended to stimulate energy retrofitting, the availability of public funding has inflated property prices, particularly in areas already affected by touristification (A1, 56; A4, 48; A5, 67-72).

In summary, a tension between the economic benefits of tourism and its social and spatial impacts in the historical center of Assisi emerges recurrently as a core issue. Tourism is a driver for high housing costs, reduced access to services, and speculative pressures, raising concerns about long-term sustainability in the historical center (A5, 81; A6, 44; A9, 18).

5.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Tourism represents one of the clearest perception gaps and most contested issues in Assisi. Public agencies describe tourism - - especially “green” or experiential tourism - - as a **strategic development lever**, while civic actors increasingly perceive it as a **driver of displacement and exclusion**. Interviewees involved in bottom-up tourism projects highlight conflicts with municipal authorities when ethical or anti-gentrification objectives clash with branding or visibility strategies (A9, 25). Civic actors frame tourism as socially selective, redistributing benefits upward while externalizing costs onto residents (A4, 63; A9, 28). Institutions, by contrast, tend to treat tourism growth as structurally positive and socially neutral. This comes together with a gap in the perceived priorities of public action between, mainly, economic development (mainly via touristic development) and foundational infrastructures - housing,

services, mobility, sociability. A tension surfaces repeatedly in critiques of fragmented interventions that improve buildings but ignore services, mobility, or other issues linked to social reproduction (A7, 23–27; A4, 46). Interestingly, we see converging perspectives of activists and hotel owners and developers on short term rental proliferation: b&bs and short-term rentals growth are seen as a problem, yet framing the causes and possible solutions differently (with hotel owners claiming for loosening up rules for hotels expansion).

"Homeowners have clearly benefited because they have found themselves with capital that has been greatly revalued over the years due to Assisi's new image and tourist potential and the emergence of this new type of tourist leisure consumption, i.e., staying in the homes of residents, which then became bed and breakfasts or tourist rentals. This has seen tremendous growth over the last twenty years, and those who owned homes in locations that were susceptible to this phenomenon have enjoyed enormous advantages. Those who were disadvantaged were those who did not own a home, so they had to look for one and pay for it, and they found themselves having to pay more and more in order to compete with a type of user who might otherwise have been a tourist."

NGO-representative (A4, 63)

A further gap concerns energy transition and housing policies. Public agencies emphasize **technical and environmental performance**, while civic perspectives stress **affordability and usability**. Centralized heating systems, bonus-driven retrofits, and energy efficiency measures were often described by residents as generating costs they cannot sustain, leading to underuse or system shutdowns (A6, 14–16; A6, 23). Public bodies, however, interpret these interventions as baseline improvements: this divergence indicates different benchmarks of "success". Regarding the distributional effects of energy retrofitting policies, the point of view of local stakeholders is similar between the two groups: the Superbonus 110% had rather regressive outcomes and primarily benefitted wealthy homeowners. This might be due to the fact that even institutional interviewees are active at local level, while the main measures (above all, the Superbonus 110%) have been centralized at the national level.

"But look, if we're talking about [Superbonus] 110, in our city it has exclusively benefited all those wealthy owners, all those owners who could afford it anyway, who started and embarked on this path without fear that if the government took a step back, they would find themselves in financial difficulty. And so yes, yes, the upper middle class. Exactly, but higher than average. We were asked to give an overview, and it's the same everywhere... I mean, if we ask ourselves which population groups have benefited? The upper-middle class.

Representative of tenants' union (A10, 11)

Regarding public housing, most stakeholders agree that demand largely exceeds the very limited and stagnating supply. However, municipalities display a strong fear of possible ghettoization and tend to promote "intermediate" forms of housing between public housing and market housing (e.g. the *canone concordato,* an agreed rent scheme), instead of new public housing.

Regarding **urban transformation**, there seems to be some underlying conflict and perception gap between Institutional actors and civic groups on environmental protection related topics, including urban transformations that entail soil consumption and landscape alteration or degradation. This has happened more recently due to construction of medium retail structures via an accelerated planning permission due to the 1998 Bersani national reform – a national reform that liberalized many aspects of commercial activities – and its implications in terms of liberalization of retail activities. In Assisi, despite high landscape protection standards, high real estate values trigger new construction activity linked to urban sprawl in the lower parts of the city, entailing land consumption, as stressed by environmentalist civic groups (A4, A11, A12).

Additionally, a gap emerges around the evaluation of outcomes of regeneration projects. Public agencies largely assess projects through **physical, financial, or functional indicators** (reuse of vacant buildings, efficiency gains, attractiveness). Civic groups instead foreground **loss of social infrastructure and everyday spaces**. The conversion of the former Santa Caterina prison - previously hosting major associations and the ARCI social club - into luxury hospitality was cited by civic actors as a profound social rupture (A4, 36–37). From an institutional viewpoint, the intervention aligned with reuse and valorization objectives; from a civic perspective, it represented **the erosion of collective life and informal welfare functions.**

Another gap concerns how **participation** itself is understood and how vulnerability is perceived and represented. Public agencies tend to frame participation as **procedural compliance** - consultation at predefined stages - whereas civic actors understand participation as a **shared process of framing and co-decision**. Civic interviewees involved in consultancy to support policy and project design expressed frustration when key strategic choices were later altered without discussion, despite initial engagement claims. From their perspective, participation was instrumentalized as a legitimizing device, rather than treated as an ongoing governance relationship. Public institutions, by contrast, implicitly treated consultation as concluded once formal steps had been completed, revealing a mismatch between expectations and institutional practice.

Public agencies often assume that existing consultation mechanisms capture social needs, while civic interviewees emphasize the underrepresentation of the most vulnerable groups. Some respondents noted that elderly people, low-income tenants, and marginalized residents often avoid mobilization due to stigma, dignity concerns, or resignation (A9, 45; A10, 14). Their absence from protests or committees could be misread institutionally as consent or low conflict, masking latent exclusion.

5.3.5 Critical Analysis: Assisi

5.3.5.1 Overview

The 1997 earthquake profoundly reshaped Assisi's social geography. While many residents benefited from reconstruction funds yet a significant share of them never returned to their homes in the historic center. Reconstructed dwellings were converted into second homes or

tourist accommodations, accelerating a process of touristification. This dynamic lies at the core of perceived social harm. Rising property values, the proliferation of short-term rentals, and the decline of everyday services have rendered the historic center increasingly inaccessible to long-term residents. Interviewees explicitly separate these effects from green policies. Displacement and desertification are attributed to tourism and market dynamics rather than to ecological interventions.

In face of **chronic insufficiency of public housing stock**, Umbria partially compensated by acquiring and reusing existing buildings under a strict **zero-land-take** rule for public housing actors. Integrated urban programs implemented in the late 1990s combined physical regeneration with social objectives and often included the reuse of buildings for public or social housing in central areas. Beyond affordability gains, such interventions produced collateral benefits by revitalizing neighborhoods and restoring social functions. The conversion of disused buildings, such as the former hospital in Assisi, into public housing exemplifies this integrated approach, which sharply contrasts with more recent, fragmented policy instruments. Nonetheless, demand still far exceeds supply, and **institutional discontinuity** - loss of experienced staff, burdensome reporting, shifting priorities - weakens implementation.

Political **mobilization around housing remains weak and fragmented**, reflecting both national patterns of low participation and local dynamics of benefit distribution. Because many property owners gained from tourism and retrofitting incentives, collective contestation has so far been limited, despite recent rise oft he topic in the debate. Housing inequality is acknowledged but insufficiently politicized. By contrast, environmental issues generate more visible mobilization, though primarily from conservationist perspectives rather than through lenses of housing justice or inequality. As a result, the relationship between ecological transition policies and housing inequalities does not strongly emerge from the case study. Green policies are rarely perceived as either the cause of injustice or a tool for redressing it. Traffic and mobility, together with natural heritage preservation and land take, stand out as the most salient environmental concerns. High car dependency characterizes daily life in Assisi and the wider Umbrian region, where commuting patterns and dispersed settlements generate significant emissions. Many stress that ecological sustainability debates should extend beyond building retrofits to address mobility systems, which account for a substantial share of household carbon footprints. Opposition to green interventions is most visible when they disrupt car-based routines, such as reductions in parking or road space, highlighting the political sensitivity of mobility. **Questioning whether green transition initiatives caused or exacerbated housing inequalities, t**he interviewees suggest that green transition measures have interacted with *pre-existing* drivers of inequality - touristification, scarce public housing supply, and path-dependent planning legacies - sometimes amplifying them rather than countering them.

The clearest example is the **retrofit policy via Superbonus 110%**: across respondents, access skewed toward middle and high income owners able to anticipate costs, navigate complex procedures, and absorb regulatory uncertainty; meanwhile, social tenants and low income groups largely remained excluded (A10, 11; A5 e, 62; A11, 3). In the public housing sector, institutional hurdles (procurement, governance complexity) and the design of the

instrument itself meant that *very little* of the measure reached public housing stock, especially outside large cities (A1, 58; A1, 56; A1, 61). This produced an uneven distribution of public expenditure and benefits, with limited relief for those facing energy poverty (A4, 22; A6, 26). Affordability concerns also emerge around new **heating systems** : centralized systems conceived as efficient solutions have proven difficult to sustain for low income tenants who cannot cover operating and condominium costs, resulting in underuse or service interruptions - an outcome experienced as policy failure by residents even where infrastructure exists (A6, 14–16; A6, 23–24). Barriers to adopting innovative technologies such as heat pumps are not purely financial. A lack of training, technical knowledge, and public awareness among both residents and professionals limits uptake. Interviewees repeatedly call for better accompaniment mechanisms, such as local energy helpdesks, to guide households through retrofitting processes and ensure effective outcomes. In short, retrofit and energy measures perceived as *technically* successful may translate *socially* into additional financial strain.

By contrast, **NBS** are not perceived as direct housing inequality drivers. Interviewees portray Umbria's small cities as already embedded in green landscapes; if anything, this *abundance* has encouraged a long term underinvestment in urban green management within towns (A5 e, 138–140). Yet green amenities also *raise place attractiveness*, providing another channel through which tourism and short term rentals revalorize the historic center and push residents out - an indirect, market-mediated effect more than an immediate impact of NBS policy (A2, 20; A4, 63).

Densification appears only selectively salient with regard to housing inequalities. Respondents link its *potential* equity gains less to new supply than to reduced mobility costs: in a context of high car dependency, household energy budgets are dominated by fuels; therefore, compactness and proximity - if paired with walkability and nonmotorized mobility - could mitigate "energy poverty" via transport expenditure rather than via building performance alone (A11, 7). Densification is highly practiced in continuity with retrofit, allowed by a policy meant to make retrofitting more financially viable. However, densification in the historical center is constrained by heritage protections and limited demand in a depopulating region; where attempted, residents often mobilize defensively around parking loss and street space changes (A12, 7).

Regarding distributional effects, interviewees describe mainly three issues: (i) retrofit incentives captured by better off owners (A10, 11; A5 e, 62); (ii) ERP tenants struggling with energy/condominium costs (A6, 14–16; A6, 23–26); and (iii) tourist market dynamics that convert housing into B&Bs and raise prices, hollowing out the center (A2, 20; A7, 23–30; A8, 36).

Looking ahead, further **pressures are expected** from large scale photovoltaic siting debates on rural land and from continued short term rental growth unless governance shifts (A9, 42–43; A4, 63). Conversely, **collective energy mechanisms (CERs)** and municipal energy helpdesks are viewed as *promising, equity-oriented correctives* if anchored by regional stewardship and ATER's role, with the explicit social objective to cut heating bills for low income tenants (A2, 8; A11, 10; A6, 123–124).

5.3.5.2 Key critical points defining housing justice/inequalities in the case in conversation with local/national context and histories

The Assisi case emerges as a context in which ecological transition policies, housing inequalities, and urban regeneration intersect only partially. Social vulnerability primarily results from tourism pressure, long-term underinvestment in public housing, and mobility dependence. The impacts of green interventions are mostly perceived as technically beneficial (with some exceptions) but socially selective or weakly redistributive. Unlike metropolitan contexts, Assisi's socio-ecological challenges are not so much framed around access to green amenities (largely present in the surrounding natural landscape) or large-scale redevelopment, but around the tension between heritage preservation, (touristification related) challenges in access to housing, and everyday residential life and access to services. Negative social impacts of ecological transition policies reported by civic actors are overwhelmingly attributed to market dynamics linked to tourism and to the structural fragility of the public housing system, with green policies playing, at most, an indirect or amplifying role.

Urban regeneration in Assisi follows trajectories that differ fundamentally from those observed in large cities and metropolitan contexts. Scale, demographic trends, and institutional legacies shape a model in which regeneration is fragmented, incremental, and deeply conditioned by historical events, most notably the 1997 earthquake and the efforts to recover historical centers. Not only the 1957 Astengo plan, but also the first architectural association for the protection of historical centers in Italy characterize the urban XXth century planning culture in Umbria. As a legacy, rather than large, coordinated redevelopment projects led by private capital, regeneration in Assisi has largely taken the form of dispersed interventions on single buildings. While halting land take is an official public goal at most levels of government, densification only happens in soft- and small scale typologies, more framed in terms of increasing volume as leverage for building renovation – for long time incentivized by effective public-led reconstruction policies after the 1997 and 2016 earthquakes. The post-earthquake reconstruction acted as a powerful catalyst for regeneration, producing widespread improvements in building quality and technical capacity. This legacy triggered a process of diffused regeneration that benefited broad segments of the population, particularly homeowners able to access reconstruction funds. However, this process did not translate into a structural relaunch of urban functions or social composition. Large scale regeneration and densification is both unattractive due to low plusvalue and not incentivized enough, with greenfield construction still constituting the main strategy for private developers (with some exceptions). The Umbrian context features de-population and lacks the real estate value differentials that make large-scale private redevelopment attractive in cities. Consequently, private-led housing-driven regeneration has remained marginal, with few exceptions while urban transformation instead proceeds through piecemeal interventions, constrained by the small size of urban centers and by heritage protection rules. This model has ambiguous social outcomes. On the one hand, it avoided the disruptive effects often associated with large redevelopment schemes. On the other, it failed to counter long-term trends of depopulation and functional hollowing-out of historic centers, which were exacerbated by post-earthquake displacement and later by tourism-driven reuse. The Umbrian case shows a peculiar role of ATER (the public housinc company) as a key actor in urban regeneration processes that we

do not see in other Italian cities: ATER is often “used” by regional and local governments to acquire and redevelop decayed building into social housing (or more rarely public housing due to social mix concerns). Some public-led regeneration initiatives are considered very interesting in terms of socio-ecological approach, such as the conversion of a former hospital into 28 public housing units in the city center of Assisi or the rehabilitation of unfinished residential complexes in Perugia, but remain quantitatively limited.

Renovation of the existing housing stock is widespread in Assisi and Umbria, involving public actors, private owners, and mixed-ownership arrangements. Earthquake recovery and planning instruments, such as density bonuses, have facilitated extensive physical renewal. However, energy retrofitting has not been systematically integrated into these processes. In many cases, renovations focused on structural safety or functional upgrading without addressing insulation, system efficiency, or long-term energy performance. This gap reflects both regulatory constraints in historic centers and uneven technical capacities among professionals. As a result, the environmental impact of many renovations remains uncertain, and efficiency gains are often more nominal than real. Despite this, energy retrofitting (together with housing renovation in general) emerged as the most important policy in terms of funding and quantity. While energy retrofitting initiatives are often evaluated positively in terms of comfort and energy saving, they rarely emerge as catalysts of either social justice or social conflict, outside of any planning and mobility logic. Instead, most actors agree that the Superbonus 110 had a rather unjust and regressive distributive impact, mostly benefitting wealthy homeowners and excluding tenants and public housing companies, as suggested by increasing literature on fiscal welfare (Jessoula, Pavolini, 2022) and social impact of ecological transition policies (Peverini et al., 2023; Carrosio, Cogliati Dezza, 2025) in Italy. The Superbonus 110% represents the most significant recent retrofitting policy, yet it is widely perceived as socially regressive. Access to the measure was structurally skewed toward middle- and high-income homeowners with sufficient liquidity, administrative capacity, and professional networks. Low-income households and public housing providers, despite being among those most affected by energy poverty, were largely excluded. Public housing agencies were effectively left out of both the policy design and its practical implementation. Procedural complexity, procurement constraints, and uncertainty linked to regulatory changes made participation unfeasible. As a result, the policy largely bypassed the housing stock most in need of energy upgrading. Moreover, the measure produced distortive market effects, including inflated construction prices and the spread of informal or irregular labor practices.

Nature-based solutions, as conceptualized in contemporary urban policy debates, play a limited role in Assisi. This is not unanimously perceived as a deficit, as the city is embedded within a highly valued landscape and is directly adjacent to extensive green areas, notably the Monte Subasio natural park, and access to green space is not a pressing issue, as much as halting land take. In this context, green is framed less as an infrastructural intervention to be implemented within the city and more as an inherited asset to be preserved. The main ecological concerns relate to landscape protection, land consumption in the plain, and conflicts over large-scale photovoltaic installations on agricultural land and wind turbines in mountain areas, rather than to the creation of new urban green spaces. The main private-led greening initiative indeed involves the (touristic) valorization of an existing forest close tot he main

cathedral. This framing reinforces the idea that ecological transition in Assisi is primarily about safeguarding an existing environmental capital rather than redistributing access to it.

5.3.5.3 Short reflections

Primary stressors of housing inequalities are **tourist and short term rentals related pressure** and **structural public and social housing scarcity**; green measures interact indirectly through place valorization and regressive distribution of benefits. The **historic center of Assisi** - protected, compact, and globally valued - has undergone **resident replacement** since the post1997 cycle, with properties converted to tourist use. The **plain** concentrates newer housing and car-based life, with heat island concerns and opportunities for **networked green and cycling corridors**. **Energy poverty** is salient, but in Umbria it is as much **mobility driven** (fuels) as building driven, and there are no significant measures targeting just sustainable mobility.

Despite these tensions, interviews identify **mechanisms with distributive promises**. The regeneration programs' (PUC) **season** built administrative and engagement capacity that is now largely lost but could be reactivated. **ATER as a public urban regeneration agency** - through acquisitions, reuse, and rental strategies in historic centers - offers ways to stabilize social mix without new sprawl. Renewable Energy Communities, **energy helpdesks**, and **Energy Service Contracts** can act as *intermediaries* translating complex transitions into lower bills and manageable practices for households and municipalities. **Ethical tourism charters** and territorial projects are attempts to rebalance the resident–visitor–operator triangle, but remain very limited in scale, impact, and uptake by public institutions. Their success hinges on **stable funding, regional stewardship, and social targeting** - conditions repeatedly missing when institutional leadership changes. We can argue that for Assisi, a just green transition is *less* about multiplying projects and *more* about **scaling up the few mechanisms that already align ecological goals with social protection** - public housing acquisition without land take, regulated social mix in the center including new rental opportunities, RECs and other energy efficiency measures including ATER, slow mobility and shade networks in the plain part of the city.

5.3.5.4 Limitations and perspectives for further research

Interviewees reflected a balanced composition between public institutions, third sectors and civic groups, inhabitants and local entrepreneurs. The results presented in this paper include various limitations, including limited number of interviews and gender imbalance. Notably, no real estate developer, landlord association, and short-term rental unit owner were interviewed, perhaps reflecting a bias towards tenants. Concerning gender, while the Policy Lab was rather balanced, only 3 out 15 interviewees are female (20%), reflecting an unequal position of women in key positions in the region (including in civic groups).

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5.3.7 Appendix 1 – Glossary

Abbreviations

ATER	Regional Public housing company
CERs	Collective energy mechanisms
ERP	Edilizia Residenziale Pubblica – public housing, allocated on the basis of income and needs criteria, owned and managed by public bodies (public housing agencies and municipalities.
GESCAL	Gestione Case Lavoratori. A public fund created in 1963 to finance the construction and allocation of public housing for workers.
NRRP / PNRR	National Recovery and Resilience Plan
PAESC	Sustainable Energy and Climate Action Plan (Piano d'Azione per l'Energia Sostenibile ed il Clima)
PUC	Complex public-led urban regeneration programs
REC	Renewable Energy Communities

Terms and Concepts

Superbonus 110%	EU funded national energy retrofitting program National instrument (partly funded through the NRRP) incentiv ising retrofitting in the residential sector.
Astengo plan	1957 urban plan for the city of Assisi, a pioneering case of heritage protection and conservative urban planning

5.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/Organization	Date of interview	Modality
A1	Representative of Regional Public Housing Institution	Regional Public Housing Institution	11/4/2025	In person
A2	Public manager in Urban Planning	Municipality of Assisi	06/9/2025	In person
A3	Collective interview with three civil servants of the Direction of Urban Planning, the Service Housing policy of the Umbria Region	Umbria Region	23/09/2025	In person
A4	NGO-representative	Representative of anti-mafia association (Libera)	17/06/2025	Online
A5	Representative from municipalities network	Association of municipalities working on sustainability topics	06/09/2025	In person
A6	Urban Planning Expert	Architect and urbanist	07/09/2025	In person
A7	Hotel Owner and inhabitant	Hotel Owner	06/09/2025	In person
A8	Hotel Owner and inhabitant	Hotel Owner	06/09/2025	In person
A9	Urban Planning Expert	Local NGO	12/06/2025	In person
A10	Representative of tenants' union	Tenants' union	04/04/2025	In person
A11	Representative of environmentalist association	National environmentalist association	04/04/2025	In person
A12	Representative from Park Association	Local civic group and initiative (Parco della Piana di Assisi)	04/04/2025	In person

Date	4 April 2025
Location (indicate, if hybrid)	In person event, Assisi, DigiPass, Piazza Giuseppe Garibaldi, Santa Maria degli Angeli
Number and types of participants	16 people participated in the event, of which 6 persons from research and academia, 6 from public and cooperative housing associations, 1 person from the municipality, 1 from a tenant union, 1 from an environmental NGO, and 1 practitioner (architect). The policy lab was dedicated to one case study location only (Assisi).

6 NORWAY

6.1 CASE STUDY (LARGE): OSLO

Nydalen. Picture: Roberta Cucca

Authors: Roberta Cucca & Anne-Kristine Kronborg (NMBU)

Contributors: Kara Lenina Taggaoa, Marthe Spondberg, Karen Waneska de Jesus, Didrik Wedum (NMBU)

6.1.1 City profile, challenges around just (housing and ecological) transition

Oslo, the **capital of Norway**, is both the country's largest city and its primary economic, political, and cultural centre. Located at the head of the Oslofjord and surrounded by extensive forested areas, the city combines relatively high environmental ambitions with strong demographic and housing market pressures. Over the last two decades, Oslo has experienced sustained population growth, driven by internal migration and international immigration, placing increasing strain on housing provision, infrastructure, and land use.

As of the mid-2020s, Oslo has a population of approximately 710,000 residents, while the wider metropolitan region exceeds 1.5 million inhabitants. Demographically, the city is characterised by a **relatively young population** compared to the national average, with a strong concentration of young adults and working-age residents, **although population ageing**

is expected to accelerate in the coming decades (Statistisk sentralbyrå, 2025). Projections indicate a particularly rapid increase in the number of residents aged 70 and above, including a doubling of the 80+ population by 2045, which will have significant implications for housing demand, service provision, and urban planning (Statistisk sentralbyrå, 2025). Oslo is also Norway's **most diverse city**. Individuals with an immigrant background—defined as immigrants and Norwegian-born children of immigrants, most commonly from Ukraine, Poland, Syria, Somalia and Sweden (Statistisk sentralbyrå, 2025) —already constitute a substantial share of the population, and this proportion is projected to continue rising. In line with national trends, people with immigrant backgrounds are expected to make up close to one-third of the population by the mid-2040s (Statistisk sentralbyrå, 2025). This demographic dynamic contributes to the city's social diversity but also intersects with patterns of residential segregation and inequality (Cucca and Mouratidis, 2025; Ljunggren, 2017; Wessel, 2000).

Population **density** is **unevenly distributed**: while inner-city districts and selected redevelopment areas exhibit high densities, large parts of the municipality remain characterised by low-density residential development, including detached and semi-detached housing (Cavicchia, 2021). This dual spatial structure—dense inner areas combined with extensive low-density neighbourhoods—plays a crucial role in shaping both housing debates and green transition strategies (Næss and Moberg, 2021).

A defining feature of Oslo's urban geography is the **Marka boundary (Markagrensa),** a legally protected forest belt surrounding the built-up area. This boundary strictly limits outward urban expansion and has been a cornerstone of Norwegian land-use planning for decades (Cavicchia, 2023). In addition, Norway maintains strong national protection of agricultural land. Together, these constraints have reinforced a strategic focus on **urban densification** within existing built-up areas, particularly along transport corridors, former industrial sites, and underutilised land (Næss et al., 2011).

Oslo is often described as a "**green city**," not only due to the surrounding forests but also because of its extensive network of parks, rivers, and green corridors (Municipality of Oslo, 2018; Røe and Luccarelli, 2016). Approximately two-thirds of the municipal territory consists of forests and protected natural areas, while green and blue infrastructures—such as river corridors, waterfronts, and urban parks—are increasingly integrated into planning strategies (Municipality of Oslo, 2018). However, access to everyday green space varies significantly between neighbourhoods, especially between older, low-density areas and newer, high-density developments, as green and blue spaces are disproportionately concentrated in Oslo's wealthier western districts compared to the more socio-economically disadvantaged east, which often has greater immigrant populations (Venter et al., 2023). Access to the greenbelt Marka is also uneven across Oslo, with distance posing a particular constraint for residents in certain districts, as well as for children and groups with reduced mobility (Gundersen et al., 2015; Gurholt and Broch, 2019). In addition to these spatial barriers, cultural factors can also shape patterns of use, particularly among migrant groups who may be less familiar with forest environments.

Oslo operates as both a **municipality and a county** (kommune og fylke), with a strong degree of local autonomy (Christensen and Lægreid, 2020). The city is governed by a city council and a city government (byråd), with responsibilities spanning land-use planning, housing policy

instruments, transport, climate policy, and social services. Over the past **two decades**, the City of Oslo has been **governed by alternating centre-left and centre-right coalitions**. From the mid-2000s to 2015, and again between 2015 and 2023, the city was largely governed by centre-left coalitions led by the Labour Party, often in alliance with the Socialist Left Party and, in later years, the Green Party. In contrast, earlier periods and the most recent municipal election have brought centre-right coalitions back into power, led by conservative parties. District administrations (bydeler) play an important role in local service provision but have limited influence over strategic planning decisions.

Urban development is primarily governed through statutory planning instruments, including the **Municipal Master Plan** and detailed regulation plans (Falleth et al., 2010). Planning processes include formal consultation procedures (høringer), but key decisions regarding land use, density, and housing typologies are typically taken at the city level. Public land ownership is limited compared to many European cities, constraining the municipality's capacity to directly steer development outcomes, particularly in relation to housing affordability (Hanssen et al., 2024).

Norway's housing system is characterised by **very high rates of homeownership**, including owner-occupied apartments in housing cooperatives (borettslag) and condominiums (Cavicchia et al., 2024; Sørvoll and Nordvik, 2020). Cooperative housing has long been central to Norway's welfare model, promoting widespread homeownership and contributing to residential stability and wealth accumulation across broad segments of the population(Cavicchia, Cucca and Kronborg, 2025). The largest housing cooperative in Norway, OBOS, founded in 1929, operates on a cost-price principle, reinforcing owner-occupation, while limiting opportunities for speculation (Kronborg, 2014). **Rental** housing plays a comparatively limited role and is **weakly regulated**, with short-term contracts and limited tenant protection. Municipal housing represents only a small share of the total housing stock and is primarily targeted at the most vulnerable groups (Sørvoll, 2019).

Oslo's **housing market** has been under sustained **pressure** for many years. Housing prices have increased significantly faster than incomes, particularly in attractive inner-city and transit-accessible areas (Cavicchia, 2021). While ownership remains attainable for medium- and high-income households, access to suitable housing for families and lower-income groups has become increasingly constrained. Housing affordability is therefore widely recognised as a major urban challenge, even though policy instruments to address it remain limited.

In terms **of climate and environmental strategies**, Oslo has positioned itself as a **frontrunner** (Røe et al., 2022). The city has set ambitious targets for greenhouse gas reduction, aiming for near-zero emissions by 2030. Key pillars of Oslo's green transition include compact urban development, investment in public transport, reduction of car traffic, and the integration of nature-based solutions (NBS) into urban planning (Municipality of Oslo, 2018).

Densification is framed as a central environmental strategy: by concentrating growth within existing urban areas, Oslo seeks to reduce car dependency, protect surrounding natural and agricultural land, and support efficient public transport systems (Næss et al., 2011). Nature-based solutions—such as green-blue infrastructure, river restoration, urban parks, and climate-adaptive landscapes—are increasingly embedded in planning documents and

development projects (Di Marino et al., 2024).

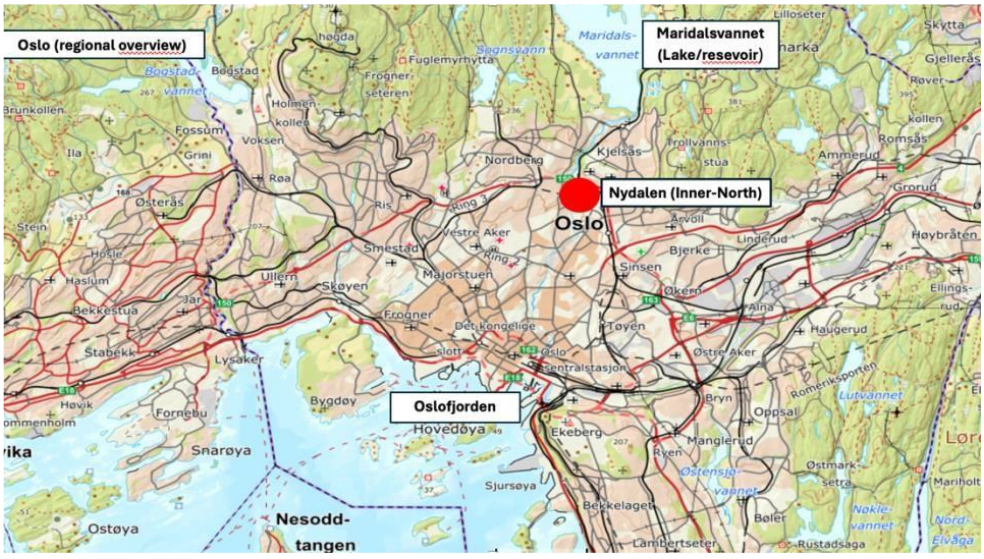
At the same time, **energy efficiency and retrofitting** of the existing housing stock represent a **less developed pillar** of Oslo's green transition. While energy use and emissions are central to national and municipal climate goals, Norway currently lacks an overarching, binding framework for large-scale residential energy retrofitting (Cavicchia et al., 2025). Measures remain largely voluntary and are shaped by existing housing governance structures, with little evidence of a coherent strategy. As a result, implementation tends to reproduce "business as usual" practices, drawing on cooperative participatory frameworks rather than comprehensive public strategies.

In Oslo, green transition policies and housing challenges are often addressed in parallel rather than in an integrated manner (Cavicchia, 2021). Densification and NBS are frequently justified through environmental and climate objectives, while housing affordability is implicitly expected to be addressed by increasing supply in the private market, and housing typologies such as smaller apartments. This separation has generated growing debate about the social consequences of green urban development (Andersen and Skrede, 2017).

The coexistence of ambitious environmental policies, strong housing market pressures, extensive low-density residential areas, and limited redistributive housing instruments makes Oslo a particularly relevant case for examining the social implications of green transitions. The city thus provides a critical context for analysing how densification, nature-based solutions, and energy retrofitting interact with housing inequalities—both in current developments and in future policy trajectories.

6.1.2 Green Transition Interventions in Oslo: Densification in Nydalen and Energy Retrofitting in the Cooperative Sector

This working paper is based on two empirical case studies in Oslo that capture different but complementary dimensions of the green transition and its interaction with housing inequalities: (1) **large-scale densification** combined with nature-based solutions (**NBS**) in **Nydalen**, and (2) **energy retrofitting in housing cooperatives** located in the eastern part of the city.

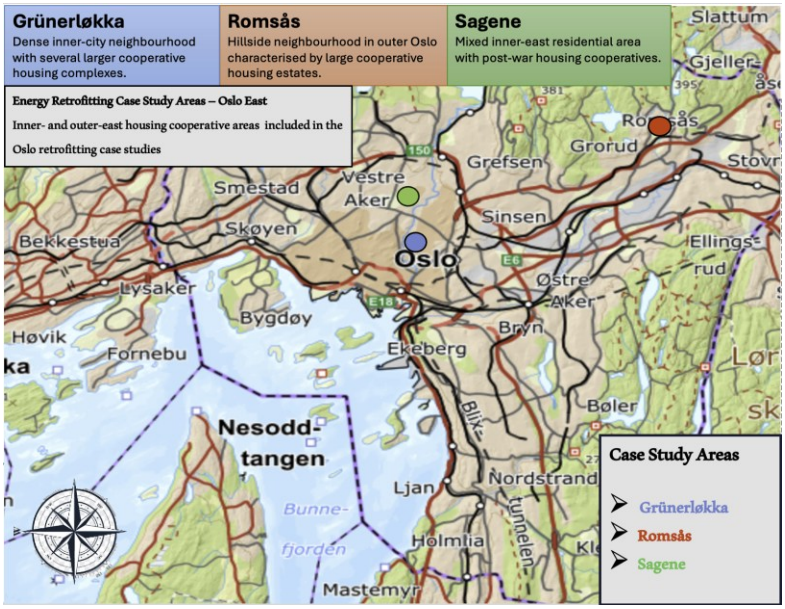


Map 1- Location of Case study area Nydalen in Oslo. Author: Didrik Wedum

Picture 1: Nydalen High Density – Picture: Roberta Cucca

Nydalen represents one of the most **advanced and emblematic examples of hard densification** in Oslo. Formerly an industrial area along the Akerselva river, it has been redeveloped since the early 2000s into a high-density, mixed-use district characterised by residential, office, and knowledge-based activities, including a major university campus (Orderud and Røe, 2002). The transformation has been driven largely by private actors, most notably **Avantor**, the dominant landowner and developer, and **OBOS**, a key cooperative housing organisation and developer, in close interaction with the Municipality of Oslo (Orderud and Røe, 2002). Public-sector involvement has mainly taken the form of planning regulation, transport infrastructure provision (notably the metro), and partial co-financing of public space. While Nydalen is widely framed as a successful example of compact, transit-oriented, and green urban development, housing provision has been almost entirely market-based, with limited use of affordability-oriented instruments (Holmen, 2025).

The second case focuses on **energy retrofitting in housing cooperatives**, with empirical material drawn from cooperatives located in both the inner and outer eastern parts of Oslo. This case must be understood against the city's longstanding east–west socio-spatial divide (Ljunggren, 2017). While western Oslo is traditionally more affluent, eastern Oslo includes a higher concentration of cooperative housing, more socio-economically diverse populations, and, in the outer east, more vulnerable and multiethnic communities.



Map. 2 -Location of Case study areas for energy retrofitting in Oslo
Author: Didrik Wedum

Housing cooperatives across Oslo have a long tradition of maintenance and upgrading, but energy retrofitting has gained prominence only in recent years. Unlike densification, retrofitting is not guided by overarching strategies or regulatory mandates; instead, initiatives are locally driven, financed by the cooperatives themselves, and motivated primarily by economic considerations, with limited and fragmented public support (Cavicchia et al., 2025.).

Picture 2: An example of typical cooperative housing architecture in Oslo's east side. Picture: Roberta Cucca

Together, these two cases allow for a **differentiated analysis of green transition pathways in Oslo**: one **highly visible, spatially transformative**, and market-driven; the other **incremental, decentralised, and mainly embedded in private responsibility**—each with distinct implications for housing justice.

Table 1. Key data on two case study areas in Oslo.

	Densification in Nydalen	**Energy retrofitting in East-side Coops**
Neighbourhood characteristics (general social type, economic activities, density, etc.)	Former industrial area redeveloped into a high-density, mixed-use neighbourhood. Predominantly residential and office-based, with knowledge-intensive activities linked to the university campus. High density, strong public transport accessibility, and socio-economically selective population dominated by middle- and medium-high-income households.	Three housing cooperatives are located in eastern Oslo, including one in the outer east and two in the inner east. The outer eastern area is generally more socio-economically disadvantaged and ethnically diverse. In contrast, the inner eastern areas are former working-class neighbourhoods that have undergone partial gentrification, with rising housing prices and a mixed but predominantly middle-income population.
Duration	Early 2000s – present. Development is now largely completed, with some recent and ongoing interventions related to green space provision.	Ongoing processes since the 1990s. All three cooperatives are large, affiliated with OBOS, and have implemented upgrade measures in the last 10 years.
Funding *(be explicit if public/private, nonprofit, etc.)*	Predominantly private funding, led by private developers. Public sector involvement mainly through planning regulation, infrastructure provision (metro), and partial co-financing of public space.	Predominantly private. Energy retrofitting is financed by housing cooperatives through bank loans, repaid by residents via monthly common costs. Limited public support is available through ENOVA and municipal schemes, though these are not specifically targeted at cooperatives.
Actor constellation *(aka stakeholders)*	Private developers; municipality of Oslo; public transport authorities; university institutions; local politicians; organised citizen groups and neighbourhood action groups.	Residents in housing cooperatives (shareholders), elected board of the housing cooperatives, general assembly, Municipality of Oslo, ENOVA, professionals and consultants
Aims and objectives	Redevelop brownfield land into a compact, accessible, and environmentally sustainable urban district; support densification and transit-oriented development; enhance attractiveness through green amenities and high environmental standards.	Maintaining and upgrading the housing stock, saving energy and energy costs, increasing quality of life, housing standards and increasing property values.
Specific physical measures	High-density residential and office developments; metro station and transit-oriented layout; redevelopment of industrial plots; integration with	Facade renovations, adding insulation, installing new windows, and installing solar panels

	Akerselva green corridor; planned and newly approved public park connected to recent housing developments.	
Accompanying housing policy/ regulatory measures	Housing is largely delivered through the private market. Limited availability and use of affordability-oriented housing instruments. Emphasis on increasing housing supply through densification.	Energy retrofitting in housing cooperatives is not part of any housing policy, and there are no regulatory measures. Housing cooperatives are responsible for their own housing stock.
Key social tensions or/and benefits between greening and housing	Limited public green space relative to density triggered resident dissatisfaction and mobilisation. Citizen action influenced planning outcomes regarding green space provision, while housing affordability challenges remain largely unaddressed.	Energy retrofitting is regarded as a private responsibility, and is little contested or discussed. However, housing cooperatives are aware of the potential risk that expensive investments and upgrading measures may cause excessively high living costs for some of the residents.

6.1.3 Methods

This case study is based on **qualitative research** carried out between **mid-2025 and early 2026**. It combines semi-structured interviews, site-based observation, and document analysis. The methodological design aimed to capture how civic and institutional actors perceive green transition initiatives in Oslo and how these intersect with housing inequalities, with particular attention to governance arrangements and neighbourhood-level effects.

In total, **21 interviews were conducted with 23 participants**. Three of these interviews addressed cross-cutting themes related to the broader impacts of green urban transitions on housing inequalities in Oslo (OS01; OS08; OS12). The interview sample included current and former municipal technical staff, district-level politicians, developers, representatives of housing cooperatives, members of neighbourhood and environmental organisations, researchers, journalists, planning and energy-retrofitting professionals, activists, and residents. Interviews were conducted in Norwegian, English, and one in another language that we don't specify to avoid compromising the anonymity of the informant. An overview of interviewee profiles is provided in Appendix 2.

Policymakers and technical staff were primarily recruited through contacts established during the preparation of, and participation in, the ReHousIn Policy Lab held in April 2025, as well as through the researchers' engagement in workshops and public events focused on housing and green transition policies. Additional participants were identified through snowball sampling. Representatives of civic organisations and neighbourhood groups were selected based on their public visibility, media engagement, or involvement in local campaigns and assemblies addressing housing, urban redevelopment, and environmental issues. Initial contact was made via institutional email addresses or professional online profiles, followed by further snowball recruitment.

Most interviews were conducted online via Microsoft Teams (14 interviews) and recorded using the platform's integrated recording function, which also generated automatic transcripts. Four interviews were carried out in person and recorded using a mobile device, with transcription

produced automatically. All interviews were conducted with informed consent and transcribed in their original language. Following the interview process, one key informant decided to withdraw their consent to participate in the study. In accordance with ethical research standards, the interview was therefore deleted and has not been analysed, or included in the empirical material used for this research

Transcripts were subsequently reviewed, translated where necessary, and refined using an AI-based transcription support tool approved by **SIKT,** the Norwegian Agency for Shared Services in Education and Research.

Fieldwork also included several walking interviews and site observations: one walking tour in Nydalen with an environmental organisation representative, and two site visits to housing cooperatives included in the study. These activities supported situated observation and informal elicitation. Anonymised English-language transcripts were coded and analysed thematically using **NVivo**. Documentary analysis covered planning documents, legislation, municipal and consultancy reports, media sources, academic literature, and grey literature, which were used to contextualise findings and triangulate interview material.

A key limitation of the study is that, despite the diversity of actors included, the perspectives of more precarious or less organised resident groups are likely underrepresented. A methodological limitation should be noted regarding language use during the interviews. Most interviews were conducted in a language that was not the native language of either the interviewee or the interviewer, or of both. While care was taken to ensure mutual understanding, this may have resulted in minor imprecisions in expression, nuance, or interpretation. All interviews were conducted in accordance with ethical standards for social research. Issues of privacy, anonymity, and confidentiality were handled in line with the guidelines and requirements set by SIKT – the Norwegian Agency for Shared Services in Education and Research.

6.1.4 Civic and Institutional Perceptions of Green Initiatives in Nydalen

6.1.4.1 Precedents and implementation

The development of Nydalen is described as closely embedded within Oslo's long-term **densification strategy** and broader environmental policy framework. Rather than being understood as an isolated project, interviewees frame Nydalen as an early and emblematic example of how Oslo has sought to accommodate urban growth. This approach is described as relying on the protection of surrounding natural and agricultural land.

> We have a number of very strong environmental policy frameworks. As you know, we have the *Markagrensa*—the forest boundary—which creates essentially a national park surrounding the built area. You're not allowed to build anything there—not even a little fence. And then we have a high level of protection of farmland, for the obvious strategic reasons. (Municipal staff member – OS01)

Within this broader densification strategy, **the Akerselva river** emerges as a key element shaping both the physical transformation and residents' perceptions of Nydalen. The river is described as a structuring element in the historical transformation of Oslo's industrial areas, with many industries originally located along its banks. Several interviewees recall long-term public efforts to open up the river for public access, remove industrial fencing, remediate pollution, and establish the river as a green-blue backbone within the urban fabric.

> The aim was to open the area to the public, because it was fenced. Because it was all industrial areas, and also polluted.So all along the river there were fences. And then they got the permission to open these gates so the public could see what was behind them. (Member Environmental Association - OS02)

Picture 3: Akerselva and artificial swimming pool in Nydalen– Picture: Roberta Cucca

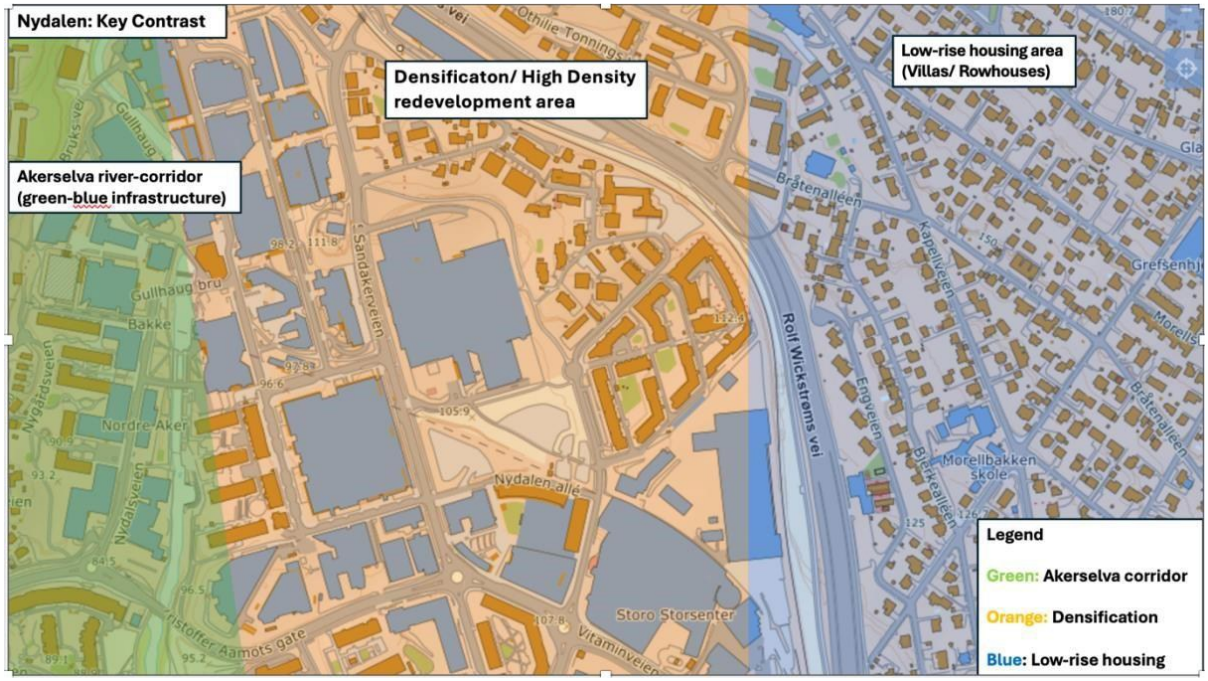
Another recurring theme concerns the decisive role played by **public transport infrastructure,** particularly the metro, in shaping the development of Nydalen. Municipal planners and planning professionals consistently describe proximity to the metro station as a critical driver of both residential and commercial development and a key condition for high-density redevelopment (OS08). The extension of the metro line to Nydalen was perceived as one of the last major metro investments in Oslo, providing strong justification for large-scale redevelopment in the area (OS08). Initially, the area was not conceived as a residential neighbourhood but rather as a location for offices and knowledge-based activities, particularly following the establishment of a private **Business School (BI)** in 2007 and the ambition to develop an ICT and innovation hub (OS13). Former municipal planners and local politicians describe the implementation of Nydalen's development as a gradual and evolving process, rather than the result of a single comprehensive master plan; housing development is described as having been introduced later, as demand increased and institutional actors relocated to the area.

> The consequence was that the area was not originally planned as a residential neighbourhood; housing came much later. A few years before I finished working there, we were preparing what we called an action programme to address this [need for housing] more systematically.

But development had already happened very fast. (Member of the Environmental Association; Former Municipal Staff - OS12)

Local politicians and civic actors report that the **speed and density of development** became increasingly visible over time. Nydalen is described as having grown rapidly into a **dense and mixed neighbourhood**, characterised by a concentration of residents with high levels of education and substantial social and economic resources (OS06; OS13). As development progressed, interviewees also highlighted **growing concerns** related to high density and **limited access to everyday green space**. These issues are described as becoming more apparent in daily life, with landscape quality and public green provision perceived as insufficient relative to the scale of residential growth.

So, in terms of transportation, densification in Nydalen makes a lot of sense because there is t-bane (metro), there, there's even a train, and there's a bus going, not far away. So it's a great place to densify. My personal wish would be to keep densifying, but also make sure there's enough space for people to live. There are some concrete areas which could have been green instead, for instance. (Local Politician District Level - OS07).



Map 3 Nydalen -Map of the site
Author: Didrik Wedum

6.1.4.2 Participation and governance (procedural)

Procedural participation in urban development processes in Norway primarily takes place through formal, legally mandated instruments such as *høringer* (public hearings), written consultation rounds, and opportunities to submit comments during the preparation and revision of zoning and regulation plans, allowing stakeholders and residents to express views but offering limited scope to influence core strategic decisions once plans are advanced. Interviewees describe civic participation in Nydalen as taking place through a combination of

formal consultation procedures, organised civil society engagement, and more situational forms of mobilisation. These forms of participation are perceived differently depending on respondents' institutional positions and roles.

From the perspective of municipal planners, participation is primarily understood as being structured **around statutory planning instruments**, including regulation plans, public hearings, and formal consultation processes (OS12). Participation is described as embedded in established planning routines, particularly along the Akerselva river corridor, where engagement initiatives have been repeated over time. Former municipal planners emphasise efforts to broaden participation beyond formal hearings through surveys, exhibitions, cultural events, and temporary installations, aimed at linking participation to everyday use of the river and public space.

> We conducted surveys with schoolchildren, held exhibitions, displayed artefacts from different cultural backgrounds, and hosted concerts under the bridge. It was a way to involve people through the river and everyday experiences. (Environmental association representative; former Municipal Staff – OS12)

Organised civic society actors, particularly those engaged with environmental and river-related issues, describe participation as a **continuous, long-term, and resource-intensive activity** (OS02; OS03). These actors report systematically monitoring planning processes, reviewing regulation plans, and coordinating written responses during consultation phases. Participation is described as most effective when engagement occurs early in planning processes, which seems to have been the case in Nydalen, before key decisions are fixed.

> We meet about once a month and discuss new regulation plans. We try to go into the startup of the process, because that's when you have more influence. These cases take many years, and we follow them closely. (Member Environmental Association - OS02)

Civic actors and activists express more **ambivalent** and critical perceptions of participation (OS02; OS03). Several respondents report having attended meetings and consultations related to construction projects, but describe these arenas as narrowly framed. Participation is perceived as focusing on technical details—such as placement of benches or small design elements—rather than on more fundamental questions regarding density, land-use priorities, or the overall direction of development. These experiences are described as generating frustration and a sense of limited influence.

> We had the opportunity to give feedback on the construction plans, and we did. But it didn't change anything. Then, suddenly, the municipality invited us to a meeting about where to put green areas. We were sitting around tables, drawing benches and flower boxes, while the big entrepreneur who owned most of Nydalen was also there. (Local activist - OS03)

Local politicians and district-level representatives describe their role as **mediating** between municipal planning processes and neighbourhood-level concerns (OS06; OS07). Participation at the district level is perceived as taking place mainly through formal hearing procedures related to building permits, schools, and local infrastructure. Several respondents emphasise that district administrations have limited scope to influence strategic decisions, which are largely taken at the city level, constraining opportunities for more comprehensive, area-wide dialogue.

Finally, both municipal planners and civic actors note that **not all policy issues mobilise participation to the same extent**. Environmental quality and access to green space are perceived as more tangible and locally actionable, while issues such as housing affordability, apartment size, and tenure are described as receiving less sustained attention at the neighbourhood level. These topics are reported to be addressed mainly within institutional working groups and professional policy arenas, rather than through broad civic mobilisation.

> There hasn't been much public debate about the regulation allowing smaller apartments. Usually, working groups are formed to discuss such matters, and we submit our opinions, but there was little time to address this issue in depth. (Representative Minorities Committee – OS05)

6.1.4.3 (In)equity (distributional)

Most interviewees describe the distribution of benefits and burdens associated with urban development and greening in Nydalen as **uneven**. While environmental improvements and new housing are widely acknowledged as positive outcomes, respondents consistently emphasise that access to these benefits varies according to **housing tenure, life stage, and location within the district** (OS03; OS06; OS08).

A central concern relates to **housing affordability, size, and residential stability**. Planning consultants and local politicians highlight that the predominance of small apartments—many of them rental units—limits opportunities for long-term settlement. Renters who, in 2021, disproportionately comprised 61.1% of the lowest income quartile and see also an overrepresentation of migrants and single parents (Cavicchia et al., 2024) are further described as particularly exposed to rising prices and as having few realistic pathways into homeownership in the area. These dynamics are perceived as reinforcing insecurity and short-term residency for those without access to ownership (OS08).

Families with children are frequently mentioned as a group particularly affected by these dynamics. Parents' representatives and local politicians describe how small apartments quickly become inadequate as households grow, while larger dwellings are perceived as scarce and unaffordable. This is described as contributing to residential turnover, with families leaving the area as their housing needs change, affecting continuity in schools and neighbourhood life.

> When my daughter started first grade, the school was full. But when you come to the second and third grade, we see that people are moving out. Usually, it's because of a lack of space. You come here as a student or a young couple, but when the children grow and need more space, you have to move out. (Member Parents' Committee - OS04)

Environmental quality and **access to green space** are also described as unevenly distributed within the district. Local politicians and civic actors emphasise that proximity to the Akerselva river is associated with higher residential quality (Berg Tveter, 2025), while interior parts of Nydalen are perceived as lacking everyday green spaces close to housing (OS07; OS03). Although the river is widely valued, respondents note that its benefits are not equally accessible due to crowding and competing uses.

> The municipality designates the area along the river as a major green corridor, yet in reality it functions more like a transport route. Cyclists, e-scooters, and joggers dominate the space, leaving little room for families or elderly people. If an area looks green on the map, it's considered sufficient, regardless of how it actually functions. (Researcher – OS09)

At the same time, interviewees consistently stress that **green spaces are essential** for wellbeing, social interaction, and everyday life, particularly for households living in small apartments without private outdoor space. Civic actors and journalists highlight that limited access to nearby green areas intensifies the effects of high density and reinforces perceptions of inequity within the neighbourhood (OS02; OS11). While the available data do not allow for a precise quantification of environmental injustice, patterns of socio-spatial segregation are evident in areas adjacent to the river. Apartments located closer to the river tend to be more luxurious and command higher prices. The case of the "Vertical Nydalen" building, for instance, illustrates a form of micro-segregation: despite its high environmental ambitions, it risks contributing to an exclusionary and socially unsustainable urban development, suggesting that proximity to high-quality green space may be unevenly accessible to lower socio-economic groups (Berg Tveter, 2025). Overall, interviewees portray distributional (in)equity in Nydalen as shaped by the intersection of **housing tenure, market dynamics, and uneven access to environmental amenities**, with ownership emerging as a key dividing line in who benefits from development-led value creation.

6.1.4.4 Political mobilization

Interviewees describe political mobilisation in Nydalen as a **gradual and cumulative process** that intensified between **2019 and 2025**, following the near completion of large-scale development in the area. Several respondents recall that mobilisation became more visible with the formation of the civic group *Ja til stor park i Nydalen* (Yes to a large park in Nydalen), which opposed plans to allocate a centrally located area primarily to further real estate development and instead demanded its conversion into a large public park. According to interviewees, years of sustained mobilisation—largely conducted through **social media campaigns, opinion pieces, and coverage in local and national newspapers**—eventually contributed to a political decision to develop a new public park on the site. The construction of *Schibsted Park* is planned to begin in 2026 and be completed in 2028.

Across interviews, mobilisation is widely described as emerging once the cumulative effects of density, limited green space, and traffic became tangible in everyday life. Local politicians, researchers, and journalists emphasise that mobilisation gained momentum after development was largely realised, rather than during earlier planning phases (OS07; OS09; OS11). From this perspective, mobilisation is framed as grounded in lived experience rather than opposition to development in principle.

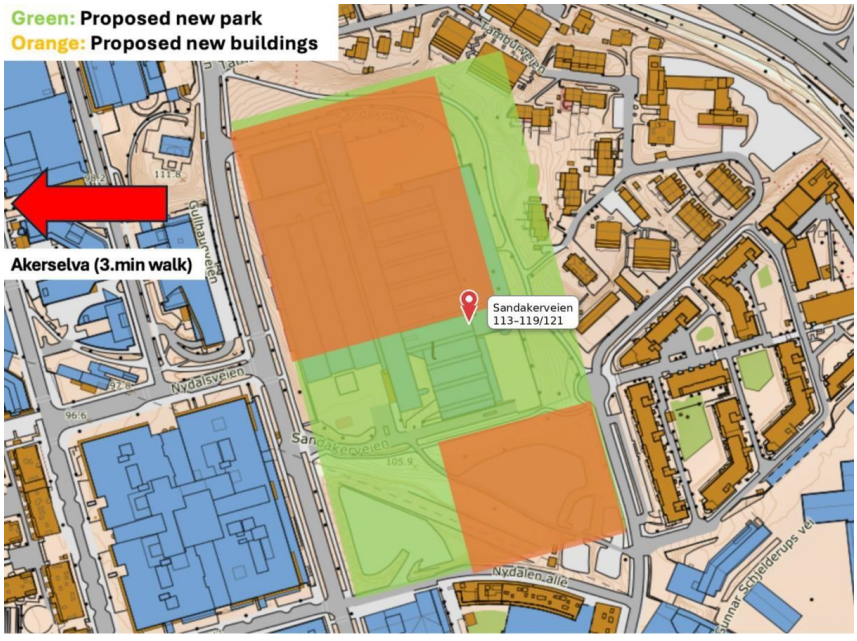
Mobilisation is not described as anti-development. Instead, respondents consistently emphasise that it focused on **specific and concrete outcomes**, particularly the lack of accessible green space in a high-density neighbourhood (OS07). The absence of everyday green areas is described as a shared concern that allowed residents to articulate common demands across different social groups.

> It was so obvious that it was becoming extremely dense, the development in Nydalen. And it was quite visible that their focus on landscape and green spaces was very limited. I think anybody could see that with their own eyes that what was going on was deeply problematic. (Local politician-OS07)

Several interviewees describe mobilisation as being fuelled by **frustration with formal participation processes**, echoing experiences described in Section 3.2. Civic actors and activists report that earlier participation opportunities were perceived as confined to technical details, with limited scope to influence fundamental questions regarding land use priorities or density. This perceived mismatch between participation and influence is described as a key trigger for more overt political action (OS03).

> They thought that Nydalen was finished. That it was a lost case. That the municipality didn't own land anymore, and that there was no money. So nothing could be done. And that was even said by the politician who serves now as the Municipal Deputy Mayor for planning. (Local activist - OS03)

Mobilisation is described as having taken multiple forms, including **direct contact with local politicians, engagement with political parties, and strategic use of media channels**. Journalists and researchers emphasise that residents were able to frame their claims in **bureaucratically legible terms**, which helped sustain mobilisation over time and gain political traction (OS09; OS11). Several interviewees note that district-level and local party organisations gradually expressed support for the demand for a new park, as concerns about density and environmental quality gained wider visibility and legitimacy (OS07; OS04).



Map 4 – Location of the New Park in Nydalen. Author: Didrik Wedum

At the same time, researchers and journalists stress that political mobilisation in Nydalen remained **bounded in scope**. While it is widely perceived as having influenced decisions related to environmental amenities—most notably the development of a new public park—

concerns related to housing affordability and broader redistribution are described as largely beyond the reach of neighbourhood-level mobilisation (OS09; OS11)

6.1.4.5 Socio-ecological impacts/benefits (positive)

Interviewees describe a range of positive socio-ecological impacts associated with the development of Nydalen, particularly in relation to **mobility**, **accessibility**, and **environmental quality**. These benefits are described as tangible in daily life and widely appreciated, including by respondents who are otherwise critical of density or housing affordability.

The integration of **dense urban development with high-capacity public transport** is consistently described as supporting **climate objectives** while also improving **everyday convenience**. Informants emphasise that proximity to the metro enables low-car living, reduces dependence on private vehicles, and facilitates access to jobs, services, and leisure activities.

> It's very difficult for me to find negative aspects in Nydalen: it is very well connected to public transportation, there are very nice restaurants, pubs and shopping opportunities. During the break, I can go out and enjoy the river. I don't live here, and so it can be different for a family, but as a daytime user, this is a perfect location. (Academic staff member, local university - OS13)

Additionally, reduced car dependency and more **pedestrian-friendly streets** are perceived as contributing to both environmental sustainability and quality of life, particularly in a dense urban context.

The **Akerselva river corridor** is consistently highlighted as a major socio-ecological asset. The opening up of the riverbanks and the improvement of water quality have transformed former industrial land into accessible public space (OS09; OS02; OS11). The river is described as enabling everyday contact with nature through walking, jogging, swimming, and informal social activities, contributing to mental wellbeing and everyday recreation within the city.

> I live less than one minute from the river. And also very close to this swimming pool that they made in the river. So in summer, I literally just go down, and I can get some sun and bathe in the river, but you can also just go for a walk by the river or run. It's quite nice. So that's something I have access here. (Resident-representative minority group-OSL10)

Schools and kindergartens are also described as benefiting from the proximity of the river and the linear park. Even where green space is not directly available within schoolyards, **nature and outdoor environments along the river are actively integrated into learning and everyday activities**, contributing to children's wellbeing and environmental awareness.

> Today, Akerselva is the most used river in Oslo for walking and hiking. It's appreciated by the population in Oslo. Also, many tourists come here, and the local population uses it for jogging, for recreation, grilling, playing, and walking the dog. And it's very appreciated. So, one of the main benefits of living close to the river is that you have the river, you can look at the river, it's green, and it changes by the seasons, and you experience the 100-meter closed forest that you have. And it's especially accessible for children, and all in these daycare centres can walk

here, and they can look at the nature, they can learn about the trees, they can learn about the birds. (Member Environmental Association - OS02)

Several interviewees frame these interventions as examples of **nature-based solutions** used as **sustainability strategies**. The river corridor, green-blue infrastructure, and adjacent public spaces are perceived as performing multiple functions simultaneously, including ecological restoration, climate adaptation, and social use. Former municipal planners emphasise that these strategies reflect long-term policy ambitions to integrate environmental considerations into urban development (OS12).

Finally, interviewees point to **housing-related benefits** linked to accessibility. The availability of small apartments, particularly in the rental sector, is described as enabling access to the neighbourhood for singles, students, and newcomers who benefit from good transport connections and proximity to services (OS10; OS06). At the same time, respondents note that these benefits coexist with challenges related to **housing stability and long-term affordability**, which remain unresolved for lower-income households.

The rent that I pay is affordable, but as I said, I won't be able to continue here. Because at some point, I have to give the apartment back, and I want to buy something, and I won't be able to continue here. If I want to continue here, I would have to buy a much smaller one than the one that I live in today. (Member of a Migrant Association and resident - OS10)

Together, these elements contribute to perceptions of Nydalen as a liveable, accessible, and environmentally improved urban area, even as challenges related to housing stability, place-making, access to public green spaces, and affordability persist.

6.1.4.6 Socio-ecological impacts/benefits (negative)

Alongside recognised benefits, interviewees identify a range of **negative socio-ecological impacts** associated with the development of Nydalen. Respondents emphasise that these issues are interconnected, linking environmental pressures, housing dynamics, and social change.

A central concern relates to **green accessibility and ecological pressures on the Akerselva river**. While the river is widely valued, several respondents stress that it is heavily used and unable to compensate for the lack of everyday green space within the neighbourhood. Researchers and civic actors note that the river corridor is narrow, crowded, and shaped by competing activities, which limits its usability for children, young people, and less mobile groups (OSL09).

When you see pictures of Nydalen, you see pictures of the river. But that's the only green place, right? You can't let your children play there before they are like 10 or 12, because they can fall into the river. You can't play ball because the area is just two meters wide. And when the weather is nice, there's no room. The river is for the whole of Oslo, so everyone uses it.

(Local activist – OS03)

Environmental activists raised concerns about **ecological pressures on the river itself**, noting that past industrial pollution, ongoing runoff, and occasional infrastructural failures

continue to affect water quality and aquatic life, highlighting the **fragility of the river ecosystem** despite its central role as a green-blue amenity (OS02).

Several interviewees also raised concerns about **traffic, construction disruption, and quality of life**, particularly for families with children. Parents' representatives describe traffic as a persistent challenge, exacerbated by ongoing construction projects and increased population density. Safe routes to school are described as difficult to secure in a context of heavy traffic and continuous redevelopment, with implications for everyday safety and wellbeing.

> The main problem is traffic. There are always projects going on, and Sandakerveien is under heavy construction. There are a lot of children walking alone or with parents, and also many cars. It is a challenge to secure the road to school, even with all the measures we try to put in place. (Member Parents' Committee - S04)

Housing-related impacts are another dominant theme. Interviewees consistently point to **reduced housing accessibility and affordability**, particularly for families and lower-income households. While small apartments are described as relatively accessible, respondents stress that larger dwellings are scarce and prohibitively expensive. This is perceived as forcing households to compromise on space or to leave the area altogether.

Several respondents link these dynamics to broader processes of **displacement and gentrification.** Civic actors and planning consultants describe Nydalen as part of a wider transformation affecting inner-city areas, where rising prices and new development increasingly exclude lower-income groups. Even when direct displacement is not always observed, respondents emphasise forms of indirect displacement through pricing-out and residential turnover (OS05; OS08).

> Everything is becoming more expensive, and people with less income are moving out. If you don't own, you don't benefit from the value increase. There is no lack of expensive apartments in Oslo. What we lack is affordable housing, and the market cannot solve that. (Planning consultant; former municipal planner - OS08)

Finally, several interviewees describe negative socio-ecological impacts as rooted in **short-term planning and market-driven development**. Researchers and civic actors argue that insufficient attention was paid to long-term needs such as green space, schools, and family housing, resulting in a built environment perceived as dense but lacking in everyday livability.

> The process of developing Nydalen is an example of how not to do it. You need to plan for 10, 20, 30, and 50 years. You need to plan for schools, kindergartens, and areas where people can live their lives, because the apartments are too small. (Local Activist - OS03)

Taken together, these perceptions portray Nydalen as a neighbourhood where **environmental pressures, housing market dynamics, and social change intersect**, generating uneven and often negative socio-ecological outcomes. As reported in the Report on Housing system WP4 (Cavicchia et al., 2024), national responses to the housing challenges remain fragmented and insufficient. The social rental sector is minimal, private renting is precarious, and innovative models such as shared ownership or third-sector housing remain marginal. At the

local level, municipalities lack the regulatory and financial capacity to steer housing development toward affordability goals.

6.1.4.7 Tensions and power dynamics between stakeholders/actors

The tensions and power dynamics described in Nydalen are primarily shaped by the **relationship between market-led development and public governance**, as well as by **multi-level and intersectoral governance** arrangements. Respondents across institutional, civic, and research backgrounds emphasise that development outcomes reflect an imbalance between **strong private actors** and comparatively **constrained public authorities**, particularly at the municipal level.

A recurring theme concerns the historical role of Nydalen as an **industrial enclave**. The area functioned for decades as a largely closed industrial zone, where landowners exercised substantial autonomy over land use and development decisions. This legacy is described as carrying over into the redevelopment phase, with early transformation driven mainly by private business initiatives rather than by comprehensive public planning (Orderud and Røe, 2002). Interviewees explain that following industrial decline, a **single private property** owner (Avantor) accumulated large portions of land, giving private actors significant control over development trajectories and limiting municipal leverage and opportunities to provide affordable housing.

> If you're a landowner, as the city rarely is because they have sold off most of its land, then of course you can negotiate any sale with conditions on affordable housing. But when it comes to zoning, there are very limited possibilities to regulate housing outcomes in detail. (Environmental association representative; former Municipal Staff – OS12)

Respondents also point to governance tensions arising from the **temporal sequencing** of decisions and limited coordination across sectors. Former municipal planners (OS08; OS12) describe how offices, higher education, and economic activities were prioritised in early phases, while housing and associated social and environmental infrastructures were addressed later, once development was already well underway. Is this sequencing perceived as constraining the municipality's ability to anticipate cumulative socio-ecological needs and address possible green gentrification threats? and to coordinate responses across policy areas.

Interviewees further highlight **multi-level governance** constraints as shaping the scope of local action. Housing-related issues are widely perceived as lying partly beyond the reach of local authorities, due to national regulatory frameworks, market conditions, and the limited public land ownership. Municipal authorities face structural limitations, as key regulatory and funding mechanisms remain under national jurisdiction. As a result, responsibility for addressing affordability is dispersed across governance levels, producing a persistent policy impasse.

Finally, some respondents point to the **blurring of boundaries between public and private** actors in Oslo in general, noting that publicly owned entities often operate under market logics. This is perceived as further reinforcing market-oriented priorities and weakening the capacity of public institutions to pursue redistributive or socially oriented objectives.

> The municipality claims it no longer owns land, so it can't intervene. But other public entities still own land, and they operate like private companies, with profit as the main goal. (Representative Minorities Committee – OS05)

Taken together, interviewees portray power relations in Nydalen as shaped by strong private landownership, limited municipal capacity, and fragmented multi-level governance, constraining the ability of public actors and participatory processes to influence housing affordability, social inclusion, and long-term socio-ecological outcomes.

6.1.4.8 Innovative governance mechanisms

Interviewees describe urban development in Norway as being shaped primarily by public–private negotiation, a governance model that relies on collaboration between municipalities and private developers rather than on strong regulatory intervention. In the case of Nydalen, however, this **negotiated approach** is widely perceived as having delivered limited outcomes in terms of accessible green space and, in particular, affordable housing. Several respondents stress that while negotiation may facilitate investment and rapid development, it has proven far less effective in securing socially inclusive housing outcomes in high-demand urban contexts such as Oslo. Several interviewees explicitly criticise the idea that market-based solutions alone—such as increasing supply or reducing apartment sizes—can resolve affordability problems. These strategies are described as reinforcing housing precarity rather than addressing structural exclusion.

> The private developers and also the politics, they believe that if we build more, it will be more affordable. Or we make the apartments smaller. So the apartments get smaller and smaller. They try to solve it with market tools, and for me, it's nonsense. (Researcher - OS09)

Against this background, some interviewees point to **specific housing initiatives** as partial examples of innovation within an otherwise market-oriented system. Civic actors and planning professionals mention the rent-to-buy strategy developed by OBOS, Norway's largest housing cooperative, as a positive mechanism that can lower entry barriers to homeownership (Cavicchia, Cucca and Kronborg, 2025). At the same time, respondents emphasise that such initiatives are considered insufficient in scale and unable to counter broader affordability pressures generated by the housing market.

Picture 3: OBOS' new development plans around the new park in Nydalen – Pict: Roberta Cucca

A recurring theme concerns the perception that the Norwegian system of policies promoting **homeownership has historically functioned well, but is now no longer adequate**, particularly in Oslo. In this context, sort of inclusionary zoning and the development of a third housing sector are frequently mentioned as potential governance innovations.

> When it comes to zoning, as of the 1st of July this year, there is a new provision in the Planning and Building Act that allows municipalities to zone specifically for student housing and for housing associations. I don't think it's sufficient, but indirectly it means you can enable projects that do not compete on the general market in the same way as purely commercial developments. I've also often pointed out that there is a clause in the planning law that allows the city to request to purchase some housing units at market price. In my view, that clause should be amended — or possibly replaced — so that units could be acquired at a reduced price instead. (Environmental association representative; former Municipal Staff – OS12)

Planning consultants and researchers emphasise that such instruments would require national-level political intervention, as local authorities are perceived as having limited capacity to regulate prices or mandate affordability through existing planning tools.

I think first we have to talk about it, to identify that it is like it is, and to accept it. They could change it, but it's dependent on politics, and it's not the local politics. It's national politics that has to go in and regulate housing prices, make at least a certain percentage of the housing affordable, but it does not happen. (Planning consultant; former municipal planner – OS08)

6.1.4.9 Tourism and market pressures

Interviewees describe **market pressure and housing financialization** as central dynamics shaping development outcomes in Nydalen. While Nydalen is recognised as part of Oslo's wider housing market, interviewees stress that the pressures experienced in the area are primarily linked to speculative development logics rather than to tourism or short-term rentals.

Several respondents explicitly challenge the dominant policy narrative that increasing supply alone will improve affordability. Planning professionals and researchers argue that housing production is strongly conditioned by profit expectations and that **construction activity** is perceived as **slowing** or stopping when **prices do not meet developers' return thresholds**. Although interviewees note the lack of transparent data on profit margins, they widely assume that expected returns must be high, given the scale and persistence of development.

Norway stopped having social housing, like in the 80s. And so the argument is to build more and more and faster and faster to get the prices down and make it more affordable. But the reality shows it doesn't work like that. The prices are rising all the time, because it's totally steered by private developers and strategies. And if the prices are not high enough, they stop building. So, they wait until the prices rise again. And the public has no role in this anymore.

(Planning consultant; former municipal planner – OS08)

In contrast to other areas of Oslo**, short-term rentals** and tourism are not identified as the main source of housing pressure in Nydalen. Platforms such as Airbnb are widely problematised for the impacts they have on more central areas of Oslo. However, they also recognise that specific housing typologies—particularly small apartments—are well suited to short-term rental strategies, raising concerns about future impacts.

Smaller apartments are ideal for short-term rentals. They're attractive to people looking to profit from Airbnb, students, or middle-class individuals who can secure bank loans to buy and rent out properties. Airbnb is relatively new in Oslo—it's not like Rome or Barcelona, where it's already caused problems. But it's starting to grow, and we're beginning to see its effects. (Representative Minorities Committee – OS05)

6.1.4.10 Gaps in perceptions between civic groups and public agencies

Interview data suggest that gaps in perceptions between civic groups and public agencies are **not uniform across policy domains**. In relation to **green accessibility**, respondents from both civic and public-sector backgrounds **largely converge** in their assessments. Interviewees consistently agree that the development model applied in Nydalen has been unable to deliver sufficient everyday green space for a neighbourhood of such high density. Both civic actors and municipal representatives describe the newly planned park as absolutely necessary, and

as a corrective measure to earlier development phases where green provision was perceived as inadequate. In this respect, no significant perceptual gap emerges: the lack of accessible green space is widely acknowledged as a shared problem.

By contrast, a more pronounced **gap** in perceptions emerges **around housing affordability** and housing market dynamics. Civic actors and residents tend to frame high prices—particularly for larger, newly built apartments—as a direct indicator of exclusion and inequality, questioning the social relevance of such housing provision in a context of acute affordability pressures. Some public-sector informants, however, articulate a more systemic interpretation of how high-end housing is expected to function within the wider housing market.

An informant from the municipality explains that while complaints about the prices of large and expensive dwellings are understandable, the underlying rationale for their construction is not primarily to meet the direct housing needs of lower-income groups. Instead, such developments are described as contributing indirectly to housing accessibility through vacancy chains within the regional housing market.

> Well, for example, building big, expensive houses for rich people—or by rich people—can make sense if they are also letting out a flat on the ground floor or upstairs. Because then that creates a vacancy for somebody on a lower income, who then moves from somewhere else in the region and creates a vacancy for someone else. So one big new home with a flat to let—or even for somebody else to move out—will create a vacancy chain behind it, enabling more people to fulfil their housing needs across the whole housing market region, which is quite interesting. It's not a one-to-one system at all. It's a very complex system. (Municipal staff member – OS01)

6.1.5 Civic and Institutional Perceptions of Energy Retrofitting in the Cooperative Sector in Oslo East Side

6.1.5.1 Precedents and implementation

Energy retrofitting in housing cooperatives represents a distinctive trajectory within Oslo's green transition, shaped by the historical development of the Norwegian housing system and by governance arrangements that differ markedly from many other European contexts examined in ReHousIn. Unlike densification and nature-based solutions, which are embedded in long-term spatial planning frameworks, energy retrofitting in housing cooperatives remains **largely decentralised, voluntary, and only weakly regulated** at the national level (Cavicchia, Cucca and Di Marino, 2025) .

Large-scale cooperative housing construction in Oslo began in the 1950s, forming a substantial share of the city's housing stock. Housing cooperatives are particularly prevalent in the eastern parts of Oslo, including post-war satellite neighbourhoods traditionally associated with working-class populations, while they are less common in the more affluent western areas (Ljunggren, 2017). Crucially, cooperative housing in Norway is legally defined as private housing. Dwellings in housing cooperatives are sold on the free market, to the same prices and with the same conditions as other dwellings. Cooperative housing in Norway must not be considered as "social housing". Cooperatives typically include a mix of residents,

representing people of different ages, different kinds of households and different economic situations (Kronborg, 2014). Further, each cooperative is an independent legal and economic entity owned collectively by its residents. This means that responsibility for maintenance, renovation, upgrading, and energy retrofitting lies primarily with the residents themselves.

As a result of extensive post-war construction, a significant portion of the cooperative housing stock has now reached an age where renovation and upgrading are necessary. The first wave of large-scale renovations already began in the 1990s, and housing cooperatives therefore have a long-standing experience with upgrading measures. The building stock is generally described by interviewees as being in relatively good technical condition, reflecting decades of continuous maintenance. Typical interventions over the past 30 years include façade renovations (with or without additional insulation), replacement of windows and doors, installation of new heating systems, and upgrading of bathrooms and shared indoor and outdoor spaces.

Governance and implementation are organised through the cooperative model. Each housing cooperative is managed by an **elected board, chosen annually** by the general assembly, where each dwelling has one vote. While the board is responsible for day-to-day management, major renovation or retrofitting projects must be approved by the general assembly (OS15; OS16). Such projects are typically **financed through bank loans** taken out by the cooperative and repaid collectively through monthly common costs. This financing principle is widely recognised as a cornerstone of the Norwegian cooperative housing model and reinforces a strong sense of collective ownership and responsibility.

All our interviewees consistently emphasise that maintenance and upgrading are understood as **private responsibilities rather than as housing policy issues**. In a context where homeownership is dominant, renovation is largely framed as an individual or collective homeowner obligation rather than as a matter of public intervention. As several informants noted, energy retrofitting was not initially approached as a political issue at all, but rather as part of routine value preservation and building maintenance (OS15; OS16).

At the same time, energy retrofitting has gained **visibility** in recent years as part of broader **climate and energy debates**. Although Norway is not a member of the European Union, discussions around whether **EU energy performance** directives could eventually apply to Norway have contributed to politicising the issue. Interviewees noted that the prospect of binding requirements has raised questions about public responsibility and financial support: if private homeowners are required to implement costly measures, public co-financing is increasingly seen as necessary (OS16).

Despite these debates, there is currently **no overarching national strategy mandating energy retrofitting in housing cooperatives**, nor any legislation requiring specific measures. Retrofitting remains voluntary and is initiated, planned, financed, and implemented by individual cooperatives. Typical recent measures include additional insulation, replacement of windows, and installation of solar panels (OS17; OS18; OS19).

Motivations for retrofitting are described by our interviewees from the three housing cooperatives as multiple but predominantly economic. Reducing energy consumption and heating costs, improving indoor comfort, and increasing property values are consistently

identified as key drivers. Environmental considerations and contributions to the green transition are present, but usually secondary.

> The building is from 1975 (…) The façade consisted of 10 cm thick insulation, and we are now waiting for new insulation and cladding on the outside. In many cases, the insulation was very good, but there were challenges with thermal bridges and the indoor climate (…) It was partly based on the fundamental value-preserving approach taken by the previous board, and partly to address indoor climate challenges and improve the energy situation for all residents. (Housing Coop. Board member - OS16)

The role of financial incentives further reinforces this economic framing. A representative from Enny, a solar panel provider, highlighted how environmental ambitions are often intertwined with financial considerations.

> It may be a requirement or a wish from the board and the members of the housing cooperative that they want to contribute to the green transition. They want to have an environmental profile, so it can be a bit emotion-driven. Of course, the economy is the most important thing, and then we look at what we can call green benefits – green economic benefits at the banks. (Solar energy provider - OS17)

Public support schemes exist at both municipal and national levels, notably through **Oslo's Climate and Energy Fund and the state agency Enova**. However, interviewees from both the housing cooperatives, the consultancies and the municipality stress that these schemes typically cover only a limited share of costs and are not specifically tailored to housing cooperatives, often favouring actors with stronger financial capacity.

Overall, energy retrofitting in housing cooperatives emerges as a green transition pathway that is still largely non-mandatory, fragmented, and driven primarily by economic rationales, with environmental values playing a supporting role. Compared to other European ReHousIn cases, the Norwegian context is characterised by strong homeowner responsibility, limited regulatory pressure, and growing uncertainty about how future, potentially stricter energy requirements might reshape both governance arrangements and housing inequalities.

6.1.5.2 Participation and governance (procedural)

As outlined in the previous section, energy retrofitting in Oslo's housing cooperatives is initiated, planned, and implemented by the cooperatives themselves. **Procedural participation** is therefore **structurally embedded in the cooperative housing model**, which relies on internal democratic governance rather than external planning processes. All cooperatives are governed by an elected board, accountable to the general assembly, where each dwelling has one vote. Major renovation and energy retrofitting measures must be approved by the **general assembly** and are typically financed through collective loans repaid via monthly common costs.

In this sense, residents formally enjoy a high degree of influence over decisions related to upgrading the housing stock. However, interviews reveal that this participatory model is **unevenly activated** in practice and depends heavily on resident engagement and board capacity (OS15; OS16; OS20). Several informants describe participation as a **key**

vulnerability of the system, particularly in large cooperatives with low attendance at general assemblies.

> We held an extraordinary general assembly to get it [the renovation project] through. We are 661 shares, but only 45 share owners met. We are maybe 50 to 100 people who are engaged, and almost 500 we never hear from. (Housing Coop. Board member - OS15)

Other cooperatives highlight more robust routines, underlining how long-term planning instruments and institutional memory can strengthen procedural governance. One informant described the role of a long-standing "maintenance key" and systematic follow-up as crucial to enabling complex renovation processes, while also stressing the importance of individual leadership and technical expertise within the board (OS16).

Interviewees consistently emphasise that **communication is central** to making participation meaningful. Explaining why measures are necessary, how they will be financed, and what their implications are for residents is described as essential to securing legitimacy and consent. As one board member noted:

> There is a lot of communication work around this that helps people understand why we are doing the work and what it means. If we don't do that, there will be many perceptions based on incomplete information. (Housing Coop. Board member - OS16)

At the same time, procedural participation is widely described as slow and demanding (OS21). Decision-making often requires multiple meetings and, in some cases, extraordinary general assemblies, particularly when loans are involved. From the perspective of external actors, such as technology providers, this makes retrofitting processes lengthy and uncertain:

> It is a long and heavy process. Agreements can change, and in the end everything has to be approved by the general meeting (Solar energy provider - OS17)

Overall, the case highlights a form of procedural justice that is formally strong but uneven in practice, highly dependent on engagement, competence, and communication within each cooperative.

6.1.5.3 (In)equity (distributional)

One of the most striking findings of the research is that energy retrofitting in housing cooperatives is generally **not perceived as a question of politics and not discussed in terms of inequality**. Across interviews, retrofitting is framed primarily as a technical, economic, and managerial issue, rather than as a matter of redistribution or housing justice. This reflects the broader Norwegian housing context, where cooperative housing is understood as private property and upgrading is seen as the collective responsibility of residents.

At first glance, one might expect energy retrofitting to be unevenly distributed across Oslo, given the city's long-standing socio-spatial divide between the more affluent western districts and the traditionally working-class eastern areas. However, interview evidence challenges this assumption. According to a representative from OBOS Prosjekt, the consultancy company supporting many retrofitting projects, **the capacity to implement large-scale upgrades is not lower in the eastern parts of the city**—and may in some cases be stronger.

> We notice a big difference between east and west. The housing cooperatives in Oslo East rely much more on the advice they receive from us and use almost exclusively project and construction management to carry out projects, because they realize that they do not have the expertise themselves. For example, on Romsås, I think all the housing cooperatives have carried out complete renovations, and that is one of the poorest areas in Oslo. (…) Oslo East has a large number of large borettslag, which in turn provide significant financial resources that enable them to run large projects without any major consequences. (Consultancy housing and construction services – OS18)

The same informant emphasises that **size matters more than location**. Large housing cooperatives—often found in eastern Oslo—tend to function like small organisations, with paid board positions, hired operational staff, and accumulated assets, and thus with a greater ability to carry on with a retrofit process. Smaller cooperatives, by contrast, often lack both expertise and internal capacity, making retrofitting more difficult regardless of neighbourhood affluence.

While retrofitting is therefore not perceived as geographically unequal, **distributional tensions can emerge within cooperatives themselves**. Board members consistently stress that residents differ significantly in income, life stage, mortgage burden, and financial resilience. Cooperatives often include a mix of long-term owners with low incomes, families with high debt, and more affluent households who recently purchased at high prices. This internal heterogeneity complicates decision-making and makes boards particularly cautious about financial strategies.

Several informants also express concern that **not retrofitting may itself generate inequality**, by negatively affecting property values or living conditions over time. Across interviews—including those with consultants, technology providers, and municipal representatives—there is broad recognition of a **structural tension** within the cooperative housing model: while responsibility for upgrading lies collectively with residents, **the financial risks are unevenly borne**. This tension remains largely manageable under the current voluntary framework, but several respondents note that it could become significantly more problematic if energy retrofitting were to become mandatory in the future.

6.1.5.4 Political mobilization

Although both housing and energy are policy domains with a strong political dimension, energy retrofitting in housing cooperatives has **not generated visible forms of political mobilisation**. Across the interviews conducted, energy retrofitting measures were not framed as a political issue, nor as a matter of public contestation or collective claim-making. Instead, they were consistently understood as a **private responsibility** of individual housing cooperatives, embedded in routine practices of maintenance, upgrading, and value preservation.

This lack of political mobilisation reflects several structural features of the Norwegian housing and energy context. First, the strong tradition of homeownership and cooperative self-governance fosters a **widespread acceptance** that decisions related to building maintenance and upgrading fall within the remit of residents themselves. Second, housing cooperatives are **not currently subject to binding legal requirements** to implement specific energy retrofitting

measures. As long as retrofitting remains voluntary, interviewees do not perceive it as an issue that warrants political struggle or collective mobilisation beyond the cooperative level.

Norway's position outside the European Union further contributes to this depoliticisation. While **EU-level directives** on building energy performance have triggered intense political debate and mobilisation in several European contexts, their application in Norway remains **indirect and contested**. As a result, energy retrofitting is not yet experienced as an externally imposed obligation that might provoke resistance, claims for compensation, or demands for stronger public intervention. Instead, **it is approached pragmatically**, primarily through economic reasoning and internal decision-making processes within housing cooperatives.

Nevertheless, some interviewees anticipate that this **situation could change in the future**. Should stricter energy requirements be introduced—whether through national legislation or through closer alignment with EU standards—**energy retrofitting may acquire a more explicit political dimension**. In such a scenario, demands for clearer guidance, professional support, and more robust public funding schemes are likely to emerge.

> So, politically speaking, more professionally structured advice and support in the administration may be a tool that could lead to more people taking the necessary responsibility. (Housing Coop. Board member - OS16)

In parallel to debates on governance and responsibility, the current Norwegian energy context is characterised by a **high level of public intervention in electricity pricing**. From 1 October 2025, the government introduced **Norgespris**, a state-backed scheme offering households a fixed and predictable electricity price throughout the year. The aim of the scheme is to shield consumers from price volatility in the electricity market, enhance predictability for household budgets, and reduce exposure to sudden price spikes.

6.1.5.5 Socio-ecological impacts (positive)

Interviewees consistently describe a range of positive socio-ecological impacts associated with energy retrofitting in housing cooperatives. Beyond **reductions in energy consumption**, retrofitting measures are widely perceived as improving **everyday comfort, indoor climate, and overall quality of life**. Better insulation, new windows, and upgraded façades are described as making dwellings warmer, more stable in temperature, and more pleasant to live in, particularly during winter months. Energy retrofitting is also strongly associated with **value preservation** and, in some cases, value enhancement. Several informants frame upgrading measures as a long-term investment that strengthens the housing cooperative's position within the local housing market.

> We have also talked about the fact that we need to do something about the indoor climate in terms of insulation, energy heat loss and adding value to the property. We have seen that, in relation to the area around us, the price per square meter in our housing cooperative is lower than the average for homes sold in the neighborhood. I would think that this will have some influence on the valuation of the price [in the future] in relation to the promise that has been made. (Housing Coop. Board member - OS16)

In this sense, retrofitting is not perceived merely as an environmental intervention, but as part of a broader strategy to maintain long-term economic and environmental sustainability of the cooperative housing stock.

Interviewees also emphasise the generally positive reception of completed projects among residents. Despite concerns related to costs and temporary disruption during construction, informants report high levels of satisfaction once projects are finalised. As the same board member notes:

> My impression from talking to people and the other board members along the way is that there have been few complaints about the work and there has been a lot of positive feedback about how people experience their flats and how they experience the finished product – the finished work. (Housing Coop. Board member - OS16)

Beyond individual dwellings, upgrading measures are also perceived as contributing to the **aesthetic improvement of buildings and shared spaces**, reinforcing a sense of collective ownership and pride in the cooperative.

It is important to situate these perceptions within the broader Norwegian energy context. Energy prices in Norway are comparatively low, and at present they are further moderated by the Norgespris scheme, which provides households with a fixed and predictable electricity price. As a result, while **energy savings** are acknowledged as beneficial, they are **not always the primary or most urgent motivation** for retrofitting. Instead, comfort, building quality, and property value often emerge as equally—if not more—important drivers of positive perceptions. Also, environmental responsibility is seen as growing concerned.

> I am very happy that people are trying to look ahead to the long term with regard to the green shift. The older generation who sat on the board saw it more as a cost factor, so you can see a trend in the new board, where perhaps the green shift is something you take on board and feel more strongly about, and something you are a little more committed to than you were before, so I would definitely say that it started with a cost limit, but has shifted a bit more towards thinking about the environment and how to lead the way forward. (Housing Coop. Board member - OS15)

6.1.5.6 Socio-ecological impacts (negative)

Despite the broadly positive assessment of energy retrofitting, interviewees consistently emphasise its **high economic costs** as the main negative socio-ecological impact. All board members interviewed express strong awareness that large-scale retrofitting projects place uneven financial burdens on residents, whose economic situations vary considerably. While energy measures are generally perceived as necessary and desirable, they also raise concerns about **affordability, social vulnerability, and the risk of exclusion**, particularly in cooperatives with ageing populations or low-income households. So far, more vulnerable households appear to have coped with rising energy costs through everyday “do-it-yourself” strategies and behavioural adjustments; however, they would likely face greater difficulties in absorbing the upfront and long-term financial burdens associated with large-scale energy retrofitting (OS21). Indeed, a recurring concern relates to the **potential impact of increased monthly costs** on residents with limited financial flexibility.

> Yes, it is difficult for people to make ends meet. This is not the area (bydel) with the highest income, but what we notice, or hear feedback about, is that it is difficult to make ends meet, and that people have to work even harder to avoid increases in rent or shared costs. But the reason shared rent (felleskostnadene) is high is that it is expensive to live in Oslo. There are high fees for electricity and things like that, but at the same time, renovations have been carried out that have cost a lot of money because we are such a large borettslag, and that means large loans, so you end up paying millions in interest expenses every single month. (Housing Coop. Board member - OS15)

Board members highlight that **elderly residents are especially exposed**: many have lived in the cooperative for decades, purchased their dwellings early, and may be asset-rich but income-poor. In this context, rising common costs linked to loan repayments for retrofitting are perceived as a potential strain on everyday living conditions.

> It has been difficult for many people – especially for many elderly people. There are many elderly people living in the housing cooperative who have lived here for many years, who bought at an early stage, and who may not have the financial means to cope with increased daily costs – even though their homes are very valuable. (Housing Coop. Board member - OS16)

At the same time, informants stress that boards actively try to manage these risks through careful financial planning and incremental decision-making. While cost increases are described as challenging, they are also framed as manageable so far, thanks to a strong sense of responsibility on the part of boards to balance long-term building maintenance with residents' ability to pay.

> We are constantly calculating what this will mean for shared costs – how can we solve this but at the same time ensure that people do not end up with higher rents or shared costs?(....)But it is very rare for someone to stand up and say "we can't afford this" at a general meeting. But it's something the board discusses for every single investment we make – how are we going to finance this? What does it mean for the common costs? (Housing Coop Board Member - OS20)

6.1.5.7 Tensions and power dynamics between stakeholders/actors

In contrast to other green transition domains examined in this report, tensions and power dynamics between stakeholders play a **relatively limited role** in the case of energy retrofitting in housing cooperatives—at least under current conditions. As long as energy retrofitting measures remain voluntary and are not mandated by law, interviewees do not frame them as sites of broader political or institutional conflict.

Housing cooperatives themselves emerge as the primary arenas where decisions are negotiated and contested. Residents are simultaneously homeowners, decision-makers, and those who ultimately bear the financial consequences of retrofitting projects. **Potential tensions therefore unfold mainly within cooperatives,** rather than between cooperatives and external actors such as the municipality or private developers. Interviewees acknowledge that disagreements may arise between residents, or between residents and elected boards, particularly around costs, timing, and prioritisation of measures. These tensions are typically

addressed through general assemblies, where lengthy discussions and negotiations are common.

However, **none** of the interviewees described these internal disagreements as escalating into **major conflicts**. Instead, they are portrayed as an expected and manageable feature of cooperative governance. Even in large housing cooperatives with diverse resident profiles and varying financial capacities, interviewees emphasise that decision-making processes generally result in broad consensus, particularly when retrofitting measures are framed as necessary for maintaining building quality, comfort, and long-term value.

> There are always some critical voices, but there is no major dispute. There is always a large majority in favour of adopting the decisions. In such a large borettslag there is great diversity among the residents, and there will of course be different views and many questions, but there has been no big dispute. There is broad agreement, at least we think this is important to do. (Housing Coop. Board member - OS16)

6.1.5.8 Innovative governance mechanisms

Interviewees identify only a limited set of governance innovations in relation to energy retrofitting in housing cooperatives (OS17; OS18; OS19). Rather than pointing to new regulatory instruments or binding policy frameworks, respondents consistently emphasise the need for **improved financial support schemes, enhanced access to expertise, and more systematic information** and guidance for housing cooperatives (OS21). Innovation is thus framed less in terms of institutional restructuring and more as **incremental adjustments** to existing support mechanisms.

Board members highlight that while **financial incentives** exist, **access to them is uneven** and often dependent on individual capacity, professional networks, or the presence of knowledgeable actors within the cooperative. Several informants stress that navigating support schemes requires organisational competence that not all cooperatives possess, particularly smaller ones.

> There are incentives and support schemes, but I would like to see them expanded and made less dependent on individuals. You are dependent on having contact with a property management company or having an advisor on board. For there to be resources available to assist with planning and implementation is something that could add value, and that both the state and the municipality maintain and expand the schemes that are in place. (Housing Coop. Board member - OS16)

From the municipal perspective, interviewees describe ongoing efforts to refine and target existing grant schemes. Representatives from the City of Oslo explain that **recent adjustments in the funding and support schemes aim to improve distributional outcomes,** shifting support away from detached private homes—where grants were found to concentrate in high-income western neighbourhoods—towards housing cooperatives and condominiums, where support can reach a broader population.

> "Previously, we provided support for private homes, but we no longer do so. By providing support only to housing cooperatives and condominiums we reach more people, including

those who would not have had the resources or opportunity to apply on their own. This is a very concrete distributional measure." Municipal representative (SO19)

At the same time, **municipal actors underline** that their **mandate remains centred on climate and energy objectives rather than social equity**, which constrains how explicitly redistribution can be addressed within these schemes. This tension is reflected in ongoing efforts to improve communication and outreach while remaining within a climate-policy framework. Housing cooperatives that have implemented energy retrofitting measures emphasise the decisive role of public support in enabling projects, particularly for more capital-intensive investments such as solar panels. Without municipal grants and supplementary funds from cooperative organisations, several projects would not have proceeded.

We would not have gone for the solar panel solution if we had not received support from the Oslo Kommune. The support was crucial for making the project possible. (Housing Coop. Board member - OS15)

Finally, consultants, technology providers and researchers stress that the **lengthy and complex decision-making processes** within housing cooperatives pose a significant challenge for any future policy that might seek to mandate energy retrofitting (OS21).

6.1.5.9 Tourism and market pressures

Tourism and short-term rentals do not emerge as a relevant issue in the case of energy retrofitting in housing cooperatives. Renting out dwellings is regulated within cooperatives, and interviewees do not associate retrofitting measures with tourism-related pressures.

Market dynamics are instead discussed indirectly, primarily through the lens of property values and long-term asset maintenance. Several informants describe energy retrofitting as a way to preserve or enhance the value of dwellings relative to surrounding areas, rather than as a driver of broader market pressure. Retrofitting is thus framed less as a factor contributing to housing price inflation, and more as a **defensive strategy aimed at avoiding depreciation in an increasingly competitive housing market**.

(...) if you look at apartments – before, two-room apartments were around 4-4.5 [million] and now go for 5.5 [million], and four-room apartments that previously went for a maximum of 8 are now listed for 9.6. There is a lot of psychology involved in buying a home and living there, so hopefully the [aesthetic] expression that is now here and the standard that this contributes to will have an impact. Board Member (SO16)

6.1.5.10 Gaps in perceptions between civic groups and public agencies

In the case of energy retrofitting in housing cooperatives, gaps in perceptions between public agencies and civic actors do not take the form of open conflict, but rather emerge as **differing priorities and problem framings.** On the side of **public authorities**—particularly municipal climate and energy agencies—energy retrofitting is primarily understood as a **climate policy instrument.** The main concern is reducing energy consumption and greenhouse gas emissions, in line with municipal and national climate targets. Support schemes are therefore

designed and justified mainly on environmental grounds, with limited explicit attention to social or distributional effects.

> We are constantly working on communication and how we can reach out and specific points on how we can reach out more with information than what we support, because our mandate is to provide support for climate and energy measures, not social equality measures. So, in a way, we have to argue why we support the various measures, which will always take climate emissions and energy reduction into account, as that is our mandate." Municipal representative (Staff member at the Municipal Climate Agency -OS19)

Housing cooperatives, by contrast, frame energy retrofitting primarily as an **economic and managerial issue**. For boards and residents, the central concern is affordability: how investments will affect monthly common costs, residents' ability to pay, and the long-term financial sustainability of the cooperative. While environmental considerations are often acknowledged and sometimes valued, they remain secondary to cost control, property maintenance, and value preservation.

> I think the residents know that the board is doing its best to keep common costs down." Board-member (Housing Coop. Board Member - OS20)
>
> I think some of the good work that has been done is to create an understanding that the housing cooperative-model is a type of community model where everyone has a responsibility to ensure that it [the community] is maintained (Housing Coop. Board member - OS16)

6.1.6 Critical Analysis: Oslo

6.1.6.1 Green transitions and housing inequalities in a high-pressure context

Taken together, the case of Nydalen and that of energy retrofitting in cooperative housing in eastern Oslo provide a particularly insightful lens through which to assess the impacts of green transitions on housing inequalities in a highly pressured urban context such as Oslo. The two cases capture distinct yet complementary dimensions of Oslo's green transition. Nydalen represents one of the most advanced and consolidated examples of hard densification combined with nature-based solutions (NBS) in Norway—a strategy that is not only more developed nationally than in many EU contexts (WP3), but also increasingly central to Oslo's urban development model. By contrast, the case of energy retrofitting sheds light on a policy field that remains less developed, fragmented, and largely depoliticised, yet likely to generate significant future challenges in terms of affordability, social equity, and housing security as climate requirements intensify.

Together, these cases allow for a differentiated assessment of both **current and emerging socio-spatial inequalities** associated with green urban transitions. While Nydalen illustrates how greening and densification strategies can intersect with—and in several respects intensify—housing inequalities already under way, energy retrofitting highlights how future climate obligations may place new burdens on households within a housing system strongly oriented toward private responsibility and homeownership.

6.1.6.2 Nydalen: advanced densification and the restructuring of housing inequalities

The Nydalen case illustrates how green urban transition initiatives can reshape housing inequalities in high-pressure urban contexts. While Nydalen is often presented as a flagship example of densification combined with green-blue infrastructure—most notably along the Akerselva river—interview evidence points to a more ambivalent outcome, shaped by the interaction between environmental ambitions, market-led development, and weak coordination of housing policies.

Green transition initiatives in Nydalen have not directly generated housing inequalities, but they have contributed to **intensifying and restructuring them**. Densification around the river and major transport infrastructure has driven up land values and housing prices, reinforcing processes of social selection. At the same time, the environmental qualities associated with the river corridor and the area's green branding have increased neighbourhood attractiveness, further amplifying market dynamics. In this context, green infrastructure functions less as a compensatory public good and more as a value-generating asset within a predominantly market-driven development model.

Crucially, the Nydalen case also reveals the **limits of the green transition even on environmental or green quality terms**. Although green-blue infrastructure and NBS are formally embedded in planning frameworks and widely mobilised in policy discourse, their implementation has been uneven and insufficient (Venter et al., 2023). Interviewees consistently note that public authorities either lacked the capacity or acted too late to negotiate the provision of accessible, everyday green spaces with private developers. As a result, green infrastructure has been largely concentrated along the river corridor, while interior parts of the district remain highly dense and undersupplied with proximate public green areas. Even along the corridor, high densification means that the blue spaces can be overused and feel crowded, thus undermining the "nature experience." This spatial imbalance has generated tensions around environmental access and everyday liveability, particularly for families and residents living in small apartments. Ecological concerns related to residential development located too close to the river further underscore the fragility of the green transition outcomes in practice.

Housing-related impacts are already clearly felt. Interviewees describe declining affordability for ownership, limited availability of larger dwellings suitable for families, and high levels of residential turnover. While the rental market has enabled access to Nydalen for highly educated, medium-income singles and couples—often newcomers to Oslo—this access is widely perceived as temporary and insecure due to weak tenant protections and short-term contracts. As household needs evolve, particularly with the arrival of children, remaining in the area over the long term becomes increasingly unfeasible.

Looking ahead, respondents expect these dynamics to intensify rather than diminish. Without stronger coordination between densification, NBS, and housing affordability policies, Nydalen is likely to consolidate as a socially selective neighbourhood, characterised by high environmental quality for some—particularly households located close to the Akerselva or the new park—and growing exclusionary pressures for others.

6.1.6.3 Energy retrofitting in housing cooperatives: strengths and vulnerabilities of a private-responsibility model

The case of energy retrofitting in cooperative housing in eastern Oslo illustrates a different, yet equally revealing, dimension of Oslo's green transition. It reflects core characteristics of the Norwegian housing system: a high level of homeownership, a strong emphasis on private responsibility, and a limited integration between housing affordability policies and climate strategies.

Housing cooperatives represent a substantial share of Oslo's housing stock, particularly in the eastern parts of the city. The cooperative model facilitates maintenance and upgrading by pooling responsibility and enabling collective borrowing, making large-scale renovations possible even where individual households would struggle to finance them alone. In this sense, the cooperative structure constitutes a relative strength: many cooperatives—including those in less affluent areas—have successfully implemented energy-efficiency measures, contributing to building quality, comfort, and long-term value preservation.

At the same time, this model also reveals significant vulnerabilities. Energy retrofitting is currently voluntary and not embedded in any overarching national strategy. While there is increasing awareness of energy use and climate concerns, retrofitting remains primarily driven by economic considerations—such as reducing energy costs or increasing property values—rather than by social or redistributive objectives. Importantly, energy retrofitting is not widely perceived as a political issue by residents or boards, reflecting the broader depoliticisation of housing maintenance within a system centred on private ownership.

If energy retrofitting were to become mandatory in the future—through national regulation or alignment with EU standards—these vulnerabilities could become more pronounced. Higher common costs associated with retrofitting may disproportionately affect economically fragile households, including elderly residents and those with limited income despite high housing wealth. While displacement has not been observed in the cases studied, interviewees acknowledge the risk that some households could be forced to move, thereby missing out on the long-term benefits of retrofitting, such as increased property values and lower energy expenses.

Moreover, differences in organisational capacity, knowledge, and access to information may lead to uneven retrofitting outcomes across cooperatives. Cooperatives with fewer resources or less experienced boards may struggle to plan and implement complex projects, potentially creating a future pattern of uneven housing quality and value across the city.

6.1.6.4 Housing justice dimensions: procedural, recognitional, and distributional

Across the two cases, several critical housing justice issues emerge. **Distributional justice** concerns are most visible in Nydalen, where exclusionary pressures operate primarily through affordability, dwelling size, and life-course dynamics rather than direct displacement. Small apartments and a relatively accessible rental market facilitate entry for students, newcomers, and medium-income singles and couples, but this accessibility is highly temporary. Families and households requiring larger dwellings face increasing constraints, leading to outward

mobility as needs change. Vacancy-chain arguments—whereby high-end housing is expected to free up family dwellings elsewhere—are widely questioned by interviewees and appear to function more as a planning rationale than as an empirically robust mechanism.

In the case of energy retrofitting, distributional issues are less visible at present but loom as future risks. While retrofitting can raise property values and reduce energy costs, the financial burden is borne unevenly, and those forced to sell early may lose out over time.

Procedural justice displays a striking asymmetry. In Nydalen, civic participation ultimately proved effective in relation to green space provision: sustained mobilisation, media attention, and public debate led to the reallocation of land and the decision to develop a large public park. This demonstrates that participatory mechanisms can, albeit belatedly, influence environmental outcomes. By contrast, housing affordability and tenure remain largely outside participatory arenas, framed as technical or market-driven issues beyond neighbourhood-level influence.

In the cooperative retrofitting case, procedural participation is formally strong—decisions are taken democratically within general assemblies—but participation is uneven in practice, with a small share of residents often carrying the main responsibility.

Recognitional justice gaps cut across both cases. Low-income households are largely absent from Nydalen, both empirically and in planning rationales, reflecting the lack of instruments aimed at enabling their inclusion. Elderly residents and older couples appear indirectly in vacancy-chain narratives, yet their actual mobility is uncertain and constrained by attachment, affordability, and limited alternatives. Finally, the design and use of green infrastructure in Nydalen privilege mobile, able-bodied users, limiting accessibility for children, elderly people, and those with reduced mobility. Several interviewees implicitly point to groups whose needs and constraints are insufficiently recognised within current retrofitting practices. Elderly residents, long-term owners with low or fixed incomes, and households who bought their dwellings at an early stage are repeatedly mentioned as potentially vulnerable to rising common costs. Yet these groups are rarely recognised as such within policy frameworks, as energy retrofitting is primarily understood as a technical and economic issue rather than a social one. The dominant assumption that homeowners are generally capable of absorbing increased costs contributes to rendering these vulnerabilities largely invisible.

Recognitional gaps also affect households with limited financial literacy or reduced capacity to engage in complex decision-making processes. While the cooperative model is formally democratic, effective participation often presupposes time, knowledge, and confidence in dealing with technical and financial matters. Residents who lack these resources risk being marginalised within internal deliberations, even when decisions have long-term consequences for their housing security.

6.1.6.5 Comparative overview and concluding reflections

Analytically, Nydalen can be situated within a cluster of hard densification combined with NBS on brownfield and infrastructural sites in municipalities under sustained housing market pressure. Densification is justified through environmental objectives—compact development,

public transport integration, green-blue infrastructure—yet implemented in a context where housing affordability is largely delegated to market mechanisms (Cavicchia, 2023).

The **primary stressor in Nydalen is not tourism but housing market pressure** driven by speculative development, rising land values, and a weakly regulated rental sector. The actor constellation combines strong private developers, a municipality with limited land ownership and constrained regulatory tools, and highly resourceful civic groups capable of mobilising around environmental—but not housing—issues.

The energy retrofitting case highlights a different vulnerability: the **reliance of retrofits on private responsibility within a sector that will likely face increasing climate-related demands**. While the cooperative model has important democratic strengths, there is the risk that cooperatives are not able to limit inequalities if stronger regulatory requirements are introduced without adequate support.

Taken together, the Oslo cases show that green transitions are not neutral processes. Without stronger coordination between environmental ambitions and housing policy—particularly around affordability, tenure security, and recognition of vulnerable groups—green urban development risks producing forms of sustainability that are environmentally visible yet socially partial.

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6.1.8 Appendix 1 – Glossary

Avantor-A major private real estate developer and landowner in Oslo, particularly influential in large-scale redevelopment projects such as Nydalen, with a central role in shaping urban form and land-use outcomes.

Borettslag- A housing cooperative ownership model common in Norway, where residents own shares granting the right to occupy a dwelling and collectively own and manage the building through a democratically elected board.

Bydel- An administrative district of Oslo responsible for local welfare services (such as health, childcare, and social services), but with limited authority over land-use planning and housing development.

Enny-A private energy service company specialising in solar energy solutions for housing cooperatives, often developing shared-risk and shared-investment models for photovoltaic installations.

ENOVA-A state-owned agency under the Norwegian Ministry of Climate and Environment that provides financial support for energy efficiency and renewable energy measures in buildings, industry, and infrastructure.

Felleskostnader (Common costs)-Monthly shared costs paid by residents in housing cooperatives (borettslag), covering loan repayments for common debt, maintenance, utilities, and the operation of shared facilities and services.

Markagrensa-A legally protected boundary surrounding Oslo's built-up area that preserves forests and recreational land, strictly limiting urban sprawl and reinforcing densification within existing urban areas.

Norgespris-A national electricity pricing scheme introduced by the Norwegian government that offers households a fixed and predictable electricity price, partially shielding consumers from market volatility and high energy costs.

Nurse Index-The nurse index is an indicator of housing affordability used in Norway and it is

expressed as the percentage of dwellings sold in a specific year that a nurse can afford to buy. In 2025, this percentage was 16,7% in Stavanger vs. 2,5% in Oslo.

OBOS- Norway's largest cooperative housing organisation and developer, involved in both housing provision and property management, and a key actor in urban development and housing cooperatives in Oslo.

6.1.9 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
OS01	2 Municipal staff members (urban planning)	Public sector	27-May 2025	Teams
OS02	Member	Environmental association	28-Aug 2025	In person
OS03	Local activist (local park initiative)	Civil society	28-Aug 2025	In person
OS04	Member	Civil society (parents' committee)	11-Sep 2025	Teams
OS05	Representative	Civil society (minority committee)	26-Sep 2025	Teams
OS06	Local politician (district level)	Local government	6-Oct 2025	In person
OS07	Local politician (district level)	Local government	16-Oct 2025	Teams
OS08	Planning consultant; former municipal planner	Consultancy / former public sector	17-Jan 2025	Teams
OS09	2 Researchers	Research institute	20-Jan 2025	Teams
OS10	Member of a Migrant Association and Resident	Civil society	21-Oct 2025	Teams
OS11	Journalist	Media	23-Oct 2025	Google Meet
OS12	Environmental association representative; former Municipal Staff	Civil society / former public sector	6-Nov 2025	Teams
OS13	Academic staff member local university	Higher education	14-Nov 2025	In person
OS14	Withdrew consent after interview	—		

OS15	Board member	Housing cooperative	02-Oct 2025	Teams
OS16	Board member	Housing cooperative	03-Oct 2025	Teams
OS17	Employee	Private company (Solar energy provider)	08-Oct 2025	Teams
OS18	Employee	Consultancy (housing and construction services)	13-Oct 2025	Teams
OS19	Staff member	Municipal climate agency	28-Oct 2025	Teams
OS20	Board member	Housing cooperative	04-Nov 2025	Teams
OS21	Researcher	University	13-Jan 2026	Teams

6.2 CASE STUDY (MEDIUM): STAVANGER

Bybånd, Stavanger. Picture: Rebecca Cavicchia

Authors: Rebecca Cavicchia (NMBU)

Contributors: Petar Vejin (NMBU)

6.2.1 City/Town profile, challenges around just (housing and ecological) transition

Stavanger is the administrative centre of Rogaland County and the fourth most populous municipality in Norway, with an estimated 151,602 inhabitants in January 2026 (Municipality of Stavanger, 2026)., which represents a growth of about 7,000 people since January 2020 (Statistics Norway, 2026a). Drivers of this growth include net in-migration, particularly of labour migrants (especially connected to the oil and gas industry – the backbone of Stavanger's economic growth), students, and refugees. As of 2025, 21,4% of the population in Stavanger has an immigrant background, representing an increase of 7,5 percentage points since 2010 (Municipality of Stavanger, 2025b). Together with neighbouring Sandnes, Sola, and Randaberg, it forms the Stavanger–Sandnes conurbation, the third largest urban region in Norway, with 239,055 residents in 2024 (Statistics Norway, 2025a). This regional setting is important because major housing developments are concentrated along the corridor connecting Stavanger and Sandnes *(Bybånd*-urban belt), where urban growth is tightly linked to densification and transport infrastructure projects.

Fig 1. Location of case study city: Stavanger. Made by author

Stavanger's strong population growth has translated into increasing housing market pressure, and by 2025 the city ranked second only to Oslo in terms of housing affordability challenges, as measured by the nurse index (see appendix 5.2).In the first half of 2025, housing prices rose by 12.2%, outpacing Bergen (+8.1%), Oslo (+5.8%), and Trondheim (+4.8%) (Eiendom Norge, 2025). This marks a sharp contrast with a decade ago, when the downturn in the oil industry in 2014 triggered a significant decline in housing prices (Municipality of Stavanger, n.d.).

Rental costs show a similar upward trend. The average monthly rent for a two-room dwelling in Stavanger reached 11,400 NOK (about 970 euros) in 2025, compared to 8,740 NOK (about 743 euros) in 2020 (Statistics Norway, 2026b). Although these figures remain slightly below the national average (11,790 NOK per month for a two-room flat in 2025), the rapid rise illustrates the city's affordability challenges (Johannessen Litland and Sættem, 2026).

As of 2025, about 19.2% of Stavanger's population rents their home—either on the private market or in municipal housing—showing a slight increase from 18.6% in 2016. The remaining 80.8% are homeowners (Municipality of Stavanger, 2025a). The increase in market-rate rentals and persistent housing debt levels mirror broader Norwegian tendencies highlighted in Cavicchia et al. (2024). Beyond affordability, concerns related to housing quality and liveability have become more prominent. Small dwelling sizes, limited access to green spaces and the

predominance of compact apartments in new developments, which are often poorly suited to the needs of young families wishing to remain within the city, are emerging issues.

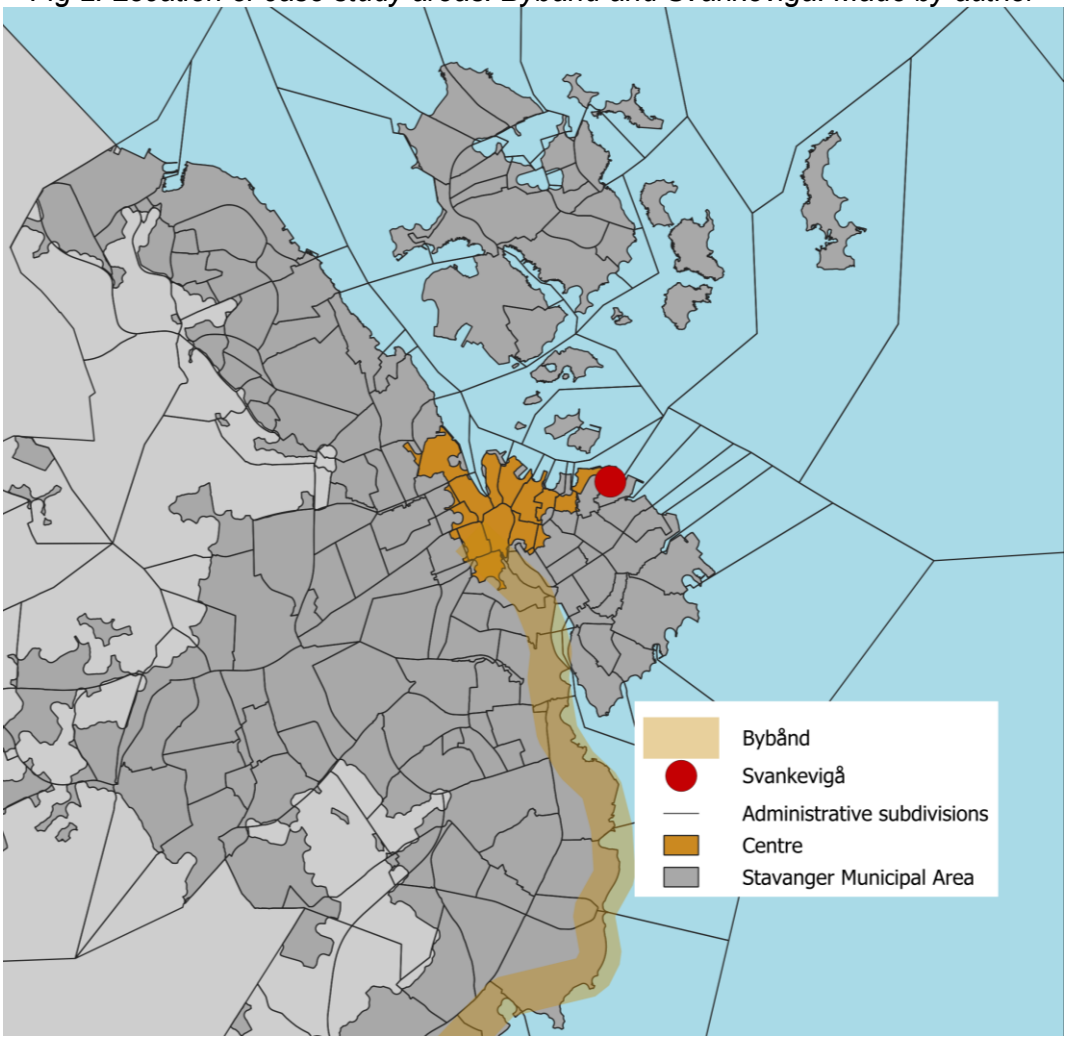
Environmental and climate policies form an important backdrop to these housing dynamics, but they are also associated with a number of challenges. Densification, which is the main strategy explored in this case, while central to Stavanger's strategy for reducing car dependency has intensified tensions around housing quality, housing accessibility and quality to green spaces, especially concerning their size and spatial distribution. Although municipal planning documents emphasise "densification with quality", ensuring that higher densities translate into liveable neighbourhoods has proven difficult in practice, particularly along the *Bybånd*-Urban Belt (Municipality of Stavanger, 2018, 2024).

Housing policy responses are articulated in Stavanger's social housing thematic plan (Boligsosial temaplan 2022–2025), which positions housing as a core pillar of welfare and aims to reduce social inequalities by ensuring access to adequate and affordable homes. The plan highlights four main areas: improving neighborhood quality where municipal housing is concentrated; reducing homelessness and reliance on temporary accommodation; expanding and diversifying the supply of municipal housing to meet rising demand, particularly for families and people with special needs; and supporting pathways from renting to ownership to improve turnover and affordability. Despite annual allocations for new housing, the plan notes that growth in the municipal housing stock has been minimal (5,2% as of 2023), waitlists remain long, and affordability challenges persist, especially for larger family units. The strategy combines operational measures such as counseling and housing allocation with long-term policy, financing, and governance efforts, and will be revised in 2026 to align with new national legislation.

6.2.2 Green Transition Interventions in Stavanger: Bybånd (city belt) and Svankevigå

Over the past two decades, Stavanger has progressively aligned its urban development strategy with national and regional climate objectives, placing densification at the core of its green transition agenda. Two initiatives—the Bybånd (urban belt) and the redevelopment of Svankevigå—illustrate both the ambitions and contradictions of this approach (Fig. 2).

Fig 2. Location of case study areas: Bybånd and Svankevigå. Made by author



The Bybånd concept emerged in the early 2000s as a regional strategy to concentrate growth along the Stavanger–Sandnes axis, linking land-use planning with investments in public transport. From the 2010s onward, the strategy has been operationalised through transit-oriented development around railway stations (Paradis, Jåttåvågen) and high-capacity bus corridors, alongside stricter limits on outward urban expansion. Key projects such as Jåttåvågen exemplify this shift: former industrial and agricultural areas are being transformed into high-density mixed-use districts, with the explicit aim of reducing car dependency, protecting surrounding farmland, and improving infrastructure efficiency. While environmentally progressive, these interventions have struggled to deliver affordable housing, with new developments largely catering to higher-income groups—highlighting a tension between climate-friendly urbanism and social inclusion.

Fig 3. Development along the Bybånd. Picture: Rebecca Cavicchia

Svankevigå represents a more recent and contested phase of Stavanger's densification agenda. Since the late 2010s, growing pressure to redevelop centrally located waterfront sites has intensified. The 2023 rezoning plan marks a turning point, proposing the replacement of low-rent, culturally vibrant industrial spaces with dense residential blocks. Framed as a sustainable inner-city regeneration project, the initiative has raised concerns about displacement, loss of informal social infrastructure, and gentrification.

Fig 4. The industrial character of Svankevigå. Picture: Rebecca Cavicchia

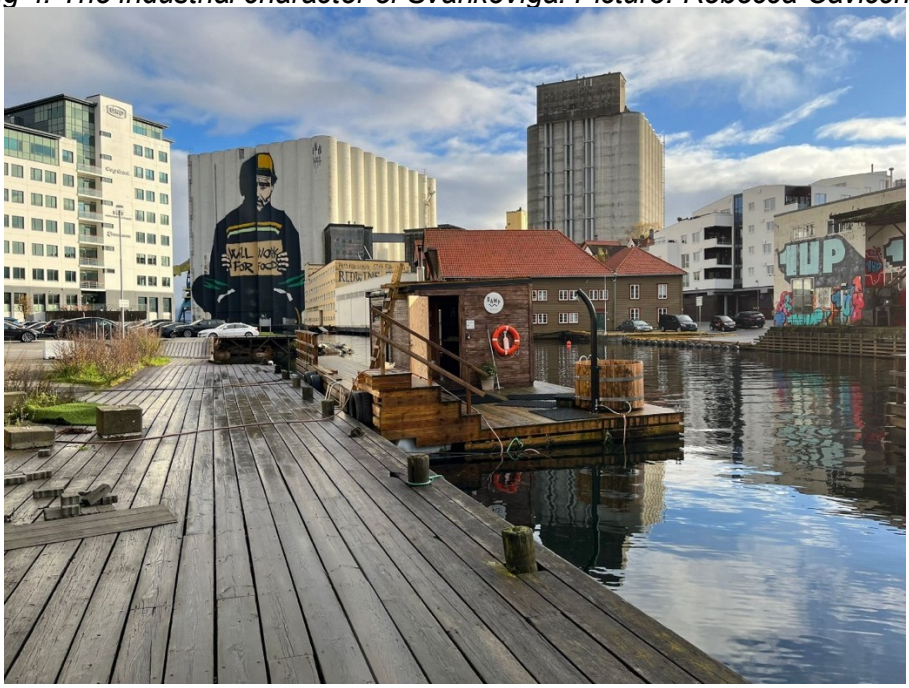


Table 1. Key data on case study area of Stavanger.

	Bybånd	Svankevigå
Neighborhood characteristics (general social type, economic activities, density, etc.)	Linear urban corridor (approx. 9 km); mixed residential, commercial, industrial and agricultural land; increasing density near public transport nodes	Small inner-city waterfront area; former industrial sheds; low built density; strong cultural and community-based uses; low-rent spaces
Duration	Strategy: early 2000s–present. Implementation: 2010s–present. Key areas of development: Jåttåvågen, Paradis, Hillevåg (ongoing)	Strategy: late 2010s–present. Implementation: 2023–present. Key element: rezoning and demolition plan
Funding	Public funding (Bymiljøpakken), about 30million NOK (until 2033) for the transport infrastructure. Private funding (developers) for housing development	Private devs (OBOS, Nordr); Stavanger Municipality (planning authority)
Actor constellation	Stavanger and Sandnes Municipality, RFK, NTP, developers	Stavanger Municipality, private devs, cultural actors, civic groups, NEB-STAR
Aims and objectives	TOD; densification near PT; reduce car dependency; regional growth management	Inner-city densification; new housing; activated waterfront; improved connectivity
Specific physical measures	High-density mixed-use development.; rail + Bus; cycling lanes; station-area hubs	Demolition of sheds; 5–8 storey blocks; ≈100 dwellings; new pedestrian route; partial land infill; green area in between the buildings.
Accompanying housing policy/regulatory measures	Zoning for high density	Standard zoning; no protection for low-rent cultural uses
Key social tensions or/and benefits between	Benefit: climate-friendly mobility. Tension: high prices, family housing gap, construction disruption	Benefit: central housing supply, redevelopment of industrial area. Tensions: displacement, gentrification,

greening and housing		loss of cultural/social infrastructures

6.2.3 Methods

The qualitative material is based on 15 semi-structured interviews (see interviewee list in Appendix 2) conducted between May and October 2025. All interviews lasted between one hour and one and a half hours, enabling in-depth discussion of planning strategies, governance arrangements, and their social and spatial implications. In particular, the interviews focused on local perceptions of green transition and densification initiatives, their interactions with housing inequalities (affordability, displacement, access, and security), and the tensions or synergies between environmental objectives and social outcomes.

Interviews were conducted primarily online via Microsoft Teams (14 interviews) and recorded using the platform's built-in recording function, which generated automatic transcripts. One interview was conducted in person and recorded using an iPhone, with transcription generated automatically. Interviewees included urban planners, private developers, municipal practitioners, representatives of civil society and activist groups, and expert researchers. Participants were selected through a purposive sampling strategy, based on their relevance to the Bybånd and Svankevigå case studies identified through desk research, and subsequently expanded through a snowball sampling approach.

All interviews were conducted in English. Transcripts were reviewed and polished using an AI-based transcription support tool approved by SIKT—the Norwegian Agency for Shared Services in Education and Research, which provides national guidance on secure and ethically compliant use of digital research tools.

Ethical considerations were addressed throughout the research process. All participants received information about the project's purpose, the voluntary nature of participation, and their right to withdraw at any time. Informed consent was obtained prior to each interview. Interview data were stored securely and handled in accordance with institutional and national data protection guidelines. Transcripts were anonymised during processing, and identifying details were removed or generalised in the reporting of results.

Additional qualitative methods included two walking tours conducted during fieldwork: one in Svankevigå with two representatives of a local activist group, and one along the Bybånd corridor in late October. These were used for situated observation and informal elicitation.

Interview transcripts and field notes were coded and analysed using NVivo, following a thematic qualitative analysis approach. Background research included strategic planning documents, laws and regulations, municipal and consultant reports, media coverage, academic literature, and grey literature related to densification, green transition policies, and housing inequalities.

An important limitation concerns the composition of the Bybånd interview sample, which consists primarily of practitioners, planners, architects, and decision-makers. Attempts to recruit resident participants were not successful. This partly reflects broader contextual conditions: in Norway — and particularly in smaller urban contexts — there is generally a limited tradition of organized urban activism and resident-based mobilization around planning and development projects. From this perspective, the Svankevigå case documented in this report represents a relatively rare and distinctive example of local activist engagement. Nevertheless, the absence of direct resident interviews means that the empirical narrative of Bybånd is more strongly grounded in institutional and professional perspectives, while residents' experiences and reactions are captured only indirectly through stakeholder accounts, activist contributions, and documentary sources.

6.2.4 Civic Perceptions of Densification strategies in Case Study Areas: Bybånd and Svankevigå

The following sections present the results of the interview analysis through a set of thematic lenses applied to both the Bybånd and Svankevigå cases, as relevant examples of densification strategies and ambitions in Stavanger. The analysis is structured to first capture how each theme emerges at the level of the broader city strategy of Bybånd, and subsequently how it materialises in the more localized and contested context of Svankevigå. While Bybånd is discussed primarily through the perspectives of municipal planners, architects, and policy-oriented actors, Svankevigå is analysed by a higher diversity of interviewees like local activists, residents, researchers, a municipal planner and the project developer. This difference in interviewee composition influences how issues such as social impacts, participation, power relations, and political mobilisation are articulated and will be further discussed in Section 4.

6.2.4.1 (Civic perceptions of) precedents and implementation

This section first outlines the Bybånd strategy as a broader framework for transit-oriented densification in the Stavanger–Sandnes region, before turning to Svankevigå as an inner-city redevelopment case that reflects multiple tensions in Stavanger's urban transformation agenda

Rather than a single project, Bybånd is consistently framed as a long-term spatial strategy aimed at restructuring urban growth along the main public transport corridor between Stavanger and the neighboring municipality of Sandnes.

Fig 5. Area under development along the Bybånd. Picture: Rebecca Cavicchia

Municipal representatives describe Bybånd as a response to multiple, overlapping policy goals: primarily reducing car dependency, but also concentrating growth in already built-up areas, protecting agricultural and natural land, and supporting a compact city structure around rail and bus infrastructure**. Densification along the Bybånd is closely linked to ideas such as the *10-minute city*, transit-oriented development, and climate mitigation through reduced transport emissions** (ST4, ST1). Implementation, however, is described as structurally constrained. Most land within the Bybånd is privately owned and fragmented, limiting the municipality's capacity to steer outcomes (especially concerning housing) beyond regulatory frameworks and negotiated incentives (ST4, ST6).

> *"*We do not own a big development area, but we own the framework and the strategy of how we want it to develop. We are not the whole solution; we have to work together with private developers to get what we want*." ST4 – Planner working with community and strategic planning*

Several interviewees working with strategic planning emphasise that transformation projects along the Bybånd are capital-intensive, slow, and risky, particularly compared to greenfield development, with infrastructure costs and environmental upgrades ultimately feeding into higher housing prices, as developers are often responsible not only for housing but also for local infrastructures and green areas (ST6, ST8). Concerns about affordability, accessibility, and uneven access to green amenities are acknowledged, but often framed as systemic challenges rather than project-specific responsibilities.

> “It's clear there are dilemmas: prices go up after transformation, and infrastructure/green upgrades go into the final price. In some periods, the difference between old and new housing was almost 50%. In Jåttåvågen, prices are high because you have to recreate nature and build all the infrastructure. It's different from building on greenfield land.”*S6 – Planner*

Svankevigå enters the narrative as a specific site within Stavanger’s overall densification strategies. It is a small former industrial waterfront area located immediately east of Stavanger’s city centre, between the historic bathing site of Badedammen and the residential neighbourhoods of Storhaug. Over the past 15–20 years, it has been the subject of repeated redevelopment attempts, pauses, and reactivations, making it a particularly illustrative case of how inner-city densification and green transition ambitions intersect with locally embedded social and cultural practices.

> “This is an area where there's a lot of street art, graffiti. It's where you'll see rubbish on the ground, you know, plants growing through the cement. It's a little bit grungy, it's rustic and that is what many people like about the area.“ *S10- Researcher*

The redevelopment of Svankevigå was described by interviewees as the outcome of a long and incremental process in which broader urban strategies, private land ownership, and local socio-economic conditions gradually intersected (ST10; ST14; ST11). Historically used for maritime and industrial activities, the area lost much of its original function over time and rather than being fully transformed, existing buildings were reused in ad hoc ways, shaping a physically fragmented but vibrant urban environment.

> “But along Svankevigå it was this stage for alternative music performances. There was a small workshop for fixing bikes and quite a large woodworking workshop that is open for everyone, almost as a social project for people that might be disabled or didn't have work. They could come there and do carpentry during daytime. Yes, it was very nice.” ST12 – Local Activist

From the municipal perspective, the site came to be seen as part of a wider strategy to reuse centrally located former industrial land and to strengthen Stavanger’s city centre through densification (ST14). Concentrating new housing in inner-city locations was framed as environmentally beneficial, given proximity to public transport, services, and walkable destinations, and as a way to reinforce the city centre as a social and cultural anchor. Within this logic, Svankevigå was interpreted as an underused site with potential to accommodate new housing while contributing to broader sustainability objectives.

Development plans for Svankevigå existed well before the recent public debate. Interviewees noted that the land had been acquired by a private developer in the mid-2000s and that zoning plans allowing residential development were already in place by the early 2010s (ST11; ST10).

However, implementation stalled following a sharp downturn in Stavanger's housing market linked to the oil price crisis in 2015, which made apartment sales unviable (ST11; ST12). As a result, redevelopment was postponed for several years.

> "So, they tried to sell these in the market, and they had 100 dwellings, but they sold only one. That was in 2015 when we also had that economic crisis with oil prices, so there were several reasons for that. But the framework for this plan was inherited into the next plan. And this 2010 plan proposed tearing down everything, create a totally new area, forget about history, in a way. And they inherited it and made a new plan that was still proposing to tear down everything, and this plan was approved in the building council as a first-time approvement and then you have the public hearing. And then it started, you know, with those two buildings there. What OBOS had done was to rent these buildings out very cheaply to have activity in the area, and then the people that rented it liked it that much that they wanted to stay. So, it's a difficult situation." *ST14 - Architect*

In the last decade, the existing buildings were rented out at low cost (also as part of an area-based development program), enabling a range of cultural, social, and community-oriented activities to emerge (ST10; ST12). A carpentery workshop (*Storhaug Snekkeforening*), performance spaces in the cultural center RIMI-IMIR, a bicycle repair place, and saunas took advantage of the flexible and inexpensive premises. Interviewees consistently emphasised that these uses transformed Svankevigå into a socially inclusive, active and vibrant urban environment. The area was described as a "melting pot" that brought together artists, migrants, students, and people with limited economic resources alongside more established users (ST12; ST15). Over time, these activities generated strong place attachment and everyday use, turning the area into a valued meeting place rather than a vacant redevelopment site. Against this background, Svankevigå came to be perceived as one of the few remaining inner-city spaces in Stavanger offering openness, diversity, and inclusiveness.

Fig 6. One oft the buildings that will be demolished to make space fort he OBOS densification plan in Svankevigå. Picture: Rebecca Cavicchia

When redevelopment plans were revived in the early 2020s, these accumulated meanings became central to public debate. Developer representatives framed the new proposal as bringing quality to the area being more open and greener than earlier plans, emphasising public access and improved connections (ST11). Researchers and civil society actors, however, described the proposal in more concrete and critical terms, focusing on the planned demolition of key buildings, partial infilling of the inlet, and the construction of approximately 90–100 apartments. In their view, the project places insufficient emphasis on the quality of the built environment and provides limited consideration of basic services and shared functions needed to support community life and social interaction(ST10; ST12).

Land ownership[126] emerged as a decisive factor shaping how these tensions unfolded. Interviewees across roles emphasised that the site had long been privately owned, limiting the municipality's capacity to intervene beyond regulatory planning instruments (ST11; ST14).

[126] Norwegian municipalities generally control little land, and in this case owned only a very small portion of the site, offering limited leverage in negotiations

As the planning process advanced, opposition intensified and the project became subject to political debate, public hearings, and multiple revisions (ST13; ST15). Civil society actors described repeated cycles of proposal, contestation, and adjustment, with disagreements centring on the loss of existing social and cultural uses, development scale, and waterfront transformation (ST13; ST15). At the time of the interviews, implementation remained uncertain and strongly dependent on market conditions, with construction contingent on the pre-sale of 50% of the planned dwellings (ST11; ST12).

6.2.4.2 (Civic perceptions of) participation and governance (procedural)

While both Bybånd and Svankevigå are subject to statutory participation requirements under the Norwegian Planning and Building Act, the meaning, reach, and perceived effectiveness of participation differ substantially between the two cases, reflecting differences in scale and actor composition, but also in the typology of interviewees.

Within the Bybånd framework, participation is primarily described by municipal planners, strategic advisors, and coordinators as a structured and iterative process aimed at informing planning decisions and building broader legitimacy for densification. Interviewees working at the municipal level emphasise workshops, surveys, and targeted engagement strategies as key tools for civic inclusion, particularly in relation to public space and neighbourhood-level interventions. A city centre coordinator describes how large public workshops were organised during 2018 to gather residents' input on the design and programming of a new green park "Lervigpark" located in a new densification area in Stavanger East (ST9). These processes generated substantial feedback, but also revealed participation biases, with older residents overrepresented and families or working-age households less visible. In response, the municipality experimented with alternative formats, including smaller, network-based meetings ("gjestebud"), designed to reach "silent voices" who typically do not attend formal workshops (ST9). **From this perspective, participation is framed as an evolving practice, requiring constant adaptation and institutional learning**. Municipal planners involved in Bybånd also acknowledge **limits to participation, particularly regarding communication and alignment across political and administrative levels**. One interviewee reflects on the difficulty of ensuring that planners, administrators, and politicians share the same priorities, noting that disagreements at higher levels can undermine both participation outcomes and public trust (ST3). Here, participation is understood less as direct co-decision and more as a mechanism for gathering knowledge and offering input on smaller aspects of project design and implementation.

> "We had a big workshop where we invited all the citizens in that area to ask them what they want for the park, and we got a lot of inputs there, but we also saw that many of the participants were elder people, so they were people who had time to come and give us inputs. So, we didn't see any families there. That's why we decided to apply an organisation that's called (*unintelligible), a Norwegian organisation to help us have more workshops for including the "silent" voices. And then we designed a participation process for those people who usually don't show up for those workshops. So, we used some of the networks in the area. We have an organisation in that area that is sort of connecting all these small organisations, so we used them. And then we invited some of the inhabitants to what we

call “gjestebud” in Norwegian, where you just invite some of your friends or your neighbours and then you discuss some themes related to the park, and what you want from the park.” *ST9 - Planner*

From a more critical standpoint, a housing justice researcher highlights that while participation is legally mandated, its effectiveness depends on how inclusive it is in practice. Underrepresented groups—such as immigrants or low-income households—are formally included but often harder to reach, requiring proactive and resource-intensive engagement strategies (ST5). In the Bybånd context, participation is thus portrayed as institutionally anchored but uneven, with a stronger focus on consultation and information than on shared decision-making.

In Svankevigå, participation is described as reactive, conflict-driven, and closely intertwined with political mobilisation. Several interviewees recount how civic inclusion in Svankevigå extended well beyond the immediate neighbourhood, reflecting strong emotional and symbolic attachment to the area. A researcher involved in the case describes how residents were supported in organising a petition that gathered around 600 signatures, indicating a level of engagement that surpassed formal participation channels (ST10). At the same time, this broad engagement was uneven: while online activity and written contributions were extensive, sustained attendance at meetings proved more difficult (ST10). **Local activists express deep scepticism about the quality and purpose of formal participation processes.** Participation is frequently described as procedural rather than substantive, fulfilling legal requirements without granting real influence. One activist explicitly refers to a politician’s statement that *“participation is not co-decision”*, emphasising that participation is advisory and carries no legal power (ST12). This distinction is central to how participation is perceived in Svankevigå: as an obligation imposed by law rather than a genuine opportunity to shape outcomes.

“There was one politician that said: ‘*medvirkning* (participation) is not *medbestemmelse* (co-decision)’. So, with “medvirkning” you have no legal rights, it's only advisory. So, the entrepreneurs or the real estate developers don't necessarily take these processes or the critique seriously.” *ST12 – Local Activist*

The technical complexity and volume of planning documents further contribute to perceptions of exclusion. **Activists describe participation as time-consuming, emotionally draining, and linguistically inaccessible, arguing that professional planning language effectively monopolises opportunities for influence** (ST12). The result, according to one of the interviewees, is not empowerment but frustration and fatigue, with participation processes leaving people “depressed afterwards” rather than included (ST12).

“Yes, there was a very large common meeting with politicians from most of the parties in Stavanger. Well, there were several lectures, and representatives of the neighbours and the carpentry workshop. And the argumentation was so good that the politicians decided to

preserve the building where there was the factory. Yeah, they wanted to preserve the carpentry workshop and the bicycle workshop. And they wanted it to be a place for the municipality. They wanted to buy it. But then a year after, they decided the opposite. So, it was quite a depressing participation project thing because we had a lot of common-sense suggestions... If they wanted to build something, they could build something that will make the neighbourhood better, and preserve this activity that already existed there. But after a while, the politicians didn't want to hear it anymore, so they decided the opposite. They accepted the plan from OBOS." *ST12 -Local Activist*

Municipal representatives acknowledge shortcomings in participation practices in Svankevigå, highlighting that participation efforts were insufficient and often occurred too late in the process, when plans were already largely defined (ST14). From the developer's perspective, participation is framed as an earnest but ultimately unsuccessful attempt to communicate and negotiate within an already approved planning framework. A project manager from OBOS describes early-phase surveys, digital workshops, and information meetings as evidence of good intentions, while also acknowledging that dialogue with tenants and creative actors failed to produce acceptable compromises and escalated into public controversy (ST11).

6.2.4.3 (Civic perceptions of) (in)equity (distributional)

In the Bybånd case, stakeholder perceptions often frame densification and transit-oriented development in terms of collective urban benefits, even if negative implications were largely discussed (see next sections). Interviewees involved in planning and development frequently emphasise positive expected outcomes, including improved public transport accessibility, increased housing supply, greener neighbourhoods, and more efficient land use (ST6, ST8). Some actors highlight that previously underused or industrial areas are being transformed into housing and green areas that may improve neighbourhood quality and everyday usability (ST9). Even if multiple challenges related to housing accessibility were identified, a municipal planner describes the BYbånd strategy as enabling more people — including families, elderly residents, and younger households — to live in well-connected urban areas, supported by new apartments and upgraded mobility systems, while at the same time the risk is to develop areas with high pollution levels (ST3).

So, I guess if we do the right things, you can have so many nice places for people to live here, and I think this includes the elderly and the young, and children and families, and everybody. So, there was something here about how to point out the best quality areas and maybe start the transformation there instead of always looking at the collective transportation system. So, we have, for instance, a big plan near the collective transportation system, and that's very good, but also near the highway […] of course, here you will have a lot of pollution, a lot of noise. ST3 – Planner working with community and strategic planning

Interviewees involved in the Svankevigå case articulate a strong and recurring sense of injustice, linked both to the planning process itself and to its distributive outcomes. Perceptions

of unfairness are particularly pronounced among local activists and users of the area, who describe redevelopment as a process that systematically marginalises existing communities while privileging economic interests.

A central dimension of perceived injustice relates to participation processes, which -as already mentioned - are not only seen as ineffective, but as actively producing feelings of exclusion and resignation. Rather than offering channels for influence, participation is experienced as exhausting and demoralising, contributing to what interviewees describe as a broader erosion of trust in democratic planning institutions (ST12).

This sense of injustice is also closely tied to perceptions of profit-driven development. Several interviewees frame the Svankevigå project as primarily motivated by financial gain, with limited concern for neighbourhood quality, aesthetics, or existing social life.

> And then we got this thing from OBOS that said they wanted to build something, and that they wanted to have this information meeting. So, there were a lot of people that went to this information meeting and so many people were really frustrated by the new plans. But not just this project, people all over the town didn't feel heard and seen. And I felt like the entrepreneurs were just building houses, lots of houses, and they were not balancing with the schools, kindergartens and different kinds of recreational places for other people to be parks and places to socialize. It's always just about building houses, and that's where the money is. ST15 – Local Activist

Perceived injustice is also articulated through experiences of temporal uncertainty and dispossession, particularly among community initiatives and users of the area. Cultural and social actors describe how prolonged vacancy, lack of clear communication, and the absence of concrete alternatives generate insecurity and waste existing social resources. As one interviewee noted, *"it's been standing one year empty (*referring to the two buildings that OBOS will tear down to make a new residential development)*. So, we could have been there"* (ST13), while another highlighted how uncertainty undermines long-term engagement: *"all our energy is spent wondering how we can't do something because we don't know how long we're going to stay"* (ST13). This suggests that injustice is not only spatial but also temporal, unfolding through waiting and uncertainty.

Interviewees also emphasise that the groups most affected by these dynamics are those already facing structural vulnerability. Local activists stress that the surrounding area scores low on municipal living-condition indicators and is home to migrants, disabled residents, young people, and elderly residents (ST12). The displacement or marginalisation of these groups is therefore perceived as particularly unjust, as it risks deepening existing inequalities rather than addressing them. While one displaced activity was able to relocate independently to a site very close to the former venue—without support from either the municipality or the developers—the performative arts centre and the carpentry workshop have yet to secure new premises.

> *"Yeah, I think that one thing that comes out of all these participation processes I've been part of is that people are quite depressed afterwards. You have plans and you have wishes*

and you have a neighbourhood that you care for, and neither the real estate owners nor developers or politicians care. They want to build it, and they want to build fast, and they want to earn a lot of money, but they don't care about neighbourhoods and people already living there. So, that's what we are trying to fight now… Democracy is important." (ST12)

At the same time, some interview material also documents **limited distributional gains** achieved through political negotiation. These include **stronger requirements for socially active ground-floor uses and the preservation of selected community amenities such as saunas** (ST14). These outcomes are described as "small victories" that introduce elements of social sustainability into the project, but they are consistently characterised as incremental concessions rather than structural equity safeguards (ST14).

6.2.4.4 (Civic perceptions of) political mobilization

This section examines how political mobilization unfolds differently at the scale of the Bybånd strategy and in the place-specific case of Svankevigå, highlighting variations in focus, intensity, and modes of engagement.

In the Bybånd context, political mobilization is primarily described as linked to specific, concrete issues rather than as an opposition to the strategy itself. Interviewees working with community and strategic planning refer to recurrent debates and conflicts related to densification, infrastructure, and perceived overdevelopment, particularly in areas undergoing rapid change like the redevelopment of the residential areas of Paradis and Jattåvågen along the Bybånd. However, these dynamics are often framed as debates rather than as organized collective action, and interviewees involved with city development note that concerns about gentrification are more visible in public discourse than in quantitative evidence. Political mobilization around transport infrastructure emerges as one of the clearest examples of city-wide protest. A municipal planner describes large demonstrations against the Bussveien project and road tolls ("bompenger"), including street protests (ST3). In this case, mobilization is not directly linked to housing densification, but it strongly influences the political climate in which Bybånd is implemented.

"I think there has been discussion about this "Bussveien" project, the collective transportation system. And people maybe think it's too expensive, it takes too much space from the gardens and the parking space, for instance. And they would not go by bus, they would drive. Everybody has their own car, everybody will drive where they want. So, that's what they think. And they will not have this "bompenger" (road tolls). Yes, and people hate that, so there have been really big demonstrations a few years ago. They were taking it to the streets and screaming, having this megaphone. And even a political party was founded on the issue of road tolls, and there was a lot of noise connected to that. So, that's the main thing. We have also looked at how different the housing that was already built in the "Bybåndet" is. There were already a lot of detached houses there. So, there is quite a lot built there. I have not heard much noise from them. I think most of them think it's OK that there will be another way of building (more compact). There's been a bit too much of block apartments in one place called Paradis where you could have a really nice development

and now it's 10 blocks. So, people maybe think it's not the way they wanted it to be, but it's not hard discussions." *ST3 - Planner*

Other forms of political engagement at the Bybånd scale appear more institutionalized. For example, a planner describes how political support at the district level played a proactive role in advancing the development of Lervig Park based on citizen input, with politicians endorsing the overall need for green space rather than contesting specific design choices (ST9). Here, political mobilization is channelled through representative institutions rather than through protest or opposition. Political contestation at the Bybånd scale appears sporadic and uneven—visible in large infrastructure debates (e.g. Bussveien, toll roads, Paradis), but less consistently tied to housing or displacement concerns (ST3, ST8).

In contrast, Svankevigå is characterised by intensive, place-based political mobilization. Mobilization here emerges as a response to a concrete and perceivedly irreversible threat: the redevelopment of a site that hosted long-standing social, cultural, and community-oriented activities.

Several interviewees describe how mobilisation began once residents and users of the area received the development plans proposed by OBOS. Neighbours organised meetings, coordinated critique, and submitted collective statements during the public hearing process (ST12). A researcher involved in the case highlights the formation and role of *Bevar Svankevigå* (Protect Svankevigå), an organisation dedicated to preserving key buildings and activities, including the carpentry workshop and the cultural centre RIMI/IMIR (ST10). According to this interviewee, Svankevigå stands out as one of the few places in Stavanger where redevelopment triggered a "big public outcry" and sustained mobilisation starting from approximately 2020, during COVID-19 pandemics (ST10). Political mobilization in Svankevigå extended beyond formal participation channels. Interviewees refer to petitions signed by dozens—and in some cases hundreds—of people, public meetings attended by politicians from multiple parties, and sustained media engagement (ST10, ST14). While some mobilisation focused on opposing the developer, frustration was also directed at the municipality, particularly regarding its earlier decision not to purchase the property and protect existing activities (ST10).

Importantly, mobilization in Svankevigå also took the form of neighbourhood advocacy. Local activists did not only oppose the redevelopment, but also engaged with planning rules and governance structures, scrutinising dispensations related to building height, volume, and land use, and developing alternative proposals. One such proposal involved municipal acquisition of one of the two buildings to be demolished (the Dokken building) and collaborative development with local initiatives, prepared together with the city architect and submitted to the municipality (ST10). Activists describe these efforts as an engagement with institutional procedures rather than outright rejection of them (ST15).

6.2.4.5 (Civic perceptions of) socio-ecological impacts/benefits (positive)

This section maps how interviewees describe the intended and perceived positive socio-ecological outcomes of densification, contrasting the strategic framing of Bybånd in terms of accessibility, public space, and green infrastructure with the more contingent and negotiated benefits described in Svankevigå.

Interviewees working with strategic planning in both Stavanger and the nearby municipality of Sandnes describe Bybånd as a project with explicit ambitions for positive social outcomes. Across these interviews, Bybånd is associated with improved accessibility, enhanced public spaces, and the creation of more liveable, connected neighbourhoods. Densification along transport corridors is seen as a way to support everyday mobility, reduce car dependency, and create conditions for more inclusive urban life, particularly for groups such as the elderly, young people, and families (ST1, ST3). Several interviewees among planners and strategic plan coordinators emphasise that Bybånd has been accompanied by deliberate efforts to integrate green infrastructure and public spaces into redevelopment processes. New parks, upgraded streets, and nature-based solutions are described as contributing not only to environmental goals but also to social well-being, health, and opportunities for everyday interaction (ST1, ST9). In this framing, formerly underused or industrial areas are transformed into mixed-use environments combining housing, green spaces, and improved public amenities, thereby increasing the overall attractiveness of the city and expanding access to urban qualities for a larger population (ST3, ST9).

> *"The one side is that this is a really good thing. You will have a fantastic transportation system; you will come near to it. There will be a lot of apartments here that will give a lot of people the possibility to live in a new apartment, and I guess there will be quite a lot of people living in these apartments."* ST3 – Planner working with community and strategic planning

At the same time, some of the interviewed planners acknowledge that these positive social impacts are not evenly distributed and may come with side effects, such as rising housing prices and changing neighbourhood demographics. While green areas and improved public spaces are widely seen as beneficial, they are also recognised as factors that can increase attractiveness and property values, potentially contributing to exclusionary dynamics over time (ST9). Furthermore, issues related to open construction sites, construction disruption issues, lack of attractiveness and neighborhood quality were discussed.

Svankevigå is described as a more contested and ambivalent case, where positive social impacts are perceived as limited, negotiated, and largely reactive. From a municipal perspective, political debate around Svankevigå led to concrete, though modest, adjustments in the plan. These included requirements for more socially oriented ground-floor uses rather than parking, which one interviewee described as *"the tiny victory that came out of this whole process"* (ST14). Similarly, the decision to retain certain existing amenities—such as the saunas in the area—is framed by a municipal planner as another incremental gain resulting from mobilisation and negotiation rather than from the original development vision (ST14).

These elements are perceived as potentially contributing to everyday social life and maintaining some continuity with previous uses of the area. However, they are consistently described as exceptions, rather than as indicators of a socially driven redevelopment logic.

From the developer's perspective, the transformation of a former industrial area into housing is seen as a way to improve the city centre and respond to housing demand, contributing to urban renewal and increased activity (ST11). From the perspective of the local cycling-business, densification can create new economic opportunities at the micro scale as increased density combined with reduced parking is expected to generate more cyclists and customers (ST13).

> *"Now I can look at it differently, because if there comes a lot of apartments with no parking places, there's going to be more bicycles and more customers for me. So, if I look at it from a business perspective, of course there will be more activity."* ST13- Local activist and business owner

At the same time, interviewees stress that Svankevigå previously functioned as a socially open and diverse space, hosting a wide range of users and informal activities. While redevelopment is expected to make the area more "polished," some interviewees acknowledge that formalisation may also stabilise certain functions and improve accessibility, provided that space remains for diverse social groups (ST15). These reflections suggest that positive social impacts are not entirely absent.

6.2.4.6 (Civic perceptions of) socio-ecological impacts/harms (negative)

In this section we outline perceived negative consequences of densification in the two cases, focusing on how affordability pressures, liveability trade-offs, and socio-spatial exclusion are discussed as systemic risks in the Bybånd context and as immediate and concrete losses in Svankevigå.

From the perspective of municipal planners and strategic advisors, Bybånd is increasingly associated with tensions between densification goals and housing affordability. Some of the interviewed planners note that although the compact-city model is intended to reduce sprawl and improve sustainability, rising housing costs in central areas are pushing households to relocate to neighbouring municipalities. As one municipal advisor involved in the social dimension of the planning strategy observed, people move out of Stavanger in search of affordable housing, resulting in patterns of city spreading that contradict the original intent of densification (ST1).

> "…we also have this social part where we experience that people move from Stavanger city to neighboring municipalities, because of more affordable housing in Sandnes or Sola, and then you have this city spreading, not as we planned. And we also have this city area that is a common work area and transport area, but it's different municipalities. Stavanger is the biggest one, and you have Sandnes, Sola, and Randaberg, and different policies in the other municipalities. That's where we're not working together, but in some parts against each other. It's making it difficult for us to achieve our goals. We also see

differences in house pricing in the city centre of Stavanger and in more dense areas that are cheaper. And so, it's more difficult for people who don't have much money to decide where they are going to live and buy a house. This way you get an area with notable social and economic differences." *ST1 - Advisor and project manager for community planning*

Interviewees also highlight spatial inequities in how densification benefits are distributed. Areas with higher concentrations of low-income households are described as having fewer new green areas and lower environmental quality, while investments in green infrastructure and public space tend to concentrate in redevelopment zones associated with Bybånd (ST1, ST4). This creates a situation in which sustainability improvements risk becoming selective, reinforcing rather than reducing socio-spatial inequalities. A recurring concern raised by the interviewees involved with city planning as advisors and architects is that new – high environmental standards - housing produced through densification is often too expensive to fulfil its intended social function. Interviewees describe how infrastructure costs, land values, and design standards translate into high sales prices, making it difficult for families, young people, or lower-income households to access housing in central areas (ST4, ST6, ST7). Even strategies aimed at encouraging downsizing—such as moving older residents from villas into apartments—are described as problematic, since new apartments are often more expensive than existing homes, limiting mobility within the housing system (ST4, ST8). Several interviewees also point to quality-of-life trade-offs linked to Bybånd-related development. Housing located close to transport corridors may benefit from accessibility, but is also exposed to noise, pollution, and limited green space, raising questions about liveability, especially for families with children (ST3, ST4).

In Svankevigå, interviewees emphasise direct experiences of exclusion and loss of sense of place. A central concern relates to housing affordability, as new apartments are likely to be expensive due to location, land values, effectively limiting access to wealthier households (ST10, ST11, ST12). This fuels perceptions that redevelopment will reinforce exclusion rather than alleviate it. The project is thus interpreted not as neutral urban transformation, but as part of a wider process of gentrification described as *"a destructive project that is excluding a lot of people that live in the area or perhaps could have lived there if it was cheaper. So, I think this project is part of the gentrification in this area."* (ST12).

Displacement emerges as a key theme. Interviewees describe how cultural initiatives and community-based activities—such as the carpentry workshop, bicycle repair shop, and the RIMI/IMIR cultural space—were required to leave, often with short notice and without viable alternatives (ST10, ST11, ST12, ST13, ST15). For local activists, this is framed not only as the loss of individual tenants, but as the removal of social infrastructure that supported everyday interaction, inclusion, and low-cost activities. A researcher involved in the case highlights how the redevelopment eliminated spaces that enabled community-building and well-being, particularly for people with limited financial resources (ST10).

"And we also complained about the gentrification because this alternative stage, bicycle workshop and carpentry workshop had to move. They weren't given an alternative, and

they couldn't afford it to rent in this new building because it's probably quite expensive, I think." *ST12 – Local Activist*

Interviewees also raise concerns about the quality of the built environment that is being produced. Local activists describe nearby green areas associated with dense housing as poorly designed and underused, due to wind exposure, lack of sunlight, and limited functionality (ST12). Others argue that the project provides only minimal green space and lacks essential social infrastructure such as kindergartens, informal meeting places, and spaces for non-commercial social life (ST15).

You have these many apartments, it should be this much green area and stuff. And now they had to build 10 apartments less, and they were really not happy about it because that's less income. And more of this green area, but the green area is still on a bare minimum. I think there's still not enough green area, and there are no kindergartens. So, if you don't have kindergartens in the area that could handle the kids, some extra kids, and there's no place for the elderly people to be, and there's not many socializing places, if you don't want to go to a bar or go to a fancy restaurant, but if you want to go to a place just to socialize and meet other people, there's nothing like that in the area, so that's what they took away. But you also have all this other social infrastructure that is not in place. It's not a good place for kids; collective transport is not that good. There are not too many buses going there. The schools are not that good. The primary and elementary schools there are packed. And they're just going to build more and more, and they don't have a plan. ST15 – Local Activist

Combined with low parking provision and limited public transport options for families, this leads interviewees to expect that the area will primarily attract older or wealthier residents, reinforcing demographic homogeneity (ST15). Finally, several interviewees frame Svankevigå as part of a broader pattern of gentrification in eastern Stavanger, characterised by rapid transformation, rising prices, and the gradual displacement of low-income residents and informal activities (ST10, ST12, ST13).

6.2.4.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

Here we investigate how power relations are perceived and explained, showing how Bybånd-related tensions are often described in institutional and structural terms, whereas in Svankevigå they are portrayed in relation to land ownership, political decisions, and affective experiences of uneven development.

In the Bybånd case, power dynamics are primarily articulated through institutional and professional lenses. Municipal planners and strategic advisors tend to describe tensions as systemic challenges embedded in the planning system, rather than as conflicts between identifiable actors. From this perspective, private sector influence is understood as a

consequence of the Norwegian housing system, which is dominated by the private market and offers limited legal instruments for enforcing social objectives such as affordability (ST14). Architects and planners working within or alongside municipal institutions further emphasise the fragmented nature of development control, noting that when development is driven by privately owned plots, the municipality's ability to pursue comprehensive, city-wide objectives is constrained (ST7). Power asymmetries are thus framed as an outcome of project-based development and limited regulatory reach, rather than as deliberate dominance by individual developers.

> "When it's private developers developing their own area, you don't see the city as a whole. It's very project based and not much like a comprehensive overview. We try to have comprehensive development, but often it gets small because developers only focus on their own land." *ST7 – Architect in Sandnes Municipality*

This framing is also reflected in how professional actors discuss negotiation and incentives. Interviewees involved in urban development highlight contractual arrangements and value-capture mechanisms as the main tools available to public authorities, implicitly accepting that social outcomes must be bargained for rather than guaranteed (ST6). Within this interview material, tensions appear technocratic and normalised as part of contemporary urban governance.

In the Svankevigå case interviewees offer a more experiential and conflict-oriented portrayal of power dynamics. Local activists frame private sector influence as rooted in land ownership and reinforced by political decisions that limited public control over the site. The municipality's earlier sale of the land is repeatedly cited as a pivotal moment that shifted power decisively toward the developer and constrained later political options (ST10, ST13). From this standpoint, tensions are not simply structural, but the result of identifiable planning choices with long-term consequences. Political decision-making itself is described as inconsistent and difficult to trust. Activists recount how politicians initially supported preserving buildings and activities in Svankevigå, through an area based development initiative (områdesatsning) and including discussions about municipal acquisition, before later approving the developer's plan (ST12).

> "I think it's the government who lacks planning because they sold it very, very cheaply like 10-15 years ago or even more, a long time ago. And they have got 100 million to spend on "områdesatsning" (area based development). And they give money to the carpenters, to RIMI/IMIR in the black building. They put out so much money and when the project is over, it's like there's nothing... They shouldn't sell it out first and then give a lot of money to different kinds of actors like the carpenters or the artists. And when it's over, it's over. It's not sustainable. So, when they take it up to government level to try to buy it back, then the price is probably four or five times as high. It's a lack of planning from the government from the start, I would say. Because I know when the area is for sale and the developer comes and buys it, of course their plan is to build something there." *ST 13 – Local Activist*

Because many interviewees in this case were directly affected by these decisions, power dynamics are described in affective terms—through frustration, disillusionment, and perceptions of democratic failure. A researcher involved in the case highlights how redevelopment was justified through a storyline portraying the area as degraded and unsafe, with the developer positioned as the agent of improvement (ST10). Activists, in turn, interpret this narrative as a strategic tool that legitimised displacement and marginalised existing social practices (ST15).

6.2.4.8 (Civic perceptions of) innovative governance mechanisms

At the scale of Bybånd, a key mechanism discussed is the deliberate concentration of development in already built-up areas, combined with the withdrawal of planned housing from peripheral or greenfield locations. One municipal planning advisor describes this approach as *"planvask"*, a process through which land previously designated for housing is removed from the municipal plan and returned to nature, allowing densification efforts to be focused in central and well-served areas (ST1). This represents a proactive attempt to align land-use planning with long-term environmental and climate goals. In parallel, interviewees involved in municipal planning acknowledge ongoing efforts to strengthen legal and policy instruments for housing security and affordability, though these are widely described as less mature than environmental tools. Municipal representatives point to new legal requirements, within the Social Housing Act, obliging municipalities to develop comprehensive overviews of housing needs, including groups struggling to access homeownership (ST1). This instrument is framed as enabling better coordination between social housing policy and sustainability planning, even if their practical impact remains limited at present (ST4).

> "We have strategies for affordable housing, but at the next level we don't have many (regulative) tools." *ST1 – Planner in Stavanger Municipality*

One innovative example highlighted by interviewees is the former municipal land development company Sandnes Tomteselskap, established by the municipality of Sandnes (neighbouring Stavanger, along the Bybånd corridor). The agency pursued a strategy of proactive land acquisition to enable the construction and sale of housing at prices roughly 20% below prevailing market levels (ST 2). The affordability gains were made possible because the company primarily purchased lower-cost greenfield sites and then developed them for residential use. However, this model also represented its main limitation: since projects were concentrated on greenfield land, they did not align with the municipality's broader densification strategy and goals of compact urban development. As planning priorities increasingly shifted toward inner-city densification—where land prices are substantially higher and acquisition costs less manageable—the model became financially unviable, and the agency was ultimately discontinued.

"We've never built homes ourselves — we've always been land developers, selling ready-to-build plots to developers who construct and sell the houses. In recent years, there's more focus on densification near rail and bus routes, which is more complex, capital-intensive, and risky. That's something the private sector is better equipped to handle.

Our old model was mostly based on transforming farmland. We'd make an option agreement with a farmer: if the land could be rezoned, we'd buy it . The only upfront cost was maybe a small sign-on fee, like NOK 100,000 (about 10000 euros), which could be deducted from the final price. If rezoning didn't succeed, we walked away. But in urban areas, you can't get those deals. You need to pay market price upfront, so the financial risk is much higher. That's why the municipality pulled back." *ST2 – Former employee at Sandnes Tomteselskap*

With regard to housing security and affordability, none of the interviewees identified Svankevigå as a site of innovative social governance. While municipal representatives note that municipalities have the option to purchase apartments or plots at market price to develop social or affordable housing concepts (ST6), this mechanism was not realised in Svankevigå. Instead, the case is repeatedly described as illustrating the limits of existing tools, particularly once land is privately owned and prices have increased. Local actors and researchers point out that environmental and social initiatives supported through public funding lacked long-term security because they were not embedded in firm regulatory frameworks or public ownership arrangements.

6.2.4.9 (Civic perceptions of) tourism and market pressures

Rather than operating in the background, market dynamics are described as actively constraining densification outcomes, shaping what can be built, at what cost, and for whom—both at the Bybånd scale and in the Svankevigå redevelopment.

At the scale of Bybånd, market pressures are primarily seen as a consequence of the shift away from greenfield development towards densification. Several interviewees involved in strategic planning stress that building in already developed areas—particularly along public transport corridors—is significantly more complex, capital-intensive, and risky than earlier development models (ST2). Municipal planners point out that some planned large-scale housing projects have faced unexpected technical and environmental constraints, such as difficult soil conditions, which substantially increase construction costs and delay implementation. One strategic planning advisor refers to major housing plans that proved difficult to realise because of marshland conditions, illustrating how environmental constraints can quickly translate into financial pressure and uncertainty (ST1). These dynamics can affect not only feasibility but also long-term housing supply targets.

Architects and urban development professionals further describe a paradox at the core of densification. On the one hand, there is broad agreement that avoiding further land take and protecting nature is essential. On the other hand, transformation projects require extensive investments in infrastructure, environmental remediation, and public space, all of which are

ultimately reflected in housing prices. As one interviewee explains, *"almost everything we do is transformation… and that's a paradox and a challenge regarding price"*, particularly for young people trying to enter the housing market (ST6). In several areas, interviewees note that the price difference between new and existing housing has at times approached 50%, underscoring how sustainability-driven development can inadvertently reinforce affordability problems (ST6).

> "Now, almost everything we do is transformation, and that's a paradox and a challenge regarding price, because getting these new dwellings accessible for most people, especially young people entering the housing market, is a really big question and difficult to solve. It's a paradox, but we know we have to avoid destroying more nature or agricultural land, so it's a difficult balance". *ST6 – Municipal planner*

Housing experts and representatives from civil society organisations also situate market pressures within a broader political and institutional context. They point to the erosion of Stavanger's earlier tradition of social housing (as of 2023 the 5,2% of the total stock is public housing and the rest is market [127]) and the growing reliance on the private rental market, where high rents and low-quality housing create additional strain on municipal budgets and vulnerable households (ST8). While debates about these issues are present in policy documents and public discourse, interviewees describe a sense of fatigue, linked to the lack of effective legislative tools to counteract market dynamics.

In Svankevigå, interviewees focus on how profit-seeking behaviour manifests in concrete planning proposals and repeated attempts to stretch or bypass regulatory requirements. Local activists provide detailed accounts of how the developer sought to maximise buildable area and revenue, for example by significantly reducing the amount of ground-floor space allocated to activities and businesses compared to what was required in the regulation plan (ST13). These attempts are interpreted as indicative of strong financial pressure and an underlying logic of profit maximisation, where social and community-oriented functions are treated as residual. As one activist notes, developers repeatedly "push the line" by proposing solutions that fall far below planning requirements, often expecting to receive dispensations (ST13). As of today, the plan has not been implemented yet and the future of it still seems uncertain.

At the same time, Svankevigå also illustrates how regulatory limits can, in some cases, constrain market pressure. Interviewees highlight that several proposals from the developer OBOS were rejected because they did not comply with requirements related to activity spaces,

[127] https://www.kommuneprofilen.no/profil/bygg/BenchBy/bygg_bolig_kommunal_by.aspx

land ownership, or environmental fees, and they describe this as an important signal that not all deviations would be accepted (ST13).

Other interviewees involved in the case contextualise these dynamics within the broader economics of urban transformation. As in the Bybånd case, professionals acknowledge that building in central, already developed areas is more expensive than greenfield development, and that these costs inevitably shape project design and pricing (ST6). However, in Svankevigå, these pressures are perceived as having immediate social consequences, particularly for existing users of the area, who experience loss of space, displacement, and rapid change.

"*We don't have much land in Storhaug* (district in Stavanger)*, but there it's clear there are dilemmas: prices go up after transformation, and infrastructure/green upgrades go into the final price. In some periods, the difference between old and new housing was almost 50%. In Jåttåvågen, prices are high because you have to recreate nature and build all the infrastructure. It's different from building on greenfield land*." (ST6)

6.2.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Gaps in perceptions emerged clearly in the case of Svankevigå, also given the heterogeneity of the interviewees, which included public authority, developers, residents, researchers, and local activists.

A persistent gap concerns how civic groups and public agencies perceive urban transformation processes, particularly regarding participation, social value, and the objectives of redevelopment. Public agencies and planners tend to frame projects such as Svankevigå primarily through strategic lenses of densification, sustainability, and long-term citywide goals. From this perspective, redevelopment is justified as a rational response to environmental targets, transport efficiency, and the reuse of former industrial land, often emphasizing procedural compliance with participation requirements and regulatory frameworks.

"So, densification around the city center will strengthen it. And the city center is very important. It's the history and it's the identity and everything. And it's also environmentally friendly because all the public transport goes there, and you know, a lot of people can walk there and so forth." *ST14 - Architect, Stavanger municipality*

In contrast, civic groups interpret the same processes through lived experience . For residents and local activists, participation is perceived as largely symbolic rather than empowering, reinforcing feelings of exclusion and powerlessness. Technical language, extensive documentation, and legally limited forms of involvement are experienced as barriers that privilege institutional and market actors over local knowledge . This fuels a sense that decisions are effectively pre-made, with participation serving more to legitimize outcomes than to shape them

A further divide concerns how "improvement" is framed. While public actors and developers emphasize upgrading, greening, and attractiveness, civic groups stress the loss of existing social infrastructures, informal uses, and inclusivity. They further consider the green provision within the project not as an added value, but as a minimal baseline.. What institutions describe as underused or degraded space is often seen by residents as a rare commons—a "melting pot" that supported cultural production, social mixing, and low-threshold activities. This clash reflects deeper tensions between growth-oriented planning rationales and community-centered understandings of social sustainability, where displacement and homogenization are viewed as costs that are insufficiently acknowledged by public agencie

"I think it's a destructive project that is excluding a lot of people that live in the area or perhaps could have lived there if it was cheaper. So, I think this project is part of the gentrification in this area."
(ST12, Local activist, Svankevigå)

"So, what they say is that this area used to be very poor, very dirty, very dangerous. And they have come in and they have put in streetlights. They have renovated the buildings which were falling down."
(ST10, Researcher, University of Stavanger)

"And this Svankevigå, that was such a melting pot. There was a lot of artists around there and there was a lot of foreigners and different kind of people."
(ST15, Local activist, Bevar Svankevigå)

6.2.5 Critical Analysis: Stavanger

This section examines how green transition initiatives intersect with housing inequalities in Stavanger, with particular attention to **how these inequalities are framed by different actors, which dimensions of housing inequality are made visible,** and **which environmental policies are empirically central in this case.** Stavanger's green transition strategy, centred on densification and transit-oriented development, has become a key structuring force in the city's contemporary housing dynamics. While initiatives such as the Bybånd and the redevelopment of Svankevigå are framed as climate-friendly responses to population growth, mobility needs, and land-use efficiency, the empirical material indicates that they have also contributed to the reproduction and, in some cases, intensification of housing inequalities. In particular, they are associated with reduced housing accessibility, as new units built in densification areas can be **up to 50% more expensive than existing housing**, and with displacement pressures, as observed in Svankevigå. Together, these outcomes highlightstructural tensions between environmental objectives and housing justice.

Because in Stavanger densification dominates both policy implementation and interview narratives, it also becomes the main arena in which housing inequalities are discussed and contested. Energy retrofitting and NBS are described mainly as technical components of densification projects—such as green roofs, stormwater management, or energy-efficient buildings—rather than as independent policy domains reshaping housing access or affordability. This empirical focus has important implications: it means that the inequalities observed and articulated are primarily those linked to market-driven redevelopment, rather than to the upgrading of existing housing or climate adaptation of established neighbourhoods.

6.2.5.1 Densification and perceived housing inequalities

The analysis suggests that densification initiatives in Stavanger have contributed to exacerbate existing housing inequalities, while also creating new tensions, especially in the case of Svankevigå. Furthermore, there are different implications in the two cases as far as different dimensions of housing inequalities are concerned (affordability, displacement and quality). It should be noted that in Stavanger, and in Norway in general, there is a housing

system already characterised by high levels of homeownership, rising housing debt, limited municipal housing supply, and strong reliance on private developers. Within this context, densification strategies have tended to favour market-driven outcomes, with limited capacity to ensure affordability, housing diversity, or social inclusion.

In the Bybånd case, there is a general and recurring sense among most of the interviewees involve with planning in both Stavanger and the nearby municipality of Sandnes, that housing inequalities do not currently constitute a major or acute problem within the framework of the Bybånd strategy. While rising housing prices, limited housing diversity, and selective access to new developments are recognised, these issues are often described as emerging or secondary concerns rather than as central challenges of the green transition agenda. Within this narrative, housing outcomes tend to be framed as side effects of a necessary and broadly successful sustainability strategy and are positioned as secondary and structurally constrained, shaped by the dominance of private land ownership, high transformation costs, and limited regulatory instruments for social steering. Overall, the findings suggest that Stavanger's densification strategy operates within a housing system that has limited capacity to produce or expand public or non-market housing provision at a scale that could offset emerging inequalities. The strong reliance on private developers, high land and construction costs, and constrained municipal instruments for social steering reduce the practical scope for affordability-oriented interventions (no affordability programs or renters

Affordability concerns are acknowledged across interviews, yet they are rarely framed as the result of specific planning choices or projects. Instead, rising prices are attributed to the inherent cost of building in already developed areas, where infrastructure investments, environmental remediation, and negotiations with private developers increase financial risk and final housing prices. This framing has an important discursive effect: it relocates responsibility for affordability away from the green transition itself and towards broader market dynamics and national housing structures. As a result, affordability appears as largely unavoidable side effect of environmentally responsible urban development. Housing quality emerges in the Bybånd narratives as a key site of tension, but again primarily through a professional lens. Planners and architects highlight challenges related to small dwelling sizes, exposure to noise and pollution near transport corridors, limited access to green space in some high-density areas, and construction-related disruption. These issues are framed as design and implementation challenges rather than as expressions of inequality. The notion of "densification with quality" functions as an aspirational principle, even as interviewees involved with municipal planning acknowledge its difficulty in practice. Importantly, several interviews working with the Bybånd strategic development point to uneven distribution of environmental benefits, with green infrastructure and upgraded public spaces concentrated in redevelopment areas, while other neighbourhoods—often with lower-income populations—remain underserved. However, this unevenness does not really emerge as a justice issue within the Bybånd narrative.

In contrast, Svankevigå is narrated as a site where housing inequality is immediate, tangible, and deeply contested. The small scale of the site, its strong historic social and cultural character, and the visibility of redevelopment plans produce a very different discursive landscape, dominated by local activists, residents, users of the area, and engaged

researchers. In Svankevigå, affordability is treated as central to the project's expected effects. Interviewees consistently describe the planned housing as inaccessible to low- and middle-income groups, given its waterfront location and market-oriented development model. Lack of affordability is framed as an exclusionary mechanism that reshapes who can inhabit central urban space, reinforcing patterns of gentrification in eastern Stavanger. Unlike in Bybånd, affordability here is explicitly politicised and explicitly linked to claims about the right to the city. Displacement is also a central narrative through which housing inequality is understood in Svankevigå.

In Svankeviga, local activists describe not only the removal of tenants, but also the dismantling of a dense network of low-rent cultural and social activities that had transformed the area into an inclusive "melting pot". The loss of these spaces is framed as the loss of social infrastructure—places that enabled participation for groups with limited economic resources, including migrants, young people, and people with disabilities. Displacement is also narrated as a temporal process, characterised by prolonged uncertainty, waiting, and insecurity, which drains energy from community initiatives and undermines long-term engagement. This temporal dimension is largely absent from the Bybånd narratives but is central to how injustice is experienced in Svankevigå. Housing quality in Svankevigå is similarly reframed through a social lens. While developers and municipal representatives emphasise greening, improved access, and regeneration through the transformation of a brownfiels, local actors question whether the proposed built environment will support everyday life, diversity, and social interaction. Concerns are raised about wind-exposed and poorly functioning green spaces, lack of kindergartens and informal meeting places, and a general expectation that the area will cater to older or wealthier residents rather than families. Here, quality is not merely about architectural standards, but about the capacity of the neighbourhood to sustain social diversity.

6.2.5.2 Temporality of housing inequalities

When considering the temporality through which housing inequalities manifest, the two analyzed cases offer two different scenarios. In the Bybånd case, interviewees predominantly describe housing impacts as gradual, and spatially diffuse. Large-scale displacement is rarely articulated as an immediate concern at this scale; instead, inequalities emerge through rising housing prices, limited availability of family-sized dwellings, and increasingly selective access to newly developed areas along public transport corridors. These dynamics are already shaping residential mobility patterns, particularly for households that cannot afford new-build apartments or do not find them suitable in terms of size and liveability. A concrete and present outcome repeatedly highlighted by interviewed planners working with the sstrategic development of the Bybånd is the outward movement of households from Stavanger to neighbouring municipalities in search of more affordable housing. This process is not framed as displacement in a narrow, but as a form of structural exclusion that nonetheless risk to have significant social and environmental consequences. From a social perspective, it limits who can remain in or access central, well-connected neighbourhoods; from an environmental perspective, it undermines the core objectives of densification by generating longer commuting distances and reinforcing regional patterns of car dependency. Importantly, this form of displacement remains largely invisible within project-level planning and participation

processes, precisely because it unfolds incrementally and beyond the immediate boundaries of Bybånd developments.

Several interviewees further emphasise that the most far-reaching consequences of Bybånd-related densification are expected to materialise over time rather than as immediate shocks. These include gradual socio-demographic change, whereby central and transit-accessible areas increasingly cater to smaller, wealthier households, while families and lower-income groups are progressively filtered out. Interviewees also point to the uneven spatial distribution of environmental and public-space investments, with green infrastructure, upgraded streetscapes, and nature-based solutions concentrating in redevelopment zones associated with Bybånd. Unless accompanied by stronger housing policy instruments—such as affordability requirements, diversified housing typologies, or more proactive public land strategies—these patterns risk producing long-term inequalities.

In contrast, in the Svankevigå case, housing inequalities are already acutely felt and articulated through immediate, embodied experiences of loss and exclusion. Here, the impacts of green transition-related redevelopment are not diffuse but immediate and concentrated in a specific place and among identifiable groups. Displacement of tenants and community-based activities, prolonged uncertainty about future use, and the closure of low-rent spaces have had direct and immediate social consequences. Interviewees describe how cultural initiatives, workshops, and informal meeting places were forced to leave, often without clear alternatives, disrupting established social networks and everyday practices.

Beyond spatial exclusion, interviewees in Svankevigå repeatedly emphasise temporal injustice as a central dimension of housing inequality. Long periods of vacancy, shifting redevelopment timelines, and lack of clear communication are described as generating insecurity, emotional strain, and exhaustion among local actors. In this sense, inequality unfolds not only through the eventual outcome of redevelopment, but through the process itself.

While future impacts—such as rising housing prices, further gentrification, and demographic change—are widely anticipated in Svankevigå, the sense of injustice expressed by interviewees is firmly rooted in present experiences. The loss of affordable space and inclusive environments, combined with perceptions of limited influence over decision-making, contributes to a broader feeling of democratic failure and ultra-dominance of market and investors' dynamics. Compared to Bybånd, where inequalities are often discussed as future risks or systemic constraints, Svankevigå illustrates how green transition initiatives can produce immediate and deeply felt housing injustices when redevelopment intersects with existing social and cultural ecosystems.

6.2.5.3 Conclusive reflections

Situating these findings within Stavanger's broader housing context reveals several critical points about how housing inequalities are produced and reproduced through densification. Across both cases, housing justice appears weakly institutionalised within the green transition agenda. While social sustainability and inclusiveness are increasingly referenced in municipal strategies and planning documents, they tend to be operationalised through soft and design-oriented measures rather than through robust mechanisms addressing affordability, tenure

security, or long-term access. A recurring narrative—common in major Norwegian cities—is that smaller dwelling sizes will automatically enhance affordability, yet the empirical material suggests that such assumptions do little to counteract rising prices or improve access for households with limited purchasing power. In the absence of binding affordability requirements or alternative tenure models, housing outcomes remain largely shaped by market dynamics, even within projects explicitly framed as environmentally progressive.

The dominance of market-based housing provision further constrains the municipality's capacity to counteract exclusionary dynamics emerging in densification and redevelopment projects. Even when housing inequalities are recognised by public actors, the available tools to address them are perceived as limited, slow, or politically difficult to deploy. In Norway, the construction of new social housing has largely ceased for decades, and the delivery of affordable housing models is mostly delegated to private developers, making their provision largely discretionary rather than structurally guaranteed. Several interviewees describe a sense of institutional "fatigue", linked to repeated acknowledgement of affordability and displacement pressures without corresponding expansion of regulatory or financial instruments capable of altering outcomes. As a result, housing justice concerns are often managed through negotiation rather than through structural change.

The Stavanger case also raises broader questions about the risk of an emerging "green divide", in which access to environmentally sustainable housing and neighbourhoods becomes increasingly stratified by income and social position. Green transition initiatives contribute to enhancing the attractiveness of central and well-connected areas through improved mobility, public space, and environmental quality. However, when these improvements are not accompanied by strong housing policy measures, they tend to benefit households already well positioned in the housing market. In both Bybånd and Svankevigå, interviewees point to patterns of selective access, where climate-friendly locations and upgraded urban environments are increasingly associated with higher prices and reduced social diversity. Over time, this risks producing a city in which environmental sustainability and social inclusion move in opposite directions, rather than reinforcing one another.

Importantly, the analysis also suggests that housing inequalities linked to green transition are not only spatial but temporal. In addition to long-term affordability pressures and gradual socio-demographic change, redevelopment processes can generate prolonged temporal vulnerability, uncertainty, waiting, and insecurity, particularly for users of low-rent spaces and community-based activities.

6.2.6 References

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6.2.7 Appendix 1 – Glossary

Abbreviations

BOBY: *Bolig og Byplanforening* (The Norwegian Housing and City Planning Association). It is a nationwide, independent, non-profit professional association focused on housing policy, urban planning and community development in Norway.

NEB-STAR : *New European Bauhaus – Sustainable, Together, Affordable Renovation*; an EU initiative promoting deep energy renovation that integrates sustainability, design quality, and social inclusion. It includes pilot projects in Stavanger, focusing on affordable and cooperative housing.

NTP: National Transport Plan

OBOS: Oslo Bolig- og Sparelag (Oslo Housing and Savings Association) - largest housing cooperative and developer in Norway

RFK: Rogalang Fylkeskommune (County) -public body

TOD: Transit Oriented Development

Terms and Concepts

Nurse Index: The nurse index is an indicator of housing affordability used in Norway and it is expressed as the percentage of dwellings sold in a specific year that a nurse can afford to buy. In 2025, this percentage was 16,7% in Stavanger vs. 2,5% in Oslo.

6.2.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
ST1	Advisor and project manager for community planning	Stavanger municipality	23-Jun	Teams
ST2	Former employee of Sandnes Tomsteselskap	Sandnes municipality	21-May	Teams
ST3	Community and strategic planning	Sandnes municipality	16-Oct	Teams
ST4	Community and strategic planning	Stavanger Municipality	16-Oct	Teams
ST5	Housing Justice expert	University of Stavanger	23-Oct	Teams
ST6	Architect	Stavanger Utvikling	28-Oct	In person
ST7	Architect	Sandnes municipality	10-Nov	Teams
ST8	Member of BOBY	BOBY	11-Nov	Teams
ST9	Planner	Stavanger municipality	25-Sep	Teams
ST10	Researcher	University of Stavanger	26-Sep	Teams
ST11	Project manager	OBOS	1-Oct	Teams
ST12	Local Activist	Svankevigå	1-Oct	Teams
ST13	Local Activist	Svankevigå	9-Oct	Teams
ST14	Architect	Stavanger municipality	10-Oct	Teams
ST15	Local Activist	Bevar Svankevigå	10-Oct	Teams

6.3 CASE STUDY (SMALL): SOGNDAL

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Contributors: Ada Horndalsveen Birc & Karen Waneska de Jesus (NMBU)

6.3.1 City/Town profile, challenges around just (housing and ecological) transition

Sogndal is a municipality in Vestland county, in the **Western part of Norway (Fig 1)**. The municipality was created when the former municipality of Sogndal was merged with the municipalities of Leikanger and Balestrand in 2020 (Thorsnæs and Askheim, 2025). The current municipality has a total area of about 1 258 km2 and the landscape is characterized by tall mountains and narrow fjords.

Fig 1. Location of case study city: Sogndal. Made by author

This report focuses on the urban area of **Sogndalsfjøra**, which is the largest settlement within the municipality. Sogndalsfjøra is commonly referred to simply as *Sogndal* and will be referred to as such throughout this report. When the municipality as a whole is meant, this will be specified explicitly.

The urban area of Sogndal is bordered by the fjord to the east and steep mountain slopes to the north and south. The local climate is particularly well suited for fruit cultivation, including apples. Mild winters, a long growing season, and high levels of summer sunlight create favourable conditions for fruit farming. These environmental characteristics have contributed to the development of one of Sogndal's best-known local industries: jam and juice production at the Lerum factory. Fruit cultivation has historically been central to Sogndal's agricultural tradition and remains an important part of its local identity, even though many former orchards have gradually been replaced by new development. Nevertheless, Sogndal continues to be associated with its nickname *"the juice village" (Saftbygda)*.

As of 2025, Sogndal had a population of 12496 inhabitants (Statistics Norway, 2025). The urban area has experienced population growth since the 1970s, but the pace increased substantially in the 2000s, reaching approximately a growth of 2% per year—a higher growth rate than Oslo during the same period (Statistics Norway, 2025). This rapid growth in population meant that Sogndal quickly had to adapt to more inhabitants, and in the last two decades **densification** has been the main development approach. Between 2000 and 2020, population density in Sogndal increased by 65%, in contrast to a decrease of around 40% in the nearby municipality of Kaupanger (Næss and Moberg, 2021) . Population growth is expected to continue, with municipal projections estimating an increase of around 100 people per year, reaching more than 13,359 inhabitants by 2036 (Statistics Norway, 2026).

Much of this growth is associated with young, highly educated in-migrants moving to Sogndal as a regional centre, attracted by employment opportunities for skilled workers and access to outdoor recreation (SO1). Growth has also been driven by net in-migration more broadly, particularly among labour migrants, students, and refugees. As of 2025, 21,4% of the population in Stavanger has an immigrant background, representing an increase, representing an increase of 7,5 percentage points since 2010 (Municipality of Stavanger, 2025c).

Average household size is 2.35 persons, suggesting that population growth will create a need for more than 1,000 additional housing units before 2040 (Kaur et al., 2017).

One key driver of population growth in Sogndal has been the presence of higher education institutions. Sogn og Fjordane University College (Høgskulen i Sogn og Fjordane) was established in 1994 and, following a regional restructuring in 2017, was merged into the Western Norway University of Applied Sciences (Høgskulen på Vestlandet). Today, one of the university's five campuses is located in Sogndal. The campus contributes up to 3,000 students to the local population, and approximately one quarter of these students reside in publicly supported student housing (Norsk studentorganisasjon, 2024). As discussed later in the report, student numbers have declined since the COVID-19 pandemic, a development that has likely reduced pressure on the local housing market.
The relatively high concentration of students in such a small municipality has also contributed to a significantly higher share of renters compared to national levels. In 2015, 42.8% of households in Sogndal were renting, compared to 22.6% nationally. This share has since declined substantially—particularly following the COVID-19 pandemic—to 33.9% in 2024 (Statistics Norway).

The cost of housing has been steadily rising the last couple years, with the price per square meter for detached houses going from 22 000 NOK (about 1900 Euros) in 2020 to almost 30 000 NOK (about 2590 Euros) in 2024 (Kommuneprofilen, 2025). That is a percentage increase of about 36%, much higher than the national average increase of 15%. By 2024, the average price per square metre in Sogndal was only around 1,000 NOK (about 90 euros) lower than the national average, which is notable for a relatively rural municipality.

Most of the **housing challenges** that Sogndal is facing are connected to the increase in population, which the municipality has been working on to facilitate and adapt to. As the population grows, housing demand tends to increase, while supply does not always expand at the same pace, which can contribute to upward pressure on property prices and rental costs. Within the context of green transition initiatives, the challenge becomes even more complex. This creates barriers for different demographics seeking to settle in the area, especially those from low socio-economic backgrounds, including refugees (SO1).
Furthermore, as a recently merged municipality, Sogndal has experienced political and administrative tensions regarding development priorities. There appears to be limited coordination of social housing work across municipal departments, with responsibilities fragmented between units (SO1) and the transition and consolidation of strategies from the former municipalities is also ongoing (SO1).

Finally, Sogndal's geographical context creates additional constraints. Situated between fjord and mountains, the urban area has limited land available for development, and new

construction must also account for environmental protection and landscape preservation. Land availability is further constrained by stricter national policy on soil conservation introduced in recent years (Norwegian Government, 2025).

6.3.2 Green Transition Interventions in Sogndal: general densification strategy and the redevelopment of Lerum Brygge

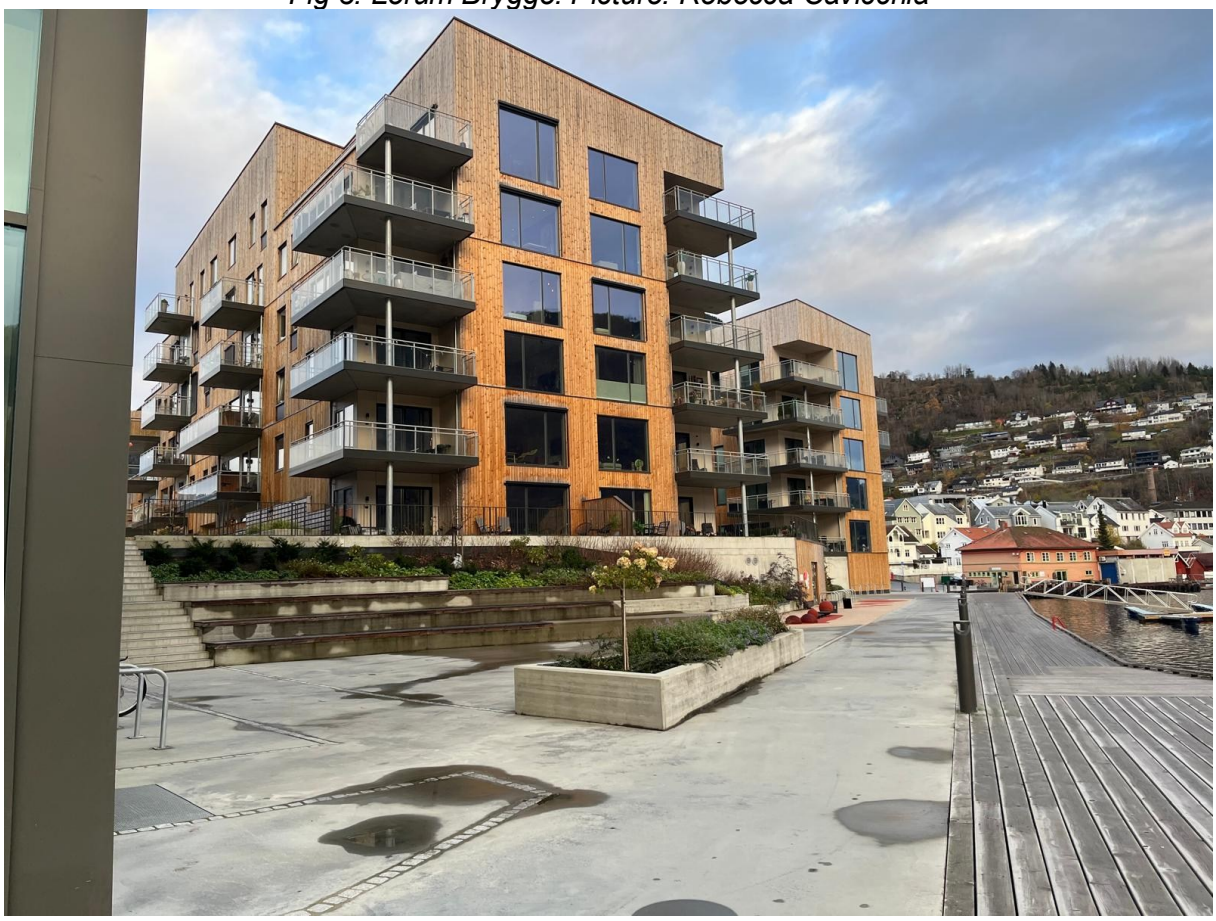
The case of Sogndal is particularly interesting as it represents a small, rural municipality with strong urban development ambitions, especially in relation to densification (Fig 2). This report primarily explores what the overall **densification strategy** has meant for the town, focusing on its impacts on housing and environmental quality, as well as the contestation surrounding these developments. As mentioned above, densification has been pursued in Sogndal for several years and has been driven both by population growth and by the town's geographical constraints. Informants generally portrayed densification as a positive process that has enabled the town to grow, become more attractive, and improve accessibility. At the same time, it has triggered debates and opposition, mainly linked to the loss of agricultural land, rising housing prices and perceived declines in quality of life, particularly related to the loss of views.

Fig 2. Typical soft densification with terraced houses in Sogndal. Picture: Rebecca Cavicchia

Within the local densification agenda, the redevelopment of **Lerum Brygge** stands out as a key project (Fig 3). Lerum Brygge is a transformation project in which a former industrial site was redeveloped into a residential area consisting of **115 apartments**, commercial spaces, a small boat dock, and a parking garage, **organised as a housing sameie (a jointly owned**

condominium association where each apartment owner holds a private unit and a shared ownership stake in common areas) (Veidekke, n.d.). The site was previously occupied by the Lerum factory, where jam production took place for almost one hundred years, following the establishment of production at this location in 1920 (Skjerdal and Brugrand, 2016). In 2018, Lerum relocated its main factory to the nearby municipality of Kaupanger, thereby freeing up the industrial plot for redevelopment.

Fig 3. Lerum Brygge. Picture: Rebecca Cavicchia



The property was acquired in 2018 by the real estate developer Nordr and the contractor Veidekke, who initiated the development process in 2020. In an interview with the national broadcaster NRK, Veidekke's regional manager expressed the ambition that Lerum Brygge would *"put Sogndal on the map"* and described the project as a local equivalent to the Barcode , a landmark high-rise waterfront development in Oslo (Skjerdal and Brugrand, 2016). A central component of the development consists of three apartment blocks, with construction beginning in August 2020. The buildings are **six, seven, and eight storeys high**, and their height gradually decreases towards the town centre, moving away from the river outlet. Apartment sizes range from **35 to 118 m²** (Brekkhus, 2024).

The project has received attention due to its pricing structure and its position in the local housing market. The largest unit, measuring 118 m² and including a parking space, was sold for **10.15 million NOK** (approximately 870,000 EUR), reportedly breaking the informal record for the most expensive apartment sale in Sogndal (Widing, 2020). The average square meter price in the project is 73.000 NOK (~6500 euros) , almost 20 000 NOK (~1800 euros) more

than the municipal average in Sogndal (KommuneProfilen, 2024).

Lerum Brygge has been developed within an area designated in the municipal master plan as suitable for **dense development, renewal, and densification within already developed areas** (Asplan Viak, 2018). The plan allows for the construction of relatively tall buildings, in some cases up to ten storeys. At the time of its introduction, the master plan was criticised by local architects and landscape architects for *"prioritising the principle of densification above anything else"* (Storvik, 2014). The Lerum Brygge project itself also faced critique for the potential long-term impact of high-rise housing on Sogndal's visual identity. Critics argued that the height and scale of the apartment blocks would permanently alter the town's landscape and character.

The development was completed in 2024 and handed over by the contractor to Lerum Brygge AS. The ownership structure of Lerum Brygge AS includes Nordr as well as other investors, including local banks and private individuals.

Table 1. Key data on case study area of Sogndal

	Densification strategy in the city	Lerum Brygge
Neighborhood characteristics (general social type, economic activities, density, etc.)	Rural town and regional centre with sustained population growth; economy linked to higher education, research, services, tourism, and outdoor recreation; historically low-density housing with increasing central densification.	Redeveloped central waterfront densification area. Previously an industrial site (Lerum factory). Likely oriented toward higher-income households (high price per m² compared to municipal average).
Duration	Long-term strategy emerging from the late 2000s	Planning and redevelopment began after property acquisition (2018–present). Key element completed: main development completed/handed over in 2024.
Funding	Predominantly market-driven private investment	Primarily private investment. Property acquired by Nordr (developer) + Veidekke (contractor) (2018). Ownership company Lerum Brygge AS partly owned by Nordr and other investors including local banks and private individuals.
Actor constellation	Municipality; private developers; landowners;investors	Nordr (developer); Veidekke (contractor); Lerum (former industrial landowner/tenant, relocated 2018); Lerum Brygge AS (ownership entity); municipality (planning authority/masterplan framework); local banks and private investors.

Aims and objectives	Accommodate population growth; strengthen regional role; reduce land take; connect campus and centre; provide housing; maintain attractiveness and access to nature.	- Densification of brownfield - Provide new housing supply - Contribute to urban growth in Sogndal and function as a symbolic flagship development
Specific physical measures	Soft and hard densification with terraced housing and multi-storey apartment buildings; redevelopment of former industrial sites	Conversion of industrial site to mixed-use area including: 115 apartments; commercial area; small boat dock/marina; parking garage; three apartment blocks (6, 7, 8 storeys);waterfront redevelopment (including pedestrian pathway).
Accompanying housing policy/regulatory measures	- No specific housing measures linked to densification	- No affordability measures in the sale of apartments. - Airbnb/short-term rental cap: maximum 90 days per year per unit.
Key social tensions or/and benefits between greening and housing	**Tensions:** affordability, rising prices, land loss. **Benefits:** improved public space, housing supply, attractiveness	**Tensions:** high-end pricing; critique of insufficient inclusive/public elements; concerns over permanent change to landscape/identity through high-rise blocks. **Potential benefits**: redevelopment of waterfront and improved accessibility/connectivity through a pedestrian path

6.3.3 Methods

The qualitative material for this study is based primarily on semi-structured interviews conducted between June and October 2025. In total, seven interviews were carried out, with an average duration of approximately 1.5 hours. The interviewees represented a range of perspectives relevant to local development and densification processes and included an expert and former municipal employee, a researcher, a member of the university student community, a member of the parent committee of a local school, a representative of the senior citizens' council, and a board member of a local environmental organization. A full list of interviewees and their profiles is provided in Appendix 2.

The sampling strategy combined purposive and snowball approaches. The process began with an initial contact with a former planner from the Municipality of Sogndal, who facilitated access to additional interviewees through snowballing. In parallel, relevant actors were identified and

contacted directly based on publicly available information from organizational websites and local networks.

All interviews were conducted online via Microsoft Teams, recorded using the platform's built-in recording function, and transcribed with the transcription tool available in Teams. Three interviews were conducted in English and four in Norwegian. The Norwegian-language transcripts were translated into English and linguistically cleaned using an AI-based translation tool provided by SIKT, the Norwegian Agency for Shared Services in Education and Research, which provides national guidance on secure and ethically compliant use of digital research tools. All interview data were anonymised, assigned unique codes, and stored securely in a folder accessible only to the research team.

Interview transcripts and field notes were coded and analysed using NVivo, following a thematic qualitative analysis approach. In addition to interviews, the study draws on background research including municipal plans, legal and policy documents, reports, academic literature, grey literature, and local and national news media. A two-day fieldwork visit was also conducted, during which unstructured observations were carried out, alongside informal conversations with one interviewee and with a resident of the Lerum Brygge development.

A key limitation of the qualitative material is the absence of representatives from neighbourhood groups that actively contested densification or from local activist movements. Such actors proved difficult to recruit, reflecting the relatively weak tradition of urban activism in Norway, particularly in smaller rural municipalities.

6.3.4 Civic Perceptions of Green Initiatives in Case Study Areas: Sogndal

6.3.4.1 (Civic perceptions of) precedents and implementation

Interviewees consistently situate densification in Sogndal within a longer history of spatial planning decisions, institutional development, and incremental urban change predating recent discussions of green transition. Rather than being associated with a single policy moment, **densification is described as the cumulative outcome of successive planning interventions linked to population growth and the municipality's evolving role as a regional centre**. Civic perceptions of current development are shaped less by formal planning objectives than by accumulated experiences of how change has been implemented over time through concrete projects.

Actors with close involvement in municipal planning and research (SO1 and SO2) describe densification as having emerged gradually as a dominant approach through zoning decisions, town boundary definitions, and redevelopment of centrally located sites. **Implementation is described as closely tied to concerns about transport generation, commuting between**

settlements, and limits to outward expansion, rather than to explicitly articulated environmental goals.

> "It wasn't in the name a green transition, but at least in my view most of the spatial planning is where the municipalities have the most impact on a green transition, both in terms of spatial distribution of the different functions like housing and businesses, and the transport generated from the distribution of the different activities. So we've had a quite forward-leaning policy on densification here in Sogndal, with a strict border of the town, and we wouldn't take any more land outside that. Where we place housing is really important for how much transport is generated, so that has been one of the main focuses in our strategies." *SO1- Former municipal planner*

Other interviewees from municipal, research, and civil society backgrounds (SO1, SO2, SO4–SO6) refer to densification as a process marked by contestations. Conflicts related to the conversion of agricultural land, changes to established neighbourhoods, and loss of views or landscape values are described as accompanying individual projects over time.

Within this broader history of densification, Lerum Brygge is repeatedly identified as a key reference point. A former planner situates the project within a longer sequence of central redevelopment initiatives dating back to the late 2000s, recalling that the area was previously occupied by the Lerum jam and juice factory, which for decades represented a major industrial presence along the waterfront. Following the relocation of production, the site became available for redevelopment and was gradually transformed into a residential and mixed-use area through private development under municipal planning frameworks.

Interviewees from municipal and civil society backgrounds (SO1, SO4, SO6) describe the implementation of Lerum Brygge as highly visible and temporally extended, unfolding over several years and completed relatively recently. The project is frequently referenced as a concrete illustration of how densification has been carried out in practice, producing a clear physical "before and after" in the townscape. **The redevelopment is associated with new apartment buildings, public paths along the waterfront (Fig 4), and recreational spaces that changed the relationship between the town centre and the fjord**.

Fig. 4. Pathway along the fjord that reconnects the town with the waterfront. Lerum Brygge can also be observed. Picture: Rebecca Cavicchia

On the other hand, civil society actors (SO4–SO6) commonly describe the project as market-driven, with limited emphasis on affordability or social mix, even as it improved public access to previously industrial land.

> "People come in and see, for example, Lerum Brygge and think, 'Those are nice, fancy new apartments I can't afford,' and then don't really think about it much, because they didn't see what it looked like before—just what it looks like now." *SO6- Representative of green organization*

Overall, civic perceptions of densification and Lerum Brygge are shaped by the tension between long-term experience of incremental change and the visibility of recent flagship projects. For actors involved in planning and local governance, these developments represent the continuation of established strategies implemented through successive projects. For civil society and student actors, they are primarily encountered through their material outcomes and their implications for everyday use of the town.

6.3.4.2 (Civic perceptions of) participation and governance (procedural)

Interviewees describe participation and governance around densification in Sogndal as **embedded in ordinary municipal planning processes** rather than organised through a single, dedicated participatory framework. Participation is primarily associated with the preparation of overarching municipal plans, zoning processes, and sectoral strategies, where **consultation and information-sharing are described as standard components of implementation**.

From the perspective of a former municipal employee (SO1), participation is closely linked to the development of community plans and long-term strategies. **Interviewees refer to public meetings, consultations, and the collection of contributions from local communities and children as forming part of the basis for political priorities and development goals**. These processes are described as shaping how planning objectives are articulated and communicated, even if decisions are ultimately taken within formal political and administrative structures:

> "So we had quite a bit of what's that called—contributions, yeah.
> From both kids and the local community. So this is really the basis of the new municipality, on politics and development plans and what we want the municipality to be really." *SO1- Former municipal planner*

Participation is also described as supported by communicative tools and institutional arrangements aimed at making planning processes visible. The community plan is referred to as being presented through a dedicated digital platform, where goals, strategies, and focus areas are made publicly accessible. Within this context, participation is framed as part of a broader effort to build social acceptance around political decisions, including climate-related strategies.

At the same time, interviewees describe participation as varying in scope and depth across projects. Civil society actors (SO5) refer to public meetings and information-sharing as common practices through which local communities are involved, while also pointing to poor economic capacity as a limiting factor shaping how participation is carried out, often reducing it to basic information-sharing and one-off public meetings rather than more sustained or resource-intensive forms of engagement.:

> "The local actors I've been involved with have been good at involving the local community through public meetings and information about various projects.
> The will is not lacking, but the economic capacity is the challenge." *SO5- Member of senior citizens council*

Power dynamics are described most explicitly in relation to planning initiatives that affect land use and property interests. Interviewees refer in particular to the Campus Områdeplan, an area zoning plan adopted in 2019 that aims to densify the areas between the university campus and the town centre. The plan covers areas with a long history of agricultural use and detached housing, which interviewees point to when describing opposition and mobilisation. In this context, actors with research backgrounds (SO2) describe how local landowners and neighbouring residents can be influential or effective lobbyists:

> "When the municipality or private planning initiatives are being presented, they will very often provoke local residents and those neighbors influenced by these plans and in some cases these neighbors or local residents are influential or have access to the right

politicians or they are efficient lobbyists. I think that is the case in this Campus Områdeplan that some of the landowners in the surroundings are opposed to this development, and they know how to raise momentum against the plans." *SO2-Researcher*

Finally, while **Lerum Brygge** features prominently in other accounts of development in Sogndal, it is **not referred to in the interview material as an example of participation or governance practice**. Interviewees' accounts of participation instead consistently focus on municipal plans, school development, campus planning, and research-led initiatives. This absence suggests that Lerum Brygge is not recalled as a participatory reference point within discussions of governance.

6.3.4.3 (Civic perceptions of) (in)equity (distributional)

Interviewees discuss **issues of injustice and inequity in Sogndal primarily in relation to housing access, affordability, and the uneven distribution of benefits and burdens associated with growth and densification**. At the same time, interviewees also refer to policies and practices intended to promote more equitable outcomes, particularly in relation to housing provision for vulnerable groups. These, however, are not explicitly linked to densification.

Almost all interviewees highlight limits to the equity outcomes of densification, linking densification to rising housing prices and increasing competition for housing. Housing prices in Sogndal are described as comparable to those in larger cities like Bergen, with interviewees noting that municipal strategies to improve housing quality operate within market dynamics that also contribute to higher prices. These tensions are described as a recurring feature of local debates. New housing developments are described as expensive and largely inaccessible to less privileged groups:

"It's not so that people living in the town centre have easy access to green spaces within their immediate surroundings. And when new housing is being built, these flats are expensive, so they will not be an alternative for less privileged people." *SO2-Researcher*

Across interviews, **groups most frequently referred to as affected by these dynamics include students, renters, refugees, and other vulnerable households**. Interviewees describe Sogndal as having a high proportion of renters alongside a rapidly growing student population, intensifying exposure to housing market pressures. Additionally, interviewees identify equity-oriented considerations in discussions around development and densification, even if these are described as secondary. The researcher (SO2) notes that arguments concerning affordable housing and less privileged groups are present in political debates, particularly among left-wing parties, although they are not described as dominant:

> "It's an interest conflict, and when you develop an area, some might be hurt by that. But the social engagement for those affected by the development in Sogndal or the concern for people seeking affordable housing and those less privileged in society, those debates could be heard from the left parties, but it's not high on the political agenda." *SO2-Researcher*

Concerning social and spatial equity aspects, from the perspective of municipal actors (SO1), housing provision for refugees and other vulnerable households is described as guided by national frameworks and economic incentives, but also by an explicit aim to avoid spatial concentration and exclusion. Even if not explicitly linked to densification strategies, interviewees refer to municipal strategies that seek to integrate housing for vulnerable groups into the ordinary housing market and locate it in areas with access to public transport and services:

> "So at the national level there is every year there's like a questionnaire for the different municipalities; how many refugees can you house? And so there's economic incentives for giving them a house, to say it easy. And Sogndal's policy has been to try to locate the housing for vulnerable groups both in Sogndal centre and Kaupanger and the different areas, but places where they are at least able to use public transport, bus. But it's part of the ordinary housing market, really." *SO1- Former municipal planner*

Concerning Lerum Brygge, interviewees and fieldwork observations highlighted two main aspects related to potential perceptions of injustice. The first relates to the **loss of views toward the fjord for residents in existing housing**. During a fieldwork walk across the town, one informant referred to strong dissatisfaction among incumbent residents when the Lerum Brygge buildings were constructed, noting that the new development obstructed previously valued fjord views (Fig 5).

Fig. 5. Access to Lerum Brygge, with pre-existing houses visible behind the new building. Picture: Rebecca Cavicchia

The same informant also remarked that the site had previously been occupied by the Lerum jam factory, suggesting that views toward the fjord were not entirely unobstructed prior to redevelopment. The second point concerns housing affordability**. Civil society actors (SO4–SO6) commonly described Lerum Brygge as a market-driven development, with limited emphasis on affordability or social mix.** While the project was acknowledged for improving public access to a formerly industrial waterfront area, interviewees did not associate it with housing options accessible to less privileged groups.

> "It has a reputation as fancy apartments for older people, which is fine and important, but it's not really in the orbit of students or student organisations in Sogndal." *SO6 - Member of the student community*

6.3.4.4 (Civic perceptions of) political mobilization

Densification of agricultural land is repeatedly cited as a focal point for mobilization. Interviewees recall cases where strong local resistance from residents led to tangible changes in zoning decisions, including the reversal of planned development areas back to agricultural use. One interviewee refers to opposition against a zoning proposal affecting farmland on the outskirts of Sogndal, where resistance resulted in the withdrawal of development plans:

> "And so the regional state was giving us the green light [in 2013] to have that strategy and take the agricultural land within the red border here [points at a map] ... And then there's been a shift [in 2022/2023] in both national level and local level views on soil policies like "jordvern" -soil conservation. In that like the zoning plan we were working on there were plans of like building houses. And there was quite a big resistance to it. And so. The

outcome was really to take out this whole area and like taking it back to agricultural land from the main source here. Really. So. Let's see from the line over here [points at a map] this whole farming area is going back to what it is really.… That's really due to the resistance towards the densification. That's one of the clearest examples we've had." *SO1 – Former Municipal Planner*

Opposition is described as particularly strong where densification proposals affect long-established housing areas. Interviewees refer to resistance against plans to replace detached housing with multi-storey apartment buildings, noting that some landowners were unwilling to sell and that this contributed to organized opposition:

"It's single detached houses. Family houses owned by the families living here from way back.…All of these houses over here were zoned to building blocks on four or five stories. And so there was a quite big opposition." *SO1 – Former Municipal Planner*

The Campus Områdeplan mentioned in the previous section is repeatedly referenced as a prominent example of political mobilization. **Interviewees describe how opposition to the plan coalesced into a coordinated campaign, including a signature collection in 2018 explicitly targeting the densification proposal.** While the plan was formally adopted, its implementation is described as having been delayed:

"There was quite a big opposition to the plans and had like a signature campaign with 1300 signatures saying 'Stop Områdeplan Campus'. And that was quite a big opposition to the plans… Well, the plan is adopted, but it's not been implemented.
So it shows that mobilization actually mattered in this case." *SO1 – Former Municipal Planner*

At the same time, interviewees emphasize that mobilization capacity is uneven and shaped by the interests at stake. From a research perspective (SO2), opposition to densification is frequently framed around the protection of private amenities—such as gardens or views—rather than broader concerns related to housing affordability or social equity:

"My impression is that it's more about people that are afraid of losing privileges or afraid of losing their apple gardens or their fjord view or whatever.
It's an interest conflict, and when you develop an area, some might be hurt by that." *SO2 – Researcher*

Not all land-use discussions are described as escalating into sustained mobilization. Some interviewees refer to debates around land use in the town centre as recurring but manageable, characterizing them as part of the trade-offs associated with maintaining a functional and attractive centre:

> "It's mostly about the use of land in the center. There is a price to having a well-functioning center, because then some areas have to be put to use. But this is something we can live with, and it hasn't led to major conflicts." *SO2 – Researcher*

Concerning Lerum Brygge, the densification project does not feature in interviewees' accounts of political mobilization. Interviewees do not recall petitions, campaigns, or organized opposition associated with the project, and no collective action comparable to that surrounding densification of agricultural land or the Campus Områdeplan is mentioned. Accounts of political mobilization consistently focus on projects affecting farmland and low-density residential areas. Overall, mobilization is described as most visible where development directly affects land ownership, housing form, or landscape values, while other forms of development generate more limited or no collective response.

6.3.4.5 (Civic perceptions of) socio-ecological impacts/benefits (positive)

At a general level, densification is described as contributing to physical upgrading and more efficient use of centrally located land. Interviewees refer to the transformation of former industrial sites and underutilised areas into mixed-use developments with housing, services, and commercial activities. From a research perspective (SO2), **these projects are described as producing compact urban forms that provide new housing opportunities while activating ground floors with shops and services:**

> "As we speak I could reckon at least three, maybe four development projects in a central Sogndal where grey areas or poorly developed quarters are being densified, and we get the new three- to four-storey buildings with housing in the upper parts and the shops at the ground level. So, all these projects will provide more flats for couples or single households." *SO2 - Researcher*

Improved housing accessibility is frequently highlighted as a positive outcome of densification. Interviewees note that Sogndal has been able to accommodate population growth without severe housing shortages, particularly for students. From the student representative's perspective (SO3), housing conditions for students are described as comparatively good and affordable:

> "In Sogndal the average student has it very good when it comes to housing. It's a renter's market here, we don't struggle with student support. Here you can live for 4,000 NOK (less than 400 euros) a month with electricity and internet included, and you're just two minutes away from school." *SO3 - Member of the student community*

At the same time, interviewees refer to densification as gradually increasing the supply of smaller housing units, which is seen as beneficial for singles, couples, and households with more limited housing needs. Municipal actors describe expectations that ongoing densification will contribute to a more diversified housing stock, particularly through the construction of apartments rather than detached housing. As a member of a green organization explains:

> "There has been a strong tradition of detached housing here, but that is changing. With densification, we see more apartments being built, and that is important, because not everyone wants or needs a detached house with a garden. Smaller households, older

people, and young people need different housing types, and densification makes it possible to provide that." *SO7 - Board member of environmental organization*

Civil society actors also highlight the social value of green and blue infrastructure. The establishment of Fjordstien, a continuous path along the fjord that is also connected to the Lerum Brygge area (Fig 3 and 4), is described as the result of long-term struggle and as a widely **appreciated public amenity enabling inclusive access to the waterfront**. In this context, Lerum Brygge is further described as contributing to public access and everyday use of the fjord, complementing broader efforts to open up previously industrial waterfront areas. Interviewees thus perceive the project as aligning physical densification with improvements in public space and environmental quality.

"After a lot of struggle over 10–25 years, we've achieved Fjordstien—a trail that runs along the fjord throughout the village. It's very important for creating contact between the fjord and the village, and is a joy for everyone. Here you can drive a wheelchair, walk with a walker, stroll, walk the dog, walk with your partner—and it's a great offering for all." *SO5 - Member of senior citizens council*

While associated with various concerns related to housing accessibility and the blocking of fjord views, Lerum Brygge is also referred to as a example of a development perceived to generate positive impacts especially related to the improved quality of the built environment. Interviewees describe the project **as a successful transformation of a former industrial site into a dense residential area integrated into the town centre** (SO1, SO2).

Interviewees also emphasise the project's design qualities and integration of green and blue infrastructure. Lerum Brygge is described as visually attractive and well-received, partly due to the use of wood materials, green roofs, and landscaped spaces around the buildings:

"The buildings have green roofs and some permeable plantings and green spaces between and around the buildings. I think it looks nice, which is important from a public outreach perspective. There's often a lot of resistance to new apartment buildings because they're seen as ugly and big, but Lerum Brygge, in my opinion, is attractive and fits in nicely with its surroundings.The wood paneling and the greenery on the roofs and around the buildings are important in achieving that." *SO6 - Board member of «green organization"*

Overall, interviewees describe several positive social impacts of densification in Sogndal as emerging through improved housing provision, physical upgrading, access to amenities, and enhanced connections to nature. Lerum Brygge is highlighted as a particularly visible example where dense development, design quality, and green-blue infrastructure are perceived as contributing positively to everyday life and community acceptance.

6.3.4.6 (Civic perceptions of) socio-ecological impacts/harms (negative)

While coming with several positive outcomes, densification is repeatedly linked to rising housing prices and reduced accessibility for certain groups, in particular in the owner-occupied sector of the housing market. Interviewees describe **Sogndal as one of the rural municipalities in Norway with the highest housing prices, noting that detached houses and new apartments alike have become increasingly expensive.** From a research

perspective (SO2), housing affordability is described as a growing constraint on who can establish themselves in the municipality. Interviewees further link high housing prices to broader demographic and fiscal concerns. Rising prices are described as pushing new households to neighbouring municipalities with more building land, resulting in a loss of potential residents and taxpayers for Sogndal, and an increased need for public transport (SO2).

While densification is described as increasing housing supply, interviewees question the affordability of new apartments in central areas. Civil society actors (SO4) and researchers (SO2) note that centrally located apartments are often priced beyond what is accessible for less privileged groups:

> "You can discuss how cheap apartments in the center actually are, because they're quite expensive." *SO4 - Member of the parent committee*
>
> "These flats are expensive, so they will not be an alternative for less privileged people." *SO2 - Researcher*

Interviewees also describe uneven effects of densification on housing availability for certain population groups. Civil society actors (SO7) suggest that while more apartments are being built, this has not substantially eased overall housing availability, particularly for small households such as single parents. One interviewee reflects on personal experience of being priced out of new housing:

> "A three-room apartment costs almost the same as a slightly older detached house. For me, when I was going to buy as a single parent with one daughter, it was almost impossible. Maybe if I sold my share of a house, I could get a two-bedroom apartment, but the new apartments are still more expensive than what's really manageable." *SO7 - Representative of the municipal refugee service*

Beyond housing affordability**, interviewees associate densification with broader socio-spatial change and loss of land**. Several interviewees refer to the rapid transformation of areas that were previously agricultural or characterized by orchards and detached housing. From a research and civil society perspective (SO6), this transformation is described as generating a sense of loss of Sogndal's agricultural identity:

> "There's a feeling in Sogndal that the agricultural soul of the place is going away with urban densification. A lot of the small orchards people had in their yards are being cut down to support new housing. I think a lot of people acknowledge the need for new housing and changes in the urban fabric, but also regret the loss of the connection to historical economic drivers." *SO6 - Board member of environmental organization*

Within this broader context, Lerum Brygge is referred to as a visible example through which some of these negative social impacts are perceived. While interviewees do not describe organized opposition to the project, they refer to **dissatisfaction among nearby residents**

related to construction impacts and changes to the built environment. In particular, the obstruction of fjord views is mentioned as a source of frustration.

Interviewees also describe Lerum Brygge as symbolizing broader affordability concerns. From the perspective of renters and students (SO6), the project is perceived as visually attractive but financially inaccessible, particularly for newcomers.

> "People come in and see, for example, Lerum Brygge and think, 'Those are nice, fancy new apartments I can't afford,' Of course, it's a different story for people who grew up here or have lived here a long time." *SO6 - Board member of environmental organization*

6.3.4.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

At a general level, municipal institutions are described as occupying a central coordinating role, while operating under constraints related to limited resources, national regulations, and long planning timeframes. From the perspective of a former municipal employee (SO1), densification has been pursued as a long-term strategy, with the municipality sometimes acting directly as a landowner and developer in order to make densification feasible:

> "But in the long-term strategy there was a densification. Like the houses would be teared down and built up on a more dense scale like building blocks. And a lot of the areas that have been regulated for densification, the municipality would buy some of the houses and act really as a real estate developer. On a strategic level, related to making the densification work really." *SO1 – Former Municipal Planner*

Private sector actors are repeatedly described as influential, particularly in relation to housing development and growth linked to the expansion of the university campus. Interviewees emphasise that students have been a key driver of population growth in Sogndal, contributing to sustained demand pressure on the local housing market. In this context, strong interest from real-estate developers in densification is reported, alongside the dominance of private provision in sectors such as student housing (SO1).

Civil society organisations and community groups are described as having more limited formal power, but maintaining influence through dialogue, cooperation, and participation in public meetings. Representatives from civil society (SO5) emphasise communication and negotiation rather than confrontation:

> "The challenges have sometimes slowed things down, but we have good cooperation with the business sector. We also have good communication with developers, owners and the various projects through public meetings and town halls, so we find that they listen." *SO5 - Member of senior citizens council*

Within this broader stakeholder landscape, **Lerum Brygge is not described as a site of active negotiation or contestation among multiple civic actors**. Interviewees do not refer

to dedicated stakeholder forums, civic coalitions, or sustained dialogue processes linked specifically to the project. Instead, Lerum Brygge appears indirectly in accounts of private sector-led development, market-driven housing provision, and broader discussions of developer influence in Sogndal.

6.3.4.8 (Civic perceptions of) innovative governance mechanisms

Interviewees describe tools and innovation related to green transition and urban development in Sogndal as **fragmented and largely incremental**, rather than transformative or system-changing. While a range of planning instruments, research projects, and strategic frameworks are referred to, these are not described as forming a coherent toolbox with strong regulatory or redistributive capacity. Instead, innovation is portrayed as occurring primarily through **pilot projects, and knowledge production**, with limited ability to shape market-driven development outcomes.

One municipal actor (SO1) describes the preparation of a joint climate and development scenario between Sogndal and the neighbouring municipality of Luster, referred to as the **BAKT strategy**, which stands for *bustad* (housing), *arbeid* (employment), *klima* (climate), and *transport*. In interviewees' accounts, BAKT is described as a long-term, scenario-based framework aimed at aligning housing development, labour markets, mobility, and climate objectives across municipalities, rather than as a legally binding planning instrument. BAKT does not represent an instrument capable of enforcing specific development trajectories or constraining private actors. As such, its influence is described as indirect and dependent on how it is taken up in subsequent statutory plans.

In contrast, interviewees consistently point to **weak innovation capacity** in areas such as building retrofit, energy efficiency, and housing affordability. Economic constraints, high upfront costs, and reliance on national funding schemes are described as limiting the municipality's ability to deploy more ambitious tools.

> "Not in terms of retrofitting, like energy retrofitting, that has not been the goal. The main goal is really just acceptable housing standards. Retrofitting to a high level of energy efficiency or a low level of energy consumption is not economically viable, really just because the investments are so big." *SO1- Former Municipal Planner*

Existing instruments for housing vulnerable groups are described as long-standing and reactive rather than innovative, focused on meeting minimum standards rather than advancing broader social or environmental objectives.

Lerum Brygge does not feature prominently in interviewees' accounts of tools or innovation, and it is not described as a testing ground for new planning instruments or experimental governance arrangements. However, fieldwork observations point to the presence of regulatory tools operating at the level of the housing cooperative (*sameie – see Appendix 6.1 for a definition*). During a conversation with a local resident, it was noted that the cooperative has adopted internal regulations limiting short-term rentals, restricting the use of platforms

such as Airbnb to a maximum of 90 days per year. At the same time, it should be noted that renting out apartment in this residential complex is remarkably profitable. An informal check of advertised prices during fieldwork indicated that a two-bedroom apartment at Lerum Brygge was listed at approximately 500 euros per night, illustrating the high market value of short-term accommodation despite the existence of such restrictions.

6.3.4.9 (Civic perceptions of) tourism and market pressures

Interviewees consistently frame tourism and market pressures in Sogndal as emerging from longer-term growth dynamics rather than from short-term tourism alone. These pressures are described as closely linked to sustained population growth, densification strategies, and the municipality's positioning as a regional centre for higher education and outdoor activities. Tourism, in this sense, is understood as one component of a broader mobility and attractiveness dynamic that also includes students and new permanent residents.

At a general level, interviewees emphasise that **Sogndal's housing market has been shaped by unusually rapid population growth for a rural municipality**. Growth rates since the 2000s are described as having exerted strong upward pressure on housing prices, resulting in price levels comparable to larger Norwegian cities:

> "Sogndal has had a quite rapid growth all the way from the 70s, but when I started here as a student in 2007 and until about 2019, we had between 1.5 and 2% annual growth. So it was really like it was growing more rapidly than Oslo and that's been the main driving factor of the housing market in Sogndal. And that has had a big effect on the housing prices. So a house here in Sogndal has about the same price as a house in Bergen, which is quite the opposite of other rural areas in Norway." *SO1 – Former Municipal Planner*

Municipal actors similarly describe housing prices as exceptionally high relative to Sogndal's size, linking this to limited availability of land for detached housing near the centre and increasing reliance on densification:

> "I actually think the price level can be compared to Bergen, which is a bit unusual. Sogndal is one of the few municipalities that has still had positive population growth, and this has led to rising prices because more people are moving in. As for detached houses, there's very little space to build new ones near the center." *SO7 - Representative of the municipal refugee service*

Interviewees consistently link these dynamics to Sogndal's **place branding as a destination for outdoor recreation**. A former municipal employee (SO1) describes how, since the mid-2000s, the municipality has cultivated an image as a centre for skiing, biking, and outdoor lifestyles, attracting both tourists and longer-term residents. This understanding is echoed by other interviewees, who emphasise that nature and the student environment are central to Sogndal's attractiveness. At the same time, interviewees describe growing awareness among

planners and politicians that the municipality's natural assets must be actively managed to sustain attractiveness for both visitors and residents:

> "There is a growing understanding among most people and politicians and planners alike that we need to keep the attractivity, but to also develop these natural assets to make this society even more attractive for tourists and new settlers." *SO2 - Researcher*

Concerning **Lerum Brygge,** interviewees account primarily as **a symbol of high-end, market-oriented development rather than as a focal point of tourism-related debate**. Nevertheless, a few apartments from the residential complex are listed in short term rental platforms at remarkably high prices, showing speculative dynamics.

Overall, interviewees describe tourism and market pressures in Sogndal as the outcome of sustained growth, place branding, and investment linked to the municipality's role as a regional hub and outdoor destination. While densification is framed as a necessary response to these pressures, rising housing prices and developments such as Lerum Brygge contribute to perceptions of market intensity that interviewees describe as unusual for a municipality of Sogndal's size.

6.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Interview material does not point to systematic or openly articulated conflict between civic groups and public agencies in Sogndal. Instead, interviewees describe a planning and development context characterized by **broad alignment on overall objectives**, alongside differences in emphasis and expectations that emerge implicitly rather than through direct confrontation. Where perceptual differences appear, they are expressed through contrasting ways of describing constraints, priorities, and the pace of change, rather than through explicit disagreement.

Municipal actors consistently frame development challenges—particularly those related to densification, housing provision, and environmental ambitions—through the lens of **structural and institutional constraints**. Limited economic capacity, regulatory frameworks, and long planning horizons are repeatedly emphasized as shaping what is feasible in practice. From this perspective, success is often articulated in terms of having established plans, secured growth, and avoided stagnation:

> "There's not much economic *handlingsrom* (room for maneuver). Sogndal kommune is quite a poor municipality, like many smaller communities in Norway.
> And especially when we were growing into a bigger municipality, you'd have to distribute limited resources." *SO1 – Former Municipal Planner*

Civic actors and researchers largely acknowledge these constraints, and interview material does not suggest a strong rejection of municipal rationales. At the same time, their accounts place greater emphasis on **experienced outcomes**, particularly in relation to housing

affordability and accessibility. Rather than challenging planning strategies such as, interviewees question how these strategies translate into everyday housing options.

These statements do not directly contest municipal intentions, but reflect a different evaluative focus: where public agencies emphasize provision and growth, civic actors emphasize **who is actually able to benefit**.

In the case of **Lerum Brygge**, interview material does not reveal a pronounced perceptual divide between civic actors and public agencies. The project is largely discussed as having proceeded within established planning frameworks, with limited reference to participation, contestation, or negotiation. Civic concerns related to affordability or exclusion are expressed, but not framed as a critique of public agencies' role or decisions, suggesting a degree of normalization of market-led development outcomes.

Overall, interviewees' accounts suggest that **differences in perception between civic groups and public agencies in Sogndal are subtle and situational rather than polarized**. Divergences appear primarily in how success is assessed—through institutional feasibility on the one hand and lived accessibility on the other—rather than in fundamental disagreement over development objectives.

6.3.5 Critical Analysis: Sogndal

Sogndal represents a distinctive case of **rural growth** in Norway, where sustained population increase has been closely coupled with densification strategies, generating specific implications for housing inequalities and land loss, alongside more ambivalent and, in some cases, positive outcomes.

As discussed in previous sections, densification constitutes the main vehicle through which environmental objectives, growth management, and housing provision are pursued in Sogndal, and it is therefore the principal lens through which housing inequalities are assessed in this report.

Within this framework, densification, selective redevelopment, and compact growth cannot be understood as isolated environmental interventions. Rather, they are embedded in a broader local political economy shaped by sustained population growth, a strong higher-education sector that attracts many students, limited municipal financial capacity, and reliance on market-based housing provision. Across interviews, densification is generally described as necessary to accommodate growth within a limited supply of developable land, and compact development is not articulated as a fundamentally contested goal. Furthermore, interviewees acknowledge certain positive effects of densification, particularly in relation to housing provision and the conversion of former industrial land into publicly accessible areas with improved connectivity and access to the fjord.

On the other hand, densification is perceived as interacting ambivalently with housing inequalities rather than resolving them.

Importantly, civic actors rarely frame densification as a “climate” or “green” project in itself. Instead, it is understood primarily through its **housing, land-use, and social consequences**, with environmental rationales often appearing as supporting arguments rather than as the core motivation. In this respect, densification functions as a planning strategy with environmental justifications, rather than as an environmental intervention per se.

From a distributional perspective, while intended to accommodate growth and limit land take, densification has largely materialized through centrally located, market-oriented apartment developments. This has given rise to the first and most persistent point of friction: **affordability**. Interviewees consistently describe new housing produced through densification as expensive and inaccessible to less privileged groups. In this sense, densification increases supply without significantly expanding access, reinforcing a housing system in which market participation remains the primary entry point.

A second point of friction relates to **housing quality and loss of view**, particularly where increased building heights and density alter established residential environments. Complaints about blocked fjord views, reduced daylight, are mentioned in interview material, especially in relation to prominent densification-linked redevelopment projects such as Lerum Brygge. While these concerns rarely translate into organized political mobilization, they contribute to everyday dissatisfaction and shape perceptions of densification as involving qualitative trade-offs for existing residents.

The third—and most politically salient—point of friction concerns **loss of land and the erosion of Sogndal’s agricultural character**. Contestations surrounding the Campus Områdeplan illustrate that densification becomes particularly contentious when it entails the conversion of agricultural land or long-established low-density areas. Unlike affordability or view-related concerns, which are typically experienced individually, land loss has generated collective mobilization. This indicates that densification is most strongly resisted when it is perceived to threaten Sogndal’s historical identity and relationship to land, rather than solely its housing market.

These dynamics are further shaped by Sogndal’s **large student population and the structure of its rental market.** The prevalence of students explains the municipality’s relatively high share of renters compared to the national average and has historically sustained a flexible, predominantly privately supplied rental sector. While this configuration has facilitated the absorption of population growth, it has also entrenched **reliance on market mechanisms and heightened exposure to demand fluctuations**—an issue that became particularly visible when student numbers declined in the aftermath of the COVID-19 pandemic. **Densification introduces additional housing supply into this system but does not fundamentally alter its underlying market dependence**. As a result, Sogndal has been able to accommodate growth without experiencing acute housing shortages, yet this has come at the cost of normalising private provision and market responsiveness as the primary modes of housing governance, rather than strengthening public housing policy.

Market and tourism pressures operate as reinforcing rather than primary stressors. Sogndal's branding as an outdoor destination enhances overall attractiveness, while developments such as Lerum Brygge illustrate how densification combined with environmental upgrading can generate high-value housing with limited accessibility. Short-term rental activity, though regulated, signals the potential for speculative dynamics to coexist with residential use.

6.3.5.1 Concluding reflections

Taken together, the Sogndal case illustrates how housing inequalities related to green transition unfold through **layered, locally specific frictions** rather than singular causal mechanisms. Densification functions as the primary interface where environmental objectives, housing markets, and local identity collide.

The three points of friction—affordability, housing quality and loss of view, and loss of land—are not equally politicized. While affordability and housing quality are experienced individually and discussed pragmatically, loss of agricultural land and low-density character touches deeper historical and symbolic registers, explaining why it has generated the most visible contestation.

The student population plays an ambivalent role in this landscape. It has sustained a flexible rental market and enabled growth, but has also entrenched a housing system highly sensitive to demand fluctuations and weak in redistributive capacity. Densification adds new supply to this system without fundamentally altering its dependence on private actors.

Tourism and market pressures act as amplifiers rather than primary drivers. While tourism has not yet produced large-scale displacement, the symbolic and economic value attached to nature, waterfronts, and design quality feeds into broader price dynamics. Environmental improvements thus risk reinforcing inequality unless paired with stronger housing regulation.

Overall, Sogndal demonstrates how green transition initiatives can coexist with rising housing inequality without triggering overt crisis. This "quiet" trajectory underscores the importance of addressing housing justice proactively in smaller, growing towns, where cumulative market effects and land-use decisions may otherwise reshape access and belonging over time.

6.3.6 Appendix 1 – Glossary

Terms and concepts

Framtiden i våre hender: “The Future in Our Hands” is a Norwegian environmental and solidarity NGO founded in 1974.

Sameie: a form of joint ownership where individuals own their apartments outright while sharing ownership of common areas and facilities.

6.3.7 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
SO1	Expert/former employee	Municipality of Sogndal	6/24/2025	Teams
SO2	Researcher	Vestlandsforskning	8/27/2025	Teams
SO3	Member of the student community	Studentsamfunnet Sogndal	9/23/2025	Teams
SO4	Member of the parent committee	Kvåle school	10/9/2025	Teams
SO5	Member of senior citizens council	Sogndal Eldrerådet	10/13/2025	Teams
SO6	Board member of environmental organization	Framtiden i våre hender Sogndal	9/29/2025	Teams
SO7	Representative of the municipal refugee service	Municipality of Sogndal	10/29/2025	Teams

7 POLAND

7.1 CASE STUDY (LARGE): WARSAW

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Contributors: Bartosz Bartosiewicz (Uni Łódź)

7.1.1 City profile, challenges around just (housing and ecological) transition

Warsaw, the capital and largest city of Poland, is located in east-central Poland and extends along both banks of the Vistula River. The city covers approximately 517 km² and consists of two distinct parts: the left bank, historically more urbanised, densely developed, and elevated,

and the right bank, characterised by more diverse relief and a stronger presence of natural river terraces and floodplain features.

Figure 33: Location of case studies in the context of Warsaw's road network. Source: own elaboration based on BDOT10k spatial data (https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/ accessed on 13-01-2026).

In 2024, the population of Warsaw reached 1,863,845, making it the most populous municipality in Poland. The average population density is approximately 3,604 inhabitants per 1 km², with substantial variation between districts. Recent demographic change has been primarily driven by domestic and international migration, replacing natural increase as the main growth factor since 2020. Together with Kraków, Wrocław, and Gdańsk, Warsaw has experienced sustained population growth, leading Poland with a 10% increase since 2002. Growth in the wider metropolitan area has been even more dynamic, reaching nearly 15% since 2006. Population growth is spatially uneven, with peripheral districts attracting new residents while central areas experience decline. The city is also ageing, and the growing number of non-resident 'city users' places additional pressure on infrastructure and services (The City Office of Warsaw, 2024).

Warsaw is exposed to typical river city environmental pressures, including flood risk and erosion processes along the floodplain. The Vistula valley accounts for nearly 60 % of the

metropolitan area, underscoring the city's strong dependence on this geomorphological system. The river plays a defining role in the city's spatial structure, landscape, and environmental dynamics. Its valley forms a wide natural corridor that influences the patterns of urbanisation. At the same time, pronounced urban heat-island effects occur, particularly in dense central districts, partly mitigated by the cooling influence of the river and the preservation of green corridors (Wierzbicki et al., 2021). These conditions shape both constraints and opportunities for nature-based solutions, building retrofit, and future densification.

Following the near-total destruction of the city during the Second World War, Warsaw was rebuilt largely according to socialist modernist planning principles. This resulted in relatively low-density development and significant reserves of undeveloped land at the time of political transformation, enabling rapid post-1989 expansion. However, inconsistent spatial planning has also contributed to dispersed and poorly coordinated development. An example of this situation is Powiśle, which despite its attractive riverside location was for many years cut off from the river by the Wisłostrada acting as a spatial and transport barrier. Consequently, riverside developments such as the Vistula Boulevards were implemented in a fragmented manner, without full integration with the surrounding residential fabric, resulting in the absence of a coherent urban system. Another example can be found in Stara Praga, where public and private investments were implemented selectively, without a comprehensive development plan for the entire district. This approach resulted in isolated projects that failed to generate spatial cohesion or long-term urban integration.

Warsaw operates under a two-tier governance system comprising central city authorities and district governments. Executive power rests with the mayor, while the City Council functions as the legislative and supervisory body. Districts implement delegated tasks in areas such as local services, housing management, revitalisation, and social policy, although strategic and financial decisions remain centralised. Municipal organisational units and companies support the implementation of sectoral policies, including spatial planning, transport, housing, and environmental protection.

Warsaw is the largest and fastest-growing housing market in Poland. As the national capital and a major economic and institutional centre, it has the country's largest housing stock and the highest number of new dwellings completed over the past three decades. Warsaw currently has nearly 1.1 million dwellings, over 500,000 more than 30 years ago, representing twice the national growth rate. Housing conditions have improved substantially: the average apartment size increased to 58.9 m², the usable floor area per capita nearly doubled to 34.5 m², and access to basic utilities is almost universal. More than 90 % of the housing stock was built after the Second World War, and nearly half after 1990. Over the past 15 years alone, approximately 250,000 dwellings have been completed, representing nearly one quarter of the current stock.

Private ownership dominates, representing around 70% of all dwellings. The market remains the most expensive in Poland, with an average transaction price of €180,000 and a median price of €3,100 per 1 m². Despite sustained construction activity, the demand for municipal housing continues to exceed supply. The municipal housing stock declined from 154,888 units in 1995 to 81,258 in 2022, largely due to post-socialist privatisation and reprivatisation

processes, contributing to long waiting times and ongoing challenges for housing and social policy.

Significant changes in the ownership structure of the housing stock are being observed in Powiśle and Stara Praga (Fig. 2 & 3). The most pronounced transformations are observed in the municipal and private housing stock. The share of apartments remaining in the private housing stock increased by 25.81% in Powiśle and by nearly 30% in Stara Praga. At the same time, both areas saw a significant decline in the public housing stock, falling by 14.8% in Powiśle and 27.54% in Stara Praga, respectively[128].

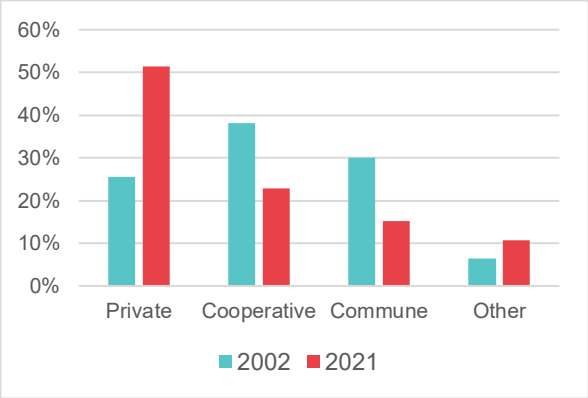

Figure 34 Housing structure in 2002 and 2021 in Powiśle. Source: own elaboration based on Census Data.

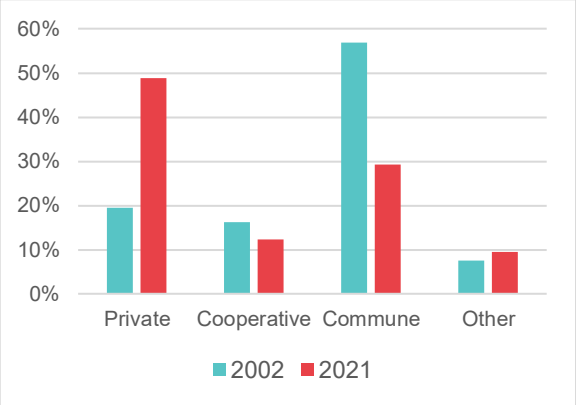

Figure 35 Housing structure in 2002 and 2021 in Stara Praga Source: own elaboration based on Census Data.

Analysing changes in the socio-occupational structure of residents in Powiśle and Stara Praga between 2002 and 2021 allows us to capture the broader processes of social transformation taking place in these areas. The observed shifts toward higher socioeconomic occupations, coupled with a simultaneous decline in the share of working-class and low-skilled groups, are consistent with gentrification patterns. These changes reflect not only the influx of new, better-off residents but also the gradual restructuring of local labour markets and housing stock, which has significant implications for housing availability and the social structure of the districts studied (Fig. 4 & 5).

[128] The presented data reflect the overall structural characteristics; however, the absolute values differ slightly due to the incomplete spatial overlap between statistical regions and the case study areas selected for the analysis.

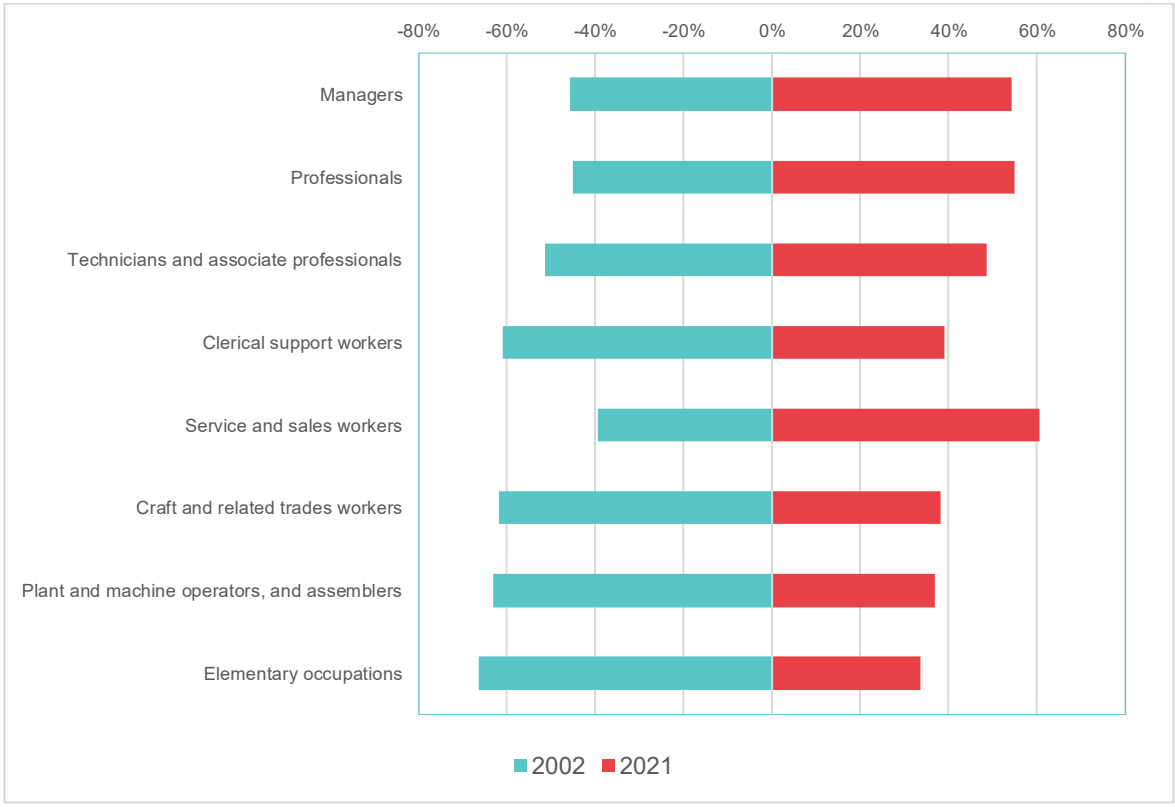

Figure 36 Socio-professional structure in 2002 and 2021 in Powiśle. Source: own elaboration based on Census Data.

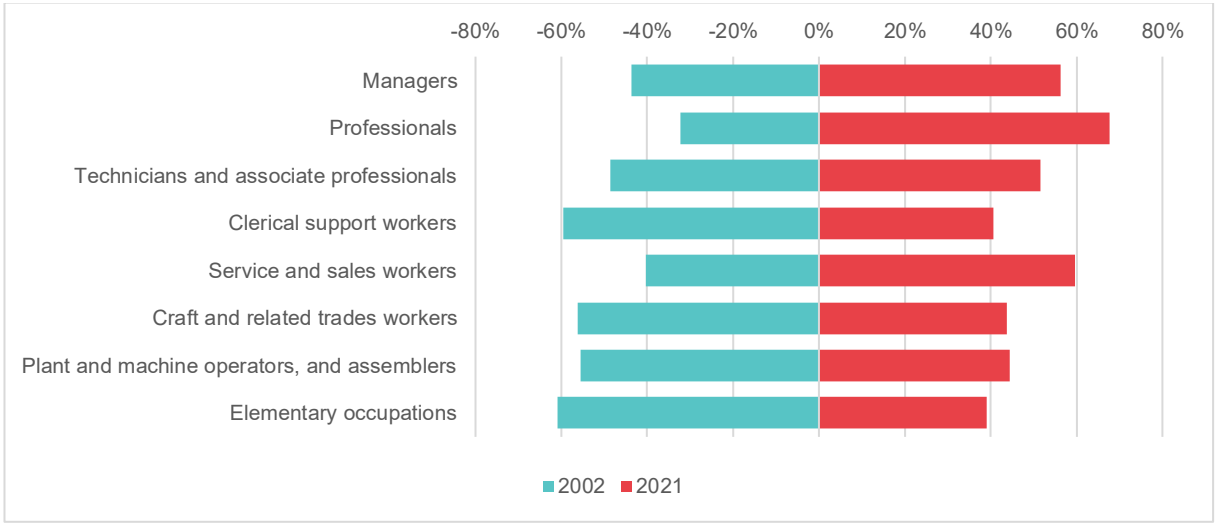

Figure 37 Socio-professional structure in 2002 and 2021 in Stara Praga Source: own elaboration based on Census Data.

In both districts, a clear change in the occupational structure is visible between 2002 and 2021, indicating a process of polarisation and professionalisation of the employment structure. In 2021, a significant increase was observed in the share of groups with higher occupational status, particularly managers, specialists, and service and sales workers, compared to 2002. The strongest growth was observed in the managerial and specialist categories, which may

indicate the growing importance of the knowledge sector, management functions, and highly skilled work. At the same time, a systematic decline in the share of blue-collar and low-skilled occupations, such as industrial workers, machine operators, craftsmen, and elementary workers, was observed. A particularly pronounced decline was observed in the "elementary occupations" and "plant and machine operators" categories, which can be interpreted because of economic restructuring, automation, and deindustrialisation.

Like many large European cities, Warsaw faces rising housing demand, the need to maintain and modernise its building stock, and persistent affordability challenges. In Warsaw, the green transition is framed primarily as an integrated response to climate change, environmental risk, and long-term urban resilience, rather than as a standalone environmental agenda. The strategic city documents, including the *#Warsaw2030 Development Strategy* (2018) and *Climate Change Adaptation Strategy for the Capital City of Warsaw until 2030 with a Perspective to 2050.* The *Municipal Adaptation Plan* (2019), emphasizes the need to reconcile continued urban growth with climate mitigation, adaptation, and improved quality of life. Within this framework, housing, spatial planning, and environmental policies are increasingly interconnected.

7.1.2 Green Transition Interventions in Warsaw: Powiśle and Stara Praga

As Poland's capital and largest metropolitan centre, Warsaw has experienced dynamic socio-spatial transformation since the post-socialist transition, shaped by rapid urban growth, market-driven redevelopment, and increasing integration of green transition objectives into urban policy. Over the past two decades, Stara Praga and Powiśle have undergone significant transformations, illustrating how green transition processes intersect with housing affordability in different ways within Warsaw.

Stara Praga is a historic residential district located on the eastern bank of the Vistula River, distinguished by its exceptionally well-preserved pre-World War II urban fabric, which is rare in Warsaw. Its development accelerated in the late 19th and early 20th centuries, particularly following the construction of the railway, and this period still defines the district's architectural character, dominated by dense tenement housing. For decades after World War II, Stara Praga played an important administrative role, but later experienced neglect and social marginalisation, while simultaneously preserving elements of traditional Warsaw folklore and local identity rooted in the prewar era.

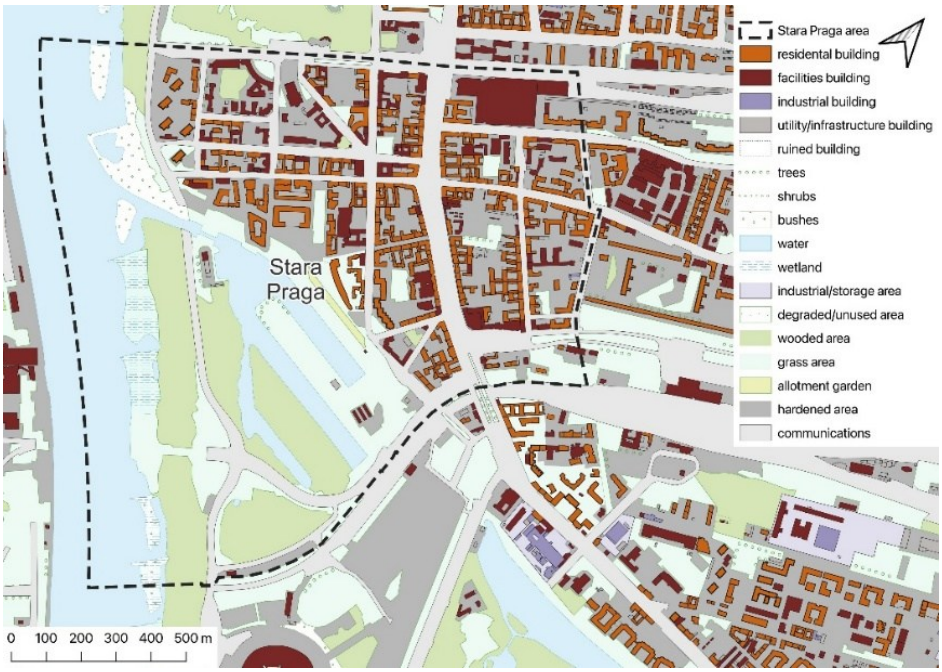

Figure 38: The land use in Stara Praga. Source: own elaboration based on BDOT10k spatial data (https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/ accessed on 13-01-2026).

Since the early 21st century, Stara Praga has undergone a gradual but profound transformation. Its proximity to the city centre, improved transport accessibility, most notably the second metro line, and the presence of key landmarks such as Targowa Street, Różycki Market, or the Warszawa Wileńska railway station have increased its residential and economic attractiveness. Large-scale redevelopment projects, especially in the former Port Praga area, are introducing new housing, commercial, cultural, and recreational functions, reshaping the district while reinforcing its role within the broader urban structure of Warsaw.

At the same time, Stara Praga illustrates the complex social dynamics typical of inner-city revitalisation. Although the population has declined over the past two decades, the social profile of residents has changed markedly, with a growing share of highly educated and economically active inhabitants. It was caused mainly by suburbanisation, the ageing of long-term residents, and the outflow of lower-income households driven by rising housing costs and redevelopment pressures. A major turning point was the Integrated Revitalization Program for Warsaw till 2022 (2016), which identified Stara Praga as a priority area. Interventions included the renovation of historic tenement houses, the modernisation of streets and public spaces, and the development of new social and cultural facilities. Revitalisation continues under the Municipal Revitalization Program until 2030 (2024). At the same time, the northern part of the former Port Praga area is being redeveloped with new residential and commercial projects. These processes have incorporated elements of green transition, such as connection to district heating, thermal retrofitting of buildings, pedestrian-oriented public spaces, street greenery, and planned blue-green infrastructure, including retention and riverside recreational links.

Figure 39: Visualisation of the concept for the reconstruction of streets, squares and green areas in Praga. *Source: The Office of Warsaw (accessed on 15-01-2026: https://architektura.um.warszawa.pl/-/wyniki-konkurs-nowe-ulice-starej-pragi).*

Figure 40: Visualisation of the reconstruction of the square in front of the Praga Hospital in Praga. Source: The Office of Warsaw (accessed on 15-01-2026: https://architektura.um.warszawa.pl/-/wyniki-konkurs-nowe-ulice-starej-pragi).

Revitalisation programs have improved housing quality, public spaces, and technical infrastructure, while altering ownership structures and residential patterns. As a result, Stara Praga today represents a distinctive blend of historical continuity and contemporary urban change, combining cultural authenticity with the pressures and opportunities of ongoing gentrification.

The second completely different case study from Warsaw is **Powiśle** - a distinctive inner-city area within Warsaw's Śródmieście district, located directly along the banks of the Vistula River and shaped by its long industrial past. Throughout the 19th and early 20th centuries, its riverside location supported the development of factories, warehouses, and technical infrastructure, resulting in a densely populated but socially disadvantaged district dominated by modest workers' housing. Severe wartime destruction and the post-war decline of industry led to gradual physical degradation, yet these same conditions later created the basis for profound transformation in the late 20th and early 21st centuries.

Unlike many other central areas, Powiśle's renewal occurred largely outside formal municipal revitalisation programs. Key catalyst projects, most notably the University of Warsaw Library, the Copernicus Science Centre, improvements to the Vistula boulevards, and the opening of a metro station, fundamentally changed the district's image and accessibility. Former industrial sites were adapted for residential, commercial, cultural, and recreational uses, with the redevelopment of the Powiśle Power Plant complex symbolizing the transition from post-industrial decline to a multifunctional and prestigious urban environment (Dudek-Mańkowska & Fuhrmann, 2012; Homiński, 2008).

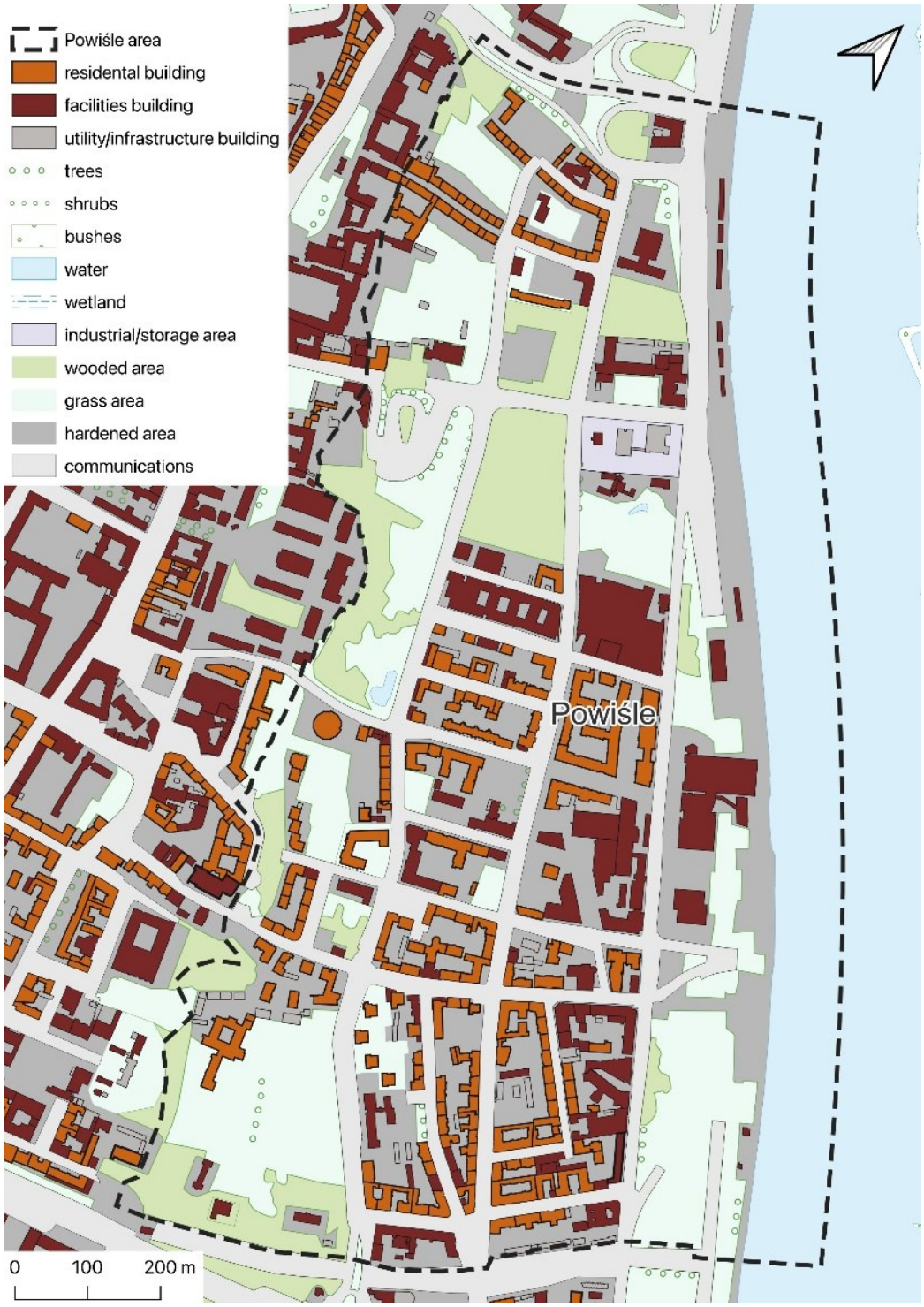

Figure 41 : The land use in Powiśle. Source: own elaboration based on BDOT10k spatial data (https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/ accessed on 13-01-2026).

Today, Powiśle is one of Warsaw's most desirable residential locations, combining high-quality public spaces, extensive greenery, and a strong recreational character with contemporary architecture. Despite a population decline of around 25% over the past two decades - largely

driven by suburbanisation, demographic ageing, and the conversion of residential buildings into commercial, service, and short-term rental uses, the district has experienced clear social upgrading, marked by rising education levels, increased employment in managerial positions, and growing property values. At the same time, intensive investment pressure has generated tensions related to gentrification, rising housing costs, and conflicts over spatial development, making Powiśle a representative example of both the opportunities and challenges associated with inner-city transformation. The lack of a local development plan for parts of Powiśle means that development in the area is based on decisions on development conditions, strengthening the position of private investors. As a result, two priorities compete: maximizing profits, which favors high-quality investments at very high property prices, and maintaining the social mix through the preservation and modernisation of municipal housing stock.

Figure 42: Vistula Boulevards in Powiśle. Source: The Office of Warsaw (accessed on 13-01-2026: https://go2warsaw.pl/bulwary-nad-wisla/).

Figure 43: The garden on the roof of the University of Warsaw Library in Powiśle. Source: Warsaw Tourist Organisation (accessed on 13-01-2026: https://go2warsaw.pl/biblioteka-uniwersytetu-warszawskiego/).

Taken together, the two districts highlight contrasting yet interconnected pathways of urban transformation. Stara Praga illustrates a public-led revitalisation model integrating green transition and retrofit measures, which improves environmental conditions but also increases development pressure and affordability risks. Powiśle exemplifies a market-driven, prestige-oriented redevelopment, where green and cultural investments contribute to environmental enhancement while reinforcing housing inequalities. These cases demonstrate how green transition projects can generate divergent social outcomes depending on governance structures, housing tenure patterns, and the balance between public and private investment.

	STARA PRAGA	POWIŚLE
Neighbourhood characteristics (general social type, economic activities, density etc)	Historic, dense, pre-war housing; area undergoing intensive revitalisation; post-industrial areas of Port Praga; visible gentrification processes; social environment is changing (increasing share of people with higher education, growing number of new investments). Density: 6,125 people/km².	Formerly an industrial area, now a prestigious, rapidly developing part of Śródmieście; intensive functional and social transformation; high gentrification; developed recreational and service infrastructure. Density: 6,340 people/km².
Duration	Intensive revitalisation since around 2010, based on the Integrated Revitalization Programme 2016–2022 and continued in the Municipal Revitalization Programme; investments in Port Praga have been ongoing for over a decade.	Transformation since the 1990s (including the University Library, Wisłostrada, metro line II, Powiśle Power Plant); intensive processes of spatial and social change over the last ~30 years.
Funding	Mainly funds from the Warsaw City Hall, private investors (Port Praga, new residential buildings), public funds for infrastructure, thermal modernisation and connections to the heating network.	The dominant funds come from private investors (new developments and the Powiśle Power Plant), the city of Warsaw (infrastructure, public space), university investments (BUW), funds for public transport and the modernisation of the waterfront.
Actor constellation	The City Office of Warsaw, housing communities, tenement house owners, private developers, local organisations and residents' associations, residents participating in consultation processes.	The City Office of Warsaw, the University of Warsaw, private developers (e.g. Powiśle Power Plant), cultural institutions (Copernicus Science Centre), local entrepreneurs and residents.
Aims and objectives	Renewal of the pre-war fabric, improvement of the quality of life, modernisation of infrastructure, strengthening of social functions, reduction of degradation and exclusion, activation of public spaces and functional change of the Port Praski.	Post-industrial transformation towards residential, service and recreational functions; improving the quality of space; integration with the Vistula River; developing cultural, scientific and tourism infrastructure; increasing investment attractiveness.
Specific physical measures	Number of renovated tenement houses; number of buildings connected to the district heating network; increased housing supply; new green areas; new social and cultural facilities	Redevelopment of post-industrial sites (including the former Powiśle Power Plant); modernisation of riverside public spaces; development of green and recreational infrastructure along the Vistula River; iconic green roof of the University of Warsaw Library; improved transport, pedestrian, and

		cycling connectivity; high-quality public space and landscaping.
Accompanying housing policy/ regulatory measures	Implementing interventions consistent with the city's strategic documents and further implementing revitalisation and modernisation activities based on the obtained sources of financing.	Implementing interventions consistent with the city's strategic documents and further implementing modernisation activities based on the obtained sources of financing.
Key social tensions or/and benefits between greening and housing	Acceleration of gentrification processes, rising fees and living costs, difficult interactions with public administration institutions, highly formalised forms of social participation, the disappearance of neighbourly ties, nuisances related to increased car traffic, and negative impacts resulting from ongoing investment activities.	An area of high prestige, dominated by high-quality green areas, who's environmental and image attractiveness results in increased housing costs.

Table 1. Key data on Warsaw case study areas. Source: own elaboration.

7.1.3 Methods

The qualitative component of the study was based primarily on in-depth interviews. In total, 20 interviews were conducted between September and December 2025. All interviews were carried out remotely via Microsoft Teams. Interviews were conducted in Polish. Profiles of interviewees may be found in Appendix 2. Prior to participation, informed consent was obtained from all interviewees, including consent for use of the material for research purposes.

The interview sample included experts representing a broad range of perspectives relevant to housing and urban transformation processes. Interviewees comprised academic researchers, local activists, representatives of residents, municipal officials, and elected councillors, with expertise in housing, nature-based solutions, building retrofit, and urban densification. Sampling drew on contacts established during the preparation and participation in the ReHousIn Policy Lab held in March 2025. Additionally, a snowball sampling strategy was applied: initial participants were identified purposively, and subsequent interviewees were recruited based on recommendations from earlier respondents.

Interviews were audio-recorded using Microsoft Teams. Automated transcripts generated by the Teams transcription tool were subsequently reviewed in full by the researcher. Transcriptions were verified against the original recordings and corrected to address any errors or inaccuracies. The verified transcripts were then translated into English using AI-based tools embedded in Microsoft Word and Writefull, with additional manual checks to ensure accuracy and consistency of meaning. Qualitative coding and analysis were conducted using ATLAS.ti software. All coding was carried out by a single researcher, following a predefined coding framework aligned with the study's analytical objectives.

In addition to interviews, the study employed complementary qualitative methods. These included research walks aimed at visiting and documenting key locations mentioned by interviewees, such as green areas, NBS interventions, housing investments, and other sites identified as problematic or contested. Photographic documentation was collected during these walks to support contextual interpretation of the interview data.

Finally, the qualitative analysis was informed by background research, including a review of legal and policy documents, strategic plans, official reports, and academic literature. This desk-based research provided contextual grounding and supported triangulation of findings from the interviews and field observations.

The study drew on an extensive review of municipal and district planning documents, policy analyses, technical reports, scholarly publications, and grey literature from neighbourhood groups, advocacy organisations, and media sources. These materials informed interviewee selection, provided contextual grounding, and enabled triangulation of empirical claims. Nonetheless, the research has limitations: despite including a broad spectrum of institutional and civic stakeholders, it does not fully represent all resident populations affected by redevelopment, particularly more marginalized groups with limited formal representation. Moreover, because the redevelopment initiatives are ongoing, several findings capture anticipatory perceptions and evolving dynamics rather than finalized outcomes.

7.1.4 Civic Perceptions of Green Initiatives in Case Study Areas: Stara Praga

7.1.4.1 Precedents and implementation

The evolution of transformational processes in Warsaw's Stara Praga has progressed from largely facade-oriented interventions in the early 2000s, such as the modernisation of streets, towards a more comprehensive and multi-dimensional model of urban regeneration. A key catalyst for this shift was Poland's accession to the EU in 2004 followed by the implementation of successive regeneration frameworks (Local Revitalisation Programmes, Integrated Revitalisation Programmes, and Municipal Revitalisation Programmes), which enabled systematic public co-financing of improvements to the district's degraded housing stock.

"(...) the revitalisation of Praga has actually been going on for almost 30 years, because the first revitalisation activities related to Ząbkowska Street and the attempt to create something like a Praga Old Town in this area, characterized by the oldest residential buildings, date back to the early 2000s. Back then, there was no thought at all about greenery or ecological trends. The idea was only to somewhat renovate the crumbling tenement houses and attract some tourists to Praga, to put it simply. But the real revitalisation of Praga actually began with the influx of EU funds, that is, after our accession to the European Union, and these are the subsequent programs: the Local Revitalisation Program for 2007-2013, the Integrated Revitalisation Program for 2014-2022, and finally the Municipal Revitalisation Program, based on the Revitalisation Act of 2024, with a perspective until 2030. I do not deny that each of these

programs brings in more financial resources". (*Representative of residents' committee* - Interview W8B)

The implementation of NBS and blue-green infrastructure is perceived by residents primarily through the lens of bottom-up initiatives, including participatory budgeting projects, which are often seen as compensating for shortcomings in formal planning processes. While such interventions contribute to improved thermal comfort and aesthetic quality of public spaces, their reception is shaped by low levels of trust in managing institutions, particularly municipal housing authorities. This mistrust is associated with limited transparency, and the perceived low quality of renovation works.

"Were [the greening campaigns] initiatives from the civic budget or entirely private initiatives of residents, for example, through programs that subsidize neighbourhood initiatives? Here, residents also did a lot and put in a lot of effort, so it proves there's a great awareness and a great responsibility for these spaces". (*Representative of residents' committee* - Interview W10B)

Retrofit measures, including those supported by programmes such as ELENA (European Local Energy Assistance Program), are primarily focused on addressing energy poverty through the installation of central heating systems in tenement buildings. These interventions are widely regarded by the local community as a fundamental improvement in living conditions. By contrast, densification processes, implemented mainly through new social housing developments and private infill construction, elicit ambivalent responses. While they address functional and housing shortages, they also intensify concerns related to gentrification and the potential displacement of long-term residents. Additional criticism relates to insufficient communication regarding construction timelines and the perception that flagship projects prioritise tourist-oriented circulation over every day needs of local users.

"Retrofitting buildings with central heating. This primarily concerns the municipal resource, namely the elimination of individual heating sources. Not only that freestanding stove, I'd say they became a thing of the past many years. In fact, the scale of heating with coal or wood has been declining significantly over the past eight to 10 years, but in many cases, residents simply heated with electricity, which drained their wallets. And here's the issue of connecting buildings to the municipal heating network. This solves the problem for most buildings that were worth renovating and didn't have any claims". (*Representative of residents' committee* - Interview W8B)

7.1.4.2 Participation and governance (procedural)

The implementation of urban policies and projects in Warsaw is shaped by a complex institutional and legal context, resulting from both the division of responsibilities within the municipal administration and unresolved ownership conditions. Institutional fragmentation and multi-level decision-making processes influence the pace and scope of policy delivery, requiring extensive coordination among numerous actors. Even initiatives that are well-prepared at the conceptual level may encounter procedural constraints during implementation, particularly where interdepartmental cooperation is required.

Interviewees frequently pointed to the layered administrative structure of the city, in which competencies are dispersed across citywide units, district authorities, and specialized agencies.

> "The complicated administrative structure of the Warsaw City Hall and every organisational unit in the city… the district councils, which supposedly can govern, but in reality, when it comes to green spaces, public spaces, and a number of other organisational units operating within the city, everything has to be agreed upon." (*City official* - Interview W16C)
>
> "I have to go to several groups and people at the same time to get them interested in it, (…) then I have to coordinate it so that they meet together, and there is often animosity between them, and the decision-making process itself, that they want to do something with us, there are so many levels." (*Expert/professional* - Interview W14C)

In addition to administrative complexity, ownership-related constraints constitute a significant factor shaping implementation trajectories, particularly in areas affected by unresolved property claims. Decisions regarding renovation or investment are often deferred due to legal uncertainty and the financial risks associated with potential restitution of property to former owners or their heirs.

> "Sometimes we can renovate something, but sometimes it's simply better to wait… the property might not remain in our management, and the claim [referring to unresolved restitution] might be large, because there are many apartments, the building is worth a lot, etc. (…) we're often stuck with very basic ownership issues, which are very expensive." (*City official* - Interview W3A)

Comparable challenges are evident in the housing sector, especially during the implementation phase of programmes and investments. Respondents highlighted limitations in institutional oversight, including the absence of dedicated units responsible for monitoring project execution and verifying outcomes. This affects entities such as the Warsaw Real Estate Management Department[129] where monitoring mechanisms are described as insufficiently institutionalized.

> "There are no units that verify the completion of all work. (…). Often, they learn months later from residents that certain things haven't been done or haven't been done properly. I consider this a very big problem, because the ZGN itself says there are no units overseeing these works. There are no designated people, no unit at all, to verify this, and this often results in wasted money." (*Representative of residents' committee* - Interview W10B)

[129] pl. *Zakład Gospodarowania Nieruchomościami m.st. Warszawy* (ZGN)

Alongside administrative and organisational factors, patterns of residents' participation further shape implementation processes. Participation takes diverse forms, ranging from active engagement in grassroots initiatives and participatory budgeting to more limited involvement in formal consultation mechanisms. Grassroots initiatives (such as neighbourhood initiatives, participatory budget projects, the "adopt a flowerpot" project) are often more effective in implementation and better perceived by the public, although they are not always adequately supported by the city.

"They were initiatives from the participatory budget or entirely private initiatives of residents, for example, through programs that subsidize neighbourhood initiatives. Here, residents also did a lot and made many efforts, so it proves that there are such a great awareness and responsibility for these spaces". (*Representative of residents' committee* - Interview W4B)

„The city consults with residents on many ideas, conducting a process of dialogue and public consultations. The implementation of these ideas and projects varies. Often, there are years of delays or abandonment, which is disappointing. It's safe to say that practically the entire district has been subjected to various consultation processes, and various urban and architectural projects have been developed, but not everything is implemented". (*Representative of residents' committee* - Interview W8B)

"Various revitalisation works have been going on for a long time now and so many different public consultations are taking place that some residents simply do not participate in them anymore because they feel as if they have been "over-consulted"". (*Representative of residents' committee* - Interview W10B)

An additional factor shaping participation patterns is the level and scope of public education regarding residents' rights and their potential influence on urban space. Limited awareness of these mechanisms may constrain engagement, particularly among residents of municipal housing

"Residents are primarily learning about the new quality [of governance], but it's very difficult to raise awareness among residents because there's no public education about the fact that YOU can demand more, that you live in this municipal apartment, you pay very high prices for it, which some people do, and it's up to you what this space will look like, and you should talk about it, because unfortunately, there's this old tradition that once I get an apartment... I won't even ask, I won't ask for anything more, I won't question what's happening." (*Representative of residents' committee* - Interview W10B)

Finally, challenges related to participation and decision-making become even more apparent when different interests and development visions clash. Disputes over green spaces and urban mobility are a prime example.

"There are certainly different visions when it comes to greening the city. There are strong voices, namely the Law and Justice party[130], which often takes the position of, let's say, the driver's party in discussions about changes in the city. It turns out that solutions related to increasing green spaces at the expense of, for example, traffic lanes, or introducing other mobility solutions like bike paths, are criticized." (*Representative of residents' committee* - Interview W2B)

7.1.4.3 (In)equity (distributional)

The analysis of transformational processes in Warsaw's Praga district reveals a pronounced dualism in the social perception of distributive justice, shaped primarily by ownership structures and ongoing gentrification dynamics. Residents of municipal housing frequently express a sense of institutional marginalisation, describing themselves as "second-category tenants". This perception is linked to deficits in transparency in the activities of the Municipal Property Management Authority and to the absence of systematic civic education concerning the enforcement of tenants' rights.

"For decades, ZGN has treated everything connected to us as a secret. We are not considered a party in any of the reprivatisation proceedings or claims. We are treated simply as second-class tenants, because this is municipal housing and because we are seen as the kind of people who just "sit there." I constantly have the feeling that we are not taken seriously, even though we care deeply about our wellbeing. Our flat has been renovated, we look after it, and so on. We feel strongly connected to our neighbours, many of whom have lived here for generations. At the same time, I observe the situation around us: there are fewer and fewer of us [as a result of gentrification and the aging of society], the condition of the tenement building is deteriorating, and the future remains uncertain (…)". (*Resident/entrepreneur* - Interview W13B)

The distribution of benefits and burdens associated with urban transformation is perceived as asymmetrical. On the one hand, technical upgrades to residential buildings, such as the installation of central heating systems and lifts, are seen as producing tangible improvements in living standards. On the other hand, high-profile investments in public space are often interpreted as projects oriented towards more affluent social groups rather than existing residents. Key perceived burdens include rent increases following thermal retrofitting and spatial conflicts arising from the reallocation of space, for example the removal of parking areas in favour of blue–green infrastructure

[130] Law and Justice (Prawo i Sprawiedliwość, PiS) – a Polish political party with a conservative and national-conservative profile, founded in 2001 by twin brothers Lech and Jarosław Kaczyński. The party emphasizes state sovereignty, a strong role of the state in the economy, traditional social values, and a critical approach to deeper European Union integration. Law and Justice was the leading governing party in Poland from 2015 to 2023.

„Municipal tenants who previously lived in buildings, for example without central heating, point out that rents do in fact increase at the moment when they move to a building with central heating or when such a system is installed“. (*Representative of residents' committee* - Interview W4B)

The impacts of transformation on vulnerable groups are described as multi-dimensional. Older residents, frequently affected by the so-called “fourth-floor prisoner” phenomenon, benefit from improved architectural accessibility. At the same time, seniors and households located within the rent gap are identified as particularly exposed to social atomisation and the erosion of neighbourhood ties. These processes are associated with temporary relocations linked to renovation works and with the lack of adequate replacement housing within proximity. As a result, despite observable improvements in the physical quality of the urban fabric, social perceptions are dominated by concerns regarding the displacement of lower-income residents by private and developer-led capital.

„It seems to me that there is very strong development pressure here, and that the city is supportive of it. If this pressure remains so intense and there are no mechanisms capable of restraining it in any way, no community activist has the power to stop this process. This is even more the case given that living in Praga has become fashionable“. (*City official* - Interview W16A)

7.1.4.4 Political mobilization

Local associations such as *“City is Ours”* (*pl. “Miasto jest nasze”*) or “*Agreement for Praga*” (*pl. Porozumienie dla Pragi”*) operate as key intermediary actors in the articulation and transmission of residents' interests within urban governance processes. Their activities span multiple spatial scales, from neighbourhood-level engagement to participation in citywide decision-making arenas. As emphasized by representatives of these organisations, involvement is largely motivated by a sense of responsibility for the immediate living environment as well as for the broader development trajectory of the city.

This engagement encompasses a wide range of thematic areas, including spatial planning, transparency in local governance, sustainable mobility, environmental protection, and housing accessibility. In some cases, grassroots activity has extended into formal political representation, enabling associations to influence urban policy through institutional channels. In the housing domain, associations have also established links with entities at the national level (including committees operating within Ministries), seeking to influence broader policy frameworks related to affordability and access.

“As residents, we simply want to have an impact on our neighbourhood, on Warsaw, whether it's shaping spatial order, transparency in local government, or supporting a more sustainable vision for the city, meaning strong public transport, green initiatives, or housing that is accessible to all social groups. Our activities are both citywide – since the last local elections, we have also had our own city councillors, so some of our actions also take the form of city council positions or resolutions that we propose”. (*Representative of residents' committee* - Interview W8B)

„When it comes to housing, we're also in close contact with our parliamentary partners regarding affordable housing. It's important to us that this accessibility exists". (*Activist/researcher* - Interview W2B)

Alongside institutional engagement, protest activities constitute an important mode of action, particularly in relation to environmental protection and contested uses of public space. These mobilisations have, in some cases, led to concrete modifications of planned investments.

"Thanks to public pressure, this project [street reconstruction, which was to involve cutting down about 500 trees] was changed and 200 trees were preserved, so it can be said that it was a considerable success at the stage when the investment was about to be implemented". (*Representative of residents' committee* - Interview W8B)

"Such protests, even if based on incomplete knowledge, are often an expression of concern for the environment. I believe this is valuable in itself". (*Representative of public housing agency* - Interview W7A)

The contemporary diversity and organisational capacity of Warsaw's urban movements can be traced back to earlier mobilisation processes, particularly those triggered by controversies surrounding reprivatisation, with particular intensity during the reprivatisation scandal in 2016.. These events acted as a catalyst for resident engagement and contributed to the expansion and thematic diversification of local associations.

"We're a grassroots organisation, so in our case, these goals aren't set by the board (...) Environmental issues has been part of our activities practically from the very beginning of the association. Housing was the first, the whole so-called reprivatisation scandal. But very quickly, so-called thematic committees emerged, one of which deals broadly with greening, tree protection, and nature conservation." (Activist/researcher - Interview W2B)

7.1.4.5 Socio-ecological impacts/benefits (positive)

In recent years, changes observed in the Stara Praga area can be interpreted as the outcome of the combined effects of local government interventions and residents' grassroots initiatives. These processes operate at multiple scales, encompassing housing provision, spatial transformation, and improvements in environmental quality. The interaction between top-down public policies and bottom-up civic engagement appears to play a key role in shaping both the pace and direction of these changes.

One of the central dimensions of transformation concerns the affordability and quality of housing, particularly within the municipal and social housing stock. Publicly supported housing instruments, including Social Housing Association – TBS, are described as mechanisms addressing structural gaps in the housing system by offering rental units with regulated rents, targeted at households that fall between social housing eligibility and market affordability. Warsaw has two active municipal housing companies – TBS Północ and Południe – the latter of which implements projects in the Stara Praga district. This non-market orientation is further

reinforced by institutional arrangements that prevent the resale of dwellings and retain long-term public control over the housing stock.

> "TBS focuses on the construction of residential apartments, i.e., apartments for rent. Rents in these units are regulated by law and maintained at a standard level. This makes them affordable for people with average incomes. This is crucial because Poland faces a group of consequences known as the housing gap." (*Representative of public housing agency* - Interview W7A)
>
> "Unlike commercial investments undertaken by developers, our actions do not lead to the gentrification of these areas. (…). Residents who move into our units can live there if they meet the criteria." (*Representative of public housing agency* - Interview W7A)

Parallel to affordability considerations, retrofitting and modernisation of the existing housing stock have significantly altered living standards. Thermal modernisation, connection to district heating, and compliance with contemporary building regulations have resulted in improved energy efficiency, reduced maintenance costs, and enhanced residential comfort.

> "Residents will receive a new apartment that's cheaper to maintain and better heated. Remember, thermal modernisation is often associated with this. This is calculated for the entire building, so every square meter of the apartment is better heated, and heat is distributed evenly. And then there are the bathrooms, just like in tenement buildings. In many places, there were no bathrooms, or they were shared in the hallways. Today, renovations are required because of building regulations. An apartment is at least 25 square meters and must have everything, including a bathroom, a kitchenette, and many other related regulations. And so, people are returning to a much higher standard than before." (*City official* - Interview W3A)

Beyond housing, transformations in Stara Praga are also evident in the spatial and social dimensions of the neighbourhood. Investments in infrastructure, public safety, and the physical environment have contributed to perceptible changes in how the area is used and perceived.

> "There have certainly been enormous spatial changes. Aesthetic changes related to the return of these buildings to society through their connection to the district heating network (...) So, spatial changes have certainly occurred. Social changes have also significantly changed. This awareness and the fact that it's now relatively safe to walk through Praga." (*City official* - Interview W16A)

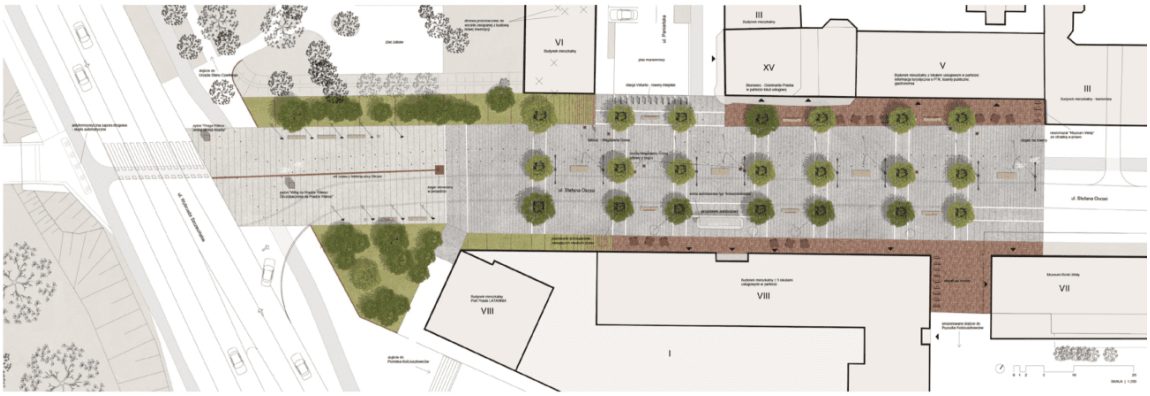

Figure 44: Architectural, urban and functional project for the reconstruction of Stefana Okrzeja Street. Source: The City Office of Warsaw (accessed on 13-01-2026: https://pragapn.um.warszawa.pl/-/ulica-okrzei-w-nowej-odslonie).

A distinct component of these spatial changes relates to green infrastructure and public space development, frequently implemented through participatory mechanisms. Programs such as the Participatory Budget and revitalisation initiatives have enabled the creation of pocket parks, street greenery, and redesigned streetscapes that prioritize pedestrians and reduce car dominance.

> "Certainly the square that was created [around 2019] behind the building at 2b Kępna Street. This square was created through a participatory process, the result of several projects funded by the participatory budget. A quite pleasant space has emerged, and it continues to develop year after year. The greenery has truly taken hold; it's become a natural playground, very popular on good days and beyond." (*Representative of residents' committee* - Interview W8B)

Finally, respondents emphasized that retrofitting housing stock and improving green and public infrastructure have broader implications for residents' physical and mental well-being, as well as for environmental conditions. The elimination of individual heat sources, introduction of central heating, and landscaping of courtyards were identified as interventions with cumulative health and environmental benefits. These benefits extend beyond immediate residential comfort to include thermal regulation, air quality, and water retention functions within the urban ecosystem.

> "Improving the living conditions of residents by retrofitting buildings with central heating – and it must be admitted that these buildings are being retrofitted gradually, especially since 2014 – is a large-scale project, with 1,000 apartments equipped with central heating, meaning the elimination of individual heat sources, electric heaters, or even all those stoves or gas heaters. The second issue is the landscaping of courtyards and the creation of green spaces." (*Representative of residents' committee* - Interview W8B)

7.1.4.6 Socio-ecological impacts/harms (negative)

Transformation processes are characterized by socio-economic restructuring. While they improve the quality of public space and infrastructure, they also generate significant negative

effects in the housing and spatial spheres, indicating the coexistence of gentrification processes, institutional barriers, and structural limitations in housing affordability.

Gentrification takes the form of both direct relocation and indirect economic displacement. In Warsaw, the revitalisation of municipal tenement buildings – often requiring major renovations – frequently often to the temporary or permanent displacement of entire buildings. Temporary and permanent displacement follow distinct but interrelated trajectories, both producing long-term neighborhood-level effects. Temporary displacement most often arises from building renovations, legal disputes, or pending court decisions, during which residents are formally promised a return. In practice, however, such displacement often becomes prolonged and uncertain, lasting several years and, in some cases, extending over a decade, thereby disrupting everyday routines, social networks, and access to services. Permanent displacement, by contrast, occurs when tenants are unable to return due to rent increases, tenure termination, or the conversion of housing into market-rate units. The lack of adequate alternative housing within the same district further exacerbates these processes, leading to the disruption of long-standing neighborhood communities and the relocation of residents to distant areas.

> "The city started renovating buildings with residents, while not providing adequate housing in the district (...) the city could be said to have broken these neighbourly ties." (*Representative of residents' committee - Interview* W8B)

At the same time, a process of economic displacement is taking place, related to the rising costs of maintaining housing following the modernisation of municipal housing stock and the sharp rise in real estate prices on the private market. Praga, historically perceived as a more affordable district, has reached price levels close to the Warsaw average, significantly limiting the housing options for people with lower and middle incomes.

> "The cost of purchasing real estate has increased so enormously in this part of the city, which means that for people who used to be able to treat it as just another Warsaw, but accessible to less affluent segments of society, today we are no longer dealing with such a process." (*Researcher* - Interview W1C)

The residential developments are accompanied by a shift in the structure of local services. Traditional services and essential shops are gradually being replaced by restaurants and services aimed at more affluent users and tourists. Space is beginning to be managed primarily with new residents and visitors in mind, rather than existing local communities.

> "The city began to focus on pleasing those who had arrived, rather than necessarily working with those who were already there." (*City official* - Interview W16A)
>
> "The most visible example is the shifting of services (...) pushing out small services that residents need on a daily basis." (*Representative of residents' committee* - Interview W2B)

While investments in public spaces are intended to improve quality of life in the long term, they generate significant social costs in the short term. Lengthy renovations, the elimination of

parking spaces, and a lack of communication with local businesses lead to decreased revenue, limited accessibility, and a sense of marginalisation among stakeholders.

"Right now, the reconstruction has only resulted in a street struggling to reconcile a massive renovation with some kind of traffic disruption. Half the [Okrzei] street is dug up, people are driving in the other lane, or rather stuck in traffic jams. However, all the parking spaces have been deleted. Simply put, with the flick of a switch, there were dozens of parking spaces here, and they're gone (...) we all need time for this; no one consulted us beforehand. The renovation itself wasn't communicated to us, though widely. We weren't given a schedule." (*Resident/entrepreneur* - Interview W13B)

"Such small investments, some minor square footage issues, take several months to complete. I realize this is a complicated renovation because everything in the street structure is changing, but the duration will also be very difficult for us." (*Resident/entrepreneur* - Interview W13B)

Respondents pointed to a deepening housing affordability crisis, affecting not only the lowest-income households but also the middle class, young adults, and public sector workers. They pointed to the growing "rent gap," a group of people who earn too much to qualify for municipal housing but too little to cover the costs of a mortgage or market rent. At the same time, the criteria for allocating municipal housing are becoming a structural problem. Respondents also highlighted the inefficient use of available housing, including vacant properties and large units that do not meet current residents' needs. As a result, young people seeking independence find neither small municipal apartments nor affordable options on the private market. This is exacerbated by the financialisation of the market, dynamic price increases, and limited supply of long-term rentals – further diminished by the growth of short-term rentals.

"On the one hand, this municipal resource is insufficient, on the other hand, we have a huge group of people in the so-called rent gap, i.e. people who would not qualify for this municipal resource anyway and due to these skyrocketing prices are unable to buy properties themselves, and in turn, rental prices on the free market are also very volatile and very high here." (*City official* - Interview W9A)

“We have a problem with overcrowding in the municipal housing stock. We also have the problem that criteria, such as income or square footage, haven't been touched for years. This means that the multi-year increase in the minimum wage, for example, has led to a situation where low-income people earn too much to qualify for municipal housing. So this is another problem that needs to be addressed. And the third thing is the issue of accessibility, that is, combating the phenomenon of the fourth-floor prisoner and, by retrofitting buildings, implementing solutions that improve accessibility." (*Representative of residents’ committee* - Interview W8B)

"Because we currently have no multigenerational families in Praga, or only a handful, and families with two children don't need 100-120 square meters, they don't have the opportunity to allocate such an apartment at all. So, the largest units often sit empty, and young people between 20 and 30 who want to become independent can't do so because they can't afford to buy an apartment, for example, or rent. At the same time, there are no small units available. A 120-square-meter unit would be a fantastic alternative to five studio apartments, and this

would solve the problem for these young people." (*Representative of residents' committee* - Interview W10B)

Paradoxically, despite high demand, a significant number of municipal premises remain vacant due to financial and organisational barriers on the city's side.

"If Praga renovated all the available spaces, there would be no housing queue [for municipal housing], and we could probably accommodate several hundred families. So, there's huge potential here, and when I hear from the ZGN that they're running out of budget or don't have the time or space to work until the end of the year because they don't have crews, and we're in the middle of the biggest revitalisation boom, it's completely senseless to me." (*Representative of residents' committee* - Interview W10B)

7.1.4.7 Tensions and power dynamics between stakeholders/actors

The analysis of social perceptions of transformational processes in Warsaw's Praga district indicates deep institutional fragmentation and a pronounced asymmetry of influence among key stakeholders. The governance structure of the City Hall is perceived as highly dispersed, generating competency-related barriers and coordination paralysis between municipal departments and executive units.

The complex administrative structure of the City of Warsaw and its individual organisational units functions like a "state within a state." Each municipal body operates with a high degree of autonomy. A public land management authority, for example, effectively constitutes a state within a state. When a heritage conservator seeks to agree on matters such as the protection of historic buildings, the procedure resembles writing to, arranging meetings with, and negotiating as if with Brussels or even the Vatican". (*City official* - Interview W16A)

The dynamics of power are dominated by strong pressure from private capital. Developers act as primary producers of the urban fabric, frequently instrumentalising public investments in NBS to enhance the value of their own projects. In contrast, non-governmental organisations and urban movements seek to address deficiencies in formal planning through the Participatory Budget, although their capacity to influence outcomes is constrained by regulatory barriers and the marginal position of cooperative housing models. These relations are further shaped by processes of "over-consultation" and low levels of trust in the durability of municipal commitments, contributing to a widespread perception of the social marginalisation of long-term residents in favour of newly arriving elites.

"If we're going to completely renovate a building, we must take these people out. We've had experiences where people didn't want to move, and we even started, which was covered in the press and media. When we started the renovation, we simply started with the tenants. It always ended in major protests and disputes, both with the residents themselves and with the various parties you just asked about. It also depends on where these residents went, who they contacted, which council group they contacted. I'd say the consequences are that residents don't want to move out of their homes and don't really trust that they will return, that there will

be a chance to return. But I'd say the further we go with the revitalisation, the better the experience". (*City official* - Interview W3A)

7.1.4.8 Innovative governance mechanisms

Innovative approaches to managing Warsaw's housing stock increasingly rely on instruments that combine market-based mechanisms with social policy objectives. These tools are intended to expand the availability of affordable housing, diversify tenure forms, and improve the quality and sustainability of the existing housing stock.

Social Housing Associations (TBSs) constitute a more established pillar of Warsaw's housing policy. TBSs provide rent-regulated housing targeted at households located within the so-called rent gap – those whose incomes exceed eligibility thresholds for social housing but remain insufficient to access market-rate rentals. After a period of stagnation linked to funding shortages, this sector experienced renewed development from around 2015 onwards, enabling the delivery of projects with enhanced social and environmental standards.

"The situation only changed around 2015, when funding was reinstated (…) Rents are regulated by law and kept relatively low (…) This is crucial, as the number of residents living in the so-called rent gap is growing." (*Representative of public housing agency* - Interview W7A)

Complementing the TBSs, Social Rental Agencies (SANs) represent a newer and more innovative mechanism within Warsaw's housing policy. According to experts, SANs are not yet a widespread solution, but their potential is significant. They enable the inclusion of private apartments – usually renovated and furnished – in socially oriented rental programs, offering below-market rents and greater tenancy stability.

"SAN is probably the first mechanism in Poland that allows private housing to be used for social purposes. It's still in its infancy, but it's doing well here because the government, thanks to European funds and social funds, is supporting the SAN Programme (…) the SAN can simply take apartments from the commercial market, those that have been renovated and furnished." (*Expert/professional* - Interview W14C)

Finally, following legislative changes introduced in 2022, Warsaw has gained new competencies to support housing cooperatives, understood as groups of residents jointly engaged in the planning, construction, and long-term management of residential buildings. Cooperatives are perceived as a potential tool for activating less attractive plots or vacant buildings and for fostering stable neighbourhood structures. However, their practical implementation remains constrained by the absence of dedicated financing instruments for collective investments.

"The law generally provides a tool for such limited tenders (…) However, one more tool is missing, namely a financing mechanism." (*Expert/professional* - Interview W14C)

The modernisation and transformation of the existing housing stock are further supported by national and European financial instruments, most notably the Polish Development Bank - BGK Subsidy Fund and EU programmes. These resources enable large-scale renovations of historic tenement buildings, vacant structures, and accompanying infrastructure, often combined with energy audits and comprehensive thermal retrofitting. Interviewees highlighted the growing scale of such interventions, including investments in green and blue infrastructure. European additionally support preparatory phases of energy-efficiency projects, facilitating systematic thermal modernisation across entire building stocks.

"So far, we have managed to obtain over PLN 100 million from the BGK non-refundable subsidy fund (…) and we have applications for PLN 200 million (…) Infrastructure projects, including renewables and greenery, are also being funded." (*City official* - Interview W3A)

"As the Praga-Północ district, we are implementing a project with the name ELENA (…) this is a project that involves the thermal modernisation of buildings. Energy audits are currently underway." (*Representative of residents' committee* - Interview W8B)

A sustainable environmental approach is reinforced by the Warsaw Green Building Standard, which defines requirements related to energy efficiency, water management, and blue-green infrastructure. The standard operates both as a mandatory framework for municipal investments and as a reference point for private developers, promoting consistent environmental practices across sectors.

"These are guidelines that must be implemented as part of municipal investments and also constitute a set of good practices for external investors." (*City official* - Interview W6A)

"The advantage of the Warsaw Green Building Standard is that the city does not charge any fees for 'certification'. It is voluntary [for private investors] and available to anyone interested. This means it is not a financial burden, while also setting a direction for Warsaw to pursue." (*Representative of public housing agency* - Interview W7A)

Another significant domain is restructuring programs aimed at resolving rent arrears and preventing evictions. Particularly noteworthy are initiatives that introduce alternative modalities for debt resolution (debt restructuring, work-offs, housing relief and subsidies). The innovative character of these mechanisms is reflected in their departure from a punitive paradigm of housing management toward a remedial and supportive framework. These measures function simultaneously as social interventions and as instruments enhancing the efficiency and adaptability of municipal housing governance.

"We also have very great restructuring activities, where, for example, residents who are in debt can work it off. We have a lot of pre-emptive actions that make evictions not necessary, for example – it's a very good program." (*City official* - Interview W3A)

7.1.4.9 Tourism and market pressures

Analysis of the transformational processes taking place in Stara Praga indicates an intensification of gentrification driven by the interaction of tourism development and market pressure. From the perspective of residents, these processes are widely perceived as resulting in the gradual loss of the district's historical and social identity, increasingly subordinated to external capital and the needs of temporary users rather than long-term inhabitants.

Contemporary Stara Praga has become a "fashionable" urban area, which has led to a rapid escalation in property prices, now comparable to the citywide average and reaching approximately 18.000-20.000 PLN (4.270-4.750 Euro) per square metre. A central role in this transformation is played by the financialisation of the housing market. Changes in the urban fabric are shaped primarily by private development projects like Port Praski, while public-led revitalisation policies often function merely as a background framework rather than as a steering force. Speculative practices are evident in the maintenance of vacant dwellings or entire buildings in anticipation of land value appreciation, effectively constraining the supply of affordable housing.

> "Praga is a bit trendy, so prices are definitely high. We're seeing people buying apartments here. These are wealthy people, and these apartments aren't cheap". (*Resident/entrepreneur* - Interview W13B)

The emergence of institutional rental sectors raises additional concerns regarding the formation of socially homogeneous enclaves that destabilise established local social structures. Short-term rentals, particularly through platforms such as Airbnb, are identified as a driver of housing scarcity and price inflation in the long-term rental market. The absence of effective regulatory instruments at the municipal level contributes to a sense of institutional powerlessness in addressing the commodification of housing.

> "I think there's currently no very good, hard data on short-term rentals, due to the lack of requirement to report this type of rental to the housing association or cooperative. I think this could have a huge impact on housing affordability and equity, not only in terms of rent prices, but also in the overall availability of this resource and its release for long-term rentals". (*Researcher* - Interview W17C)

The social consequences of these processes are profound. Long-term residents frequently report feelings of alienation within their own neighbourhoods, described as "becoming a stranger in one's own area." Traditional local services and crafts are increasingly displaced by high-end gastronomic and leisure-oriented establishments catering to affluent users and tourists. As a result, despite formal improvements in environmental and infrastructural standards, growing economic barriers render Praga progressively less accessible to middle- and lower-income groups, reinforcing patterns of socio-spatial exclusion.

> "It used to be normal to meet in the stairwell, say "hello" five or ten times, there were old school friends, neighbours, the lady from the store. Unfortunately, these kinds of relationships have become very shallow now. And unfortunately, I feel like a stranger in my neighbourhood.

I leave my building, and I don't know anyone. There's a lot of traffic, a huge traffic jam, tons of people; sometimes I feel like I'm in a strange city". (*Resident/entrepreneur* - Interview W13B)

7.1.4.10 Gaps in perceptions between civic groups and public agencies

Gaps between civic groups and administrative perspectives concentrate around three interrelated dimensions: the effectiveness of governance structures, the credibility and outcomes of participatory processes, and the social consequences of interventions aimed at modernizing the urban fabric.

From an administrative standpoint, project implementation is shaped by a complex, multi-level governance system that generates coordination barriers and dilutes responsibility. From the perspective of civic actors, however, the administration is perceived as a system of institutional "pushing," lacking clear accountability for the technical condition of municipal assets and the quality of implemented investments.

„Rebuilding the entire structure and, above all, implementing units that verify the work performed – how it was done and whether this or that issue is resolved. Because if subcontractors, and unfortunately, given the rates they charge for the work, often choose the cheapest, not the best, companies. This verification is absolutely necessary. Or let's not organize such units but allocate a larger budget to ensure that this work is done properly. Let the companies that perform this take 100% responsibility for it. Let there be penalties for failure to meet deadlines, and so on. The budget in this area should be increased to ensure it simply works". (*Representative of residents' committee* - Interview W10B)

A second major area of divergence concerns the role and meaning of participatory processes. City authorities primarily emphasize the formal dimension of participation, treating public consultations as an instrument for legitimizing strategic decisions (e.g., within the Municipal Revitalisation Program or Strategy 2040+). Representatives of urban movements, by contrast, argue that the prevailing practice of public consultations contributes to the erosion of trust and the growth of civic apathy. Key points of contention include the discrepancy between submitted demands regarding scope, priorities, and spatial consequences of planned interventions and final decisions of the authorities' – generating a sense of performativity or sham – and the role of the participatory budget as a compensatory mechanism that enforces the implementation of projects not pursued by the city in a systematic manner (e.g., courtyard greening).

"Housing policy, yes, was also [consulted], but that was because the authorities wanted it that way (...) it was simply the mayor's decision to consult. However, now it's an obligation. It's a statutory obligation now, so the new strategy is being consulted." (*City official* - Interview W3A)

"It's a bit like this: the City of Warsaw consults many ideas with residents, conducting a process of dialogue and public consultation. The implementation of these ideas and projects varies. Often, there are years of delays or abandonment, and this causes disappointment. It's fair to say that practically the entire district has been subjected to various consultation processes,

and various urban and architectural projects have been developed, but not everything is implemented." (*Representative of residents' committee* - Interview W8B)

A third axis of divergence relates to the social implications of housing modernisation and retrofitting. For municipal officials, the unresolved legal status of properties constitutes a fundamental barrier to retrofitting investments, understood as an objective and systemic constraint largely beyond the control of local governments. In practical terms, this situation means that tenants often do not know who the legal owner of their building is, while municipalities are unable to direct public funding or co-financing schemes for retrofitting to properties with unresolved ownership. Residents living in buildings affected by ownership claims, however, interpret these barriers as a form of institutionalized discrimination. They experience their situation as that of "second-class tenants", excluded from renovation programs and deprived of reliable information about the future of their homes, which generates persistent insecurity, fear of eviction, and anticipation of gentrification.

"I live in an old tenement building with a very rich history (…) This is a municipal apartment that we could never acquire through purchase, nor was there even the possibility of establishing a community. (…) I live in a classic tenement building that has been neglected for decades, because along the way, claims have been an obstacle to the city managing it properly, but also to us, as residents, being able to purchase the apartment we live in. (…) You ask what the situation is – it's not very promising, because business-wise, financially, I've never had the creditworthiness to pay. Because of our creditworthiness, we're living in this apartment as long as we can. We'll see what happens next, because the situation is truly dynamic. I'm afraid we'll fall victim to the gentrification process. (...) (*Resident/entrepreneur* - Interview W13B)

"The ZGN, for decades, they've been keeping everything secret, including ours. We're not a party to any claims. We're treated like simply lower-class tenants, because it's a municipal tenancy, because these are people who sit around. I constantly feel like we're not taken seriously, even though we care deeply about our well-being. Our apartment has been renovated, we take care of it, and so on. We feel connected to our neighbors, who have also lived here for so long. I'm also observing this situation – there are fewer and fewer of us, the building's condition is deteriorating, and the future is uncertain because, as I said, my very seasonal business is unfortunately failing". (*Resident/entrepreneur* - Interview W13B)

In contrast, city officials and representatives of the Social Housing Association (TBS) argue that the relatively high share of municipal housing stock – estimated at approximately one-third of the buildings – acts as a structural buffer against gentrification in Stara Praga, helping to preserve the existing social mix.

"There are plans to renovate nearly 30 tenement houses that have been vacated, so these tenement houses will return to the [municipal] housing stock and will, of course, be occupied by people who need affordable housing. So, these proportions will change, and that's why such negative gentrification phenomena are not as prevalent in Praga". (*City official* - Interview W3A)

However, civic groups perceive a gradual process of elitisation driven by large-scale, high-end developments (such as Port Praga) and the rising costs of everyday services, which increasingly exceed the financial capacities of long-term residents.

"My company is adjacent to Port Praski, which is developing rapidly, and I see it in the registrations and hear it on the street. (...) The demand is enormous, so prices here are skyrocketing. This is private land and a developer's property. It was and will be expensive there. It's always been impressive, these figures when it comes to square meters of living space. But they have no problem selling, but as you asked, I think: Praga is a bit trendy, so prices here are definitely high. We're seeing people buying apartments here. These are wealthy people, and these apartments aren't cheap." (*Resident/entrepreneur* - Interview W13B)

The dichotomy of perception reveals a structural tension between a governance logic grounded in procedures, strategies, and systemic constraints, and the everyday experiences of residents, which are shaped by concerns over housing conditions, affordability, social stability, and the potential loss of local identity in the course of gentrification processes.

7.1.5 Civic Perceptions of Green Initiatives in Case Study Areas: Powiśle

7.1.5.1 Precedents and implementation

The evolution of spatial transformation processes in Warsaw's Powiśle district illustrates a trajectory of inner-city change, shifting from an industrial and working-class area to an elite residential and service-oriented district. Powiśle's strategic riverside location, proximity to the historic city centre, and successive waves of public and private investment have positioned the district as a key site of socio-spatial reconfiguration. As a result, the area has become an emblematic example of how market-driven redevelopment and selective revitalisation can produce profound changes in land use, social composition, and the symbolic status of urban space.

From a historical perspective, Powiśle functioned as a district with a high concentration of productive and storage activities, marked by significant environmental burdens associated with industrial operations. During the 1960s and 1970s, modernist planning principles were implemented through the development of housing estates built with prefabricated panel technologies, characterised by simple, repetitive forms and spacious layouts. These projects introduced opened areas intended for greenery and recreation, creating became known as “residual greenery”. The modernist interventions reflected an open and socially integrative approach aimed at improving sanitary conditions and supporting a mixed academic and artisanal community.

“(…) it was an industrial district, there was a very large power plant there, which was extremely burdensome, and when it was closed down, it opened up the opportunity to develop Powiśle

in a completely different way". (*Representative of the Society of Urban Planners* - Interview W15A)

A major turning point occurred at the turn of the millennium, when the deindustrialisation of the area coincided with the opening of the University of Warsaw Library in 1999. This investment provided a strong institutional and symbolic framework for further transformation. In the first decade of the twenty-first century, large-scale infrastructural projects, including the construction of the Wisłostrada tunnel and the establishment of the Copernicus Science Centre, enabled the physical and functional reintegration of the Vistula riverbanks into the urban fabric. In the contemporary phase, transformation is dominated by market-driven densification, with former brownfield sites increasingly converted into luxury residential and premium office developments.

"(…) when the University of Warsaw Library building opened in Powiśle in 1999, and later, when several other public investments were implemented in the first decade of the 2000s, most notably the covering of Wisłostrada and the construction of the Copernicus Science Centre, this was an example where the lever for these changes was exerted by public investments. These investments benefited the development companies that completed the process". (*Researcher* - Interview W1C)

Figure 45: Former Power Plant Powiśle Complex -today a modern office and commercial centre. Source: White Star Real Estate & Tristan Capital Partners/ Press materials (accessed on 13-01-2026 https://www.muratorplus.pl/inwestycje/inwestycje-komercyjne/apartamenty-hotel-biurowce-warszawa-powisle-budowa-kompleksu-elektrownia-powisle-coraz-blizej-konca-aa-Hdru-Dp65-VxPh.html*).*

7.1.5.2 Participation and governance (procedural)

With regard to green projects and environmental interventions in Powiśle, respondents emphasize that municipal governance is characterized by a reactive and fragmented approach. City authorities are perceived as introducing greenery-related initiatives on an ad

hoc basis, often in response to immediate pressures or opportunities, rather than as elements of a coherent, long-term strategy for the district's environmental and social development.

„I have the impression that these actions are ad hoc; they were proposed, so to speak, and when a problem arises, it's later resolved". (*Activist/researcher* - Interview W2B)

One key source of this perception is the city's complex and dispersed governance structure. The multi-level decision-making system (city council, district councils, and numerous organisational units) leads, according to respondents, to a dilution of authority, unclear responsibilities, and difficulties in coordinating sectoral policies. Particularly criticized is the lack of a unit acting as an overarching coordinator, capable of monitoring strategy implementation and assessing their effectiveness.

"We have a lot of different units, at different levels (...) which causes the competencies to become blurred, as well as who is responsible for what (...) There is a lack of coordination between units (...) and a unit that will tie it all together and then analyze what we have managed to achieve". (*Representative of residents' committee* - Interview W4B)

Interviews with resident representatives, who are themselves local residents, also highlight the „overproduction" strategic documents, which formally regulate city operations but, in practice, do not always translate into coherent and consistent implementation of public policies. These documents function in parallel, often without sufficient cross-sectoral integration.

Critical reflection also concerns a paradigm shift in thinking about urban space and greenery. A shift to a quantitative rather than qualitative approach to greenery has been noted, with the maximisation of new plantings at the expense of protecting existing natural resources. This approach implies that urban planning increasingly evaluates greenery based on the number of new plantings rather than the ecological value, maturity, or social functions of existing vegetation. As a result, older trees and established green areas may be removed or neglected to make space for new plantings, potentially undermining ecosystem services such as shade or air purification.

"We have moved to a level of thinking about greenery that is treated somewhat thoughtlessly, quantitatively – not in terms of taking care of the greenery that already exists". (*Researcher* - Interview W1C)

In the context of inversion activities, the role of structural conditions, over which local government has limited influence, is emphasized. Particularly in the Powiśle district, the effects of housing reprivatisation and ongoing legal proceedings over property restitutions were highlighted, which led to the loss of municipal land and housing resources, limiting the possibility of pursuing an active housing policy.

"The city simply lost its land (...) the tenement houses were returned [to people claiming rights to the property without clear legal title], and the claims are still pending". (*City official* - Interview W3A)

Both in terms of implementing new municipal investments and adapting vacant buildings. The city's dependence on funds from the Polish Development Bank - BGK Subsidy Fund was pointed out, as availability of these funds has been limited in the past, although forecasts for the coming years are more optimistic.

In the normative dimension, there is a call for depoliticizing spatial planning and strengthening an approach based on the common good and long-term responsibility for the city. Respondents are critical of the instrumentalisation of planning decisions in favor of short-term economic gains and their subordination to current political interests or market logic.

"Warsaw's biggest problem is strong politicisation and doing everything just to sell it later in some tender." (*City official* - Interview W16A)

As a result, the statements described here paint a picture of procedural participation, which – while potentially a cornerstone of urban democracy – is seen in practice as requiring profound overhaul. Stakeholders perceive not only institutional shortcomings and limitations but also systemic conditions that undermine the sense of agency and transparency in decision-making processes. From their perspective, what is necessary is not so much the creation of new mechanisms, but rather the strengthening of existing ones through better coordination, clear assignment of responsibility, stable financing, and the effective depoliticization of spatial planning.

7.1.5.3 (In)equity (distributional)

Civic perceptions of inequity in Powiśle are strongly shaped by experiences of uneven distribution of the benefits and burdens associated with urban transformation. Both residents and experts consistently frame recent changes through the lens of perceived unfairness, emphasising that gains from redevelopment have been disproportionately captured by affluent newcomers, developers, and transient users, while long-term inhabitants bear a growing share of social and economic costs. These costs primarily include rising financial pressures associated with housing maintenance and everyday functioning within the district, as well as indirect and non-displacing forms of displacement linked to the commercialisation and functional reorientation of local services and public spaces. Simultaneously, this transformation generates social costs manifested in the erosion of neighbourhood-based social ties and the intensification of tensions between long-term residents and new users of Powiśle.

“Powiśle is currently part of the Śródmieście district, a very wealthy district, mostly inhabited by wealthy people who bought apartments for a lot of money in areas that were sold by various state or municipal companies, and in fact, those 10 years of transformation, i.e. the 1990s and early 2000s, that's when it happened”. (*City official* - Interview W3A)

Perceived unfairness is most evident in assessments of access to housing, public space, and urban amenities. While Powiśle has benefited from high-quality public investments and environmental upgrades, experts emphasize that these improvements have simultaneously

driven up land values and living costs, effectively excluding lower- and middle-income households.

> “However, the framework was indeed provided by public investments, which showed that the former district of garbage dumps, sex workers, and social inequality, depicted in Prus's descriptions of "The Doll," had been transformed into a cool, nouveau-riche, prestigious district in Warsaw's city centre. So, public investments provided the framework there”. (*Researcher* - Interview W1C)

The distribution of benefits and burdens is thus viewed as structurally asymmetrical. Benefits such as increased prestige, improved aesthetics, and proximity to cultural and recreational infrastructure, accrue primarily to property owners and high-income residents. Conversely, burdens are experienced by long-term tenants and vulnerable groups in the form of rent increases, service displacement, noise, overcrowding linked to tourism, and the gradual erosion of everyday accessibility and services, especially for older residents.

> “However, I think the most visible example is the changing services, specifically the pushing out of small-scale services that residents need daily, which, of course, negatively impacts new residents. New residents also need a cobbler, but suddenly it turns out that some restaurant concept can charge more. So, greater protection for these key services or those that are disappearing is definitely needed here.” (*Activist/researcher* - Interview W2B)
>
> “Suffice it to mention the problem of the so-called "fourth-floor prisoners." These are issues that, in my opinion, should be among the most important today, because we are entering a period of significant change, and we know that funding from programs like The National Recovery Plan is running out and the state budget is under significant strain, which limits housing funding.” (*Researcher* - Interview W19C)

The effects on vulnerable groups are particularly salient in civic narratives. Elderly residents, low-income households, and long-term renters are identified as the groups most vulnerable to displacement pressures and the erosion of local social support networks. At the same time, apartment owners were the group that benefited most from the transformation processes, primarily through significant increases in the value of their properties and the opportunity to monetize them.

> “Some of these residents who lived there previously became beneficiaries because they owned these apartments, and their level of wealth, understood as the value of the property, increased significantly. It's obvious that some of them, in this situation, decided to sell the property and move elsewhere.” (*researcher/resident* – Interview W20B)

7.1.5.4 Political mobilization

Political mobilisation in Warsaw is perceived by local actors as a multifaceted process, encompassing both protest-oriented activities and more institutionalized forms of engagement, including cooperation with elected representatives and participation in legislative processes. Mobilisation is not interpreted solely as oppositional action but rather as a mechanism for

articulating collective interests, primarily related to the protection the quality of life in the neighbourhood, and maintaining the accessibility and inclusive nature of public space.

Protest activities are commonly associated with environmental protection and the use of public space. Respondents emphasize that even when protests are grounded in partial or incomplete information, they constitute an important expression of civic concern and attachment to place. From this perspective, protest is framed less as disruption and more as a signal of social sensitivity to urban change, highlighting the importance of transparent and proactive communication by public authorities.

> "Such protests, even if based on incomplete knowledge, are often an expression of concern for the environment. I believe this is valuable in itself. In such situations, good and reliable communication is key: explaining why certain actions are necessary and what their effects will be." (*Representative of public housing agency* - Interview W7A)

Beyond protest, political mobilisation in Warsaw increasingly takes the form of agenda-setting and policy advocacy, particularly through actors associated with urban movements who have gained representation in local government. Experts point to housing policy as a key domain of mobilisation, especially in response to growing affordability constraints in central districts[131]. City councillors linked to urban movements actively promote the expansion of eligibility criteria for municipal housing to include employees of the public sector, such as teachers and police officers, who are increasingly unable to afford housing in the inner city.

> "When it comes to housing, we are also in close contact with our parliamentary partners regarding affordable housing. It is important to us that this accessibility exists. (…) Our city councillors proposed extending eligibility for municipal housing to public sector workers, such as police officers and teachers, who are increasingly absent from Warsaw due to affordability constraints." (*Activist/researcher* - Interview W2B)

This form of mobilisation extends beyond the municipal level to include parliamentary lobbying and participation in national legislative debates. For example, following local housing-related conflicts in central Warsaw, civic actors and urban activists submitted written opinions to parliamentary committees and engaged with members of parliament during debates on housing and spatial planning reforms. Respondents, such as researchers and experts, describe involvement in consultations surrounding new housing legislation and efforts to influence policy instruments perceived as exacerbating housing inequalities. In particular,

[131] e.g. in July 2025, residents of apartment blocks in Powiśle district protested against a housing cooperative's plans to construct an additional apartment building (https://www.rdc.pl/aktualnosci/warszawa/powisle-czerniakowska-spoldzielnia-nowy-blok_scsfBEFgewzgGV0oGIFn?utm_source=chatgpt.com - accessed on 29.01.2026)

credit subsidy schemes are criticized for inflating housing prices and deepening the rent and credit gap, thereby excluding broader segments of the urban population.

> "A tangible outcome has been the – hopefully effective – blocking of proposals related to mortgage subsidies. While they increase purchasing power, they also raise housing prices, leading to a growing rent or credit gap and pushing more residents into it." (*Activist/researcher* - Interview W2B)

Environmental issues constitute another central axis of political mobilisation in central Warsaw. Researchers note a shift from localized, project-based environmental concerns toward demands for systemic changes in the management of urban natural resources. Green and blue infrastructure, air quality, and water management are increasingly framed as interconnected policy areas requiring coordinated and long-term responses. Social organisations, e.g. 'The City Is Ours' not only exert pressure at the municipal level but also engage in advocacy at the national level, linking environmental degradation directly to public health and residents' well-being.

> "If we start focusing on green infrastructure or blue-green infrastructure, we can see that such a movement exists. In Warsaw and many other Polish cities, it has emerged over recent years as a result of pressure from social movements." (*Researcher* - Interview W1C)
>
> "We are involved in actions related to the Vistula River. We have had another year of very low water levels. Not only did we raise the alarm, but we are also trying to enter into dialogue with the city's mayor." (*Activist/researcher* - Interview W2B)

Overall, political mobilisation in central Warsaw is perceived - primarily researchers and policy experts, to be evolving from reactive protest toward more structured and multi-level forms of engagement. While protests remain an important means of expression, there is an increasing emphasis on institutional access, political negotiation, and legislative influence. This trajectory reflects both the growing organisational potential of urban movements and the perceived limitations of purely consultative or informal mechanisms in addressing structural issues related to housing affordability and environmental sustainability.

7.1.5.5 Socio-ecological impacts/benefits (positive)

The transformation of Powiśle has generated a range of positive socio-ecological outcomes, particularly in relation to environmental quality, thermal comfort, and the functional reconfiguration of public space.

One of the most frequently highlighted benefits by all groups of respondents concerns the enhanced attractiveness and environmental performance of public spaces (Vistula Boulevards, Powiśle Power Plant, Agatona Square, Kazimierzowski Park), especially in the context of climate adaptation. Respondents point to the role of greenery, water retention solutions, and shading in mitigating the effects of heatwaves, improving thermal comfort, and indirectly supporting air quality and urban safety. These interventions are perceived as part of a broader socio-ecological system, in which local environmental improvements are connected to city-wide resource management, including water circulation linked to the Vistula River.

“This is precisely the increase in the attractiveness of public spaces. Respite during heatwaves (...) we have this greater thermal comfort. Such respite, of course, also translates into air quality and safety. This is related to water, although it's very indirect. Because we're creating some retention reservoirs, which helps the vegetation, but then it can also feed the Vistula River, from which we then draw most of Warsaw's drinking water.” (*Activist/researcher* - Interview W2B)

In the built environment, respondents emphasize the technical and energy-efficiency gains associated with new developments and modernized buildings. Improved insulation standards, energy-efficient systems, and contemporary construction technologies are identified as tangible environmental benefits. At the same time, these improvements align with a broader urban development trajectory characterized by increasing density and intensification of land use, reflecting a shift toward to a compact city model rather than the preservation of open or low-intensity green spaces that contribute to improved aeroclimatic conditions and urban ventilation.

„The benefits certainly relate to the buildings themselves and their energy efficiency. If they possess such qualities, I consider it a benefit, for obvious reasons. (...) Besides, this entire area is being tidied up. Most or very few of these bases, warehouses, workshops, etc., have disappeared from Powiśle, which creates a sense of order, which also improves the quality of the space in terms of its use by residents and visitors. It's important that the park area by the escarpment has been preserved, although partially in Mariensztat, there are various investment projects aimed at increasing density there as well.“ (*Representative of the Society of Urban Planners* - Interview W15A)

Crucially, respondents underline the partial preservation of green areas along the escarpment, despite strong development pressures, particularly in areas such as Mariensztat. Maintaining these park spaces is framed as a significant socio-ecological asset, mitigating some of the associated with densification.

Finally, the transformation of Powiśle has led to a profound symbolic and social revaluation of the district. Historically associated with poverty, neglect, and marginalisation, Powiśle is now perceived as an urban area of high status and prestige. Although this change carries ambivalent social consequences, discussed elsewhere in this study, it remains one of the key outcomes of the district's spatial, environmental, and functional modernisation. At the same time, empirical research conducted by one of the respondents indicates a strong attachment among residents to their place of residence and a high assessment of the quality of life in Powiśle, which is often identified as one of the most desirable places to live in Warsaw. A high level of residential satisfaction translates into a low propensity to relocate.

“Residents self-identify with Powiśle to a greater degree than with Śródmieście. They identify first as residents of Powiśle, then Śródmieście, which is unusual in Warsaw neighborhoods. (…) This densification has occurred and continues, and in my opinion, it improves the quality of public spaces, the quality of life for residents, and the efficiency of this area's use, while still maintaining a very large biologically active area.” (*Researcher/resident* - Interview W20B)

7.1.5.6 Socio-ecological impacts/harms (negative)

Despite the observed environmental and spatial benefits resulting from the urban transformation in Powiśle, interviews with researchers and experts indicate that these processes also generated significant negative socio-ecological consequences. In particular, investments in high-quality public spaces and the accessibility of the waterfront were strong catalysts for gentrification. The transformation of the Powiśle waterfront can be described as partial or instrumental naturalisation rather than full ecological restoration. Although not classified as green space in a strict ecological sense, the boulevards function as a highly organized and accessible riverfront environment, whose attractiveness has substantially increased the symbolic and market value of the surrounding area.

More broadly, Powiśle is described as a case of public-investment-led gentrification, where flagship public projects have preceded and stimulated private capital inflows. Key interventions, such as the construction of the University of Warsaw Library and the covering of the Wisłostrada expressway with a tunnel topped by green space, are perceived as transformative but socially selective.

> "Powiśle would be a very good example in this regard. It is an area that has become extremely gentrified as a result of public investments – starting with the University Library and later the covering of Wisłostrada and the creation of green space above it." (*Researcher* - Interview W1A)

Significantly, these investments were not accompanied by a housing policy aimed at preserving or expanding the municipality's housing stock. Instead of using rising land prices to support municipal or social housing, the city allegedly sold strategically located plots to developers, thus reinforcing market-driven redevelopment patterns.

> "These places were not supported by any comprehensive housing measures. They were not treated as an opportunity to develop municipal housing or large TBS investments. Instead, the city rather sold off strategic land in that area. There was only one municipal building in recent years - and even that triggered dramatic protests, with accusations that 'pathology' was being brought into Powiśle." (*Researcher* - Interview W1A)

Another recurring theme concerns the risk of green gentrification, whereby investments in greenery and public space enhance environmental quality while simultaneously undermining social inclusiveness. Improved aesthetics, recreational infrastructure, and event-oriented programming increase the attractiveness of the area but also intensify pressures on existing residents through rising costs and changing patterns of use.

> "Of course, there are also downsides that the city could respond to. Greening can involve the risk of green gentrification – the space becomes very attractive, and as a result, existing residents are pushed out, either directly or indirectly." (*Activist/researcher* - Interview W2B)

Taken together, these findings suggest that the socio-ecological transformation of Powiśle has been marked by a structural tension between environmental upgrading and social sustainability. While investments in public space and accessibility have enhanced

environmental quality and urban attractiveness, the absence of parallel housing interventions has contributed to displacement pressures and the social selectivity of benefits.

7.1.5.7 Tensions and power dynamics between stakeholders/actors

Powiśle is perceived as an arena of specific gentrification, differing from the classic model of Western cities due to the dominance of privately owned housing and cooperative housing. Instead of rapid displacement, a process of filtration is observed, involving the movement of people with increasingly higher financial status and the filling of wasteland with luxury development.

> Powiśle is considered a key location in Poland where these gentrification processes began. (...) Gentrification doesn't happen directly through the sudden displacement of residents from a given area, because rents that were X suddenly become three times X, and the people who live there simply can't afford to stay, and they have no choice, because they can't stay there, because they can't pay the bills (...) Therefore, these processes [of functional transformation] didn't trigger some sudden process of replacement of residents, but rather triggered a process of change – the gentrification of others, consisting primarily of the construction of new buildings and the moving in of people with a higher financial status. (...) So it's not that Powiśle was a bad district (…) It was a district of contrasts and still is, but if we want to treat gentrification as a social change, we can basically say that it started before the war. (*Researcher/resident* – Interview W20B)

Another key area of tension is the dichotomy between raising environmental standards and ensuring affordable housing. The contemporary structure of Powiśle is the result of strong pressure from the private sector, while simultaneously weakening the agency of the local community. Developers, striving to maximize usable apartment space, often conflict with the need to preserve aeration corridors and public squares.

> “This will always be met with some kind of counter-reaction from developers who will want to maximize the use of space. These tendencies also exploit certain contradictions and will always create some kind of conflict, I think”. (*Representative of the Society of Urban Planners* - Interview W15A)

In the context of Powiśle, growing tensions between long-term residents and newly arriving affluent groups manifest most visibly in the progressive enclosure and privatisation of spaces that were previously semi-public or fully accessible. Housing estates developed during the modernist period were originally designed as open, permeable environments that fostered everyday social interaction and informal community use. In recent years, however, these spaces have increasingly been fenced, gated, or otherwise restricted, often justified by discourses of security, property value protection, and lifestyle exclusivity promoted by new residents and developers. These residents are typically middle- and upper-middle-class households, as well as real estate investors and short-term rental operators. For long-term inhabitants, this shift represents a symbolic and material rupture with the district’s historical ethos of openness, reinforcing feelings of exclusion and loss of territorial belonging.

"At the moment, the University buildings are also being built over, and the changes taking place there, despite the high architectural and technical quality of these buildings and their energy efficiency benefits, are moving towards a denser city, towards an intensively developed city, not an open area". (*Representative of the Society of Urban Planners* - Interview W15A)

7.1.5.8 Innovative governance mechanisms

Innovative governance mechanisms in Powiśle are perceived primarily through the prism of practical, sectoral interventions that combine social, planning and environmental goals.

Integration of housing policy with social policy, especially in the context of new housing investments, is indicated as an example of action that can contribute to increasing the inclusiveness of an area.

"For example, a new program[132] has emerged, implemented by the Office of Social Policy, concerning so-called assisted living complexes. This solution involves the city planning to designate several apartments for people with disabilities in each new development". (*Representative of public housing agency* - Interview W7A)

The current planning situation in Powiśle indicates the need to take action to streamline the area's spatial structure. Currently, only a portion of the estate is covered by current local development plans, which in recent years has resulted in a significant portion of development being implemented based on planning permission. This development approach has fostered spatial development with limited coordination and planning coherence. Important instrument in urban management is the implementation of planning practices that go beyond the mandatory regulatory minimum. Planning documents specify a biologically active area index[133], which, in accordance with applicable regulations for multifunctional zones (residential and commercial development), is 30%. In response to increasing investment pressure and escalating spatial conflicts, the city's Department of Architecture and Spatial Planning is consciously adopting higher planning standards, demonstrating proactive regulatory adaptation and the implementation of sustainable development principles in the city's spatial policy.

"Internally, we in the office have already accepted that even as long as these regulations are not yet in force, we still strive to set this 30% as such in our documents, i.e. in local plans and also in decisions on development conditions." (*City official* - Interview W6A)

[132] The apartments are located in the newly constructed TBS buildings.

[133] The part of a plot of land that provides natural vegetation and water retention. Biologically active areas include lawns, gardens, green areas, and planted trees and shrubs, but do not include built-up areas, paved roads, sidewalks, or parking lots.

The innovative nature of governance in this case study doesn't involve radical institutional reforms but rather pushing the boundaries of existing practices toward a greener and more inclusive neighbourhood. The responses demonstrate that Powiśle particularly values solutions that integrate various areas of public policy, are implemented "preemptively," and limit the negative impact of market and investment processes.

Moreover, investments undertaken by housing communities, involving the grassroots implementation of photovoltaic installations on building roofs, are gaining increasing importance in improving the economic situation of households and achieving environmental goals. Residential representatives emphasize that, given high energy prices and the existence of financial support systems, including national and EU instruments, the payback period for such investments is estimated at approximately 3-4 years. This relatively short payback period makes this solution widely recognized as economically viable among housing communities.

7.1.5.9 Tourism and market pressures

Market pressure is perceived as the dominant force structuring contemporary Powiśle. Both experts and residents consistently emphasize that large-scale public investments – such as the reconstruction of the Vistula Boulevards, the construction of the Copernicus Science Centre, and the University of Warsaw Library – acted as catalysts for change. These projects significantly increased land values in the area and attracted a significant influx of private development capital.

In civic narratives, these projects functioned as an “investment lever,” accelerating the commodification of post-industrial land and facilitating the emergence of a premium real estate market largely inaccessible to middle- and lower-income groups. The historical sale of municipal land to private actors is retrospectively assessed as a missed opportunity to secure affordable or non-market housing, reinforcing perceptions of structural exclusion.

> “Powiśle offers luxury for everyone - from the wealthy to the municipal residents, to the private residents of the recently completed apartment buildings. Everyone has excellent access to green spaces. Construction of a third metro line is also being considered, so Warsaw residents would have easier access to these abundant green spaces”. (*City official* - Interview W3A)
>
> And the fact that Powiśle used to have the reputation of being a poor, neglected, working-class district, even a bit criminal, is now something completely different, it is such an elite space (…)”. (*Representative of the Society of Urban Planners* - Interview W15A)

Tourism-related pressures are viewed ambivalently. On the one hand, the revitalisation of the Vistula riverbanks and the emergence of new urban landmarks are acknowledged as enhancing the city’s image and recreational offer. On the other hand, residents associate tourism growth with the intensification of short-term rentals, functional conflicts in public space, and the “eventisation” of everyday environments. Unregulated platforms such as Airbnb are widely perceived as destabilising neighbourhood cohesion by displacing long-term tenants and introducing transient user groups.

"Or even the fact that more city-wide services, related to gastronomy, appear there, and suddenly it turns out they have a harder time finding a local artisan. These are things that, in their own way, can protect residents from this. (...) This is a hot topic in Warsaw right now, and in our opinion, part of this problem could disappear if restrictions were introduced on night-time alcohol sales, so that any drinking in the city center would be linked to outdoor dining areas or restaurants (...). So services are disappearing, the peace is disappearing, and it's a slow displacement of residents. This is clearly visible in Powiśle, for example, which was once a very neglected district, and now it's a completely different district. One of the most luxurious in Warsaw, which is also partly a result of gentrification". (*Activist/researcher* - Interview W2B)

Experts point to the unregulated short-term rental market as one of the most serious threats to the stability of Warsaw's districts. However, in Powiśle, this phenomenon is not perceived as a significant problem by long-term residents, primarily due to the specific nature of the local real estate market. As one respondent emphasizes, apartment prices here are so high that the potential profits from tourism are lower than in other, still centrally located but more affordable housing estates.

"There are probably a few apartments listed on platforms for short-term rentals, but I don't see this as a problem right now, at least not yet. The possibility of selling the apartment on the market or renting it out long-term is also very beneficial, if they are luxury apartments, which makes this problem less of a major issue in my opinion, but will it continue to grow? It's hard to say." (*Researcher/resident* – Interview W20B)

The issue of unregulated parking fees on weekends also impacts residents' quality of life. Due to the proximity of the historic city center and the numerous attractions and events organized in Powiśle, the lack of zoned parking fees generates an increased influx of cars from outside the area. This leads to increased traffic and inconvenience for permanent residents.

7.1.5.10 Gaps in perceptions between civic groups and public agencies

Powiśle, an area in an advanced phase of urban transformation, exemplifies the intensification of gentrification and tourism processes, which are structurally transforming the local social order and patterns of spatial use. In the discourse of city authorities and experts, the revitalisation of post-industrial areas is perceived as a rational and desirable strategy for enhancing the attractiveness of the area, and gentrification is sometimes interpreted as an inevitable consequence of modernisation and increased value of urban space.

"For example, this building on the corner of Dobra and Lipowa Streets, which was perhaps not a "slum" but a building where the poor population was concentrated in the old days, and now it's an elite building, with some famous people living there, etc. All the new buildings that were built there, also due to the prices, attract a rather wealthy population, and this old part, as I said, along with the increasing attractiveness of the former post-industrial areas, benefited because individual tenement houses or houses were renovated there, the apartments were small, and sometimes they were combined." (*Representative of the Society of Urban Planners* - Interview W15A)

From the residents' perspective, however, these processes take the form of gentrification, in which investments in blue-green infrastructure and improved public spaces coexist with new forms of exclusion. Green spaces emerging near new housing developments are characterized by limited accessibility and strong regulations on their use, which undermines their public and inclusive character. At the same time, changes are being observed in the local service structure, with everyday services being displaced by high-priced offerings aimed at a new group of space users.

> "I think we're seeing (…) a certain exclusion related to excessive real estate price inflation or the fact that these green spaces are overly sanitized and are created primarily in areas with new construction. If it's greening in such a publicly accessible public space, I think it's OK. But for example, (…) I have a post-industrial area outside my window where lofts have been created, apartment prices have risen, a green area has been created that is completely closed at night, and I have to say, few people go there, which in turn is related to the fact that service providers who install themselves there won't have a wide customer base, because this space is being created for a class they don't identify with." (*Expert/professional* - Interview W11B)

The final significant dimension of the processes analyzed is, according to interviewed researchers, the growing polarisation of social conflicts, related both to the influx of new, affluent residents and to the intensification of Powiśle's tourist function. Opposition to the presence of municipal housing stock and the growing pressure associated with short-term rentals reveal mechanisms of spatial and symbolic exclusion characteristic of advanced stages of gentrification.

> "I live in the city center of Warsaw and here a very big threat is short-term rentals and their complete lack of regulation." (*Researcher* - Interview W17C)

As a consequence, Powiśle appears as a space in which interventions related to green transformation and revitalisation, despite measurable environmental and infrastructural benefits, simultaneously intensify inequality processes, leading to selective spatial inclusion and deepening social divisions.

7.1.6 Critical Analysis: Warsaw

7.1.6.1 Uneven social impacts of green transition interventions

The comparative analysis of cases in Stara Praga and Powiśle demonstrates that green transition initiatives in Warsaw have not operated in a socially neutral manner. Rather, they have interacted with pre-existing housing structures, tenure regimes, and market dynamics in ways that have, in different forms and temporalities, contributed to the reproduction and, in some cases, exacerbation of housing inequalities. Both cases illustrate how nature-based solutions, retrofit, and densification can act as accelerators of uneven socio-spatial change when not accompanied by robust housing safeguards.

A key distinction between two case study areas concerns the temporal dimension of perceived impacts. In Powiśle, housing inequalities linked to green transition are largely experienced as

an accomplished fact. The district is widely perceived as having already crossed a threshold of affordability, with advanced gentrification, a diminished municipal housing presence, and a strong orientation toward luxury housing, services, and tourism. The effects on vulnerable groups, older residents, long-term tenants, and lower-income households, are described as cumulative and largely irreversible, manifesting in displacement, loss of everyday services, and erosion of neighbourhood cohesion. In contrast, in Stara Praga, inequalities are more often articulated in anticipatory terms. While some impacts, such as rent increases, temporary displacement during renovations, and service change, are already evident, many respondents frame the most severe consequences as looming risks rather than fully realised outcomes.

Despite their differences, both case studies reflect broader dynamics shaping Warsaw as a whole. In both areas, green transition initiatives are embedded in a governance context marked by institutional fragmentation, limited coordination, and a weakly regulated housing market. The city's strong reliance on market mechanisms, combined with a long-term decline in municipal housing stock, constrains the capacity of green policies to deliver socially just outcomes.

The comparison clearly indicates that different typologies of green transition interventions generate distinct socio-spatial dynamics. Retrofit measures, particularly in Stara Praga, are generally perceived by? as socially progressive when implemented within the municipal housing sector. They directly address energy inefficiency and poor living conditions and are often framed as necessary, long-overdue investments. However, their distributive effects are ambivalent: while improving comfort and reducing environmental harm, they can also increase rents and contribute to indirect economic displacement if not accompanied by rent regulation or income-sensitive safeguards.

Nature-based solutions and public space upgrades exhibit more pronounced risks of "green gentrification," especially in Powiśle. Large-scale, high-visibility green and recreational projects are perceived as disproportionately benefiting external users, such as tourists, visitors, and affluent residents, while intensifying housing market pressures. In Powiśle, riverside and boulevard investments exemplify how NBS can function as urban "value multipliers" in contexts already shaped by strong private capital.

Densification processes further differentiate the two cases. In Stara Praga, densification through infill and social housing projects is met with ambivalence: it is recognised by? as necessary to address housing shortages but feared as a vector for further gentrification if dominated by private developers. In Powiśle, densification is overwhelmingly associated with luxury developments and the enclosure of formerly open or semi-public spaces, reinforcing perceptions of exclusion and loss of the district's historically open, modernist spatial ethos.

The key difference lies in timing and governance leverage. Powiśle illustrates the long-term consequences of environmental upgrading without housing safeguards, serving as a cautionary example at the city scale. Stara Praga, by contrast, represents a critical juncture where green transition, retrofit, and revitalisation could still be aligned with housing equity goals, if mechanisms to protect vulnerable groups, stabilise rents, and retain public control over housing assets are strengthened.

In conclusion, the Warsaw case studies demonstrate that green transition initiatives tend to reinforce existing socio-spatial divides. The contrast between Stara Praga and Powiśle underscores the importance of timing, intervention typology, and governance capacity in shaping whether green transitions contribute to inclusive urban transformation or to environmentally upgraded yet socially exclusive cityscapes.

7.1.6.2 Key critical points defining housing justice and inequalities in Stara Praga

Housing justice in Stara Praga is shaped by a layered interplay of historical legacies, post-socialist institutional arrangements, and contemporary green transition interventions. The district's current trajectory cannot be understood solely through recent revitalisation or environmental upgrading; rather, it reflects the cumulative effects of long-term neglect, fragmented ownership structures, and a housing system in which market mechanisms increasingly dominate over social safeguards.

A defining structural condition of Stara Praga is the persistence of pre-war tenement housing, much of it municipal or subject to unresolved reprivatisation claims. Unlike many parts of left-bank Warsaw that were rebuilt after World War II under socialist planning regimes, Praga retained a dense, historically layered housing stock. While this has become an asset in symbolic and cultural terms, it has simultaneously produced deep housing inequalities rooted in poor technical standards, energy inefficiency, and legal uncertainty. For decades, these conditions positioned Stara Praga as a marginalised district, accommodating lower-income households who were effectively excluded from Warsaw's more dynamic housing submarkets.

The post-2004 shift toward EU-funded revitalisation marked a turning point. Public investments in retrofit, infrastructure, and public space were widely perceived as long-overdue corrective measures, addressing both environmental deficits and substandard living conditions. From a housing justice perspective, retrofitting tenement buildings, particularly through connection to district heating and thermal modernisation, has delivered tangible benefits. It reduced exposure to energy poverty, improved health outcomes, and aligned the housing stock with national and municipal climate goals. In this sense, green transition measures in Stara Praga initially functioned as redistributive interventions, narrowing environmental and infrastructural inequalities that had accumulated over decades.

However, interview evidence consistently indicates that these benefits are unevenly distributed and embedded in fragile institutional arrangements. For municipal tenants, retrofits often coincide with rent increases, higher service charges, and heightened uncertainty regarding tenure security. These dynamics reflect a broader national housing context in Poland, characterised by the steady erosion of municipal housing stock, weak tenant protections, and a strong policy bias toward ownership and market provision. As a result, environmental upgrading is translated into economic pressure on precisely those groups that revitalisation policies nominally aim to support.

In Stara Praga, revitalisation and retrofit programmes have clearly improved environmental quality, housing standards, and energy efficiency, particularly within the municipal housing

stock. The elimination of individual heat sources, thermal modernisation, and courtyard greening have generated tangible socio-ecological benefits, including reduced energy poverty and improved health conditions. However, these same interventions are perceived to contribute indirectly to gentrification pressures by increasing the attractiveness and symbolic value of the area. Rent increases following retrofits, combined with the shrinking municipal housing stock and unresolved ownership claims, translate environmental upgrading into heightened insecurity for long-term, low-income tenants.

The analysis of housing justice and inequalities in Stara Praga requires consideration of its unique historical context as well as contemporary market and legal conditions. Stara Praga represents a rare example within Warsaw of a preserved pre-war urban fabric that avoided wartime destruction but was subject to decades of systemic degradation and marginalisation.

The key points defining housing inequalities in this area include:

- Legal barriers and ownership claims: A specific factor constraining modernisation and residential stability is the nationwide context related to the Bierut Decree[134] and the reprivatisation process. Ownership claims paralyse investments in municipal buildings, deepening their technical degradation and reinforcing residents' sense of institutional neglect.
- Dual ownership structure: The area is characterised by a division between municipal housing stock (approximately one-third of buildings), cooperative housing, and private ownership. Residents of municipal housing often perceive themselves as "second-class tenants," a perception rooted in long-standing deficiencies in basic infrastructure (e.g. toilets located on half-landings, lack of central heating).
- Gentrification pressure and financialization: Praga has become a "fashionable" area, attracting developer capital and leading to a sharp increase in property prices, which have reached the Warsaw average. This process generates a risk of displacement for households in the so-called "rent gap" - those earning too much to qualify for municipal housing but too little to access mortgage-based homeownership.
- Conflicting transformation priorities: There is a clear tension between the city's greening agenda and residents' basic housing needs. Investments in high-quality public spaces (e.g. the pedestrian–cycling bridge, woonerfs) are sometimes interpreted as projects designed for a "tourist circuit," while long-term residents continue to wait for fundamental upgrades such as lifts in tenement buildings or the removal of coal stoves.

[134] A legal act issued in 1945 that transferred all land in Warsaw to state ownership. The decree facilitated the reconstruction of the war-damaged city, regulated the management of properties, and established state supervision over land, while creating long-term complications for property ownership, including claims by former owners.

- Impacts on vulnerable groups: Seniors (“fourth-floor prisoners”) and refugees face both architectural and economic barriers. Although revitalisation improves overall living standards, renovation-related relocations often lead to the breakdown of neighbourhood ties and the atomisation of the local community.

In conclusion, Stara Praga represents a critical juncture rather than a completed trajectory. Housing inequalities linked to green transition are already being felt, but their most severe consequences remain anticipatory. Whether environmental upgrading ultimately contributes to housing justice or accelerates exclusion depends on the city’s ability to stabilise municipal housing, regulate rent impacts of retrofit, and integrate social safeguards into green transition policies. Without such measures, Stara Praga risks following the path of more advanced inner-city gentrification, transforming environmental improvement into a mechanism of social displacement rather than inclusion.

7.1.6.3 Key critical points defining housing justice and inequalities in Powiśle

In Powiśle, the relationship between green transition initiatives and housing inequality is more direct and structurally embedded. Here, flagship green and cultural investments, such as riverside boulevards, large-scale public spaces, and architecturally iconic projects, have functioned as catalysts for market-led redevelopment. These interventions have reshaped land values and accelerated socio-economic selectivity, in the absence of countervailing housing policies. Respondents consistently frame Powiśle as an example of public-investment-led gentrification, where the environmental and aesthetic upgrading of space has primarily benefited property owners, developers, and affluent newcomers, while excluding lower- and middle-income groups from access to housing in the area.

The transformation of Powiśle represents a case of advanced, market-driven gentrification, in which spatial planning and redevelopment mechanisms have converted a former working-class and industrial district into an elite residential and service-oriented enclave. While historically characterised by high density and poor technical infrastructure, the area’s contemporary trajectory was decisively shaped by post-war reconstruction and, more critically, by flagship public investments implemented at the turn of the twenty-first century. Projects such as the University of Warsaw Library or the Wisłostrada tunnel acted as key triggers, providing symbolic and infrastructural frameworks that catalysed large-scale private developer investment. More recently, this trajectory has been further reinforced by green transition initiatives, including riverfront revitalisation, the expansion of cycling and pedestrian infrastructure, and sustainability-oriented urban design strategies. While framed in policy discourse as improving environmental quality and urban resilience, these interventions have simultaneously enhanced the area’s attractiveness to higher-income residents and investors, contributing to rising property values and reinforcing exclusionary dynamics characteristic of advanced-stage gentrification.

From a housing justice perspective, the central issue in Powiśle is the systemic exclusion of lower- and middle-income groups resulting from a dramatic escalation in property prices. This process was reinforced by a land policy adopted during the post-socialist transition, whereby

strategically located municipal plots were sold to private actors rather than retained for social or municipal housing development.

A further critical dimension is the phenomenon of green gentrification. Investments in blue–green infrastructure, such as the revitalisation of the Vistula Boulevards and landmark green roofs on institutional buildings, have increased environmental quality and urban prestige, but simultaneously intensified affordability pressures. These projects function as tourist landmarks and contribute to the eventisation and touristification of public space, generating everyday burdens for permanent residents. Housing inequalities are further deepened by the largely unregulated short-term rental market, which destabilises neighbourhood cohesion and reduces the supply of housing available for long-term residents.

Densification processes in Powiśle have additionally contributed to socio-spatial fragmentation. Historically open housing estates have increasingly been enclosed through fencing and access control, undermining spatial permeability and everyday social interaction. Redevelopment of post-industrial sites and infill construction, exemplified by projects such as Powiśle Powerplant, often compensates for the loss of biologically active land through substitute solutions that fail to replicate the full ecosystem functions of former ventilation corridors and open green spaces.

Finally, the pursuit of energy-efficient retrofitting in Powiśle is constrained by strict heritage protection regimes, which limit standard insulation solutions and require the use of significantly more expensive technologies. In practice, these costs are largely shifted onto property owners or housing communities, while public subsidies remain limited, fragmented, or inaccessible in buildings affected by ownership disputes, effectively excluding low-income tenants from the benefits of modernisation. These inequalities are compounded by the privatisation of the municipal district heating provider, reducing flexibility in network connections and increasing maintenance costs for low-income tenants. Collectively, these processes have contributed to the displacement of traditional, everyday services by high-end commercial uses, reinforcing a sense of alienation among long-term residents.

In sum, Powiśle illustrates how green and spatial transformations, when embedded in a market-dominated governance framework, can consolidate environmental upgrading while simultaneously reproducing deep housing and social inequalities.

The analysis of processes shaping the socio-spatial structure of Warsaw's Powiśle allows for the identification of key points defining housing inequalities in this area:

- Advanced gentrification and elite transformation: Powiśle has undergone a profound transformation from a neglected, post-industrial working-class enclave into one of the most prestigious and luxurious parts of the capital,
- Asymmetry in ownership structure and decline of public housing: Over the past 20 years, private ownership has become the dominant tenure form. During the post-socialist transition, the city sold strategically located land instead of allocating it to social or municipal housing, permanently limiting access to the district for middle- and lower-income households,

- Impact of flagship public investments on market prices: The implementation of landmarks such as the University of Warsaw Library, the Copernicus Science Centre, acted as a “lever” for developer capital. These investments elevated the symbolic status of the district and stimulated a rapid increase in premium property prices, leading to spatial exclusion of less affluent groups,
- The phenomenon of green gentrification: The high quality of public spaces, including the Vistula Boulevards and rooftop gardens, has become a luxury commodity directly driving rent and property price increases,
- Destabilisation of communities through short-term rentals and touristification: As part of the city centre, Powiśle faces the problem of largely unregulated short-term rentals which displace long-term tenants and erode neighbourhood cohesion. The “eventisation” of riverside areas generates nuisances such as noise and perceived insecurity, reducing the quality of life for permanent residents,
- Architectural barriers problem: Despite the overall prestige of the district, older housing estates still accommodate elderly residents in buildings without lifts. Modernisation of these structures is often associated with drastic increases in maintenance costs, forcing seniors to choose between deteriorating living conditions and leaving the neighbourhood,
- Spatial fragmentation and the loss of everyday services: Intensive densification leads to the fencing of previously open modernist housing estates and the privatisation of residual green spaces. At the same time, traditional local services and crafts are displaced by expensive gastronomic concepts targeted at affluent newcomers, deepening feelings of alienation among long-term residents.

7.1.6.4 Concluding reflections

Stara Praga and Powiśle represent two distinct, but interconnected areas of urban transformation shaped by the green transition. Stara Praga aligns with a revitalisation and retrofit characterised by municipal intervention in a historically degraded housing stock, gradual environmental upgrading, and partial retention of public control. Powiśle, by contrast, exemplifies a market-driven prestige redevelopment, where public investments primarily act as catalysts for private capital, accelerating socio-spatial restructuring, and with a much lower public housing stock/proportion.

Moreover, Stara Praga and Powiśle diverge sharply in their historical trajectories, which continue to shape present-day housing inequalities. Stara Praga’s preserved pre-war fabric has resulted in long-term infrastructural deficits and social marginalisation, while Powiśle’s wartime destruction enabled modernist reconstruction and, later, large-scale brownfield redevelopment. Consequently, Powiśle’s contemporary prestige is rooted in spatial clearance and redevelopment, whereas Praga’s transformation is constrained by inherited underinvestment and unresolved infrastructural shortcomings. This contrast helps explain why green transition interventions in Powiśle have reinforced elite urbanism, while in Stara Praga they intersect with ongoing struggles over basic housing standards and social inclusion.

In Stara Praga, municipal authorities, housing management bodies, residents’ committees, NGOs, and social housing providers play visible and often contested roles. Civic actors retain

some capacity to influence outcomes, particularly through participatory budgeting and advocacy. In Powiśle, private developers, institutional investors, and tourism-oriented businesses dominate, with public authorities primarily shaping framework conditions rather than actively steering housing outcomes. Civic influence is weaker and largely reactive, focused on mitigating rather than redirecting change.

Powiśle illustrates the long-term consequences of green upgrading without social housing protection, while Stara Praga remains a critical juncture where alternative, more just pathways are still conceivable. Together, the cases highlight the need to integrate green transition policies with robust housing justice instruments if Warsaw's ecological ambitions are to avoid reinforcing socio-spatial exclusion.

7.1.7 Bibliography

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7.1.8 Appendix 1 – Glossary

Abbreviations

AI	Artificial Intelligence
BGK	Polish Development Bank (pl. Bank Gospodarstwa Krajowego)
BUW	University of Warsaw Library (pl. *Biblioteka Uniwersytetu Warszawskiego*)
ELENA	European Local Energy Assistance Program
EU	European Union
NBS	Nature-Based Solutions
NGO	Non-Governmental Organisation
PLN	Polish Złoty
SAN	Social Rental Agency (pl. *Społeczna Agencja Najmu*)
SIM	Social Housing Initiative (pl. *Społeczna Inicjatywa Mieszkaniowa*)
TBS	Social Housing Association (pl. *Towarzystwo Budownictwa Społecznego*)
ZGN	Warsaw Real Estate Management Department (pl. *Zakład Gospodarowania Nieruchomościami m.st. Warszawy*)

Terms and Concepts

Housing Cooperative:	A collective initiative in which future residents jointly implement a housing investment on a non-commercial basis, bypassing the developer, in order to meet their own housing needs.
Social Housing Association:	A non-profit or limited-profit housing entity (TBS) in Poland responsible for the development and management of rental housing with regulated rents, targeted primarily at middle- and lower-income households that do not qualify for municipal housing but cannot afford market prices. TBS operates within a public policy framework, often in cooperation with local governments, and plays a role in improving housing affordability and stability.
Social Housing Initiative:	A publicly supported housing scheme (SIM) in Poland introduced after 2021, aimed at increasing the supply of affordable rental housing with moderate rents. SIMs are typically established by municipalities, often in partnership with the state and other local actors, and target households that exceed

	municipal housing income thresholds but are excluded from the commercial housing market.
Social Rental Agency:	An institutional intermediary between the public sector and the private rental housing market, SANs aim to increase access to rental housing for low-income households. SANs operate by acquiring units from private or public landlords and making them available to tenants on a regulated basis, typically at below-market rates.
The Polish Development Bank:	A state development bank, responsible for financial support for the implementation of public policies, including housing policy, through the management of financial instruments and government programs.
The Warsaw Green Building Standard:	A certification system that defines requirements for energy efficiency and blue-green infrastructure. The standard is used in municipal investments and recommended to private investors as a tool for harmonizing environmental requirements.

7.1.9 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Researcher	University of Warsaw	9-09-2025	MS Teams
2	Activist/researcher	"City is Our" Association ["Miasto jest nasze"]	17-09-2025	MS Teams
3	City official	The City Office of Warsaw	19-09-2025	MS Teams
4	Representative of residents' committee	District Councillor/ "Agreement for Praga" Association ["Porozumienie dla Pragi"]	24-09-2025	MS Teams
5	Activist	Co-operative Housing Association	26-09-2025	MS Teams
6	City official	The City Office of Warsaw	29-09-2025	MS Teams
7	Representative of public housing agency	Social Housing Association [Towarzystwo Budownictwa Społecznego – Praga Południe]	29-09-2025	MS Teams
8	Representative of residents' committee	District Councillor/ "Agreement for Praga" Association ["Porozumienie dla Pragi"]	29-09-2025	MS Teams
9	City official	The City Office of Warsaw	30-09-2025	MS Teams
10	Representative of residents' committee	District Councillor/ "Agreement for Praga" Association ["Porozumienie dla Pragi"]	03-10-2025	MS Teams

11	Expert/professional	Habitat for Humanity Poland	07-10-2025	MS Teams
12	Expert/professional	Institute for Urban and Regional Development [Instytut Rozwoju Miast i Regionu]	09-10-2025	MS Teams
13	Resident/entrepreneur	Resident/entrepreneur	17-11-2025	MS Teams
14	Expert/professional	Habitat for Humanity Poland	20-11-2025	MS Teams
15	Representative of the Society of Urban Planners	Society of Urban Planners [Towarzystwo Urbanistów Polskich]	26-11-2025	MS Teams
16	City official	Revitalisation Committee / Voivodeship Office	05-12-2025	MS Teams
17	Researcher	Warsaw University of Technology/University of Brno	12-12-2025	MS Teams
18	Expert/professional	Institute for Urban and Regional Development [Instytut Rozwoju Miast i Regionu]	12-12-2025	MS Teams
19	Researcher	SGH Warsaw School of Economics	12-10-2025	MS Teams
20	Researcher/resident	University of Warsaw	24-01-2026	MS Teams

7.1.10 Appendix 3 – Visuals

Figure 46: The frontage of the new Port Praga housing estate. Source: T. Mikołajczyk (20-11-2025).

Figure 47: Development in the new Port Praga estate. Source: T. Mikołajczyk (20-11-2025).

Figure 48: Buildings before and after modernisation - Brzeska Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).

Figure 49: Historic buildings of Stara Praga – Brzeska Street. Source: T. Mikołajczyk (20-11-2025).

Figure 50: Frontage of bulidings on Targowa Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).

Figure 51: Frontage of bulidings on Brzeska Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).

7.2 CASE STUDY (MEDIUM): PABIANICE

Authors: Bartosz Bartosiewicz (Uni Łódź)

Contrubitors: Katarzyna Leśniewska-Napierała, Tomasz Mikołajczyk (Uni Łódź)

7.2.1 City profile, challenges around just (housing and ecological) transition

Pabianice is located approximately 15km from the centre of Łódź, **Poland's fourth-largest city**. In 2024, the city had just under 60,000 inhabitants, while the surrounding county, which also bears the name Pabianice and for which the city serves as the administrative centre, had a population of 118,700. Over recent decades, the city has experienced a persistent population decline. Since 1995, Pabianice have lost around 15,000 residents, primarily due to a long-term negative natural population balance, amounting to a decrease of approximately 11,000 people over the last 30 years. This decline has been partly offset at the county level by population growth in neighbouring municipalities, driven by suburbanisation processes. Since the early 2000s, municipalities within the county have recorded a combined population increase of approximately 12,500 residents, largely due to a stable positive migration balance. New residents are moving in both from the city of Pabianice and, in particular, from Łódź.

Pabianice maintain strong functional linkages with Łódź. The cities are connected by a tram line, as well as frequent rail and bus services. Nearly 5,000 residents commute daily from Pabianice to Łódź, accounting for around 20% of the city's employed population and nearly 10% of all commuters travelling to Łódź from the wider region. At the same time, Pabianice attract approximately 3,000 workers from surrounding municipalities, representing about 15% of local employment.

Historically, Pabianice was an important centre of the textile industry, developing alongside the wider Łódź industrial region in the nineteenth and early twentieth centuries. Until the early 1990s, the city hosted large state-owned enterprises in the textile, electrical, and pharmaceutical sectors. Most of these factories closed during the economic transformation period of the 1990s. Today, Pabianice functions primarily as a service-oriented city, complemented by a significant number of small and medium-sized manufacturing enterprises, particularly in the clothing and pharmaceutical sectors. Manufacturing employment accounts for approximately 35% of the local workforce, a relatively high share compared to other cities in the region.

The city covers an area of 32.9 km². Built-up areas constitute roughly one quarter of this surface. Residential land occupies approximately 5.6 km² and is dominated by single-family housing. Industrial and warehouse areas account for just under 10% of the city's area. Although formally managed green spaces are limited, open areas such as forests, tree-covered plots, and agricultural land make up more than half of the city's territory. Urban greenery is primarily associated with residential neighbourhoods.

From a functional–spatial perspective, Pabianice can be divided into four main zones. The first is the historic city centre, located along the main east–west street and characterised by compact perimeter-block development, including pre-1945 tenement buildings, public institutions, commercial services, and post-industrial sites dating from the late nineteenth and early twentieth centuries. The second and third zones consist of large housing estates constructed in the 1970s and 1980s using large-panel concrete technology typical of the socialist period. These estates are located to the southeast and west of the city centre. The fourth zone comprises industrial and warehouse areas concentrated in the northern part of the city. In addition, extensive single-family housing areas are located on the urban periphery, particularly in the western, north-western, and southern parts of Pabianice.

Pabianice has medieval origins, and its historic urban layout has largely been preserved. The oldest part of the city, long affected by neglect and physical degradation, is currently undergoing revitalisation. Recent interventions include the modernisation of the market square, completed in 2025, as well as the reconstruction of the main street and the tram line running along it. These projects form part of a broader initiative aimed at strengthening sustainable public transport and developing a city-wide cycling network.

Housing policy in Pabianice is strongly shaped by the city's proximity to Łódź, a metropolitan centre of over 600,000 inhabitants. Until the early 1990s, Pabianice was a growing industrial city with a relatively autonomous service base and limited functional dependence on Łódź, serving primarily as a centre for surrounding rural areas. During the 1970s and early 1980s, two large cooperative housing estates were constructed, providing approximately 10,000

apartments. The housing stock was supplemented by pre-war tenement buildings, which were nationalised after 1945.

Following the political and economic transformation after 1989, most pre-war tenement buildings became municipal property, while some were returned to former owners or privatised. Cooperative housing estates remained under cooperative management, although the majority of apartments became privately owned. At present, Pabianice has approximately 32,350 housing units, representing an increase of around 10% over the past 30 years. More than half of the housing stock consists of apartments smaller than 50 m², predominantly three-room units. Nearly 45% of dwellings were built in the 1970s and 1980s. Over the past 25 years, around 10% of the housing stock has been added, mainly in the form of single-family housing and developer-built multi-family apartments for sale or rent.

The ownership structure is mixed. Approximately half of all dwellings are privately owned, while over 30% belong to housing cooperatives, primarily in large-panel estates from the socialist period. The municipality owns just 3,200 apartments, representing around 10% of the total stock, mostly located in the oldest pre-war buildings. Over the last three decades, the city has gradually reduced its housing stock by selling approximately two-thirds of municipal apartments. In addition, the municipality owns around 50 social or emergency housing units intended for households at risk of eviction or homelessness.

The largest housing stock manager in the city is the Pabianice Housing Cooperative (PSM). Its stock includes over 15,000 dwellings — nearly half of the city's total housing stock — located in 308 buildings. These dwellings are concentrated in two housing estates, Bugaj and Piaski, which together occupy approximately 20% of all built-up areas in the city. Both estates were developed in the 1970s, 1980s, and early 1990s and consist of building forms typical of socialist-era housing estates constructed using large-panel concrete technology. Approximately 60% of the city's population resides in the cooperative's housing stock. The stock is characterised by a diversified ownership structure, with three main legal tenure forms: cooperative tenancy rights, cooperative ownership rights (currently the predominant form), and full individual ownership.

Housing conditions in Pabianice have gradually improved. The average usable floor area per person reached 31 m² in 2024. More than 90% of apartments are equipped with a bathroom and toilet, and approximately three quarters are connected to the gas network. The poorest housing conditions persist in the oldest pre-war buildings, particularly within the municipal housing stock. Housing costs in Pabianice remain lower than in Łódź: the average market price of an apartment is approximately €1,600 per m², around 20% lower than in the regional capital. On the private rental market, average monthly rents are approximately €500, about 25% lower than in Łódź.

Housing policy in Pabianice, as in other Polish cities, is strongly influenced by national regulations and funding frameworks. Local actions largely depend on national and regional programmes offering co-financing for specific types of interventions. As a result, municipal initiatives tend to respond to available funding opportunities, whether related to green space development, housing provision, or social housing programmes such as the Social Housing Initiative (SIM).

Despite recognising housing as a strategic issue, the city lacks a coherent and comprehensive vision for housing development. While the municipal development strategy adopted in 2023 identifies an effective housing policy as a strategic goal — encompassing the revitalisation of old tenement buildings, expansion of social housing, modernisation of municipal apartments, and provision of infrastructure for new residential areas — there are no dedicated strategic documents addressing housing development or green space planning in an integrated manner. Improvements in public transport and strengthened connections with Łódź are expected to accompany housing policy.

Revitalisation of the historic city centre constitutes a key element of housing and urban policy in Pabianice. The first revitalisation programme was adopted in 2017, and work on a new programme began in 2025. Unlike earlier, more selective interventions, the new programme focuses on comprehensive revitalisation of the city's oldest areas, combining physical, social, and economic measures. A major objective is the modernisation of substandard municipal housing and the expansion of the district heating system, aimed at improving living conditions and reducing air pollution. Pabianice currently faces significant challenges related to smog and low-emission pollution.

Private investment also plays an increasingly important role in the revitalisation process. A notable example is a leading Polish pharmaceutical company headquartered in Pabianice, which has revitalised a former nineteenth-century textile factory complex in the city centre. The site now hosts a hotel, spa, restaurant, concert hall, conference centre, and parking facilities, and serves as a venue for numerous cultural events with regional reach. The same investor has also developed a five-hectare private park-garden on the city's outskirts. These projects have enhanced the city's attractiveness and are beginning to stimulate private housing development.

A review of policy documents related to housing in Pabianice reveals a lack of a clearly articulated long-term vision on the part of city authorities. Despite facing significant demographic, environmental, and spatial challenges, the city has yet to fully define a coherent housing strategy. Key challenges include the modernisation and expansion of municipal housing, effective use of revitalisation funds to strengthen the city centre's residential appeal, and the implementation of spatial policies that limit urban sprawl — particularly low-density single-family housing — while promoting densification within the existing urban structure.

7.2.2 Green Transition Interventions in Pabianice

In Pabianice, as in many small and medium-sized towns, **locally driven green policy initiatives** remain limited. Most actions stem from national or regional frameworks or depend on the availability of external funding, particularly EU programmes, rather than from a coordinated municipal strategy. Strategic and planning documents rarely refer explicitly to residential densification; however, such processes are expected to intensify due to recent changes in spatial planning legislation aimed at limiting urban sprawl, as well as through ongoing revitalisation of the city centre and improvements in public transport and public services. Among these interventions, the following can be identified:

1. The Pabianice City Development Strategy for 2023–2030 seeks to counter suburbanisation and population outflow by promoting compact and multifunctional development and increasing the availability of higher-standard housing. Although the strategy does not explicitly reference **nature-based solutions** (NBS), several initiatives align with this approach in practice, including the modernisation of the central park with renaturalisation of the Dobrzynka River, upgrades to major residential parks, and development of the Dobrzynka Boulevards south of the city centre. These actions are complemented by plans to expand greenery along streets and increase the use of permeable surfaces, contributing to a more interconnected green system.

2. Improvement of the **energy efficiency of housing** managed by the Pabianice Housing Cooperative. Over the past 20 years, approximately 75% of cooperative residential buildings (235 buildings) have undergone thermomodernisation, including insulation and replacement of windows and doors. In addition, lighting in common areas has been fully replaced with energy-efficient LED systems (approximately 18,000 fixtures), and elevators have been modernised in all cooperative buildings (85 units). These measures are being continued.

3. **Modernisation of heating systems** in Pabianice constitutes a priority element of municipal policy aimed at improving energy efficiency and reducing low-stack emissions. Key measures include the gradual replacement of coal-fired stoves with connections to the municipal district heating network or gas boilers, particularly within the municipal housing stock. These investments, covering both external infrastructure and internal installations, are financed from the municipal budget and targeted subsidies. EU-funded projects also support comprehensive thermomodernisation combined with connection to district heating. In cooperative housing, fully connected to the municipal network, efforts focus on optimising heat distribution, including the replacement of group substations with individual ones. Local urban standards are used to require new developments to connect to the district heating network, while the Municipal Revitalisation Programme prioritises comprehensive connection to heating and gas networks in degraded areas.

4. Social Housing Initiative (SIM). In 2024, the city, in cooperation with a housing cooperative initiative, launched the construction of two rental apartment buildings on municipal land, providing 58 dwellings. The project forms part of the wider Social Housing Initiative (SIM), which is delivering over 300 apartments across eight cities and two municipalities in the Łódź region.

5. The Pabianice Revitalisation Programme, adopted in 2017, aimed to address crisis conditions in degraded urban areas through the restoration of key public spaces—particularly the Old Market Square—and the implementation of social, educational, and employment activation measures. By 2020, most planned projects had been completed or were at an advanced stage, including social programmes, recreational investments in the Lewityn area, “Green Courtyards,” improvements in the energy efficiency of public buildings, and the revitalisation of historic routes and buildings. Some projects, including the Dobrzynka River boulevard and the full renovation of the City Museum, were postponed due to funding constraints; work on the former began in 2025

	Intervention 1: City Development Strategy 2023–2030	Intervention 2: Energy Efficiency (Housing Cooperative)	Intervention 3: Modernisation of Heating Systems	Intervention 4: Social Housing Initiative (SIM)	Intervention 5: Pabianice Revitalisation Programme
Neighborhood characteristics (general social type, economic activities, density etc)	Municipal level;	Cooperative housing estates comprising 235 residential buildings.	Municipal housing stock, cooperative housing, and degraded urban areas.	Municipal land designated for new residential development.	Degraded urban areas, including the Old Market Square and central historic zones.
Duration	2023–2030	Ongoing; active for the past 20 years.	Continuous; prioritized in current municipal policy.	Launched in 2024.	Adopted in 2017; major works completed by 2020; some projects active until 2025.
Funding	National and regional frameworks; EU-funded projects.	Internal cooperative resources and external funding (general).	Municipal budget, targeted subsidies, and EU-funded projects.	Cooperation between the city and a housing cooperative initiative.	Municipal budget; EU-funded projects.
Actor constellation	City Council	Pabianice Housing Cooperative (PSM).	City Council	City Council and the regional Social Housing Initiative (SIM) partners.	City Council
Aims and objectives	Countering suburbanisation and population outflow; increasing higher-standard housing availability.	Improving energy efficiency of the cooperative's building stock.	Reducing low-stack emissions and improving energy efficiency through system upgrades.	Increasing the availability of rental apartments on municipal land.	Addressing crisis conditions in degraded areas through social and spatial renewal.
Specific physical measures	Renaturalisation of Dobrzynka River, park modernisations, street greenery, and permeable surfaces.	Thermomodernisation of 235 buildings, installation of 18,000 LED fixtures, and modernization of 85 elevators.	Replacing coal stoves with district heating or gas; installing individual heat substations.	Construction of two rental apartment buildings providing 58 dwellings.	"Green Courtyards," restoration of Old Market Square, and Lewityn area recreational investments.
Accompanying housing policy/regulatory measures	Strategic focus on residential densification and limiting urban sprawl.	Energy management standards for cooperative-owned assets.	Local urban standards requiring connection to the district heating network.	National SIM framework for social rental housing.	Social, educational, and employment activation measures; energy efficiency for public buildings.
Key social tensions or/and benefits between greening and housing	Benefits of higher-standard housing and better-connected green systems.	Economic benefits for residents through energy savings and modernized infrastructure.	Prioritization of degraded areas for infrastructure improvements to reduce energy poverty.	Social benefit of providing affordable rental housing options.	Social activation and improved quality of life through recreational and green space restoration.

Table 1. Key data on Pabianice case study area. Source: own elaboration.

7.2.3 Methods

The qualitative component of the study was based primarily on in-depth individual interviews. In total, 12 interviews were conducted between September and October 2025. All interviews were carried out face-to-face and conducted in Polish. Profiles of the interviewees are presented in Appendix 2. Prior to participation, all respondents provided informed consent, including consent for the use of the collected material for research purposes. The interview sample comprised experts and stakeholders representing a broad range of perspectives relevant to housing and urban transformation processes in Pabianice. Interviewees included local activists, representatives of residents, municipal officials, and elected city councillors, with expertise in areas such as housing policy, nature-based solutions, building retrofit, and urban densification. Participant recruitment partially drew on contacts established during the preparation and participation in the ReHousIn Policy Lab held in March 2025. In addition, a snowball sampling strategy was applied: initial interviewees were purposively selected, and subsequent participants were recruited based on recommendations from earlier respondents.

All interviews were audio-recorded using a digital voice recorder. The recordings were subsequently transcribed using transcription tools embedded in Microsoft Word. The resulting transcripts were reviewed in full by the researcher and verified against the original audio recordings, with corrections made to address any errors or inaccuracies Qualitative coding and analysis were conducted using ATLAS.ti software. Coding was undertaken by a single researcher in accordance with a predefined coding framework aligned with the analytical focus of the Pabianice case study. Additionally, NotebookLM was used independently as an auxiliary tool solely for the purposes of organising and navigating the interview transcripts; it did not generate codes, themes, or interpretations, nor did it influence the analytical decisions. In addition to interviews, the study employed complementary qualitative methods, most notably research walks aimed at visiting and documenting key locations mentioned by interviewees. These included green spaces, existing or planned NBS interventions, housing developments, and other sites identified as problematic or contested in the context of urban development in Pabianice. Photographic documentation was collected during these walks to support the contextual interpretation of the interview data, or it was provided by the respondents themselves or by the institutions they represent (the City Office, the Housing Cooperative).

The qualitative analysis was informed by desk-based research, including legal and policy documents, municipal strategies, planning instruments, official reports, and academic literature. These materials provided institutional and spatial context and supported the triangulation of interview and fieldwork findings, as well as informing interviewee selection. Nevertheless, the research has limitations. While a broad range of institutional and civic stakeholders was included, the study does not fully capture the perspectives of all resident groups affected by redevelopment in Pabianice, particularly marginalised populations with limited formal representation, such as bottom-up civic initiatives. Moreover, as several initiatives remain ongoing, some findings reflect evolving dynamics rather than finalised outcomes.

7.2.4 Civic Perceptions of Green Initiatives in Case Study Areas: Pabianice

7.2.4.1 Precedents and implementation

Investment processes in Pabianice rarely rely on long-term strategies that were initiated many years ago. Although the city undertakes efforts to promote green initiatives, some councillors assess that the pace of implementing environmental innovations is delayed by approximately 30 years in relation to real needs. A catalyst for the introduction of new greenery has been large-scale infrastructure investments, including the modernization of the city's main transport axis along Zamkowa and Warszawska Streets, as well as the redevelopment of the Old Market Square. In both cases, located in the city centre where green space is scarce, a range of greening measures was introduced (tree alleys, lawns, low vegetation, and greenery in planters). An important social driver is also the needs of an ageing population, which forces local authorities to adapt public spaces as well as to take action within their municipal housing stock (energy poverty, housing as a "prison" due to the lack of staircases or elevators, leaving seniors confined to their apartments). A prospective catalyst for development, particularly in the housing sector, may be the ongoing final phase of the reconstruction of the railway junction in Łódź. This will drastically shorten travel time to the regional capital's centre and increase the attractiveness of Pabianice for new residents. This represents a development opportunity, but also a potential threat resulting from growing pressure from private investors in the residential construction sector.

> "The main impetus for introducing new greenery in the city center has been major infrastructure investments, above all the comprehensive modernization of the tram line along Zamkowa and Warszawska Streets" (City councillor:Interview P7B).
>
> "Another strategic catalyst for development (…) is the construction of the cross-city tunnel in Łódź, which will dramatically shorten travel time to the center of the voivodeship capital and increase the attractiveness of Pabianice for new residents" (City councillor: Interview P7B).

There are few examples of pilot projects. Several years ago, a rain garden project was implemented at a homeless shelter, demonstrating the potential of blue–green infrastructure in activating socially excluded groups. Unfortunately, this was a one-off initiative. Using external funding opportunities, the city carried out the modernization of a tenement building at 6 Sienkiewicza Street, dedicated to young people leaving foster care. The effectiveness of this initiative is assessed as moderate (average) – it is estimated that at least half of the residents have already lost their apartments. This resulted from the fact that many were not prepared for independent living, were unable to manage household budgets, and accumulated housing debt, despite previously offered psychological support and vocational training. The city is currently also testing the concept of pocket parks by designating small plots for greenery in the densely built-up city centre.

> “It was not about creating the garden just so that it would exist (…) our main goal was to socially engage the people, and for it to genuinely make sense.”
>
> “Residents look out only for the tip of their own nose (…)” (City councillor: Interview P10B).
>
> “So far, it has worked. I would say to a moderate extent, because at least half of those children have already lost those apartments. (…) Very often, these children abandon the apartments; later on, they struggle to adapt to independent living, they are unable to manage their financial resources, and they accumulate debt.” (City official: Interview P1A).
>
> “Within the revitalization area, we included in the GPR the creation of a pocket park—that is, identifying underused inter-building plots that could be developed for this purpose.” (City official Interview P12A).

The city’s strategy assumes the deliberate release of land for new residential development through the consolidation of smaller plots and offering them on the developer market. These measures aim to complete street frontages and improve the aesthetics of central urban blocks. A key challenge in densification remains the functional conflict between the need to create green spaces and the growing pressure from residents to designate new parking spaces.

7.2.4.2 Participation and governance (procedural)

In the area of social participation and urban governance, Pabianice faces significant challenges related to genuine resident engagement and rigid legal frameworks that limit the innovativeness of local actions. Formal consultation processes are assessed ambivalently: on the one hand, the city fulfills its statutory obligations; on the other hand, officials and councillors openly admit that traditional consultation meetings held at city offices attract very little interest from residents. Often, only a few people attend, predominantly representatives of the administration or councillors themselves. Respondents indicate that residents become engaged primarily when planned investments directly affect their immediate surroundings. A noticeable improvement in the quality of participation was brought about by research walks conducted as part of work on the new municipal revitalization programme, which enabled direct dialogue in the field and allowed residents’ demands regarding the inclusion of specific areas in the revitalization zone to be taken into account. Despite these experiences, a reactive attitude still dominates, focusing on individual interests and raising objections only at the stage when draft planning documents are formally presented. The interviews further confirm that residents’ engagement with public authorities tends to intensify only when decisions have a direct impact on them.

> „There were 30 people in the room, 20 of whom were officials and councillors. So yes, these kinds of planning activities are a statutory requirement, but people simply don’t have time for them.“ (City official: Interview P7B)
>
> „Residents look after only the tip of their own nose.“ (City official: Interview P9A)

Spatial management in Pabianice takes place under conditions of almost complete coverage (99.95%) of the city with local spatial development plans, which in practice almost entirely eliminates the issuance of individual development condition decisions. At the same time, planning processes face significant barriers. Approximately 70% of the municipal housing stock consists of historic buildings, which significantly hampers thermal modernization and the installation of modern systems such as ventilation or gas installations, often due to a lack of consent from heritage conservation authorities. An additional challenge is the operation of the so-called “Lex Developer” law, which—despite the city’s efforts to resist pressure for non-standard developments—is sometimes used by investors to circumvent local urban standards. A significant constraint is also the strong dependence of local housing policy on national programmes such as SIM or funds from the National Recovery Plan, which entails risks resulting from instability of rules at the central level.

Urban processes in Pabianice affect the inclusion or marginalization of particular social groups in diverse ways. The progressive ageing of the population means that the absence of elements of street furniture, such as benches, becomes a form of spatial exclusion for seniors, limiting their mobility and leading to social isolation. In the design of green areas, the needs of young people are often overlooked, while public space focuses mainly on playgrounds for children and infrastructure aimed at older people. Individuals interested in social housing, including participants in the SIM programme, point to a sense of exclusion resulting from unclear rules for acquiring ownership of apartments and high financial participation thresholds. Exclusion also manifests itself in neighbourhood conflicts over the use of space, where conflicting interests—such as the need for parking spaces versus the protection of green areas—force city managers into difficult processes of balancing competing residents’ voices.

7.2.4.3 (In)equity (distributional)

Inequalities in Pabianice are manifested primarily in the stark contrast between the standard of new developments and the condition of the outdated municipal housing stock. The municipal stock is largely obsolete, and many apartments in tenement buildings still lack basic amenities such as bathrooms or toilets. Although the city offers apartments for renovation as a way to shorten waiting times, many families cannot afford the modernization works, forcing them to wait longer for ready-to-occupy units. These problems were strongly emphasised in the interviews, although they are not always fully reflected in the available data.

> „We run into situations like this: one group of people comes to us, raises the issue, and submits requests for parking spaces. Then, when we proceed with such an investment (…) another group comes along and protests.” (Representative of housing cooperative: Interview P3A)

New initiatives such as the Social Housing Initiative (SIM) also face an economic barrier—the requirement of a 30% contribution to construction costs makes the offer inaccessible to poorer residents, rendering the programme elitist, despite its original aim to support people without access to mortgage credit. In the distribution of benefits from green projects, a geographical divide is evident: residents of large housing estates (Piaski, Bugaj) benefit from proximity to revitalized parks and the Lewityn area, while residents of the densely built-up city centre feel excluded, lacking even small green spaces for a short walk with a dog. The modernization and revitalization of tenement buildings, although aesthetically desirable, also impose burdens in the form of expected rent increases and higher operating costs, which raise concerns among tenants.

„Society is simply too poor (…) residents cannot afford to cover 30% of the construction costs [of the SIM].“ (City official: Interview P1A)

“Many apartments lack bathrooms and toilets (…) around 70% of the housing stock has heritage status, which makes replacing installations difficult.” (City official: Interview P1A)

7.2.4.4 Political mobilization

Social and political mobilization in Pabianice manifests most strongly in situations of direct threats to residents’ interests, such as plans to sell recreational areas, tree cutting, or changes to the residential environment. A key example of effective neighbourhood advocacy was the activity of residents of apartment blocks on Sienkiewicza Street, who organized a special committee to negotiate with the mayor permission to purchase apartments in newer-generation buildings, which had originally been legally restricted. In the area of housing rights, municipal institutions also note pressure to privatize renovated housing stock; officials emphasize the need to introduce mechanisms preventing the purchase of apartments at discounted prices immediately after public-funded revitalization, in order to protect municipal resources. Political voices, particularly from left-wing councillors, mobilize around systemic support for the renovation of municipal tenement buildings, seeking external funding for this purpose.

Mobilization around environmental issues often takes the form of protests against specific investments. A spectacular success for residents was the protest (widely reported in national media) against the sale of a plot with a playground in the Bugaj housing estate, adjacent to the city’s largest recreational area, Lewityn, which forced the PSM housing cooperative to withdraw from the transaction. Strong social opposition also accompanied the modernization of Warszawska and Zamkowa Streets, where residents loudly contested the removal of old trees, forcing authorities to introduce denser plantings along the road corridors. The sharpest conflict occurred in 2025 concerning the location of energy storage facilities and photovoltaic farms, where residents felt insufficiently informed and directly accused officials of misleading them. The case concerned the northern periphery of the city, in the vicinity of single-family housing. On plots located near a transformer station supplying a large part of the city, an investor applied for permission to locate an energy storage facility and a photovoltaic farm. Residents’ opposition led to the blocking of this investment. All of these protests had a

grassroots character and emerged spontaneously, led by residents directly affected by the respective issues rather than by formal organisations.

> "I live in the city centre and it's terrible - even if I had a dog, I wouldn't have anywhere to take it for a walk." (City councillor: Interview P10B)
>
> "Residents organized a committee that went to negotiate with the mayor. (…) Eventually, consent for the sale was granted." (City councillor: Interview P10A)

Local activism is also evident in councillors' advocacy for the creation of pocket parks in dense urban fabric, as well as in grassroots initiatives by housing communities (e.g. on Wiejska Street), which independently initiate and co-finance the arrangement of greenery around their buildings. At the same time, neighbourhood-level conflicts over space persist—groups seeking to increase the number of parking spaces clash with defenders of lawns, forcing city managers to continually balance competing demands.

7.2.4.5 Socio-ecological impacts/benefits (positive)

Residents of Pabianice have gained a housing offer for middle-income groups in the form of the SIM programme, which provides "turnkey" apartments. This allows beneficiaries to move into modern housing without having to take out a mortgage. In recent years, residents have also gained extensive recreational spaces that were previously neglected or dysfunctional. Thanks to a long-term greening strategy, 63 hectares of green enclaves were created solely in housing estates managed by PSM, with nearly 4,000 trees and 133,000 shrubs planted—radically transforming the aesthetics of formerly "concrete" courtyards. The modernization of Lewityn and Freedom Park (municipal investments) has provided residents with high-quality infrastructure: safe roller-skating paths, illuminated running routes, water playgrounds, and modern amphitheatres. The Old Market Square, redeveloped in 2025, despite initial criticism, has become a lively meeting place; thanks to numerous benches and new plantings, residents of the city centre gained a space for rest that had previously been lacking. Systematic modernization of heating sources and connecting tenement buildings to the district heating network or gas supply has tangibly reduced energy poverty and improved air quality in the city.

> "We managed to green 63 hectares. During that time (…) we planted nearly 4,000 trees and 133,000 shrubs." (Representative of housing cooperative: Interview P3A)
>
> "Residents (…) are happy that Lewityn is developing. (…) you can organize events there…" (I City councillor: nterview P7B)

7.2.4.6 Socio-ecological impacts/harms (negative)

The negative social effects of projects implemented in Pabianice are concentrated around increasing financial barriers and the exclusion of vulnerable groups from modern urban infrastructure. A serious problem is the lack of affordability of new housing initiatives for the lowest-income residents. Although the Social Housing Initiative (SIM) was intended to increase

the supply of accessible apartments, it proved to be an insurmountable barrier for many local residents, forcing the city to open recruitment to people from outside the municipality. At the same time, revitalization processes raise fears of rising rents and operating costs in renovated tenement buildings, which may lead to the displacement of existing tenants. A trend is also observed toward "premium" housing estates developed by private developers. While this attracts wealthier residents from Łódź, it increases overall price levels on the local market.

> "Society is simply too poor (…) residents cannot afford to cover 30% of the construction costs [of the SIM]." (City official: Interview P1A)

The specific characteristics of Pabianice's municipal housing stock—where 70% of buildings are listed as historic monuments—generate energy poverty. Restrictive conservation regulations block the installation of modern heating and ventilation systems, forcing the poorest residents to use expensive electric heating in uninsulated buildings. Many apartments in the city centre still lack bathrooms and toilets, which, combined with the absence of green areas in the immediate vicinity, drastically lowers living standards. Additionally, the municipal housing stock is systematically shrinking (by approx. 1–2% annually) through discounted buyouts and demolitions of buildings in poor technical condition.

7.2.4.7 Tensions and power dynamics between stakeholders/actors

In the sphere of governance and development planning in Pabianice, clear contradictions emerge between ambitious pro-environmental goals and the pragmatics of everyday life, as well as systemic barriers. The most visible flashpoint is the conflict between the need to preserve green areas and growing pressure to create parking spaces. Officials and representatives of the housing cooperative point to a paradox in which one group of residents demands the paving of land for cars, while shortly after construction begins another group protests against the destruction of greenery. Another tension arises at the intersection of ecology and heritage protection. The city aims for an energy transition and a reduction of low-stack emissions, yet most of the municipal housing stock—despite being in poor technical condition—is under conservation protection. In practice, this blocks the installation of modern heating systems, heat pumps, or necessary ventilation ducts, deepening energy poverty.

A similar inconsistency appears in land property policy: on the one hand, the city declares care for the housing stock, while on the other it pursues a policy of consolidating municipal plots in the city centre and selling them for the construction of "premium-type" housing estates, which in fact limits the availability of land for affordable municipal housing.

> "There were various ideas for how to develop this area, but none were implemented, and a decision was made for the city to sell the property. It was purchased by a developer who intends to build a premium-type residential estate there." (City official: Interview P11A)

Competency and regulatory tensions are further intensified by instability in national regulations, visible for example in sudden changes to the "Clean Air" programme, which blocked financing for gas connections and undermined local plans for modernizing heating

sources. At the same time, there is a communication gap between authorities and residents concerning innovation: while officials promote revitalization successes, some councillors openly assess that key adaptive measures are being undertaken with a thirty-year delay relative to real climate needs. These discrepancies are largely absent from media narratives, and public engagement with such issues—especially in medium-sized and small towns—remains marginal.

7.2.4.8 Innovative governance mechanisms

In Pabianice, tools and innovations in the field of green initiatives are based on participatory models, modernization of resources, and legal and financial instruments supporting this type of action. The main instrument for the development of new housing is the Social Housing Initiative (SIM), in which the city acts as a shareholder in the company "SIM Łódzkie." This model relies on using State Treasury land to build apartments with moderate rent levels for people without creditworthiness.

> "After just two years of operating the municipal stove replacement programme, we already have conclusions showing that even though the number of beneficiaries is increasing—people want to participate and are becoming familiar with the programme—unfortunately, as a result of modifications to national programmes from which these actions were co-financed, it turns out that the costs of a gas connection can no longer be covered. Because of this, residents often become discouraged from undertaking such measures." (City official: Interview P12A)

A key element of the energy transition is comprehensive thermal modernization of municipal and cooperative housing stock and the replacement of heat sources. The main measures include replacing tiled stoves with individual dual-function gas boilers or connecting buildings to the municipal district heating network. Next, the Municipal Revitalization Programme (GPR) serves as an instrument enabling the city to exercise a pre-emptive right to purchase properties within the revitalization zone, intended to prevent uncontrolled land speculation. Finally, local urban planning standards are used to block unfavourable developer projects through requirements such as ensuring access to utility networks.

7.2.4.9 Tourism and market pressures

In Pabianice, tourism-related market pressure and speculative pressure are not currently observed. Potentially, such pressure may appear in the future once the modernized railway junction in Łódź becomes operational, significantly improving travel-time accessibility from Pabianice to the centre of the regional capital. Pabianice is not a tourist city, and short-term rental phenomena (such as Airbnb) do not occur.

> "Those housing estates that are developed with greenery in mind are certainly more attractive to buyers, and apartment prices there are higher." (Representative of housing cooperative: Interview P3A)

However, an increasing phenomenon of “flipping” and the purchase of apartments by wealthier individuals is observed, who treat real estate as a safe capital investment amid market uncertainty. This is likely not driven by local conditions but rather reflects nationwide trends resulting from rising housing prices (both primary and secondary markets) and very liberal regulations that encourage treating housing as an investment asset. Residents and councillors note that proximity to modern parks makes apartments in these locations more attractive and more expensive, which in the future may lead to the gradual displacement of poorer residents (in favour of a new, wealthier incoming group).

7.2.4.10 Gaps in perceptions between civic groups and public agencies

An analysis of development processes in Pabianice reveals a clear gap in how urban priorities are perceived between public administration and social groups/councillors. Officials view green initiatives and NBS-type solutions primarily through the lens of maintenance costs, durability, and resistance to vandalism. Meanwhile, some councillors assess the pace of implementing environmental innovations as delayed by around 30 years, pointing to the need for the systemic introduction of green roofs or green walls—solutions that officials consider non-obvious or difficult to manage. This conflict is deepened by residents’ pragmatic needs: in

> “I’ll be honest— the city definitely wants to do this, but it seems to me that there is still a lack of innovation. Everything that is being done is being done 30 years too late.” (City councillor: Interview P10B)

dense development, many people prioritize the need for parking spaces over protecting lawns, forcing city managers to balance conflicting interests among neighbourhood groups.

In the area of revitalization, officials focus on structural works such as connecting tenement buildings to district heating and gas networks, treating these as a necessary foundation for further actions. At the same time, the administration expresses concern about the “privatization of profit,” i.e., buying out apartments revitalized with public funds at discounted prices—contradicting residents’ aspirations for stable ownership. Councillors, in turn, more strongly emphasize the human and social dimension of revitalization, calling for, among other things, activating residents in tenement courtyards. Regarding densification, the city pursues an active policy of consolidating plots for developers in order to complete street frontages—viewed by officials as an aesthetic and financial success—while residents and councillors fear aggressive development under the “Lex Developer” mechanism and the loss of remaining inter-block open spaces.

A significant barrier concerns the very methodology of participation. While officials often interpret low attendance at traditional meetings as a lack of interest or time on the part of residents, councillors argue that archaic forms of consultations held in offices discourage citizens from taking part. A breakthrough in reducing this gap has been achieved through research walks, which enabled the real inclusion of community demands into strategic programmes, demonstrating that residents engage willingly when dialogue takes place in their immediate neighbourhood.

> “In Pabianice there is an e-consultation platform in operation, and traditional consultations are also held. However, to be honest, the vast majority of residents, in their busy daily lives, are not interested in what is happening in the city until an issue directly affects them—for example, the street they live on. Recently, broad consultations on the Revitalization Programme were conducted. I participated in them. They were held in several locations on several dates, and apart from the consulting firm conducting the process, there were about ten people in the room—half of whom were city councillors who are interested in the topic.” (City councillor: Interview P6B)

7.2.5 Critical Analysis: Pabianice

In Poland, there are significant differences in the level of awareness and engagement of local authorities with regard to so-called green initiatives and their impact on the emergence of housing inequalities. In smaller cities such as Pabianice, this issue does not constitute an important element of urban policy. There are no strategic documents that directly address the processes forming the basis of this analysis. The conducted interviews confirmed the assumption that among representatives of public institutions responsible for urban management and development, councillors, and residents, there is generally no awareness of the relationship between green initiatives and housing inequalities. Only during the interviews did many respondents realize that such a relationship might exist. A review of municipal documents makes it possible to identify goals and actions that, to a greater or lesser extent, fall within the scope of green initiatives. These actions are implemented in the city; however, both the document review and interviews with decision-makers indicate that they are not carried out in a systemic or “fully conscious” manner. They appear to be driven primarily by the availability of external funding. These programmes are most often prepared at the national level and respond to the objectives of national policy. Cities, especially smaller ones, adapt their activities to these instruments. In many respects, they do not pursue their own policies — and this applies not only to green initiatives — but instead adjust their actions to national policy through available grants. The limited financial capacities of local governments (primarily smaller cities and municipalities) further leave them with no alternative to these national programmes. This demonstrates how important **state-level policy** is in Poland, particularly policy directed at cities. This represents a major responsibility for those in power and, unfortunately, is not without shortcomings. On the one hand, it allows central administration to set directions for urban policy and respond to key challenges (e.g., climate-change adaptation, defence). On the other hand, such actions may overlook needs arising from local urban characteristics. Not all cities face the same problems. In smaller cities, access to green areas is not as significant an issue as in large cities. For example, in Pabianice — as shown by both document analysis and interviews — apart from selected areas in the city centre, access to greenery is not a problem. Respondents even pointed out that the city is small enough for parks or forests to be easily accessible from almost anywhere.

In Polish cities, especially smaller ones, the key type of green initiative is revitalisation (retrofitting). Thanks to EU funds, cities have gained access to financial resources for the modernisation of their central districts. In 2015, a law regulating the revitalisation process was adopted, and all municipalities in Poland are obliged to adopt municipal revitalisation

programmes. Pabianice also had such a document, covering the years 2017–2020. It was a pilot document, and the implemented actions were point-based. Work is currently underway on a new document that assumes comprehensive (area-based) actions, and thanks to planned national funding, an intensification of such activities in the coming years can be expected. In Pabianice, as in many other cities in Poland, there is no deliberate policy aimed at urban densification. On the contrary, social pressure has so far pushed local authorities towards releasing additional peripheral areas for the development of single-family housing. An additional but very important sub-task within retrofitting activities involves improving the energy efficiency of buildings, primarily through thermal modernisation and the replacement of heat sources with more environmentally friendly ones.

Densification encounters strong resistance in housing estates from the second half of the 20th century. Built during the socialist period, they are characterised by relatively low building density and large distances between buildings, filled with green areas. In many cities — mainly large ones — there is pressure to densify this type of development, which residents perceive negatively. In Pabianice, where this housing stock holds a dominant position on the local market, this problem currently does not occur; however, any attempts to undertake such measures would certainly trigger strong social opposition.

In the field of NBS, activities undertaken focused primarily on improving the quality of existing green areas. All parks, larger squares, and recreational areas have been modernised over the past 10–15 years, with attention paid to both greenery and recreational infrastructure. All respondents pointed out that the current number and equipment of such areas in the city is satisfactory. No other activities in this area are being implemented in Pabianice. At the same time, awareness among both officials and residents regarding the preservation of existing greenery is increasing. Just a few years ago, tree cutting associated with road renovations did not meet with significant resistance. Currently, such resistance is more visible and effective. Conflicts remain present not only between officials and residents but also among residents themselves, particularly regarding the development of residential surroundings (parking spaces versus green areas). A key city investment currently being implemented and fitting within NBS is the renaturalisation of the Dobrzynka River and the construction of new green areas along its banks (the so-called riverside boulevards).

In Pabianice, housing inequalities in the context of green initiatives are not currently perceived as significant. Housing inequalities are shaped primarily by housing affordability and the exclusion of the poorest groups from access to adequate-standard housing. These groups are confined either to low-standard municipal housing — often lacking toilets, bathrooms, or energy-efficient heating systems — or to the private rental market, which generates the highest cost burden. In response to this threat, the city has joined the SIM initiative, which results from housing policy implemented at the central level. Opinions on the effectiveness of this solution in Pabianice are divided, and conclusions should be postponed until the currently constructed housing estate becomes operational. City authorities emphasise that only then will they decide whether to continue implementing the programme. At the same time, it should be expected that housing inequalities will deepen in the future and become more noticeable. This will certainly be influenced by the revitalisation of buildings in the city centre (where municipal housing stock dominates). Improving the quality of life in the city centre will contribute to

increasing housing values and, consequently, housing costs. This may lead to gentrification processes. A second potential factor is the significant improvement in accessibility between Pabianice and the centre of Łódź (thanks to railway renovations, travel time will be reduced by half to approximately 30 minutes). This will likely translate into increased interest in the local housing market, particularly near the two railway stations in Pabianice. This, in turn, will result in rising housing prices and maintenance costs, which are currently much lower. For the city, this represents an opportunity (a potential increase in population and, consequently, revenues), but measures to mitigate potential negative effects should already be initiated.

7.2.6 Appendix 1 – Glossary

Abbreviations

BGK – The Polish Development Bank (Bank Gospodarstwa Krajowego);

GPR – Municipal Revitalization Programme (Gminny Program Rewitalizacji);

LED - Light Emitting Diode

NBS – Nature-Based Solutions;

PSM – Pabianice Housing Cooperative (Pabianicka Spółdzielnia Mieszkaniowa);

SIM – Social Housing Initiative (Społeczna Inicjatywa Mieszkaniowa);

EU – European Union

Terms and Concepts

"Lex Developer" law:	A Polish legal regulation that can be used by investors to propose housing developments that deviate from local urban planning standards.
Flipping:	A market phenomenon where investors purchase apartments to resell them quickly for profit, often driven by rising prices and treating real estate as a capital investment.
Housing Cooperative:	A collective initiative in which future residents jointly implement a housing investment on a non-commercial basis, bypassing the developer, in order to meet their own housing needs.
Large-panel concrete technology:	A construction system widely used in the 1970s and 1980s to build high-density housing estates, forming a major part of the city's housing stock.
Low-stack emissions:	Air pollution originating from individual, local heat sources (such as old coal-fired stoves), which the city aims to eliminate through heating system modernizations.
Revitalization:	A comprehensive process involving physical, social, and economic improvements to bring degraded urban areas back to life and modernize existing buildings.
Social Housing Initiative:	A publicly supported housing scheme (SIM) in Poland introduced after 2021, aimed at increasing the supply of affordable rental housing with moderate rents. SIMs are typically established by municipalities, often in partnership with the state and

	other local actors, and target households that exceed municipal housing income thresholds but are excluded from the commercial housing market.
Thermomodernisation:	Improvements to buildings intended to increase energy efficiency, typically including wall insulation, roof repairs, and the replacement of windows and doors.

7.2.7 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview
1	City official	The City Office of Pabianice	02.10.2025
2	City official	The City Office of Pabianice	09.09.2025
3	Representative of housing cooperative	Pabianice Housing Cooperative (PSM)	23.09.2025
4	City councillor	Councillor of the Pabianice city council	24.10.2025
5	Member of the neighbourhood council	Neighbourhood council	03.10.2025
6	City councillor	Councillor of the Pabianice city council	23.10.2025
7	City councillor	Councillor of the Pabianice city council	24.10.2025
8	Member of the neighbourhood council	Neighbourhood council	03.10.2025
9	City official	The City Office of Pabianice	10.09.2025
10	City councillor	Councillor of the Pabianice city council	24.10.2025
11	City official	The City Office of Pabianice	06.10.2025
12	City official	The City Office of Pabianice	17.10.2025

7.2.8 Appendix 3 – Visuals

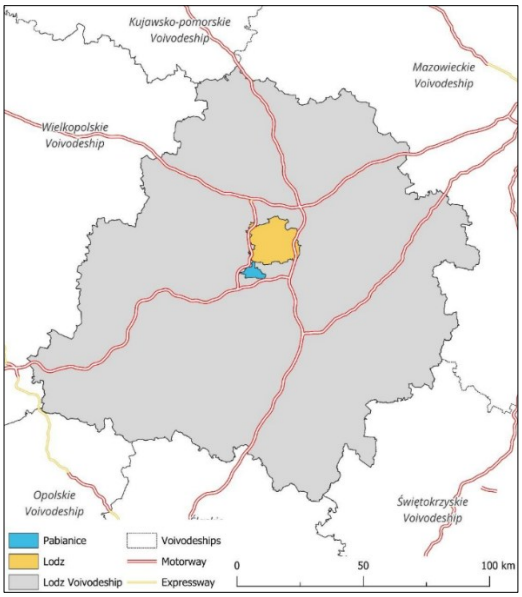

Figure 1: Location of Pabianice within the Łódź Voivodeship. Source: own elaboration

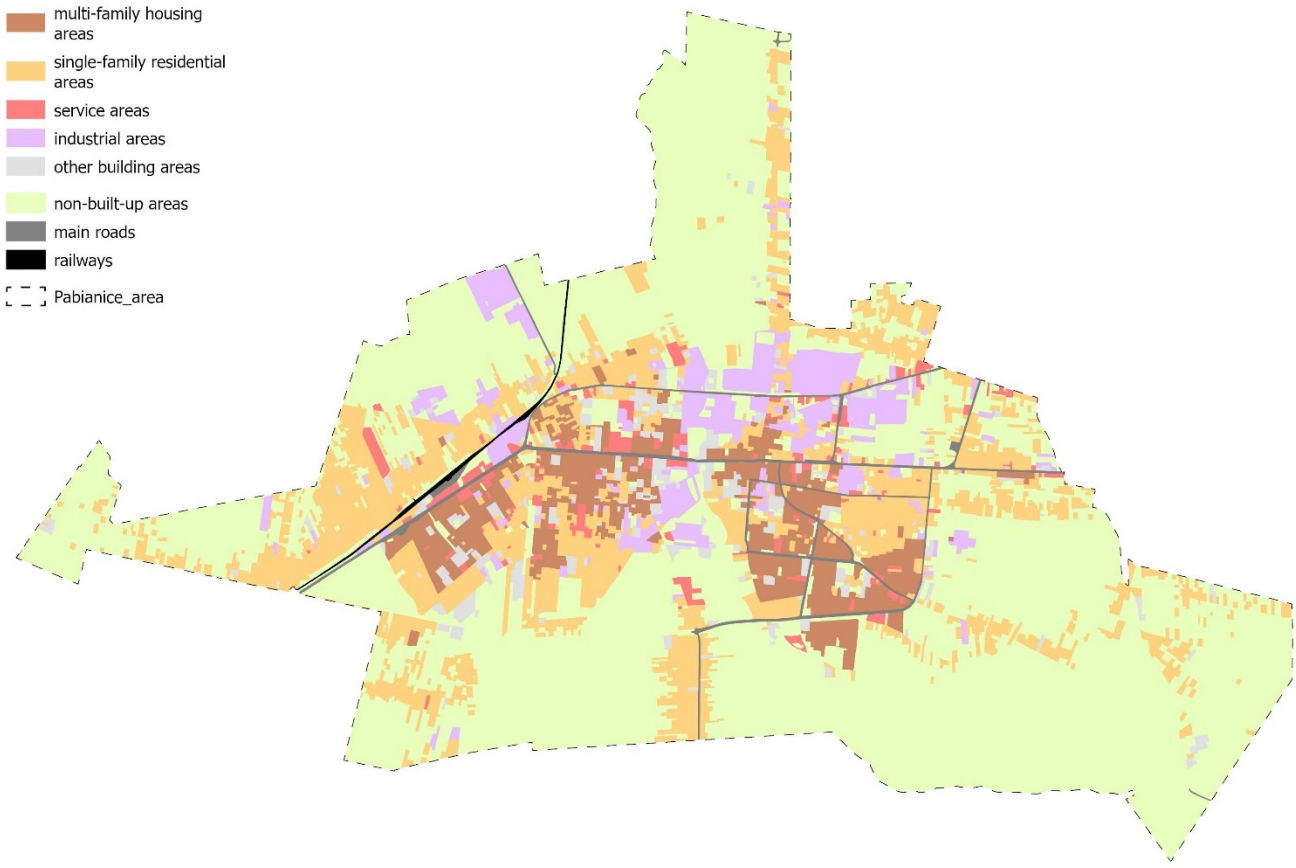

Figure 2: Built-up areas in Pabianice. Source: own elaboration based on BDOT10k and OSM spatial data (accessed on 27-01-2026)

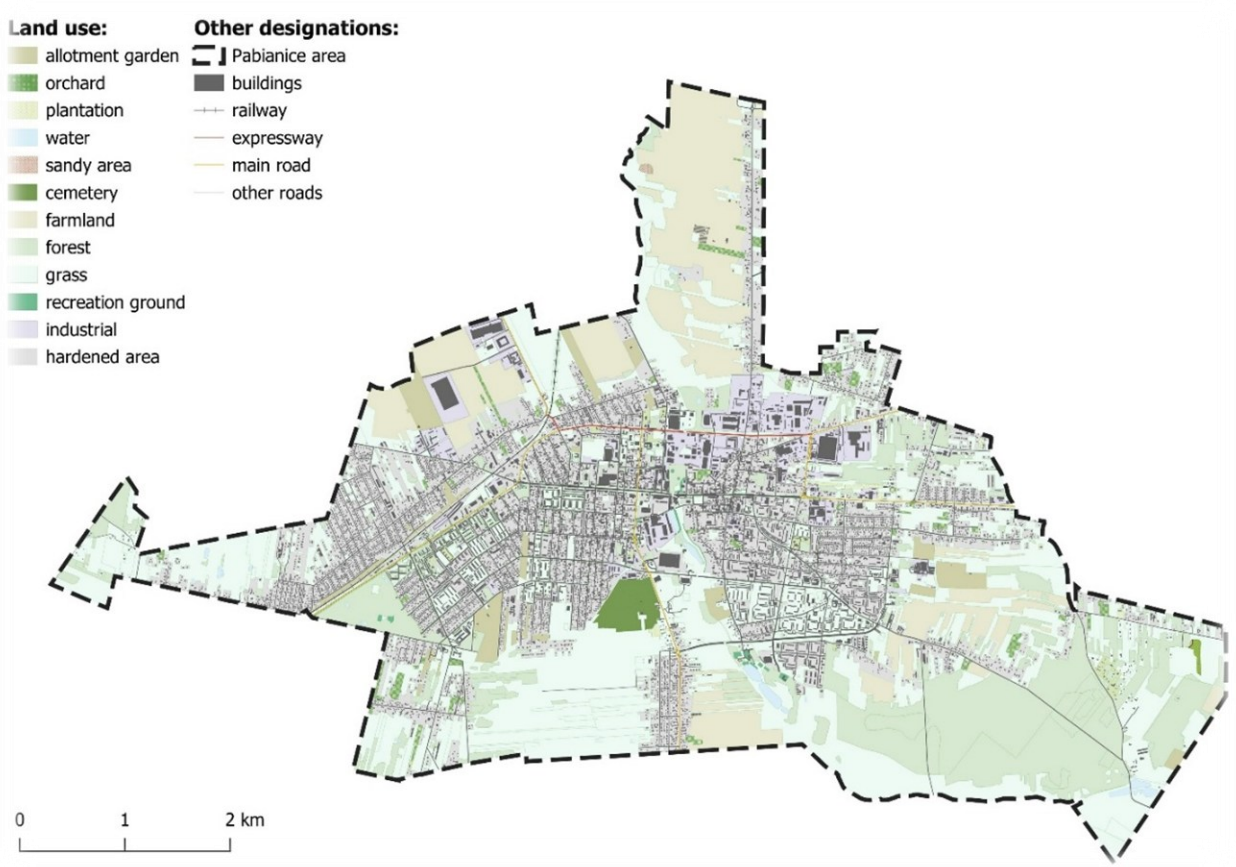

Figure 3: Natural and green areas in Pabianice. Source: own elaboration based on BDOT10k and OSM spatial data (accessed on 27-01-2026)

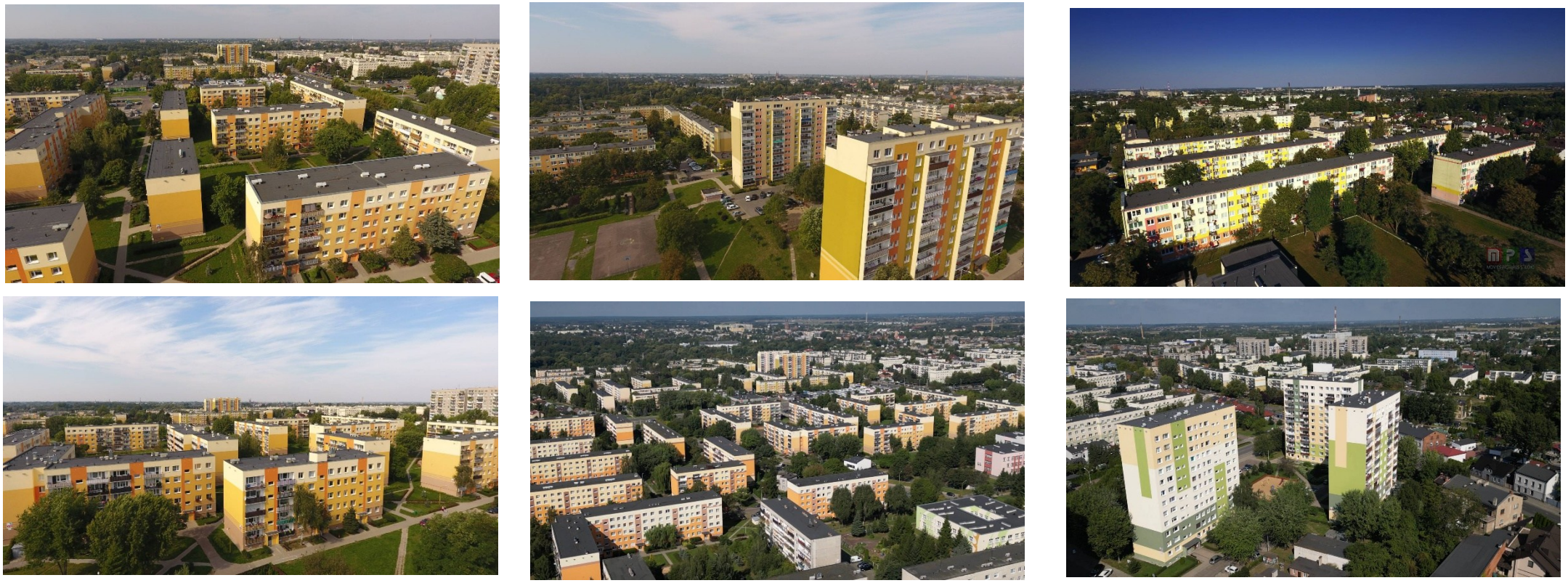

Figure 3: Spatial development of residential estates administered by the Pabianice Housing Cooperative (PSM) – aerial view. Source: Archives of the Pabianice Housing Cooperative (PSM).

Figure 4: Green areas within the residential estates administered by the Pabianice Housing Cooperative (PSM). Source: Archives of the Pabianice Housing Cooperative (PSM).

Figure 5: Examples of residential buildings before (upper row) and after thermal modernization administered by the Pabianice Housing Cooperative (PSM).Source: Archives of the Pabianice Housing Cooperative (PSM).

7.3 CASE STUDY (SMALL): RADOMSKO

Authors: Katarzyna-Leśniewska-Napierała & Tomasz Mikołajczyk (Uni Łódź)

7.3.1 City profile, challenges around just (housing and ecological) transition

Radomsko is a medium-sized city located in **central Poland**, within the Łódź Voivodeship. Covering an area of approximately 51 km², the city has a population of around 42,500 residents as of 2024, resulting in a population density of about 825 inhabitants per 1 km². Although Radomsko remains an important local urban centre, its population has been steadily declining over the past two decades, from nearly 50,000 inhabitants in 2000 to its current level. Although the pace of depopulation is somewhat slower than in other cities of similar size in the region, demographic decline and population ageing constitute major structural challenges.

Demographic processes in Radomsko are spatially differentiated. The central part of the city, which covers only 13.75% of the total municipal area but accommodates approximately 45% of the population, is particularly affected by depopulation, ageing, and related social problems. These trends are reinforced by negative migration balances, especially the outmigration of young people, as well as broader socio-cultural changes such as delayed family formation and declining birth rates. As a result, the proportion of residents of non-working age is increasing, while the number of children and young people using educational services is decreasing.

Historically, Radomsko developed as an industrial town, with furniture manufacturing and metalworking playing a dominant role in its economic profile. Like many medium-sized Polish cities, it has undergone profound socioeconomic transformations since the post-socialist transition. Industrial restructuring, limited job creation in high-value sectors, and increasing competition from larger urban centres have contributed to youth outmigration and urban stagnation (Kulesza, 2014). Despite these challenges, Radomsko continues to serve as a local service and housing centre within the regional settlement system, benefiting from relatively affordable real estate prices compared to nearby Łódź.

The city's spatial structure is characterised by a compact historical core with a dense inner-city fabric. The central area contains numerous historic buildings dating from the second half of the 19th century and the early 20th century, including urban forms shaped by the once significant Jewish community that constituted an important part of Radomsko's pre-war population. Many of these buildings, particularly three-storey tenement houses with enclosed courtyards, are in poor technical condition and suffer from low energy efficiency and inadequate living standards (Kulesza, 2014). More than 40% of the Radomsko's building stock was constructed before World War II, which creates substantial challenges in terms of maintenance, renovation, and thermal retrofitting.

Housing conditions in Radomsko reflect both progress and persistent inequalities. The city has approximately 20,339 dwellings, a number that has increased by over 20% during the last three decades. Single-family housing dominates, particularly in peripheral districts, giving Radomsko a lower-density character than larger metropolitan cities. Almost 70% of dwellings are privately owned, while the municipal housing stock has gradually declined to 815 units by the end of 2022. Although average housing conditions are improving, reflected in a high average usable floor area of around 70 m² per dwelling and widespread access to basic amenities, lower-income households often remain concentrated in older, energy-inefficient buildings with higher operating costs.

Green infrastructure is a critical but currently underrepresented component of the city's spatial structure (Fig. 1). Radomsko has two main recreational parks, Świętojański Park (3.22 ha) and Solidarności Park (4.21 ha), as well as 14 green squares covering a total of 6.6 ha. In addition, street greenery occupies approximately 22 ha, and housing estate green spaces about 26.85 ha. However, forests and wooded areas constitute only 3.2% of the city's cadastral area, and recreational parks and formal green spaces account for merely 0.8% of the total city area, compared to a regional average of 2.8%. This imbalance highlights both a deficit of accessible green spaces and a strong reliance on linear street greenery.

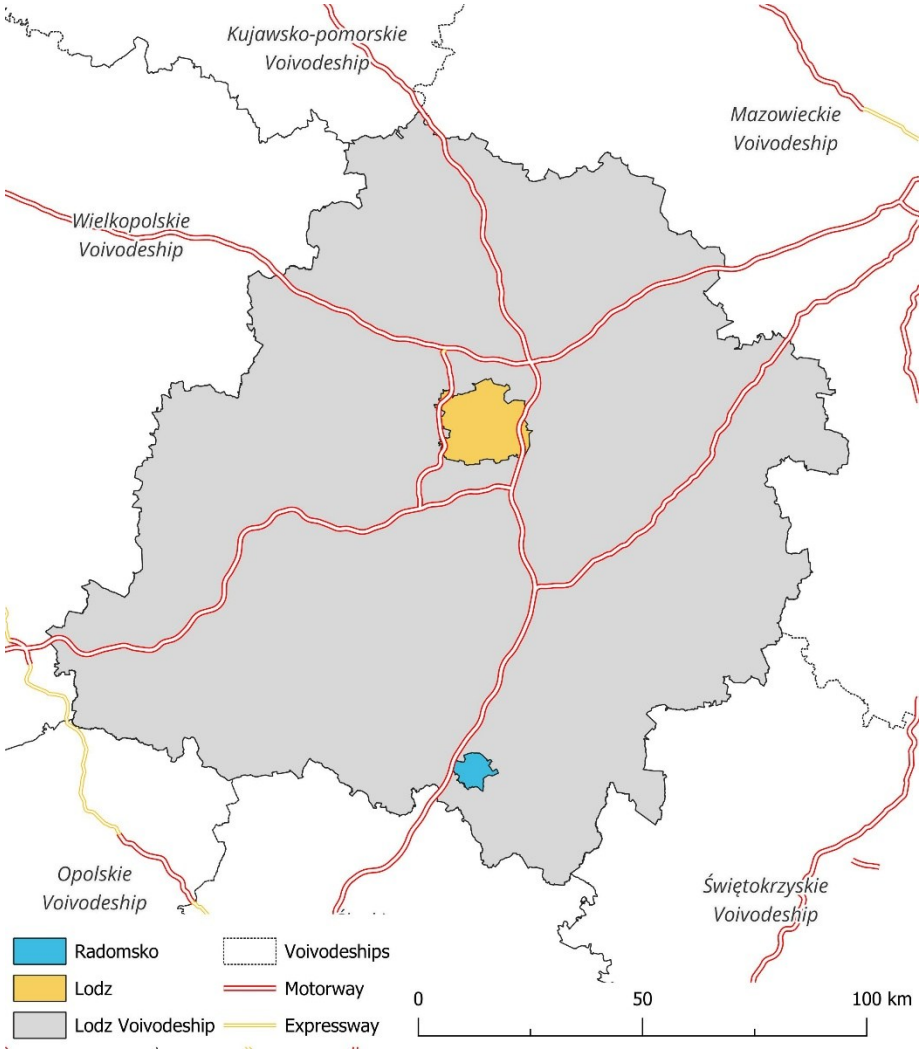

Figure 52: Radomsko location in the context of Lodz Voivodeship. Source: own elaboration

In response to these challenges, local government has adopted a proactive policy framework. *The Radomsko City Development Strategy until 2030* (2020) and the *Municipal Revitalization Program 2030+* (2024), explicitly frame housing, environmental quality, and green transition as interlinked priorities. The revitalization vision places strong emphasis on green and blue infrastructure, including the renaturalisation of the Radomka River, the introduction of greenery into dense urban areas, and the reduction of the dominance of buildings and transport infrastructure. These measures are intended to improve environmental quality, enhance climate resilience, and reclaim space for leisure and everyday use by residents.

Within this policy context, Radomsko presents a relevant setting for exploring **nature-based solutions**, **building retrofits**, and **selective densification**. The concentration of population and ageing housing stock in the central area creates opportunities for energy-efficient renovation combined with greening interventions at the building, block, and neighbourhood scales. At the same time, limited availability of residential land encourages infill development and densification within already urbanised areas, aligned with investments in public spaces, greenery, and social infrastructure. Together, these dynamics set the scene for integrated approaches that link housing policy, green transition, and urban regeneration (Report on the

Condition of the City of Radomsko for 2024 [Raport o Stanie Miasta Radomska Za Rok 2024], 2025).

7.3.2 Green Transition Interventions in Radomsko

Over the past two decades, Radomsko has gradually embedded green transition objectives into its urban development and housing policies, responding to demographic decline, an ageing building stock, and environmental pressures. As a medium-sized post-industrial city, Radomsko illustrates both the tensions and synergies between housing affordability, densification, and nature-based solutions (NBS).

Since the early 2000s, municipal strategies have increasingly prioritised compact urban development and the reuse of already urbanised land. **Densification** through infill development has been promoted to limit urban sprawl, reduce infrastructure costs, and improve access to services. Recent housing projects, such as the planned estate on Narutowicza Street (approximately 240 apartments developed by the city and the Municipal Housing Association[135]) and the SIM Łódzkie[136] development on Starowiejska Street (over 100 affordable-rent apartments), exemplify this approach. These developments combine higher-density housing with basic green and social infrastructure, including playgrounds and barrier-free access, supporting housing security for young families, seniors, and people with disabilities. However, increased density also intensifies pressure on local green space and transport systems, highlighting the need for integrated green planning.

Parallel to housing densification, Radomsko has expanded its use of NBS and green infrastructure, particularly since the mid-2010s. *The Municipal Revitalization Program 2030+* (2024), marks a turning point by explicitly linking urban regeneration with climate neutrality, biodiversity enhancement, and improved quality of life. Within the revitalisation area, interventions include the creation of pocket parks, street greenery, and small-scale blue infrastructure, designed to counterbalance dense built form and mitigate heat, pollution, and noise. The planned renaturalisation of the Radomka River represents a strategic, long-term intervention aimed at flood risk reduction, ecological restoration, and the creation of accessible public space, although funding constraints have delayed full implementation.

Energy transition measures have been particularly visible in the housing sector. Since the 2000s, and with growing intensity after 2015, Radomsko has implemented large-scale **thermomodernisation** of public buildings, especially schools and educational complexes. These upgrades include insulation, window replacement, heating system modernisation, and the installation of photovoltaic panels. More recently, subsidy programmes have supported private households in adopting renewable energy technologies such as solar panels, energy

[135] TBS - Social Housing Association (pl. *Towarzystwo Budownictwa Społecznego*)

[136] SIM Lodzkie - Social Housing Initiative (pl. *Społeczna Inicjatywa Mieszkaniowa*)

storage systems, and heat pumps. These interventions have reduced energy costs and improved indoor comfort, disproportionately benefiting lower-income households living in inefficient buildings, thereby partially mitigating housing inequalities.

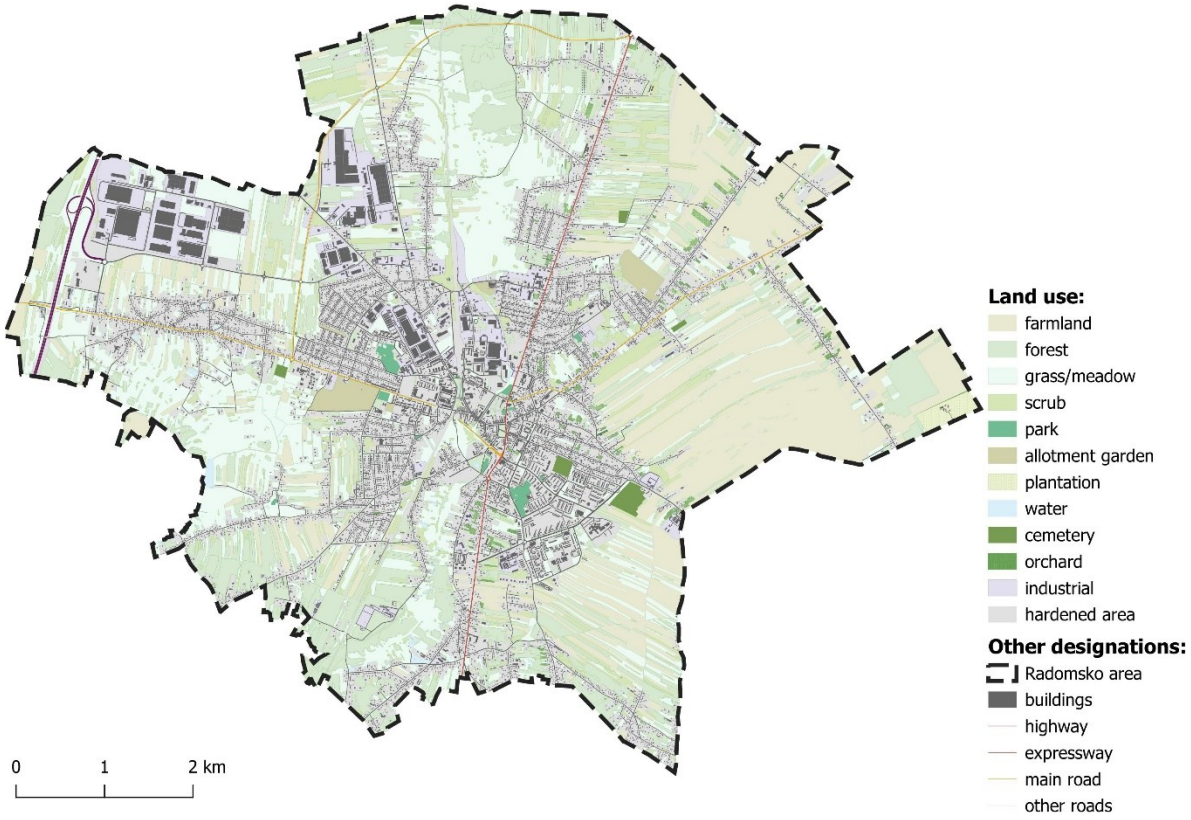

Figure 53: Natural and green areas in Radomsko. Source: own elaboration based on BDOT10k and OSM spatial data (accessed on 27-01-2026)

In Radomsko, green transition initiatives reveal the dual nature of contemporary urban transformation. Retrofitting and greening efforts in the inner city address social vulnerability and poor housing conditions, yet they are constrained by fragmented ownership structures, limited available space, and the technical condition of the historic building stock. In newer residential developments, green transition measures are easier to integrate at the design stage; however, without explicit affordability safeguards, these projects risk excluding lower-income groups. Overall, Radomsko demonstrates that incremental, publicly led green transition interventions can improve housing quality and residential affordability, while simultaneously highlighting the need for careful coordination between densification processes and equitable access to green amenities across the city.

	Municipality-wide
Neighborhood characteristics (general social type, economic activities, density etc)	– Medium-sized city in central Poland – Compact, high-density historic centre (13.75% of area, ~45% of population) – Lower-density peripheral districts dominated by single-family housing – Post-industrial economic base (furniture manufacturing, metalworking, local services)

	– Ongoing depopulation, ageing population, youth outmigration – Limited share of formal green spaces; relatively high share of street greenery
Duration	– Early 2000s: spatial planning reforms and housing policy adjustments – Mid-2010s: acceleration of energy retrofits and renewable energy uptake – 2021: establishment of Social Housing Initiative - SIM Łódzkie – 2024: adoption of Municipal Revitalization Programme 2030+ – Current horizon: up to 2030
Funding	– Municipal budget – Municipal housing companies (TBS, SIM) – National and regional funds for energy efficiency, revitalisation – Potential EU structural and environmental funds – Private co-financing by developers (infrastructure contributions)
Actor constellation	– City of Radomsko (planning, housing, environment, revitalisation) – Municipal units (schools, public facilities) – Social Housing Association & Social Housing Initiative - TBS Radomsko and SIM Łódzkie – Private developers and investors – Residents, housing communities, private owners – National-level institutions
Aims and objectives	– Limit urban sprawl through infill and compact development – Improve quality of life in degraded and dense areas – Increase efficiency of technical and social infrastructure – Improve air quality and reduce energy consumption – Strengthen green and blue infrastructure – Support affordable and accessible housing for vulnerable groups
Specific physical measures	– Thermal modernisation of schools and public buildings – Support for household-level renewable energy and storage – New and revitalised green spaces – Street greening and green buffers along transport corridors
Accompanying housing policy/ regulatory measures	– Renovation and revitalisation of existing municipal housing stock – Affordable rental housing via TBS and SIM schemes – City Development Strategy 2030: planning-led housing development
Key social tensions or/and benefits between greening and housing	– Improved air quality and microclimate – Lower energy costs after retrofits – Better housing accessibility and security (TBS/SIM) – Enhanced public spaces and recreational opportunities – Uneven distribution of green benefits (new developments vs. historic centre) – Risk of rising housing costs after renovation without affordability safeguards

Table 1. Key data on Radomsko case study area. Source: own elaboration.

7.3.3 Methods

The qualitative component of the Radomsko case study was based primarily on semi-structured, in-depth interviews. A total of five interviews were conducted between September and October 2025. All interviews were held remotely using Microsoft Teams and carried out in Polish. Prior to participation, all interviewees provided informed consent, including permission for the use of interview material for research purposes. An overview of interviewee profiles is provided in Appendix 2.

The interview sample was designed to capture a broad range of perspectives relevant to housing policy, green transition, and urban development in Radomsko. Participants included academic expert, local activist, representatives of residents, municipal administration staff, and elected city councillors. Due to the scale of the city under study, some interviewees occupied more than one professional or social role relevant to the research. Their areas of expertise covered housing provision, nature-based solutions, building retrofitting, and processes of urban densification. Initial interviewees were identified through professional and institutional contacts established during the preparation and participation in the ReHousIn Policy Lab held in March 2025. This purposive sampling was subsequently complemented by a snowball approach, whereby additional respondents were recruited based on recommendations from earlier participants.

All interviews were audio-recorded via Microsoft Teams. Automated transcripts generated by the platform were carefully reviewed and checked against the original recordings to correct inaccuracies and ensure completeness. The verified transcripts were then translated into English using AI-assisted tools integrated in Microsoft Word and Writefull, followed by manual verification to preserve nuance and consistency of meaning. Qualitative coding and analysis were conducted using ATLAS.ti software. Coding was undertaken by a single researcher in accordance with a predefined coding framework aligned with the analytical focus of the Radomsko case study. The themes presented in the report therefore reflect both the conceptual architecture of the research design and empirically recurrent narratives across respondent groups. Additionally, NotebookLM was used independently as an auxiliary tool solely for the purposes of organising and navigating the interview transcripts; it did not generate codes, themes, or interpretations, nor did it influence the analytical decisions.

In addition to interviews, complementary qualitative methods were employed. Research walks were carried out to visit and document key locations in Radomsko identified during interviews, including green spaces, nature-based solution interventions, housing developments, and areas perceived as contested or problematic. These walks were accompanied by photographic documentation, which supported contextual interpretation and cross-referencing of interview material.

The qualitative analysis was further informed by desk-based research. This included a systematic review of municipal and district-level planning documents, strategic development plans, policy papers, technical reports, and relevant academic literature related to housing, urban regeneration, and environmental transition in Radomsko. These sources provided essential contextual grounding and enabled triangulation of insights derived from interviews and field observations.

7.3.4 Civic Perceptions of Green Initiatives in Case Study Areas: Radomsko

7.3.4.1 Precedents and implementation

The development of housing in Radomsko reflects a transition from post-war cooperative housing models to contemporary, low-emission and socially oriented approaches introduced after 2016 and consolidated after 2021. Most of the existing housing stock was built between the 1960s and 1980s by local housing cooperatives and is characterised by relatively low building density, generous green spaces, and mature tree cover. Although technically outdated, this legacy has become an important reference point for current discussions on urban liveability and climate resilience.

> "We have a very large amount of green space because our housing cooperative began its developments in the 1960s, 1970s, and 1980s. This was a continuation of the planning trends of that period, when the approach to housing development was fundamentally different from today. There was no drive to maximise development on every square metre of land, as is often the case with contemporary private developers, where the primary focus is on maximising residential floor area. Instead, buildings were constructed at greater distances from one another, allowing for extensive open and green spaces". (*Representative of housing cooperative / councillor* - Interview R3A).

A first strategic shift occurred around 2016, when environmental considerations began to be systematically integrated into municipal investment policies. This change was largely driven by deteriorating air quality and increasing public awareness of climate-related risks. From that point onward, greenery and energy efficiency became standard components of public projects, creating favourable conditions for later implementation of nature-based solutions and large-scale modernisation programmes.

> „However, wherever it is possible, we make a deliberate effort to introduce greenery. Whenever conditions allow, this includes trees, and since President Jarosław Ferenc[137] took office in 2016, every project has incorporated some form of green infrastructure. Regardless of scale, whether trees or shrubs, greenery is consistently included, and it has become one of our key priorities". (*City official* - Interview R2A).

A key catalyst for housing initiatives was the growing affordability gap. A significant group of residents earned too much to qualify for municipal housing but lacked sufficient income or credit capacity to purchase homes on the private market. This structural problem directly influenced the introduction of Social Housing Initiatives (SIM Łódzkie) in 2021, which provided

[137] Polish geographer and local government official, mayor of Radomsko since 2016.

stable legal and financial frameworks for affordable rental housing. Municipal land contributions to SIM projects significantly reduced development costs and enabled their rapid rollout.

Environmental pressure also played a decisive role. Severe air pollution and smog episodes triggered strong grassroots mobilisation, which in turn pushed local authorities to implement anti-smog programmes and accelerate thermal retrofitting. Rising energy prices further reinforced this trend, reframing energy efficiency and renewable energy systems as tools for reducing long-term operating costs for residents rather than purely environmental measures.

The primary actor mobilising residents was the Radomszczański Alarm Smogowy (RAS). RAS is a grassroots civic initiative formed by local residents in response to severe air pollution and recurring smog episodes. It initially operated as an informal community group but later evolved into a formally registered association. As a bottom-up civil society organisation, RAS played a key role in raising public awareness, organising community engagement, and exerting pressure on local authorities to adopt anti-smog programmes and accelerate thermal retrofitting measures.

The implementation initially focused on public buildings, particularly schools and kindergartens, which were fully modernised with new heating systems and photovoltaic installations. In cooperative housing stock, thermomodernisation progressed incrementally, constrained by limited funding mechanisms for partially upgraded buildings. Historic structures posed additional challenges, as conservation requirements and significantly higher costs often limited the scope of energy improvements.

„The Radomsko Smog Alert was established as a grassroots initiative by local residents. Initially, it was an informal group that emerged at a time when, in our small provincial town, people began to acknowledge that the problem of smog affected us as well, and not only large metropolitan areas“. (*Local activists* - Interview R4B).

Nature-based solutions were introduced through both pilot and regeneration projects. High-visibility interventions, such as green walls in the city centre, served a symbolic and educational function, while larger projects focused on restoring degraded areas and improving water retention through parks, rain gardens, and planned river renaturalisation. Urban infill complemented these efforts by promoting compact development in central areas, supporting the “15-minute city” concept, despite recurring social resistance.

„In the city, we also managed to implement two green walls. They are large, each is nearly 100 square metres and they have been in place for about three years now. We are still learning how to maintain them, as this is not straightforward, but they are functioning and in good condition. I hope they will continue to grow and develop further. So, this has also been introduced in the city centre“. (*City official* - Interview R2A).

Overall, housing-related projects in Radomsko were initiated in response to concrete social, environmental, and economic pressures. The pilot projects and the inherited spatial structures together shaped an incremental learning process, allowing the city to move toward more sustainable and affordable housing models.

7.3.4.2 Participation and governance (procedural)

The governance of housing development and the green transition in Radomsko is based on cooperation between the municipal government, special purpose housing companies, and state-level institutions. A key role is played by Social Housing Initiatives (SIM Łódzkie), in which Radomsko is a shareholder alongside other municipalities and the State Treasury, represented by the National Real Estate Resources (KZN). The municipality contributes land to the company, provides access infrastructure, and manages tenant recruitment. Larger housing investments are implemented through the Social Housing Association (TBS), acting on commission from the city. Since 2016, the city's executive leadership has prioritised environmental considerations, requiring the integration of green elements in all investment projects. Cooperation with the municipal housing cooperative (RSM) is described as functional, partly due to overlapping institutional roles at the local political level.

Participation practices in Radomsko have evolved from largely formal procedures toward more direct and dialogical forms of engagement. In the past, consultations were limited to legally required announcements published in the Public Information Bulletin (BIP), which attracted little public interest. More recently, a shift toward face-to-face meetings with residents of specific streets or neighbourhoods during the planning phase of infrastructure projects has become standard practice, allowing local knowledge to be incorporated before construction begins. Civil society organisations play an increasingly visible role in this process. The Radomsko Smog Alert (RAS) has emerged as a key actor, transitioning from an initially marginalised position to a recognised social partner consulted on the assumptions of municipal programmes, particularly in relation to air quality and the protection of mature trees during street renovations. However, the Civic Budget, operating for around a decade, is criticised for limited transparency, lack of systematic evaluation, and the dominance of school-based or event-orientated projects, which tend to displace smaller, neighbourhood-led initiatives.

„In the past, residents were not even informed about what their street would look like after renovation. The designer, the department head, and the mayor had their own vision, implemented it, and then were surprised that people were dissatisfied. That is not how it should work. Today, in the case of some streets, a significant change is visible. Meetings are organised, residents are informed, they can submit their comments, and they know what can and cannot be done. As a result, there is much less criticism once an investment is completed, when only limited changes are possible. In this respect, the situation has clearly improved, both in the city and at the county level". (*Local activists* - Interview R4B).

„This year, school-related projects account for around half of all submitted proposals [to the civic budget]. In addition, there is many picnics and events, as well as ideas such as organising celebrations for the anniversary of the granting of municipal rights. If the city considers such events important, they should be funded from the regular municipal budget rather than from the participatory budget. I suspect that this approach is motivated by an attempt to save resources in other parts of the budget. This practice contradicts the fundamental idea of the participatory budget". (*Local activists* - Interview R4B).

Local governance is strongly shaped by national policy and legal frameworks. Financing from institutions such as Polish Development Bank (BGK) and the National Recovery Plan (KPO)

imposes strict energy-efficiency standards and compliance with the “Do No Significant Harm” (DNSH) principle. At the same time, SIM and TBS frameworks protect tenants through statutory rent caps, limiting sudden increases in housing costs. Climate policy obligations, including the regional anti-smog resolution, further structure local action by requiring the gradual elimination of non-compliant heating sources.

> “I believe that Radomsko’s housing policy is moving in the right direction. If the planned investments are successfully implemented, including the renovation of three tenement buildings and the construction of six municipal housing blocks and six blocks under the TBS system, within a few years we will be in a much better situation than at present. It should also be acknowledged that housing policy in Radomsko already appears more effective than in some large cities, such as Łódź, where the number of people on waiting lists reaches into the thousands and the housing stock includes many severely neglected tenement buildings requiring substantial investment“. (*Representative of housing cooperative / councillor* - Interview R3A).

The processes of civic inclusion and exclusion coexist within this landscape of governance. While SIM and TBS projects are designed to be barrier-free and accessible to seniors, people with disabilities, and families with children, access is constrained by the requirement for significant upfront financial participation. Rising housing prices and increased demand have intensified economic exclusion, particularly for groups that fall outside formal support systems, including single mothers and people experiencing homelessness. Local conflicts around densification, green space loss, and recreational noise illustrate persistent NIMBY dynamics and the contested nature of participatory governance in Radomsko.

7.3.4.3 (In)equity (distributional)

The green transformation in Radomsko is simultaneously bringing tangible material benefits and new lines of social conflict, revealing tensions related to the fairness of decision-making processes and redistribution. Perceived injustice in this context is largely relational, stemming from comparisons between different social groups, as well as between "current" and "new" residents of specific areas of the city. Concerns expressed by residents highlight the importance of green spaces and concern a decline in quality of life as a result of new investments increasing building density.

> “Residents feared the loss of this space, increased traffic, parking problems, and increased development around their properties.” (*Representative of public housing agency* - Interview R1A)

In the older housing stock, the continued presence of elderly residents in multi-storey tenement buildings without elevator access constitutes a significant barrier to everyday mobility, contributing to spatial and social exclusion.

> „It seems to me that housing and the energy transition are issues that affect everyone: the youngest entrants to the housing market, the professionally active, and seniors. One need only consider the problem of the so-called ‘fourth floor prisoners.’” (*Researcher/expert* - Interview R5C)

At the same time, a representative of a local community group pointed to an observable shift in municipal practices in recent years. New housing developments are increasingly designed without architectural barriers, incorporating elevators and amenities for people with limited mobility and suggests a gradual institutional learning process and a growing awareness of inclusive design principles.

However, the lack of comprehensive modernisation of the existing housing stock continues to reinforce age-related inequalities in access to public space. These constraints become particularly pronounced during heatwaves, when the limited availability of greenery and shade in "revitalized" public spaces poses heightened risks to the health and well-being of older residents.

> "There is still a lack of places where older people can comfortably take a break and sit. Even when benches are installed, shade, which is crucial, especially in summer, is often lacking." (*Local activist* - Interview R4B)

Although some of these deficiencies may be mitigated over time as newly planted vegetation matures, they currently underscore the uneven social impacts of urban revitalization and green transition policies. In Radomsko, the authorities do not explicitly address the phenomenon of "green inequality" (e.g., increases in housing prices following greening), pointing to the dispersion of attractions across various parts of the city.

7.3.4.4 Political mobilization

Political and social mobilization in Radomsko manifests through both institutional action and grassroots civic initiatives. It primarily revolves around improving quality of life, environmental protection, and access to affordable housing. Over time, the city has witnessed a gradual shift from confrontational protest toward selective cooperation between activists and local authorities, alongside persistent neighborhood-level conflicts. A key grassroots actor is the Radomsko Smog Alert (RAS), which emerged as a bottom-up initiative responding to poor air quality. Through sustained anti-smog campaigns, RAS exerted pressure on municipal authorities, contributing to the launch of the "Radomsko without Smog" furnace replacement program. While early civic proposals were rejected on formal grounds, RAS is now recognized as a social partner and invited to co-consult subsequent policy editions. Environmental mobilization also includes protests against excessive tree cutting during street renovations. Activists have successfully forced designers to preserve mature trees. Beyond advocacy, RAS engages in direct action, organizing cyclical clean-up campaigns of the rivers, strengthening community involvement in local ecosystems. Participatory tools have also been used: a smog-monitoring drone was purchased through the participatory budget following RAS advocacy.

> "As for *Radomsko without Smog*, the beginning was very inelegant. We submitted a legislative civic initiative, which was rejected, and in the meantime the mayor presented an almost identical proposal as his own. We were criticized for commas, as if that were a sufficient reason to dismiss a residents' initiative. This is absurd, because when citizens put forward an initiative, one cannot expect them to draft a legal act at the level of professional lawyers. What matters most, however, is that the program was ultimately implemented and residents began replacing their furnaces with more environmentally friendly ones". (*Local activist* - Interview R4B)

Housing-related mobilization is largely institutional but generates social responses. The municipality uses Social Housing Initiatives (SIM) and Social Housing Association (TBS) schemes to deliver rental housing for households in the "rent gap." These programs enjoy broad political support across administrative levels and are framed as anti-inequality instruments. Institutional actors mobilize demand through economic arguments, emphasizing high energy standards, thus mitigating energy poverty. Simultaneously, tenants increasingly mobilize around expectations of eventual ownership, challenging the original model of long-term social rental.

"(…) an increasing number of residents are asking whether they will be able to buy their apartments, given that they are repaying a loan through their rent. Of course, TBS housing is price-competitive compared to the secondary market, where apartments are very expensive. Fundamentally, however, this system is not oriented toward ownership but toward stable and secure rental housing". (*Representative of housing cooperative / councillor* - Interview R3A).

While the participatory budget has operated for a decade, activists argue it has degenerated, now dominated by school or event-based projects rather than neighbourhood infrastructure. Conversely, the city has introduced more effective consultation practices, replacing passive online procedures with open design-stage meetings, enabling earlier conflict resolution.

7.3.4.5 Socio-ecological impacts/benefits (positive)

Initiatives implemented in Radomsko are generating significant socio-ecological benefits, contributing, among other things, to improved housing affordability. Instruments implemented through the Social Housing Initiatives (SIM) and the Social Housing Association (TBS) play a particularly significant role, constituting a key element of the local response to the rising costs of living and the challenges of energy transition.

"In recent years, the city has embarked on a program to build SIM [Social Housing Initiatives] apartment blocks (...) All apartments [built by SIM] have their tenants (...) and we are currently embarking on another project. We already have a building permit for the first block. The first of 12, in fact, to be built near the city centre, and the Social Housing Association [TBS] will implement it on our behalf. These will include both municipal apartments and those built under the TBS system." (*City official* – Interview R2A)

Investments carried out by SIM Łódzkie are targeted at households whose income exceeds the thresholds for renting municipal housing, but at the same time, do not allow for sufficient creditworthiness to purchase an apartment on the commercial market. The units offered by SIM are characterized by a high standard of finishing, including fully equipped bathrooms and finished floors, allowing immediate occupancy without the need for additional renovation costs. Rents in these properties are subject to statutory limits, increasing their affordability.

A SIM representative emphasized that the newly constructed buildings under the initiative are characterized by the use of environmentally friendly solutions. These buildings are highly energy-efficient, resulting in significantly lower heating and water heating costs than in older, poorly insulated buildings. This translates into real monthly savings for many households. Modern mechanical ventilation with heat recovery ensures a constant supply of fresh, filtered

air, which is particularly important for allergy sufferers and families with children. Additionally, the buildings feature enhanced acoustic insulation, improving living comfort and reducing noise-related tensions among neighbours.

At the same time, city authorities are placing increasing emphasis on measures to improve stormwater retention, shape the local microclimate, and support sustainable mobility.

> "In the city centre, there was an investment in a parking lot, but it was actually connected to a park. We wanted to create a space that wasn't just a typical parking lot, but one that would also allow for some recreation. We've implemented very ecological solutions there, on such a large scale. For example, we have a rain garden designed to collect water from the area and store it. The vegetation growing there benefits from this. (…) We also managed to install two green walls in the city. Large ones, each almost 100 square meters long, have been in place for three years. We're also learning how to maintain them, because that's not easy either, but they're there, functioning, and doing well." (*City official* – Interview R2A)

The number of trees and shrubs planted along main streets is systematically increasing, which not only enhances the aesthetics of public spaces but also improves air quality, increases shade, and provides comfort for pedestrians and cyclists.

At the same time, the city is consistently implementing thermal modernization of public buildings. Nearly all schools and kindergartens in Radomsko have already been energy-efficiently modernized, including the installation of photovoltaic systems and heat pumps, which significantly reduces energy consumption and improves the comfort of building occupants.

7.3.4.6 Socio-ecological impacts/harms (negative)

The transformation processes in Radomsko are accompanied by significant socio-ecological challenges. Housing availability is limited primarily by complex financial and structural barriers. A significant limitation of the SIM system is the requirement for a down payment of 25–30% of the construction value, which effectively prevents low-income individuals with limited creditworthiness from accumulating the significant initial capital necessary to participate.

> "Those wishing to become tenants must contribute approximately 25% of the investment's construction value, with a maximum contribution of 30%. For example, if the cost of building a 1-square-meter turnkey apartment was PLN 10,000, the tenant would cover 25% of that amount. It's worth noting that all our apartments are turnkey, which sets us apart from other developers". (*Representative of public housing agency* - Interview R1A)

Investments aimed at increasing urban density and introducing street-side tree plantings have elicited strong resident opposition, primarily due to perceived disruptions to their existing quality of life. The construction of new SIM apartment blocks on former green spaces, even if previously neglected, has generated local protests, as residents express concerns regarding the loss of recreational areas and increased traffic volumes.

> "Residents of nearby housing buildings were dissatisfied that the last remaining green space nearby, where they could walk their dogs or simply relax, was being taken away. Furthermore,

the increasing density of buildings in the city center is impacting people's daily lives." (*Local activists* - Interview R4B)

Residents living near areas transformed into nature-based recreational areas, such as Glinanki Park, have reported some nuisances. These complaints primarily concern noise generated during active use of these areas, including recreational and leisure activities. While such interventions positively impact the quality of the urban environment, biodiversity, and the availability of green infrastructure, they also introduce social tensions by altering the local soundscape and sense of tranquillity. This highlights a recurring challenge in urban planning: reconciling the ecological and recreational benefits of nature-based solutions with the everyday comfort and expectations of residents.

"We created a large complex among single-family homes and apartment buildings. We developed 5.5 hectares of land that had once been formerly quarried, excavating clay and brick. We revitalized the area. We created a beautiful complex with playgrounds and a sports field. And here, a conflict arose: residents living directly next to the square complained about the noise, and that's it." (*City official* - Interview R2A)

In summary, Radomsko is facing a paradox: new pro-ecological and social investments improve the overall quality of life, but at the same time they cause conflicts between neighbours and impose financial demands on tenants that low-income groups are unable to meet.

7.3.4.7 Tensions and power dynamics between stakeholders/actors

The dynamics of conflict between local authorities and various stakeholder groups in Radomsko are particularly evident in the context of activities related to spatial planning and urban investments. These conflicts most often erupt at the intersection of three key areas: investment processes, environmental protection policy, and housing policy. In practice, this means that tensions arise when the city's development needs, such as the implementation of new infrastructure projects or housing construction, collide with the expectations of residents.

"There are undoubtedly various organizations in the city that are interested in this and are active in these areas. We have the Radomsko Smog Alarm, for example, which is heavily involved in various solutions (...) So I think it will be possible to develop this further, and indeed, the group associated with the Smog Alarm is very active here, although sometimes too impulsively. (...) So it's not conducive; it seems to arouse such animosity towards the other side, although, well, that shouldn't be the case, because we work together and for the common good, in a sense. Even those green walls you mentioned are not the solution cities are implementing." (*City officials* – Interview R2A)

City officials point to difficulties in their relationships with institutions and bodies participating in design processes as advisory and consultative bodies, which in practice can lead to suspensions or significant delays in investment processes. These problems stem from both formal procedural constraints, including complex construction and administrative law provisions, and informal aspects of cooperation, such as limited coordination of activities, differences in the priorities of individual entities, and a mismatch between decision-making timelines and the city's investment needs.

"We can spend a year processing certain conditions when signing a contract to remove conflicts in investments that sometimes couldn't be completed quickly. But suddenly, the network operator becomes a huge drag, both during the design phase and later during implementation." (*City officials* – Interview R2A)

"They're not doing anything about it and they're unwilling to support it. At one point, we were close to signing an agreement to co-finance the reconstruction of this river. However, after the change of government, this agreement unfortunately fell through. The issue is very important and pressing for us, so the city is taking action on its own, so to speak, using its own resources. We will seek support from external sources. However, this is also where the lack of cooperation is complete when it comes to *Polish Waters*[138]." (*City officials* – Interview R2A)

As a result, the city is experiencing a slowdown in the implementation of infrastructure and housing projects, underscoring the importance of developing more coherent mechanisms for inter-institutional cooperation and strategies to minimize the risk of procedural blockages in investment processes.

Conflicts within local communities stem from the clash of residents' differing needs and expectations regarding their living spaces, with local governments and property managers often forced to act as mediators. A typical example is the NIMBY effect, where declarative support for urban development gives way to opposition to investments in the immediate vicinity, perceived as a threat to green spaces, quality of life, parking availability, or traffic congestion. Within housing cooperatives, disputes also regularly arise between supporters of increasing the number of parking spaces and defenders of green spaces, with these conflicts sometimes involving even minor interventions, such as installing a bench, perceived as a potential source of noise. Tensions were similarly sparked by the revitalization of Glinianki Park, where the intensification of recreational functions and increased youth activity disturbed the existing sense of peace among local residents, leading to an escalation of the local conflict.

7.3.4.8 Innovative governance mechanisms

One of the most innovative governance mechanisms in Radomsko is the model of social housing. This mechanism relies on a complex financial assembly combining municipal land contributions, non-repayable state grants (from institutions such as the Polish Development Bank), and preferential loans. A key conflict emerges between environmental ambitions and housing affordability. Advanced technologies, such as building management systems, heat pumps, and mechanical ventilation, raise construction costs, forcing institutional actors to

[138] State Water Holding "Polish Waters" is a central government agency in Poland responsible for the management and protection of water resources. It oversees water management planning, flood and drought risk management, maintenance of rivers and water infrastructure, issuing water permits, and implementing EU water policy (including the Water Framework Directive).

balance technological ambition against economic viability. If tenant participation costs increase too much, demand weakens and apartments risk remaining vacant. To counter this, authorities emphasize long-term operational savings, arguing that lower energy bills compensate for higher entry costs. However, this narrative clashes with the commercial housing market, where developers often build to lower energy standards, offering cheaper upfront prices. This discrepancy creates public confusion and fuels scepticism toward more expensive "social" housing investments.

> "For example, [SIM] are building to a reduced energy consumption standard, with an EP index of 52, and in two buildings we managed to get it down to 48. Meanwhile, developers are still building to a standard of 65. Society sees that "65 is possible," so the question arises: why build more expensively when someone else is building cheaper?". (*Representative of public housing agency* - Interview R1A)

Implementation is further complicated by disputes between actors and regulatory barriers. Heritage conservation authorities frequently restrict the use of modern energy retrofits in historic buildings, making renovations significantly more expensive and technically less effective. Utility providers are described by local officials as major bottlenecks, with centralized decision-making outside Radomsko and lengthy procedures delaying construction processes. Competency gaps also exist, particularly a shortage of firms capable of properly installing and servicing advanced building management systems. Additionally, funding frameworks are poorly aligned with urban realities; paradoxically, it is often easier to obtain funding for expanding green areas than for improving existing ones, which is particularly problematic in dense city centres.

> „In the case of buildings listed in the heritage register, it must be remembered that all investments in such properties are very costly. Some years ago, around a decade ago, I carried out such calculations and found that the modernization of a listed building can cost up to several times more than in the case of an ordinary building. This results from the need to preserve numerous historical elements as well as from strict regulatory requirements". (*Researcher/expert* - Interview R5C)

Narrative inconsistencies further deepen governance challenges. Although the social housing system is designed for stable rental, many residents perceive it as a pathway to ownership, generating political pressure to alter rules during project implementation.

7.3.4.9 Tourism and market pressures

The interviews contain no references to tourism or its influence on the housing market or broader development of Radomsko. Instead, Radomsko is characterized by disproportionately high housing prices despite its status as a medium-sized county-level city, with prices often compared to those in much larger urban centers such as Częstochowa. New developer-built apartments are widely perceived as unaffordable for average residents, reinforcing barriers to homeownership.

"The housing system in Poland is largely dysfunctional. In this respect, Radomsko does not stand out in any particular way, neither positively nor negatively. Admittedly, we do not have apartments priced at twenty thousand per square meter here, but for Radomsko a price of around eight thousand per square meter in developer standard is already extremely high. And even then, eight thousand is among the cheaper offers. Therefore, I assess the situation as bad, although probably not worse than in the rest of the country". (*Local activists* - Interview R4B)

"When it comes to developer-built apartments, one needs either substantial financial resources or a very high creditworthiness. In the case of SIM housing, however, one must lack mortgage creditworthiness while at the same time having some capital and fitting within specific income thresholds, meaning not earning too much, but also not too little to be able to maintain the apartment". (*Local activists* - Interview R4B)

The private development sector dominates housing provision, delivering most new dwellings through high-density, profit-oriented construction that contrasts with the more spacious cooperative estates from the socialist period. Market pressures have been intensified by external shocks, including the war in Ukraine, which tightened the rental market and pushed prices upward. These dynamics are compounded by broader processes of financialization and by nationwide housing support instruments that have been criticized for benefiting wealthier buyers. As a result, Radomsko exhibits a pronounced "rental gap," which social housing models such as SIM and TBS seek to address by offering regulated rents and greater stability.

"For people who cannot afford a mortgage or the purchase of their own apartment, the situation is more difficult than it was just a few years ago. After the outbreak of the war in Ukraine, demand for rental housing increased and prices rose sharply". (*Local activists* - Interview R4B)

7.3.4.10 Gaps in perceptions between civic groups and public agencies

A significant gap exists in Radomsko between civic groups and public agencies regarding the credibility and purpose of pro-environmental initiatives. Public authorities tend to frame projects such as green walls as innovative interventions that improve urban aesthetics and demonstrate environmental commitment. In contrast, environmental activists, particularly those associated with grassroots movements, perceive these projects as costly symbolic gestures with minimal real impact on air quality, serving more as political marketing than effective ecological policy. This divergence undermines trust and fuels scepticism toward officially branded "green" actions.

„From a certain distance it [green wall] looks nice and, as a visual curiosity, it can be appealing. However, it provides neither shade nor any meaningful air purification. One could say that plants planted directly in the ground would probably cost a fraction of that amount and deliver a similar ecological effect. The difference is that such solutions require a different kind of space, and there would be nothing to ceremonially cut a ribbon for". (*Local activists* - Interview R4B)

Disputes also arise around the origins of policy successes. Civic actors argue that some flagship environmental programs originated from citizen-led legislative initiatives that were

initially rejected on formal grounds, only to be later reintroduced by city leadership as official programs. From the activists' perspective, this reflects institutional appropriation of bottom-up ideas, while public agencies emphasize procedural correctness and governance continuity.

Perceptions of participation mechanisms further illustrate this divide. Municipal officials highlight improvements in consultation practices, particularly during the early design stages of infrastructure projects. Activists, however, criticize the participatory budget for drifting away from grassroots neighbourhood needs toward financing school-related projects or public events, thereby marginalizing every day, small-scale urban improvements. A representative of RAS actively participated in drafting the first participatory budget regulations and served on the initial consultative committee. However, activists now report feeling marginalised within these participation mechanisms. While municipal officials emphasise improvements in consultation procedures, activists argue that the participatory budget has shifted away from grassroots neighbourhood initiatives toward school-related projects and public events, thereby sidelining small-scale, everyday urban improvements proposed by individual residents.

"We try to make all the documentation that is produced publicly available. We organize meetings with residents of specific streets at the design stage, where we explain what we are doing and what we intend to do. If they have any comments at that point, and if it is possible, we incorporate them, although not everything can be taken into account. This dialogue with residents takes place primarily at the planning stage; later, during implementation, it is the contractor who carries out the works and must also listen to various remarks. We also try to sensitize contractors so that, where possible, they take these comments into account and consult them with us". (*City officials* – Interview R2A)

Beyond activism, housing cooperatives and NGOs play distinct roles that are also perceived differently. Civic actors view them as stewards of environmental and social capital, such as mature green spaces or ecological oversight, while public institutions often see them as constrained partners limited by regulatory and funding frameworks. Overall, these perception gaps reflect deeper tensions between symbolic governance and outcome-oriented activism, complicating cooperation and weakening the legitimacy of public action in the eyes of engaged citizens.

7.3.5 Critical Analysis: Radomsko

7.3.5.1 Uneven social impacts of green transition interventions

Green transition interventions in Radomsko have been implemented in a context marked by demographic decline, an ageing population, and a structurally heterogeneous housing stock. These interventions, spanning energy retrofits or NBS have not produced uniform social outcomes. While the city's green transition has not resulted in large-scale displacement or gentrification, it has nonetheless contributed to uneven social impacts and the reproduction of existing inequalities. New green transition initiatives have not so much created new inequalities as revealed and, in some cases, partially intensified already existing structural barriers.

Energy retrofitting and new-build social housing under SIM and TBS schemes have clearly improved housing quality, energy efficiency, and long-term affordability for a defined group of

residents, primarily middle- and lower-middle-income households excluded from both municipal housing and the private ownership market. These interventions function as anti-inequality tools by reducing exposure to energy poverty and stabilising housing costs. However, access to these benefits is uneven. The requirement for a substantial upfront financial contribution (25–30% of construction costs) in SIM housing effectively excludes the lowest-income households, single-parent families, and people in unstable employment situations. In this sense, green transition policies risk producing a selective inclusion effect, where sustainability-linked housing improvements are accessible mainly to those with some initial capital.

In the existing housing stock, inequalities persist more sharply. Elderly residents living in pre-war tenements or post-war walk-up blocks without elevators face compounded disadvantages: poor energy performance, limited mobility, and insufficient access to shaded, climate-resilient public spaces. Retrofitting in these buildings is constrained by fragmented ownership, heritage protection, and high costs, meaning that green transition benefits are spatially and socially unevenly distributed.

The social impacts of green transition interventions in Radomsko are already tangible, though their longer-term distributive consequences are still unfolding. Residents directly experience reduced energy bills, improved thermal comfort, and better air quality because of thermomodernisation and renewable energy uptake. Similarly, new green spaces, parks, and revitalised recreational areas have enhanced everyday liveability, particularly in dense central districts. At the same time, interview data point to isolated tensions that could become more relevant in the future. In one instance, a densification project combined with greening triggered local opposition, mainly due to residents' concerns about the loss of informal green space, increased traffic, or noise. Although this protest was a single and limited incident that was subsequently managed, it illustrates how future rounds of compact development could give rise to similar perceptions of injustice if not carefully mediated.

Radomsko has not yet experienced strong "green gentrification" dynamics. This is partly due to its demographic trajectory (population decline rather than growth) and relatively weak market pressure. Energy retrofitting has the most clearly positive and redistributive effects. By lowering energy consumption and operating costs, retrofits directly address energy poverty and improve housing affordability. However, benefits are skewed toward public buildings, cooperative housing, and new social housing, while historic tenements and privately owned older buildings lag behind due to regulatory and financial barriers.

NBS generate more ambiguous social outcomes. Some interventions, such as green walls, rain gardens, and revitalised parks, are widely perceived as improving aesthetics, microclimate, and recreational opportunities. Yet they also expose tensions between symbolic and functional greening. Civic actors question the cost-effectiveness and ecological impact of highly visible projects (e.g. green walls). On the other hand, densification is the most conflict-prone intervention type. While infill development supports compact city goals and housing supply, it frequently collides with residents' expectations shaped by the legacy of socialist-era estates with generous green spaces.

At the city scale, Radomsko's green transition is characterised by incrementalism and institutional learning rather than abrupt transformation. The municipality has gradually integrated environmental priorities into housing and planning policy, supported by the broad acceptance of social housing instruments. This has mitigated some of the disruptive effects often observed in larger, fast-growing cities. The key challenge for Radomsko is not preventing displacement, but ensuring that the most vulnerable groups, particularly low-income households and elderly residents in older buildings, are not left behind in a selectively "greened" city. Addressing these gaps requires stronger integration between retrofit programmes, inclusive public space design, and densification strategies that explicitly recognise green space as a social infrastructure, not merely an environmental add-on.

7.3.5.2 Key critical points defining housing justice and inequalities in Radomsko

Housing justice and inequalities in Radomsko are shaped by a layered interaction of historical legacies, national housing policies, local governance choices, and the selective impacts of the green transition. A first critical point concerns the long-term legacy of housing production under socialism and the post-socialist transition. Much of Radomsko's housing stock was constructed between the 1960s and 1980s by housing cooperatives, following planning principles that emphasised relatively low density and generous green spaces. While this legacy has become an important asset for urban liveability and climate resilience, it also produced a technically outdated stock that now requires substantial investment. In parallel, many buildings date back to the pre-war period, particularly in the inner city, where tenement housing is often energy-inefficient, inaccessible for older residents, and costly to modernise due to heritage protection requirements.

These historical layers constrain contemporary housing justice outcomes. Residents of older buildings face higher energy costs, poorer thermal comfort, and limited mobility, while retrofit opportunities remain uneven due to fragmented ownership and regulatory barriers. Housing inequality in Radomsko is therefore not only income-based, but deeply path-dependent, embedded in the age and legal status of the housing stock.

Another critical point relates to the national housing system in Poland, which heavily favours owner-occupation and market-based provision. As in many medium-sized Polish cities, Radomsko exhibits a pronounced "rent gap": a large group of households earn too much to qualify for municipal housing yet lack sufficient creditworthiness to purchase on the private market. This structural mismatch has intensified in recent years due to rising construction costs, high interest rates, and external shocks such as the war in Ukraine, which increased demand and prices in the rental sector.

Social Housing Initiatives (SIM) and the Social Housing Association (TBS) represent an important local response to this challenge. They improve housing justice by offering stable, regulated rental housing with high energy standards. However, access is conditioned by a significant upfront financial contribution, which excludes the lowest-income households. As a result, these schemes reduce inequality for some groups while simultaneously reproducing exclusion for others, highlighting a selective redistribution problem inherent in current housing policy frameworks.

Further critical point concerns the ambivalent role of the green transition in shaping housing justice. Energy retrofitting and renewable energy investments have delivered clear benefits: reduced energy bills, improved indoor comfort, and lower exposure to energy poverty. These outcomes are particularly important in a city with an ageing population and relatively low average incomes. In this respect, green transition measures function as social protection instruments. At the same time, green transition benefits are unevenly distributed. Retrofitting has progressed most rapidly in public buildings, schools, and new social housing, while historic tenements and privately owned older buildings lag behind. These tensions illustrate how environmental improvements can inadvertently create new lines of inequality if not aligned with everyday needs, particularly those of vulnerable groups.

Radomsko's compact development strategy aims to limit sprawl and improve access to services, aligning with national and EU planning principles. Residents frequently interpret these interventions as a loss of environmental quality and an imposed burden, even when projects include new greenery or social infrastructure. Long-term residents of cooperative estates often compare new developments unfavourably with the spatial standards of the past, while newer residents are framed as beneficiaries of public investment.

While local governance practices have improved, moving from formalistic consultations toward earlier, face-to-face engagement, significant gaps remain. Civic actors criticise the participatory budget for favouring institutional projects over neighbourhood-scale improvements, while activists point to cases where citizen-led initiatives were initially rejected and later reintroduced by authorities. These experiences undermine trust and contribute to perceptions that housing and green transition policies are insufficiently co-produced.

To conclude, housing justice and inequalities in Radomsko are defined by a combination of historical housing legacies, national policy constraints, selective green transition benefits, and contested urban densification. However, inequality persists in more subtle forms, particularly affecting low-income households, elderly residents, and those living in the oldest parts of the housing stock. The critical challenge ahead is to better align green transition goals with inclusive housing policy, ensuring that sustainability does not become another axis along which existing inequalities are reproduced.

7.3.5.3 Concluding reflections

Radomsko aligns most closely with a medium-sized, post-industrial city experiencing demographic decline. In this setting, green transition interventions are incremental, largely publicly led, and strongly shaped by inherited housing structures. Unlike dynamic growth cities where greening may trigger rapid gentrification, Radomsko exhibits slow and uneven transformation, with selective improvements rather than systemic restructuring. The dominant types of intervention, energy retrofitting of public buildings, social rental housing (SIM/TBS), and small-scale nature-based solutions, produce differentiated outcomes depending on tenure, building age, and location. Overall, the green transition in Radomsko tends to mitigate existing vulnerabilities rather than generate new market-driven housing inequalities.

The primary stressor shaping housing inequalities in Radomsko is housing affordability, particularly rents and entry costs, rather than tourism, which plays virtually no role in the local

housing market. Instead, stress emerges from rising construction costs, energy prices, and a national housing system oriented toward ownership. External shocks, such as the war in Ukraine, intensified rental demand and price pressure, deepening the “rent gap” between municipal housing and private ownership. Green transition measures act both as a buffer (through reduced energy costs) and as a stress multiplier (through higher upfront costs in energy-efficient housing), reinforcing selective access rather than universal relief.

Neighbourhood-level inequalities are strongly shaped by historical development paths. Cooperative housing estates from the socialist period benefit from generous green spaces and relatively good environmental conditions but face technical obsolescence. Inner-city tenement areas concentrate multiple disadvantages: ageing populations, poor energy performance, accessibility barriers, and limited high-quality green space. Newer developments, often built under SIM or by private developers, offer higher standards and energy efficiency but at the cost of higher financial thresholds. These contrasts generate relational perceptions of injustice between “old” and “new” residents and reinforce spatially embedded inequalities rooted in the city’s historical growth patterns.

Housing and green transition dynamics in Radomsko involve a hybrid constellation of actors. The municipality plays a central coordinating role, working through municipal housing companies (TBS) and Social Housing Initiatives (SIM). National institutions shape outcomes indirectly through funding rules, energy standards, and housing policy frameworks. Civil society actors, particularly environmental activists and housing cooperative representatives, act as watchdogs and agenda-setters, influencing air quality policy and green space protection.

Green transition measures, such as thermomodernisation, renewable energy installations, and new SIM/TBS developments, generate clear distributive benefits in the form of lower energy consumption, reduced operating costs, and improved living standards. However, access to these benefits is socially differentiated. For example, entry requirements in SIM housing (including a 25–30% upfront contribution) structurally exclude the lowest-income households, even though the scheme targets affordability. Similarly, energy retrofits have progressed most effectively in public buildings and newly constructed social housing, whereas residents of pre-war tenements and fragmented private ownership structures face regulatory and financial barriers that delay modernization. Nature-based solutions and densification projects also produce uneven spatial effects: while some neighbourhoods gain improved green amenities and microclimatic comfort, others experience perceived loss of informal green space or increased density without proportionate compensatory benefits. As a result, green investments in Radomsko function simultaneously as instruments of social protection (through energy cost reduction and regulated rents).

7.3.6 Bibliography

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7.3.7 Appendix 1 – Glossary

Abbreviations

BGK	Polish Development Bank (pl. Bank Gospodarstwa Krajowego)
BIP	Bulletin of Public Information (pl. *Biuletyn Informacji Publicznej*)
DNSH	"Do No Significant Harm" principle
EU	European Union
KPO	National Recovery Plan (pl. *Krajowy Plan Odbudowy*)
KZN	National Real Estate Resources (pl. *Krajowy Zasób Nieruchomości*)
NBS	Nature-Based Solutions
NGO	Non-Governmental Organization
NIMBY	"Not In My Back Yard" phenomenon
PLN	Polish Złoty
RAS	Radomsko Smog Alert (p. *Radomszczański Alarm Smogowy*)
RSM	Radomsko Housing Cooperative (pl. *Radomszczańska Spółdzielnia Mieszkaniowa*)
SIM	Social Housing Initiative (pl. *Społeczna Inicjatywa Mieszkaniowa*)
TBS	Social Housing Association (pl. *Towarzystwo Budownictwa Społecznego*)

Terms and Concepts

National Real Estate Resources	National Real Estate Resources (KZN) is a state-owned institution in Poland responsible for managing public land and property assets for the purpose of supporting housing policy, particularly the development of affordable and social housing.
Radomsko Housing Cooperative:	Radomsko Housing Cooperative (RSM) refers to a member-based, non-profit housing organisation operating at the local level in Radomsko. It is responsible for the development, management, and maintenance of multi-family residential buildings owned collectively by its members.
Radomsko Smog Alert	Radomsko Smog Alert (RAS) is a local grassroots civil society organisation focused on air quality protection and environmental health in the city of Radomsko. It emerged as a bottom-up initiative of residents responding to growing awareness that air

	pollution and smog are significant problems not only in large metropolitan areas but also in smaller towns.
Social Housing Association:	A non-profit or limited-profit housing entity (TBS) in Poland responsible for the development and management of rental housing with regulated rents, targeted primarily at middle- and lower-income households that do not qualify for municipal housing but cannot afford market prices. TBS operates within a public policy framework, often in cooperation with local governments, and plays a role in improving housing affordability and stability.
Social Housing Initiative:	A publicly supported housing scheme (SIM) in Poland introduced after 2021, aimed at increasing the supply of affordable rental housing with moderate rents. SIMs are typically established by municipalities, often in partnership with the state and other local actors, and target households that exceed municipal housing income thresholds but are excluded from the commercial housing market.
The Polish Development Bank:	A state development bank, responsible for financial support for the implementation of public policies, including housing policy, through the management of financial instruments and government programs.

7.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Representative of public housing agency	SIM Łódzkie	24.09.2025	MS Teams
2	City official	The City Office of Radosmko	25.09.2025	MS Teams
3	Representative of housing cooperative / councillor	Councillor of the Radomsko city council	6.10.2025	MS Teams
4	Local activists	Smog Alert	6.10.2025	MS Teams
5	Researcher/Expert	SGH Warsaw School of Economics	12.10.2025	MS Teams

7.3.9 Appendix 3 – Visuals

Glinianki Park in Radomsko, Source: https://radomsko.pl/images/aktualnosci/inwestycje/glinianki/3.jpg

Vertical garden in Radomsko Centere, Source: https://ogrodwertykalny.pl/ogrod-wertykalny-w-radomsku/

8 SPAIN

8.1 CASE STUDY (LARGE): BARCEONA

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8.1.1 City profile, challenges around just (housing and ecological) transition

Barcelona, the capital of the Autonomous Community of Catalonia in Spain, constitutes a paradigmatic case for examining how ecological transition unfolds within a highly spatially constrained and commodified urban housing system. With approximately 1.7 million residents within the municipal boundary and a metropolitan region exceeding five million, Barcelona is among the most compact and densely populated cities in Europe. Its urban form is shaped by pronounced geographic constraints—the Collserola hills, the Llobregat and Besòs rivers, and the Mediterranean Sea—and its dense urbanization and topographical constraints leave little developable land within city limits (Busquets, 2005). The exceptions are key “major transformation areas,” which are predominantly reclaimed industrial and infrastructural land, a trend dating from the mid-20th century (see Figure 3). All major “hard” gentrification measures in Barcelona follow this model, as there is not more appropriate developable land in the city

due to its density and topography. Aside from the area under study in this report—that of the district of Sants-Montjuïc—the city is taking such an approach in the area surrounding the new La Sagrera railway station under completion, involving the demolition of thirty warehouses to make way for mixed-use redevelopment including a mix of social and market-rate housing, to commence in 2027.

Outside the city limits, though less pronounced than in other Spanish metropolitan areas, the late-20th century phenomenon of low-density, automobile-dependent suburban housing development (sometimes called “España de las piscinas” [swimming pool Spain]”, is notable in surrounding metropolitan municipalities in Vallès, Maresme, and Baix Llobregat (López, 2021). This is a physical manifestion of what has been referred to as the “ugly Spain”, in which the contemporary built environment is the result of **systematic political, economic, and cultural decisions that have prioritized short-term profit and spectacle over landscape quality, social cohesion, and long-term planning (Rubio, 2022)**. **Debates framing residential density in Barcelona are focused on the metropolitan scale** (Estela, 2025), as the urbanized metropolitan footprint has expanded in so-called suburban “urbanalization” (Muñoz, 2008)—a result of the legacy of highway building from the 1950s to the 1980s—while the city itself has maintained a relatively stable population.

Barcelona’s contemporary housing and ecological challenges are inseparable from its historical development trajectory. The city expanded outward from the walled medieval core (Ciutat Vella) through the nineteenth-century Eixample [extension] plan of Ildefons Cerdà and the annexation of surrounding industrial and agricultural municipalities at the turn of the twentieth century, including the former industrial towns of Sants, Sant Martí, Sant Andreu, and Gràcia (Figures 1 and 2). **During the second half of the twentieth century, rapid industrialization and internal migration under the Franco dictatorship (1939–1975) drove the construction of mid-rise, working-class housing blocks, often characterized by deficient public infrastructure, proximity to noxious industries, and limited services. By the mid-1970s, industrial and infrastructural land became the sites of intense social contestation as newly-legalized neighborhood movements mobilized for the conversion of these spaces into public green areas and facilities** [schools, libraries, health centers, civic centers, etc.], influencing the approach taken by the 1976 Pla General Metropolità (PGM). In the PGM, much of the city’s industrial areas were rezoned to respond to these deficits (Solans Huguet, 2022) and industry was clustered in industrial parks on the city fringes or displaced outside the Catalan capital city. Barcelona still operates, through punctual modifications, of the PGM, while a new Metropolitan Urban Masterplan reaches completion. Currently, **Barcelona’s population density—approximately 17,000 inhabitants per km² overall and exceeding 30,000 in urbanizable areas—reflects a compact urban form typical of Southern Europe, paired with the deindustrialization and urban restructuring since the 1979 democratic transition.**

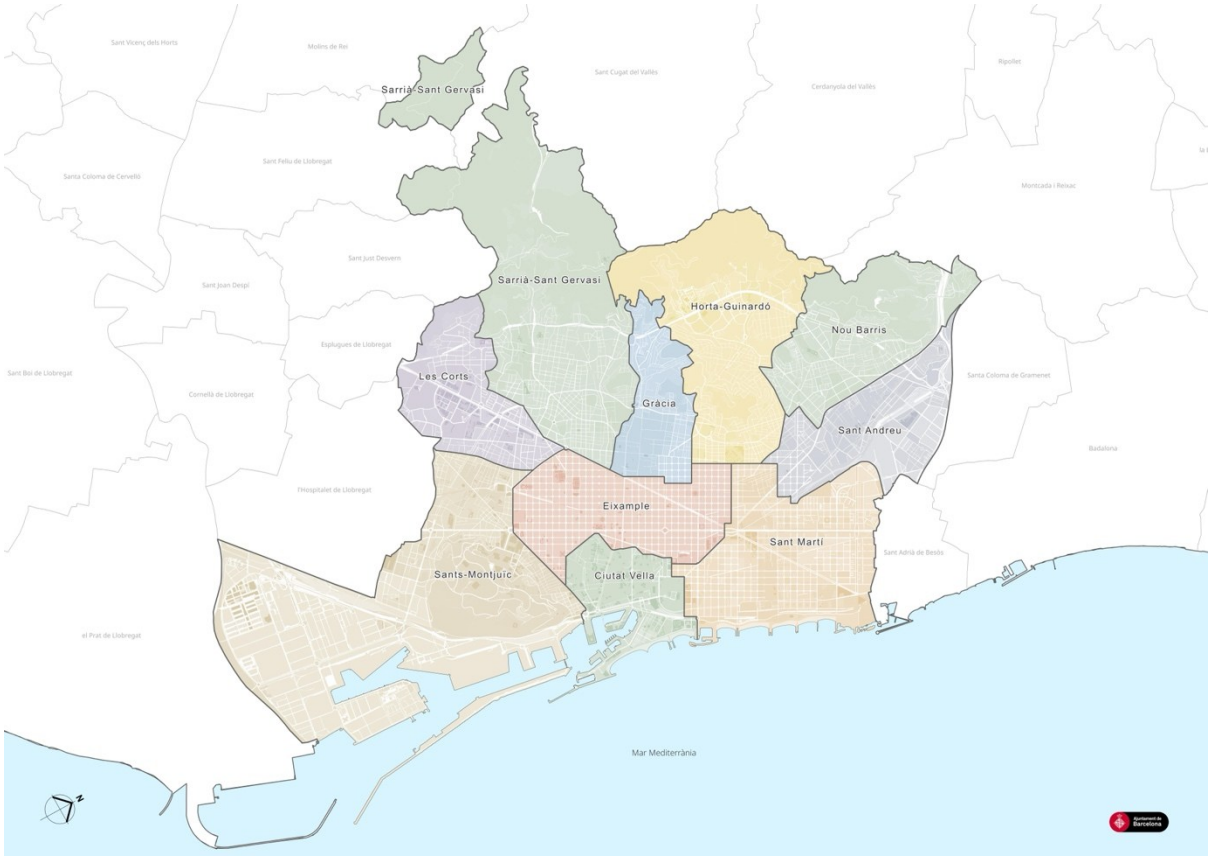

Figure 1: Districts of the City of Barcelona. Source: Barcelona City Hall

The legacy of this trajectory is a city with an **aging and poor quality housing stock** in which new-build residential densification—and the creation of new green spaces—is highly constrained. According to a Barcelona Metropolitan Housing Observatory report, **the city's energy simulation shows that about 81% of residential buildings in Barcelona would obtain an E energy rating or lower, indicating they are currently low-performing and would therefore need energy-efficiency retrofits to meet stringent EU 2030 performance standards (Alsina Maqueda et al., 2022)**, while bearly 8,700 homes will be renovated in the city with EU Next Generation funds (Ajuntament de Barcelona, 2025c). Such concerns take an additional precedence in the metropolitan policy realm because housing is formally understood not as a residual market outcome but as a contested social right based in the Spanish constitution whose fulfillment obliges public authorities to intervene in land, tenure, and housing markets to counteract structural inequality and commodification (Trilla, 2023).

The "reconstruction" of Barcelona (Bohigas, 1985) **creating a polycentric city through the creation of "new centralities" (Busquets, 2005), has been reframed through the language of climate urbanism in recent years. Former industrial sites on the fringes of the city have been targeted for shifts from automobile-oriented infrastructure toward active mobility and public transport, paired with interventions designed to address climate risks including drought, flooding, and extreme heat.** These efforts were central to urban policy under the left-municipalist Barcelona en Comú (BComú) administration of Ada

Colau (2015–2023), which explicitly framed environmental and climate urbanism as inseparable from housing and social justice. The Colau administration introduced participatory budgeting processes (Decidim) and increased focus on community-based planning. **Globally infuential urbanism initiatives such as "superblocks", "green axes", schoolyard greening, climate shelters, energy retrofits of public buildings, and neighborhood-scale green interventions were justified as attempts to redistribute environmental benefits to historically underserved areas.** However, these initiatives unfolded within a city experiencing rapidly rising housing costs and tourism pressure, particularly in areas experiencing such green interventions, giving rise to **public debate around green gentrification** (Anguelovski et al., 2023). **Environmental and mobility interventions became increasingly politicized across the ideological spectrum**. Since 2023, the social-democratic PSC administration under Mayor Jaume Collboni has shifted urban greening investment away from the superblock and green-axis approach, returning to more incremental, investment-led, and smaller-scale public-space interventions reminiscent of 1980s and 1990s (Rosa and Panayotopoulos-Tsiros, 2024) with a renewed focus on large-scale infrastructures.

These policy trajectories are embedded within a **deeply commodified and highly financialized housing regime, with international and institutional investors becoming protagonists through their adquisition of distressed properties in the wake of the 2008 crisis.** Steps toward decommodification and renters' rights taken in recent years at the level of the Spanish state have included the 2023 Spanish Right to Housing Law tenant protections such as rent control in "tense market areas" (Vidal et al., 2024), the 1.3 billion euro Strategic Project for the Recovery and Economic Transformation (PERTE 2025) for the Industrialization of Housing over ten years, the Catalan government's commitment to create 50,000 new social housing units, and the creation of Casa 47, a state-led public housing entity to **manage and expand a permanent public rental housing stock**. Nevertheless, housing production and access in Barcelona continue to be governed overwhelmingly through market mechanisms and as of 2025, **fully public housing represented approximately 2% of the city's housing stock**, in line with Spanish averages and among the lowest shares in Europe. Social housing in Spain has historically been produced through subsidized homeownership schemes (Viviendas de Protección Oficial, VPO) subject to time-limited protections (García-Lamarca, 2024). With many protections expired or imminently expiring, **nearly half of remainng VPO units in Barcelona are projected to lose protected status before 2068, with particularly high losses in Sants-Montjuïc** (Marrani et al., 2025).

Increased migration has been the key driver of maintaining demographic balance in the city: the population born abroad in the city was 5% in 2000 and has risen to 31.1% in 2024, and Barcelona is the city with the highest migrant population in the city (Blanchar, 2026). However, as **the flow of migrants increasingly skews toward the highly-qualified and international teleworkers, this has also driven processes of transnational gentrification**. **Housing affordability pressures in Barcelona are acute**. Rents have nearly tripled since 2000, while nominal wages have largely stagnated in real (inflation-adjusted) terms. By 2025, approximately 74% of the average salary is required to cover rent, placing Barcelona as having the **second highest rent burden among the European cities** (European Commission, 2025). Over the same period, **homeownership rates have declined while the share of renter households has risen to roughly 40%, exposing a growing proportion of the**

population to market volatility and insecure tenure, particularly among migrants: 70% of migrants in Barcelona are renters (compared to 20% of autochthonous residents), who experience triple the risk of poverty (Blanchar, 2026). The incoming flow of international migrants are more likely to be highly-qualified and from comparatively wealthy countries—often with greater spending power—placing additional strain on the housing market, **driving the phenomenon of transnational gentrification and contributing to a widespread shift of the rental housing market to unregulated, often fraudulent, seasonal leases** (1-11 months) (López-Gay et al., 2026). Nearly half of tenant households in Barcelona spend more than 30% of their income on housing, and displacement occurs not only through formal eviction but through denial of contract renewal, rent increases at the point of renewal, and exclusionary displacement.

To address these challenges, **Barcelona is increasingly taking a "public-private-community partnerships" approach financed by loans from the Catalan, Spanish, and EU public financial institutions, as well as EU Next Generation funding**. In 2022 the city hall received financing from of 140€ million from the ICO and ICF to build and/or rehabilitate 1,000 housing units to create public rental (60%) or cooperative cohousing (40%) (Ajuntament de Barcelona, 2022). In 2025, the City Council secured a €113 million loan from the European Investment Bank to finance the construction of nine public housing developments with 641 new energy-efficient social rental units between 2026 and 2030 (Ajuntament de Barcelona, 2025b).**The main testing ground for the cooperative cohousing approach throughout Spain has been Can Batlló, one of the case study areas examined in this report.**

Housing conditions and planning initiatives shape how ecological transition is experienced. In additional to a general housing accessibility crisis, Barcelona faces significant climate vulnerability, especially in relation to extreme heat. Barcelona is projected to have the *highest absolute number* of additional heat-related deaths by the end of the century (Barnes et al., 2025) **and to experience the highest number of premature deaths due to climate change among European cities** (Masselot et al., 2025). 28% of housing units in the city are considered vulnerable to extreme heat (Moccia et al., 2025). These dynamics overlap with the phenomena of gentrification—including green gentrification—**those displaced from their homes are more likely to relocate to areas with limited access to green space** (Anguelovski et al., 2018), contributing to the creation of "urban green sacrifice zones," in which marginalized populations—especially migrants—are excluded from the benefits of environmental investment as greener and more climate-resilient neighborhoods become inaccesible (Anguelovski and Connolly, 2024). As such,**housing conditions are central to this differentiated vulnerability**. Overcrowding, poor insulation, informal housing arrangements, and energy poverty are commonplace, as are illegally subdivided dwellings or of those that do not meeting formal standards ("infrahabitatge"). These conditions are chronically undercounted in official registers and heighten exposure to climate stressors.

Barcelona has embraced **nature-based solutions (NBS) and blue-green infrastructure** as central components of its climate adaptation strategy, integrated into comprehensive redevelopment. Funded through EU research programs, the European Regional Development Fund, and European Investment Bank loans, **these interventions incorporate new parks,**

climate shelters, Sustainable Urban Drainage Systems (SUDS) integrated into hybrid green–gray infrastructures aimed at groundwater reuse, mitigating flooding, reducing heat, and supporting biodiversity. These strategies intersect with residential densification on former industrial land, as we see in our case study areas in the Sants-Montjuïc district (Figure 2): La Marina del Prat Vermell (LMPV) and Can Batlló. Though sharing commonalities and relative proximity, these two case study areas differ markedly in terms of planning histories, governance arrangements, socio-economic and environmental vulnerabilities, connectivity with the city center, intensity of gentrification, and relationships to surrounding neighborhoods. Focusing on civic perceptions, governance processes, and socio-ecological impacts, the report analyzes how green transition interventions intersect with housing inequalities along three analytical dimensions: distributional, procedural, and recognitional justice: Distributional justice concerns **who receives benefits and bears burdens**, procedural justice addresses **who participates and how decisions are made**, and recognitional justice focuses on **whose identities, needs, and experiences are acknowledged and respected** within governance processes (Schlosberg, 2007). What follows is a detailed analysis of local perceptions of the housing-green transition nexus through these cases.

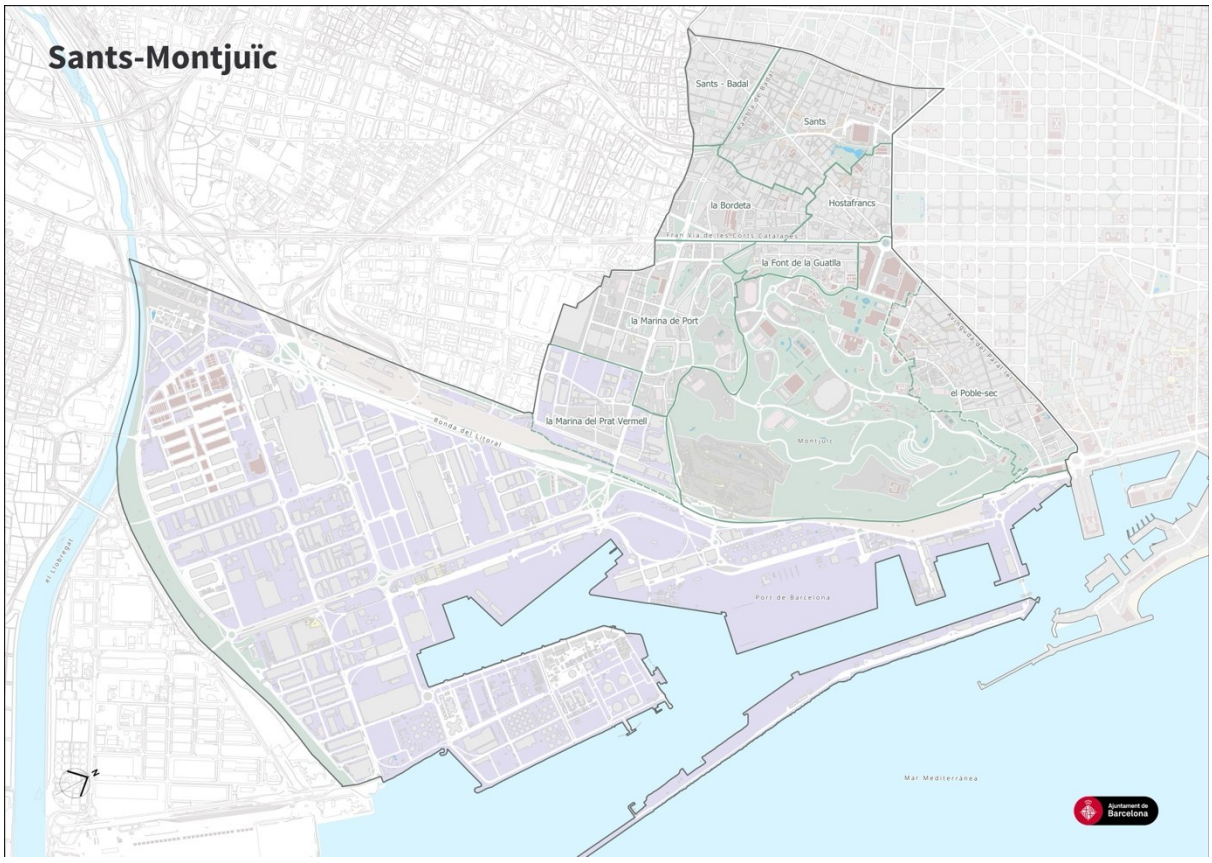

Figure 2: Neighborhoods of the District of Sants-Montjuïc. The area encircled in green is Montjuïc mountain. The large lilac and gray area across the Ronda del Litoral highway is the Zona Franca industrial area and Port of Barcelona. West of the Zona Franca is the Barcelona-El Prat International Airport and associated logistics activities. Source: Barcelona City Hall.

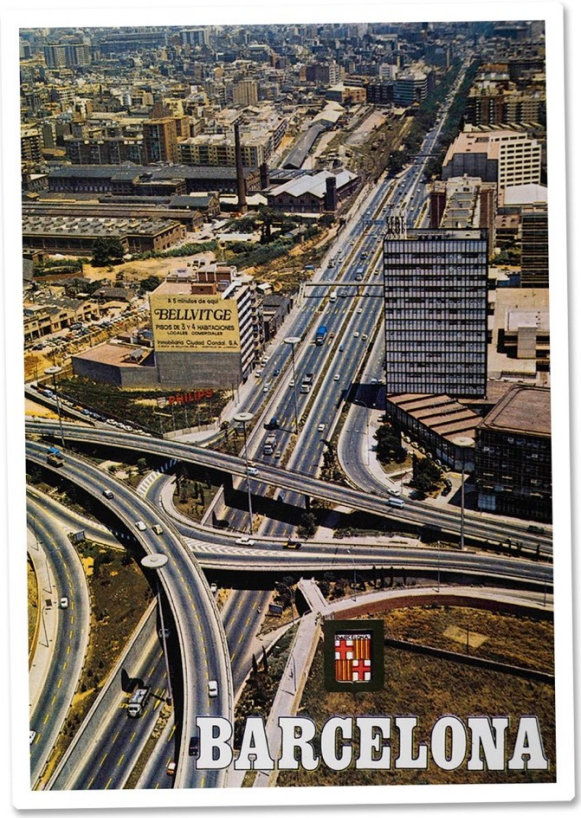

Figure 3: The foreground of this aerial photograph, from around 1970, is the Plaça de Ildefons Cerdà with its flyovers, now converted to a large roundabout with a pedestrian bridge and gardened elements in 1999. The major road is the Gran Via de les Corts Catalanes, the boundary between La Bordeta and La Marina del Port. Can Batlló is located to the upper left. To the right is an office tower of the automobile manufacturer Seat. The Gran Via has since been redesigned in various phases, introducing partially protected bicycle lanes, dedicated bus lanes, and crosswalks at grade. Source: unknown

8.1.2 Green Transition Interventions and Housing Context in Barcelona: La Marina del Prat Vermell and Can Batlló

The officially-designated neighborhoods of LMPV and La Bordeta (Figures 2 and 3) are located in areas classified as **highly vulnerable to climate change**, with La Bordeta bordering areas identified as the most vulnerable (Moccia et al., 2025). These assessments incorporate indicators related to urban form, building characteristics, and socio-demographic factors, situating both case study areas within broader patterns of climate exposure (Institut Metròpoli, 2025). As of 2019, neither La Marina del Port nor LMPV were yet identified as neighborhoods experiencing gentrification pressures (López-Gay et al., 2021) and both were classified as socioeconomically vulnerable, with LMPV identified as one of the city's most vulnerable and fastest-growing neighborhoods (Ajuntament de Barcelona, 2025d). However, **by 2021, by measures developed by the Centre de Estudis Demogràfics, La Bordeta displayed moderate gentrification dynamics between 2011-2021 in comparison to the city as a whole, which is identified as having the strongest gentrifying trends in Spain** (Sanz-

Pérez et al., 2025). Such pressures had not arrived to such a great degree in La Marina, but available data preceeds current redevelopment.

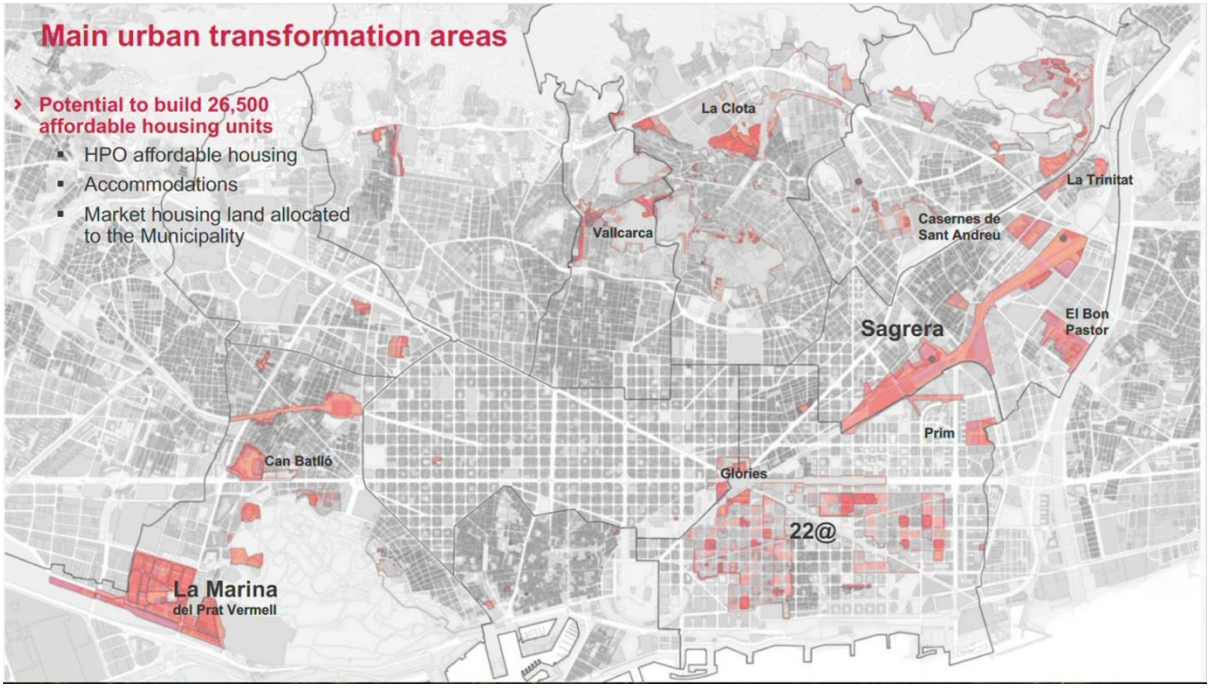

Figure 3: Prioritized major transformation areas for the city of Barcelona, illustrating LMPV and Can Batlló as the principal sites in western Barcelona. Image source: Ajuntament de Barcelona

La Marina del Prat Vermell

LMPV is the most extensive area of comprehensive residential development currently underway in Barcelona. **Rezoned from industrial to residential and mixed use in 2006**, at which time LMPV was first treated as a separate neighborhood from La Marina del Port, (LMP) the 75-hectare site was dominated by industrial and logistics usage associated with the Zona Franca industrial district. Until the 1980s, the area comprising LMPV and LMP were known as the neighborhood of Zona Franca. LMPV the **neighborhood with the second highest rate of social vulnerability in Barcelona (out of 73) in 2006, is currently under wholesale transformation to accommodate around 30,000 new residents over the coming decade**. **In LMPV and LMP, have been various municipal housing initiatives throughout the 20th century to rehouse the tens of thousands of people living in informal settlements on the Montjuïc mountainside, which defines the core of the housing legacy of the area.**

Prior to rezoning, LMPV was sparsely populated, with most residents concentrated in the 340-unit Eduard Aunòs public housing estate surrounding Plaça Falset, built on a portion of the site of the demolished cluster of 533 publicly developed, low-rise workers' housing from 1929. Another social housing experiment in the area was Can Tunis, where the city built a housing complex for former shackdwellers in the late 1970s. The

isolated neighborhood became a drug distribution center and severe social exclusion—particularly among the Gitano (Spanish Roma) community—and was demolished in the early 2000s as part of port and infrastructure expansion. Its removal set the stage for the current redevelopment strategy aimed at avoiding the social failures associated with the former settlement and fear of ghettoization.

The redevelopment of LMPV is coordinated by the Municipal Institute of Urbanism (MIU) through the Office of La Marina, a municipal office established through the Pla de Barris: Over the past decade this program has included targeted regeneration in **LMP** and the comprehensive transformation of LMPV, aiming to improve urban quality, public space and social infrastructure alongside new housing delivery. More recently, authorities have formalized the **Pla Singular La Marina 2025–2035** to coordinate educational, economic and community investments with its urban expansion. The MIU oversees targeted neighborhood programs, mainly implemented on privately owned land through negotiated planning agreements. **Municipal planners frame LMPV as a corrective to earlier large-scale redevelopment models based on industrial district rezoning and as an anti-gentrification measure, with more robust commitments to social and protected housing. The 2006 redevelopment plan established that approximately 50% of housing in LMPV is to be public or subsidized—a commitment that has been upheld and progressively supplemented by planning objectives related to energy-efficient construction, district heating and cooling systems, and the integration of green and blue infrastructure**. The affordable housing in the area is equally divided between subsidized private rental developments and new public housing complexes. LMPV's peripheral and physically constrained location—bordered by Montjuïc mountain, port infrastructure, coastal highways, and industrial areas—shapes perceptions of connectivity, integration, and future affordability. These characteristics make LMPV a key case for examining how **large-scale densification and integrated green infrastructure intersect with housing inequality under conditions of anticipatory governance and deferred impacts.**

La Bordeta-Can Batlló

Can Batlló is a **9-hectare former textile mill complex established** in 1878, located in the La Bordeta neighborood adjacent to the Plaça d'Ildefons Cerdà (Figure 3) at the border of the municipality L'Hospitalet de Llobregat. More so than a plaza, Idefons Cerdà is a highway interchange and strategic metropolitan node of western Barcelona designated as a mixed-use urban center in the 1980s and 1990s (Busquets, 2005). Though formally separate neighborhoods, civic life La Bordeta, Sants, Hostafrancs and Sants-Badal have been considered under the umbrella term of "Sants". **Neighborhood activists in greater Sants had been pushing for Can Batlló to be converted to public spaces and facilities since 1972** (Martí Gómez and Marcé i Fort, 1996), **and city plans officially designated to site for such uses in the 1976. The conversion of large factory complexes into parks, public facilities, and housing in Sants has occurred since the 1980s, while La Bordeta lagged behind.** Following the closure of the textile mill in 1964, the complex was converted into a light

industrial “City of Trades,” subdivided into factories, workshops, warehouses, and slaughterhouses employing over 4,000 people. **Housing conditions were historically precarious in La Bordeta**: in 1964, 80.8% of homes were rentals and only 3% were equipped with water, gas, electricity, bathroom, and heating, creating a situation through which, by the late 1970s, “renovation [was] so profound that it affect[ed] almost all [Sants] neighborhoods equally” (Carreras i Verdaguer, 1980: 137). **The City of Trades continued operating until preparations for redevelopment led to the often-involuntary displacement of industrial tenants during the 2000s—generating the first protests against housing development-induced displacement there—with businesses relocating to the Zona Franca or outside city limits.**

Can Batlló has been the site of struggles around public green space going back to 1961, when residents of the recently-built cooperative housing blocks associated with the Sant Medir Church parish on current-day Carrer de Mossèn Amadeu Oller fought the cosmetics company Margaret Astor—which operated within the Can Batlló Complex—from expanding its warehouse over public land created by the removal of a piece of industrial canal. Residents successfully fought for the site to instead be used for small gardens and a playground, considered one of the few neighborhood victories during the height of Francoism, when neighborhood organizations were not legal.

After the 2008 financial crisis stalled redevelopment and left the complex closed off to the neighborhood for years, community mobilization reshaped its trajectory. In 2011, to avoid threatened occupation by neighbors organized as *Can Batlló és pel Barri* (Can Batlló is for the Neighborhood), authorities and the landowner granted neighborhood activists access to the building Block 11, initiating a process of self-managed adaptive reuse gradually expanding within the complex. A 2011 report from the Federation of Neighborhood Associations identified Can Batlló as both the **primary solution to—and the key bottleneck in prohibiting—the neighborhood’s intertwined housing, environmental, and social deficits, characterizing La Bordeta as “the cul-de-sac of Barcelona”** (Castaño Marcos et al., 2011).

Demolitions on the **Can Batlló** site began in **2013**, when the **Ajuntament** initiated clearance of derelict industrial structures as part of urban transformation including public housing, facilities, and park spaces, while the **factory’s landowners were given development rights for private housing on, and next to, the Can Batlló site in exchange for contributions to infrastructure works and the park**. This required the demolition of one of the city’s last remaining older, self-built shanty towns—Camí de la Cadena—the rehousing of its residents (primarily into the newly built public housing on the Can Batlló perimeter), and the relocation of a highly used mosque elsewhere in La Bordeta. **The evictions and demolitions made way for the construction of Be-Corp, a 420-unit gated rental community, the largest of its type in Spain.**

The resumption of redevelopment has coincided with sharp housing market shifts and new residential construction in the past decade. **By 2025, La Bordeta recorded the second-highest population growth among already dense areas in Barcelona** (4.1%) (Ajuntament de Barcelona, 2025). Rental pressures have become especially pronounced, with La Bordeta

registering **the highest rents for new contracts among Barcelona's 73 neighborhoods in 2023** (Cambra de la Propietat Urbana de Barcelona, 2023), and being identified as the **third-most expensive neighborhood to rent in Barcelona (sixth in Spain)** in 2025, with journalists noting a supply of **new luxury housing aimed at "expats" within, and next to, the old factory site** (Casals Torres, 2025).

Meanwhile, **several historic factory buildings and a community garden remain self-managed by neighbors through the ECVA Can Batlló, creating a unique environment where the uses of a complex is are principally co-managed between a neighborhood platform built on anarchist principles and the city government, along with other levels of government and private owners. As such, Can Batlló is a case where green transition interventions and densification are embedded in a longer history of civic struggle, negotiated governance, and already-felt housing market impacts, generating ambivalence about the neighborhood's newfound attractiveness.** New housing construction was, ar various points, planned to be between 30 and 50% "affordable"—public rentals, cooperative, or through subsidized ownership—, and since the area is classified as a Major Transformation Area (triggering 40% VPO requirements), the end results of such claims will be addressed later in this report.

Can Batlló must also be understood as a hub for cooperatives and social enterprises: emerging from social movements and a cooperative trajectory in Sants—revived from traditions predating the Franco dictatorship—the city acquired the building Block 4 from the Generalitat and converted it to Bloc4, a cooperative and social-economy hub, funded as a public-cooperative project by the City Council and the Generalitat (7.4€ million) with Next Generation support. It was completed in 2024 (Ajuntament de Barcelona, 2023) and is the largest such facilty in Europe. A variety of cooperative entities working around housing and green transition activities that operate from Bloc4 also receive NextGen funds (see Table 1). More than simply a neighborhood space, **both the ECVA and Bloc4 spaces serve as key meeting points for social movements and public initiatives for a much broader geography than La Bordeta or Sants. Can Batlló serves as a key symbolic space for the political left where clashes between anti-authoritarian movements and institutional reformers are common**. Through the Bordeta Energy Community, set up in Can Batlló and the surrounding area in 2022, the neighborhood also has a consumers' cooperative that provides energy services (principally through rooftop solar panels) and is promoted by various social economy and solidarity initiatives to manage the production, distribution and use of clean energy.

For the purposes of the report, the main activity at Can Batlló, is the creation of the new Parc de Can Batlló and its relation to housing tensions**. The inauguration of the Can Batlló playground—among the city's largest—was in 2023, and the first phase of the Parc de**

Can Batlló in November 2024 marking a milestone in the transformation of La Bordeta[139]. Before the years-long transformation of the site, much of the complex had already been appropriated by neighborhood residents through the creation of a community garden, dog park, basketball courts, and other elements including parking lots, most of which were later relocated and included in the site design. **The new park covers 26,000 m² and incorporates extensive green-blue infrastructure with SUDS rain gardens and an underground groundwater reservoir and irrigation system** that is part of a distributive model to reduce municipal potable water use by 15%. Currently water is collected from the park's deposits by truck and used for watering gardened areas elsewhere as the infratructure is completed. **The park, delayed by 21 months and overrunning its 12.6€ million budget due to various archaeological finds uncovered in prepatory works**, exemplifies the victories of community activism, and also the ambivalence of green transition activities in a context of an acute housing crisis.

Other projects at Can Batlló remain pending: the completion of the second phase of the park and renovation of buildings committed to the ECVA have generated a highly-visible conflict between the Ajuntament and the ECVA. The conversion of an abandoned building into a school and the construction of another aside it has been pending for years. Lastly, the rehabilitation of Block 8—a building of approximately

[139] Corresponding with residential redevelopment associated with the Can Batlló planning process, more than 725 housing units were completed between 2018 and 2023, including 175 market-rate units for sale along Gran Via, 130 *concertada* units on Carrer de Parcerisa, and a 420-unit gated rental complex, all constructed with energy efficiency A ratings. This market-led production has substantially outpaced the delivery of decommodified housing: in the same period, only 54 public housing units were completed and 144 cooperative units were built or underway, suggesting that approximately 27% of housing produced can be considered decommodified—well below the original target of 50% protected housing (or 45% if *concertada* units are included). In parallel, the first phase of the Parc de Can Batlló was inaugurated in November 2024 at a cost of €21 million. Covering 26,000 m², the park integrates extensive green-blue infrastructure, including 485 trees, 48,000 bushes, and groundwater reservoirs connected to a broader distribution network serving Montjuïc-adjacent green spaces, reducing potable water use by an estimated 15%. Conceived as both a "green lung" and a climate adaptation measure, the park incorporates rehabilitated industrial buildings for public facilities, a self-managed community garden, recreational areas, and a mix of public, cooperative, and private housing, reflecting long-standing neighborhood demands and municipal climate objectives. A second phase—currently pending—foresees additional play areas, cultural infrastructure, ornamental water features, and the installation of 3,500 meters of solar panels, alongside the future development of public facilities including a school complex and the adaptive reuse of the site's central warehouse as a consolidated municipal archive.

30,649 m² of floor area—to consolidate and house the Municipal Archives—was design and presented by the Ajuntament in 2018, but is currently **shelved**.

Can Batlló is at once celebrated as a long-overdue environmental and social gain, but since it coincides with intensified revalorization in a historically working-class neighborhood, changes are not necessarily perceived as primarily benefitting long-time residents. **As the city paid industrialists and residents and acquire 5,000 square meters of residential land through developers' contributions of 10€ million—allowing for luxury private development, some on land initially planned for public use** (López, 2012)**—the park's creation and rising housing costs cannot be analyzed as separate processes.** In what follows we will focus on the dynamics and tensions around this exemplary site.

8.1.3 Methods

This case study—focused on two areas in the Sants-Montjuïc district of Barcelona, draws on qualitative research conducted between late 2024 and late 2025, combining semi-structured interviews, participant observation, documentary analysis, and ethnographic engagement. The methodological approach was designed to capture civic and institutional perceptions of green transition initiatives and their relationship to housing inequalities in Barcelona, with particular attention to governance processes and neighborhood-scale impacts.

In total, 19 interviews were conducted with 22 participants, including five interviews addressing cross-cutting themes across both case study areas. Interviewees included municipal and district-level policymakers and technical staff, representatives of housing cooperatives and private developers, neighborhood association members, activists, and residents. Interviews were conducted in Catalan, Spanish, or English. Profiles of interviewees, who have been given pseudonyms, may be found in **Appendix 2**.

Sampling of policymakers and technical staff drew on contacts established during the preparation and participation in the ReHousIn Policy Lab (March 2025) and through researchers' participation in workshops and public events related to housing and green transition initiatives organized by public, cooperative, and non-profit institutions. Additional participants were recruited through snowball sampling.

Community organization representatives and neighborhood activists were identified through their public engagement in media, participation in civic initiatives, or involvement in neighborhood assemblies and campaigns related to housing, urban redevelopment, and environmental issues. Initial contact was made through institutional email addresses associated with their organizations or, when requested by participants, via WhatsApp. Further participants were recruited through snowball sampling, including through local social networks connected to the lead author's civic engagement in Sants-Montjuïc, notably via the Student-Family Association of a public primary school attended by students from La Bordeta, La Marina and surrounding neighborhoods in Sants-Montjuïc.

Interviews were audio-recorded with participants' consent and transcribed in their original language. Audio transcription was carried out using an offline version of the AI-based software Whisper for English and Spanish. Spanish-language interviews, with personal identifiers removed, were then translated using an offline version of DeepL and subsequently reviewed, corrected, and cleaned by the research team. Catalan interviews were transcribed directly by the researchers, translated using the SoftCatalà platform with personal information removed, and subsequently cleaned. Transcript verification was conducted while listening to original audio recordings to ensure accuracy.

Analysis and coding were completed in English, for later comparability with other case European case studies, using the software Atlas.ti following a shared codebook developed by the Auntonomous University of Barcelona ReHousIn team (Appendix 3). Coding focused on recurring themes related to housing access and affordability, perceptions of green transition initiatives, participation and governance processes, distribution of benefits and harms, and neighborhood identity and recognition.

Additional data collection included participant observation and ethnographic engagement at neighborhood assemblies, public consultations, hearings, and workshops organized by public authorities, civic associations, and other actors affected by the redevelopment processes under analysis. These activities provided contextual insight into participation dynamics, institutional narratives, and informal interactions shaping civic perceptions.

Documentary analysis included municipal and district planning documents, policy reports, technical studies, academic literature, and grey literature produced by neighborhood associations, advocacy organizations, and media outlets. These materials were used to identify interviewees, contextualize findings, and triangulate claims.

Several limitations should be acknowledged. While the interview sample includes a diverse range of institutional and civic actors, it does not fully capture the perspectives of all resident groups affected by redevelopment, particularly more precarious populations with limited organizational representation or those who do not identify with dominant civic/social movements in Sants. The rapidly evolving nature of the redevelopment projects examined means that findings reflect perceptions and expectations of *ongoing processes* rather than fully realized outcomes.

*Table 1. Key data on two case study areas in Barcelona (see **Appendices 1** and **3**)*

	Can Batlló (CB)- La Bordeta	**La Marina del Prat Vermell (LMPV)**
Neighborhood characteristics (general social type, economic activities, density etc)	Densely built low to mid-rise workers' housing from 1880s-1920s and mid- to high-rise buildings from the 1950s-70s (the latter 60% of total). Population: 19,567 (as of 2019, since increased.)[140] 2019 population density: 32,100 per km², or 37.850 excluding Can Batlló (similar to Sants and Hostafrancs). Density has since increased. 2025 household rent burden: 38%[141] Mixed age, mixed tenure, family oriented, diverse country of origin, strong neighborhood social fabric, working to middle class with new, wealthier enclaves. Well-connected to city center by metro (L1, L5), intercity rail and airport, and highways	Sparse population preceding redevelopment: 1,137 in 2015, 2,800 in 2025; projected at 6,000 in 2027, 28,000 in mid-2030s. 2015 population density: 3,100 per km² Projected density: 37,000 per km² Socio-economically vulnerable area, residents more likely to have been born in Spain than average. Low income and high unemployment rates with new economically and ethnically diverse enclaves. Isolated location with poor transport connections to city center, well connected to airport, industrial parks, highways
Duration	Strategy: 1976 (PGM) to present First Modifcation of PGM: 1999-2005. Second: 2017. Third: 2024 (MPGM Can Batlló-Magòria)	Strategy: 2006 (MPGM) to present Implementation: 2014 to present

[140] This is calculated by taking the last official figure and accounting for an increase of 4.1% as reported by the city in December, 2025.

[140] The rent-burden estimate is based on the most recent available per-capita income data for La Bordeta (2022), which was multiplied by the average household size for Barcelona (approximately 2.3 persons) to approximate median household income in the absence of published neighborhood-level household income figures for 2025. This estimated monthly household income was then compared to the 2025 median rent to calculate rent as a percentage of income, following standard housing-affordability methodology.

	Implementation: 2008ish-present. *See timeline in Appendix 2*	*See timeline in Appendix 2*
Institutional funding (counting right-of-use of public land, see glossary in Appendix 1)	Ajuntament (park, land in form of right-of-use (see Glossary, Appendix 1), with 10€ developer contribution for infrastructural works and park). **EU Next Generation funding of cooperative housing development (Empriu 4€ million),** cooperative legal services at Bloc4 (AMURA), cooperatives associated with ECVA (food cooperative, cooperative local food café, etc.) and cooperative housing foundation (La Dínamo). Eu funding for Bloc4 through BIMSA. Council of Europe Development Bank **€31 million financing package to Sostre Cívic**	Barcelona City Hall, City, regional, national, and EU funds for social housing, Generalitat (police station, projected schools and health center), Consorci de la Zona Franca, Barcelona Urban Management (municipal company)
Actor constellation ***(in addition to "Institutional funding")***	Generalitat Grup Gaudir (primary landowner) BeCorp and Via Célere (developers) LaCol, Sostre Cívic, Fundació La Dínamo (cooperative architectural firms, developers, and foundations), Housing Coops (La Borda, Sotrac, Empriu) Bloc4BCN Association Centre Social de Sants EVCA Can Batlló Associació del Veïnat de Mossèn Amadeu Oller CaixaBank (owner and current occupant of office building)	Culmia and AQ Acentur (developers) La Chalmeta (housing cooperative) Eduard Aunós Residents Association Unió d'*Entitats* de *la Marina, Associació de Comerciants de La Marina*
Aims and objectives	Conversion of former cotton mill complex to new public space and facilities, development of public, cooperative, and market-rate private housing through participatory planning process	Rezoning and preparation of a predominantly industrial area to accommodate 12,000 homes, with significant proportion of new protected housing (50%) and NBS elements
Specific physical measures	Demolition of walls, buildings, homes. Road extension and reconfiguration. Adaptive reuse or structural work on industrial buildings and structures, excavation to create the water reservoir, archaeology and soil remediation, creation of SUDS, construction of office building with supermarket and gym, and housing. All works toward creation of park.	Demolition of variety of industrial structures Creation of SUDS, new large park and smaller green spaces. Installation of district energy system. Planning commitments include allocation of **over 13 hectares to green spaces and promenades.**
Accompanying housing policy/ **regulatory measures**	Public housing construction, mostly utilized to relocate residents affected by the associated development through demolitions. Testing ground	Testing ground for right-of-use programs. Wide variety of public and private actors building interspersed public, subsidized, and market-rate housing for sale and rental. Approximately 50% protected

(see Glossary in Appendix 1)	for right-of-use programs for social housing in the form of cohousing cooperatives.	housing. 30% of public housing designated for La Marina residents.
Key social tensions or/and benefits between greening and housing	New-build gentrification in dense housing around perimeter of site, which is not perceived to be integrated into, or for, the neighborhood	Prioritized access of local residents to public or subsidized housing, issues of accessibility and transparency. Concerns about internal segregation and disconnection between Prat Vermell and the rest of La Marina.

8.1.4 Civic Perceptions of Green Initiatives in Case Study Areas: La Marina del Prat Vermell

8.1.4.1 Precedents and implementation

Figure 4: Spanish President Pedro Sánchez, Barcelona Mayor Jaume Collboni, and Spanish Minister of Housing and the Urban Agenda Rodríguez visiting new social housing in LMPV in September, 2024. The Spanish government finances 16% of the LMPV redevelopment. Image source: Ajuntament de Barcelona

Interviewees consistently situate the redevelopment of LMPV within a long history of planning interventions, infrastructural impositions, evolving social housing approaches, and environmental justice struggles predating the 2006 rezoning of the predominantly industrial

area, along with disappointment with the city's inability to deliver promised improvements to La Marina's main avenue, the Passeig de la Zona Franca.

Civic perceptions of the current transformation are shaped less by the formal objectives of the LMPV plan than by accumulated experiences of marginalization, delayed investment, the feeling of being ignored by municipal authorities, and resentment at being the recipient of unwanted land uses over decades. Several interviewees note that the implications of the LMPV plans were not widely understood among residents until at least 2010, reinforcing perceptions of a top-down process whose foundational decisions were taken with minimal local democratic input.

Local actors describe the broader La Marina area as an historically peripheral, marginalized, and "sacrificed" territory used to absorb land uses serving the functional needs of the city as a whole—heavy industry, logistics, port-related activities, transport infrastructure, and isolated social housing—while receiving limited public investment and services. Interviewees frequently refer to past mobilizations against landfills on Montjuïc, demonstrations to close freight rail traffic carrying hazardous materials, and fights against proposals for incineration facilities as emblematic of this role. **Improvements in living conditions, including the creation of public spaces and the removal of noxious land uses, are recalled** as the result of sustained mobilization rather than proactive municipal intervention. The wider area of La Marina, historically known as the Zona Franca, with its proximity to the Seat automobile plant (opened 1955) and concentration of its workers, is famed for its role in clandestine labor activism under the Franco regime, leading to occupations and deadly battles. This historical memory conditions how green transition initiatives are interpreted and contextualized and shapes ideas around solidarity and class-consciousness, though its neighborhoods are not currently as organized or militant as others in Sants-Montjuïc. **Due to the area's relative isolation and legacy of automobility, there is also a commonly-held perspective that car ownership is important for residents, owing in large part to the perception that public transit options remain substandard.**

> The entities in La Marina are most active at social level. It is true that they have historically played a very strong social role and led struggles, because **everything in the neighborhood had to be fought for**. When there was running water in other parts of Barcelona, there was none here. Neighborhood associations had to fight to get water, to have housing, for everything. It hasn't even been ten years since we've had a subway stop. In the social struggle, organizations here are very important. Now life is not so tough here as it was, but we are starting to say "well, we have come this far!". [Núria]

Interviewees frame La Marina's historical role as that of an **out of sight, out of mind "receptacle" gradually carved up for the undesirable land uses on side of Montjuïc mountain opposite from the city center**. It is bitterly noted by several interviewees that La Marina residents used to be able to walk down the Passeig de la Zona Franca to the sea before

it was blocked off by motorway and port expansion, cutting off an area with centuries of maritime activity from its seafront. **This history of marginalization and peripheralization underpin what still remains cautious optimism that the redevelopment underway *could* improve the area's symbolic and physical positioning within the city.**

Along with new housing, plans have been approved to connect the LMPV area to the center through new bicycle lanes on a narrow stretch between Montjuïc and the waterfront, requiring the reconfiguration of infrastructure around the Ronda Litoral highway and Port. The city has further committed to extending a direct metro line to the neighborhood in coming decades: while a metro link to LMPV and La Marina del Port arrived with the phased opening of Line 10S (2018-2020) running beneath the Passeig de la Zona Franca, this connection still requires traveling out of the city entirely and a transfer in order to travel to the rest of Barcelona. This leads to a heavy reliance on bus services to access the city center.

The designation of LMPV as a "new neighborhood" rather than part of a broader La Marina—an area referred to as the "Zona Franca" (Free Trade Zone) neighborhood from the 1930s until the 1980s—is perceived negatively by nearly all interviewees and a matter of civic concern and resentment. Municipal technicians and property developers deploy "new neighborhood" rhetoric to emphasize opportunity, scale, and coherence, but civic actors and some public officials stress that LMPV should be understood as an extension of the phyisical and social fabric of La Marina. **Concerns about "new neighborhood" framing, beyond the symbolic, focus on the implications for socio-spatial fragmentation and the prioritization of new residents over unmet needs of existing communities. Addressing these concerns,** LMPV and LMP are now officially treated by the City of Barcelona as a *singular territory in transformation*, where housing pressures, governance complexity, and social tensions are shaped by a prolonged "meanwhile" period between planning intent and lived reality (Ajuntament de Barcelona, 2025d).

These tensions are amplified by the scale of redevelopment, having few 21st century precedents in Barcelona, while civic and institutional actors agree that conditions enabling such large-scale planning initiatives are rare. **LMPV is treated as an opportunity to address housing provision, environmental upgrading, economic activity, and infrastructural modernization simultaneously**. **Perceptions arising from local community activists reflect a dual reading: the project is recognized as incorporating objectives that could benefit La Marina and address longstanding deficits while producing protected housing and green infrastructure, but the initative is perceived as predefined and opaque, leaving limited scope for negotiation, with civic input perceived as exerting greater influence over mitigation, minor adjustments, and symbolic elements (naming of parks, etc.) than overall strategy.**

A recurring point of concern relates to the **redesign of the Passeig de la Zona Franca**. **Despite an extended participatory process under the Colau administration—including a monitoring commission and public meetings facilitated through the 2023 Decidim participatory budgeting process—interviewees express uncertainty about whether, and when, the redesign will be implemented. Several attribute this uncertainty to shifting**

political priorities rather than technical contstraints, notwithstanding Mayor Collboni's announcement of "New Montjuïc" plan funding commitments incorporating the initiative (Ajuntament de Barcelona, 2025a). **Such doubts in the city's desire or capacity to appropriately acknowledge citizens' demands occur in a neighborhood with voting patterns that continue to support the governing PSC party, despite low turnouts: in elections from 2019-2023, LMPV had the lowest voter turnout of anywhere in Barcelona** (González, 2023)**.**

8.1.4.2 Participation and governance

Besides record levels of voting abstention among residents of LMPV, **civic perceptions of participation and governance are closely linked to highly technocratic arrangements to manage the long-term, large-scale redevelopment process, with gradual increases in social outreach**. Interviewees refer to the *Pla de Barris* framework and the designation of both La Marina neighborhoods in a joint *Pla Singular*—as a municipal acknowledgment of the scale, duration, and complexity of redevelopment that requires targeted governance mechanisms and concerns about the socio-spatial fragmentation.

The presence of a the dedicated municipal Office of La Marina is perceived as a positive institutional innovation by civic actors and public technicians alike. **Physical proximity to municipal representatives is described as facilitating information-sharing, coordination, and responsiveness to day-to-day issues arising during the prolonged "meanwhile" period of LMPV development, in contrast with earlier phases when decisions were experienced as comparatively distant and imposed**. **Interviewees express doubts, however, regarding the depth and effectiveness of participation.** Meetings, workshops, and consultations are acknowledged, but described as operating at the level of information-sharing and consultation rather than the sort of participatory planning that occurred in nearby La Bordeta. For example, several interviewees emphasize that most key elements of land use, density, height parameters, and sequencing were defined before participatory processes.

In the wider La Marina area,The *Unió d'Entitats de La Marina* occupies a complex intermediary role, functioning as a liaison between the municipality and a diverse civic network and as watchdogs capable of adopting confrontational positions reflecting community concerns. This dual role generates both recognition and confusion regarding the respective responsibilities of this coordinating body and the Office of La Marina.

Procedural governance is frequently characterized as fragmented, though neighborhood organization activities themselves are described as fragmented and based on older, distinct sub-neighborhoods (barriades). Meanwhile, decision-making responsibilities regarding comprehensive redevelopment are distributed across several municipal departments, city-owned companies, private developers, the Generalitat and the Spanish state, creating **uncertainty about where and how decisions are made and how grievances can be addressed. This institutional complexity is seen as undermining**

confidence in participatory channels, especially when outcomes related to housing allocation, public facilities, or public-space design appear weakly reflective of earlier consultations.

Concerns surrounding housing allocation processes for public and subsidized housing emerge as the focal point for procedural tensions. Civic actors highlight anxieties related to transparency, prioritization criteria for local and Barcelona residents, and the role of private developers in managing access to subsidized units. Such themes are particularly sensitive in a context of an **increasingly inaccessible local housing market and expectations that redevelopment should predominantly prioritize existing residents of La Marina**. Such concerns also arise for the allocation of public housing being constructed:

> The neighbors have their doubts, and that makes people suspicious and creates bad vibes.… These allocation processes make them uncomfortable... 30% have to go to people in the neighborhood, right? Well, then where are the 1,600 houses for our children? My older children had to leave Barcelona. I don't like these comments, but people say they're only giving the flats to Moroccans. [Josep]

From the perspective of technicians and developers, **municipal mixed-tenure and mixed-income requirements introduce significant governance and design challenges while responding to legacies of concentrated poverty in the area and a professed need for an economically and socially diverse, modern neighborhood.** Integrating protected and market-rate housing within the same buildings is described as novel in Barcelona and **framed in the language of social integration.** However, complex legal and financial arrangements to manage shared spaces and costs consistently raise fears that **new forms of internal segregations and tensions will arise between residents of subsidized and market-rate units**, since those living in subsidized units will not have access to some facilities such as gyms and swimming pools, and will have separate entrances. Such arrangements also pose practical challenges for developers partnering with the city to deliver housing contained mandatory subsidized units:

> We had always built private and subsidized housing in different buildings. There are the common areas, and a person who buys a private home can afford a swimming pool, a gym, a tennis court... These things generate expenses at the community level, so it was decided to build different stairwells and clearly delimit the common areas. You don't know if it will be accepted by the people who buy the homes or how the public would respond. [property developer]

In relation to housing, what has been considered the key local victory has been **advocacy pushing public bodies to introduce quotas reserving 30% of protected housing for neighborhood residents and their children, seen as a partial corrective to first-come, first-served allocation and confusing lotteries.**

> **We insisted to [the city's Housing Office] that there had to be some scales, a percentage of protected housing allocated for neighborhood people. Not that people from outside shouldn't come, but it can't be that someone from [the city of] Lleida has preference over our neighbors, right?** Besides, it's not transparent, you give power to the company. It was proposed in the [Sants-Montjuïc] Plenary and accepted, now we are following up on it so that when there are lottery drawings there are percentages for people with disabilities, those experiencing social problems, and a quota for people from the neighborhood. [Núria]

Participation fatigue is a recurring theme: long time window of redevelopment, combined with consultations whose outcomes are slow to materialize or indefinitely shelved, contribute to **skepticism regarding civic engagement and public consultation processes. This is compounded by perceptions that political shifts at the municipal level stall or reverse previous participatory initiatives**, particularly in relation to the pacification and greening of the Passeig de la Zona Franca.

Local media associated with civic organizations, active in shaping and airing local public opinion, have raised concerns that the the 2025–2035 Pla Singular places **less emphasis and fewer resources on social and community-oriented projects** (such as community support, education, cultural activities, and services for older adults) **than the previous Pla de Barris did, despite maintaining commitments to urban and public-space investments** (La Marina, 2025). Community organizations involved in the process have specifically **noted a reduction in social ambition and a lack of concrete plans and funding for the social-community axis**. This reinforces interviewees' perceptions that **procedural inclusion may be narrowing as physical transformation accelerates and the city's concerns are more technical and operational at the expense of social integration and transformation.**

In terms of local self-determination and a feeling of being overshadowed by other Sants-Montjuïc neighborhoods, multiple interviewees suggest that, considering the growth of LMPV by 30,000 residents, its large area and its relationship to the port and Zona Franca, the neighborhoods of La Marina should be jointly upgraded to the status of a new city District, offering greater decision-making power.

8.1.4.3 Concerns over unequal distribution of benefits

Distributional equity emerges as a central concern in civic perceptions of the redevelopment of LMPV in relation to housing access, relocation, public facilities, and the overall benefits associated with large-scale urban transformation. **Interviewees frame equity around the question of whether, and how, the preexisting local community benefits from new housing production through the creation of complexes with private amenities and large corporate commercial tenants, while the creation of comparable public amenities (swimming pools, sports centers, etc.) and the opening of independent, smaller businesses lag.**

The relatively high proportion of protected and subsidized housing planned for LMPV is acknowledged by civic actors as positive. In a working-class neighborhood which nevertheless has high levels of homeownership, there is less agreement of the impacts of new rent control protections, with some seeing this as state overreach and an assertion that the state should focus on creating public housing and leave the private market to its own devices.

Though sometimes describing LMPV in the language of "real estate speculation", as has been common in discussion in redevelopment in Barcelona for decades, **interviewees distinguish LMPV from projects perceived as straighforwardly market-driven, emphasizing that commitments to various forms of protected housing. Notwithstanding, there is also a widely held perception that new subsidized rental housing is within the price range of local residents, raising the question of how "affordability" is calculated.** Civic actors routinely stress that protected housing does not, within itself, generate locally equitable outcomes, while **questions persist regarding eligibility criteria, multiple lotteries, heavily bureaucratic processes requiring specialist knowledge, and allocation mechanisms perceived as opaque. Subsidized housing is frequently described as priced above what is accessible for existing residents of La Marina, or attractive mainly to younger people whose parents can help pay.** Interviewees note that these dynamics intersect with narratives around migration and belonging, some noting a rise in suspicion and resentment that is fomented by an emerging far-right party that is heavily recruiting in the area.

Anticipated population growth is expected to place additional pressure on already strained public services such as schools, healthcare facilities, and social services. Interviewees note that responsibility for many of these services and facilities lie with the Generalitat, complicating accountability in a planning process orchestrated by the Ajuntament and calling into question the possibilities for timely provision. It is sometimes pointed to with frustration that **a migrant internment center (2006), a police station (2007), and a new prison (2022) have been completed in La Marina and Zona Franca area—but not many other promised public facilities—as part of the legacy of the area as a "sacrifice zone."**

Housing displacement emerges as a salient distributional issue in specific cases, most notably Colònia Bausili, a small historic settlement in LMPV originally built for textile factory workers and consisting of low-rise houses with a distinctive architectural character and a lauded community fabric. A street of two-story houses hidden behind a gas station on the Passeig de la Zona Franca, its site was purchased by investors and residents were immediately pressured

to leave, house-by-house. Planning initiatives, including the 2025 Pla Singular, discount its future for residential use and most residents have already been displaced. **Currently, the ground floors are considered uninhabitable due to flood risk, and most homes have**

> A new neighborhood is built from nothing, and, wall-to-wall, another disappears. This example of industrial and working-class heritage, Colònia Bausili, it's dead because a vulture fund arrived, the City Hall turned a blind eye. Time goes by and you know what vulture funds do. While you are waiting, they are buying. One hundred years of history gone in 10 months. It's shocking…. There was no neighborhood meeting to tell [Colonia Bausili residents] what was happening, they went one by one. They divide and conquer. [José]

been condemned with residents being rehoused nearby, but some long-time tenants continue to live there as of January, 2026. Some residents have been excluded from rehousing options based on eligibility criteria, feeding perceptions of involuntary expulsion.

Market-rate housing is perceived as aimed toward non-Spaniard individuals and couples who are comparatively wealthy, without children or roots in the neighborhood, raising concerns for weakening social ties. Several interviewees noted the near absence of new residents in La Marina civic life, suggesting that they are commuters or remote workers living in private enclaves. Broadly, many **civic actors perceive that incomers fitting such a profile structurally favored over autochthonous tenants, lower-income households, families with children, and the elderly.** As the neighborhood was traditionally populated by internal migrants from rural Spain and the use of the Spanish language remains common in the area, a rise in Catalan speakers is also perceived as a symbol of a new, incoming population.

According to a developer working in in LMPV, among their 600 market-rate units sold in LMPV, around 70% of purchasers Spanish citizens, mainly Catalans but not necessarily from Barcelona, around 80% of homes are purchased as primary residences, and more than 50% of purchasers are under 45. There is a wide array of nationalities among purchasers, including Venezuelans, Ukrainians, Italians, Dutch, Poles, Chinese, Colombians, Russians, Germans, Swedes, Irish, Hondurans, Iranians, Morroccans, Armenians, Bangladeshis and Indians, without a strongly dominant incoming profile.

> It’s very fragmented… There's more representation than in the UN. It's very scattered. We wonder about whether we are attracting a specific profile, but in the end, you take whoever comes and that's it. [representative of developer]

Notwithstanding concerns about affordability, access, and belonging, **several interviewees emphasize that they see the LMPV development as a potential opportunity for themselves, their family or friends to remain living in a neighborhood where market pressures have already pushed many out of La Marina, and, typically, out of the city entirely.**

While there is a notable “green” emphasis on the development of the new neighborhood through district heating and cooling infrastructure, ecological construction techniques and high-efficiency buildings, new parks and active mobility infrastructure (Ajuntament de Barcelona, IMUB, 2024), **in La Marina, nature-based solutions and residential densification are not perceived through the lens of environmental sustainability, but rather as elements integral to an overall development approach: as integrated infrastructural components. Greening itself, in a neighborhood that already has relatively high levels of green space compared to neighborhoods like La Bordeta (albeit of varying levels of maintenance), the integration of green elements are not perceived *within themselves* as drivers of inequality, but as part of the protocol of an overarching, government-driven project. Nevertheless, questions are often raised about who benefits from such improved environmental quality, whether improvements will occur at the expense of already-existing green spaces, and what spillover effects the overall development will have on local housing costs.**

8.1.4.4 Political mobilization

Civic perceptions of political mobilization in La Marina are deeply shaped by a long history of collective struggle in neighborhood and labor movements. **Interviewees describe mobilization not as episodic or reactive, but as a constitutive feature of local political life, forged through earlier struggles for basic services, environmental health, and recognition within the city.** However, there is also a **sense of a weakening fabric, heightened by concerns regarding the lack of civic involvement of newcomers.**

Neighborhood organizations in La Marina are recognized for their capacity to mobilize across a broad range of issues, including housing access, public services, and urban infrastructure. This **capacity is understood as cumulative, drawing on organizational memory, long-standing networks, and shared repertoires developed over decades.** These histories shape expectations regarding engagement with public authorities and perceived legitimacy of collective claims, but **the aging of activists and the challenges of recruiting younger activists and new residents are perceived as a challenge.**

> The residents organize on their own, and that scares any public organization.… In the end **we're going to the roots of what these neighborhoods are: the struggle against power.** A good part of the old neighborhoods are of self-construction. You didn't ask for permission to build a house when you've just arrived and you have nowhere to go. People took bricks and built little houses out of necessity. You always do that against established power…. **We know that city councils follow the lead of private companies. The real dissidence is through alternative media and organizing, which are more and more persecuted**. But we are asleep because we live well compared to 100 years ago. [José]

The large-scale redevelopment project of LMPV has significantly altered the terrain of mobilization, as **the complexity of planning processes, multiplicity of actors involved, and technical language of complex urbanization create barriers to broad participation. Mobilization increasingly requires specialized knowledge, sustained engagement, and volunteered time, limiting who feel that they can meaningfully participate, heightened by concerns that participation predominantly implies consultation as a "box-ticking" exercise rather than shared agency.** The Cases Barates constitute the only long-established residential nucleus within LMPV itself, and since civic activity remains strongly rooted in older *barriades* as it has over the past century, sustained and unified mobilization focused on the new development area is a continuous challenge. Political mobilization is described as operating across multiple registers ranging from institutional participation to more confrontational practices, including media interventions and public statements. Civic actors are described as moving strategically between modes depending on the issue at stake, perceived institutional openness, and urgency.

Uneven mobilization capacity emerges as a recurring concern. Longstanding residents—typically older homeowners—are generally seen as better positioned and more able to engage with planning processes than newer residents, precarious households, or individuals with limited time and resources. Elderly activists note that there are generational differences in relation to activism and organizing, and that younger residents who might be involved have been priced out of the neighborhood, creating a sense of urgency for recruitment.

> We really need more young people to get involved, especially in organizations and associations. Any type of association needs new blood with new ideas. People always say, "No, it's full of old people." Sorry! But most of the older people who were, or are, in these organizations, when you join, they'll tell you, "We do *this*, *this*, and *this*, and we do it *this way*, what do you think?' But in the second year [newcomers] will say, 'Hey, what if we do it *like this*?' Okay, fine, we'll start putting your ideas into practice. After all, we're also bribing you so that you you'll be my replacement later on [laughs]. [Emili]

Mobilization is also shaped by shifting political dynamics at the municipal level. **Several interviewees note a shift in tone and responsiveness following changes in city government, with some participatory spaces associated with the Colau administration becoming less active, discontinued, or ignored.** This has prompted a recalibration of strategies, with some civic actors emphasizing renewed autonomous organizing alongside more selective institutional engagement, while others continue to see participation and advocacy through formal channels as a pragmatic approach.

Despite fatigue, generational turnover, distrust in formal participatory and consultory processes, and impatience, interviewees stress that mobilization remains a critical tool for shaping outcomes. **Perceived successes—such as securing quotas for neighborhood residents in protected housing or influencing the location of public facilities—are cited as evidence that collective action still yields tangible results.**

8.1.4.5 Positive socio-ecological impacts

Perceptions of positive socio-ecological impacts in La Marina related to LMPV are closely linked to shared experiences of environmental neglect and territorial stigmatization. In a broader sense in relation to La Marina, **interviewees frame recent and planned green transition interventions as overdue improvements in an area historically characterized by industrial land uses, infrastructural burdens, and limited environmental quality.** They also consistently emphasize that **La Marina has long possessed environmental assets, namely its proximity to Montjuïc and neighborhood parks won by earlier social struggles, but that access, connectivity, and investment remain uneven**, maintaining a fragmented civic fabric. Recent interventions, including new parks, tree-lined streets, stormwater management systems, and reductions in asphalted surfaces, are widely perceived as improving thermal comfort, walkability, and visual quality, associated with a greater sense of calm, dignity, and livability contrasted with the area's industrial past. New green amenities with LMPV are welcomed, assuming the "new neighborhood" feels inviting, but there is also a **widely held perception that La Marina residents will stick to their own areas and that new facilities like the new Parc de Tretze Roses (inaugurated 2024), between new housing and Eduard Aunós-Cases Barates, is underutilized.**

> The new park gives [Eduard Aunós residents] peace and quiet, space. Then there's everything that goes with the flower beds, rainwater drainage. All that is obviously very good, but it needs maintenance, otherwise it turns into a dump. It's a very good idea, walking down the street and seeing clean green spaces, it gives you quality of life because you don't have asphalt. But sometimes it seems that we don't value that, incivility a pending issue. [Josep]

Green transition interventions are interpreted through a lens, though not the language, of recognitional justice: visible improvements in public space and the insertion of bicycle lanes and new pedestrian and gardened drainage infrastructure are generally understood to signal that, while La Marina remains *peripheral*, it is becoming less *marginal*, and is deemed worthy of environmental investment. Interviewees frequently describe greening as a long-awaited acknowledgment, particularly when interventions directly affect daily routines. These positive impacts are rarely framed as exceptional or excessive. **Green spaces, climate-adapted housing, and pedestrian-friendly streets are consistently described as minimum standards for a dignified neighborhood rather than amenities,** though some interviewees express concern that **"green" approaches (building materials, energy efficiency standards, green infrastructure) contribute to prohibitively high prices. Thus, while their arrival is genearlly welcomed, green interventions are interpreted as belated and unequally beneficial**.

8.1.4.6 Negative socio-ecological impacts

Green transition interventions are understood as enhancing quality of life and environmental conditions, while remaining embedded within broader concerns on negative socio-ecological impacts. Beyond housing, **a central concern relates to heat exposure and the lack of shade in key public spaces. Interviewees note that, despite overarching commitments to greening, heavily used areas remain dominated by hard surfaces with limited vegetation or protection from extreme temperatures. This is perceived as problematic for children, older residents, and those with health vulnerabilities, cited as evidence that climate adaptation goals are not consistently translated into everyday spatial design.**

As such, negative socio-ecological impacts tend to be framed through embodied, everyday experiences. **Heat stress, air pollution, noise, and safety risks linked to heavy traffic are described as *compounding existing social vulnerabilities*, especially in a context of rapid population growth, increasing housing burdens, and intensified mobility demands.** Interviewees emphasize that La Marina is highly impacted by through-traffic serving broader citywide functions (the port, industrial parks, the Fira conference center, stadium traffic, etc.) at the expense of local environmental quality and safety. **Traffic-calming and cycling interventions have been introduced here, but interviewees express skepticism about their safety and effectiveness.** The bicycle lane along the thoroughfare (2021) is described as chronically underused due to inadequate separation from heavy bus and freight traffic, especially around a large home improvement and DIY retail chain. The continued prioritization of logistics and passenger vehicle flows is seen as contradicting stated goals of pollution reduction, active mobility, and neighborhood connectivity.

> *"They always say 'there's no money,' but we are fighting for playgrounds to be covered. In the summer, the kids can't even play. It is a minimum. All of Barcelona should have playgrounds and squares covered.* ***The Plaça de La Marina is a neuralgic, central square. People faint there. It's cement, there's nothing but sun.*** *I would like to have even more green, but what space do you have?* ***One demand is to green the Passeig de la Marina, to have shade, reduce pollution, and to pacify it. We wanted to cut it from traffic on Sundays, just as in Sants. They do not let us because we are the exit of Barcelona.*** *So think about the mobility of gathering 30,000 new people!"* [Núria]

Temporal unevenness is another recurring theme. **Existing residents bear the costs of prolonged construction through noise, dust, disrupted mobility, and uncertainty. Though parks and green-blue infrastructure were completed before buildings were constructed, social benefits—particularly in the form of subsidized and public housing and public facilities such as schools, health centers, and sports centers—remain future-oriented.**

Maintenance deficits feature prominently in civic perceptions. Interviewees stress that green infrastructure requires sustained care to deliver environmental and social benefits. Where maintenance is insufficient, green spaces are described as deteriorating, underused, or generating problems with rat infestations, weakening their intended contribution to neighborhood well-being. There is a broader concern that investment in LMPV may have the effect of further disinvestment and lack of maintenance in older green spaces.

Limited shade, insufficient facilities, traffic pressure, and delayed services are perceived as interacting with demographic growth to generate new forms of environmental stress. Negative socio-ecological impacts are largely understood as the result of misalignment between

planning ambitions and lived experience, underscoring the importance of **integrating climate adaptation with everyday usability, mobility management, and social infrastructure provision, moving beyond symbolic achievements and benchmarks toward noticeable improvements to everyday life.**

8.1.4.7 Tensions and power dynamics between stakeholders/actors

Perceptions of the redevelopment of LMPV highlight tensions and power asymmetries among the actors involved, including municipal authorities, private developers, cooperative housing initiatives, and neighborhood organizations, tempered by widespread acknowledgment that the municipally-led integrative approach is superior to more neoliberal modes of redevelopment. Nevertheless, civic actors frame these dynamics in terms of unequal access to decision-making power, information, and resources.

More so than in La Bordeta, tensions emerge in relation to cooperative housing and social economy initiatives. **While cooperatives are often supported in principle as alternatives to speculative development, interviewees express ambivalence when such publicly-subsidized projects are perceived as insufficiently embedded in the local social fabric or benefiting from privileged access to land and institutional support. These perceptions do not amount to a rejection of cooperative models, but reflect unmet expectations regarding their potential role as bridges between long-standing residents and new populations.** For example, the organic food store and community space Keras Buti, located on the ground floor of the Chalmeta housing cooperative, is perceived by some as not providing for the needs of local neighbors.

> There are all sorts, but they don't seem to be people who are closely linked to the neighborhood. A cooperative has to be an engine for dynamism. If these people do not dynamize and do not integrate, they are not a driving force. So what's the point? As the blocks arrive, or more cooperatives, people from many countries are coming: how cool, but if they do not integrate, then what are they doing here? [Núria]

These concerns point to **broader anxieties that alternative housing models may inadvertently reproduce forms of social closure or symbolic distinction if neighborhood integration is not actively cultivated. Interviewees stress that legitimacy, in this context, is not derived solely from tenure form, but from ongoing engagement, accessibility, and responsiveness to local needs.**

Informational power asymmetries constitute another key dimension of perceived imbalance. Access to technical knowledge, planning documents, and institutional language is seen as exclusionary, privileging actors with professional expertise or sustained engagement capacity. Even within participatory settings, this contributes to perceptions that some stakeholders are structurally better positioned. Taken together, **civic perceptions of tensions and power**

dynamics emphasize that redevelopment in LMPV is understood as a negotiated terrain marked by unequal power relations and contested expectations.

8.1.4.8 Innovative governance mechanisms

Perceptions of innovative governance in LMPV focus on institutional arrangements designed to manage the social impacts of long-term, large-scale redevelopment. Interviewees most frequently reference the Pla de Barris framework—and specifically the designation of LMPV as a Pla Singular—as an attempt to adapt governance tools to the exceptional scale, duration, and complexity of the transformation underway.

Interviewees highlight the integration of social policies alongside physical redevelopment as an important, if uneven, innovation. Efforts to coordinate housing provision with employment programs, community activities, and social services are seen as attempts to mitigate disruption and support social cohesion during demographic change. However, several civic actors note that recent iterations of the Pla Singular allocate fewer resources to social and community initiatives than earlier phases, generating concern that governance innovation is increasingly weighted toward managing physical transformation rather than strengthening social infrastructure.

LMPV is perceived simultaneously as an object of governance and as a governing mechanism. The high proportion of social and subsidized housing is welcomed, with disputes centered on questions of prioritization and access. In this context, **the Tanteig i Retracte mechanism that has been applied in some cases in LMPV—in which public bodies have first refusal for any property being sold, including newly-built developments, to convert to protected housing—is viewed by planners and housing experts as a promising tool for expanding public housing stock. However, this tool and its potential benefits remains poorly understood among residents.**

Residents of La Marina observe that the neighborhood's rapid transformation—driven by a surge in private developments and rising property values—is reshaping both the social composition and access to public housing. One resident highlights the disparity:

> **No one wanted to come here, but now it is a very expensive area: there is a lot of private development and the people aren't from the neighborhood.** It will become a bedroom community…. **LMPV is not for us, it's for Barcelona to look good, and because it was the only place to build**. People here cannot afford 400,000 or 500,000 euro flats, or even the [subsidized units]. In the pre-school where I work, many children leave, their families can no longer keep their lives in Barcelona… They do the Parc de les Tretze Roses, the green, to sweeten the deal and we bought it. **In a 'neighborhood of neighborhoods', this will be the rich one, and if there are racialized people it's because they have gotten access to new public housing, which is like winning the Christmas lottery**. (Rita)

Municipal actors, however, frame their approach as a deliberate effort to **expand and integrate the existing neighborhoods of La Marina, and to find a balance between the provision of social housing without ghettoization or creating isolated bedroom communities, noting important changes over time**. A local politician from BComú explains:

> We started with a project that was, in [Mayor Xavier] Trias' time, a private luxury development facing the highway, like those being built on the outskirts of Madrid with gated communities accessed by car with a swimming pool, gym, and all private services. The approach [the District of Sants-Montjuïc under Comuns leadership] took was that it's *not* about building a new neighborhood, but expanding the existing neighborhood. **And that it wouldn't be good, given the stigma the neighborhood, to have 100% social housing—at least, that's what we thought at the time, now it might be debatable.** (Andreu)

Together, these perspectives underscore the **tensions between market-driven redevelopment, social inclusion and integration, and neighborhood identities**, **highlighting the governance challenges in attempting to orchestrate equitable urban transformation.**

8.1.4.9 Tourism and market pressures

Civic perceptions of tourism and market pressures in LMPV reflect an acute awareness of the neighborhood's changing position within the urban economy. Conventional mass tourism is not currently a feature in comparison to the central city, though La Marina houses many workers in tourism and related service economies. The upper part of LMPV is borders the convention center Fira, the main hub for business tourism straddling Barcelona and L'Hospitalet de Llobregat. The conference center is perceived to have a neutral to negative impact in the neigborhood—it may generate some extra business activity such as cafes, but at prices that are much higher than traditional establishishments in La Marina, while some argue that trade shows and convention center hotels become hotbeds of prostitution and public inebriation which have negative impacts on the surrounding area.

Interviewees describe LMPV as being at an **early stage of market transformation, in which pressures are monitored and anticipated rather than fully consolidated**. Several interviewees emphasize that the scale of housing production in LMPV generates speculative expectations among property owners and investors and question to what degree this can be mitigated by new social and subsidized housing. **Anticipated amenities, improved environmental quality, and future connectivity are perceived as driving investment well in advance of project completion, though the extent is largely unknown**.

> People, even if they are forty years old, cannot leave their parents' home because the prices are exorbitant. And young people don't have the downpayment to buy these flats. Neither the 'social', 200,000-something, which is not cheap either. [LMPV] will be a neighborhood where we will go for a walk and say 'look, the rich people', with their pools, with padel courts, another level. And the difference is noticeable. You go to the market and you start to see the type of population that already exists, mixed with those from the Cases Barates. (Rita)

Tourism is most often discussed indirectly, particularly through concerns about the expansion of medium-term and flexible rental formats, a dynamic at the tourism-housing nexus. Interviewees express apprehension that, as LMPV attracts more higher-income residents and international workers, regulatory gaps or weak enforcement will allow short-term or quasi-touristic rentals to proliferate. These concerns are framed through comparison with other parts of the city, where such dynamics have contributed to rapid rent inflation and displacement.

8.1.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Civic and institutional actors in LMPV share a broad acknowledgment that green transition and large-scale redevelopment are necessary, but they diverge significantly in how they interpret causes, responsibilities, and likely outcomes. These perceptual gaps are not framed as outright conflict, but as differences rooted in institutional position, temporal horizon, and lived experience (Villaró Rabadán, 2025).

Public officials and municipal technicians emphasize structural constraints and opportunities shaping the LMPV project, including legal frameworks, market conditions, intergovernmental competencies, and the technical complexity of coordinating housing, infrastructure, and environmental systems at scale. From this perspective, outcomes are shaped less by political choice than by feasibility, sequencing, and instruments, sometimes generating unfortunate but unavoidable externalities. Officials frame LMPV as a pre-emptive intervention within an anticipatory and redistributive approach designed to avoid the speculative dynamics observed in earlier projects such as 22@ in the District of Sant Martí. Reflecting on that earlier experience, the director of the Office of La Marina notes:

> "At that time [with 22@] we did not think 'damn, many foreigners are going to come here to work in these office buildings'. That's the reality. Does this produce gentrification? Surely… It happens in some areas but what is very important is the issue of protected housing." (Anna)

Civic actors, by contrast, interpret the same conditions as reflecting an underuse of institutional power. Acknowledging legal and economic constraints, interviewees question whether municipal authorities exhaust available tools to prioritize affordability, regulate market pressures, or strengthen guarantees for existing residents. This divergence is particularly evident in debates over what constitutes "affordable housing." Civic actors stress how the aggregation of different subsidy and public housing regimes under the banner of "50% protected housing" obscures meaningful differences in accessibility. **Privately promoted HPO units—typically priced around 25% below market value—are perceived as remaining out of reach for many La Marina residents**, particularly renters and lower-income households, driving skepticism about redistributive effects.

Mixed-tenure development further illustrates this perceptual gap. **Municipal actors emphasize spatial integration as a *corrective to segregation*, arguing that co-locating market-rate and subsidized units within the same buildings prevents stigmatization. Civic actors, however, focus on everyday inequalities that arise within these arrangements, including differentiated access to amenities, unequal community fees, and the social implications of "poor doors" as new forms of insidious *micro-segregation***, raising doubts about whether "social mix" translates into equity.

Temporal framing also differs markedly. **Public officials consistently situate LMPV within a long-term horizon, emphasizing that benefits related to facilities, connectivity, and environmental quality will materialize gradually. Civic actors tend to foreground short- and medium-term impacts, including delays in schools and healthcare provision, prolonged construction disruption, and fears that the symbolic prominence of the "new neighborhood" may overshadow unresolved deficits**.

Divergent interpretations emerge around the role of green transition itself. While public agencies frame green infrastructure and high-performance buildings as beneficial components of redevelopment, civic actors remain cautious about their revalorizing effects of a new, green development in a strained housing market. **Environmental improvement is therefore evaluated by civic actors less in technical terms or climate concerns than through its interaction with affordability, accessibility, and belonging.** These gaps reflect distinct but overlapping rationalities rather than irreconcilable positions. Institutional actors prioritize coherence, feasibility, and risk management at scale, while civic actors emphasize distributive outcomes, lived experience, and historical memory.

8.1.5 Civic Perceptions of Green Initiatives in Case Study Areas: Can Batlló

Figure 5 (placeholder): Can Batlló and Magòria labeled, red line is the boundaries of La Bordeta. Sections A, B, D, G, and F fall within the Can Batlló site.

8.1.5.1 Precedents and implementation

Civic perceptions of the redevelopment of Can Batlló factory site are inseparable from its status as a symbol of unfulfilled planning promises and contested urban transformation for more than half a century (LaCol, 2013). **Interviewees consistently situate the project within a historical arc beginning with neighborhood activism since the early 1970s**, influencing the the 1976 PGM, which designated the land for public facilities and green space, commitments that remained unrealized for decades. This delay is perceived as emblematic of a broader pattern, like in La Marina, where **working-class neighborhoods bore the costs of industrial decline and infrastructural fragmentation while receiving limited public investment.**

The period following the 1964 closure of the textile mill complex and its conversion into the alegal "City of Trades" is cited as a formative precedent, as well as the contested displacement of its tenants in preparation for redevelopment. This, followed by the paralysis induced by the 2008 financial crisis, reinforced **distrust toward speculative development led by the heirs to the Batlló industrial fortune and skepticism regarding the city's capacity, or willingness, to deliver promised public goods.** The site's prolonged enclosure, occupying nearly one-fifth of La Bordeta, is remembered as a physical and symbolic barrier, though many also had social links with workers that brought them into the private complex. In 2000, Can Batlló was treated not only as a public space and facilities problem but as "an antiquated and anachronistic obstacle that confines and prevents the reorganization of the streets of La Bordeta" (Vivanco, 2000: 222)

> With the real estate crash, no one would invest five cents in brick and mortar, and without bricks [construction], there are no green areas or anything else. "Yes, yes" [city representatives] said to us in 2009. So that we would leave, they told us, "look, by early 2011, the cranes and excavators will be working in Can Batlló." So we said, "okay, we'll even give you until spring 2011. If Can Batlló is not under construction and open to the neighborhood by then, the residents of Sants and La Bordeta will occupy it". Laughter, you see, because my comrades were grandparents, and we said we were going to occupy it. (Jaume)

The opening of the community-managed building Bloc 11 in 2011 is framed as a key turning point. Interviewees emphasize that the initial access granted to neighborhood groups was not the result of benevolent institutional planning, but of sustained mobilization and the credible threat of politicized squatting. This moment is described as a precedent-setting assertion of collective rights and a testament to the legitimacy of self-management practices (*autogestió*). Later governance struggles, though requiring more institutional collaboration with the Ajuntament, are seen as arising from this history of struggle. Can Batlló is described as a as a laboratory in grassroots urbanism and collaboration by

activists and architects, particularly through the architecture cooperative LaCol (see Aiguasol et al., 2021). **In order to complete formal agreements with the City Hall regarding the management of the spaces of the complex, activists formed a legal non-profit entity,** the Self-managed Community and Neighborhood Space [ECVA] of Can Batlló, in 2018.

> "Can Batlló" can refer to the whole space including the park and other spaces, but we are trying to distinguish ourselves as the *Self-managed Community and Neighborhood Space of Can Batlló*. It's hard because we keep just saying "Can Batlló", which is easier, but no, the part that we manage is the *ECVA* Can Batlló: we are somewhat responsible for the existence of everything else, but that's a heavy weight on our shoulders. several realities have coexisted in Can Batlló, , and the current reality is that the management of the playground, the park, all that depends directly on the City Hall. [Francisco]

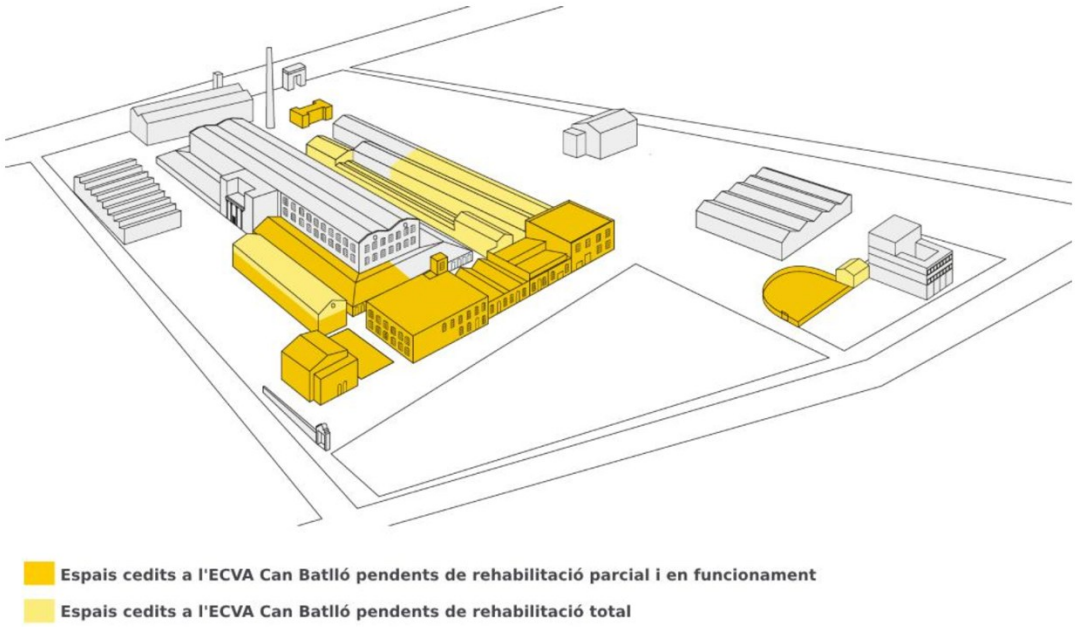

Figure 6: Map illustrating which spaces of the Can Batlló complex have been ceded to the ECVA, with those in use but needing partial rehabilitation in dark yellow, and those awaiting rehabilitation for use by the ECVA in light yellow. The remaining buildings in the image are/will be managed by various public bodies and/or cooperatives. Image source: ECVA (2024)

Over time, like in LMPV, the city shifted its discourse regarding the atrributes and the values of the park, explicitly framing it as part of Barcelona´s climate adaptation strategy (heat mitigation, drought resilience, etc.): this impacted not only policy language and stated goals,

but also integral elements of the design of the park itself, in which gardens became treated as amenities but also as core infrastructural features through the implementation of SUDS. It also gradually framed the park more as a reclaimed space for the entire city, not only La Bordeta. Meanwhile, arising from participatory planning exercises led by neighborhood activists and the architectural cooperative Lacol in 2017 and 2018 involving hundreds of residents, more emphasis was gradually placed on historical memory and industrial heritage in the park's design. Principally, this led to the maintenance of factory facades as enclosures for a sports area, the playground, and the new Bloc4 building, as well as the adaptive reuse of several buildings for public facilities.

Implementation of housing development, parks, and public facilitities is perceived as hybrid and uneven. **Interviewees recognize the gradual materialization of long-demanded public facilities, cooperative housing, and green space as significant achievements, while they stress that implementation has proceeded asymmetrically, with market-rate residential development advancing more rapidly than public facilities consolidated community uses.** This sequencing is interpreted as reflecting power imbalances between private capital and activist demands. There is also an acknowledgment that the park, perceived as a *city* project, was not a sufficient subject of involvement and oversight by the ECVA assembly.

Overall, perceptions of precedents and implementation frame the Can Batlló redevelopment as an **ongoing negotiation shaped by historical delay, collective action, and contested priorities, and the site is understood less as a finished project than as a terrain where past struggles continue to condition present expectations** regarding housing justice, governance, and the social meaning of green transition.

> They asked me on the news, "Do you like the park?" I said "Yes. Of course. Bear in mind that this used to be a factory. **When they tore it down, it was all ruins. Anything you put on top of it will look much better. The only thing is, this park was born 46 years too late"** [laughs]. Many of the residents who lived in buildings around the park sold them because there was going to be a big park here and, in the meantime, their children have grown up. My sons are 44 and 41 and now they are finally seeing it. The second phase is at a standstill and it has a problem—not so much financial—but because the second phase requires demolishing or repairing parts of buildings that are *ours*. (Jaume)

8.1.5.2 Participation and governance

Perceptions of participation and governance focus less on formal planning process and more on how decision-making, representation, and responsibility have been restructured over time and the importance of neighbhood self-management. Interviewees describe governance in Can Batlló as an evolving arrangement, shaped by the **tension between radical self-management practices and gradual institutional formalization.**

> Our point of view we very much about trying to take advantage of the impasse of the crisis, of the restructuring of capital, to generate other ways to do urbanism, other ways of building a city, other ways of building another a neighborhood otherwise, with relationships that could capitalism, patriarchy, fascism, etc. [Enric]

The 2024 Annual Report of the ECVA Can Batlló reflects these tensions, emphasizing the challenges of and semi-institutionalized *autogestió,* but also the legacy of social struggle that led to legal agreements around management of collectively-run spaces during the Colau administration.

> We cannot forget that before being a legally constituted association, Can Batlló was a neighborhood and social movement with more than thirty years of history and constant struggle. A collective effort that has demonstrated that the management of material, human, symbolic resources, etc. does not have to be the exclusive work of State institutions or private companies, but can be a task that organized society can carry out in an effective and sustainable way. [ECVA 2024, p. 5, translation the authors']

Interviews concur with academic and policy literature identifying Can Batlló as an **innovative social laboratory, particularly in relation to community self-management, cooperative housing, and hybrid arrangements between public institutions and civic organizations**. Such literature, much written by local action-researchers, explore Can Batlló in relation to new models of **governance against, and with, the state** (Dalmau i Torvà, 2014; De La Peña, 2020; Martí-Costa and Dalmau i Torvà, n.d.), as a **paradigm-changing model of public-commons partnership** under the municipalist BComú party (Bianchi, 2025). Within the project, **the La Borda housing cooperative—emerging from these movements and constructed on the Can Batlló site as a pioneering right-of-use development in collaboration with the Ajuntament—is an internationally recognized and award-winning testing**

ground for cooperative cohousing (Cabré and Andrés, 2018; Costa Gómez and Garcia i Mateu, 2015; Del Río, 2025) and is highlighted in international discussions on socio-ecologically responsible housing (Hill and Mazzucato, 2025; Pareja-Eastaway, 2025).

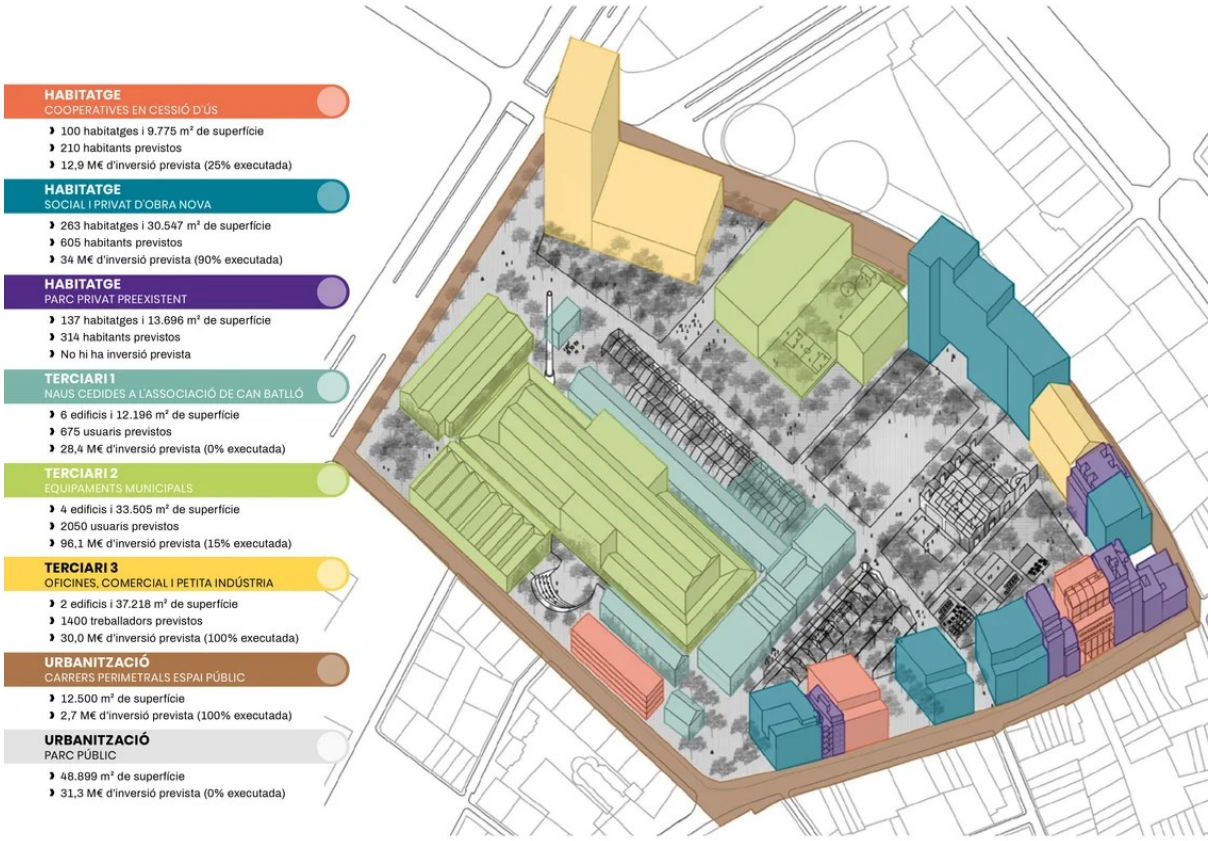

Figure 7: Can Batlló as conceived in the year 2021 in the Lab Batlló project, led by the La Col architectural cooperative. The area in grey constitutes Can Batlló Park https://lacol.coop/es/projectes/labbatll%C3%B3/

Participation is understood as central to the legitimacy of Can Batlló, but place-based activists emphasize that the form and effectiveness of participation have changed significantly across phases. The assemblies and working groups that emerged during the early phases of civic activism continue to play a central role, but interviewees note that their **capacity to influence outcomes has become more uneven as governance and large-scale redevelopment have become more complex and institutionalized. Decision-making is described as dispersed across multiple institutional arenas, including district administrations, technical departments, and project-specific processes, rather than concentrated within neighborhood assemblies exclusively.** The redevelopment is also evolving in terms of partnerships and actors involved:

> The first year of the agreement went well for us because it was hard fought until one person, a neighbor new to Sants, who was working with [BComú] in participation, came up with the idea of saying, "**if we do everything in Barcelona by public-private partnerships, why not a public-community partnership**?" The concept of 'community' that is going to be implemented by the Comuns is good, we come from more or less the same ideology, but there isn't a very clear definition of community. (Jaume)

A key procedural concern relates to the bureaucratization of governance and the city's technocratic approach. Like in La Marina, **interviewees highlight that engagement requires familiarity with planning documentation, regulatory frameworks, budgeting processes, and administrative timelines. This shift is perceived as raising the threshold for meaningful participation and contributing to a concentration of influence** among a smaller number of highly committed, technically knowledgeable actors. As a result, broader civic involvement is difficult to sustain.

On the other hand, a*utogestió* is perceived as rewarding but internally demanding for the ECVA and other civic organizations practicing functioning as assemblies. Ongoing challenges around representation, accountability, and organizational fatigue emerge within the main associations involved in Can Batlló, the ECVA and the older, umbrella neighborhood organization the Centre Social de Sants. **Assemblies remain central sources of neighborhood legitimacy but are described as time-intensive, difficult to maintain at scale, and exclusionary to vulnerable people, parents, and non-Catalan speakers**, as the range of issues under discussion expands beyond immediate mobilization to include long-term management and compliance.

Another central issue in civic perceptions of procedural justice concerns the differentiation of governance responsibilities across the site. Interviewees emphasize **that the park, public spaces, and certain facilities are managed by municipal authorities, while other buildings and activities remain under community stewardship. This division generates ambiguity and tensions for users and for civic actors, regarding who is responsible for maintenance, decision-making, and accountability in a "peoples' park".** The ECVA seeks to balance perceived community ownership of the whole site while acknowledging its limited capacities. Such ambiguity is perceived as problematic as the site becomes more visible and attracts users beyond Sants: Bloc11 is a city-wide hub for cultural and activist events around anti-capitalist, feminist, queer, anti-racist themes broadly construed as "alternative" and "anti-repression", increasing Can Batlló's visibility beyond the presence of a new park.

> Many people in the [ECVA] were involved with the monitoring and follow-up [of the park]. When the first sessions were held when it was going to be built, there were participatory sessions, some were held here in our auditorium. But from then on, I don't think many people got involved in the process. Some associations did from other spaces, because the City Council was holding sessions, so then it was like "well, it seems we fell asleep". Maybe if we had been more attentive we could have had more influence. The assemblies were saying '*they* are doing this' and nobody bothered to go to those meetings to follow up. You know, people have enough meetings and the design aspects were a little bit hard to understand. [Francisco]

Neighborhood activists are divided on whether public sector involvement as inherently negative, creating rifts in *autogestió* and anarchist praxis. It is acknowledged that there has been in-kind support from the City Hall for community-run spaces from the beginning, whether not this is considered to compromise the social project. Interviewees acknowledge formal agreements, legal recognition through the Patrimoni Ciutadà framework, and public investment have been essential to securing long-term stability of the activist project. Current **procedural tensions are described as arising from the challenge of preserving *autogestió* and influence in negotiations within institutionalized governance frameworks, rather than from opposition to public authority per se.** Still, **the negotiation-driven relationship between the ECVA and the city is perceived by some as eroding popular power through cooptation**.

Civic perceptions of participation and governance in Can Batlló highlight a procedural context and agonistic approach alternating contestation, negotiation, adaptation, and constraint. **Participation is experienced not as a fixed set of mechanisms, but as a shifting practice whose effectiveness depends on time, capacity, and the ability to navigate institutional complexity.**

8.1.5.3 Concerns over unequal distribution of benefits

Perceptions of distributional equity center on how material benefits and burdens of redevelopment are distributed across social groups, housing tenures, and surrounding neighborhoods. Interviewees frame distributional questions in terms of housing outcomes,

> Here in Sants we have been seeing a process of gentrification for several years, because expats are arriving, people with higher purchasing power, and what we are finding is that residents do not have their contracts renewed and leave, while a few—for the magnitude of what is happening—stand up and come to the Sants Housing Group assembly. We have work to do, **around Sants there is a lot of construction and renovation, which means that neighbors have already left**. (Mar)

access to public space and facilities, and the symbolic value generated by the transformation of the former industrial site in the wider area.

The previous quote emphasizes that the sacks of construction waste left in the streets of La Bordeta are perceived as symbolically synonomous with displacement—though an aging population suggests these may simply be signs of residential succession, activists point to regular intimidation of tenants to leave their homes to allow for renovation aimed at newcomers.

In both renovations and new construction, housing is the clearest distributional concern. **The creation of a new model of right-of-use cooperative housing is widely regarded as a landmark achievement and directly emerging from neighborhood struggles at Can Batlló and impacting innovative housing policies throughout Catalonia (and, to an extent, Spain), while interviewees emphasize that its scale remains limited relative, since no further cooperative project has emerged or been supported.** Cooperative housing is described as deeply democratic and participatory, accessible primarily to households with sufficient organizational capacity, time, and economic stability to navigate complex and laborious processes. **Even as cooperatives are celebrated as key decommodified alternatives, they are not perceived as a scalable solution for addressing housing needs among the most precarious residents of La Bordeta and surrounding neighborhoods without additional subsidies**, and cooperativists emphasize that such a strategy does not replace the necessity for conventional public housing and protections against renovictions, and that cooperatives may symbolically attract gentrifiers, even those with good intentions and desire to be civically involved.

> I'm in a housing cooperative that we are constructing here. **I am very critical within the cooperative movement of Sants because, unfortunately, the cooperativism being practiced has been successful because it has been popular among the progressive petty bourgeoisie. It is not really a cooperativism helping the working classes.** It has been very hard for me to stay involved because everything is about money. Linking that with the gentrification processes, I think that it plays a part even if you don't want it to. **Proposals that are supposed to fight gentrification attract attention from capital. In the end you are beckoning a middle class that feels comfortable in comfortable alternative spaces, like living in your own little utopia**. [Francisco]

Notwithstanding these self-critiques of cooperativists, **market-rate housing developed adjacent to the Can Batlló site are perceived as the primary driver of distributional imbalance.** Interviewees link the construction of new, energy-efficient residential towers and gated rental complexes around the site's perimeters to rising rents in La Bordeta. Like in La Marina, this **new housing is perceived to be predominantly targeted toward comparatively wealthy international newcomers, reinforcing a perception that the material gains of redevelopment are unevenly distributed.**

Distributional concerns extend to public space. **The Parc de Can Batlló is widely celebrated as a long-awaited "green lung". It is a highly valued and intensively used space, with especially notable use by children and elderly people during daytime hours and socializing, predominantly among people with migrant backgrounds, at night.** However, interviewees note that its benefits are not evenly experienced. **Longstanding residents describe bearing the costs of delays, prolonged construction noise, dust, and disrupted mobility, along with long delays caused by excavations for NBS infrastructure** that uncovered archaeological remains, causing further delays. This temporal asymmetry, like in La Marina, is a recurring theme in civic accounts of injustice.**The park is perceived to attract new users from beyond the neighborhood during the day—a dynamic whose benefit is a matter of disagreement—and have problems with noise and antisocial behavior at night.** Though not highly supported, **a proposal was put forward in the Dicidim participatory budgeting process in 2025 to gate off the park at night**, **with fears that this is a more likely outcome as buildings under construction further limit the site's permeability.**

Interviewees emphasize symbolic dimensions of distribution. **The transformation of Can Batlló increased the visibility and prestige of Sants-La Bordeta, a recognition is perceived as troublesome, in that it responds to decades of neglect while it contributes to revalorization processes placing pressure on existing residents, particularly renters. Environmental improvements are thus understood as producing both collective goods and stimulating exclusionary effects.**

Civic actors highlight that community-managed spaces rely heavily on unpaid labor and sustained volunteer engagement, creating uneven burdens within the ECVA itself. **Those most involved in self-management shoulder disproportionate responsibility for maintaining spaces that increasingly serve a broader public, while the city is perceived as neglecting its responsibilities for the continued physical transformation of the site, which had been framed in agreements as an acknowledgement of the public benefits such volunteerism offers to the city.**

Many stress that, **while Can Batlló represents an exceptional case of civic influence and long-expected improvement, it still operates within a housing market and broader neighborhood context characterized by intense speculative pressure and limited public capacity to counteract rising land values**. From this perspective, distributional inequalities are not attributed solely to local governance choices, but to structural constraints that limit the redistributive reach of redevelopment projects.

Civic perceptions of distributional equity in Can Batlló reflect a nuanced assessment in which **achievements in decommodification and public space coexist with persistent concerns about scale, accessibility, and indirect displacement**. While the site is widely recognized as an alternative to purely market-led redevelopment, interviewees remain attentive to how its benefits are socially differentiated and to the limits of local innovation in the face of broader housing market dynamics.

8.1.5.4 Political mobilization

Civic perceptions of political mobilization in Can Batlló are inseparable from the site's long history of collective action and its symbolic status within Barcelona's urban social movements. **Interviewees consistently describe mobilization not as a reactive response to redevelopment, but as the constitutive force that enabled the transformation of the site in the first place**. From this perspective, **Can Batlló is widely understood as a "won space" with a strong sense of community ownership, whose current configuration is the outcome of sustained neighborhood pressure rather than institutional initiative.**

Interviewees emphasize that contemporary activism builds on decades of labor, neighborhood, and housing struggles in La Bordeta and Sants, with Can Batlló representing the crystallization of these trajectories. This history continues to shape expectations regarding the legitimacy of confrontation, negotiation, and direct action as political tools.

> In Sants we had a Neighborhood Assembly that was not legalized. **Our activity was to always be within the law, but with one foot in *alegality*, to force situations.** We organized street parties so the "knock knock Can Batlló" campaign spread like wildfire. Someone from the State Attorney's Office representing the [landowners] took out the map of Can Batlló and made us a proposal: the property would become city-owned and the City Hall would give access to the residents. There were 250 of us by then, so we brought it to the assembly the next day. **We discussed it and decided to accept [the city and landowners' proposal], but as a *Trojan horse*. (Jaume)**

Political mobilization is also shaped by the growing institutionalization of Can Batlló. **Formal agreements, legal recognition through the Patrimoni Ciutadà framework, and ongoing negotiations with municipal authorities are seen as both gains and constraints. While these arrangements provide stability and protect community uses from eviction or reversal, they are also perceived as channeling mobilization into bureaucratic processes that can dilute oppositional capacity**. Some interviewees describe this dynamic as a **tension between maintaining insurgent potential, keeping pressure on the city and maintaining a sense of institutional legitimacy, and managing the responsibilities of long-term stewardship**.

This dynamic could be found in the increasing accommodation of activists' demands under the Colau administration, which was perceived as widely sympathetic but an institutionalizing force. A long-term neighborhood activist sheds light on the complicated balance between oppositional neighborhood politics and institutional legitimization:

> The PSUC [Catalan Communist Party] was influential [in the 1970s], but little by little, people drifted away when they entered the Transition. Many switched to the PSC. People in the PSUC said “comrades, now there's no point in you being in the neighborhood association, the good guys are in the government” [laughs]. That was a mistake. And when Ada Colau came to tell us that she was running for mayor, I remember saying "You're free to do what you want, it's great, but bear in mind that if you become mayor, you'll have power and we'll be in the street. And if you do something right, great. But if something goes wrong, we'll be the first to say so.” (Jaume)

Despite these challenges, interviewees consistently emphasize that mobilization remains central to shaping outcomes. **Past successes—such as securing community management, influencing the allocation of space, and advancing cooperative housing—are cited as evidence that collective action retains leverage, even within constrained institutional contexts**. Mobilization is thus understood as an ongoing practice rather than a completed chapter, requiring continual recalibration in response to changing political, legal, and spatial conditions.

8.1.5.5 Positive socio-ecological impacts

Civic perceptions of positive socio-ecological impacts in Can Batlló are closely tied to the transformation of a long-inaccessible industrial site into a multifunctional public space combining green infrastructure and community facilities. **Interviewees frame these impacts not as isolated environmental improvements, but as the materialization of long-standing neighborhood claims to collective well-being.**

The creation of the Parc de Can Batlló is widely perceived as a major environmental gain for La Bordeta and surrounding neighborhoods, given historical deficits in green space and public amenities. Interviewees emphasize improvements in thermal comfort, air quality, and everyday usability, especially during heatwaves. The presence of trees, shaded areas, permeable surfaces, and water-sensitive design elements is described as significantly enhancing the habitability of the area, both for nearby residents and for users from other parts of the city.

The most celebrated element of the park is likely the first part that opened, the large playground built within the shell of factory walls along Carrer de Constitució.

When they opened this playground—it's been open for a year now—I really liked it. And the thing is, since they opened it, it's been packed every day. At the end of the school year, entire schools come here. **When we had small children, we sometimes had to go all the way to Sant Andreu.** (Jaume)

Positive socio-ecological impacts are also associated with the environmentally sensitive adaptive reuse of industrial buildings for community facilities, cultural activities, and social infrastructure. Interviewees stress that these uses contribute to a form of environmental regeneration that preserves industrial heritage while reducing resource consumption through rehabilitation rather than demolition. **This approach is perceived as aligning ecological objectives with collective memory and neighborhood identity, reinforcing a sense of continuity rather than rupture.**

Housing-related environmental improvements are highlighted in relation to energy-efificient cooperative cohousing housing projects developed on the site's perimeter. **Interviewees point to improved energy performance, reduced energy poverty, and collective approaches to sustainability as concrete benefits that distinguish these projects from conventional market-led development. In this sense, socio-ecological impacts are understood not only in spatial terms, but also through everyday practices of collective living and resource sharing.**

Recognition emerges as a key dimension of perceived positive impact. Interviewees frequently frame greening and environmental investment at Can Batlló as a form of symbolic reparation for decades of neglect. Like in La Marina, the visibility of public investment and the quality of design are interpreted as signals that La Bordeta is no longer treated as a marginal or disposable space within the city. This sense of recognition is often contrasted with earlier periods in which environmental burdens were concentrated in the area without corresponding benefits.

At the same time, interviewees emphasize that **these positive impacts are inseparable from the role of civic mobilization. Environmental improvements are not perceived as gifts from the municipality, but as outcomes secured through sustained collective action.** This framing reinforces the view that socio-ecological benefits are contingent and politically produced, rather than automatic consequences of redevelopment.

Spaces like the Parc de Can Batlló are very necessary. When I see the Moroccan mothers behind La Borda with their kids, of course they're here because they must live in tiny apartments which are hot as hell now, they need this space to live better. **I think that the fact that this space has been made in this way improves the lives of many people who live in a very dense and confined way. A lot of the apartments in Sants are quite terrible, with rooms without ventilhation. I think it is a neighborhood that needs these escape valves for people to live.** (Jaume)

This view is complemented by reflections on the integration of green spaces with urban infrastructure, despite challenges associated with revalorization and reported nuisances associated with the new park:

> Of course green spaces generate revalorization. In the same way that if you have a place with good access to transportation. If you´re on top of the metro tunnel, no, because it will shake you (laughs). Same with parks. In other words, **there are values that you have in a place and they have their advantages and disadvantages. It's both, but it doesn't have to be counterproductive, green spaces and pacification are now essential in cities.** (Martí)

Overall, civic perceptions of positive socio-ecological impacts in Can Batlló highlight the potential for green transition interventions to contribute meaningfully to environmental quality, social use, and neighborhood recognition when they are embedded in collective governance and oriented toward everyday needs. These positive assessments coexist, however, with concerns about uneven access, housing pressure, and long-term sustainability.

8.1.5.6 Negative socio-ecological impacts

Civic perceptions of Can Batlló also—albeit carefully—articulate a set of negative or ambivalent impacts linked to housing pressure, uneven accessibility, and the unintended consequences of increased visibility and attractiveness. **These critiques do not reject the ecological transformation of the site, but question how its benefits are distributed and sustained in a context of market pressure and institutional constraint**.

A central concern relates to the relationship between environmental improvement and rising housing costs in the surrounding areas—not only on the direct perimeter of Can Batlló, but in La Bordeta, Hostafrancs, and Sants. **Interviewees consistently associate the opening of green spaces, public facilities, and rehabilitated buildings with processes of revalorization extending beyond the site and green gentrification—whether or not framed as such—is a phenomenon that residents have become acutely aware**. The park and public amenities are celebrated but are also perceived as contributing—symbolically and materially—to the repositioning of La Bordeta within the housing market. **This dynamic is framed as particularly problematic given the limited pace and volume of decommodified housing delivery relative to market-rate construction in the vicinity.**

Several interviewees point to a perceived mismatch between environmental investment and housing protection. **While Can Batlló is often presented as an exemplar of socially oriented redevelopment, civic actors emphasize that ecological improvements risk benefiting higher-income newcomers disproportionately if not accompanied by stronger safeguards for tenants in the existing housing stock**, itself a theme going well

beyond the planning of the site to city, regional, and national policy. In this sense, **green transition interventions are understood as potentially amplifying exclusionary dynamics when embedded in a broader context of rent increases, speculative demand, and weak tenant security**.

> **It is really painful**, you know, as we've lived here in the neighborhood for several years. **If they had asked me back in 2018, whether Can Batlló was going to become the number one selling point by real estate agents when they show you around, I would have laughed. But unfortunately, that's what it's become.** I bought an apartment with my [lesbian partner] last year, we didn't want to leave the neighborhood. We started the apartment hunt around two and a half years ago. It was during the process of the big renovations. **It was the number one thing that *every* real estate agent would ask us, "do you know about Can Batlló"? It's not even *one* of the selling points, it's *the* selling point.** (Mireia)

Concerns are also raised about uneven accessibility and use of green space. As Can Batlló has become a destination for visitors from across the city, **interviewees describe tensions between its function as, at once, a neighborhood, citywide, and metropolitan resource. Increased footfall is associated with pressure on facilities, noise, and maintenance demands, raising questions about who the park is primarily for and who bears the costs of its success.**

Key critiques of the park itself is that it has more and wider paths than desired (leading dangerous situations between cyclists and electric scooter riders taking shortcuts through the site as well as service vehicles), that there are no areas where it is permitted to sit on or engage directly with plantlife (the central lawn was fenced off after the park's inauguration in November 2024 and has remained inexplicably closed as of February 2026), and that the "canal" integrated into the design—a historical reference to the Canal de la Infanta that passed through the area—is diminutive and lacking planned water features. **With gardens (sometimes referred to as part of an 'urban forest') fenced off to protect their infrastructural role as SUDS rain gardens, there is a common sentiment of a "look but don't touch" approach to urban nature.**

From an ecological perspective, interviewees note concerns related to maintenance and long-term stewardship of the park. **While the design of the park and rehabilitated spaces is cautiously praised by some, doubts are expressed about the municipality's capacity to maintain standards over time and complete pledged works, given fiscal constraints and competing priorities.** At the same time, **there is widespread critique of increased policing and signs threatening high fines for "uncivic behavior" such as walking on plantings**, associated with the city's "Plan Endreça", which seeks to address civility and tidyness but is wrapped in punitive logic and regular sweeps of cleaning crews and police officers to break down settlements of unhoused people. Such questions of civility and secutiry are viewed

ambivalently, with a correspinding perspective that, where maintenance lags, environmental benefits are perceived as fragile and undermine trust in public institutions.

Civic perceptions of negative socio-ecological impacts in Can Batlló highlight the conditional nature of environmental gains in a commodified housing context. **While green transition interventions have delivered tangible improvements, their capacity to contribute to long-term environmental and housing justice remains contested, hinging on governance choices, housing policy alignment, and the ability to prevent ecological benefits from becoming drivers of exclusion** in a context of limited protected housing and gentrification.

8.1.5.7 Tensions and power dynamics between stakeholders/actors

Civic perceptions of the transformation of the Can Batlló site are marked by shifting power relations between neighborhood organizations, municipal institutions, developers, and cooperative housing actors. Interviewees describe it as **a space where power is neither centralized nor stable, but continuously renegotiated through conflict, compromise, institutionalization, and resistance.** These dynamics are understood as intrinsic to the project's hybrid nature.

> **When Can Batlló was legalized, we began to suffer the *bullshit of legality*, with all of these so-called 'technical' tools that are political, but they call 'technical' to subvert things.** [Enric]'

A recurring tension concerns power dynamics between local activists' moral and symbolic legitimacy—derived from decades of mobilization—and the formal and growing authority held by municipal institutions and private actors. While neighborhood organizations are recognized as the driving force behind the opening and early transformation of Can Batlló, **interviewees stress that decision-making power has shifted toward technicians, legal frameworks, and contractual arrangements**. This shift is perceived as narrowing the space for *autogestió*, especially under the current PSC (socialist) administration. However, **the creep of institutionalization is typically, and ambivalently, associated with the former Colau administration**.

With [BComú] they started to say “well, it may be an alternative space, but we still have to redirect it so it meets regulations.” With the current government the same thing is happening. As the rehabilitation of the park progresses, the control will be stricter. We are starting to have problems with uses and schedules, paperwork, everything, and when they make the second part of the park everything will change.… Certain uses, especially outdoors, will change. **Many of the activities that [the ECVA] does in the open air will be harder, you’ll need to process permits. It's complicated because the City Hall’s argument is “well, it’s a park!”. It's complicated because, underneath it all, we *fought* to have a park** [laughs]!’. [Francisco]

Relations between the ECVA and the municipality are described as both cooperative and conflictual. **Civic actors acknowledge that without public ownership and investment, Can Batlló may not have survived speculative redevelopment. At the same time, institutional actors are perceived as prioritizing risk management, legal certainty, and administrative order over the more experimental and political dimensions of community self-management**, including the public and green areas. This generates friction around programming, access, security, and the limits of acceptable uses within publicly owned space.

At points in the creation of he park, **frustrations arose among longstanding activists that newcomer “gentrifiers” were derailing the work they had done to create a new park with a vision represented expressed community needs, accusing newcomers as seeking a more manicured, quiet, and contemplative green space rather than a multifunctional social space with ecological elements**.

I remember the third or fourth meeting of the participatory process for the park, when suddenly 30 residents from the new “Transatlántico” building showed up, and then I realized ‘uh oh, this is gentrification’. They started to question the whole idea of the park that we were building, saying, ‘No! But you're going to have barbecues. And what about the dogs here?', starting a whole conflict, boycotting the entire meeting. **We were the same people as always, and suddenly there were 30 new neighbors, 'damn it!'…. When I say "us," I mean the whole neighborhood. People criticize me for that, they say ‘and who are *you all*?’ Well, the people who have been here for 30 years, working our fingers to the bone!** The park, as it’s built, is a bit of blackmail—you **choose planned degradation or gentrification. It's a park, and that's much better than a wasteland, but is it what we wanted to build? No, not at all.** [Enric]

Finally, **market actors are perceived as structurally powerful even when their influence is not visibly present. Developers operating on adjacent plots are understood as**

shaping land values, expectations, and housing affordability beyond the boundaries of Can Batlló. Activists and architects working with the ECVA stress that their capacity to influence broader dynamics remains limited, reinforcing a sense that gains achieved within the site coexist with ongoing vulnerability in the surrounding housing market. A resident of La Borda who works for the Lacol architecture coop and was involved with the ECVA argues, in relation to the payment from developers to the city in the development permitting process, that:

> **The system in Spain is very perverse—and this is part of why housing is expensive—because *housing pays for everything else*. It's not taxes that pay for the park.** Land acquisition is paid for by housing development, and these are unequal negotiations, because **landowners that have a lot of power and the best lawyers. The law is made to protect them more than the general interest. In theory, the City Council can force the private [party] to act according to the general interest, but [the city's] excuse for not questioning the [park] design too much was a deadline; if it wasn't done before a set date, they'd lose the money that the private party had to contribute.** (Jaume)

Such a perspective is echoed from the perspective of a retired city official charged with the oversight of the project:

> The Muñoz Ramonet family [owners of Can Batlló land] had to contribute an urban development fee of around 10 million Euros, making a significant investment in clearing the entire Can Batlló complex and the activities going on there, sometimes in a mafia style. **The urban development fee [they paid] somehow fulfilled their obligations as owners to complete the final urban development of the new streets, so it was not a speculative operation without any counterpoints.** The City Hall knew that what was going to happen. It was made possible because we had done the dirty work, clearing the Camí de la Cadena [shanty town]…. **I would like the administration´s urban development operations to be 100% clean, but we started from a notorious inability to carry out operations of this type, and it was necessary for the private sector to also be involved…. I think it was smart, in this sense, for [the City Hall] to *sell its soul to the devil*, if only in part, to get the best result.** I do not know if it is unjust. (Ignasi)

8.1.5.8 Innovative governance mechanisms

Civic perceptions of innovative governance in Can Batlló center on its role as an experimental assemblage of public, communal, and cooperative arrangements rather than on the introduction of entirely new institutional forms, in contrast to municipal emphasis on the creation of innovative legal mechanisms and land exchanges**.** Interviewees frame governance innovation as cumulative and negotiated, emerging from long-term struggle and iterative adaptation.

> **We had so much power in the neighborhood, so much legitimacy, that we were able to do almost whatever we wanted**. *Almost*, right? Because **we didn't prevent the 1,500 [market-price] apartments from being built, but we did tell the City Council, 'we want this here, we want this there', and this is the result of accumulated power, this ability to combine repertoires of protest and actions that are different and differential, but complementary.** When CiU [right wing independent party in power until 2016] were in power some people made arguments like "[The ECVA] is doing the neoliberal City Council's work for them." No! **We self-manage the territorial needs of the people who live here, which is to have a green area with facilities. Period**. That's when, curiously, BComú [2016-2023] arrives, as an expression of a whole series of discontentment, and these formulas crystallized policies unlike other cities—there's more plurality, but a lot of us viewed it with suspicion, we know how administrations work. [Enric]

The most frequently mentioned governance innovation involving the state was the recognition of community self-management through agreements between the municipality and activists via the Patrimoni Ciutadà framework. This mechanism is perceived as a crucial safeguard, enabling civic actors to maintain a degree of autonomy while securing legal recognition, public ownership, and protection. Interviewees emphasize that such arrangements represented a departure from earlier precarious occupations, translating insurgent practices into stabilized, though constrained, institutional forms.

> With the presence of a quote-unquote "friendly" city hall something very important was achieved, the Patrimoni Ciudadà agreement that legally protected the experience, but it was becoming clear that the legal system always lags behind transformative practice. It can perhaps maintain the legality of the space, but I don't know if it can maintain this transformative and mobilizing force…. (Enric)

Innovation is also associated with hybrid governance within Can Batlló, combining municipally managed spaces—such as the park and certain facilities—with areas under community stewardship, including cultural, social, and productive spaces coordinated by ECVA commissions. Interviewees describe this hybridity as both enabling and limiting, allowing for

differentiated management models tailored to specific uses while generating ambiguity regarding responsibilities, decision-making authority, and long-term accountability.

Cooperative housing through right-of-use arrangements is framed as another governance innovation, pioneered by La Borda's cooperative model of collective ownership, codesign, and non-speculative tenure and subsequent replication on other sites at Can Batlló. **Neighborhood activists describe cooperatives as extending the governance ethos of *autogestió* from politicized squatting into the formal residential realm, embedding housing within broader logics of commoning. At the same time, interviewees caution that cooperative cohousing requires significant institutional support, technical expertise, and financial capacity, raising concerns about accessibility beyond politically mobilized groups.** It is widely questioned whether the current Mayor Collboni (2023-) socialist administration seeks to continue this third-way approach, which is associated with Colau and BComú.

> The issue of cooperatives continues by inertia, but not with the same enthusiasm or desire. With self-management, or everything related to the cultural and the social, there has been a deeper change. The [BComú] government had given value to these things, and **the current government gives more value to everything that comes from the business world and the cultural industries. 'It's okay that it's self-managed, but we want this to make money and generate jobs'**. (Jaume)

Interviewees highlight that **governance innovation lies less in formal structures than in process: counter-planning, prolonged negotiation, conflict resolution, and adaptability. This includes mechanisms for dispute mediation, rotating responsibilities, and continuous revision of internal norms**. Such practices are valued for sustaining legitimacy and responsiveness, but also labor-intensive and vulnerable to burnout. **Rather than offering a replicable blueprint, the case of the ECVA Can Batlló and its relation with the Ajuntament demonstrates both the possibilities and limits of embedding commons-oriented governance within a public, property-based urban system. Innovation, in this sense, is relational and contingent, shaped by context, power asymmetries, and the capacity to sustain collective action over time.**

8.1.5.9 Tourism and market pressures

Perceptions of tourism and market pressures in Can Batlló are articulated less in relation to mass tourism—which has more impact than in La Marina but considerably less than in more central areas—than to broader processes of real-estate revalorization, symbolic upgrading, and transnational demand affecting the surrounding neighborhoods. Interviewees stress that while Can Batlló itself is not experienced as a tourist enclave, its transformation contributes to market dynamics reshaping housing affordability and neighborhood composition. Interviewees

report that **the cooperative housing model cannot and does not play a crucial role in providing or guaranteeing large-scale affordability**:

> When I came here 12 or 13 years ago [from Mexico] this neighborhood was much cheaper. I am not sure that housing cooperatives are managing to stop that. On the contrary **we are collaborating, in the sense that housing cooperatives are being built on public land. I think there is a dilemma of whether it would have been better to build public housing instead. Cooperative housing, although not speculative, privatizes the public in a way. The biggest contribution that this middle-class cooperative housing movement could make would be not so much to fight *for* the public sector as to fight *against* the private sector.** [Francisco]

Interviewees frequently see the site's growing visibility—through alternative cultural programming, urban design recognition, and the new park—as coinciding rising interest from higher-income international residents seeking "authenticity" and "diversity" and investors and a romanticization of neighborhood traditions of solidarity, a dynamic seen with some irony. However, this is contrasted with a general perception that those living in new, exclusive housing directly bordering the park do not use the space intensively.

There is, indeed, a niche form of tourism that has been observed to be increasing around the anti-authoritarian, utopian aura of Can Batlló:

> Capital has the capacity to convert your good intention into something beneficial for itself. And that is happening. Can Batlló, in the end, attracts a lot of attention. There are even people that offer tours: "we are not going to take you to the *conventional* Barcelona, we are going to take you to the *alternative* Barcelona" [Francisco]

Like in La Marina, discussions around presumably wealthier newcomers are often reduced to elements of xenophobia, and potentially enthonationalism, despite being dominated by the political left. In some activist circles associated with Can Batlló, emphasis has been placed on the physiognomy of the new residents, presenting "vulture funds" [international private equity firms] and "expats" as dual foreign threats representing the same dynamic, a perspective reflected in one of the few journalistic inquiries into the new BCorp development (Cobo, 2023) and a subsequent neighborhood assembly on the subject. Notwithstanding concerns about reductive narratives of transnational gentrification, **the arrival of higher-income, internationally mobile residents—somewhere between tourists and residents—clearly coincides with upward pressure on rents and accelerating competition for housing in La Bordeta and nearby neighborhoods.**

Tourism, enters narratives around housing primarily through concern about secondary effects rather than direct presence, which has increased since Covid but remains less noticeable than in the central city. **Monthly rentals, flexible housing formats, new co-living developments with private co-working spaces and private student housing, and the broader financialization of housing are viewed as mechanisms through which touristification logics affect La Bordeta**. **Enforcement of short-term rental regulations (less than one month) is perceived as relatively strong, but interviewees express concern that regulatory slippage and seasonal rental loopholes (1-11 months) diminish housing accessibilty for locals and those seeking to put roots.**

Market pressure is thus framed as spatially uneven and relational. Local activists strongly emphasize that **displacement pressures materialize not within Can Batlló's self-managed or cooperative spaces, but in the surrounding private rental market, where long-term residents face rent increases, non-renewals, and exclusionary displacement. Like in LMPV, these pressures as intensified by the arrival of higher-income households, including internationally mobile professionals, whose housing choices are perceived as reshaping rental prices in historically working-class areas and diluting community cohesion.**

Local activists largely reject narratives that frame Can Batlló's transformation into a community-run social center and park itself as the cause of market pressure. **Instead, they situate rising rents within processes of speculative urbanism, financialization, and uneven development, with Can Batlló nevertheless entangled and employed in these dynamics**. **Local civic perceptions frame tourism and market pressures as diffuse, anticipatory, and structurally driven rather than site-specific, with Can Batlló seen as simultaneously a partial buffer against, and a symbolic catalyst for, revalorization processes.**

> La Bordeta is one of the neighborhoods where the rental prices have risen most. [Can Batlló] has a direct consequence. **It's great, there are improvements, but if speculation goes up from it, it is a direct gentrifying agent. It is a pity that some people do not want improvements because of the consequences it will have**. If, by law, people could continue living here it would be great, but they have to leave and others with higher purchasing power come. The contradiction is that they sell it to you as an improvement and everybody says "yes, yes, yes". Then the whole market goes to seasonal apartments, after 11 months they can throw you out and raise rent again. **These are prices that are unaffordable for many, perhaps except for expats**. (GHAS)

8.1.5.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Neighborhood activists' and public agency representatives' perceptions are structured less around outright contradiction than around divergent understandings of legitimacy, responsibility, and the meaning of success. Both civic actors and municipal authorities articulate overlapping objectives—social inclusion, environmental quality, and housing affordability—their interpretations of how these goals should be pursued, and who should control decision-making, differ.

From the perspective of municipal actors, Can Batlló is an exceptional case of redevelopment and improved environmental quality that exceeds conventional standards of participatory governance and social innovation. **Public officials emphasize the legal recognition of community management, the allocation of public land and resources, and the integration of cooperative housing and public facilities as milestones in a progressive institutional approach**. Constraints are understood as legal, fiscal, or administrative, rather than political, and the institutionalization of governance arrangements is presented as necessary to ensure durability, safety, and accountability.

The retired head of the IMU reflects upon the process they coordinated at Can Batlló:

> Never again have I experienced this feeling of the City Hall working side-by-side, united—neighbors, property owners, everyone—through formulas and decision-making structures. **All the decisions were made by the neighbors, with the City Hall trailing behind, complaining 'now we have to do this, now they're asking for that' (laughs). Problems arise when you don´t discuss things on equal terms, and you want to impose a project that, based on your vision of responsibility to the entire city, you believe you know better. There were many municipal concessions to the neighborhood movement and it was a magnificent operation.** (Ignasi)

Local activists assess outcomes in relational and historical terms, measuring institutional action against the depth of earlier commitments, the intensity of past struggles, and expectations of transformative change. Institutionalization is perceived as diluting the radical potential of the project, narrowing the scope of collective decision-making, and shifting power away from assemblies toward technical and bureaucratic arenas. These dynamics are not seen as neutral processes of normalization, but as forms of depoliticization and compromise that risk undermining the ethos of *autogestió* that legitimized the project.

Like in La Marina, a central perceptual gap concerns the role of time. Municipal actors emphasize long-term stability, phased delivery, and procedural compliance, while civic actors foreground urgency, accumulated delays, the lived costs of waiting for housing provision and public facilities, and the time dedication of generations of activists. This temporal disjuncture shapes mutual frustration: **civic actors interpret slowness as a failure**

of political will and an exhausting civic commitment for neighbors, while institutions view demands for acceleration as willfully naïve regarding regulatory complexities.

Differences emerge around the meaning of equity. Public agencies highlight the symbolic and distributive achievements of Can Batlló at the city scale, while civic actors focus on localized impacts and unresolved inequalities. From the civic perspective, the success of self-managed spaces and cooperative housing do not fully offset the impotence of public policy in containing rent escalation and displacement in La Bordeta and adjacent neighborhoods.

These perceptual gaps do not always translate to conflict, but rather a relationship characterized by punctual negotiation and sustained civic pressure on the local government. This may manifest in public criticism and cordial negotiations behind closed doors. Civic actors continue to engage with institutions while maintaining autonomous spaces of critique and mobilization and protesting those same institutions. Municipal actors increasingly recognize the limits of institutional capacity to deliver housing justice within a commodified urban system.

As argued by a former City Councilman from Sants-Montjuïc associated with BComú:

> **So long as we live in a capitalist system and private land exists and the mechanisms to control it are what the are, any improvement will be used for speculation. The answer to this doesn't have to be 'let's not improve neighborhoods,' because if we don't there will be a problem of reproducing inequalities.** What needs to be done is to plan ahead so that where you do urban improvement, there is also public and affordable housing. **We have a serious problem with real estate speculation that we will not solve by stopping investment in neighborhoods. We will solve it by prohibiting speculation and purchases by 'vulture funds', taxing the accumulation of housing, and looking for other mechanisms.** (Andreu)

Taken together, civic perceptions of these gaps highlight that Can Batlló functions not only as a redevelopment project, but as a contested political arena and a new large-scale, mixed, experimental development space in which different visions of justice, governance, and the right to the city coexist without full convergence.

8.1.6 Critical Analysis: Barcelona

> Barcelona is becoming a dystopia, a Barcelona without Barcelonians. **To find Barcelonians you will have to go to Cornellà or Mataró.** (José)

The Barcelona ReHousIn cases illustrate how green transition interventions unfold within a housing system that remains structurally commodified, financially pressured, and institutionally constrained. **Neither LMPV nor Can Batlló can be understood as isolated, green, brownfield redevelopment projects; rather, they are embedded in a broader urban political ecology shaped by long-standing speculative dynamics, uneven public capacity, historic distributional inequalities, and intensified demographic pressures.** Across both cases, green transition measures—while recognized as necessary and socially legitimate—are perceived as interacting ambivalently with housing inequalities rather than resolving them.

Neither LMPV or Can Batlló is seen by local activists in these neighborhoods primarily as a climate project; instead, activists—along with city planners with longer historical memory—see them as examples of housing and public space development on former industrial sites in which NBS interventions were added later, welcomed but slowed the overall delivery of the park. This contrasts with municipal accounts increasingly framing the projects as ecological as nature.

From a distributional justice perspective, both cases underscore the limits of greening and residential densification in the absence of sufficient decommodified housing and renter protections. **Despite projections of high levels of protected housing in both cases, civic actors distinguish between "truly" social housing and privately promoted subsidized units priced beyond the reach of many existing residents**.

Procedural justice emerges as a second critical axis. Both cases feature innovative governance arrangements intended to manage long-term redevelopment—such as the Pla Singular in LMPV and Patrimoni Ciutadà agreements in Can Batlló—yet **interviewees, to various degrees depending on the neighborhood and the strength of its activist fabric, describe participation as occurring within the logic of consultation rather than participatory planning**. In both cases, **local activists conditionally acknowledge improvements in institutional presence, coordination, and transparency at various historical moments, but highlight persistent asymmetries in expertise, timing, and agenda-setting power**. In LMPV, participation is perceived as consultative rather than community-driven, particularly regarding density, land use, and phasing. In Can Batlló, governance has shifted from insurgent mobilization toward negotiated institutionalization, generating concerns about bureaucratization, participation fatigue, and uneven representativeness.

It is from the standpoint of recognitional justice that green transition interventions are predominantly understood as symbolically significant. **In both cases, environmental investment is framed as a long-overdue acknowledgment of historically working-class, industrial areas bearing disproportionate infrastructural and environmental burdens.** New parks, green-blue infrastructure, and climate-adapted buildings are perceived to signal institutional recognition, but this is perceived as contingent and unevenly distributed, especially where green amenities appear to prioritize future residents or external users over long-standing communities.

Across the case study areas, a shared pattern emerges: **typology and housing regimes shapes how new housing inequalities unfold and may play a mitigating role, but not whether they occur in a heavily market-driven context**. LMPV's large-scale, ex ante integration of green densification reflects an anticipatory governance model, while Can Batlló's incremental, conflict-driven transformation foregrounds civic capacity and negotiated outcomes. **Both remain vulnerable to rent escalation, symbolic upgrading, and demographic recomposition driven by broader citywide and transnational dynamics, and a lack of sufficient existing or new public or social housing for different income brackets.**

Taken together, the Barcelona cases demonstrate that **green transition initiatives cannot be assessed solely on technical, environmental grounds, or on the initial visions and goals they articulate. Their justice implications depend on governance arrangements, tenure structures, the temporal sequencing of housing and environmental interventions, and parallel processes of neighborhood change and redevelopment that revalorize and change the neighborhood identity**. Without sustained expansion of decommodified housing, stronger tenant protections, and participatory mechanisms capable of influencing core planning decisions, **green transition risks reinforcing—rather than redressing—existing housing inequalities, even where intentions are explicitly redistributive**.

The greening-housing nexus in Sants-Montjuïc is most visible in the rising levels of unhoused people's settlements in parks and other public spaces, harkening to the living memory of 30,000+ people living in informal settlements in the city well into the 20th century, principally on Montjuïc mountain itself.

According to **Fundació Arrels**, as of late 2025 the number of people sleeping on the streets in Barcelona has reached an **all-time high**, with nearly **2,000 individuals recorded**, and the district of **Sants-Montjuïc** showing the **highest concentration of unhoused people** in the city, as can be readily observed in the winter of 2025-2026 at Can Batlló and in areas surrounding LMPV. Homelessness in Catalonia is predominantly driven by housing insecurity and loss of housing, accoding to a December 2025 analysis released by the Generalitat of Catalonia's Department of Social Rights, which found that the leading causes of people experiencing homelessness in the region—when understood in terms of both rough sleeping and broader housing exclusion—were loss of housing due to eviction (32 %), termination of rental contracts (16 %) and inability to afford rent (14 %), together accounting for the majority of cases directly linked to housing instability before other factors such as employment loss or health issues:

> Poor people living in the street have reappeared, it didn't used to happen [in La Marina]. We have seen it a lot in the last two years, it's people who have a lot of problems in accessing housing. Along the coastal highway, next to the cemetery, there are a lot of people sleeping in tents, on Montjuïc too. (Núria)

Across both cases, stressors operate cumulatively. Tourism, short and medium-term rentals, and newly developed coliving and student housing function as reinforcing pressures, even where they are not yet dominant. Similarly, climate adaptation measures—such as new parks, shaded spaces, and blue-green infrastructure—are valued for their environmental benefits but are simultaneously perceived as contributing to revalorization when not paired with strong housing safeguards, and thus as risks of mid-term displacement.

Both cases reveal the limits of participation under conditions of scale, complexity, and temporal extension. Innovative governance mechanisms—Pla Singular arrangements in LMPV and public-commons partnerships in Can Batlló—improve coordination and continuity but do not fundamentally redistribute decision-making power. Civic influence remains strongest at the level of mitigation, negotiation, and symbolic recognition, rather than in shaping core parameters such as density, tenure mix, or development pacing.

This comparison illustrate that **green transition interventions are neither inherently just nor unjust. Their effects depend on how intervention typology interacts with existing housing systems, governance capacity, and neighborhood histories.** In Barcelona, the persistence of housing commodification and low percentage of protected housing (under 2%) constrains the redistributive potential of greening, producing differentiated but convergent forms of inequality in both anticipatory and incremental redevelopment settings.

Nevertheless, **LMPV and Can Batlló point to a limited but consequential set of policy inflection points through which green transition objectives could be more effectively aligned with housing justice in similar dense European cities under strong housing market pressure. These do not lie primarily in the refinement of green technologies or design standards, but in the governance of land use, housing tenure, and sequencing**.

The durability and depth of decommodification emerges as a decisive factor. **Both cases demonstrate that high proportions of protected housing, while necessary, are insufficient when protections are time-limited, affordability thresholds exceed local income profiles, and when new-build housing revalorizes entire districts.** In LMPV, the aggregation of diverse subsidy regimes under the headline figure of "50% protected housing" obscures significant variation in accessibility, particularly for renters and lower-income households. And it cannot fully compensate for the fact that prior or existing protected housing units have or will expire. In Can Batlló, cooperative and public housing has delivered meaningful decommodified space, but its scale and positive social impacts has been outpaced

by expensive, market-rate construction. **Strengthening housing justice under green transition therefore requires not only increasing protected housing shares, but prioritizing tenure forms with permanent affordability, including lifelong public rental housing and expanding cooperative models that can also be insulated from future market conversion** (Marrani et al., 2025).

Sequencing and pacing constitute an underappreciated dimension of justice. In both cases, interviewees emphasize that **negative impacts—construction disruption, service strain, rent inflation—are experienced in anticipation and in the short to medium term, while benefits such as facilities, schools, and mature green spaces are deferred, sometimes to future generations or newcomers**. **Policy frameworks rarely account for this temporal asymmetry**. A more just approach would require binding commitments to the early delivery of social infrastructure and tenant protections prior to, or at least alongside, major residential densification and greening interventions.

Allocation mechanisms and procedural transparency are critical. Civic skepticism in LMPV centers less on the principle of protected housing than on uncertainty surrounding eligibility criteria, prioritization of local residents, and the role of private developers in allocation processes. Mechanisms such as neighborhood quotas have been successfully secured through local activism, improving perceptions of fairness and protection from displacement. Scaling such measures—and embedding them as standard practice rather than negotiated exceptions—represents a concrete approach to enhance procedural and recognitional justice.

The Barcelona cases highlight the need to decouple environmental upgrading from symbolic revalorization. While green-blue infrastructure and visible amenities are essential for climate adaptation and public recreation, they are also readily instrumentalized as marketable assets. Less visible interventions—such as sustainable urban drainage systems, groundwater reuse, and energy retrofits for existing buildings—as well as small-scale, more informal resident owned or managed green spaces are perceived as less directly implicated in displacement dynamics, while potentially having significant ecological impact. Along these same lines, policy frameworks that prioritize retrofitting and upgrading existing housing stock, particularly in energy-poor buildings, may therefore deliver climate benefits with lower gentrification risk, provided robust anti-displacement safeguards are enforced.

The Pla Singular model in LMPV and the public-commons partnership in Can Batlló improve continuity and legitimacy, but **civic actors consistently describe participation as occurring within predefined limits. Expanding the scope of meaningful co-decision—particularly over land use, tenure mix, and phasing—remains politically challenging but central to aligning ecological transition with democratic accountability and social justice ambitions**.

Overall, the Barcelona case studies underscore a central insight for the ReHousIn analytical framework: **intervention typology alone does not determine housing justice outcomes**. Rather, **outcomes emerge from the interaction between typology, governance capacity, market pressure, neighborhood histories and community organization, and temporal**

sequencing. **Even in one city district, LMPV and Can Batlló combine hard residential densification with nature-based solutions on former industrial land, yet appear to be producing markedly different configurations of risk, opportunity, and civic response.**

In LMPV, large-scale, ex ante planning enables the systematic integration of green infrastructure, energy systems, and protected housing. This corresponds to ReHousIn clusters characterized by anticipatory governance and deferred impacts. Justice concerns here are primarily prospective: anticipated rent inflation, service strain, and socio-spatial fragmentation are read through experiences elsewhere in the city rather than through fully realized displacement. Governance is institutionally visible and relatively well-resourced, yet heavily top-down, producing a situation in which distributive ambitions coexist with procedural constraint. The scale of the project amplifies uncertainty: while regulatory frameworks may mitigate future harm, their effectiveness depends on political continuity, enforcement, and adaptation to emerging inequalities.

By contrast, Can Batlló reflects a configuration in which hard densification, greening, and social regeneration unfold through prolonged civic contestation and bottom-up governance. This aligns with ReHousIn typologies combining densification with strong civic embeddedness and partial decommodification. Here, housing justice dynamics are already experienced. Rising rents, demographic change, and revalorization pressures are widely perceived as linked to new-build housing and, secondarily, to symbolic upgrading associated with the park and surrounding development. Robust neighborhood activism has enabled the production of cooperative housing, public–commons partnerships, and collective management that partially buffer displacement and sustain political agency, even as they do not neutralize market forces.

Across both cases, **green transition interventions generally amplify existing housing dynamics rather than overriding them, except for the limited number of residents who are housed in cooperative housing or in the protected units**. **In areas with weak housing protection or high market exposure, environmental upgrading accelerates revalorization; where decommodified housing and civic capacity are stronger, its effects appear more mediated but not eliminated**. **This reinforces the argument that green gentrification, new-build gentrification, and transnational gentrification in historically working-class, industrial neighborhoods should be understood not as mutually exclusive processes in Barcelona, but as overlapping and cumulative.**

Barcelona's recent experience illustrates a core dilemma for just transition policy in dense European cities: **environmental investment is increasingly pursued through redevelopment and densification, yet these same processes operate within housing systems that remain largely commodified and vulnerable to revalorization dynamics, where longstanding residents often feel threat of direct, symbolic, or exclusionary displacement.** The two cases show that green transition interventions are not experienced simply as climate policy, particulary in the case of densification. They are interpreted by civic actors as multi-scalar and multi-sectoral interventions into the distribution of land, housing access, neighborhood identity, and political voice—much as neighborhood and housing movements has historically functioned—where the cities' institutional tools remain partial and contested.

Barcelona's policy discourse sometimes risks overstating the compatibility of greening and equity without sufficiently grappling with the mechanisms through which environmental upgrading becomes translated into market value. Official framings that have rejected a "false dilemma" between ecological and social objectives emphasize that greening is a matter of public health and urban rights, compromised by external forces of speculation (Sanz, 2023). The Barcelona cases under consideration support a more precise interpretation: **greening is rarely the sole driver of displacement, but nevertheless functions as a catalyst in already stressed housing markets, particularly when environmental improvements are highly visible**.

Drawing on Anguelovski et al (2022), the Can Batlló context aligns with 'integrated green gentrification', while LMPV aligns with 'subsidiary green gentrification', where green space plays a role but is less impactful than other built environment changes. It also emphasizes that, more than green gentrification per se, **Can Batlló is implicated in new-build gentrification tied to expensive housing produced through planning concessions to cross-subsidize the park and to the lag of public or cooperative housing delivery relative to private construction, falling well below the 50% affordable levels promoted in the 2006 MPGM**. **Importantly, large portions of public housing units were allocated to residents relocated from demolished buildings, reducing net new affordable units created.**

As a result of the planning related to Can Batlló—including the Magòria site, part of the same MPGM—a total of 985 housing units were produced, while approximately 41 households were affected by demolition of low-rise housing, meaning a net increase of 944 housing units. If we count the UP3 ("Transatlántico") and UP6 buildings as decommodified due to their VPO protections, the final result would be that 36% of housing units constructed were decommodified. However, **the UP3 building is set to have its affordability protections expire, potentially bringing units to the open market. If this is to happen, the total amount of "affordable" (public, cooperative VPO, VPO by ownership) housing units created by Can Batlló would be reduced to 20% before the park has been completed, while new-build housing is widely perceived to have stimulated rising housing prices in a much broader area.**

Such concerns around the expiration of VPO protections have become central in policy debates around housing in Catalonia and elsewhere in Spain, and is a matter of considerable critique among civil servants themselves. As the director of the Office of La Marina argues:

> All the [protected] housing we produced in the 90's is now free, isn't it? Surely people here, whose apartments are now market rate, will soon begin to negotiate. Of course they will increase in value. That is to say, in the end, sometimes it's not only the developers that speculate, but also the residents themselves." [Anna]

The cases in Sants-Montjuïc also highlight that the city's most tangible justice gains have been achieved where housing instruments and lasting civic pressure converge. In LMPV, redistribution is most credible where protected housing is matched with allocation mechanisms perceived as fair, such as neighborhood-based quotas. In Can Batlló, governance innovation and partial decommodification have been possible because civic mobilization created sustained input over municipal decision-making and land-use outcomes. These observations imply that a just transition cannot be treated as a program of environmental delivery alone; it requires political capacity and institutional willingness to confront housing financialization and prioritize long-term affordability. As one journalist and La Marina resident professes:

> For me, the perspective is that the housing issue at the neighborhood level is going to get worse. The issue is going to be when, how, or if, we reproduce these spaces of organization and struggle. [Francisco]

From a cultural and racial standpoint, the Barcelona case suggests that just transition debates are increasingly entangled with questions of belonging, migration, and recognition. Rising xenophobia—expressed across ideological lines and often mediated through socio-economic assumptions encoded in the terms "migrants" versus "expats"—appears alongside the fact that Barcelona's urbanization has historically been driven by migration. This tension is sharpened by current inflows which include more highly qualified international residents, reversing earlier patterns in which migrants were more likely to arrive from lower income and educational profiles. In the case of La Bordeta, the largest migrant groups as of 2019 were Italian, Pakistani, and Chinese, with Latin American and European migrants on the rise in recent years. These dynamics do not negate the real pressure placed on housing markets by the growth of internationally mobile, higher-income demand, but underscore that housing justice framings can become politically volatile and muti-layered when distributional anxieties are narrated through racialized and stereotyped categories rather than through political economic analysis.

Finally, Barcelona's experience reinforces that multiple gentrification dynamics can be simultaneously operative. In the same district, **interviewees describe overlapping processes of new-build revalorization, amenity-driven upgrading, and forms of transnational gentrification, even where tourism is not the dominant stressor.** This coexistence challenges policy approaches that treat displacement as a singular, centralized phenomenon concentrated on the historic core and overlapping with touristification. Instead, it suggests the need for a metropolitan-scale lens attentive to how environmental investment, densification, and housing market pressures increasingly diffuse into historically working-class areas, as well as the spillover effects on the destination of those displaced.

In sum, the Barcelona cases imply that the credibility of just transition agendas will depend on whether climate adaptation and environmental upgrading are institutionally coupled to ambitious and lasting housing justice strategies that also require the intervention of the Catalan and Madrid government, together recognitional strategies that avoid scapegoating mobile populations while still addressing the distributive realities of housing accessibility. The city's challenge is therefore not only technical or fiscal, but political: aligning ecological ambitions with housing justice in ways that remain democratically legitimate under conditions of market pressure and social polarization.

For ReHousIn, Barcelona thus underscores the need to move beyond typology-driven assessments toward analyses that foreground temporality, governance, and power. Housing justice in the context of green transition depends less on the presence of NBS or densification per se than on who controls land, how benefits are allocated, and whose claims are recognized as legitimate over the long term.

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8.1.8 Appendix 1 – Glossary

Abbreviations

22@	Barcelona's innovation district, created by the city council to transform former industrial land into a hub for technology, knowledge, and creative industries.
AMB	Àrea Metropolitana de Barcelona (Barcelona Metropolitan Area) - public body
BComú	Barcelona en Comú A municipal political platform focused on social justice, participatory democracy, and public-interest urban policies, which led the city council between 2015 and 2023, thro ugh its mayor Ada Colau
BCorp	
Bloc Onze	The first factory building in the Can Batlló complex to be managed by the PCBPB/ECVA, 2011-present- managed by committees of independent community organization within land belonging to Barcelona City Hall
Bloc4BCN	Publicly owned building with cluster of co-working spaces for cooperatives and social enterprises located within Can Batlló complex - public-commons partnership
CiU	Convergència i Unió The former Catalan centre-right political coalition that promoted Catalan nationalism and governed at both regional and local levels for several decades
CSA	Centre Social Autogestionat (Self-Managed Social Center, typically squatted)
CSS	Centre Social de Sants (Sants Social Center, neighborhood association founded in 1970s)
CZFB	Consorci de la Zona Franca de Barcelona (Zona Franca Consortium of Barcelona) - public-private partnership
Decidim	Decidim means "We decide" in Catalan and is a municipal digital platform for participatory democracy, created to enable citizen participation in public decision-making

DIBA	Diputació de Barcelona (Provincial Council of Barcelona)
ECVA	Espai Comunitari i Veïnal Autogestionat de Can Batlló (Self-Governed Community and Neighborhood Space of Can Batlló) - independent community organization managed by commissions and assemblies
EU	European Union
Generalitat	Government of the Autonomous Community of Catalonia - public body
GHAS	Grup d'Habitatge de Sants (Sants Housing Group): local tenants' union and activist platform
ICF	Institut Català de Finances Catalonia's public development bank providing financing to companies and public entities.
ICO	Instituto de Crédito Oficial Spain's state-owned development bank that supports public policy financing and business investment
IDRA	Institut de Recerca Urbana de Barcelona (Barcelona Urban Research Institute)
IMHAB	Institut Municipal de l'Habitatge i Rehabilitació de Barcelona (Municipal Housing and Rehabilitation Institute of Barcelona) - body of Barcelona City Hall
IMUB	Institut Municipal d'Urbanisme de Barcelona (Municipal Urbanism Institute of Barcelona)- body of Barcelona City Hall
LMPV	La Marina del Prat Vermell (neighborhood)
MIU	Municipal Institute of Urbanism The city-level public body responsible for urban planning and development.
MPGM	Modificació del Pla General Metropolità

	Refers to an amendment to the Metropolitan General Plan that regulates urban planning
NBS	Nature-based Solutions
PCBPB	Plataforma Vecinal Can Batlló és pel barri (Can Batlló is for the neighborhood Platform, predecessor to ECVA)
PERTE	Proyecto Estratégico para la Recuperación y Transformación Económica Strategic Project for the Recovery and Economic Transformation A Spanish public–private initiative to drive economic recovery and strategic sector transformation
PEUAT	Pla Especial Urbanístic d'Allotjaments Turístics (Special Tourist Accommodation Plan)
PGM	Pla General Metropolità (Metropolitan General Plan)- public land use plan at metropolitan scale
Pla de Barris	Municipal program to improve disadvantaged neighborhoods
PSC	Partit dels Socialistes de Catalunya Socialist Party of Catalonia, local branch of the national PSOE party
PSUC	Partido Socialista Unificado de Cataluña The Unified Socialist Party of Catalonia was a communist political party active in Catalonia between 1936 and 1997. It was the Catalan branch of the Communist Party of Spain and the only party not from a sovereign state to be a full member of the Third International.
SUDS	Sistemes de Drenatge Urbà Sostenible (Sustainable Urban Drainage Systems, program of Barcelona City Hall)
Unió d'Entitats de la Marina	Federation of neighborhood and civic organizations representing the La Marina area
VPO	Vivienda de Protección Oficial Publicly regulated housing offered at below-market prices to ensure affordable access

Terms and Concepts

Autogestió: Practice in which a group or community independently organizes and manages its own activities, resources, or projects without relying on external authorities.

Cession-of-use housing: In Barcelona, *cessió d'ús* refers to a long-term arrangement in which the City grants housing cooperatives the right to use publicly owned land—typically through 75- or 99-year leaseholds—so the cooperative can develop and manage non-speculative, permanently affordable housing. This is translated by the City as "cession-of-use housing". This may alternatively be called the "use-rights model," "grant-of-use tenure," "right-of-use cooperative housing," and, more broadly, "limited-equity/cohousing models on public land."

Citizen Heritage: The *patrimoni ciutadà* program is the framework through which Barcelona City Council recognizes, consolidates, and promotes citizen-led initiatives for the community use and management of municipal public heritage.

Right to first refusal: Under *Tanteig i Retracte* in Catalonia, public authorities are legally allowed to acquire properties before private buyers, ensuring they are repurposed for social housing.

Tense housing market zones: Areas designated by Autononous Communities (including Catalonia), in alignment with the Spanish Right to Housing Law, in which rent caps and increased tenant protections are put into place. In these areas, new (long-term) contracts cannot exceed the price of the last contract in force for the previous five years after the annual update (3% as of 2024).

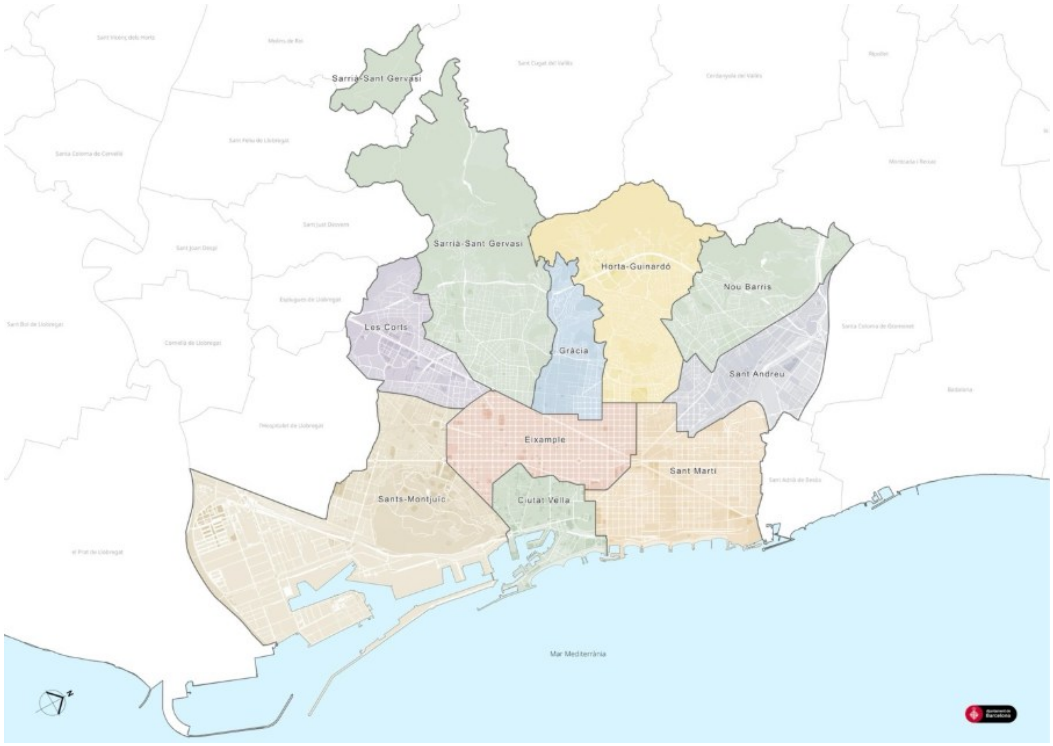
8.1.9 Appendix 2 – Key interview data and transcripts

#	Pseudonym & Position of Interviewee	Sector/Organization	Date	Modality
1	Housing policy consultant and political scientist (male)	Public/Barcelona City Hall Cooperative/Celobert Cooperative	11/4/2025	Online
2	Housing economist, program manager, Built Environment for Spain, local resident (Sants), former research officer for United Cities and Local Governments (female, "Mireia")	NGO/ Institute for Human Rights and Business	19/05/2025	In-person
3	Urban planner and lawyer, housing policy analyst (female)	NGO (public and private funders) /Pla Estratègic Metropolità de *Barcelona*	26/05/2025	In-person
4	Lawyer and politician (En Comú Podem), Deputy Area Chairman for Climate Action and Energy Transition, Deputy Councilor for Civic Participation, Provincial Council of Barcelona; former president of Sants-Montjuïc District of Barcelona (male, "Andreu")	Public/Provincial Council of Barcelona NGO/Executive Board of Climate Alliance	04/06/2025	In-person
5	Professor of Journalism, author of books on housing inequalities and the La Marina neighborhood, lifelong La Marina resident (male, "José")	Public/Autonomous University of Barcelona	12/06/2025	In-person
6	Head of Office of La Marina del Prat Vermell and director of IMUB (female, "Anna") 2- Architect specializing in urban design of La Marina del Prat Vermell (female)	Public/IMUB, Barcelona City Hall	16/06/2025	In-person
7	Spokesperson of neighborhood housing movement and renters' union in Sants-Montjuïc; ECVA Can Batlló (female, "Mar")	Other (activist platform)/GHAS NGO: ECVA Can Batlló	01/07/2025	In-person

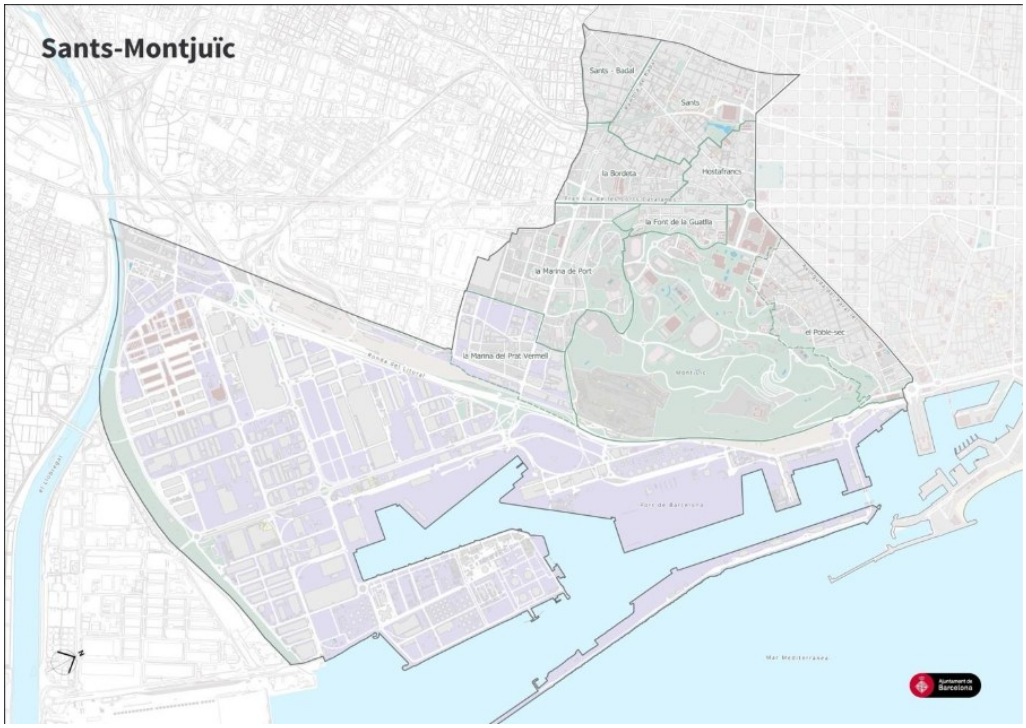
8	Director of federation of neigh borhood organizations of La Marina (female, Núria)	NGO (public and private funders)/ *Unió d'Entitats de la Marina*	02/07/2025	In-person
9	Architect, co-founder of architecture cooperative La Col, resident of La Borda cooperative, longtime involvement with PCBPB and ECVA (male, “Jaume”)	NGO/ECVA Can Batlló Cooperative/La Col and La Borda	04/07/2025	In-person
10	Latin American Visual Artist, Secretary of ECVA Can Batlló, resident of La Marina, member of housing cooperative at Can Batlló (male, “Francisco”)	NGO/ECVA Can Batlló Cooperative/Empriu	07/07/2025	In-person
11	Resident of Eduard Aunòs houses involved in various neighborhood organizations since the 1980s, political candidate with the PSC (male, “Josep“)	NGO/President, Associació de Veïns Eduard Aunòs NGO, Secretary, Unió d'Entitats de la Marina Public/ Vicepresident of Co nsell del Barri (neighborhood co uncil)	07/07/05	In-person
12	Retired director of IMUB, key figure in planning and design of Can Batlló and La Marina del Prat Vermell (male, “Ignasi”)	Public/IMUB, Barcelona City Hall	09/07/2025	Online
13	Professor of urban design, wrote PhD thesis on Can Batlló and was active in the early years of PCBPB (male)	Public/University of Californ ia	15/07/2025	In-person
14	Neighborhood activist, business owner and lifelong resident of La Marina (male, “Emili”)	NGO/ *Associació de Come rciants de La Marina,* Associació de Veïn s Plus Ultra Private/Drycleaner business owner	16/07/2025	In-person
15	Anthropologist, founder of IDRA, spokesperson of Renters’ Union of Catalonia (male)	Other/Renters’ Union of Catalonia Cooperative/IDRA	18/07/2025	In-person

16	Community activist with CSS since 1970s, PCBPB, ECVA (“Martí”)	NGO/ECVA, CSS	23/07/2025	In-person
17	1-MBA, Promotions Manager, Barcelona (female) 2- Territory Director, Catalonia and Aragon (male) 3- PR and Communications Manager, Spain (male)	Private/AQ Acentor (housing developer building mixed subsidized and market-rate housing in La Marina)	29/07/2025	Online
18	Anthropologist, neighborhood activist in Sants-La Bordeta, cooperative bookstore founder (male, “Enric”)	Cooperative/Ciutat Invisible (bookstore) and *Sotrac* (housing)	18/09/2025	In-person
19	Local schoolteacher, head of civic association of Equatorial Guineans, and activist around multiculturalism and gender equality in La Marina (female, Rita)	Association Guineocatalana Bisila / Unió d'Entitats de la Marina		In-person

8.1.10 Appendix 3 – Visuals

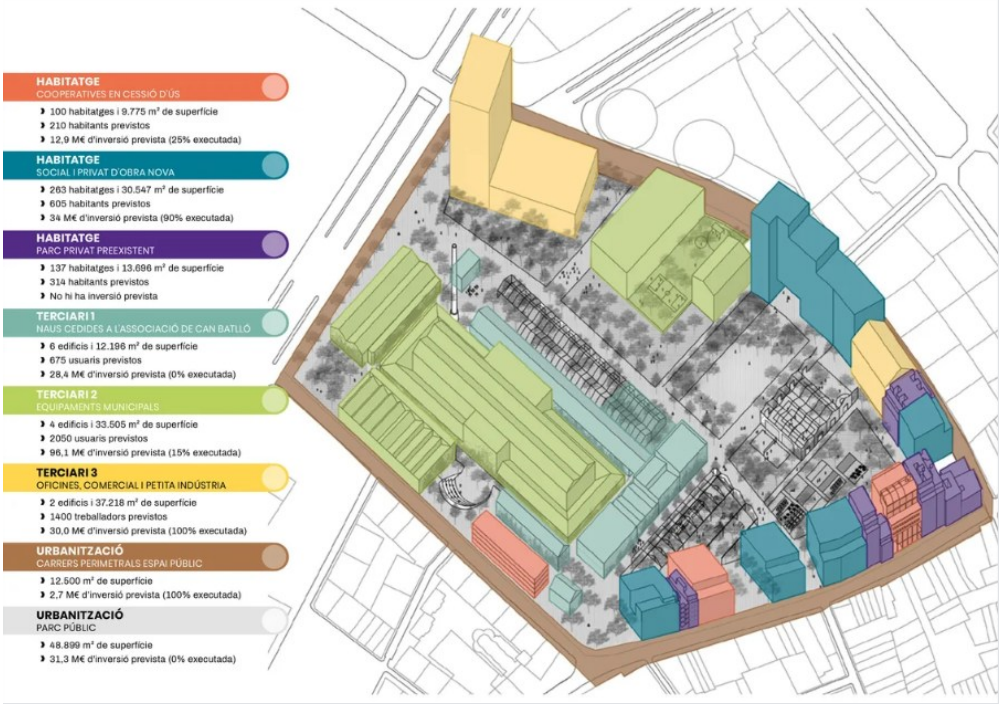


Map of the districts of Barcelona

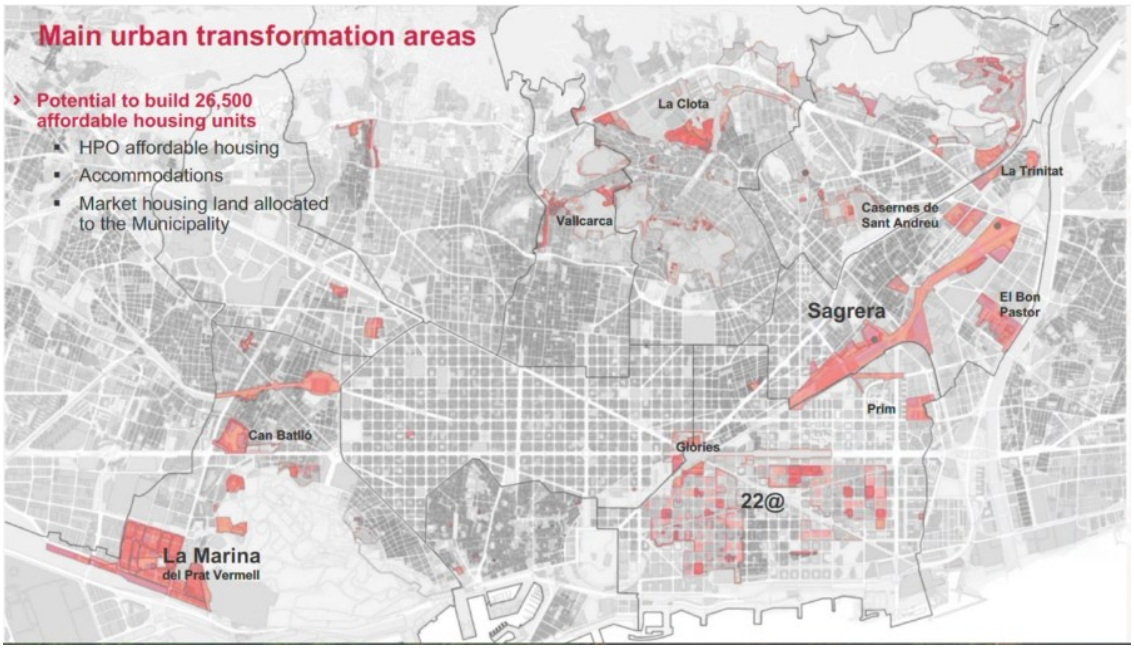


*Map of the neighborhoods of **Sants-Montjuïc**. Note that the large, unmarked area bordering La Marina del Prat Vermell is the Zona Franca industrial area. The area encircled in green is Montjuïc mountain.*

A postcard of the Ildefons Cerda flyovers, now a large roundabout with a pedestrian flyover called a plaza, with Can Batlló and Magoria in the background, in 1960s or 70s. Billboard is for one of the largest polígonos, the Bellvitge development of L'Hospitalet de Llobregat. To the right, Seat (automonile manufacturer) office building. Note Gran Via still has the pedestrian elevated walkways, very much separated from La Marina.



Can Batlló as conceived in the year 2021 in the Lab Batlló project, led by the La Col architectural cooperative. The area in grey constitutes Can Batlló Park https://lacol.coop/es/projectes/labbatll%C3%B3/



Screenshot from video interview with Eduard

8.2 CASE STUDY (MEDIUM): TARRAGONA

Photo of the first block of new housing, to be delivered in June 2026, in Ponent, Tarragona (Source: Diari de Tarragona)

Author: Brian Rosa & Andréanne C. Breton-Carbonneau (UAB)

Contributors: Panagiota Kotsila, Jordi Villaró Rabadán, Lourenço Melo, Austin Gage Matheney (UAB)

8.2.1 City/Town profile, challenges around just (housing and ecological) transition

Tarragona is a medium-sized coastal city in southern Catalonia with approximately 138,000 inhabitants and a population density exceeding 2,300 inhabitants per square kilometer. It is the capital of Tarragona province (pop. 860,000). It is one of two medium-sized cities in the Camp de Tarragona region, along with Reus, a city of 112,000 located 12km away, site of the principal airport of the province's Costa Daurada. Considering these relationships, Tarragona and Reus form part of a Functional Urban Area as defined by OECD methodology. The city occupies a strategic position within the Camp de Tarragona metropolitan area, benefiting from port infrastructure, major road corridors, and regional rail connections. Historically, Tarragona's urban form has been shaped by its Roman origins, its later role as a military and administrative centre, and—most decisively for contemporary inequalities—its rapid industrial expansion in the second half of the twentieth century (Oliveras i Samitier, 2025). The Camp de Tarragona contains 65% of the province's population, whose economy is driven by the coastal petrochemical and tourism industry, with an agricultural

inland. Governance is primarily municipal and sector-based, while the Camp de Tarragona metropolitan governance initiative (2023) seeks to increase metropolitan-level governance and planning.

From the 1960s onward, the implantation of petrochemical industries along the lower Francolí River and the expansion of the port generated a sharp increase in labor demand. This triggered intense internal migration from other regions of Spain and later international migration. **Large sections of the city's western periphery—Torreforta, Bonavista, Campclar, Sant Salvador, and related neighbourhoods collectively known as Ponent—emerged through a combination of informal self-built housing, company-sponsored worker estates, and later public housing developments, often constructed with minimal planning, limited services, and weak long-term integration into the wider urban fabric (Plaza, 2025).**

These neighbourhoods were structurally shaped by transport and industrial infrastructures. Railways, highways (N-340, T-11), and logistics corridors were routed through or alongside Ponent, creating physical and symbolic barriers that reinforced its peripheral status. Urban scholars describe Ponent as an "entrevías" territory—defined more by infrastructure crossings than by civic integration—where industrial and metropolitan functions were prioritised over residential quality and connectivity (Oliveras i Samitier, 2025).

Since the 19th century, Tarragona's population growth has been closely tied to economic modernization and successive waves of labor demand, moving from a port-and-services city into a major industrial and metropolitan node. Since the late 1800s, demographic expansion was driven by commercial activity, port functions, administrative roles, and early industrialization, reinforced by improved rail and regional connectivity that linked Tarragona more tightly to the Catalan economic system. The city's most decisive growth phase came in the 1950s–1970s, when Tarragona absorbed large-scale internal migration from other parts of Spain as jobs expanded in petrochemicals, energy, construction, and port-related industry, producing rapid urban expansion in western districts such as Ponent and consolidating the Tarragona–Reus metropolitan system (Plaza, 2025). From the 1990s onward, population growth became more diversified and metropolitan in character, supported by service-sector expansion, regional public institutions, tourism in the wider Costa Daurada, and continued industrial-port activity, alongside rising immigration from outside Spain—particularly Morocco, Romania, Colombia, and Italy, and more recently Venezuela, China, and Ukraine.

Tarragona stands at the crossroads of industry—centered on its industrial port, the second largest in Catalonia and sixth largest in Spain, and tourism—the historic center sees increasing tourist flows to the UNESCO World Heritage Site of the Archaeological Ensemble of Tarraco, containing a variety of Roman-era monuments. The main tourist flows are focused in and around the historic center (Part Alta) and non-industrial waterfront areas. Tourism and industry converge at the city's second-tier cruise terminal (approximately 120-130,000 passengers annually), which was expanded and modernized in June 2024, following an earlier wharf upgrade completed in 2020–2021. The cruise terminal is located on a dedicated passenger berth in close proximity to the industrial port, whose activities are primarily focused on petrochemicals and chemical industry logistics, connected to ChemMed Tarragona Mediterranean Chemical Cluster, the principal infrastructural-logistical cluster for petrochemicals in Southern Europe. The neighborhoods in focus in this study—those of the Ponent—are located just north of this site, on the western edge of the city.

A key structuring element of the city is the Francolí River, which is a key symbolic and physical barrier in the city. The majority of the city's postwar expansion, under the Franco regime, was west of the river in the Ponent. Broadly, central and Eastern Tarragona concentrates Roman heritage, tourism, public administration, service and retail economies, university and higher-status residential areas, while the Ponent includes larger working-class neighborhoods and a higher presence of social housing, lower household incomes, and a larger portion of migrant residents (Ajuntament de Tarragona, 2023). While Tarragona overall experienced economic growth and demographic expansion, this development entrenched a pronounced east–west divide. The eastern districts (Llevant) consolidated as lower-density, higher-income residential areas, whereas Ponent concentrated working-class households, migrant populations, and a disproportionate share of environmental burdens. By the early 2000s, foreign-born residents—particularly North African migrants—were heavily concentrated in Ponent neighbourhoods such as Sant Salvador and Torreforta, reinforcing enduring patterns of socio-spatial segregation documented in municipal and academic studies (Gutiérrez and Delclòs, 2014; Achebak and Alberich González, 2015).

Over the past two decades, Tarragona's governance has alternated between growth-oriented development models and more cohesion-focused agendas, particularly following the 2008 financial-housing crisis and subsequent regeneration debates. The 2019–2023 left-wing, independentist mayoralty of Pau Ricomà marked a pivot to social justice, sustainability, and inclusive governance, shaped by the Covid-19 crisis. The *Pla Local d'Habitatge 2021–2026* prioritized residential rehabilitation over new construction to tackle the aging, inefficient building stock—one-third of units were built 1950–1981. Investments targeted lower-income districts, supported by €8 million in EU funds, but the focus on upgrades reflected budget constraints, and new social housing provision remained negligible. Complementary plans for the vulnerable Part Baixa emphasized both housing and urban resilience, though activists criticized limited social and environmental ambition. In parallel, a moratorium on new tourist rental licenses arrived too late to stem a tide of short-term listings, with Airbnb properties mushrooming, mainly in the Part Alta.

As in Barcelona, Tarragona's inner city has endured a profound transformation: historic areas have been refunctionalized for short-term rental and tourism, while low-income residents are displaced, funneling into peripheral neighborhoods like Barris de Ponent and Sant Salvador—zones defined by social housing concentration, poor-quality stock, and insufficient public services. Urban peripheries, marred by industrial pollution and infrastructural barriers, have seen evictions spike post-2008. Officially protected social housing (VPO) is scarce and highly concentrated: 5,281 dwellings exist, but only 2,531 built since 1993 and virtually none since 2016, with supply chronically lagging behind demand—over 12,000 families were on waiting lists by 2020. Most new housing remains market-rate, and spatial segregation persists.

Recent years have also seen a resurgence of housing activism: platforms like the PAH and the Sindicato de la Vivienda have undertaken direct actions (including occupying public buildings for vulnerable residents) and organize against speculative mega-projects, such as the planned Hard Rock Casino. Yet local government's return to socialist leadership under Rubén Viñuales (since 2023) pivots again toward growth-centric redevelopment, privileging public space modernization and transport, while interventions in social housing provision remain reactive and fragmented.

The city's "Tarragona GreenBelt26" project, a cornerstone of the current urban agenda partially financed through EU NextGen funds, focuses on littoral ecological restoration and the connection and addition of pockets of green space. This project encapsulates the city's dual economic identity: a drive for green transition paired with the consolidation of tourism, a

trajectory fueling debate over whether future prosperity lies in energy ("sustainable" or otherwise) or mass tourism, and, critically, accentuating widening housing inequalities. Beyond activities in the municipality itself, the proposed megaproject Hard Rock Entertainment World in the nearby Camp de Tarragona towns of Vila-seca and Salou remains stalled and highly contested, a matter of political debate throughout Catalonia. Critics argue such approaches risk deepening territorial pressures—particularly by prioritizing land and infrastructure for visitor economies at a time when housing affordability, environmental risk, and broader social sustainability are rising concerns across the metropolitan area. Housing pressures in Tarragona are recognized across the political spectrum and codified by its inclusion as a "stressed residential market area" under the 2023 Spanish Housing Law and the Catalan Decree-Law 6/2023, especially in light of touristification, particularly evident in the Part Alta.

Much like in Barcelona, debates today focus on the appropriate proportion, targeting, and commercial viability of publicly-subsidized housing, with acute policy attention to regulatory loopholes and the slippage from long-term to seasonal or tourist rental contracts. Tarragona's "soft" intervention—prioritizing building upgrades and urban greening over structural increases in affordable housing stock—thus exacerbates persistent inequalities in access, tenure security, and spatial justice. The simultaneity of climate adaptation and tourist economy consolidation reinforce both the visibility of, and limits to, progressive housing interventions. As public policy cycles between leftist inclusiveness and centrist growth, Tarragona's experience continues to reflect deep contradictions in the search for equitable urban futures: a city haunted by both its speculative legacies and the intractability of housing precarity under ongoing marketization and financialization.

8.2.2 Green Transition Initiatives in Tarragona

In this study, we focus on the neighborhoods of the Ponent, west of the Francolí River, particularly the areas surround the Anella Mediterrànea—a 28 hectare park and sports facility complex completed and opened to public use in 2017 to host the Mediterranean Games—as well as the Pla Parcial 10 (PP10), a yet-unnamed neighborhood between Bonavista, the Anella, and Campclar, including the construction of 192 social housing rental flats ("Les Oliveres"), slated to be completed in mid-2026 to comply with Next Generation funding guidelines, along with a new hospital and shopping center. Campclar, Bonavista, and Torreforta have populations in their core areas (officially "nuclei") of approximately 9,500 each. The city has put two plots of land for sale to stimulate private development and entered discussions with INCASÒL – the Catalan housing construction and management agency – to build more social housing co-funded by the Generalitat government. Directly to the south of these neighborhoods, on the southern side of the Carretera de València, is a large industrial and port area, while there is a buffer area of agricultural land and transport infrastructure between the eastern limits of the Ponent neighborhoods and the Francolí River.

Tarragona's housing stock reflects this uneven urbanization. A significant proportion of dwellings—especially in Ponent—were built between 1950 and 1980, prior to the introduction of any meaningful energy efficiency regulations. **Technical assessments by the Col·legi d'Aparelladors, Arquitectes Tècnics i Enginyers d'Edificació de Tarragona (COAATT)—the local professional association tasked with technical guidance for applying retrofit subsidies—indicate that over 50% of residential buildings in the city present serious energy efficiency deficiencies, with the highest concentrations in the Ponent** (COAATT, 2023).

The Ponent neighborhoods have a younger demographic profile than the city as a whole, with each neighborhood having a foreign-born population between 16 and 25%. They have also been identified as some of the neighborhoods with the highest levels of residential and socio-economic segregation in Catalan cities (Roquer, Alberich, et al., 2013). A study from 2013 found that targeted interventions in Campclar through the 2004 *Llei de Barris* – a Catalan law geared towards re-investments of historically marginalized neighborhoods – intervention led to significant improvements in public spaces, facilities, and the neighborhood's external image, helping to reduce its physical isolation within Tarragona. Results from the study further showed that social and economic challenges persisted, and that the long-term impact depended heavily on continued public investment and stronger, more sustained community participation beyond the program's duration (Roquer, Gutiérrez, et al., 2013). More recent studies suggest that while public space, facilities, and neighborhood image improved, deep-rooted social and economic vulnerabilities persisted, and long-term outcomes depended heavily on sustained investment and governance continuity (Espluga Trenc et al., 2024), while such challenges of segregation and lack of participatory social infrastructure, particularly of racialized migrants, stubbornly persist. Such socio-economic vulnerability is heightened by the risks of petrochemical accidents which have occurred several times in recent decades (Rodríguez Giralt et al., 2023)

The Anella Mediterrànea forms part of the Tarragona Greenbelt initiative, one of three sites within the Ponent area that are included: aside from the Anella, the channelized Clar River in Torreforta is undergoing invasive vegetation removal and restoration of autochthonous riverside vegetation, while the western bank of the Francolí River—closer to the city center—is undergoing a 1.05 million Euro renaturalization process and the investment of 150,000 Euro for the installation of solid waste retention elements in rainwater overflows from the urban sewer network to the river.

The aforementioned structural conditions situate the Ponent as a key element of Tarragona's green transition agenda. On the one hand, the energy retrofit potential is substantial: many buildings renovations could easily exceed the 30% energy consumption reduction threshold required by Next Generation EU funding schemes. On the other hand, **the social and institutional conditions necessary to realize this potential are unevenly distributed, raising the risk that green transition policies may reproduce or deepen existing housing inequalities.**

Municipal strategies emphasize building rehabilitation, energy retrofitting, and public space improvements rather than large-scale new housing construction. **While this orientation aligns with climate mitigation goals, it also assumes a level of organizational capacity, financial solvency, and administrative literacy that many Ponent communities lack, particularly in blocks with fragmented ownership, ageing residents, or high tenant turnover, while also presenting a potential risk of the phenomenon of renoviction in homes and buildings undergoing energy-efficient renovation within neighborhoods of a vulnerable socio-economic profile.** These procedural barriers intersect with the socio-economic profile of Ponent neighborhoods. Lower levels of educational attainment and higher employment precarity reduce households' capacity to navigate complex subsidy frameworks, access digital platforms, or assume temporary financial risk (Ajuntament de Tarragona, 2023). In this context, **administrative complexity does not operate neutrally; it disproportionately affects communities already facing structural disadvantage.**

Table 1. Key data on case study area of Tarragona.

	Municipality-wide	Ponent
Neighborhood characteristics (general social type, economic activities, density, etc.)	Municipal level	Overall population of "Barris de Ponent": approximately 50,000. Total population of "nuclei" in focus: 28,500. Population density in nuclei: 18,000-24,000, approx. (Density calculated using Idescat nucleus (NP) population divided by the ICGC 'Population areas' settlement footprint polygon) (population source: IDESCAT
Duration	Tarragona Greenbelt: Project selected for NextGen in 2022 with budget of ~€3.47 million Euro Implementation: 2023-present (due to finish 2026) Anella Mediterrànea interventions under completion. In Summer 2025, The City Council carried out an intervention to clean up the area, remove invasive species, and install floating islands to enhance the attraction and presence of birds in the area. Retrofits of large-scale working-class housing and new construction of housing	Anella Mediterrànea (for Mediterrariean Games): 2014-2017 Tarragona GreenBelt Implementation: up to 2026 Key element: to reduce invasive species and foster biodiversity and to renature grey/urban parts of the Riu Clar and the artificial lake in the park of the Anella Mediterrànea Retrofits of large-scale working-class housing and new construction of housing (for example 9,3 millones de euros para rehabilitar 446 viviendas públicas en el Camp de Tarragona to be finalized by Summer 2026)
Funding *(be explicit if public/private, nonprofit, etc.)*	Primarily financed by EU NextGen funds, with support of Fundación Biodiversidad (under Spain's Ministry for Ecological Transition and Demographic Challenge), Spain's Recovery, Transformation, and Resilience Plan	Anella Mediterrànea: 76% private EU Next Generation (public housing development, GreenBelt renaturalization, residential retrofit)
Actor constellation *(aka stakeholders)*	See "funding", plus list of civic groups, private actors, etc. etc.	See "funding", plus list of civic groups, private actors, etc. etc.
Aims and objectives	Overall municipality-wide aims and objectives re: NBS, retrofit, densification	Case-specific aims and objectives re: NBS, retrofit, densification, especially in a historically under-invested and socially fragile area

Specific physical measures	See above	See above
Accompanying housing policy/regulatory measures		6.7M Euros for the Camp de Tarragona renovations. the objective is to reduce energy consumption from non-renewable sources by between 30% and 60%, depending on the building block and the corresponding stairwell. Moreover, the energy required to heat or cool the dwelling will decrease by between 70% and 80%. Work coordinated/sponsored by the Agència de l'Habitatge de Catalunya
Key social tensions or/and benefits between greening and housing	It is uncertain if greening can be part of a realized, long term strategy or is just "adjacent" to new housing construction and tourism development	Risk of concentration new housing in already over-stigmalized areas; Risk of not accessing funding for building retrofit and lack of support so that working class residents and buildings can navigate the system and the process from start to completion. Risk of long-term lack of new green space maintenance. Risk of reproducing past mistakes in urban renovation (partial process, no long-term vision, lack of continuity)

8.2.3 Methods

This case study draws on qualitative research conducted in 2025, combining semi-structured interviews and documentary analysis. The methodological approach was designed to capture civic and institutional perceptions of green transition initiatives and their relationship to housing inequalities in Tarragona, with particular attention to governance processes and neighborhood-scale impacts.

In total, 7 interviews were conducted. Interviewees included municipal and district-level policymakers and technical staff, neighborhood association members, activists, and politically engaged architects. Interviews were conducted in Catalan and Spanish. Profiles of interviewees, who have been given pseudonyms, may be found in **Appendix 2**.
Sampling of policymakers and technical staff drew on contacts established during the preparation and participation in the ReHousIn Policy Lab (March 2025) and through researchers' participation in workshops and public events related to housing and green transition initiatives organized by public, cooperative, and non-profit institutions. Additional participants were recruited through snowball sampling.
Community organization representatives and neighborhood activists were identified through their public engagement in media, participation in civic initiatives, or involvement in neighborhood assemblies and campaigns related to housing, urban redevelopment, and environmental issues. Initial contact was made through institutional email addresses associated with their organizations or, when requested by participants, via WhatsApp.
Interviews were audio-recorded with participants' consent and transcribed in their original language. Audio transcription was carried out using an offline version of the AI-based software

Whisper for Spanish. Spanish-language interviews, with personal identifiers removed, were then translated using an offline version of DeepL and subsequently reviewed, corrected, and cleaned by the research team. Catalan interviews were transcribed directly by the researchers, translated using the SoftCatalà platform with personal information removed, and subsequently cleaned. Transcript verification was conducted while listening to original audio recordings to ensure accuracy.

Analysis and coding were completed in English, for later comparability with other case European case studies, using Atlas.ti following a shared codebook developed by the Autonomous University of Barcelona ReHousIn team. Coding focused on recurring themes related to housing access and affordability, perceptions of green transition initiatives, participation and governance processes, distribution of benefits and harms, and neighborhood identity and recognition.

Documentary analysis included municipal and district planning documents, policy reports, technical studies, academic literature, and grey literature produced by neighborhood associations, advocacy organizations, and media outlets. These materials were used to identify interviewees, contextualize findings, and triangulate claims.

Several limitations should be acknowledged. While the interview sample includes a range of institutional and civic actors, it does not fully capture the perspectives of all resident groups affected by redevelopment, particularly more precarious populations with limited organizational representation or those who do not identify with dominant civic/social movements in Tarragona. The rapidly evolving nature of the redevelopment projects examined means that findings reflect perceptions and expectations of *ongoing processes* rather than fully realized outcomes.

8.2.4 Civic Perceptions of Green Initiatives in Case Study Areas: Tarragona

8.2.4.1 Precedents and implementation

Civic perceptions of green transition activities in Tarragona are structured by a long historical narrative of uneven urban development. Civic actors do not describe current initiatives as discrete or novel policy actions, but as interventions taking place within a deeply unequal urban system that has concentrated vulnerability, infrastructural deficits, and territorial stigma in the Barris de Ponent. This frames how implementation is evaluated.

For civic actors and activists, this historical framing is directly connected to the material condition of housing, the quality of public space, and long-standing patterns of neglect and disconnection from the city. Campclar, Bonavista, and Torreforta are repeatedly described as neighborhoods shaped by post-1970s expansion linked to industrial growth and logistics, where housing was built quickly to accommodate incoming workers, with limited attention to long-term habitability or integration into the wider city. As a result, civic actors evaluate green transition initiatives as part of an unfinished process of correcting territorial imbalances and improving local infrastructure.

This perspective reshapes how implementation is understood. *Implementation* is not primarily judged by the existence of a funded project or formal completion, but by whether an intervention produces stable, lived improvements that residents can feel and use in everyday

life. In the case of parks and nature-based solutions, implementation is perceived as successful when spaces become genuinely walkable, accessible, and socially activated. In the case of densification, implementation is assessed by whether new housing contributes to neighborhood integration rather than reinforcing peripheral concentration. In the case of retrofit, implementation is experienced through the ability—or inability—of ordinary households to bridge the gap between technical possibility and financial or procedural feasibility.

According to one long-term neighborhood activist in Camp Clar, the Anella Mediterrània illustrates this civic understanding of implementation as a lived transformation rather than an abstract territorial exercise. He describes how the area shifted from a hostile, asphalt-dominated environment before and during the Games to a space that residents can now traverse on foot, use comfortably, and integrate into everyday routines. The emphasis in his narrative is on changes in atmosphere, comfort, and accessibility. This embodied distinction between "before" and "after" demonstrates how residents define implementation through micro-transformations that accumulate into broader territorial change. For many, the language of greening or regeneration is subservient than the transformation of atmosphere and usability, as there is a shared sense that the area has historically been a sacrificed zone for the functioning of the Camp de Tarragona as a whole.

> Going to [the Anella] before was a bit hostile because it was all asphalt. Either you went by car, which wasn't necessary. You could go by foot but it was all asphalt. All that has changed now (long-term activist, Camp Clar)

However, civic interviewees also express caution regarding the durability of implementation. Improvements are perceived as fragile if maintenance, governance continuity, or complementary measures are weak. In such contexts, the credibility of implementation depends on whether public bodies demonstrate a sustained commitment to protecting and maintaining improvements over time. Interviewees' further perceptions suggest that implementation is evaluated through a distributive logic: which areas are selected for projects, and what the selection implies. Even beneficial projects may raise concerns if they are perceived to reinforce the spatial concentration of vulnerability, rather than distributing responsibility and opportunity more evenly across the Camp de Tarragona.

8.2.4.2 Participation and governance (procedural)

Participation in green transition initiatives in Tarragona is widely perceived as procedurally complex and unevenly accessible. Civic actors describe participation less as co-production or participatory than a confusing, laborious, and time-consuming process of navigating administrative systems. This perception confirms prior research on previous urban regeneration initiatives in the area, where the Barris de Ponent, like other more peripheral districts in medium-sized Catalan cities, have a tendency for residents to be expected to "participate" without receiving the resources to do so effectively (Parés et al., 2012).

This perception is particularly acute in relation to publicly subsidized energy-efficient retrofit programs (principally through EU Next Generation), where households and homeowners' associations are required to engage with layered bureaucratic procedures, digital platforms, and technical documentation. This is considered an additional challenge in the Ponent where owner-occupiers and small landlords are less likely to have the resources, knowledge

of complex processes of public administration, or a competent, professional property management company working on behalf of homeowners' associations, as would be found in more affluent areas. This creates strain, especially in buildings with ageing populations or limited financial reserves. **Due to the dominant housing typology of apartment blocks in Tarragona like elsewhere in urban Spain, most retrofit subsidies are managed through private property management companies on behalf of homeowners' associations in apartment blocks, organized at the building or stairwell level. As such, mere existence of subsidies or support mechanisms does not automatically translate into perceived accessibility**.

Institutional actors acknowledge these difficulties and describe them as unintended consequences of program design, funding requirements, and regulatory frameworks over which they have limited control, emphasizing that municipal departments are themselves constrained by staffing limitations, reporting obligations, and externally imposed timelines. As such, participation challenges are framed as systemic rather than intentional and as a trickle-down effect from poorly staffed municipal administrations and poorly-designed funding programs.

A long-term neighborhood activist in Camp Clar describes governance as mediated and slow, requiring residents to navigate complex channels before reaching the relevant decision-maker. As researchers on this project have found, the city's digital infrastructure creates formidable challenges to accessing information. This kind of procedural environment with uneven access to information may weaken trust in transition initiatives, especially when interventions are complex or when residents perceive their neighborhood as already disadvantaged. Governance can feel particularly fragmented and slow, when residents may demand rapid adjustments to prevent harm (e.g., protecting green pockets, ensuring parks remain usable, addressing side-effects of development), leading to a **perceptual gap between the rhetoric of transition and the reality of problem-solving.**

> "If you want to request a meeting, they tell you that you must go through the neighborhood councilor, but the neighborhood councilor *isn't* the one who will solve the problem because they don't handle mobility. In principle, that person will pass it on to someone else, and you'll see that half a year passes and nothing has been solved." (long-term activist, Camp Clar)

In retrofit governance, civic actors note that such interventions are not optional upgrades but high-stakes interventions with major financial implications. Driven by EU directives, **residential properties throughout Spain placed on the residential or rental market that have Energy Performance Certificate ratings of F or G will need an Energy Performance Certificate of E by 2030**, with the minimum expected to rise to D by 2033. **Some homeowners see public subsidies for energy-efficient retrofits as a potential opportunity to fulfill efficiency directives at a reduced cost, but mechanisms are widely considered difficult to understand and navigate.** Indeed, as has arisen in public assemblies around residential energy retrofit in Catalonia, there is also a widespread sense among property management companies that such processes are onerous or opaque.

In sum, civic perceptions highlight a shared awareness that procedural complexity has (re)distributional effects: **communities with greater organizational capacity are more likely to weather administrative processes**, while those with less time and financial resources are more likely to disengage. In this way, participation mechanisms and opportunities to access funding are both perceived as reproducing housing inequality by privileging those already

better positioned to manage risk and uncertainty. Civic perceptions indicate that **participation and governance are judged through "governability from below"**: whether ordinary residents can navigate systems without excessive burden, and whether institutions can respond effectively to make green transition objectives attainable. There is a shared perception that participation becomes unfeasible when governance structures externalize administrative and financial risk onto households already facing vulnerability. As such, procedural governance is perceived as a central point where green transition ambitions collide with housing and other socio-economic realities.

8.2.4.3 (In)equity (distributional)

The Barris de Ponent are the primary cluster of residential vulnerability and the key area where energy efficiency, energy poverty, and poor building conditions overlap in the Camp de Tarragona (COAATT 2023), and distributional inequity is one of the most persistent frameworks through which civic interviewees interpret Tarragona's housing and green transition activities. Inequity is framed as a territorial pattern of who benefits, who bears burdens, and which neighborhoods gain symbolic recognition through public investment. Within this distributive geography, neighborhoods of the Ponent are repeatedly described as a zone where vulnerability has been concentrated and where the justice dimensions of transition investment are made visible and scrutinized, with proximity to the petrochemical industry creating compounded experiences of exposure and abandonment, precarity and risk.

In the context of residential densification, distributional equity is evaluated through local experience: civic actors and neighborhood activists acknowledge the need for additional housing—market-rate, subsidized, and public—and see the potential environmental benefits of compact development in place of the sprawl that has come to dominate development in the Camp de Tarragona. However, they stress that densification is not inherently equitable if new housing continues to be concentrated in Ponent, reflecting a resentment that its neighborhoods continue to be treated as a receptacle for broader territorial needs, replicating dynamics of peripheralization.

In relation to parks and nature-based solutions, distributional equity is interpreted through access to environmental quality and everyday dignity. Green spaces are valued as contributors to wellbeing, identity, and neighborhood recognition. Though not without its criticisms, the Anella Mediterrània's sports facilities and public spaces are perceived as neighborhood gains that have not, as of yet, generated specific concerns about green gentrification. Baseline environmental conditions have historically been lower and the creation of park-like environments are read as an environmental justice gain. At the same time, interviewees express concern that these gains remain fragile and reversible if green spaces are neglected or not well-maintained, or compromised by other development priorities.

Deficiencies in mobility infrastructures and challenges in securing funds for energy-efficient home retrofit becomes the domain where distributional inequity linked to green transition projects is articulated most sharply. One civic leader in La Floresta's critique of Next Generation funding captures this perception clearly, framing retrofit inequality because of rigid programmatic structure rather than individual choice. From this perspective, households most exposed to energy poverty and thermal discomfort are often least able to access the interventions designed to alleviate those conditions, allocating benefits toward those already positioned to invest.

> That's the criticism of the NextGen funds, that it seems they're more for people who can afford it than for people who can't. And therefore, in all energy efficiency in general, whoever can install solar panels on their own roof is whoever can pay for it and makes the investment. Whoever can improve the efficiency of their windows... if a window doesn't break, I don't change it.". (civic leader)

The same access problem is acknowledged from within the public sector. A municipal housing technician describes the subsidy interface itself as discouraging and highlights how procedural friction generates dropout and demotivation

> I recognize that it's very difficult to request a subsidy, a huge amount of paperwork, the application doesn't work well and it freezes, you have to start again... Many people lose the motivation to apply for the subsidy because the amount of paperwork. (municipal housing technician)

Critics further argue that well-funded, large renovation intermediaries capture a disproportionate share of subsidies, including Effic, a subsidiary of the New York-based private equity firm Blackstone established to take advantage of EU retrofit subsidies, which is also the largest private landlord in Spain and associated with predatory practices in the housing market.

In short, such situations thus articulate retrofit inequalities and situate them as structural rather than behavioral. Beyond the barrier of lack of awareness, **households most exposed to energy poverty and thermal discomfort are often least able to access and pay for the interventions designed to reduce those harms.** Without improved, targeted support mechanisms and complementary funds raised from municipalities or regional governments, green transition interventions risk functioning as "opportunities" primarily for those already able to invest, leaving deeper housing injustices unchanged or compounding them based on the ability to take advantage of public financing.

8.2.4.4 Political mobilization

Political mobilization in Tarragona appears in the interviews as localized, pragmatic, and reactive, in the sense that it is typically triggered by moments of perceived injustice or risk. Unlike in Barcelona, civic actors do not tend to describe mobilization as a broad, territorially grounded movement, apart from elements of the housing movement, particularly renters' unions, which operate at a scale encompassing Tarragona and nearby Reus. Rather, it emerges as tactical action used to secure institutional response when transition measures become inaccessible or precarious, pressuring institutions to adapt programs to the realities of vulnerable communities. This is visible in the energy retrofit domain, but also in broader dynamics of redevelopment activities focused on the Ponent.

Perceptions of retrofit opportunities, and mobilization around them, are structured by a basic civic dilemma: the works are necessary, funding may be available, but residents cannot proceed without guarantees that funds will continue to be accessible and then disbursed swiftly. The threat of losing major external funding becomes both a risk and a mobilizing resource. Civic actors use public pressure to force engagement, framing their

demands as a necessary condition for successful implementation. Their argument is that without municipal involvement, the program is designed for failure in communities with limited ability to front costs or absorb uncertainty. The perceptions shared by activists and civic leaders from the Ponent neighborhoods illustrate how mobilization functions as a bridge between technical projects and political accountability. The community did not reject retrofit; it demanded public support so that the intervention could be delivered without exposing residents to unacceptable risk.

> "We did a press action, well, we published a press article in which we asked for the aid. We said that if the City Council didn't get involved and help us, we wouldn't be able to carry out the works and we would lose, adding the two grants together, one million euros between the two blocks. That is, we would lose one million euros of Next Generation funds in the La Floresta neighborhood if the City Council didn't help us." (civic activist, La Floresta).

This form of civic mobilization is rooted in procedural and distributive justice and reveals that **green transition activities' successful delivery may depend on conflictual negotiation rather than smooth, linear implementation, particularly in communities with fewer resources.**

Political mobilization also appears indirectly in the densification and parks/NBS domains. **Civic actors describe skepticism and vigilance around large development trajectories in Ponent, suggesting that residents remain politically attentive to whether "regeneration" is designed for local benefit or driven by external investment logics, drawing on previous experiences.** Mobilization in this context may not be formalized, but is still interpretive stance, as residents collectively anticipate future conflicts, assess credibility, and form expectations about beneficiaries.

8.2.4.5 Socio-ecological impacts/benefits (positive)

Positive socio-ecological benefits in the civic accounts primarily relate to parks and green spaces that have become usable, pleasant, and socially integrated into daily life. Civic interviewees frame the value of green space in everyday experiential rather than environmental terms: how people use it, when it feels welcoming rather than hostile, and when it changes perceptions of what a neighborhood offers. **Civic actors widely recognize that green transition initiatives in Tarragona have generated tangible socio-ecological benefits, particularly in relation to public space and everyday mobility, and there is no expressed concern about green spaces driving gentrification in the Ponent**.

Green space contributes to wellbeing, thermal comfort at the neighborhood scale, and the everyday dignity of place, and in an area with a legacy of strong territorial inequalities, access to high-quality public space is perceived as a welcome form of redistribution after decades of neglect and under-investment. Civic accounts show that this is particularly meaningful in Ponent, where residents describe older conditions of "asphalt dominance" and limited attractiveness. A local civil leader in particular describes how positive benefits can emerge through discovery and use. The emphasis is not on overarching climate goals but on embodied experience: paths, a lake, ducks, trees—features that invite residents to inhabit the space, through which parks and NBS are evaluated through the social life they enable.

"Since the sports part [of the Anella] was closed, that area was open because it was a park, and people discovered that there were paths, there was a small lake, at one point there were even ducks and all that, and even if it was artificial, it was still nice. A lot of people didn't know about it." (local civil leader)

This quote also suggests that benefits can depend on context: during the Covid-19 pandemic, residents' attention to and use of outdoor spaces shifted, making the Anella more visible and socially valued.

Positive benefits are present in civic discussions of densification, but articulated more through reflective assessments of urban form and long-term territorial impact by those with technical expertise. Civic actors frame compact density as a positive socio-ecological condition when pursued with quality, intention, and spatial coherence, rather than as an abstract growth imperative. From this perspective, densification is valued for its capacity to reduce land take, limit sprawl, and avoid the continued expansion of low-density forms and infrastructural impacts, but that its socio-ecological value depends on how it is spatially deployed and justified.

"Density is not bad. [We need] compactness with quality. "But density, how do you place it, where do you place it and why do you do it? ..." (architect and environmental activist)

Such statements frame **densification as a conditional socio-ecological benefit: one that can support broader environmental goals when embedded within an urban logic that prioritizes quality and integration, but which risks generating resistance and negative effects if implemented without contextual criteria and a clear social purpose**.

Last, in retrofit, benefits are framed as potentially transformative at the scale of the building and the home, particularly for owner-occupiers: insulation, better windows, and external façade improvements can enhance thermal comfort and reduce energy costs, with the caveat that the process of accessing public funds to do so are unduly burdensome and, when completed in rental units, the cost is passed on to tenants.

8.2.4.6 Socio-ecological impacts/harms (negative)

Negative socio-ecological impacts in civic narratives are primarily framed as *contradictions*: situations where green transition objectives coexist with development or planning decisions that *undermine* perceived environmental quality and municipal efforts towards green space investment. The clearest harm narratives arise when green spaces are compromised, reduced, or treated as secondary to other priorities. In Tarragona, the PP10 (Partial Plan 10) redevelopment provides an example of this, where development assumptions oriented toward commercial attraction and car traffic can produce direct loss of green areas and are perceived as lived disruptions, even if they incorporate the creation of desired new social housing. PP10 is one of the most important urban expansion areas in the city, strategically located in the western (Ponent) zone, between the neighborhoods of Bonavista and Campclar, next to the Anella Mediterrània. This sector is undergoing significant

development, particularly marked by the construction of affordable rental housing and new public facilities.

Civic actors further highlight how **certain planning logics treat green areas as expendable and that the Ponent is viewed as an abstract space to be exploited for future-oriented actions rather than a set of neighborhoods (or places), evidenced by the lack of a name for the site.** This is sensitive in Ponent because green amenities are seen as valuable precisely due to past shortages or low baseline conditions. When a small green area is removed or degraded, the harm is experienced not only as ecological loss but as a distributive and symbolic loss combined with the feeling that too much new housing is concentrated in certain areas of the city.

One category of perceived harm relates to the **loss or fragmentation of existing spaces** due to infrastructure works or large-scale developments. **Civic actors express concern that green or regenerative projects may coexist with, or be undermined by, road expansion, traffic growth, or commercial development, resulting in losses to neighborhood quality and also drawing into question sustainability claims**. As a local civic leader expresses, the construction of infrastructure designed for anticipated traffic flows justified the destruction of a small park and functions as a clear harm mechanism. Even if the larger plan changed later, the episode illustrates a broader vulnerability: green spaces can be sacrificed to accommodate speculative futures, leaving residents with the consequences.

> "A street went towards Rambla de Ponent, a four-lane road that wiped out a green area that was there and connected to Rambla de Ponent where another huge roundabout was planned to connect everything, because the PP10 was designed with the idea that an Ikea would be built there and that it would generate massive car traffic."

Retrofit also carries potential harm narratives, largely through concerns of missing out on available subsidies and stress about imminent rises in efficiency standards. While civic actors broadly support the idea of improving building performance, they stress that **if retrofit is pursued through unstable or uncertain funding structures, it can impose financial stress and risk onto vulnerable households. The harm here is not environmental degradation but social vulnerability (and eventually exclusion from retrofit funding) created through policy design: households can be pushed toward risk or forced to abandon improvements. The risk of debt, the possibility of losing subsidies due to administrative missteps, and the burden placed on elderly residents are repeatedly emphasized.** The perception of neighborhood leaders reveals how **harm is experienced through uncertainty rather than immediate material loss**. The fear of making a wrong decision or being unable to complete a process becomes a deterrent and a cause of anxiety.

However, from this civic point of view, **these harms are not inevitable. They are interpreted as the result of misaligned implementation approaches that fail to account for social and housing realities in one-size-fits-all approaches.** When green transition measures assume a baseline of financial and administrative stability and capacity that does not exist, they risk deepening insecurity rather than alleviating it while allowing higher-income groups to capture available funding.

The compounding impacts of environmental exposure and socio-economic vulnerability are found in these same districts facing proximity to industrial infrastructures, registering higher

social risk indicators (Ajuntament de Tarragona, 2023). This overlap supports interviewees' perception that environmental and housing inequalities are spatially co-produced rather than independent phenomena.

8.2.4.7 Tensions and Dynamics Between Stakeholders/Actors

Civic perceptions of green transition initiatives in the Ponent are strongly shaped by experiences of power asymmetry between neighborhood actors and institutional decision-makers, especially when densification and NBS project planning are concerned. Civic actors consistently describe a gap between formal participation mechanisms and actual influence over outcomes, especially where large-scale projects and strategic interventions are concentrated. These tensions are not primarily framed as conflict over environmental or housing objectives so much as decision-making processes, where authority is located, and how neighborhoods are positioned in this relationship. **For civic actors, power dynamics are experienced structurally, through repeated encounters with limited influence, institutional distance, and lengthy delays.** This perspective highlights how decision-making is perceived as spatially and procedurally removed from neighborhood realities. Such sentiments arise repeatedly and suggest that **distance itself becomes a form of power, with decisions experienced as external, difficult to trace, and resistant to modification even when consultation processes are formally in place.** The difficulty of identifying where authority is located contributes to civic perceptions of limited influence and reinforces mistrust toward governance processes.

Rather than opposing environmental or housing objectives as such, civic actors emphasize how decisions are experienced as predefined, with participation occurring after key parameters have already been fixed: as a sort of pantomime. As a civic leader describes, a frequent pattern exists in which neighborhoods are informed but rarely positioned as decision-makers:

> "Many times, they come with the project and **what they do is explain it to you**... you can give your opinion, but everything is already very defined... and in the end, **the decision has already been made somewhere else... and you just have to adapt to it**." (civic leader)

This account highlights a central perception that **ostensibly participatory processes are informational rather than transformative. Opportunities to comment may exist but are experienced as occurring after strategic decisions have already been taken, and residents feel they are expected to absorb the consequences of interventions without having shaped their direction**. Such perceptions match closely to those in the La Marina case of Barcelona as well, suggesting a more systemic problem of participation in planning processes.

In the domain of parks and nature-based solutions**, stakeholder tensions are visible in the perceived vulnerability of green spaces to competing planning agendas.** Civic actors express strong appreciation for green amenities and recognize their contribution to everyday wellbeing and neighborhood livability, including interventions associated with the Tarragona GreenBelt, but observe that these spaces can be compromised when commercial, infrastructural, or mobility priorities dominate and, in the end, might take existing green spaces over for new "grey" construction.

In relation to subsidies and support regarding energy-efficient retrofit, civic interviewees highlight that institutions and professional intermediaries are better positioned to absorb delays, administrative complexity, and financial risk, whereas individual households—particularly in vulnerable neighborhoods—are not. As a result, **retrofit becomes a domain where justice is understood to depend on shifting risk away from residents and perceived as reinforcing inequality, even when stated objectives are progressive.**

As a result, civic actors call—implicitly rather than programmatically—for green transition activities that are not only technically sound but counteract historical power asymmetries based on location and socio-economic realities, in which utilitarian and universal approaches do not allow for a level playing field. These perceived power dynamics shape trust, expectations, and willingness to engage, and form a critical backdrop for the more explicit civic–institutional perception gaps explored in Section 3.10.

8.2.4.8 (Civic perceptions of) innovative governance mechanisms

Civic perceptions of innovative governance mechanisms in Tarragona are characterized by a **pragmatic, problem-solving orientation**, **in which innovation is evaluated according to its capacity to reduce disruption, uncertainty, and risk for residents. Innovation is valued when institutional objectives are translated into forms that residents can realistically engage with**. However, civic actors emphasize that many transition initiatives in reality fail not because of opposition in principle, but because proposed solutions do not fit lived realities. A civic leader articulates this understanding of innovation when reflecting on how projects are received at the neighborhood level:

> "When things are thought through with the neighborhood in mind, when they adapt to what is already there, then people see them differently. The problem is when solutions arrive that don't fit the reality of the place." (civic leader)

This statement highlights **how innovation is perceived as a matter of contextual fit rather than technical sophistication**.

Civic actors also describe innovation in more technical terms, particularly in relation to energy-efficient retrofit. Here, specific design choices are understood as governance mechanisms because they shape residents' willingness and ability to proceed. Marc's detailed description of external insulation systems illustrates how technical solutions can function as enabling innovations by lowering perceived and actual risks. As have been observed in perceived best practices of retrofit of apartment blocks in urban Catalonia, such as the Sant Ildefons neighborhood in Cornellà de Llobregat, **publicly subsidized interventions implemented on building envelopes and windows while residents remain in their homes are perceived to be more socially just and accessible for those on lower and moderate incomes** rather than larger-scale and -investment ones that might require (temporary) relocation:

> "We're talking about installing insulation on the outside of the building with an external insulation system, which are panels attached to the exterior facade. That means no work has to be done inside the apartments, which was very important, that was a requirement on our part. Changing windows will only involve installing them over the existing frames. So there's no major interior work." (Civic leader)

The significance of such policy and physical interventions lie not only in their energy performance, but in their social effects and management. By avoiding interior works, these approaches reduce disruption to daily life, eliminate the need for temporary relocation, and lessen fear among residents, which are all factors that civic actors repeatedly identify as barriers to participation.

Beyond technical design, **civic actors also point to the role of intermediary support structures—such as trusted technicians, project coordinators, or neighborhood-based advisors—as another form of innovation**. Where such intermediaries are present, residents experience greater clarity and confidence in navigating complex processes. However, these mechanisms are described as unevenly distributed and often dependent on specific projects or individuals rather than universalized arrangements.

Civic perceptions emphasize that **innovative practices tend to appear as exceptions rather than norms**, **often associated with pilot projects or particularly attentive implementation processes that are not replicated at scale**. As a result, while such mechanisms demonstrate that participation barriers can be reduced, they do not fundamentally alter the broader distribution of responsibility and risk identified in earlier sections.

8.2.4.9 (Civic perceptions of) tourism and market pressures

Civic perceptions of market dynamics and development pressure in Tarragona are shaped by the territorial specificity of the case study, particularly the fact that interviews with civic actors focus on the Barris de Ponent, while the most intense tourism pressures in the city are concentrated in the Part Alta and non-port coastal areas. As a result, tourism does not emerge as the dominant market pressure in civic narratives of Ponent, but is acknowledged as central in relation to overall concerns about the planning and economic model of the city. Instead, **tourism is understood as a broader contextual force**, **operating alongside other economic dynamics** and playing a central influence in overall socio-spatial and environmental dynamics. **Path-dependent development trajectories are viewed with pessimism: that east-west territorial disequilibrium will continue to exist, and that Tarragona's only possible economic models are energy industries** (whether petro-chemical or "green", with concerns about atmospheric contamination and a legacy of industrial accidents in the Ponent), **and/or a tourism-oriented service economy**, an issue that arises in terms of a precarious labor market rather than in housing in the Ponent.

Within the Ponent, the dominant market pressure narrative relates more strongly to large-scale development trajectories and investment logics than to tourism or property speculation. Civic actors interpret the future of its neighborhoods through uncertainty surrounding PP10 and the wider development accompanying it: commercial activity, infrastructure, and institutional investment. These projects are perceived as capable of reshaping

the neighborhood's position and connectivity within the city, but their implications for existing residents remain unclear.

From a housing justice perspective, anticipatory market pressures intersect with the three core themes of the green transition examined in this case. Densification and new housing supply take place within a market environment where land values, investment priorities, and developer interest shape what is feasible and for whom. Civic actors are attentive to the risk that new housing delivery, even when framed as socially oriented, may reinforce existing spatial inequalities if it is not accompanied by measures ensuring accessibility for current residents. However, as of yet, **green transition activities within themselves are not perceived as directly related to rising housing costs**, which are attributed to broader overall housing trends.

8.2.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

A central finding of the Tarragona interviews is that civic actors and public-sector representatives often share **broad concerns about inequality, climate adaptation, and the need for housing intervention, yet frequently interpret *what is feasible*, *what counts as progress*, and *where the main bottlenecks lie* in different ways**. These differences a reflect a **structural mismatch** between the everyday social realities of households and neighborhoods, and the operational logics and budgetary limitations framing how public institutions design and implement green transition initiatives.

For civic interviewees, the green transition becomes meaningful only when it produces **tangible changes in everyday life**. Parks and public spaces matter when they are used, perceived as safe, and experienced as dignified; densification is acceptable when it is clearly justified, fairly distributed, and does not reproduce territorial stigma; and retrofit programs are viable only when they are accessible without imposing unacceptable financial or administrative risk on vulnerable residents. In contrast, public-sector actors tend to describe the transition primarily through **institutional constraints,** funding frameworks, legal pathways, administrative sequencing with long timelines, departmental mandates, and the scope of formal programs. These different interpretive frames generate perception gaps, where **civic actors are more likely to evaluate success through lived experience and feasibility at the individual or household or building level, while institutional actors evaluate success through deliverability, compliance, and the ability to mobilize resources within constrained governance environments.**

In the domain of **public and social housing delivery, institutional perspectives emphasize that recent large-scale interventions depend heavily on extraordinary funding opportunities and accelerated implementation mechanisms**. A housing specialist and technical staffer in the Municipality of Tarragona frames the city's social housing delivery efforts as being made possible by Next Generation funding and shaped by strict procedural and temporal requirements:

> "We did the construction of these 192 homes through a direct award... with the timing requirements set by the Next Generation funds, we took the leap... it wasn't easy to justify it even though the regulations themselves allow it... Without those funds, the 192 homes would not have been possible." (housing specialist and municipal technical staff)

This institutional framing aligns in part with civic actors' recognition that new social housing supply is necessary but differs in emphasis. **Public-sector narratives foreground the administrative conditions of delivery—speed, legality, and funding opportunity—more than the *where* and *how* that new supply becomes embedded in the city's geographies of existing and continuing inequality.** Those contrasts with civic activists asking for density to be of quality and planned through equitable spatial distribution and proper long-term planning. They **evaluate densification through the lens of territorial fairness and legitimacy, while public-sector actors tend to frame it through deliverability, funding windows, and compliance constraints.** These positions are not opposed, but they can lead to different conclusions about prioritization: institutions value feasibility and speed; civic actors value justice, distribution, and avoiding the reproduction of territorial stigma and concentration of lower-income housing.

The territorial dimension of inequality emerges as one of the strongest shared themes, yet is a source of considerable divergence in framing. A long-term housing expert in Tarragona provides an illustrative institutional perspective that links present-day interventions to the **long-term historical production of segregation** in Tarragona. Reflecting on post-1970s urban expansion tied to industrial growth, he explains the role of locational choices and building concentration of large-scale housing development for workers:

> "Tarragona has gone through a process of growth that has clearly marked the city. Campclar, Bonavista, Torreforta... these neighborhoods were created very quickly, linked to the arrival of the chemical industry, and this generated a concentration of more vulnerable populations in very specific areas." (long-term housing expert, Tarragona)

This statement situates current housing and green transition initiatives within a structural and historical context, rather than treating them as isolated policy responses, expressing a sensitivity that **interventions in the Ponent carry heavy symbolic and political weight** and underlining that institutions and their actors are not monolithic.

This framing reinforces the civic insistence that the Ponent cannot be treated as a neutral site, while civic actors' narratives about the transformation of the Anella Mediterrània illustrate how **civic actors interpret green interventions as changes to dignity, atmosphere, and everyday belonging**. In this sense, essentially, civic actors interpret parks and NBS in the Ponent as a potentially transformative intervention. Both civic actors and housing experts converge on the idea that the **green transition must be read through inequality, but civic actors focus more on lived change, while institutional actors often emphasize abstract historic patterns and technocratic administrative categories.** A municipal technician summarizes how the Tarragona Greenbelt project is embedded within EU NextGen funds requirements.

> "So, this Tarragona Greenbelt project is funded by the Fundación Biodiversidad [drawing on EU NextGen funds]. It has been 3.5 million euros... It's a project that lasts two years... and it includes actions both in renaturalization and in education and awareness.... In the end, nature-based solutions come with a project, with a budget, with a series of objectives you have to fulfill." (Municipal technician working on the GreenBelt initiatives)

As a result of their professional activities, public-sector actors are more likely to frame parks and nature-based solutions through programs, departmental mandates, and external funding structures. As the quote above suggests, NBS projects such as the Greenbelt/Anella are tied to the existence of a funded project, with a budget scale and a structured environmental objective. This differs from local civic leaders' framing, for whom "green space" is evaluated through everyday usability and discovery. These two framings can complement each other, but not necessarily: a funded NBS program may not automatically produce a space that residents use or value, while residents may value spaces that are not formally framed as "NBS" in project terms.

Problems about social equity regarding energy-efficient retrofit are shared by civic and institutional actors. While framing retrofit and housing projects through funding streams, eligibility rules, and administrative sequencing, a local technician from the municipal housing service highlights the complexity of the process.

> "The problem is not that there are no subsidies. The problem is that the process is very complex, and we don't always have the tools to accompany everyone in the way we would like." (local technician from the municipal housing service)

Housing experts similarly acknowledge the multiple burdens of information access, legibility, and technical isolation experienced by residents, while emphasizing the difficulty of altering institutional systems:

> "We are asking a lot of people. **Many communities don't have the capacity to manage these processes, and we know that. But the system is designed in a certain way, and changing that is not simple.** The vast majority, 70% of residents of the city of Tarragona, probably don't have money to pay for a property manager, so the poor president of a building's homeowners' association must first find out that Next Gen funds exist, that there are subsidies, and then learn how to apply for them. When they see the bureaucracy in the documents they must submit, which they don't even understand… many people are outside the system because they may not have internet access."

Importantly, **the civic critique is not that institutions are *doing nothing*; it is that institutional mechanisms do not match the real capacity of vulnerable communities to assume risk**. This mismatch produces a justice problem: retrofit becomes accessible primarily to those who can front costs, coordinate works, and survive financial uncertainty, while those most exposed to energy vulnerability may remain excluded.

In this context, as housing technicians from the municipality frame housing problems as multifaceted, they illuminate the **institutional tendency to interpret retrofit barriers as part of a broader complex system** rather than as a single solvable bottleneck. Institutional actors more often describe interacting constraints: market pressures, administrative fragmentation, and the difficulty of aligning multiple policy domains. In contrast, **civic actors are more likely to identify this complexity as risk and point at this risk transfer as the central injustice.** The more dimensions involved, the less predictable outcomes become for vulnerable households that cannot afford failure. This is why civic narratives consistently return to the need for guarantees and accompaniment: complexity strengthens the case for

stronger public responsibility, not for slower action. This difference in diagnosis can produce different political priorities. Civic voices demand guarantee structures; institutional voices tend to emphasize systems coordination and multi-level complexity.

Institutional actors, for their part, see serious flaws with the way they are meant to implement EU retrofit funds, seeing them as too narrowly focused and difficult to tailor to broader needs, particularly with an aging and economically vulnerable population.

> **Most EU retrofit funds here have gone to single-family houses**. It's the owner-occupiers that have more money. "Hey, for the Tesla they gave me 5,000 Euros, so…." **It's money that's not going where it should go. If they are public measures they should go to where there is need.** They have carried out some energy efficiency work on buildings in Campclar, but if you come here and say "do you want to renovate this building? It's going to cost you x", they say "what I want is a doorknob on the front door… and I have a broken window and I don't know how I'm going to pay for it." So, at that point, you say "well, forget about rehabilitating *that* building"…. They have to consent, and if they're a vulnerable community, they're going to say no. **Energy efficiency is all well and good, but… I think accessibility should be prioritized and elevators should be installed where there are none, that homes are accessible and in inhabitable condition, *then* you think about energy efficiency**. European funds should prioritize accessibility too. It is a priority for the Housing Council because the group working on refurbishments also includes accessibility. (housing specialist, City of Tarragona)

Such a position of a figure with technical and policy influence in the city suggests, as was also found in discussions during the ReHousIn policy lab with local experts, that **there is a challenge to dealing with EU funds focused specifically on energy efficiency when the needs of residents in apartment blocks—especially those on lower incomes or with disabilities—are widely seen by housing experts as more urgently needing accessibility improvements to accommodate aging people with mobility barriers, so they can remain in their homes**. Funds can be used at the same time for the installation of elevators, as happens in some cases, but the narrow focus of NextGen retrofit funds present challenges in terms of streamlining processes, and are seen as driving priorities that do not match the most immediate needs of residents, particularly those on fixed incomes.

Finally, tourism and market pressures also reveal subtle perception differences. Institutional actors often emphasize evidence-based assessment, while civic actors are less likely to speak in regulatory terms than interpret market pressures through development trajectories that feel tangible in their neighborhood environment (e.g., PP10, commercial logics, future investment uncertainty).

In sum, the Tarragona interview material suggests that **the most consequential gap between civic and public-sector perceptions is not about whether the green transition should happen, but about who should carry the burden of making it work**. Doing so requires institutional arrangements that reduce up-front household risk, prioritize the social usability, preservation of existing green spaces, and long-term maintenance of new green infrastructure, and that distribute responsibility for densification and retrofit across the city in ways that build legitimacy rather than reproduce inequality.

8.2.5 Critical Analysis: Tarragona

This section develops a policy-facing critical synthesis of Tarragona's housing justice and green transition trajectory over roughly the past two decades by placing interviewees' lived perceptions and interpretive frameworks at the center. As demonstrated in Section 3, interviewees consistently evaluate the green transition through the lens of housing condition, territorial equity, and accessibility of financial support (see also Bustamante Picón et al., 2022a, 2023).
From the point of view of several civic actors, Tarragona's transition is often experienced less as a coordinated strategy than as a series of fragmented interventions that are distributed unevenly across space. This perception is historically grounded. Several Ponent neighborhoods—most notably Campclar—experienced not only rapid housing construction but subsequent phases of institutional failure, including halted works, mismanagement of public resources, and long periods of abandonment (Plaza, 2025). These experiences help explain why contemporary green and housing interventions are evaluated by residents less on stated intentions than on their durability, maintenance, and capacity to avoid repeating earlier cycles.

In practice, the strongest "justice test" of the green transition is housing affordability and security: whether residents are able to remain in place with adequate or improved habitability, affordability, and thermal comfort, and whether improvements reach those most exposed to vulnerability rather than those already best positioned to take advantage of public programs. **This perception-based diagnosis "green transition equity" aligns with critical social science research on Tarragona's uneven urban development, where socio-spatial inequalities have been shaped by long-term territorial separation and fragmentation, contested development trajectories, and a persistent center–periphery (and East/West) distinction** (Alberich et al., 2021; Sole Gras, 2022; Zaguirre Fernández and Solé Gras, 2019). **The territorial concentration of vulnerability in Ponent gives this justice test empirical weight.** The city's own reports (2023) demonstrate that Ponent records significantly higher rates of unemployment, lower income levels, and elevated indicators of social exclusion relative to Tarragona as a whole. In this context, **the distribution of green transition benefits cannot be separated from the spatial distribution of enduring socio-economic disadvantage.**

Tarragona's position as a medium-sized Catalan city is an important part of the story, as it functions as both a provincial capital with historical and cultural assets and a node in wider networks of mobility, service concentration, industrial businesses, and tourism pressures—dynamics that increasingly interact with housing access and affordability. Tarragona has long been described as a city where long-term development pathways have generated persistent spatial imbalance and contested planning and redevelopment approaches generate tensions, particularly in the Ponent, which has historically been shaped by infrastructure, industrial land use logics, and marginality. Like in Barcelona, this context emphasizes that civic society actors frequently interpret green transition activities not as a purely technical or ecological agenda, but one that brings to light ongoing disputes over urban inclusion, recognition, and distributive equity. Yet, unlike Barcelona, civic movements are more sparse and localized.

8.2.5.1 Tarragona's transition is interpreted territorially: where the city acts matters as much as what it does

A consistent interpretive frame across the interviews is that **Tarragona is not experienced as a unified urban system. Instead, it is perceived as a territorially fragmented city**, **where neighborhood location strongly conditions access to services, symbolic**

recognition, and trust in public intervention. Interviewees describe neighborhoods relationally: in terms of proximity to the center, infrastructural connectivity, stigma, and whether public action is visible in everyday environments.

Historical accounts of the Ponent further indicate that this territorial fragmentation was reinforced by governance practices that weakened neighborhood-level collective power over time. Strong post-1970s place-based movements were gradually diluted through institutional fragmentation, parallel associations, and the political absorption of civic leadership, shaping a present-day context in which participation is often experienced as consultative rather than decision-making (Plaza, 2025), and this perspective is supported by contemporary civic actors. This territorial reading aligns closely with Tarragona-focused urban scholarship that conceptualizes the city through discontinuities and uneven integration between central and peripheral districts, produced by historical land-use choices, industrial infrastructures, and planning decisions (Zaguirre Fernández, 2015, 2020; Zaguirre Fernández and Solé Gras, 2019). In such a context, green transition interventions are interpreted politically. Investments are read as acts of recognition, while absences or delays are interpreted as a continuation of neglect.

The territorial lens is particularly pronounced in the Ponent, which functions in interview narratives as the city's most sensitive zone for housing justice. It is consistently described as a territory that concentrates vulnerability, stigma, and unmet needs—a "pending urban project"—and therefore becomes the clearest test of whether Tarragona's transition is distributive or selective on a territorial level (Alberich et al., 2021; Plaza, 2025). Academic work describing Tarragona's "oil stain" structure—a consolidated core combined with spread-out, polarized periphery—helps explain why transition interventions are experienced unevenly unless territorial cohesion and restructuring is explicitly embedded in program design.

This territorial sensitivity is not new. The 2005 Catalan Llei de Barris intervention in Campclar explicitly framed the neighborhood as a site of "integral" regeneration, combining urban, social, and environmental dimensions. However, the Campclar experience from two decades ago demonstrates how integrality depended heavily on institutional stability and coordination. The management team for the *Pla Integral d'Intervenció* changed three times, and overlapping programs complicated the delimitation of competences and responsibilities. These governance instabilities weakened continuity and complicated accountability. This history helps explain why contemporary transition initiatives in Ponent are interpreted cautiously: residents have experienced ambitious regeneration rhetoric before, but also the fragility of institutional embedding (Martí-Costa et al, 2009).

8.2.5.2 Green improvements are valued when they change everyday "livability", not only when they exist as projects

Across interviews, environmental improvement is valued most clearly when it produces tangible changes in everyday life. Legitimacy is evaluated less through abstract ecological objectives and more through effects on comfort, mobility, safety, and neighborhood usability. This reflects a recognitional dimension linked housing justice as a linked condition to environmental projects: residents are concerned not only with whether interventions exist, but whether they translate into a place that supports everyday routines with dignity.
This perception resonates strongly with Tarragona-specific research on green space accessibility and quality, which shows that urban parks in the city often score low on quality indices and that access is unevenly distributed along socio-economic lines (Puigbó Testagorda, 2018; Solé-Gras and Solà-Morales, 2023), in accord with studies

underlining that **green infrastructure and densification through urban infill become justice interventions only when they improve daily wellbeing in neighborhoods that have historically lacked environmental assets, and when they are maintained over time**.
The interviews also highlight a fragile trust in green improvements. Civic actors note that projects can feel partial or unstable when maintenance regimes are unclear, governance continuity is weak, or green spaces remain vulnerable to competing development agendas. This fragility is especially visible in relation to the Francolí River corridor: besides being the principal boundary between the Ponent neighborhoods and industrial areas and the city center, it is where ecological ambition intersects with flood risk management, land-use pressure, and multi-level governance. The renaturalization proposal developed by Ecologistas en Acción explicitly frames the Francolí as both an ecological and social corridor, arguing that accessibility, long-term maintenance, and risk-aware design are essential if renaturalization is to deliver public value and ecological restoration rather than symbolic greening (Ecologistas en Acción, 2021). This also speaks to the petrochemical and infrastructural legacy of the city, as a key barrier to renaturalizing the waterfront are buried pipelines.

8.2.5.3 Housing is the core justice aspect in civic assessments of the green transition

Housing emerges across interviews as the clearest site where Tarragona's green transition succeeds or fails: Civic caution toward housing and retrofit programs is also shaped by a longer memory of failed social interventions. At various historical moments well-funded social welfare and community programs in Ponent were undermined by poor coordination, rotating technical staff, and ineffective administration, reinforcing a rational skepticism toward initiatives that transfer risk or responsibility onto residents without strong public guarantees (Plaza, 2025).

Interviewees across institutional and civic groups repeatedly emphasize that the central housing problem in many neighborhoods—especially in Ponent—is not only affordability, but habitability: ageing buildings, limited accessibility, and persistent deficits in comfort and thermal performance.

This diagnosis aligns with technical and professional assessments of Tarragona's housing stock, which document widespread energy inefficiency and structural ageing, particularly in multi-family buildings, as underlined by the local professional association of technical architects (COAATT, 2023). **Interviewees consistently describe a two-stage problem: first basic rehabilitation (structure, accessibility, moisture, safety), and only then energy upgrading. In this sense, transition policies that focus narrowly on energy metrics risk missing what residents experience as the most urgent housing needs and as other health risks.**

From a housing access and affordability standpoint, the Local Housing Plan of Tarragona recognizes the structural gap between housing need and affordable supply, identifying social rental expansion and rehabilitation as priority challenges. Recent reporting indicates that Tarragona remains significantly below its estimated social housing requirements, with a persistent shortfall relative to projected demand. This structural gap reinforces **interviewees' perception that housing condition and access, rather than abstract climate targets, define the justice horizon of the transition.**

Institutional actors also acknowledge this misalignment, noting that European energy-efficiency frameworks are not always well adapted to Mediterranean housing typologies and ownership structures. This reinforces the idea that housing justice in the green transition depends on recognizing uneven starting points about quality and affordable housing access, rather than assuming a uniform baseline of housing adequacy.

8.2.5.4 Retrofit is widely perceived as necessary, but structurally inaccessible

While retrofit is broadly recognized as desirable, interviews reveal a persistent **access problem**. Exclusion is produced less through explicit eligibility rules than through **capacity inequalities**: differences in administrative literacy, digital access, availability of property managers, and collective organization within housing communities.

This perception aligns with Spain-wide evidence showing that although rehabilitation activity has increased sharply due to European funds, uptake remains uneven and administratively bottlenecked, particularly in vulnerable contexts (López, 2024, 2025). This local experience mirrors national reporting that Next Generation rehabilitation funds have encountered administrative bottlenecks across Spanish autonomous communities. The European Urban Initiative's Building Decarbonization report (Lorimer, 2024) similarly emphasizes that integrated renovation programs require strong local facilitation capacity and coordinated governance structures to avoid uneven uptake. Tarragona's experience in Ponent illustrates how capacity gaps at the building and household level can transform formally universal programs into stratified interventions.

Interviews reveal how many communities simply cannot navigate Next Generation rehabilitation systems because they lack property managers, digital access, and the time or ability to manage complex bureaucracy. With such challenges, **program design can reproduce inequality when funding is theoretically universal without stricter social-economic criteria and feasibility assessments.** If access depends on administrative scaffolding (property managers, technical intermediaries, stable internet access), then the transition becomes easier in higher-capacity buildings and harder in lower-capacity ones. This aligns with broader scholarship on how policy complexity often externalizes burdens onto households, producing stratified outcomes (even when overall funding is progressive) (Gutiérrez and Delclòs, 2017).

The Campclar regeneration as a result of the 2005 Catalan Llei de Barris revealed a structurally similar dynamic (Martí-Costa et al 2009). Although funding was territorially targeted and explicitly redistributive, implementation depended heavily on technical intermediaries, stable administrative teams, and clearly defined competences. The documentation of team turnover, electoral-cycle disruption, and overlapping program frameworks demonstrates how even well-funded interventions can lose coherence when institutional coordination is unstable. In this sense, the retrofit bottlenecks and complexities described by interviewees in Ponent reflect not a new failure, but a recurring governance pattern in the neighborhoods' experience of public intervention.

Together, these perceptions indicate that Tarragona's retrofit bottleneck is not mainly about whether households value efficiency or comfort. It is about whether households can engage with the system safely and realistically and without assuming greater financial risks. For housing justice outcomes, this implies that transition policy requires more than "available grants": it requires facilitation capacity, technical accompaniment, and risk reduction mechanisms, particularly in neighborhoods with vulnerable residents and older housing stock.

The COAATT report (2023) underscores why this is structurally significant in Tarragona. It documents the predominance of multi-family communities, identifies extensive energy deficiencies, and points to the scale of housing located in Ponent neighborhoods

(including Torreforta and Campclar). If these communities cannot access rehabilitation systems, the city's overall transition potential becomes structurally constrained. Both civic and institutional interviewees point to the same structural issue: program design assumes organizational and administrative capacity that many housing communities—especially in Ponent—do not possess. As a result, the transition becomes harder in those most exposed to vulnerability. **This confirms that retrofit justice requires not only grants, but facilitation capacity, technical accompaniment, and risk reduction**, **particularly in neighborhoods with ageing housing stock.**

In considering this, it is essential to note that there are deficiencies in the roll-out of retrofit subsidies and support structures: under the Next Generation–funded residential energy-efficiency programs in Spain, implemented in Catalonia through the regional recovery plan, **there was a clear intention to create "one-stop shops" (*oficinas de rehabilitación* or *ventanillas únicas*) to accompany homeowners through the technical and administrative process; however, in practice, these offices have been unevenly developed**, with well-staffed and clearly identifiable one-stop shops concentrated mainly in Barcelona, while many other parts of Catalonia have relied on more fragmented arrangements involving regional agencies, municipalities, and professional bodies with limited visibility and effectiveness; **in the case of Tarragona, there is no widely recognized, stand-alone local "one-stop shop" equivalent to Barcelona's Municipal Rehabilitation Office, and property owners are instead typically directed to the heavily-burdened Catalan Housing Agency, local municipal services for initial guidance, and private or professional technical offices** (such as the COAATT) to navigate subsidy processes, with the effect that access to these funds exist without clear local accompaniment**.**

8.2.5.5 Densification and "where growth lands": Call for compactness with quality, but rejection of macro-project logics

Housing justice in Tarragona is also shaped by perceptions of densification and development priorities. Interviewees do not reject density per se. Instead, they emphasize that **densification must be evaluated by where it is emplaced, what it replaces, and whether it improves everyday urban conditions**.

This position resonates with research on intermediate cities and territorial planning in Catalonia, which shows how large-scale projects and competitiveness narratives can intensify tensions around who benefits from growth (Varo, 2024; Vidal and García-Duch, 2024). In Tarragona, distrust is directed less at density itself than at development logics perceived as privileging private return while externalizing social costs to already vulnerable neighborhoods.

Contemporary debates about Tarragona's development model—particularly tensions between tourism, large-scale private investment, and "green industry" narratives—shape how densification is interpreted. Public discussion around strategic projects such as Hard Rock Tarragona – the large-scale leisure industry project just southwest of the city – reinforces civic sensitivity to where growth is located and who benefits. In this context, interviewees' calls for "compactness with quality" can be read as a demand for socially embedded density rather than macro-project urbanism.

As an environmental activist articulated in an interview, **density can be compatible with quality and sustainability—but only if it is shaped by careful placement, public benefit logics, and "stitching together" existing urban fragments rather than pursuing large-scale speculative schemes**: Interviewees stress that densification without parallel investment in services intensifies everyday pressure. This reinforces the idea that density becomes unjust when population increases are not accompanied by expanded collective infrastructures. In this

sense, new housing delivery cannot be treated as a standalone output but must be integrated into a broader package of social and territorial investment.
Community activists further fear that that the arrival of more residents and institutions into the Ponent will generate a sharper experience of the abstract concept of "densification" and that this experience will become more contentious unless public systems, services, and staffing expand accordingly. This perception has direct policy relevance: like in the Barcelona case, **densification becomes perceived as unjust when it adds population without expanding collective infrastructures (services, staff, health systems, local access). Tarragona's transition therefore cannot treat new housing delivery as a standalone output;** it must be planned as part of a broader package of collective investments that make neighborhood growth socially sustainable. Some interviews also stress that densification runs of risk of selectively removing or destroying valuable green space, under the promises of new housing and infrastructure – thus making green infrastructure expendable in the face of ostensibly "green" redevelopment.

8.2.5.6 New social housing delivery: positive, but territorially sensitive

Overall, interviews report that Tarragona's recent public and protected housing promotion is significant given the city's historic difficulty delivering large volumes of units. Yet these efforts are perceived as territorially sensitive: where units are located matters, because it affects neighborhood reputation, connectivity, and the distribution of opportunity.
This concern aligns with reporting on Tarragona's social housing deficit and the spatial concentration of new projects (ACN, 2024; Magarolas, 2024a, 2024b) **Interviewees interpret social housing not only as affordability infrastructure, but as territorial restructuring**, **whose justice effects depend on whether it reduces stigma and improves integration or reinforces peripheral concentration.** The 2021–2026 Local Housing Plan explicitly identifies the expansion of social housing, the mobilization of vacant units, and the improvement of residential cohesion as priority challenges. These commitments underscore that new social housing is not framed solely as quantitative supply, but as a territorial cohesion instrument—particularly relevant in districts such as Campclar and Torreforta. Neighborhood activists seek to hold the city accountable to these commitments.
A local housing expert working with the city describes the 192-unit project (located in Campclar/Anella) as both **a large opportunity and a mechanism for "energizing" an area that has been more "isolated" and "stigmatized", while also creating demands for improvements in transport and local services**: social housing is indeed framed by the city in the context of territorial restructuring. Such restructuring can be perceived by civic actors as positive if it reduces stigma and strengthens connectivity, but requires careful coordination to avoid reinforcing patterns of peripheral concentration (Alberich et al., 2021). This theme also connects to broader research on Camp de Tarragona's metropolitanization processes and regional planning tensions, where housing, infrastructure, and growth interact across municipal boundaries (Zaguirre Fernández and Solé Gras, 2019). In Tarragona, this means that new **housing delivery must also be assessed through its capacity to produce integrated urban membership and territorial balance across historically separated neighborhoods** as well as **balance between new housing and preservation of green space**.

8.2.5.7 Synthesis

Foregrounding interviewee perceptions suggest that Tarragona's green transition activities in the Ponent are not perceived as unjust because residents reject environmental improvement, but because **improvement pathways are selective, difficult to access, and territorially uneven**.

While providing opportunities for new initiatives and improved staffing budgets, **the reliance on extraordinary European funding cycles introduces structural uncertainty into the continuity of transition measures**. As observed nationally, rehabilitation rates have surged under EU funding, yet long-term institutional embedding remains uneven. Tarragona's case suggests that unless facilitation capacity and territorial equity are institutionalized beyond funding windows, transition gains may remain episodic rather than structural.

Three conclusions stand out. **First, legitimacy depends on access, not availability: capacity inequality becomes a hidden exclusion mechanism. Second, compactness is accepted when it improves city-making rather than functioning as a pretext for macro-development. Third, territorial cohesion emerges as the key justice metric. Ponent functions as the city's principal distributive test**: **when interventions reduce stigma and improve connectivity, they are perceived as just; when they concentrate burdens, they are perceived as reproducing, rather than reducing, inequalities.**

Finally, interviewees highlight dependence on extraordinary funding moments, particularly Next Generation programs. Tarragona's experience under the 2005 Llei de Barris provides a relevant precedent (Martí-Costa el al 2009). The Campclar intervention demonstrates both the ambition and the vulnerability of territorially focused regeneration when continuity, competence clarity, and long-term institutional embedding are weak. The recurrence of capacity and coordination challenges in today's green transition suggests that **the core justice question is not simply whether funding is available, but whether governance learning from earlier regeneration cycles has been institutionalized and will remain upon the expiration of the NextGen funds**. Without such learning and continued funding and support, transition risks reproducing the episodic, project-based pattern that has historically characterized intervention in Ponent.

While enabling significant interventions, project-based funding creates uncertainty around continuity and long-term embedding and concerns that urban planning initiatives are driven by the themes of funding mechanisms rather than the other way around. Evidence from European and Spanish policy analysis suggests that such reliance risks uneven outcomes unless anchored in durable institutional capacity (Lorimer, 2024). **Tarragona's experience suggests that the most urgent work of the transition is therefore not only new delivery, but institutional accompaniment and commitment**: **making improvement pathways navigable and durable for the communities that need them most.**

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8.2.7 Appendix 1 – Glossary

EU	European Union
Generalitat	Government of the Autonomous Community of Catalonia - public body
ICF	Institut Català de Finances Catalonia's public development bank providing financing to companies and public entities.
ICO	Instituto de Crédito Oficial Spain's state-owned development bank that supports public policy financing and business investment
NBS	Nature-based Solutions
PERTE	Proyecto Estratégico para la Recuperación y Transformación Económica Strategic Project for the Recovery and Economic Transformation A Spanish public–private initiative to drive economic recovery and strategic sector transformation
PSC	Partit dels Socialistes de Catalunya Socialist Party of Catalonia, local branch of the national PSOE party
PSUC	Partido Socialista Unificado de Cataluña The Unified Socialist Party of Catalonia was a communist political party active in Catalonia between 1936 and 1997. It was the Catalan branch of the Communist Party of Spain and the only party not from a sovereign state to be a full member of the Third International.
VPO	Vivienda de Protección Oficial Publicly regulated housing offered at below-market prices to ensure affordable access

8.2.8 Appendix 2 – Key Interview Data and Transcripts

	Position of Interviewee	Sector/ Organization	Date of Intervie	Modality
1	Municipal housing technician	City Council of Tarragona & SMHAUSA	14/07/2025	Online
2	Long-term housing expert	UNESCO Chair in Housing (Universitat Rovira I Virgil)	24/07/2025	Online
3	Housing expert	SMHAUSA	26/09/2025	In-Person
4	Architect and environmental activist	L'ESCAMOT architecture & urbanism cooperative	05/10/2025	Online
5	Long-term civic activist	Campclar Neighborhood Association	20/11/2025	Online
6	Civic leader	Castaño Block	28/11/2025	Online
7	Municipal environmental technician	Tarragona City Council	30/12/2025	Online

8.2.9 Appendix 3 – Visuals

Housing Retrofit in the Campclar neighborhood

Source: Diari de Tarragona

Renaturing the Anillo Mediterráneo (project Tarragona Greenbelt 26)

Source: Diari de Tarragona.

8.3 CASE STUDY (SMALL): OLOT

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8.3.1 Town profile, challenges around just (housing and ecological) transition

Olot (Girona) is the capital of the Garrotxa *comarca* with a population of approximately 40,000 residents, around 62% of the comarca's total population. Located 110 km northeast of Barcelona toward the Pyrenees and French border, Olot is inland and surrounded by the *La Garrotxa Volcanic Zone Natural Park, a forested landscape representing the most significant volcanic area of the Iberian Peninsula* (Nogué and Sala i Martí, 2017). Tourism in the Garrotxa is moderate and nature-focused, centered on small-scale rural accommodation. Second homes present but less dominant than in coastal or high-mountain areas of Catalonia. Olot functions as the comarca's service hub rather than as a principal vacation destination.

The combination of regional centrality, topographical and regulatory constraints on expansion, and the growth of its industrial economy produces a structurally tight housing market. Demand concentrates in and around the historic core (Nucli Antic), while simultaneously many buildings there remain underused, in disrepair, or are uninhabitable ruins. The coexistence of high vacancy in buildings in the Nucli Antic and strong housing demand by predominantly migrant workers dependent on Olot's labor market, frames many of the city's current tensions.

The Nucli Antic exhibits the most acute manifestations of inequality. Its dense medieval fabric is defined by narrow, irregular streets susceptible to poor ventilation and dampness, with most buildings narrow, multi-storey blocks owned by individuals or families, few who live there

themselves. At various points since 2001, more than half of flats stood vacant in the Nucli Antic, compared to a far lower townwide share; in 2009, 23.3% of buildings were in bad repair or ruin (Bonet et al., 2009), despite five years of **public works and building upgrades** funded by the Catalan government under the Llei de Barris regeneration framework. Ownership fragmentation limits coordinated rehabilitation and slowing the return of units to stable occupancy. The prevalence of walk-ups without elevators further excludes older residents, people with disabilities, and larger households.

These physical characteristics intersect with the social structure of the center, where racialized migrant residents constitute a significantly higher proportion than the town. As of 2012, the Nucli Antic had the highest concentration of those born outside of Spain, at 43.5%, followed by the neighborhoods of and Sant Miquel (37.9%, directly southwest of the Nucli Antic) and Les Tries (36.6%, adjacent to Sant Miquel) (Consorci d'Acció Social de la Garrotxa, 2012).

Figure 1. Map of Olot. Source: https://sig.olot.cat/

Documentation requirements, income volatility linked to shift work, and widely reported discriminatory landlord screening processes concentrate migrant households in substandard housing stock. Overcrowding, informal rental arrangements, and squatting are common coping strategies. In 2023, Olot was reported to have 156 squatted properties (AGN, 2023), framed within culturally coded political debates around safety and security, though Olot has a low crime rate compared to medium-to-large settlements in Girona and to Catalonia.

Recent research on urban vulnerability in Olot conceptualizes these conditions as the intersection of residential exclusion and territorialized social disadvantage, arguing that housing degradation and weakened neighborhood infrastructures mutually reinforce one another rather than operating as separate phenomena. This perspective situates the Nucli Antic's housing crisis within a broader process of spatialized inequality (Carrera et al., 2021; Carrera Fossas, 2023; Carrera-Fossas and Brugué, 2025).

The capital of the Garrotxa is experiencing sustained population growth, driven by international labor migration. ***Olot is one of the municipalities with the highest levels of industrial employment in Catalonia*** *(see Table 1). Key sectors include agro-food processing (mainly pork and charcuterie), machinery and metallurgy, and plastics, paper, and chemical industries. Most firms are small- and medium-sized and associated with local supply chains, though major companies such as the delicatessen company Noel operate macro-plants*[142]*. The area is considered part of the "fuet corridor", referring to the dry-cured Catalan sausage* (Colell, 2024b).

As of 2025, 27.8% of residents were born outside Spain, though this is likely an undercount of those in informal housing and working in the informal economy, particularly elder care. Such trends began appearing in the mid-1990s and have remained steady, while the Spanish-born population has remained stable. International migrants living in Olot are predominantly from India, Morocco, Honduras, Gambia, Romania, China, Ukraine, Colombia, Venezuela, and Peru. Population projections anticipate an additional 17.7% increase between 2025 and 2034 (Idescat, 2025b), among the highest rates for non-metropolitan Catalan municipalities. This local population growth, like in nearly all Catalonian municipalities, is attributed **to international migration rates counteracting low natality, paired with aging populations, in which there would otherwise be population stagnation or decline**. On the other hand, Olot has limited internal migration from elsewhere in Catalonia or Spain; as such, **the population predominantly comprises lifelong local residents and comparatively lower-income international migrants who are more likely to experience housing vulnerabilities.**

Tenure patterns contribute to these outcomes: owner-occupation dominates, with 23.5% of residents being renters. The construction of new housing, both market-rate and subsidized, performed a more visible role in the town from 1999 to 2011 under Socialist Party (PSC) leadership, when 3,889 new homes were completed (724 subsidized), while from 2012-2024 under the center-right Catalan independentist party formation of Convergència i Unió/Junts per

[142] For example, *Olot Meats operates multiple slaughterhouse, packaging, and processing facilities claiming the capacity to process up to 18,000 pigs per day for an international market. Noel, one of the principal manufacturers of pork products for the Spanish market, also operates a number of facilities in the area.*

Catalunya (Junts), 964 new homes were completed (100 public), despite increased population growth (Diari de Girona, 2025) and swelling waiting lists for public housing.

The Nucli Antic has a population density of over 13,000 per km², over double the town's average. However, it also high levels of vacancy and abandonment: as of 2021, the town had a reported 6-6.3% of dwellings vacant, excluding others classified as "very low consumption' buildings classified as underutilized and/or intermittently squatted. Despite high owner-occupancy rates in Olot overall, 86% of owners of properties in the Nucli Antic do not live there (Ajuntament d'Olot, 2026)*. As of 2023, there are an estimated 1,060 empty homes in the town, located predominantly in the Nucli Antic* (Masó Ros, 2023). ***Local* housing activists claim that there are closer to than 1,300 empty apartments in the town, around 8.3% of the total housing stock** (Costa-Pau, 2025). **The rapid rise of international migration in Olot, like elsewhere in Catalonia, have driven debates around cultural and linguistic integration which have aided the rise of the new far-right, ethno-nationalist independentist political party Aliança Catalana (AC)**, led by the mayor of Ripoll, 30 kilometers away. In the most recent election, the AC formation captured 15.45% of Olot's votes, behind Junts (36.7%) and just behind the PSC (16.9%), who has accused the city's leadership of shifting its discourse around migrants' integration and perceived criminality toward that of the AC (Diari de Girona, 2025), especially through emphasis on residential squatting. Olot's Mayor, Agustí Arbós, maintains that the city needs to "pause" or better regulate growth in order to preserve the quality of the welfare state, ensure adequate service provision, and allow for more effective integration. While he has rejected simplistic links between immigration and insecurity, emphasizing that most newcomers seek work and integration, he has called for a broader public debate about demographic policy and municipal capacity in Catalonia, placing security and migration as the central themes of his mayoralty. Arbós argues "Catalonia welcomes more than 150,000 newcomers each year, and we doubt that at this pace it is sustainable to maintain quality services without planning…. If we don't have quality services, it's OBJ OBJ.

Multiple journalistic reports describe how racialized migrant workers — even those with stable jobs — face open discrimination in the rental market (Bernabé, 2024). Landlords and agencies have been observed to systemically and illegally refuse to rent apartments because applicants are foreign or perceived as "outsiders," regardless of their ability to pay (Colell, 2024a, 2024b). The rise of exclusionary political currents are widely perceived to reflect, and increase, local tensions and procedural barriers for immigrant households seeking formal leases or registration. Responding to such tensions, In 2021 the Olot City Council launched a participatory process to address ethnic/racial discrimination in real estate, involving local government professionals, residents' and immigrant associations, and real estate agents. A diagnosis of the situation was made and a series of measures were agreed upon, but with limited tangible results or enforcement. With migrants increasingly being blamed for the town's problems, groups like Soms Garrotxa [We are Garrotxa] and Stop Racisme Lloguers [Stop Racism in Rentals], were formed to were formed to combat hate speech and combat residential discrimination, while the housing activist group Plataforma d'Afectats per la Hipoteca [Platform for People Affected by Mortgages, or PAH] has been revived in the Garrotxa.

Local government has placed emphasis on historic heritage enhancement in the Nucli Antic, commercial dynamization, environmental stewardship improved tourism positioning. The **Firal**

d'Olot project received the 2025 European Architectural Heritage Intervention Award in the *Outdoor Spaces* category for its transformation of a historic public space combining heritage preservation with contemporary design. Interlinked with the heritage character of the historic center, policy instruments have attempted to mobilize underused housing stock and support rehabilitation, with mixed results. Vacancy tax premiums aim to deter long-term emptiness, but the combination of fragmented titles, heritage restrictions, and steep rehabilitation costs has slowed take-up, and enforcement is minimal. Past participatory processes and integrated action plans have prioritized returning vacant units to use in the Nucli Antic, improving habitability, and diversifying ground-floor functions, but participation has been uneven. Immigrant households are under-represented due to language barriers, work schedules, and trust. Energy-efficiency programs, leveraged through the Sustainable Energy Action Plan and EU funds, have produced visible upgrades in municipal buildings and some private dwellings, yet targeting has been largely technical rather than social; low-income renters in least efficient homes have not systematically benefitted in proportion to need.

The *Pla Integral d'Actuacions de Millora* (Integral Plan for Improvement Actions, or PIAM) is Olot's integrated regeneration framework coordinating urban, social, and housing actions; the model was first introduced around **2014** through the participatory improvement plan in Sant Miquel and was later extended to guide interventions in the Nucli Antic. Since its creation, it has evolved through successive implementation phases — including early public-space projects between **2019–2022**, policy and planning adjustments in **2024**, and its integration into the larger Pla de Barris i Viles program awarded in **December 2025**.

Image source: https://arquitecturaviva.com/obras/unparelldarquitectes-can-sau-en-olot-gerona-973p9

Itziar González, architect, urbanist, and civic mediator who previously served as Commissioner for Ciutat Vella at the Ajuntament de Barcelona (2007–2010), where she promoted participatory planning and ethical urban governance, has led a major participatory regeneration process in the Nucli Antic of Olot since 2024, framing it as a long-term "social architecture" strategy connected to strategic documents for the city's *Llei de Barris i Viles* funding candidacy from the Catalan government. The initiative, funded by the Girona provincial government and implemented by the city hall through González, engaged hundreds of residents, associations, and local stakeholders through assemblies, cooperative working spaces, and co-design methods to define priorities for housing, commerce, and public space. Olot was awarded the largest amount of any Catalan municipality in December, 2025, and is now entering an implementation phase, guiding a multi-year transformation plan that combines physical interventions with ongoing participatory governance. Full planning documents remain publicly unavailable.

Taken together, Olot's housing inequalities reflect a constrained land-use framework shaped by protected landscapes; a historic core marked by high vacancy, limited accessibility, and fragmented ownership; cessation of public housing production amid rising need; and a retrofit agenda that has prioritized municipal assets and better-resourced owner-occupiers over low-income tenants. Layered onto these structural conditions is demographic growth tied to essential but lower-wage sectors, with migrant residents concentrated in the most physically constrained neighborhoods. **The resulting mismatch reinforces spatialized inequality: low-income and migrant households are more likely to face overcrowding, instability of tenure, or occupancy in buildings with accessibility and energy-efficiency deficits.** Energy-efficient cooperative and public-private pilot schemes have been explored in the historic center, but their scale remains modest relative to identified needs and the volume of potentially convertible housing stock. With the new Llei de Barris i Viles funding, **what remains vague is how comprehensive regeneration strategies for Olot will specifically address current imbalances, combat residential segregation, and the proportion of social and subsidized housing that will be produced in the historic center.**

8.3.2 Green Transition and Housing Interventions in the Nucli Antic of Olot: Precedents

The Nucli Antic has been the principal focus of regeneration policy since the early 2000s. Under the Catalan *Llei 2/2004 de Barris*, Olot implemented an integrated intervention between 2004 and 2011 with approximately €7.4 million in co-financed investment. Initial actions prioritized public-space renewal and selective building rehabilitation, followed by programs aimed at housing improvement and community cohesion. Although these measures enhanced the physical environment and symbolic centrality of the historic core, they did not substantially expand affordable housing or resolve structural barriers to rental access. Retrospective assessments of the Llei de Barris intervention suggest that although urban quality and public space improved, vacancy persistence and rental scarcity remained unresolved structural features of the neighborhood (Bonet and Pybus, 2009). This historical sequencing is significant for understanding current regeneration debates.

Recent policy cycles reposition the Nucli Antic within a broader climate and social-equity framework. The *Llei de Barris i Viles 2025–2029* proposal secured roughly €15 million in regional funding—around €25 million combined with municipal resources—alongside the designation of the Nucli Antic as an *Àrea de Conservació i Rehabilitació* (Area of Conservation and Rehabilitation, ACR*)*. This legal framework establishes targeted rehabilitation zones and obligations intended to mobilize underused housing through energy-efficient retrofits, vacancy activation, and coordinated regeneration. The strategy emphasizes long-term participatory governance and a shift from aesthetic renewal ("regeneration") toward integrated neighborhood-building (*fer barri*), in González' framing.

Energy transition initiatives form a central pillar of the current approach and Olot has been a pioneer in such approaches. Partnerships with Fundación Europace and earlier pilots such as HolaDomus have introduced technical audits, financing mechanisms, and guidance for deep retrofit, aligning local climate objectives with housing policy. These programs seek to address low owner uptake of rehabilitation while advancing energy efficiency and habitability, although their distributive impact on vulnerable tenants remains under evaluation, and have been scaled up to the scale of the province of Girona.

Overall, the contemporary framework of the rehabilitation of the Nucli Antic of Olot combines unprecedented funding, cross-party institutional support, and a growing emphasis on social architecture. Planned actions include dozens of retrofit, public-space, and environmental projects, with objectives to activate several hundred dwellings—among them a limited but undefined number of new or recovered affordable units. **Whether this new phase can translate ecological upgrading into measurable reductions in exclusion and housing inequality remains a central open question guiding current debates. The central tension lies in whether ecological upgrading and rehabilitation can be aligned with distributive housing justice.**

Table 1. Key data on case study area of Olot.

	Municipality-wide	**Nucli Antic**
Characteristics (general social type, economic activities, density, etc.)	Population of 39,500 residents (62% of comarca of the Garrotxa). Principal employment sectors: Industrial (37% employment, 48% gross value added), tertiary sector (31% employment). Median age is low, at 40.8, compared to Catalan municipal averages (87/947). Municipal p**opulation has increased 8.4% between 2021 and 2025 and was projected to increase 17.7% between 2025 and 2034** (Idescat)	Population density of 13,118 per km^2

	Average per capita income in 2022: was **€**17,350 in 2022, (90.6% of Catalan average).	
Duration	HolaDomus: pilot project (2020-2024) for the energy-efficient retrofit of homes, led by Olot-based Fundació Europace with technical support of town. Currently expanded to GarrotxaDomus (comarca) and GiDomus (province of Girona).	**2004- publication of** *Pla d'Intervenció Integral* (PII) **2004-2009: Llei de Barris public works and building upgrades (creation of plaza, road extensions, gardens and riverfront parks.** **2010-2021: Contracte de Barris, beginning emphasis on rehabilitation of storefronts and residential rehabilitation.** **2022–2025:** Implementation phase of multiple EU NextGen-funded projects focused on commercial revitalization, public-space upgrades, digitalization, and sustainability in the Nucli Antic
Funding	EU Horizon 2020 **(€314,000)** Funding of pilot project HolaDomus for the energy-efficient retrofit of homes, led by Olot-based Fundació Europace EU NextGen (**€**5.47 million): **Biomass boiler installation** in municipal indoor pool.	Province of Girona: €15,000 to Olot to support the technical drafting of the *Memòria d'Intervenció Integral* for Nucli Antic regeneration Generalitat de Catalunya: **€**7.3 million, Llei de Barris (2004-2009); **€**2.1 million Contracte de Barri (2010-2011**); €15 million Llei de Barris (2026–2030)** for 53 actions in the historic center as part of *Pla de Barris i*

	Urban design and bicycle infrastructure— €822,072 **Landscape and environmental improvements** for green spaces **Energy efficient rehabilitation of supportive housing and day-care support for elderly (**Residència Sant Jaume, €1.25 million) **Urban regeneration of the historic center (1.56 million)**, combining commercial revitalization with public-space upgrades and tourism focus Town of Olot: subsidies for pre-1980 residential building renovations (since 2021): 30% to 40% of eligible costs. GarrotxaDomus and GiDomus are funded by EU funds, private foundations, and public bodies.	*Viles (2025-2029)* framework Town of Olot: ~€10 million from municipal and EU funds to match *Pla de Barris i Viles* funding
Actor constellation	Fundació EuroPACE (recipient of EU Horizon 2020 funds)	See "funding", plus list of civic groups, private actors, etc.
Aims and objectives	Regeneration, energy efficient retrofit, addressing social cohesion	Regeneration, energy efficient retrofit, addressing social cohesion
Specific physical measures	See previous	See previous

Accompanying housing policy/regulatory measures	2000s: Local Housing Office consolidation with municipal and Generalitat funding 2010: Social rent mediation/anti-eviction (application of Llei 25/2015 of Generalitat) 2018: HolaDomus retrofit pilot (with EU funds, Europace) 2020: Vacant housing property tax surcharge in municipal fiscal ordinance (regulatory, largely unapplied) 2023: Declaration of Olot as a tense market and new rules for large owners (Generalitat application of Spanish Housing Law)	2014-18: +B Participatory municipal regeneration strategy with housing elements, Sant Miquel and Nucli Antic 2017-21: PIAM Nucli Antic (with housing elements) 2024-25: Pla de Barris update and regeneration and retrofit frameworks with municipal and Diputació de Girona support, Nucli Antic priority area
Key social tensions or/and benefits between greening and housing	Whether ecological upgrading and rehabilitation can be aligned with distributive housing justice.	Same, focal point of tensions around housing conditions and migrant residential segregation and fears of eventual expulsion with improvements.

8.3.3 Methods

This case study draws on qualitative research conducted in 2025, combining semi-structured interviews and documentary analysis. The methodological approach was designed to capture civic and institutional perceptions of green transition initiatives and their relationship to housing inequalities in Olot, with particular attention to governance processes and neighborhood-scale impacts.

In total, 8 interviews were conducted. Interviewees included municipal policymakers and technical staff, architects and planners involved in regeneration activities, neighborhood and housing activists, and an anonymous civically-engaged actor. Interviews were conducted in

Catalan and Spanish. Profiles of interviewees, who have been given pseudonyms, may be found in **Appendix 2**.

Sampling of policymakers and technical staff drew on contacts established during the preparation and participation in the ReHousIn Policy Lab (March 2025) and through contact with participants in public-facing events related to housing and green transition initiatives in Olot. Additional participants were recruited through snowball sampling.

Community organization representatives and neighborhood activists were identified through their public engagement in media, participation in civic initiatives, or involvement in neighborhood assemblies and campaigns related to housing, redevelopment, and environmental issues. Initial contact was made through institutional email addresses associated with their organizations or, when requested by participants, via WhatsApp.

Interviews were audio-recorded with participants' consent and transcribed in their original language. Interviews were conducted in Catalan or Spanish and transcribed directly by the researchers, then translated using the software Whisper or SoftCatalà with personal information removed and subsequently cleaned. Transcript verification was conducted while listening to original audio recordings to ensure accuracy.

Analysis and coding were completed in English, for later comparability with other case European case studies, using Atlas.ti following a shared codebook developed by the Autonomous University of Barcelona ReHousIn team (Appendix 3). Coding focused on recurring themes related to housing access and affordability, perceptions of green transition initiatives, participation and governance processes, distribution of benefits and harms, and neighborhood identity and recognition.

Documentary analysis included municipal and district planning documents, policy reports, technical studies, academic literature, and grey literature produced by neighborhood associations, advocacy organizations, and media outlets. These materials were used to identify interviewees, contextualize findings, and triangulate claims.

Several limitations should be acknowledged. While the interview sample includes a range of institutional and civic actors, it does not fully capture the perspectives of all resident groups affected by redevelopment, particularly more precarious populations with limited organizational representation or those who do not identify with dominant civic/social movements in Olot. Interviews were conducted while the town of Olot was awaiting the results of its bid for major financing from the Catalan government for the regeneration of the Nucli Antic, placing limitations on the town's ability to share plans. As of February 2026, these plans have not been fully released to the public. Thus, the rapidly evolving nature of the redevelopment projects examined means that findings reflect perceptions and expectations of *ongoing processes* rather than fully realized outcomes.

8.3.4 Civic Perceptions of Green Initiatives in Case Study Areas: Olot

8.3.4.1 Precedents and implementation

Civic actors consistently describe current green transition initiatives as unfolding within a longer trajectory of housing neglect and uneven urban management in Olot, particularly in the Nucli Antic. **Rather than depicting planning or energy retrofit initiatives as entirely new directions, interviewees frame them as delayed responses to longstanding structural deterioration.** Skepticism resonates with evaluations of the earlier Llei de Barris cycle, which

exhibited tensions between ambitious regeneration objectives and highly limited transformation of housing access structures (Bonet and Pybus, 2009). The memory of that earlier intervention informs contemporary caution toward physical-first regeneration strategies.

Gasulla recounts a prolonged period in which the historic center was physically degrading without decisive intervention. Their description combines building collapse, abandonment, and the reactive posture of authorities:

> "In the Nucli Antic, we fought for many years because buildings were literally falling apart. There were years when entire buildings, or parts of buildings, collapsed into the street… It had been totally abandoned. The attitude was like, 'One day it'll fall, and when it does, we'll clear the rubble and save ourselves the cost of a proper demolition or rehabilitation.' … When we say 'the PIAM was done,' we mean the document was produced. Then there's a whole execution process that hasn't been completed."

In civic accounts, this period of neglect forms the essential backdrop against which contemporary regeneration, or "neighborhood-making", efforts must be understood: asthe accumulated consequences of deferred maintenance and fragmented ownership.

Paula's involvement in diagnostic research as a consultant reinforces this perception. What began as a survey of empty buildings revealed a more complex social reality: occupied dwellings in extremely poor condition. Her consolidated account highlights both the technical and social complications:

> "What they hadn't imagined was that there were buildings in very poor condition where people were actually living… you have to rehouse people, some were squatters, so it wasn't clear who was responsible for the rehousing, and the owners had little interest… In the end, entering 100% of the dwellings was impossible… it wasn't mandatory anyway, it was voluntary."

Implementation is therefore described as constrained from the outset by legal frameworks, voluntary access, and unclear responsibility for rehousing vulnerable occupants illustrating that rehabilitation is not merely a technical upgrade to improve energy efficiency; it is inseparable from displacement risk by means of renoviction.

Civic actors also emphasize structural constraints on expansion. Juan Correa underscores that even ongoing construction will not resolve the housing imbalance:

> “Incasòl [Catalan Land Institute] continues building, but it won’t solve the housing problem… you’d need to expand the POUM [town plan]… and that’s how things are right now.”

Thus, precedents and implementation are perceived as shaped by three conditions: historical neglect in the Nucli Antic, partial execution of planning instruments, and structural limits on new housing supply. Green transition initiatives are layered onto these pre-existing housing inequalities rather than replacing them.

8.3.4.2 Participation and governance (procedural)

Civic actors describe Olot as possessing a strong culture of civic associations and activities while simultaneously identifying procedural asymmetries that affect migrant-majority neighborhoods in the Nucli Antic, whose participation in such initiatives are comparatively low.

An anonymous local civic actor emphasizes this density of civic networks and collaborative practices, but also the weaknesses of local democratic decision-making:

> “There is something we do have, as a territory: there is a lot of citizen participation, there are many organisations, a lot of collaborative work, a lot of network-based work… The vast majority [of migrant residents] are not naturalized, therefore they cannot vote and their demands and needs do not translate into City Council policies… Priority is given to the 4 or 5 complaining neighbors instead of prioritizing 500 students and their families.”

In this account, **participation is simultaneously robust and filtered. The presence of many organizations does not guarantee equal influence or overall representativeness. Migrant households concentrated in apartment blocks in the Nucli Antic are perceived as structurally disadvantaged in formal governance processes due to citizenship status, linguistic skills in Catalan, and electoral weight.**

Laura describes alternative forms of civic engagement emerging within the Old Quarter, particularly through cooperative and cultural initiatives. These initiatives are framed as spaces of collective resilience rather than institutional power:

> “We talk a lot about this space being… these islands of resilience, of hope, of socialization, of self-organization, where new projects can emerge.”

Such spaces are described as important for neighborhood identity and cohesion and claiming the right to the city, but do not replace—or always influence—formal decision-making structures.

Housing mobilization is described as persistent yet limited. Juan Correa characterizes Olot as socially introverted, noting low turnout at housing protests. Activism around eviction and discrimination depends on committed cores rather than broad civic waves.

Participation, therefore, is not absent. Rather, civic actors perceive it as unevenly translated into housing policy—particularly where migrant tenants lack voting rights and are concentrated in the Nucli Antic.

8.3.4.3 (In)equity (distributional)

Distributional inequality—especially in housing—is the most prominent theme across civic interviews. The Nucli Antic is repeatedly identified as the spatial concentration of vulnerability. As documented in recent qualitative research on community mediation in Olot, processes of dialogue and recognition can temporarily reconstruct relational trust, yet they also reveal the limits of neighborhood-level interventions when underlying housing inequalities remain unresolved (Carrera-Fossas and Brugué, 2025). The interviews analyzed here echo that tension between relational repair and structural constraint.

Civic actors describe a structural paradox: significant vacancy alongside acute housing precarity. Laura articulates this contradiction succinctly:

> "Then, the whole issue of housing is difficult. There are 1,200 empty dwellings in Olot… The situation is very precarious, and squatting is often necessary… there is a political perspective that does not accompany this at all, that stigmatizes it even more."

During the January 2023 presentation of the PIAM functional program, participants explicitly raised concerns regarding gentrification, speculation, and the fate of residents in affected buildings, questioning both the socioeconomic profile of future inhabitants and the absence of a clear housing strategy within early phases of the intervention (González Virós, 2024).

Vacancy is described as coexisting with rising rents, discriminatory practices, and informal arrangements. Gasulla provides a consolidated description of rent escalation and its social consequences:

> "In Olot, rents had never been this high. The average was 400 or 450 and now it's almost doubled… We're in a context of necessity and either you take it or someone else will… Two nights at a *pensión* and then out… You'll end up squatting, what else can you do? … Housing is needed to solve a big problem."

Rent escalation is described as particularly affecting migrant workers employed in meat-processing plants and overcrowding and room-sharing are presented as coping strategies.

Beyond questions of thermal comfort and fairness in the housing market, the anonymous civic actor links these housing conditions directly to individual and public health and safety impacts:

> "These people have housing problems… Some have to share with other families… We find that many of these families… have problems of unhealthiness, mold, dampness, heating systems that are disastrous."

Energy inefficiency is therefore not described solely as an environmental deficit or thermal comfort, but as a driver of economic strain and respiratory risk.

Gasulla further connects housing insecurity to legal precarity: **distributional inequality is described as intersecting with immigration status, reinforcing long-term vulnerability.**

> "If you get a criminal complaint and you don't have nationality, that becomes a criminal record… And when you later apply for nationality… they don't give it to you."

Across interviews, **inequity in Olot is framed less as generalized urban inequality and more as concentrated housing injustice within the Nucli Antic and migrant-majority neighborhoods dominated by apartment rentals**.

8.3.4.4 Political mobilization

Political mobilization in Olot around housing and social inequality is described as present but limited in scale and intensity. Civic actors emphasize that activism exists—particularly around eviction resistance and anti-racist organizing—but does not generate mass participation.

Juan Correa characterizes Olot as socially introverted, suggesting that mobilizations rarely translate into broad civic pressure:

> "When the PAH organizes a mobilization, very few people show up… It's a very introverted society… It doesn't carry weight."

This limited scale is described as particularly significant in the Nucli Antic, where housing precarity is most acute but residents are less likely to mobilize publicly. Migrant tenants, especially those without nationality, are perceived as reluctant to participate in confrontational activism due to legal vulnerability. Activist networks compensate for limited turnout by coordinating across collectives:

> "They decided in an assembly that we have to support the PAH… On a rotating basis, one or two people from the assembly go to the PAH to support the assembly."

Mobilization is therefore sustained through organizational solidarity rather than mass participation.

At the same time, civic actors note the growing politicization of migration and housing. Local Expert observes that housing difficulties affecting migrant workers are increasingly framed within political narratives emphasizing immigration control rather than structural supply deficits:

> "There is a tougher line on the issue of immigration… and these people have housing problems."

The reliance on squatting as a coping mechanism to respond to inaccessibility of rental housing has been mobilized on the political right to argue that migrants are acting unlawfully, bringing the combined questions of housing and community cohesion into heated debate.

However, green transition initiatives themselves—such as energy retrofits or public space improvements—have not generated comparable mobilization, instead being treated predominantly as an administrative concern, leaving housing accessibility and security as the central axis of civic contestation.

8.3.4.5 Socio-ecological impacts/benefits (positive)

Despite the strong emphasis on housing precarity, civic actors also acknowledge positive socio-ecological dimensions of Olot's urban context.

Local Expert emphasizes the town's environmental assets and the legacy of earlier urban greening initiatives, and that the desire for a green or desirable town center is not a concern specific to the political left:

> "Now we have monumental trees, huge trees, that provide shade, that provide coolness, that also give us a sense of belonging… And those were policies promoted by conservative parties."

Urban tree planting and access to surrounding natural landscapes are described as core parts of Olot's identity, but also that "nature" is something that exists all around Olot, rather than in the Nucli Antic itself. Civic actors also note that the distribution of green infrastructure within the urban core is uneven, with limited internal green space compared to peripheral residential areas.

Beyond housing and green space, Gasulla highlights the establishment of a new primary care center (CAP) in Sant Miquel as an example of redistributive public investment:

> "The new health centre… that's what we've always been asking for: public services that go there."

While not strictly a green intervention, the CAP is described as part of broader efforts to rebalance services toward historically marginalized neighborhoods. Laura points to community-led cultural and cooperative initiatives in the Nucli Antic that aim to revitalize ground-floor spaces and foster social cohesion:

> "These spaces can generate economic activity, but also social cohesion… it's about activating what is already there."

Positive socio-ecological impacts are described in terms of identity, localized revitalization, and selective service provision. However, civic actors emphasize that these benefits do not resolve housing inequality in the Nucli Antic or its comparative state of neglect compared to the town as a whole.

8.3.4.6 (Civic perceptions of) socio-ecological impacts/harms (negative)

Negative impacts associated with urban change are primarily described through the lens of housing affordability and displacement risk rather than any critique of the value of green transition and energy efficiency activities within themselves.

Paula articulates concerns about gentrification emerging through well-intentioned rehabilitation, but that Olot is not unsusceptible to gentrification, particularly in the Nucli Antic:

> "There's such huge economic inequality… Even if the intention isn't to speculate… if young people come who can pay 800 euros rent… there are people paying 200 euros each, ten of them in one flat, and they won't be able to live there anymore."

This perception reflects anxiety that energy-efficient retrofits and aesthetic improvements may indirectly increase rental values beyond what migrant households can afford, or that this is an intentional element underlining motivations to "regenerate" the center as an area more oriented toward tourism, retail, and revitalized housing at the expense of its current residents**.**

Gasulla connects rising rents to structural necessity and competition:

> "We're in a context of necessity and either you take it or someone else will. That's the big problem we have, which is also why rents are rising so much."

Scarcity of available rental units, rather than any direct effects of tourism in Garrotxa, are described as the main drivers of price escalation. Civic actors repeatedly stress that Olot is not experiencing large-scale tourist pressure; instead, labor demand and limited supply create competition in the rental market.

The risk of displacement is therefore framed not as immediate mass eviction, but as gradual substitution. Rehabilitation may attract higher-income tenants, while migrant households are pushed into more precarious arrangements or informal occupation.

Negative socio-ecological impacts are thus described as indirect: **environmental improvements and regeneration, when not accompanied by strong housing protections, risk reinforcing distributional inequality in the Nucli Antic.**

8.3.4.7 Tensions and power dynamics between stakeholders/actors

Civic actors describe multiple tensions shaping housing governance and regeneration in Olot. One axis of tension concerns property owners and enforcement. Gasulla criticizes subsidy schemes for façade rehabilitation that lack rent controls or follow-up:

> "You've allocated half a million euros and you're telling me you have no guarantee of control or supervision? They could put them at €1,000 a month, which is totally prohibitive."

This reflects a broader concern that public funds may indirectly increase private asset values without securing affordability. Gasulla also highlights symbolic regulatory measures perceived as targeting low-income residents:

> "They want to prohibit laundry being visible from the street… Obviously, it's an aporophobic and racist measure."

Other interviewees have noted that the city is seeking to limit the amount of new kebab shops opening in ground-floor units, contributing to the **perception that there is clear exclusionary cultural coding occurring in the Nucli Antic, which such measures are interpreted as privileging aesthetic considerations over the lived realities of migrant households in dense housing blocks.**

Another axis of tension concerns industrial labor demand. Local Expert describes the dependence of the meat-processing industry on migrant labor and the housing consequences of this demand:

> "These people are needed for the slaughterhouses… and they end up sharing housing in very poor conditions."

Thus, power dynamics are described as extending beyond municipal policy to include economic actors whose labor needs shape housing pressures. Across interviews, the Nucli Antic emerges as the space where these tensions intersect: between rehabilitation and affordability, aesthetics and subsistence, enforcement and legal vulnerability.

8.3.4.8 (Civic perceptions of) innovative governance mechanisms

Civic actors recognize certain policy tools aimed at addressing housing inequality, though they describe their scale as limited. There is cynicism toward previous participatory processes which did not seem to lead to much material change in the city.

Juan Correa references acquisitions through the legal tools of *Tanteig i Retracte* (the legal right of first refusal for public bodies to buy residential properties on the market and convert them to social housing), though such purchases are described as modest in relation to the scale of vacancy.

> "There have been some of these apartments that the Generalitat has bought, about 27 or 28."

Gasulla discusses planned public housing developments intended to facilitate temporary rehousing during rehabilitation:

> "The idea… is to use those units for when the Nucli Antic blocks have to be renovated… so you need to plan for their return."

These mechanisms are framed as innovative attempts to avoid permanent displacement. However, civic actors emphasize that implementation depends on funding and sustained coordination.

Energy retrofit programs are also acknowledged as innovative, as offering improvements to whoever will end up living in these units, and having ecological benefits, but participation is perceived as deeply uneven. Owners must apply voluntarily, and vulnerable tenants lack leverage to initiate improvements. Innovation, therefore, is recognized but described as incremental relative to structural housing need in the Nucli Antic.

8.3.4.9 (Civic perceptions of) tourism and market pressures

Despite the attraction of the broader Garrotxa area, tourism is not described as a primary driver of housing inequality in Olot, and highly-qualified transnational migration is not understood to be driving gentrification as it is in Catalan cities. Civic actors emphasize that market pressures are linked more closely to labor demand and limited supply than to short-term rentals.

Gasulla notes rapid rent escalation in recent years:

> "Last year it was the municipality in Girona with the biggest increase in prices."

Interviewees reference demographic growth, industrial employment, and speculative holding of vacant dwellings—its own sort of downward pressure—as driving forces in the dual challenges of vacancy and housing crisis in Olot. Such speculative holding is sometimes perceived as strategic, in sense of widening awareness among property-owners that there may be various rehabilitation subsidies to capitalize upon: costs that might otherwise have been borne themselves in response to the increasing land rent their properties could demand.

8.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

Comparison between civic and institutional interviews reveals important divergences in emphasis, framing, and scale—particularly regarding housing degradation in the Nucli Antic and the relationship between green transition and migrant precarity.

Civic actors consistently foreground overcrowding, rent escalation, vacancy, and legal vulnerability affecting migrant tenants in the historic center. Institutional representatives, by contrast, tend to frame these same conditions through strategic planning, technical feasibility, and structural urban dynamics.

Isaac describes the degradation of the Old Town as a widely recognized urban process linked to housing and vacancy, presenting it as a structural phenomenon rather than as an immediate distributive injustice:

> "All the political groups… detect the same thing, which is a process of degradation at the same time linked to the city's housing problem… there are hundreds or close to a thousand dwellings without use, and, moreover, there is an evident degradation… It is a process that we see everywhere, that town cores reach this point."

In this framing, degradation and obsolescence is normalized as part of a broader, naturalized life cycle affecting historic centers. Civic actors, in contrast, describe the Nucli Antic through lived realities of overcrowding, dampness, unsafe heating practices, and housing exclusion concentrated among migrant households.

Municipal technician Isaac's discourse frequently shifts toward scale and technical logic in differentiating Olot's needs from that of large cities. When discussing energy transition, he emphasizes density, feasibility, and infrastructural design rather than social differentiation:

> "Olot has 1,400 inhabitants per square kilometre… Some things make sense here; some things make sense [in Barcelona] too… If a public institution sets up an energy community in Barcelona… each person gets practically nothing… Here, yes, you can approach it differently… The solutions, depending on the logic, some are transferable, others there's nothing to discuss."

Isaac also explicitly characterizes his own political role as technical:

Here, the problem is framed in terms of spatial scale and technical viability. By contrast, civic actors focus on whether retrofit programs reach low-income renters in deteriorated buildings in the Nucli Antic. This technocratic framing contrasts with civic narratives centered on housing despair, discrimination in rental markets, and the cumulative effects of legal precarity on migrant residents.

> "I'm a technical politician… part of the success or non-success of what we will do is in the details. And the details have a lot of technical and economic components. They are not obvious."

Jordi Güell, Olot town councilor responsible for urban planning, similarly acknowledges past failures in housing policy but situates them within an evolving strategic framework and a

> "All public housing development has been a disaster… they concentrated the most vulnerable part of Olot's population… Therefore, we must create housing that integrates… we will try to create a social mix in the neighbourhood."

predominating perception that social housing is a failed social experiment that does not fit the needs of the town. Reflecting on earlier public housing interventions in the Nucli Antic, he states:

Where civic actors describe the ongoing concentration of vulnerability as a current injustice, Jordi frames integration and social mix as planning objectives intended to correct past mistakes. The emphasis is on design principles and future balance rather than on immediate overcrowding or rent escalation, but arguments around the concentration of poverty are interpreted by some civic actors as a pretense to gentrify the Nucli Antic.

Institutional representatives also tend to situate green transition within long-term policy trajectories. Jordi highlights the pioneering institutionalization of energy transition within the municipality, part of earlier collaborations made possible by EU funding:

> "People started talking about energy transition here 14 years ago… a specific council department for energy transition was created… It was given a budget allocation."

The green transition is thus presented as incremental, planned, and embedded within municipal governance structures. Civic actors, by contrast, question whether energy-efficiency initiatives have benefited low-income tenants in the least efficient housing stock.

Finally, differences appear in the framing of market and tourism pressures. Civic actors express concern that rehabilitation may indirectly contribute to rent increases and gradual

> "Here tourism exerts the pressure that it exerts, which is much less than in other places like Barcelona… if you want to have a habitable old town with good conditions, then urban planning does not solve it through normal channels, because the buildings are what they are… it doesn't resolve itself."

displacement in the Nucli Antic. Isaac downplays tourism pressure relative to larger cities and emphasizes morphological constraints:

Here again, the problem is described as one of built form and technical limitation, rather than as a question of distributive justice.

Taken together, institutional discourse is predominantly strategic, technical, and long-term in orientation. It emphasizes feasibility, integration, density, infrastructure design, and phased implementation. Civic discourse, by contrast, centers lived housing precarity, migrant vulnerability, rent escalation, and uneven access to rehabilitation benefits—especially in the Nucli Antic.

The divergence is therefore not one of direct contradiction, but of analytic lens and temporal scale. For institutional actors, the Nucli Antic represents a complex planning challenge requiring coordinated technical intervention and long-term restructuring. For civic actors, it remains the immediate epicenter of housing inequality and migrant precarity within Olot's green transition.

8.3.5 Critical Analysis: Olot

The Olot case illustrates that green transition in a medium-small, industrial municipality operates differently from metropolitan contexts commonly associated with green gentrification, though **there are fears that with regeneration and retrofit initiatives, housing disparities in Olot will be further amplified. Ecological initiatives in Olot are layered onto a pre-existing housing regime characterized by labor-driven demand, spatial containment, vacancy concentration, and limited decommodified housing provision. The critical analytical question is not whether green transition has directly produced housing inequality, but whether it interacts with structural housing vulnerabilities in ways that reinforce them over time**.

Section 3 demonstrated that housing inequality in the Nucli Antic predates current regeneration cycles and strategies explicitly framed within the discourse of green transition. Civic actors consistently describe overcrowding, rent escalation, dampness and energy inefficiency, discriminatory rental access, and legal precarity among migrant tenants. These conditions are embedded in long-term patterns of fragmented ownership and insufficient rental supply. **There are widespread doubts that such a pattern is changing, despite a discursive shift to more participatory planning in recent years. This is based on historic precedent: the Llei de Barris intervention (2004–2011) improved public space and urban infrastructure but did not substantially alter the structural housing distribution. Vacancy remained high, and protected rental stock did not expand at the scale required to rebalance the market.**

Nevertheless, the new Pla de Barris i Viles 2025–2029 and the designation of the Nucli Antic as an ACR signal a renewed and more ambitious intervention framework. Approximately €25 million in combined regional and municipal funding represents a significant commitment for a municipality of 40,000. The regeneration framework explicitly anticipates temporary relocation during block-scale rehabilitation processes, yet presents this as managed and reversible rather than displacement-driven.

Although rent escalation, overcrowding, and recourse to informal or squatted housing indicate that structural displacement linked to labor-driven demand and long-standing market constraints is already occurring in Olot, there is no clear evidence that recent green transition initiatives within themselves are directly producing large-scale displacement, suggesting instead that ecological interventions are unfolding within—and potentially intensifying—an already unequal housing regime rather than generating that inequality. Such concerns about this dynamic are more anticipatory in nature, and civic actors articulate fear of incremental valorization: **rehabilitation of vacant or deteriorated housing stock, combined with improvements in public space and environmental quality, are anticipated to gradually increase rental costs in a context of limited supply and accelerate residential displacement** Rent escalation is already occurring and widely perceived as severe, but interviewees attribute rising rents to labor-driven demand and scarcity. **The perceived risk is cumulative rather than immediate, based on future substitution: regeneration may attract higher-income Catalan households or young professionals capable to pay higher rents—the profile assumed to be prioritized by landlords—gradually displacing migrant and lower-income tenants.** This layering of ecological intervention onto pre-existing inequality reflects broader findings in neighborhood governance research, which show that **local policy innovation often operates within structurally unequal housing regimes that municipalities only partially control (Carrera et al., 2021), and may demonstrate willingness to do so.**

The historical trajectory of the Nucli Antic reinforces this interpretation: former Llei de Barris programs significantly upgraded urban space and infrastructure without fundamentally altering ownership fragmentation or vacancy dynamics (Bonet and Pybus, 2009). The current regeneration cycle therefore unfolds within a housing structure shaped by earlier, only partially transformative interventions.

Differences between typologies of intervention are analytically significant. “Hard” densification replacing lower-density housing is largely absent in Olot, while “soft” densification measures focus on bringing vacant buildings back into residential use or improving the conditions of occupied residential buildings. Geographic containment within the volcanic natural park limits outward expansion, and demolition-led redevelopment is minimal. Nature-based solutions are incremental rather than transformative, contributing to environmental improvement without fundamentally restructuring land markets, and are more focused on the town’s fringes.

Retrofit, as incorporated into complex social regeneration, constitutes the most socially consequential dimension of green transition. Energy transition initiatives such as district heating and the HolaDomus and Europace-supported rehabilitation programs demonstrate technical innovation. However, participation remains owner-dependent and administratively complex. As Section 3 showed, many migrant tenants occupy rental units in buildings requiring substantial intervention but lacking proactive ownership engagement. Thus, **retrofit risks reinforcing inequality if not explicitly targeted toward energy-poor rental dwellings while protecting tenants.**

in the context of a structurally constrained housing market characterized by labor-driven demand and vacancy paradoxes in Olot, ecological improvement reinforces housing inequalities unless explicitly integrated with decommodified housing expansion and strengthened tenant protection.

Housing Justice and Inequality in Context

Catalonia, like Spain's overall housing system, has historically been dominated by owner-occupation, with limited social rental provision and, until recently, relatively weak tenant protections (Allen et al., 2004; Pareja-Eastaway and Sánchez-Martínez, 2017, 2023). **Although recent legislative reforms created in the Spanish government and applied by the Generalitat have introduced rent regulation in designated "tense" areas—of which Olot is included—such smaller municipalities operate within a distinct political economy environment where enforcement capacity and public housing stock remain limited**[143].

Olot's industrial base is central to its housing dynamics. **Meat-processing and agro-food sectors rely heavily on migrant labor. This labor-housing nexus generates continuous rental demand for low to moderate-cost units. Yet access to formal rental contracts is uneven. Civic actors report systemic discriminatory practices, overcrowding, and prevalent informal and fraudulent arrangements. The Nucli Antic is frequently referenced in municipal and policy discourse as a priority area where housing vulnerability and integration challenges intersect.** Local narratives and demographic data closely associate housing pressures for migrants with older and lower-quality housing stock in segregated areas in and around the Nucli Antic. **It is in the Nucli Antic that newly created housing could most likely address increasing housing demands through soft densification, but this requires political will beyond the consensus that the historic center is in need of regeneration warranting significant external public funds.** The creation of an "Espai Cooperatiu Ciutadà" and a cross-departmental governance structure illustrates the municipality's attempt to institutionalize coordination capacity across housing, social services, culture, and economic promotion. Whether this capacity translates into distributive housing transformation remains an open question.

The vacancy paradox deepens this tension. Despite census and energy consumption-based estimates of 1,060 vacant dwellings citywide and several hundred within the Nucli Antic, rental scarcity persists. Vacancy is linked to fragmented inheritance, speculative retention, rehabilitation costs, and limited enforcement of vacancy penalties. The ACR designation seeks to mobilize around 300 units through structured rehabilitation zones—including a limited number of protected units—but relative to demographic growth and rental demand, this remains modest.

[143] Olot is officially designated by the Spanish government as a **"zona de mercado residencial tensionado,"** meaning it falls within the areas where the Housing Law allows special rental-

The persistence of substantial vacancy echoes patterns already identified during the first Llei de Barris diagnostic phase in 2019, when high vacancy and structural deterioration were central to the neighborhood's vulnerability profile (Bonet and Pybus, 2009) Two decades later, the endurance of this condition highlights the limits of regeneration strategies that priorities spatial upgrading without fundamentally restructuring housing access mechanisms.

Empirical analyses of vulnerability in Olot emphasize that **residential exclusion and weakened neighborhood organization are structurally intertwined, and that improving physical conditions without altering housing access mechanisms risks reproducing inequality** (Carrera Fossas, 2023). **The vacancy paradox in the Nucli Antic exemplifies this structural entanglement.** At the same time, mediation initiatives in the neighborhood demonstrate that while collective agency can be rebuilt at micro-scale, relational repair cannot substitute for distributive housing reform (Carrera-Fossas and Brugué, 2025)

The historic trajectory of the Llei de Barris is analytically instructive and reveals an important sequencing issue. The initial regeneration phase prioritized public-space and infrastructure upgrades. While addressing physical degradation, these interventions did not substantially expand protected housing or restructure rental access. The block-based ("illa") methodology of current site-specific retrofit and complex social regeneration approaches, where intervention is organized around spatially bounded units combining physical rehabilitation, re-parceling under community-oriented urbanist Itziar González emphasizes integrative community-building ("fer barri" instead of regeneration, creation of shared "cooperative" spaces for neighbors' debate and co-production), signaling recognition that **physical improvement alone is insufficient, but without significant quantitative expansion of decommodified rental stock and proactive measures to include migrant residents, but the culturally-coded, socio-economic objectives of "integration" raise questions in the current political environment of rising anti-migrant sentiment.**

Housing inequality in Olot is also juridical. Civic actors describe how **eviction processes and criminal complaints affect Spanish nationality applications, deepening migrant precarity**. This intersection between immigration governance and housing insecurity situates Olot within broader European debates on the social dimensions of labor migration. The locally industrial economy depends highly on migrant workers, yet housing provision remains systemically misaligned with this structural demand. However, this must also be understood in the context of Spanish President Pedro Sánchez's January 2026 announcement launching an **extraordinary regularization process aimed at granting legal status and work permits to hundreds of thousands of undocumented migrants residing in Spain. In Olot, the policy is unlikely to augment population growth but may accelerate the shift toward formal rental contracts, making existing housing shortages more visible and increasing pressure on affordable units and local planning capacity, along with possibilities for longer-term political enfranchisement of migrants in the town.**

Energy transition introduces a further justice dimension. Olot has institutionalized energy transition within municipal governance, demonstrating prolonged political commitment and technical innovation through seeking and capture of EU funds and close collaboration with non-profit foundations such as Europace. Yet energy justice literature emphasizes that

decarbonization strategies must prioritize vulnerable households to avoid regressive effects (Bouzarovski and Simcock, 2017; Bouzarovski et al., 2018; Bouzarovski, 2022). In Olot, retrofit participation depends largely on owner initiative. Interviews suggest that most rental units occupied by migrant tenants remain outside systematic intervention. **Without linking retrofit subsidies to affordability guarantees and protections against renoviction, energy transition risks benefiting property owners at the expense of tenants by increasing asset values without securing tenant protections, In Olot, it is unclear if there is political will to address this distributional tension.**

Housing justice in Olot therefore hinges on alignment between ecological transition and structural housing reform. Vacancy mobilization, protected rental expansion, anti-discrimination enforcement, and tenant protections must accompany public-space upgrades, active mobility infrastructures, and retrofit schemes, if green transition is to avoid reinforcing existing inequalities. If not, the physical improvements in the Nucli Antic may be perceived as "revanchist" in the way that gentrification is often framed in terms of gentrification in larger settlements, generating greater social tensions between "insiders" and "outsiders" which define contemporary political debates in Catalonia.

Short Reflections

The Nucli Antic of Olot is a symbolic and population center of Garrotxa. Today, it embodies historical degradation, concentrated migrant tenancy, high vacancy, and contemporary regeneration ambition. **The ACR designation and Pla de Barris funding signal unprecedented political consensus around its transformation, but not the details of the socio-economic conditions of a newly transformed historic center. There is rhetorical emphasis on "*making a neighborhood*," but less clarity regarding *for whom* this neighborhood is intended.**

In conclusion, Olot demonstrates that green transition in medium-small industrial municipalities operates through incremental layering rather than dramatic restructuring. It does not automatically generate green gentrification, but neither is it socially neutral or conceptualized in a way to reduce housing inequalities for the most volnerable. **In a context defined by labor migration, vacancy paradoxes, and spatial containment, ecological transition must be explicitly integrated with housing justice instruments if it is to avoid reinforcing entrenched inequalities.** The Nucli Antic remains the decisive terrain where this integration will determine whether regeneration produces inclusion or gradual substitution, which will surely be a political dynamic that breaks down the vague consensus around the imperatives of regeneration and residential energy efficiency.

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8.3.7 Appendix 1 – Glossary

Abbreviations

AC	Aliança Catalana (Independentist Catalan Party)
Generalitat	Government of the Autonomous Community of Catalonia- public body
PSC	Socialists' Party of Catalonia (Partido de los Socialistas de Cataluña)
PIAM	The Pla Integral d'Actuacions de Millora (Integral Plan for Improvement Actions)
PAH	Plataforma d'Afectats per la Hipoteca (Platform for People Affected by Mortgages)
POUM	POUM (Pla d'Ordenació Urbanística Municipal), City Urban Plan

Terms and Concepts

Right to first refusal: In the *Tanteig i Retracte* system in Catalonia, public authorities are legally allowed to acquire properties before private buyers, ensuring they are repurposed for social housing.

Tense housing market zones: Areas designated by Autononous Communities, in alignment with the Spanish Right to Housing Law, in which rent caps and increased tenant protections are put into place. In these areas, new (long-term) contracts cannot exceed the price of the last contract in force for the previous five years after the annual update (3% as of 2024).

8.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Local representative at town city hall & board member	Department of Urban Planning and Public Space (Regidor Urbanisme), City of Olot & Fundació Europace, a non-profit organization that aims to fight climate change by improving people's well-being.	9 July	In person
2	Local representative at town city hall	Department of Energy Transition (Regidoria de Transicio Energetica), City of Olot	9 July	In person
3	Representative	Celobert - architecture and planning coop who work on EU funded projects in Barcelona and Olot.	15 July	In person
4	Local Health Expert	Local expert	5 Dec	In person
5	Representative	Resilience Earth - NGO (Articulacio Ecosistemica)	9 Dec	In person
6	Representative	AAVV Barri Sant Miquel. (associació de veïns de Sant Miquel - Sant Miquel residents' association)	5 & 9 Dec	In person
7	Elected Representative at town city hall.	Olot City Council elected representative, former housing activist.	11 Dec	In person
8	Local politician	Former Olot City Councilor and spokesperson for En Comú Podem	9 Dec	In person

8.3.9 Appendix 3 – Visuals

Figure 1. Map of Olot. Source: https://sig.olot.cat/

Figure 2: Collection of fieldwork photos – Olot historical city center.

Figure 3. El Firal project, Paseo de Miquel Baly (source: https://annaeugenibach.com/2023/04/03/el-firal-de-olot/)

9 SWITZERLAND

9.1 CASE STUDY (LARGE): ZURICH

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9.1.1 City profile and governance structure

Zurich is Switzerland's largest city with a population of 452,42 people (in 2025; Stadt Zürich, 2026a). It represents a particularly relevant context to study the effects of environmental and energy policies on housing inequalities due to its rapid growth, tight housing market, and long-standing commitment to inner urban densification.

Zurich is administratively divided in twelve districts, differing in their size and socioeconomic profile. The city is located at the northern end of Lake Zurich, where the river Limmat leaves the lake and flows through the city (see **Error! Reference source not found.**). The populated area is nestled amongst several wooded hills. Around a quarter of the city is covered by woodland (Stadt Zürich, n.d.-c). Public green spaces, including woods, are generally relatively abundant and easily accessible in Zurich from all neighbourhoods.

In the last twenty years, the city's population increased by 23% (from 364,977 to 443,664 inhabitants; Stadt Zürich, 2026a). Currently, 33.7% of Zurich's inhabitants are non-Swiss

nationals[144] (Stadt Zürich, 2026a), and it has an important role as an arrival city for the region (Bischof, 2025). With a population density of 4,965 inhabitants per km^2, Zurich is one of the densest cities in Switzerland (BFS, 2025), although cities like Geneva (with less green space within the city boundaries) show a much higher density (13,100 inhabitants/km^2).

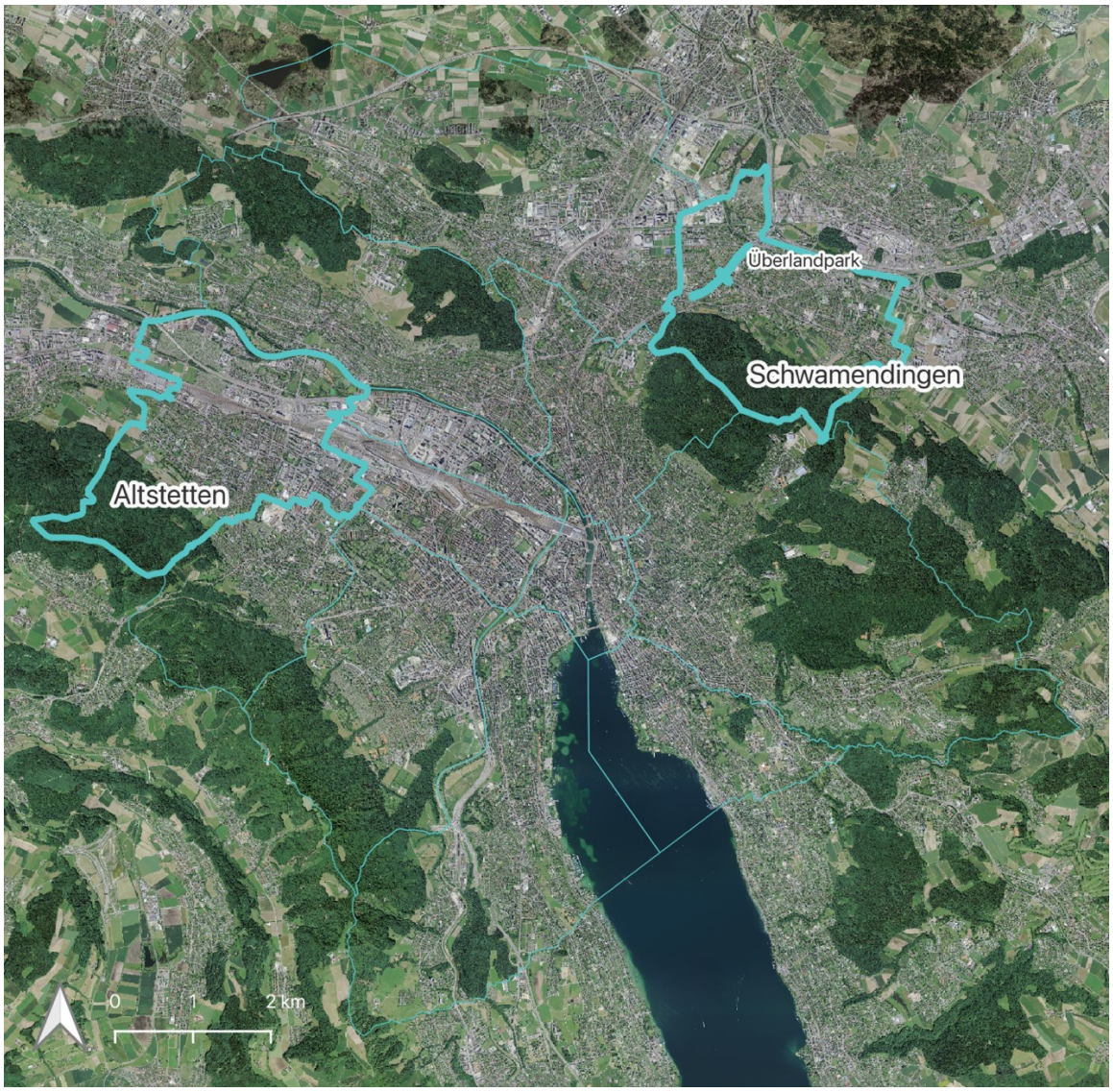

Fig.54: Aerial photograph of Zurich, with districts and case study areas. Source: Federal Office of Topography swisstopo, addition of districts and case study areas by authors.

[144] In 2024, 26.4% of the total population was from other European countries (7.2% Germany, 3.9% Italy, 1.8% Spain, 1.5% Portugal, 1.3% France, 1.1% Austria, etc.), 3.8% from Asian countries, 1.8% from African countries, and 1.6% were from the Americas (Stadt Zürich Statistik, 2024).

The city is a global centre for banking and finance, a major traffic hub, and has a high concentration of jobs. More than 540,000 people work in the city, many of them commuting to the city daily. Approximately 95% of the jobs are found in the service sector (Statistisches Amt Kanton Zürich, 2025). The median income of 8,127 CHF is significantly above the national average of 7,024 CHF (Stadt Zürich Statistik und Daten, n.d.)[145]

Zurich is embedded in a federal system consisting of three levels: municipalities (City of Zurich), cantons (Canton of Zurich), and the federal state. In Switzerland, the principle of subsidiarity ensures that political decisions are made at the most local level possible, with higher authorities intervening only when tasks cannot be effectively handled locally. Zurich is historically known as politically progressive with 28.2% of its voting citizens supporting the Social Democratic Party (SP), 14.1% the Green Party and 6.4% the Autonomous Left Party (Stadt Zürich, 2022a). The Liberal Party (FDP) was supported by 17.5%, the Green Liberal Party by 13.0%, the Swiss People's Party (SVP) by 11.5%, the Centre party by 4.4% and the Evangelical People's Party (EVP) by 2.8% (Stadt Zürich, 2022a). The City Council, the executive government of Zurich, consists of 9 members of different political parties[146]. They share executive power as decisions are made by consensus. Each of the council members is responsible for one department. One of the members is also the Mayor who is elected in a separate election.

9.1.1.1 Housing challenges

In Zurich, the tenure structure is very different from the national average: only 8% of the dwellings are owner-occupied (compared to 36% in Switzerland as a whole; Eurostat, 2023), and with 92 % the rental market clearly dominates (Stadt Zürich, 2024e) but includes a significant share of non-profit, non-commodifiable housing. In fact, 27% of the housing stock is owned by the non-profit sector, housing approximately one third of the city's population. 7.2% of all rental units are owned by the municipality, 17.8% by housing cooperatives, and the remaining 2.3% by other non-profit organisations (Stadt Zürich, 2024d). More than two thirds of rental dwellings are provided by the private market, making the private sector crucial for the city's housing system. Average offering rents in the non-profit sector are 42% below the average offering rent in the private sector (Lutz et al., 2023). Although cooperative housing tends to be inclusive towards lower-income households, elderly people, single parents and families with children, it is in high demand and access is often challenging for newcomers,

[145] The median income in Zurich is significantly higher than in the other Swiss case studies; in Zurich the median equivalised income (accounting for different household sizes and composition) in 2017 was CHF 58,500, CHF 50,774 in St.Gallen and CHF 48,000 in Amriswil (Grossenbacher et al., 2021).

[146] Four city councillors are members of the Social Democratic Party, two of the Green Party, two of the Liberal Party, and one of the Green Liberal Party.

reflected in the markedly lower proportion of non-Swiss residents in cooperatives than in the city population (Duyne Barenstein & Koch, 2022; WBG Zürich, 2021).

Fig 2: Housing owned by private developer (right) with monthly rent of approx. 8'500 CHF for 4.5 room apartment and municipal housing (centre and right with monthly rent of CHF 2'500 for 4.5 room apartment (Photo: J.Duyne, 2025)

Cooperative housing has historically played an important role in the city of Zurich (Duyne Barenstein et al., 2022). In 2011, the non-profit housing sector was further strengthened by a counterproposal to a popular initiative, which led to the addition of a basic article on housing to the municipal constitution. This article obliges the municipality to increase the market share of non-profit housing to one third *(Drittelsziel)* by 2050 (WBG Schweiz, 2011). To reach this goal, the municipality has developed a Housing Programme (*Programm Wohnen*) (Stadtrat Zürich, 2017). The municipality's housing policy focuses on the provision of affordable housing by supporting non-profit developments, on defining and building for specific target groups (e.g. lower-income households, families, students, elderly people), monitoring the ecological and social sustainability of the city's structural development and increasing the share of public housing (Stadtrat Zürich, 2017). The city uses tools like land leases, building rights for non-profit housing providers, subsidised loans, and the purchase of shares from non-profit housing providers. However, reaching the target of 1/3 non-profit housing is challenging, since for-profit developers are currently also active in building. As a result, even though in recent years the number of non-profit dwellings increased, their share has slightly decreased (Stadt Zürich, 2024c). To boost the city's housing policy and as a reaction to the housing crisis in Zurich (see

below), a new position for a housing delegate, a strategic coordinator for housing topics, was recently created, giving housing issues more visibility (Stadt Zürich, 2024c).

Fig. 3: The Zurich housing cooperative Kalkrbeite (Photo: V. Schopp)

The rapid population growth through internal and international migration, the rising share of one-person households (44%; Stadt Zürich, 2025c), market speculation, and increasing demand for living space has gradually led to a severe shortage of affordable housing in Zurich. The vacancy rate has dropped considerably since 2015 and is currently at 0.1% (Stadt Zürich, 2025e). The market for flats with more than 3 rooms has almost completely dried up, which is particularly problematic for families and flat-sharing communities. According to rent surveys, overall rents have increased 6-9% between 2022 and 2024 (Stadt Zürich, 2024i). Rental prices can range from 15 to 55 CHF per m² (Lutz et al., 2023). The most significant price increases occurred in lower-income neighbourhoods.

A central driver of rent increases is the modernization and qualitative upgrading of the existing housing stock (BWO, 2016). Although the Swiss tenancy law makes rent increases within ongoing contracts contingent upon and proportional to investments, considerably less constraints apply to rent setting in new leases following renovations (Debrunner et al., 2024). Lease terminations for the purpose of renovation or demolition are legally permissible once a construction project has reached an advanced planning stage. This regulatory framework enables landlords to use refurbishment or demolitions as a mechanism to reset rent levels,

thereby facilitating the eviction of tenants (Gehriger, 2025). Such practices are described as *renovictions*, referring to large-scale renovation processes that lead to the involuntary relocation of tenants. In Zurich, much of additional flats are created through demolitions of older but affordable housing and replacement constructions. Refurbishment or demolitions lead to displacement of tenants. Lower-income households, people without Swiss citizenship and single-parent households are disproportionately affected (Kaufmann et al., 2023).

The current housing crisis in the Zurich metropolitan area has led to a growing political mobilisation. In recent years thousands participated in mass demonstrations, and various activist groups have formed to contest evictions and displacement. These include settlement-specific resistance groups such as the neighbourhood-based association *IG Nicht im Heuried* (We will stay in Heuried), activist groups that offer neighbourhood-specific assistance and organize city-wide resistance such as *Mietenplenum*, and professional urban research and participation offices that campaign for affordable housing on a project-by-project and political basis, like *Urban Equipe*. However the awareness for housing-related issues is widespread: since 2023, the annual large Housing Demonstration ("Wohndemo", see **Error! Reference source not found.**) and several information and networking events are being organised by a coalition of activist groups (Wohndemo Bündnis, 2025). The public demonstrations are usually attended by thousands of citizens.

Meanwhile, several popular initiatives[147] dealing with housing issues have been submitted at cantonal and municipal levels. After a popular vote in 2023, a Municipal Housing Fund (*Städtischer Wohnraumfonds*) of 300 million CHF has been installed. Starting from 2025, the city and non-profit housing developers can make use of the fund to reduce the costs of acquiring building land or buildings, the construction of rental apartments, and the renovation of existing or newly acquired properties (Stadt Zürich, 2025j).

9.1.2 Densification, energy refurbishments and NBS

9.1.2.1 Densification

Densification has been a key policy goal in Switzerland since the 2014 revision of the Spatial Planning Act (*SPA*; or *SPA1* when referring specifically to the first revision), when densification became legally binding for cantons and municipalities. Cantons had to develop cantonal structure plans (*Richtpläne*) in compliance with SPA1, which serve as a basis for municipal plans (Duyne Barenstein et al., 2025b). Facing a significant population growth (it is predicted that Zurich will have 520'000 inhabitants by 2050) without any increase in building area, the

[147] Popular initiatives are a tool of direct democracy which allows Swiss citizens to hand in a proposal for a change in the constitution or the enactment, amendment or abolition of a law or a parliamentary resolution. If the initiators can collect enough signatures, a popular vote is held (list of initiatives, Appendix).

municipal government is pursuing an active urban densification policy (Stadt Zürich, 2022b) that is increasingly contested by civil society organisations due to its negative social impacts. In fact, the development potential of green- and brownfield sites is almost exhausted (Lutz et al., 2023). As a result, densification increasingly takes place by demolishing the existing, less dense but affordable housing stock. According to the official statistics of the city of Zurich, over 1000 apartments a year were demolished between 2021 and 2023, and 840 in 2024 (Jörg & Rey, 2025).

Fig.4: Demonstration for housing rights in Zurich, April 5th, 2025 i (Photo: R.Schlatter)

The municipal structure plan (*Kommunaler Richtplan Siedlung, Landschaft, öffentliche Bauten und Anlagen*, SLöBA), aligned with the cantonal structure plan was adopted in 2021. It contains specifications on the desired use density and building density, and the desired use structure and settlement quality (Stadt Zürich, 2022b). Districts at the outskirts of Zurich that are well connected to traffic networks have been designated as densification zones (see **Error! Reference source not found.**). These are located in the north and west of the city *Zürich Nord/Leutschenbach/Glattal, Flughafen-Region* and *Zürich-West/Altstetten/Limmattal*. According to the plan, densification in these areas needs to be accompanied by high-quality green spaces and areas functioning as centres in a polycentric city structure. The SLöBA also

states that in case of a planning procedure (e.g. a special land use plan or a design plan[148]) resulting in a higher permissible density, the city can demand a minimal share of affordable housing (Stadt Zürich, 2022b).

Fig. 5: Demolition of housing in Altstetten (Photo: J.Duyne, 2024)

The municipal structure plan SLöBA is binding only for public authorities but constitutes the basis for the Building and Zoning Regulation (*Bau- und Zonenordnung, BZO*) which is binding for property owners. The current version of the BZO (revised in 2016) came into force in 2018. It included upzoning in several residential areas, allowing one additional storey in many residential zones (Nater, 2018). The BZO is currently being revised with the aim to facilitate the goals of the SLöBA. Among other things, it will allow further moderate densification, try to secure a substantial share of affordable housing, improve local climate, and develop additional open and green spaces (Stadt Zürich, n.d.-a). However, the BZO can only be adapted within

[148] A special land use plan or a design plan (*Sondernutzungsplan, Gestaltungsplan*) is established in a cooperative planning procedure between private developers and the municipal authorities. It can contain benefits for developers (e.g. higher density) in exchange for contributions of public interest (e.g. public spaces).

the legal framework of the cantonal legislation, i.e. the cantonal structure plan and the cantonal planning and construction law (*Planungs- und Baugesetz*, PBG).

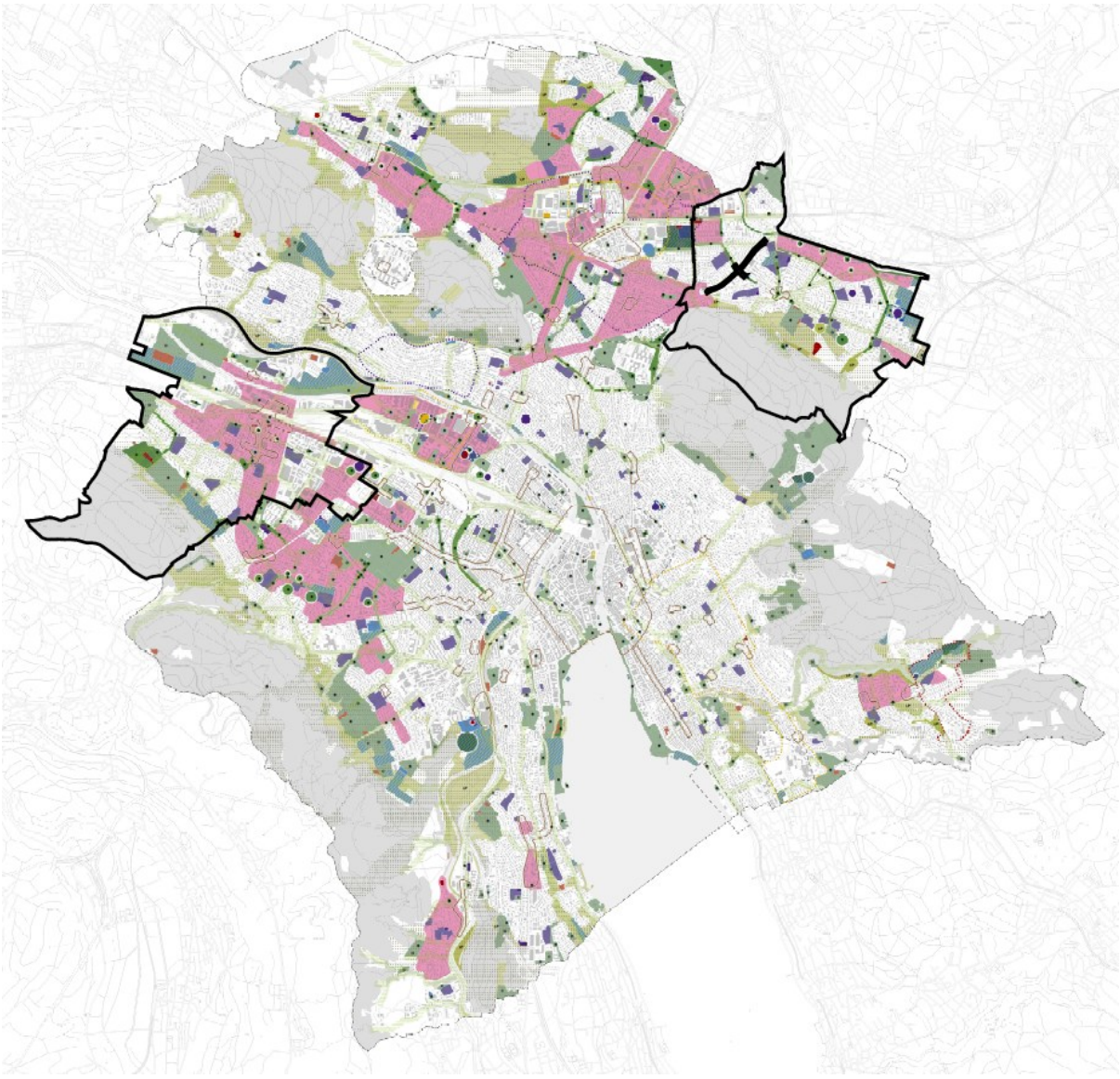

Fig. 6: Map of municipal structure plan. Areas shaded in pink are areas where additional densification is allowed. Source: Stadt Zürich, 2022b, addition of case study areas by authors.

Based on the municipal structure plan, the city also revised its guidelines for high-rise buildings in 2024 (Stadt Zürich, 2024g). In a partial revision of the BZO in 2018, areas where high-rise buildings are allowed were designated. The revised plans reduce these areas in some parts, extend them in others, and distinguish between three instead of two different types of zones (with a different maximum height each; Fig.).

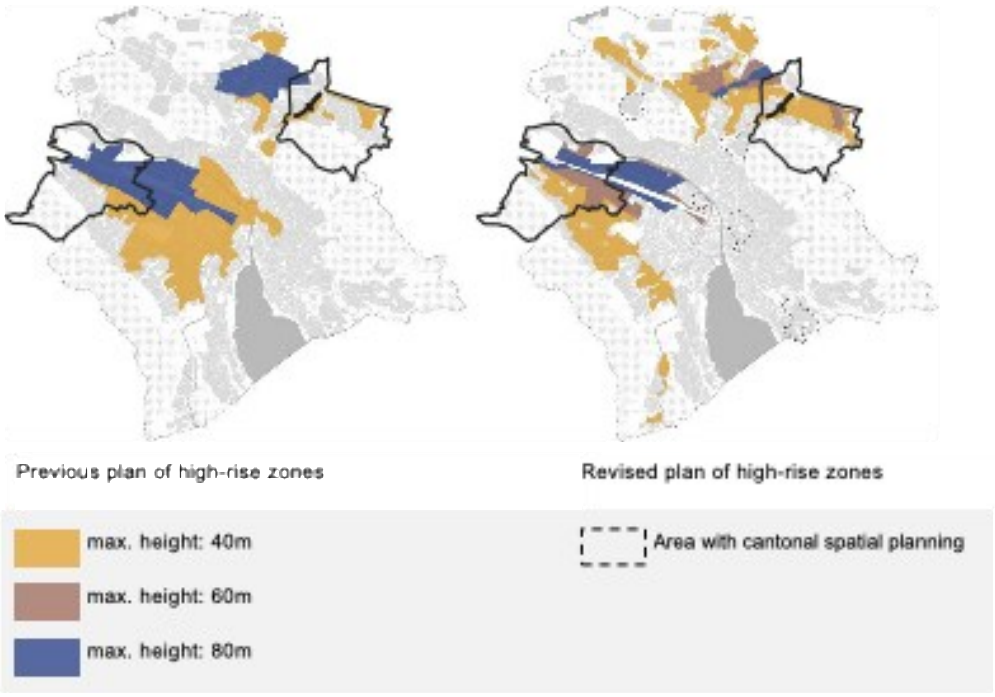

Fig. 7: Previous and revised high-rise zones. Source: Stadt Zürich (2024g), addition of case study areas by authors.

9.1.2.2 Energy refurbishments

As early as 2002, Zurich has had a municipal *Energy Masterplan*. It is binding for the city administration and "city-near" property developers. The municipal energy planning is to be monitored and revised every 4 years. The current Masterplan identifies the building sector as the largest domain of action. It aims to transform the building stock across the city in order to achieve the climate and energy targets (Stadt Zürich, 2023). All municipal policies (municipal structure plan, zoning laws, development plans, etc.) must align with the *Energy Masterplan*. The *Climate Protection Plan* (Klimaschutzplan), introduced after a popular vote in 2022, emphasises that the rate of energy-efficient refurbishment in residential construction must increase from 1.25% to 2.1% per year (Stadt Zürich, 2024b). With 54'487 buildings of which 63% have been built before 1960, the city of Zurich has a large stock in need of refurbishment (Stadt Zürich, 2024a).

The City of Zurich contributes to a variety of energy-efficient measures in the building sector to complement the federal and cantonal Buildings Programme (*Gebäudeprogramm*). Private owners can draw on 36 different programs for funding and consultation (*Suchmaschine für Förderprogramme*, n.d.). They support mainly the replacements of fossil heating systems and solar energy installations. However, energy refurbishments are often carried out as part of larger renovations, thus triggering substantive rent increases. In fact, according to the Swiss tenancy law, 50-70% of the investment costs of value enhancing renovations can be transferred to tenants (excluding subsidies). Rents therefore typically increase far more than the savings from energy efficiency. Furthermore, in case of larger renovations, landlords often evict their tenants, leading to displacement. In Zurich, between 2020 and 2023, 28% of all the

renovated dwellings entailed renovictions, affecting over 2,200 individuals in this period (Stadt Zürich, 2025d).

9.1.2.3 Nature Based Solutions (NBS)

Zurich is characterized by a comparatively high degree of urban greening and notable biodiversity. More than 70 designated green spaces account for approximately 40% of the total municipal area. Within residential zones, 10.9% of the land is classified as ecologically valuable, underscoring the ecological significance embedded in the city's built environment (Stadt Zürich, 2020).

Fig. 8: Plan of green and open space network throughout Zurich. Source: Grünstadt Zürich, Stadt Zürich (2019).

Simple biodiversity measures like roof greening on newly constructed flat roofs have been mandatory in Zurich already since 1991(Stadt Zürich, n.d.-b). Still, the creation of a networked urban green space (Fig.) requires that nature-based solutions will be a priority in urban planning as one of the four ecological goals of the municipal environmental strategy. The regional structure plan (2017), echoed by the municipal structure plan (2022) sets a goal of at least 15% ecologically valuable habitats inside of residential areas by 2040. Nature-based solutions are further embedded within a range of climate adaptation plans. Through its heat mitigation strategy, urban nature strategy, and urban tree strategy, the municipality systematically incorporates NBS into its broader ecological urban development framework,

aligning climate resilience objectives with long-term spatial and environmental planning. In addition, the municipal programme *Stadtgrün* provides targeted financial support for ecological enhancements to both public and private buildings, thereby fostering the implementation of green infrastructure across different property regimes. It includes the promotion of municipal green spaces, support for municipal properties in greening projects, the financing of ecological retrofitting as an incentive for private actors[149] as well as for research and pilot projects. The program has a total budget of 130 million Swiss Francs, with 28.2 million allocated to the second sub-programme for private property owners between 2024 and 2029 (Stadt Zürich, 2024f).

9.1.3 Green transitions in Zurich: Altstetten and Schwamendingen

The neighbourhoods of Altstetten and Schwamendingen were chosen as case study areas because they were both officially designated as priority areas for densification and are currently undergoing profound transformations. In both neighbourhoods, substantial rent gaps persist and large shares of housing consist of older buildings that are currently subject to renovation or redevelopment, making them key sites for observing the social and spatial effects of greening initiatives and densification policies. More specifically, our case studies in Zurich focus on densification and urban renewal in Altstetten, and the area around *Einhausung Schwamendingen*.

9.1.3.1 Altstetten: neighbourhood profile and green transition

Altstetten is a neighbourhood that is part of district 9 in the western part of Zurich. It counts 36,874 inhabitants (Table 1). The former village was incorporated into Zurich in 1934 (Statistik Stadt Zürich, 2025b). Socio-demographically, Altstetten is characterized by a relatively high proportion of non-Swiss nationals (38.4%; see Table 1 for the most frequent nationalities) and a more mixed population compared with inner-city neighbourhoods. The rate of people relying on social assistance is slightly higher than the city average (4.3% vs. 3.9%), and the old-age-dependency ratio is slightly lower than on average (Table 1).

Altstetten has been earmarked for densification by the municipal structure plan (Stadt Zürich, 2022b). It has been designated as one of the centres of cantonal importance within the city of Zurich, besides the inner city (also known as 'Kreis 1') and Oerlikon ('Kreis 11'; Stadt Zürich, 2022b). Large parts of the neighbourhood are situated in two of the 14 areas earmarked for densification, *Altstetten Nord* and *Hard Letzi Altstetten* (Stadt Zürich, 2022b), meaning additional building density is allowed in new projects. The revised plan for high-rise buildings allows high-rise buildings with a maximum height of 80 metres along the railway tracks in

[149] In the framework of *Programm Stadtgrün*, private owners can be subsidized for vertical greening, green roofs, ecologically valuable upgrading of outdoor spaces, unsealing, tree planting and the preservation and maintenance of valuable existing trees (Stadt Zürich, 2024h).

Altstetten, and slightly lower high-rises (max. 60 or 40 metres) across the entire neighbourhood (Fig.).

Densification in Altstetten so far primarily took place on former industrial sites, with the construction of new, mostly institutional or relatively expensive housing units, which have added residential capacity without directly displacing affordable housing. However, increasing renewal trends in existing residential areas are emerging due to the city's growth strategy, energy policies, and zoning regulations. In no other district are so many new apartments currently being built as in Zurich Altstetten (Scherrer & Rey, 2022). Many of these new projects also entail demolition, however. In 2023, 295 residential units were demolished while 795 new dwellings were constructed (Jörg & Rey, 2024). The construction activity is also evident in the above-average population growth in Altstetten. The neighbourhood population grew by 15% between 2015 and 2025, while the population of the city as a whole increased by 10% (Table 1).

The neighbourhood's transformation is particularly evident along the railway tracks, where housing and mixed-used projects developed mainly by the Swiss Federal Railway, but also by the city and by private developers, have advanced significantly, and around Altstetten station, which has become a hub for both public transport and businesses, including financial institutions such as UBS and Julius Bär (Statistik Stadt Zürich, 2025b). Altstetten thus has experienced extensive urban renewal and densification over the past decade, with new, higher-end developments driving rising rents and changing the socio-economic structure of the neighbourhood. In contrast to Schwamendingen, Altstetten does not have a particularly high proportion of non-profit housing: housing cooperatives own 19.8% of all dwellings, and the municipality 8.2% (Table 1).

9.1.3.2 Schwamendingen: neighbourhood profile and green transition

Schwamendingen is Zurich's twelfth district (Kreis 12) in the north-eastern part of Zurich and home to 32,832 people (Table 1). Schwamendingen used to be a rural village and was incorporated into Zurich in 1934 (Statistik Stadt Zürich, 2025a). Its population grew rapidly until the 1970s. In this time, many affordable terraced houses were created, and housing cooperatives built around 8,000 dwellings (Laux & Prà, 2023). Today, cooperatives own 42.6% of all dwellings in Schwamendingen, and together with municipal housing (7.8%), more than half of the housing stock is non-profit (Table 1). Buildings that were built between 1935 and 1965 represent 66% of the whole building stock which is well above the city average of 30.8% (Table 1). Socio-demographically, the neighbourhood is characterised by a relatively high share of non-Swiss nationals (38.1%), an above-average rate of people relying on social assistance (6.4%), and a slightly higher old-age-dependency ratio than Zurich as a whole (19.8 vs. 19.0; Table 1).

For a long time, Schwamendingen provided affordable housing to lower-income households. With 42,400 the median yearly equivalised income is still significantly lower than the Zurich average (Table 1), but the neighbourhood is currently undergoing urban transformations that threaten the affordable housing stock. These changes are of course related to the aging building stock – according to the City of Zurich, buildings built between 1935 and 1965 are most likely to be in need of renewal (Stadt Zürich, 2025h) – but also to the municipal

densification plans (see Section 9.1.2). Schwamendingen contains one of the 14 areas earmarked for densification (Stadt Zürich, 2022b), meaning additional building density is allowed in new projects. The revised plan for high-rise buildings also assigns almost the whole district to a zone where high-rise buildings with a maximum height of 40 metres are allowed (Fig.).

Further densification projects are under way on plots of land adjacent to the *Einhausung Schwamendingen*. This enclosure (*Einhausung* in German) covers a highway that used to cut the neighbourhood in two parts. The construction is approximately eight metres above the ground, spanning one kilometre in length and 30 metres in width (Kälin et al., 2025). Residents started demanding to cover the highway to reduce noise and air pollution already in the late 1990s. In 2004, the city voters approved the proposed loan for the construction of a highway enclosure with a majority of 83% (Bundesamt für Strassen ASTRA, 2025). While the project initially only included a green layer on top of the enclosure, it was later decided to create a fully-fledged park (*Überlandpark*) linking the two sides of the neighbourhood. After several rounds of planning, construction works started in 2018, with the highway running again in 2024 and the park being inaugurated in 2025 (Bundesamt für Strassen ASTRA, 2025) While providing significant benefits (reduced noise and air pollution, new public green space), the project is also part of a wider trend of neighbourhood revaluation, contributing to increasing rents and potential pressures on longstanding inhabitants with lower income (Laux & Prà, 2023; Stadt Zürich, 2019b).

A design plan that was elaborated with the landowners, specifying the urban design principles and allowing higher building density if the project includes a bridge between the new building and the park (Stadt Zürich, 2019a). Most buildings adjacent to the enclosure are cooperative housing, but many among them plan to demolish and reconstruct their buildings. Even when rented out at cost rent, to which housing cooperatives are committed, rents in their new buildings will be considerably higher.

Table 1: Altstetten, Schwamendingen and Zurich at a glance

Indicator	Altstetten	Schwamendingen (Kreis 12)	Zurich
Population (2025)	36,874	32,832	452,421
Population growth 2015 – 2025	15.2%	3.4%	10.2%
Median equivalised household **income** (yearly taxable income in 2023)	53,200	42,400	58,100
Share of **cooperative housing** [% of all dwellings] (2025)	19.8%	42.6%	17.9%

Share of **municipal housing** [% of all dwellings] (2025)	8.2%	7.8%	7.5%
Share of **non-Swiss nationals** (2025)	38.4%	38.1%	33.9%
Most frequent **nationalities** (other than Swiss) [% of population] (2025)	Germany (6.1%), Italy (5.4%), Portugal (2.9%) Spain (2.1%) Turkey (1.2%)	Germany (4.5%), Italy (4.1%), Portugal (3.3%), China (2.0%) Spain (1.7%)	Germany (7.2%) Italy (3.9%) Spain (1.8%) Portugal (1.5%) France (1.3%)
Old-age-dependency ratio [persons aged 65 and over / persons aged 15 – 64] (2024)	18.2	19.8	19.0
Social assistance rate (2024)	4.3%	6.4%	3.9%
Share of **buildings built 1935 – 1965** [% of all buildings] (2025)	37.0%	66%*	30.8%

* Percentage for district 12 estimated as a weighted average of the percentages per neighbourhood (Saatlen, Schwamendingen-Mitte, Hirzenbach) published by Stadt Zürich (2025h), using the stock of buildings in each neighbourhood (Stadt Zürich, 2025b).
Source: Stadt Zürich (2025f, 2025a, 2025g, 2025h, 2026a, 2026b)

Table 2: Key data on case study areas in Zurich.

	Densification in Altstetten	**Einhausung Schwamendingen**
Timeline	Since 2019 earmarked for densification in the municipal structure plan.	2004: Popular vote for the enclosure; 2018-2025: implementation; May 2025: park inauguration
Funding	Densification projects funded by different types of developers (for-profit, non-profit, public). Municipality taxes planning gains of up-zonings	Federal Roads Office (56%), Canton of Zurich (24.6%), City of Zurich (19.4%) (Regionaljournal Zürich Schaffhausen, 2024).
Actor constellation	For-profit, non-profit landowners and developers, the city, tenants and their organisations.	See “Funding”, plus housing cooperatives and other landowners adjacent to the enclosure and in the surrounding neighbourhood
Objectives	To accommodate the projected population growth and jobs; due to the lack of green- and brownfields, Zurich needs inward development and has defined zones for densification, Altstetten being one of them.	The main objective of the enclosure was to reduce noise and air pollution for residents. Later, a climate-friendly public park was added to the project. With the site development plan (*Gestaltungsplan Überlandpark*), the City of Zurich also sets criteria to

		ensure well-designed urban development and densification.
Specific physical measures	Depends on the specific projects.	The enclosure and the park also entailed the expropriation and demolition of some buildings close to the highway. Owners of the remaining buildings, most of which are housing cooperatives, delayed their renovation or renewal projects due to the construction works, and have only started demolishing and reconstructing recently (or will start in the future).
Accompanying housing policy/ regulatory measures	No specific policy or regulatory measures for Altstetten as a whole.	Besides the site development plan (which only contains elements regarding urban design), there are no policies or regulatory measures in place.
Key social tensions or/and benefits between greening and housing	Since there is hardly any undeveloped land, for most densification projects existing buildings (usually containing affordable housing) are demolished and replaced with a new construction, leading to displacement and a loss of affordable housing units.	Benefits of the enclosure are reduced noise and air pollution and new green public space. However, the enclosure enhances the attractiveness of the neighbourhood well beyond its immediate surroundings, leading to a loss of affordable housing and gentrification.

The remainder of this report is structured as follows: Section 2 presents the methods used to collect and analyse the data. In section 3, 4 and 5, results regarding the perceptions of green initiatives and housing inequalities by different actors are discussed. While the focus lies on the two neighbourhoods Altstetten and Schwamendingen, many of the factors contributing to housing inequalities in these neighbourhoods are not unique to them but apply to the whole city. Section 3 therefore starts with general perceptions on the interlinkages of densification, redevelopments and housing inequalities in Zurich, before turning to Altstetten (Section 4) and Schwamendingen (Section 5). The report concludes with a critical analysis of green transition initiatives and their effects on housing inequalities (Section 6).

9.1.4 Methods

This case study report focuses on civic perceptions of green transition interventions and their interlinkages with housing inequalities. These perceptions encompass the views of various stakeholders: private real estate developers, institutional investors (insurance or social

security), public actors (members of the city council or representatives of the city administration), and civic actors (i.e. NGOs, social workers of neighbourhood centres, housing cooperatives, activists, etc.). As a core research method, we used semi-structured interviews focusing on green transition initiatives, housing, social sustainability in housing in relation to the green transition, and issues of multi-level governance.

For the case of Zurich, we conducted 24 interviews between May and September 2025, including representatives of the city administration, members of political parties, local associations and local businesses, and activists (see Appendix 1). We used our existing knowledge from preliminary visits to the case study neighbourhoods and form the Policy Lab #1 (a workshop with stakeholders from the case study cities and from cantonal and national level in April 2025) to identify and contact an initial set of participants. Further participants were recruited through online research on relevant organisations. Interviews lasted about an hour on average, and were conducted either in person, via video call or on telephone. Participants were asked to give informed consent.

Interviews were audio-taped and later transcribed using the software *Buzz* which runs on OpenAI's speech recognition model *Whisper*. We manually edited initial transcripts generated by AI to produce the transcripts used for coding. Coding was aided by the software MAXQDA and was performed with the transcripts in their original language (German). Quotes used in this report are translated to English by the authors.

This report also relies on desk research studying academic and grey literature, reports, legal documents, plans, and statistical data. It also draws on previous research in the framework of the ReHousIn project on housing inequalities in Switzerland (Widmer et al., 2024), environmental and energy policies (Duyne Barenstein et al., 2025b), and the Swiss housing system (Duyne Barenstein et al., 2025a).

Nonetheless, this research is subject to several limitations. Although it incorporates a broad spectrum of institutional and civic stakeholders, interviews with directly affected tenants were conducted only sporadically. Consequently, the findings do not adequately represent the perspectives and lived experiences of those most affected, nor do they sufficiently address concrete outcomes and potential solutions for households facing displacement. Secondly, several public stakeholders from urban greening organisations declined interview requests, stating that housing issues fell outside their mandate. While this limited the empirical scope of the study, the refusals are themselves instructive. They reflect a siloed administrative logic in which environmental and housing concerns are treated as separate domains.

9.1.5 Perceptions of green initiatives and housing inequalities in Zurich

This chapter presents a descriptive overview of how public authorities, civic actors, and private sector representatives perceive and evaluate climate adaption strategies, such as large greening initiatives, densification policies, and energy refurbishments in the City of Zürich. Based on 24 expert interviews, the chapter systematically documents these perceptions across densification, nature-based solutions, and retrofit, following the order of the nine stakeholder-related categories defined in the codebook.

9.1.5.1 Perceptions on relevant projects, places, and policies in Zurich

In Zurich, housing inequalities are shaped by a combination of market trends and policy interventions. In the two cases examined in this report, factors such as densification policies, greening initiatives, and broader urban development strategies have contributed to rising rents and, in some cases, displacement due to renovation and demolition. The overlapping influences of urban renewal, infrastructure improvements, and environmental adaptation measures create complex dynamics in the housing market, affecting both existing and prospective residents.

Civic actors describe Zurich as undergoing **continuous redevelopment** around hubs and former industrial zones, driven by scarcity of land, densification policies, population growth, and extensive housing renewal. The latter increasingly occurs **within inhabited areas**, intensifying social conflict through rising rents and displacement. Multiple public investments, private projects, and institutional agendas unfold simultaneously, creating a sense of constant transformation. Demolition and new construction of housing estates in the name of **densification** and infrastructure-led projects such as the huge **greening initiative** in Schwamendingen respond to the strong middle- or upper-class in-migration[150].

Public officials describe Zurich's transformation as structurally unavoidable due to its exhausted expansion capacity. Following the revision of the national *Spatial Planning Act (SPA 1)*, growth occurs predominantly within existing neighbourhoods, thereby rendering **densification** and displacement unintended consequences embedded within planning processes. Resulting rent inflation is perceived as effect of the influx of high-income earners associated with Zurich's high-wage service economy, constraining access for prospective newcomers while exposing long-term residents to the risk of renoviction. Within this context, public actors identify Schwamendingen and Altstetten as key transformation zones, as confirmed by a local urban activist:

> ‚Now, in the existing residential neighborhoods and settlements, you can see that renewal pressure has emerged over the past few years. This pressure is being reinforced, of course, by the city's growth targets, energy goals, and by the master plan and zoning regulations, which clearly designate Altstetten and Schwamendingen as densification areas where development and taller buildings are encouraged.' (250526_P9_ZH_Transcription, Pos. 86)

From private developers and housing market analysts' perspectives, Zurich represents a special market. As there is a high immigration rate of foreign and Swiss national high-income earners, but not enough housing supply, prices are high. High income combined with insufficient supply leads to a stronger upward pressure on what people are willing to spend on

[150] The Social Space Monitoring Zurich (*Sozialräumliches Monitoring Zürich*) indicates that between 2013 and 2022 the highest (+39%) and the second highest income quartile (+13%) increased markedly, whereas the lowest quartile declined slightly (Stadt Zürich, 2025h)

housing. Additionally, rising construction and land costs further aggravate the situation. A home-owners association representative mentioned the **increasing role of institutional ownership** as an additional factor. Private actors acknowledge displacements due to housing renewal but emphasise management solutions.

9.1.5.2 Participation and governance in Zurich

Civic actors in Zurich express a **strong sense of urgency** regarding rising housing inequalities, particularly in relation to **displacement** and rapidly **increasing asking rents**. From their perspective, housing affordability has emerged as a central urban issue, yet political responses are widely perceived as insufficient. Most civic organisations and activists argue that the topic has only recently **entered the municipal agenda**, reflecting recognition rather than substantive policy development. Several representatives articulate frustration with what they view as limited political engagement. For example, one tenant refers to the large-scale housing demonstration in April 2025, noting the near absence of elected officials as indicative of insufficient responsiveness to civic concerns.

> '(…) at the last housing protest, the big one in April, I found it very sad that the only one who showed up was Jacqueline Badran. And for me, it's a bit like, the people are taking it to the streets. It's a huge problem. There were so many people there, but the politicians don't really care. And I think that's where I really see... Well, I thought that as a left-wing mayor, she should have shown up quickly, right? Because this is really a concern of the people. And that's where you see the gap between the politicians and the people.' (250811_P36_ZH_Transcription, Pos. 5)

Civic organisations criticise the city's governance structures, describing **fragmented responsibilities**, procedural inefficiencies, and a lack of **effective follow-ups** in planning processes. They argue that responsibilities related to displacement and urban renewal are **divided across departments**—such as Spatial Planning, Environment, and Urban Development—without co-ordinated implementation mechanisms. According to a representative of the tenant union, social impact assessments conducted by the Office for Urban Development often come too late to influence projects, resulting in recommendations disappearing into administrative silos. This fragmentation is perceived as a long-standing **strategy that prioritises housing development over social protection** of tenants and rents, facilitated by reliance on the cantonal zoning plan and limited municipal regulatory autonomy.

Against this backdrop, civic initiatives also highlight the political reluctance of some municipal departments to publicly acknowledge displacement as a structural problem. Actors such as a practitioner working on participation and urban governance, call for the city to take a clearer and **more explicit stance**, arguing that current approaches remain overly cautious and technocratic. Overall, civic perceptions depict a governance landscape in which recognition of housing inequalities is growing, yet institutional responses remain insufficiently coordinated, politically hesitant, and misaligned with the scale of displacement pressures experienced in the city. The representative of an NGO, responsible for housing consultations states:

> 'I think there's a sense of urgency. And what we were just talking about — the asking rents are simply unbelievably high. A lot, really a *lot* of people can no longer afford them. And I think this

has raised the question, on both the political and societal level, of how a city should position itself.' (250619_P14_ZH_Transcription, Pos. 92)

Most private actors, on the other hand, express strong **dissatisfaction with Zurich's regulatory environment**, which they perceive as increasingly burdensome, slow, and costly. The process of planning, approval, and construction has become significantly more complex in recent years. Lengthy **waiting times for building permits** are described as major obstacles. Rising construction costs, combined with **expanding regulatory requirements** are perceived as heightening financial and administrative pressures. Apart from other legal frameworks, private representatives claim that the Energy Act has unintentionally contributed to situations of increased displacement risk. They argue that new energy-efficiency requirements, impose stringent retrofit obligations that can lead to higher costs. Some private actors perceive the city administration as overly prescriptive, restrictive, and slow, describing bureaucratic involvement in even minor aspects of construction as evidence of excessive aesthetic and technical oversight. This has contributed to a perception that **regulatory complexity discourages development** and leads property owners to abandon or delay projects. These actors contend that the current regulatory framework contributes—directly or indirectly—to housing pressure, renovation delays, and, in some cases, tenant vulnerability. A representative of the homeowners' association states:

'We had a poster that said the Energy Act would lead to more evictions and demolitions. The Tenants' Association abstained. What happened? Due to the Energy Act, of course, we have various requirements we have to meet. (…) Everything gets more expensive. I wait for plans for six, seven months if I want to renovate. Then I wait for the building permit.' (250710_P20_ZH_Transcription, Pos. 176)

However, private sector assessments of cooperation with the municipal administration vary considerably. While a representative of the homeowners' association characterises collaboration with the municipality as challenging, a representative of a large institutional investor emphasises **structured dialogue with municipal authorities as critical** to project success—particularly in complex redevelopment contexts involving land swaps or political sensitivities. The same actor describes negotiations with tenants' associations as difficult but necessary to achieve **workable compromises**, advocating a moderation of **entrenched positions** between homeowners' and tenant organisations.

Public-sector actors repeatedly emphasise the structural limitations created by Switzerland's federal system, in which responsibilities for housing are weakly defined and often fragmented. According to several officials, the canton of Zurich does not perceive itself as a housing-policy actor, aside from its subsidised housing programme—which is described as outdated and currently under revision. As a representative of municipal housing articulates, this institutional self-understanding leads to an absence of coordination and **limited engagement from the canton**, leaving the municipality without a strong governing partner in managing housing pressures.

Despite these institutional constraints, municipal actors—especially within the office for urban development—**attempt to integrate socio-spatial considerations** into planning and

development processes. One official explains that they were hired specifically to create an internal foundation across departments for addressing displacement risks linked to housing replacement. Their role is to bring social concerns to planning tables and to advocate for socially compatible urban development. However, even in large private developments, the city cannot legally demand socio-spatial measures or affordability criteria. A representative of the urban development department Zurich explains:

> 'Even for large-scale developments, the city can only present its views on social aspects or affordability; there are no legal obligations. We can't demand anything at all. For example, we can't demand affordable housing. But that's in progress. Yes, something should be coming soon.' (250630_P16_ZH_Transcription)

In response to these limitations, the municipality has developed soft instruments aimed at influencing owners and developers. A key tool is the **socio-spatial assessment report** (*Sozialräumlicher Bericht*), prepared for major redevelopment projects. This report informs property owners about who lives in their buildings, often revealing socially vulnerable households, concentrations of children, or neighbourhoods where dozens of families could be displaced simultaneously. Although non-enforceable, these analyses are incorporated into architectural competitions and circulated among planners. Public officials note that they typically have just one seat on competition juries for new developments, and property owners predominantly determine outcomes. Without legal backing, **the city relies on persuasion**, professional argumentation, and internal advocacy to promote phased development, tenant protections, or social mitigation strategies. In cases of major displacement risks or controversial projects, the city has introduced escalation mechanisms, most notably high-level roundtables.

9.1.5.3 Perceptions of justice and equity in Zurich

Civic representatives, including social workers and activists, emphasize that housing pressures in Zurich disproportionately **affect the most vulnerable groups**. Residents with language barriers, limited digital skills, or low incomes already live in precarious conditions, while fear of eviction is widespread among elderly and marginalized tenants. Activists report that some property managers intensify this fear through threatening practices, causing severe stress, particularly among older residents. After eviction, many households re-enter only the lowest-cost segment of the housing market, often through insecure **temporary leases**. These tenancies offer minimal legal protection and can generate tensions with former tenants, **producing serial displacement** that undermines social stability. Activists also warn that, without mediation, temporary tenancy can foster discriminatory or xenophobic resentments toward long-standing residents. It is further emphasized **how dramatically people's wellbeing improves once stable housing is secured**—illustrating that access to affordable, secure housing is a foundational precondition for health, family stability, and everyday functioning. According to a representative of a neighbourhood centre:

> 'And you can really see with them how much things calm down, and problems become more manageable, once people have secure housing. It's incredible. It's really striking. I kept saying to Asan and so on, "I'm worried about you—you don't look well." He was close to a heart

attack—health-wise—because he was so worried about his family and where they would go.' (250805_P31_ZH_Transcription, Pos. 184)

A broader civic critique concerns market rents to be very high, while **excluding a growing share of the population** and raising fundamental questions about who can still live in Zurich. Civic actors observe that displacement logics have become increasingly visible and politically salient, forcing a reckoning with the city's responsibility toward vulnerable residents.

Multiple private-sector representatives and a real estate analyst confirm these trends, noting that rising rents and displacement in Zurich generate **spillover pressures** in neighbouring municipalities and **intensify demand** in economic hubs. While acknowledging the importance of social responsibility in housing development, they emphasise market constraints and project-specific factors. However, some developers and associations aim to balance profitability with long-term social goals. For example, the representative of the sustainable homeowner's association (*Casafair*) emphasizes that renovations should be carried out while units remain occupied, prioritizing energy-efficiency improvements rather than maximizing financial returns. Similarly, one for-profit developer, sees projects like the *Frohburg development*[151] as illustrating the use of **staged renovation, controlled rents** for longstanding tenants, and diverse apartment sizes to accommodate a wide spectrum of households, supporting social mix across age, income, and family composition.

Municipal social workers observe that **renovictions generate significant social costs,** particularly when already precarious households are pushed into **welfare dependency**. As one social department representative puts it, the aim is to **prevent working-poor households from slipping into social assistance**. However, public representatives also mention that the **private rental stock plays a crucial but undervalued role** in Zurich's affordability landscape. Many affordable units still lie in the private sector—often in older buildings that have not yet been redeveloped. However, **market mechanisms and regulatory accounting structures are limiting the affordability potential of the private sector**.

9.1.5.4 Perceptions of political mobilization in Zurich

Housing activists and tenant support groups regard **public demonstrations** as key tools for signalling the urgency of the housing crisis and pressuring authorities and landlords in Zurich. Although politicians are often perceived as absent, large demonstrations make residents' experiences of housing insecurity visible and demand accountability. Civic actors stress that campaigns are most effective when **grassroots mobilization** is combined with **pollical initiatives**, such as the demand to link subsidies or renovation programmes to anti-eviction

[151] The *Frohburg Development* is a redevelopment in Schwamendingen. Staged renovation allows parts of the old tenant population to remain in the estate during redevelopment and return to apartments with controlled rent increases.

measures, thereby raising awareness of displacement and enabling participation by politically marginalized groups. Many civic actors observe that mobilization around housing rights has intensified in recent years, with organizations like the ***Mietenplenum***[152] playing a central role in raising awareness, consolidating affected residents, and connecting them with political and administrative structures. They note that these efforts, including **open tenant meetings**, door-to-door outreach, and the creation of lists that make the social strata and housing needs of residents at risk of displacement visible, as empowering communities and highlighting structural inequities in the housing market. By coordinating these activist projects with the tenants' association, legal counsel, and the municipal authorities, advocacy for affected tenants can be improved. Nevertheless, the overall impact remains limited, as such initiatives can rarely counteract the structural shortage of affordable housing or prevent displacement on a larger scale.

At the neighbourhood level, civic actors emphasize **local engagement as essential** for social cohesion and direct support of affected residents. Activities include neighbourhood meetings, information sessions, coordination with social services, and negotiation with landlords and cooperatives. However, **agency is unevenly distributed**: residents in secure or resource-rich housing situations are more able to mobilize, while vulnerable groups rely heavily on civic organizations. Overall, civic actors describe housing politics as highly urgent and politicized, with mobilization, protests, and neighbourhood advocacy functioning as complementary strategies to amplify residents' voices and sustain pressure on political and economic actors. Some civic actors observe that municipal action on housing issues is increasingly driven by **internal administrative awareness** and pressure, not solely by public debate, mobilizations, or media attention. From this perspective, civic actors suggest that direct engagement with the realities of housing insecurity also creates momentum within municipal structures.

Private real estate actors describe a growing political and civil-society pressure around housing that increasingly **affects investment strategies** in the cities. In Zurich and Basel, new regulations are perceived as market-distorting, and some institutional investors report shifting their investments to **B-locations**, that is, less central urban areas with lower land values and fewer regulatory constraints. Private actors in Zurich express critical views toward political measures and regulatory interventions that affect housing and property development. According to a representative of large private developer:

> 'The requirements for construction are becoming increasingly demanding. There are various sustainability labels, BZO regulations, and individual positions taken by offices and authorities

[152] The *Mietenplenum* is a tenant support group that intervenes in public debate, organizes regular meetings for tenants affected by renovictions, and engages with a range of public and private stakeholders and institutions to advocate for housing justice.

which generally demand a bit more — or perhaps simply too much — in order to obtain a permit at all.' (250925_P53_ZH_Transcription, Pos. 31-32).

Similarly, a representative of the home-owner's association views policies like the recently politically considered public *Vorkaufsrecht* (right of first refusal) as a direct intervention into **private property rights**. From his perspective, such measures are strategically aligned with a state-controlled land economy, which private actors oppose, framing the policy as potentially **counterproductive rather than solving** housing challenges. Mobilizations around housing rights are thus seen as both a reaction to and a challenge for owners. The *Sugus-houses*[153] case is cited as an example of how poor communication can fuel conflict, motivating actors to engage earlier and more transparently during project phases. Tenant unions, environmental–social coalitions, and broader civil-society alliances are understood as key actors shaping political pressure around housing. Some private actors actively **counterbalance these mobilizations** through political advocacy.

Across interviews, public actors identify housing-related mobilization as one of the most **persistent political dynamics in Zurich**. Recurrent housing initiatives are interpreted as evidence of widespread dissatisfaction with prevailing housing conditions. Political pressure is widely regarded as the most effective lever for institutional change, particularly in influencing large investors, who tend to respond primarily to substantial public or political opposition. The municipal housing delegate emphasizes that mobilization emerges both from top-down municipal strategies and strong bottom-up demands. Ongoing engagement with real estate actors and advocacy groups—such as tenant unions and urban planning offices—is described as a routine component of municipal governance. While these interactions are generally constructive, activists often perceive their contributions as **insufficiently acknowledged** within formal political processes. A local activist states:

'And we repeatedly raised the issue (of flat evictions in Schwamendingen) with everyone we were in contact with. We also approached politicians. They sent back individual letters saying that they recognised the problem. It's tragic and all that, but nothing ever happened.' (250806_P32_ZH_Transcription, Pos. 5)

Public actors also note an imbalanced public narrative, in which successful municipal interventions receive **limited media recognition**. Historical and **contemporary campaigns and popular initiatives**, particularly at municipal level, are identified as key moments shaping Zurich's housing and densification politics. These initiatives have **influenced regulatory frameworks**, including the development of *SPA1* and benchmarks for inner urban development. The high frequency of housing-related demonstrations is further interpreted as

[153] The *Sugus houses* are an example of mass termination of rental contracts in Zurich's city centre, which attracted significant media attention.

an indicator of the issue's political salience. A public administration representative assures, that the housing issue has been acknowledged by the municipality:

> 'I believe that the four housing policy initiatives in the pipeline show that the population is dissatisfied with the current situation. It is the number one issue, and I think that if the citizens organise and name a demonstration about a problem, the municipality must have taken notice.' (251002_P54_ZH_Transcription, pos. 76)

9.1.5.5 Perceptions of positive social impacts of greening initiatives in Zurich

Civic actors emphasise that large-scale enhancement projects are widely recognised as **environmental and spatial improvements** for residents as they can contribute to improve well-being through **reduced noise**, **better air quality**, or new **community spaces**. Representatives of non-profit cooperatives and the tenants' association stress that regulated housing models, especially cost-rent schemes, effectively maintain affordability despite redevelopment pressure. **Cooperative and socially oriented landlords are seen as stabilizing forces**. However, a local housing activist group notes that generally, such upgrades are inherently ambivalent: while framed as "beautification," in Zurich they are closely linked to displacement pressures.

Private for-profit actors often frame redevelopment as an opportunity to **enhance environmental performance**, construction quality, and urban standards through sustainability-oriented practices. Circular economy principles—such as material reuse, recyclability, and dismantlability—are presented as qualitative improvements over conventional construction. A representative of the homeowners' association further characterizes renewal as **increasing overall living quality** through improved energy systems, upgraded buildings, and more attractive environments, with positive effects on residents' comfort and wellbeing. Regarding process design, socially sensitive redevelopment is expected to reduce tenant stress and support wellbeing, as is emphasized by a representative of a large for-profit investor:

> 'We generally say that planning time is key. The longer the lead time, the better and the more socially acceptable the whole thing is.' (250731_P33_ZH_Transcription, Pos. 83)

He also describes redevelopment and modernization as having a catalytic effect on surrounding properties, leading to more structural and aesthetic improvements in the urban environment. Infrastructure and public-space interventions such as traffic calming or flagship projects like the *Überlandpark* are perceived as strong amenities that **enhance neighbourhood attractiveness** and environmental quality that may also increase housing demand. Some institutional investors add that clear legal frameworks—such as the one-third affordable housing target (*Drittelszie*l)—along with cost-rent models, cross-subsidization, and dedicated investment vehicles, help maintain access for lower- and middle-income households.

From a public administration perspective, upgraded housing and environments entail **healthier and more liveable neighbourhoods**, especially compared to pre-renewal conditions characterized by poor air quality, noise exposure, or unsafe surroundings. When residents can

remain within their neighbourhoods, redevelopment is even associated with **social stabilization**. Zurich is seen as advantaged by public investment in renewable electricity and heating infrastructure, **limiting energy price volatility** and energy poverty. A public representative argues that environmental upgrades—such as de-sealing, tree planting, biodiversity measures, energy improvements, and circular construction—can be implemented without major rent increases and are part of sustainability-oriented planning. Public actors see housing redevelopment mainly to expand supply and improve access. The replacement of buildings often **increases the number of dwellings** and residents, especially when combined with occupancy regulations, as applied by housing cooperatives. Political instruments such as the one-third affordable housing target *(Drittelsziel)* are viewed as stabilizing access for lower-income groups and as an important orientation for long-term housing development. Coordinated planning processes, early cost controls, phased renovations, and partial replacement strategies are considered ways to retain residents while increasing housing capacity. The municipal housing delegate highlights measures such as cooperation with NGOs and the reactivation of the tenants' office as effective supports for tenants affected by displacement.

9.1.5.6 Perception of negative social impacts of greening initiatives in Zurich

Most civic actors perceive neighbourhood valorisations as indirect factor leading to displacement. A member of the tenant union states:

> 'So now, in the greater Zurich area, energy-efficient renovation is primarily an issue in connection with evictions.' (250522_P8_ZH_Transcription, Pos. 21)

A member of a neighbourhood resource centre and local activists identify families, single parents, and the working poor most affected. Limited budgets make them **reliant on the neighbourhood** to maintain social networks, care arrangements, proximity to work, and children's school continuity. Activists report that institutional investors sometimes evict hundreds of tenants at once, creating difficult situation to find new housing in a tight market like Zurich's. Local activists and social workers emphasize that **temporary tenancies**—increase tenant vulnerability due to weak rights, unstable leases, and conflicts with permanent residents. **Social workers observe that tenants with a low socio-economic status increasingly stay in overcrowded and outdated housing stock, which is affordable but acutely** threatened by redevelopment. Furthermore, **continuous construction noise** reduces quality of life in redevelopment areas. Civic organisations also highlight the social and emotional impacts, particularly on children, elderly, and youth, including loss of social networks, sadness, and fractured communities. Displaced teenagers are heavily affected, losing friends, school continuity, and familiar surroundings. A representative from a youth association notes:

> Well, even though they're attending school there, still spend a lot of their free time in their old neighbourhood. And then they find it difficult to settle into a new place. And then there are those who move away, and then everything breaks down... It's like the whole contact, the whole circle of friends, there's a break. And we don't know anything about them, how they're doing. (250605_P12_ZH_Transcription, Pos. 24)

Across Zurich, private-sector actors characterize redevelopment and densification as transformative processes that **inevitably entail disruption,** with displacement widely acknowledged as a structural **by-product of modernization**, densification, and regulatory change. Construction is framed as a necessary yet socially burdensome phase, producing noise, complexity, and competing interests. These disruptions are linked to broader social tensions: while densification is broadly supported as a planning objective, it is often contested when it affects specific neighbourhoods or properties, reflecting NIMBY dynamics. A representative of the homeowners' association notes that **energy and climate regulations intensify renovation pressure**, contributing to lease terminations and unstable tenancy arrangements.

Private-sector interviewees acknowledge that redevelopment can reduce housing accessibility. Institutional investors describe legally permitted post-renovation rent increases as standard practice, with affordability concerns remaining secondary. Several private actors note that tenants prioritize price over quality improvements—such as greening or biodiversity measures—suggesting that sustainability upgrades may exacerbate exclusion when they increase costs. Reduced accessibility is further linked to housing policy debates, including the **limited promotion of homeownership** despite constitutional objectives. The representative of sustainable homeowners' association (*Casafair*) warns that rising housing costs and redevelopment increasingly **displace essential workers**, such as care and cleaning staff, who depend on affordable housing near the city centre. They argue that current spatial planning measures unintentionally intensify social inequities by limiting these groups' access to both housing and employment.

Administrative representatives note that **residential mobility** in Zurich is increasingly **constrained** by very high rents. Older residents often remain in large apartments, as alternatives are smaller and more expensive, leaving redevelopment pressures **without viable relocation options**. Representatives also note that household incomes generally lag behind rising land and housing costs. The municipal housing delegate emphasizes that densification objectives typically result in new construction at the expense of existing housing stock, intensifying displacement pressures. Mass demolitions and contract cancellations generate large-scale displacement, creating acute stress on the housing market. A representative of the public social department highlights the **cascading effects of displacement** on social networks, schools, associations, and care structures, forcing institutions to adapt to new populations. A social worker states:

> If the systems are not completely destroyed, but the contacts between residents, schools, clubs and leisure activities in the neighbourhood can be maintained, then the environment will remain more stable. Because if the newcomers who move in have completely different needs, then the school must restructure, the community centre must restructure, and the clubs must reorient themselves. And that has a total domino effect. (250918_P52_ZH_Transcription, pos. 47)

Public actors observe that low-income households face growing pressure as rents outpace wages and land prices, while even middle-class households struggle to secure affordable housing, indicating a broadening displacement effect. Some officials frame this as a structural

threat: the city risks functional shortages when essential workers are pushed out. Elderly residents are particularly vulnerable, sometimes entering care homes earlier than needed.

Municipal intervention capacity is further constrained by legal and procedural loopholes exploited by developers, limiting the city's ability to mitigate social impacts. Some public-sector actors consider Zurich's older housing stock functionally outdated and view its renewal as necessary, therefore planners caution that statutory rent controls **may discourage investment** and affect housing quality. A social worker adds that affordability pressures often force residents to accept lower housing standards.

9.1.5.7 Perceptions of contradictions and tensions in Zurich

Civic actors in Zurich perceive tensions and contradictions in urban development often as tied to the **prioritization of ecological or technical goals** over social concerns. Energy renovation programs and greening projects are frequently leveraged as **opportunities to terminate existing leases** and replace them with higher-priced units, resulting in displacement.

Multiple **private investors** and developers describe the **trade-offs** between green initiatives and affordability. They experience a persistent tension between implementing environmental upgrades, achieving densification goals, and maintaining socially accessible housing. A representative from a housing cooperation states:

> 'We are one of the largest cooperatives. And accordingly, we have a great heritage and a large portfolio here. Our mission is to secure and maintain affordable and sustainable housing and make it available to our members. This is not without its conflicts of interest. Affordable and sustainable.' (250715_P21_ZH_Transcription, pos. 8)

One for-profit private actor explained the tension in refurbishing older buildings: upgrading to meet climate and energy regulations may require demolition or extensive renovation, which in turn **risks displacing existing residents**. A representative of a sustainable homeowners' association emphasizes that densification must align with social sustainability: if additional housing primarily benefits a small number of residents, it fails to meet climate goals and broader urban needs.

Some **private actors** note **conflicts arising from differing financial, regulatory, and social priorities** of tenants, municipal actors and themselves. While some for-profit actors emphasize that regular contact and frequent communication with municipal authorities is crucial, others like the homeowners' association oppose municipal interventions, preferring market-driven solutions. A large institutional investor describes how **they achieved political support** for a project that made effort to mitigate displacement of long-term tenants, emphasizing that disputes may exist but can be managed through professional negotiation and planning. He highlighted disputes over financial calculations, such as allowable rental yields.

Public actors in Zurich perceive multiple tensions and contradictions in urban development: renovation projects are often framed as **energy-efficient** or sustainable interventions, but this

framing can serve as a pretext for broader changes that may not prioritize social sustainability. Municipal real estate strategies face goal conflicts, as energy and greening requirements, affordable housing mandates, and overall growth targets compete for priority. While legislation and planning guidelines **could favour renovations over new constructions**, new builds remain the regulatory standard, raising questions about social and environmental sustainability and whether the quantity of units created within new developments meets housing demand. The **municipal housing delegate** states:

> 'There is a conflict of objectives between social sustainability and environmental sustainability, and it is a virulent one. I would say that environmental issues are much more prominent within the administration; in other words, there are many more departments working on them, in contrast to departments working on social sustainability.' (250826_P46_ZH_Transcript, pos. 13)

Concerning **private large-scale developments** (*Arealüberbauungen*), like high-rises or ensembles, the city can exercise some influence by conducting social impact assessments, but this influence is limited to cases that meet the formal criteria for city involvement. According to public representatives, some private actors deliberately avoid these thresholds, submitting standard applications that **bypass democratic participation** and municipal oversight, creating a tension between formal compliance, densification goals, and socially sustainable outcomes.

9.1.5.8 The private real estate market in Zurich: Stakeholders and dynamics

From a civic perspective, there is a fundamental dilemma: improved neighbourhood liveability always leads to gentrification and rent increases. Market rents are often unaffordable for tenants, sometimes forcing them out of liveable neighbourhoods. Civic perceptions highlight the complex interplay between economic and social motivations of landlords. There is a strong **critique of *greenwashing***, where investors frame demolitions and new constructions as ecological improvements while concealing underlying economic incentives. A local activist notes:

> 'What is certainly striking is that investors still include ecological arguments in their communications to justify why they are demolishing houses and building new ones, but in doing so they are actually hiding the fact that there are also very strong economic interests behind it. And that is a kind of greenwashing.' (250806_P32_ZH_Transcription, Pos. 5)

Most private actors, particularly portfolio managers or institutional employees, are seen as prioritizing financial optimization over social responsibility, making rapid decisions without a personal connection to the buildings or tenants. At the same time, civic actors note fear and resistance around new regulations within the real estate sector, with **hardened fronts** between owner associations and tenant representatives. Networks of influential actors—such as homeowners' associations (*HEV*) aligned with conservative political parties like FDP, SVP, and the centrist 'Mitte'—are seen as dominant in shaping regulatory outcomes, making political intervention challenging.

Several civic actors also acknowledge that institutional investors are structurally forced to generate returns, as **pension funds** are involved. In addition, banks with strict mortgage guidelines that require private investors to increase rents are fuelling the price spiral. However, civic actors emphasize the challenges that high property values create for social and municipal housing initiatives: **soaring market prices prevent the city from acquiring** affordable housing. These financial constraints strain public budgets and limit the city's ability to provide housing at controlled rents, illustrating how market dynamics constrain socially oriented housing strategies.

Private developers and housing market analysts describe Zurich as a high-demand, **supply-constrained housing market**. Strong in-migration, particularly of high-income households, combined with limited housing production has driven significant price increases. Some private actors view tenants' willingness to pay as the main **benchmark for rents**, while others emphasize land scarcity, rising construction costs, and increasing land prices as key drivers. A real estate analyst explains how the attractivity for tenants influences the prices:

> 'Ultimately, the willingness of tenants who are potentially interested in renting the flat to pay is the benchmark in the rental housing market.' (250804_P29_ZH_Transcription, Pos. 51)

According to private for-profit actors, **real estate** is perceived as a **stable investment**. Land prices and accessibility are critical, whereas good architecture and efficient layouts are often prioritized over luxury. Their investments respond to **financial capacity, demand, and location characteristics**. Renovations are often linked to **net-zero targets**. Zurich's housing market is perceived as highly location- and profitability-driven, with **micro-location factors**—such as access to public transport, childcare, environmental amenities, and noise exposure—strongly shaping property values and rents. A homeowners' association representative notes the growing role of institutional ownership, as generational change and inheritance disputes often lead to sales to institutional investors, concentrating ownership. Limited land availability is widely seen as a structural cause of high prices, and institutional investors sometimes target returns of 4–6%, exceeding the **legally permitted levels** of around 3%, amid weak enforcement of tenancy law.

Private perceptions emphasize the complex effects of ecological sustainability on market pressures. While sustainable, climate-neutral buildings may command a slight premium, the associated costs—such as maintenance, heating system upgrades, investments in biodiversity, or photovoltaic installations—often offset these gains, putting pressure on rental cash-flow returns. Investors perceive those total returns, which include potential future sales value, may appear positive on paper, but in practice, most buildings are not sold, so the immediate pressure on rental income is what matters most. Additionally, private stakeholders note that Zurich's market is **uniquely sensitive to political and legislative interventions.** Unlike other regions with fewer restrictions and less political pressure, Zurich's regulatory changes can significantly alter market dynamics and affect investors' behaviour.

From a market perspective, sustainability has become a central evaluation factor. A real estate market analyst observed that buildings failing to meet environmental standards are already

being discounted, while energy-efficient and climate-adapted properties are increasingly treated as the market baseline rather than a premium niche.

> For investment and rental properties, we saw from the market data that there is a greater willingness to pay, even from investors, for properties that score highly in terms of environmental sustainability, for example through climate-neutral heating or biodiversity. (250804_P29_ZH_Transcription, pos. 64)

This development reinforces private actors' view that ecological performance is no longer optional but a structural requirement for maintaining asset value. Private investors have also noted that **institutional investors are generally more committed to sustainability criteria** than small investors or private individuals, as they take a longer-term view when dealing with real estate and therefore tend to pursue a long-term strategy when weighing up cash flow and future investment security. Some private actors stress that **proprietary data** (rental contracts, transaction prices, cash-flow forecasts) enables strategic decisions that others cannot replicate. Furthermore, private actors note investor segmentation: institutional investors target large projects (~CHF 15–20M), while family offices and private investors operate at smaller scales. Investment choices also depend on building age and condition—1950s–60s stock often requires replacement, 1980s–90s renovation. Instruments such as phasing can be interesting in this context, as they also generate cash flow during the construction phase. Access to exclusive transaction and market data enables private actors to shape valuation expectations and indirectly influence market rents.

From a public perspective, the general imbalance in the market is criticised. **Land prices have risen disproportionately**[154] and would fall within the renovation cycle of many buildings. A representative of municipal development emphasizes:

> 'What has become more pronounced in recent years is that land prices in particular have risen massively, much more so than construction prices.' (251002_P54_ZH_Transcription, Pos. 70)

The influx of people to Zurich is further driving up property prices, as older properties can generate higher returns after new construction or renovation. Some public representatives also noted that a **change in attitude** is taking place in the private sector, i.e. not all players are focused solely on maximum returns but are increasingly looking at social aspects as well. They also highlight the limited influence the city has over **small scale, private owners driving price spirals**. Some note that the city may exercise some power on bigger landlords but has little authority over private owners developing or selling their own land. Furthermore, the public sector perceives cooperatives and public developers as largely socially responsible, with their projects being evaluated as socially sustainable by default. The main concern lies with private

[154] The implied approximate value for land prices in the city of Zurich rose from CHF 1,505/m² in 2008 to CHF 7,831/m² end 2025, with prices accelerating from 2021 onwards (Statistik Stadt Zürich, 2025c)

actors, particularly large-scale institutional developers, who dominate the market and whose practices need closer oversight to ensure social sustainability. Some actors note that private actors political influence shapes development priorities, with instruments like the *VIS (Vermögens- und Investitionsstrategie)* being seen as heavily influenced by right-leaning parties and the interests of organizations such as the homeowners' association. This creates a regulatory and policy environment that may favour profit-oriented private actors over socially oriented initiatives.

However, **non-profit actors** in Zurich have sometimes better land conditions and can calculate with old land values, therefore their rents are lower, as is emphasized by a municipal housing representative:

> 'One can say, we have an advantage compared to the institutional investors, because the land value with us is low and they have to value it true and fair, and then, then it is just the calculation game, so that they really cannot make that much cheaper rents.' (250826_P44_ZH_Transcription, Pos. 4)

9.1.5.9 For a green and social housing development in Zurich: Tools and innovations

All civic actors see regulatory and market limitations constraining the public sector's ability to mitigate housing inequalities. While municipal initiatives exist, **cantonal and federal interventions remain rare**, and recent municipal efforts are widely acknowledged by civic actors as insufficient. Many civic representatives argue for stronger mechanisms to **hold private developers accountable**, including rent caps, regulation against mass lease terminations, and obligations to include affordable units in new developments. Most civic actors perceive **non-profit housing quotas** in large-scale private developments as one of the most promising instruments to counter rising rents and displacement in the context of future rezoning processes. From the perspective of planners and the representative of the tenant union, rezoning or **upzoning can be used strategically** to fix a share of non-profit housing, thereby embedding affordability obligations directly into planning legislation. **Social sustainability labels** are named to possibly enhance standards for social sustainable housing renewal. All actors call for additional **subsidies for cooperative and municipal housing** as crucial to mitigate the affordability crisis.

Several civic actors highlight difficulties for the **lower middle class** in accessing housing, falling between social assistance and market affordability. Therefore, person-based subsidies are mentioned by some as alleviating pressure for households but insufficient to address structural inequalities. Several representatives of local NGOs call for **enhanced support services** in neighbourhoods affected by redevelopment, including multilingual contact points for residents facing housing loss. Social workers then demand more **effective street-level instruments** to avoid repeated experiences of institutional powerlessness. At the same time, many civic actors recognise the limited capacity of public administration to influence market dynamics, as illustrated in the following quote by a member of a youth organisation:

‘I think the people at the Office for Social Affairs and Urban Life are very much confronted with these issues. And they are very aware of that. But even there, I think their influence on private developers is very limited.’ (250605_P12_ZH_Transcription, Pos. 102)

Furthermore, the **allocation of municipal housing** needs prioritization based on urgency rather than formal criteria. Cooperative housing is widely seen as mitigating displacement, especially when providing temporary or permanent accommodation for households affected by private redevelopment. However, **cooperatives also face criticism** for social exclusivity and uneven responsibility in gentrifying areas. A civic actor calls them a conservative force:

‘And cooperatives, of course… they’re also conservative. Cooperatives also filter. They don't want to be too diverse either. I mean, the way some people talk about it. Really racist stuff.’ (250701_P18_ZH_Transcription, pos. 91)

Subsidies such as municipal coverage of cooperative housing shares are considered effective entry tools, yet many eligible people and even professionals are unaware of them.

Activists and members of the tenant union see pilot projects such as neighbourhood-based resource centres as valuable in supporting tenants threatened by displacement. In redevelopment projects, **staged renovations and mandatory social impact assessments** are tools to protect tenants and support fair allocation. Future-oriented strategies highlighted by civic representatives also include **repurposing vacant office buildings** or **leveraging the national railway company’s *(SBB)* and other state-controlled land for affordable housing**.

Private actors describe Zurich’s regulatory and procedural environment as both enabling development and strongly constraining it in practice. Many criticize current legal frameworks as **too rigid,** limiting housing construction. Some also point out that renovations can be more expensive than demolition and new construction due to regulatory requirements. Especially for-profit developers therefore argue strongly for **regulatory simplification and to limit opportunities for objections**, to improve project feasibility. An institutional investor representative emphasizes the importance of **predictable, standardized regulatory frameworks,** especially for projects involving densification or rezoning. Some of these actors advocate institutionalizing quotas that define affordable or non-profit housing shares in advance, to reduce uncertainty and stabilize investment calculations.

Private for-profit developers generally do not believe that rent caps are an effective long-term instrument. They argue that they could demotivate landlords from investing in their properties. They also perceive regulations, municipal policies, and sustainability labels as largely constraining. According to market analyst observations, anticipated housing protection measures and tenant initiatives are increasingly priced in as **regulatory risk**, reducing short-term investment interest in Zurich:

‘For real estate market players, stricter market regulations are in most cases perceived as a risk and not necessarily as an opportunity, although it can of course always be said that where

there are risks, there are also new opportunities. If they are in force, then of course this is taken into account for the revenue, just as one assesses future revenue prospects.' (250804_P29_ZH_Transcription, pos. 39)

Contrary, the sustainable homeowner's association argues that authorities should proactively **review legally permitted rents**, especially under crisis conditions. They also state that targets such as one-third affordable housing (*Drittelszie*l) are systematically missed and should be embedded as binding requirements already at the planning stage, particularly when projects generate substantial land value gains. Private developer describes offering apartments of **varying sizes and rent levels** as a form of social sustainability, allowing different income groups to access new developments.

Representatives of municipal housing emphasizes the city's formal commitment to the *Drittelsziel*, according to which **one third of housing in new developments should be allocated to non-profit providers.** This target is implemented particularly on municipal land through **reduced ground lease rates *(Baurechtszinsen*)** for non-profit cooperatives and foundations. They state that currently, **around 30% of dwellings in the city's municipal housing stock are subsidized,** reflecting an explicit strategy to preserve access for low-income households and to maintain socially mixed neighbourhoods. Representatives of the administration further mention the **housing fund** (*Wohnraumfonds*), which enables non-profit housing providers to purchase land and buildings despite high market prices and to amortize part of their investment costs. The fund is also used to support climate-neutral construction and other ecological standards in affordable housing projects.

Several public-sector actors describe **roundtables and formal dialogues with private owners** as important practical tools. Public officials also observe that **innovation often emerges when private actors are forced into negotiation by regulatory or political requirements**, such as land swaps that require the municipal council's approval. **Staged renovation** or redevelopments, long planning horizons combined with regulated new rents and early tenancy terminations can mitigate displacements, especially for long-term tenants. In private redevelopment projects, staged renovations and **mandatory social assessments** are tools to protect tenants and support fair allocation. The newly created **position of a housing delegate** for the city of Zurich, as a focal point that connects different municipal departments and external actors, is seen as a crucial step in mitigating housing inequalities by most public actors. The delegate himself notes that **housing has become a core topic in regional planning,** but implementation beyond the municipal level remains weak.

As civic actors, municipal representatives identify the **revised Building and Zoning Regulation** (***Bau- und Zonenordnung, BZO)*** as a central coordinating framework that links housing policy with ecological objectives, urban design standards, and social sustainability goals, as explained by a representative of municipal development:

'The new building and zoning ordinance, which specifically implements this municipal development plan, could be said to have four main focuses: ecology, then internal development, then preservation of the townscape and, of course, finally, implementing the whole thing in a socially acceptable manner.' (251002_P54_ZH_Transcription, pos. 20)

They point to **Article 49b of the cantonal Planning and Building Act (*Planungs- und Baugesetz, PBG 49b*)** as a key legal instrument which will allow municipalities to require a share of affordable housing whenever redevelopment or **rezoning** generates **additional value.** According to one administration officer, the main difficulty lies in defining quotas that remain economically viable for private developers while still producing a meaningful social effect. Overall, public actors note the **complexity of balancing growth, labour market needs, and affordable housing**. Maintaining and **carefully managing existing affordable housing** is viewed as crucial for reaching out to residents while keeping rents controlled. Urban renewal is expected to take **multiple forms—ranging from in-place upgrades to partial or full redevelopment.** Generally, public-sector actors are in favour of **balanced solutions** that avoid both a building moratorium and unrestricted development, aiming to reconcile social objectives with urban growth.

9.1.6 Perceptions of green initiatives and housing inequalities in Altstetten

9.1.6.1 Perceptions of stakeholders on relevant projects, places and policies

Civic representatives characterize Altstetten as historically heterogeneous. It's building typology enabled an incremental socio-economic transformation through a gradual conversion of **industrial land**. In the past, capital-intensive, **large-scale redevelopments** have been reported to attract higher-income households. Current developments in Altstetten are described as **extensive**. More recent projects are increasingly linked to coordinated redevelopment of existing housing estates and linked to bigger 'waves' of displacements. They affect large estates with weak tenant organisation limiting resistance. Civic representatives situate Altstetten's densification within Zurich's longer redevelopment trajectory, noting that projects are often embedded in extended timelines shaped by rezoning decisions, planning adjustments, and phased construction strategies. As a practitioner in urban governance and participation states:

> ‚Now, however, in the existing residential neighbourhoods and settlements, you can see that renewal pressure has emerged over the past few years. This (…) clearly designate Altstetten and Schwamendingen as densification areas where development and taller buildings are encouraged.' (250526_P9_ZH_Transcription, Pos. 106)

Representative of the private sector state that land in Altstetten is **highly sought-after** and often held by long-term owners, resulting in relatively few property transactions.

Public actors note that **municipal plans promote mixed-use density** and housing diversification, with Altstetten becoming a quasi-inner-city hub. A representative of the public administration states that, to accommodate densification and unlock new development potential, priority was initially accorded to large-scale projects on former brownfield sites. Looking forward, densification is expected to focus more on infill within existing urban areas rather than large-scale redevelopment, as remaining sites are reserved for diverse public uses and open space. Current developments in the private stock are extensive, generating large

displacement waves. These processes are situated within Zurich's longer redevelopment trajectory, shaped by rezoning decisions, planning adjustments, and phased construction, as the statement of a representative of municipal housing illustrates:

> 'This (housing pressure) is now also triggered by the municipal master plan designating certain areas for densification, creating a deliberate dynamic in these zones. One can certainly debate whether these areas are appropriately located, especially where the most vulnerable populations live. This is largely because the building stock is old, meaning rents are low but renewal pressure is high, which naturally creates tension.' (250826_P44_ZH_Transcription, pos. 4)

The neighbourhood itself is described by civic actors as a juxtaposition of different urban forms and lifestyles. Social workers from the neighbourhood-based resource centre observe a contrast between an older, community-oriented area with strong local networks and a newer zone of high-rises and offices, attracting a more transient and often highly educated population.

9.1.6.2 Participation and governance in Altstetten

Representatives from civic organizations perceive that **densification policies significantly shape redevelopment** and housing pressure in Altstetten. They note that growth targets, energy-efficiency objectives, and zoning regulations have intensified the pressure to renew existing residential neighbourhoods, encouraging building upwards and densification. A social worker reports that while they are often included in consultations for large municipal projects, private developments generally involve less public oversight and limited civic engagement. Civic actors further emphasise that the city's primary leverage lies in rezoning and upzoning decisions, particularly in former industrial areas. Although only recently implemented in a more systematic manner, this mechanism is regarded by a local urbanist as a key tool through which the city can influence redevelopment outcomes and potentially mitigate displacement. With respect to current development governance, they observe:

> 'And this is reinforced, of course, by the city's growth targets, energy goals and the master plan and zoning ordinance, which clearly state that Altstetten is an area for densification. So, the city has sent a very clear message: demolition and rebuilding is necessary there.' (250526_P9_ZH_Transcription, Pos. 86)

As noted, when talking about governance in Zurich in general, many private actors are frustrated by the city's procedures, particularly the long permit timelines and the high number of requirements, which are perceived as burdensome and potentially obstructive to development. However, others emphasize the central role of municipal consultation in large urban development projects, which are numerous in Altstetten.

Representatives from public administration argue that in Altstetten, their work is strongly oriented toward **managing inner-city development and densification**. This primarily involves implementing frameworks such as *SPA1* to guide settlement expansion and promote compact urban growth. Some public administration representatives point at the challenges and limitations of current densification and zoning strategies. A representative of the department for urban development argued that imposing too many requirements can deter private actors

from utilizing development potential, as seen in cases where overstretching regulatory expectations risked counterproductive outcomes.

9.1.6.3 Perceptions of justice and equity in Altstetten

There are no civic perception of justice and equity mentioned in the interviews specific to Altstetten that differ from city-wide perspectives.

From a private perspective, Altstetten is quickly gentrifying, as put by an institutional investor delegate:

> 'In Altstetten, it's still very, very mixed, but it's clear that this is the next neighbourhood to undergo gentrification, right? So you must be careful that it doesn't move in that direction even faster. Because, when you build new buildings, of course the quality is right and all that, but the rents are also high.' (250623_P17_ZH_Transcription, pos. 121)

Altstetten hosts many **(international) businesses** and is well connected to **public transportation**. The neighbourhood has become very attractive for middle-to-high income residents,[155] leading to a high-pressure housing environment, as detailed by a member of the homeowners' association.

According to a public administration representative, Altstetten's population and its building stock are mixed, making it **more resilient** towards renewal and rent increases. However, several public-sector actors emphasise that demolition in Altstetten without maintaining or valuing existing building stock amounts to **writing off assets at the expense of future generations.** They argue that large-scale replacement new builds can be **economically and environmentally unjust,** as they erode long-term asset value and transfer the financial and ecological burden of renewal to those who come after.

9.1.6.4 Perceptions on political mobilization in Altstetten

Civic actors report lower levels of spontaneous resident mobilization than in Zurich overall, particularly among socially vulnerable groups. Although local networks—such as neighbourhood associations and tenant organizations—are active, participation is often uneven and dominated by more resourceful residents. According to one civic informant displacement pressure frequently results in **resignation** rather than collective action, with many migrants and lower-income residents feeling unable to influence housing outcomes. A local schoolteacher:

[155] The report on Social Space Monitoring Zurich (*Sozialräumliches Monitoring Zürich*) shows an increase of 10-20% of the taxable household equivalent income between 2013 and 2022 in Altstetten (Stadt Zürich, 2025h).

‘But here in Altstetten, there was no conscious decision; they are simply demolishing and rebuilding.’ (250716_P24_ZH_Transcription, pos. 27)

Although protests are less frequent in Altstetten, civic actors report that advocacy by the *Mietenplenum* and local organizations—such as displacement awareness campaigns or support letters to property owners—help generate visibility and exert pressure on landlords. Neighbourhood advocacy is furthermore mediated through neighbourhood associations, publicly funded hubs, and church-affiliated community spaces. Actors note that the fragmented and resource-dependent character of the neighbourhood constrains residents’ capacity to sustain collective action independently. As a result, advocacy often relies on intermediated solutions, while limited access to cooperative housing continue to hinder residents’ long-term empowerment.

No public-sector sources address housing-rights mobilization specifically in Altstetten. Several actors nonetheless point to Altstetten’s fragmented structure and its character as an arrival neighbourhood as factors that help explain why resident-led mobilization is weaker than in Schwamendingen. Private-sector statements likewise refer only to citywide dynamics (see Section 3.4).

9.1.6.5 Perceptions of positive social impacts of densification policies in Altstetten

From a civic perspective, urban development and densification in Altstetten have brought social benefits for local communities, particularly through an increase in the number of **families with higher socio-economic resources**. One school representative observed that the influx of families, often from well-educated backgrounds and with multilingual and culturally diverse experiences, has enhanced **social networks and parental engagement**. While densification has reduced some private green areas, public and semi-public spaces, such as parks, playgrounds and community centres, have expanded and are now more intensively used and socially accessible. The increase in publicly available meeting points is identified to help maintain everyday sociability even amid rapid changes. Non-profit representatives point to cost-rent–regulated developments, which continue to generate comparatively affordable housing. They also stress that the land reserves owned by cooperatives entail opportunities to expand affordable housing supply.

From a private perspective, new or refurbished housing and neighbourhood renewal in Altstetten reflect **necessary densification,** improved living quality and a more pleasant residential environment. A representative of the homeowners’ association notes that physical improvements can enhance residents’ daily comfort and neighbourhood pride, even if these benefits coexist with concerns about longer-term affordability. Private for-profit actor furthermore refer to redevelopment in Altstetten primarily in terms of modernization and densification dynamics, where visible upgrades of buildings or infrastructure act as signals that trigger further investment and environmental improvements in the wider area. These developers argue that affordability is achievable when redevelopment is combined with differential rent structures and a mix of market-rate and more affordable units, sometimes supported through cross-subsidization.

A public administration representative highlights that large, **municipality-led new developments** play a crucial role in addressing housing shortages and in providing affordable housing in Altstetten. However, they argue that redevelopment strategies require a differentiated approach: preserving small, affordable units, integrating old and new buildings, and targeting specific household types to maintain affordability while enhancing density and social sustainability. According to a public actor, larger housing estates are implementing environmental upgrades, like de-sealing and tree planting, with minimal impact on rents and positive effects on the local climate. A public administration representative identifies the strong social mix in Altstetten as a positive factor contributing to resilience.

Figure 9: New municipal housing development in Altstetten: Wohnsiedlung Letzi. Source: (Liegenschaften Stadt Zürich, 2025)

9.1.6.6 Perceptions of negative social Impacts in Altstetten

Civic actors in Altstetten highlight several social challenges linked to urban development and densification. A school representative reports many **disruptions of established social and educational support networks** due to rising rents. Schools and other local institutions must repeatedly invest resources to integrate new students, while **children and adolescents face instability** that can hinder their social development and sense of security. Newer, often **higher-income or expatriate families benefit** from improved housing and amenities, but long-term residents are disproportionately affected by reduced access to green spaces and increased population density. Civic actors stress that these social consequences have significant impacts on the wellbeing and stability of vulnerable populations, particularly children, youth, and families who are socially or economically marginalized. A social worker explains:

‘And those who have to move, they move out. So, it's not like they usually find something else within the neighbourhood, but rather they have to leave the city. And at the age we work with, for young people, this leads to a great deal of uncertainty.’ (250605_P12_ZH_Transcription, Pos. 17)

Private actors emphasize the **high pressure on land and long-standing ownership structures** in Altstetten, where redevelopment occurs less through land transactions than through the replacement, renovation, or functional transformation of existing buildings. They highlight that **densification-driven redevelopment** increases resident numbers substantially, intensifying conflicts of interest and amplifying construction-related burdens for existing residents. Some private actors acknowledge that **displacement is unavoidable**, particularly where the number of affordable units decreases after redevelopment.

Public administration representatives note that **families are often displaced** by demolitions, disrupting children’s lives and school continuity, or forcing them to move to neighbouring municipalities due to unaffordable housing. The interviews reveal a knowledge gap regarding displaced residents’ destination. Migratory families face additional financial stress, making settlement and integration more difficult. A school representative adds that current housing conditions in Zurich discourage family formation and long-term residence in the city.

9.1.6.7 Perceptions of contradictions and tensions in Altstetten

In Altstetten, ecological and redevelopment measures create tensions on housing affordability, as improvements increase demand and rents. One institutional investor noted that while redevelopment benefits long-term tenants, it also attracts higher-income residents, indirectly raising rents. The interviewee emphasizes that, for tenants, **affordability outweighs environmental or social enhancements**: even desirable measures such as greening or biodiversity improvements are subordinate to price constraints in decision-making.

Public actors perceive clear tensions and **contradictions between different urban planning goals** in Altstetten: measures such as the net-zero emissions goal and densification strategies are sometimes in conflict. Similarly, at the federal level, actors from planning department note contradictions between inward urban development and social sustainability.

9.1.6.8 The private real estate market in Altstetten: Stakeholders and Dynamics

According to civic actors—including tenant unions, social workers, and activists—Altstetten is experiencing intense market pressure, rapid rent increases, high residential turnover, and accelerating socio-spatial restructuring, reinforced by global employment inflows. The neighbourhood’s transformation is widely interpreted as a case of speculative redevelopment, in which rising land values, institutional investment, and fragmented private transactions undermine long-standing social networks. Neighbourhood associations further highlight the growing presence of large international employers as a driving force behind the growing

housing demand and rising property prices. Furthermore, residential turnover enables frequent rent adjustments, contributing to escalating costs.

Private actors interpret Altstetten primarily as a **high-potential investment location** shaped by strong demand, strategic infrastructure and high expected future rents. A representative from a big local investor states:

> 'We also see this around Altstetten station. There, too, there is interaction between UBS and SBB. So Altstetten station is increasingly becoming a hub and was also upgraded three or four years ago, I believe. There are also various public transport connections there, which may eventually extend to the university and ETH. So, there are also efforts in the transport concept to ensure that, in addition to the urban issue of housing, the issue of development and mobility will also have an impact there. And the land there is certainly in extremely high demand. There, too, the land has actually been owned by the landowners for several years, even decades. There aren't that many transactions there. Now, in the name of densification and maximising the potential of the building stock, buildings are simply being replaced, renovated or put to other uses.' (250925_P53_ZH_Transcription, pos. 63)

Large-scale institutional investors dominate housing developments in Altstetten, setting benchmarks for project size, design, and financial expectations. Consequently, the neighbourhood represents a prototypical growth market where financial rationalities dominate project design and investment sequencing. With the large land reserves getting more scarce, smaller areas are developed and the housing stock is densified, i.e. housing is destroyed and rebuilt.

Public actors describe Altstetten as a market environment characterised by **intense redevelopment** fuelled by the densification agenda, employment growth, infrastructural expansion and proximity to important economic nodes. The neighbourhood thus exemplifies the difficulty of reconciling urban growth with social stability under conditions of intense marketisation.

9.1.6.9 Perceptions of tools and innovations for Altstetten

Only a few Altstetten-specific quotes were identified in the dataset on this issue. Private actors emphasize **vertical expansion** and new builds as a strategy to accommodate population growth in the neighbourhood while minimizing displacement. According to a real estate evaluation representative, building higher in areas with existing infrastructure allows the city to densify efficiently.

No location-specific tools or innovations for Altstetten were explicitly mentioned. Civic actors describe structural, citywide dynamics, indicating that Altstetten experiences **similar pressures of displacement, limited municipal legal leverage, and reliance on cooperative or municipal housing** as other districts. There is no evidence of tailored local instruments addressing these challenges, suggesting that residents depend primarily on broader city policies and social housing mechanisms.

Public representatives note limited intervention options, as major plans are already underway, leaving little scope for additional adjustments. Currently, only strong social and diasporic networks support residents to remain in the neighbourhood. A school representative advocates for supporting a mix of housing across income levels, using municipal or cooperative subsidies to maintain affordability.

9.1.7 Perceptions of green initiatives and housing inequalities in Schwamendingen

9.1.7.1 Perceptions of stakeholders on relevant projects, places and policies

Schwamendingen's synchronized post-war housing lifecycle creates **intense renewal** pressure, leading to overlapping lease terminations, renovations, and social disruption. Civic actors report early insecurity, long waiting periods, and rising vulnerability, particularly for low-income families, migrants, and the elderly. The *Überlandpark* redevelopment is seen as accelerating gentrification and social pressure despite improved connectivity and urban quality. At the same time, the high share of cooperative housing—supported by inter-cooperative coordination—is perceived to mitigate the most extreme effects. However, the representative of a local NGO expects long-term changes:

> 'I think that projects like the Überlandpark will lead to long-term changes in the neighbourhood. Yes, I think it's a combination of such projects but also of the estates that are being demolished, the new buildings that are constructed, the housing that is becoming more expensive, and the different people who move in. The pressure on people affected by poverty will increase even further.' (250619_P14_ZH_Transcription, Pos. 106)

Private actors associate Schwamendingen's upgrading with rising rents and investment appeal as **long-term value growth** is anticipated, while acknowledging disproportionate impacts on vulnerable tenants. A concrete current development that was mentioned is the *Frohburg* housing estate bordering Schwamendingen, where a large corporate landlord is implementing a phased redevelopment model to reduce displacement while retaining affordability.

Public actors perceive the enclosure of the highway as a landmark. However, they consider it as exacerbating rather than causing **rising rents and displacement**. The planning challenge lies not only in the structural integration of the interurban park, but above all in the social stabilisation of the adjacent neighbourhoods to prevent the emergence of fragmented urban spaces. Additionally, a large portion of the housing stock is entering a refurbishment cycle simultaneously, further aggravating the situation. A representative of municipal housing strategy states:

> 'That's exactly the kind of project that was carried out without considering the housing policy implications at all. Only at the end, under political pressure, did action begin — but it was simply too late.' (250826_P46_ZH_Transcript, Pos. 95)

9.1.7.2 Participation and governance in Schwamendingen

Civic actors consistently emphasize that the city of Zurich has so far **lacked a coordinated and proactive strategy** to address displacement pressures emerging in Schwamendingen. They report that social measures related to redevelopment are mostly reactive. However, several interviewees also mention the city's attempts to initiate a coordination and to assemble **local social organisations** to discuss emerging issues, but they failed to be effective. As stated by a representative of a local NGO, these meetings were partly prompted by pressure from social movements which forced the municipality to take the issue more seriously. Civic representatives further describe a lack of sufficient support services, and that guidelines—for instance for socially cushioned energetic retrofits—are rarely implemented in practice. As the representative of the tenant union states:

> 'There's never a point where anyone comes along and says, 'You won't get your building permit if you don't do this.' (250522_P8_ZH_Transcription, Pos. 86)

In the context of rapid change, civic actors argue that the municipality's reliance on housing cooperatives as a source of social stability is insufficient. City and neighbourhood services are perceived as structurally constrained: despite recognizing rising displacement pressures, they lack the regulatory tools and resources to intervene effectively, leaving social organizations to address impacts largely on their own. At the same time, civic actors note emerging shifts within the municipal administration. The **growing acknowledgment** of housing pressures and the active role of the municipal housing delegate in exploring mitigation strategies are viewed as early, albeit still limited, steps toward addressing the problem.

Public administration representatives acknowledge that municipal coordination on displacement in Schwamendingen has so far been limited and insufficiently institutionalised. While exchanges between the city and local actors exist, they are described as informal. There is a recognition that the city may need to establish formal mechanisms to address the issue. At the same time, municipal representatives highlight isolated efforts to intervene in specific redevelopment projects—particularly through the Schwamendingen roundtable, which sought to coordinate tenant support among housing cooperatives. Although the initiative could not significantly alter redevelopment timelines or prevent late-stage displacement pressures, it is described as partially successful: cooperatives jointly created a tenant contact office, coordinated information across their portfolios, and granted affected households priority access to available apartments. In the following quote, a representative of municipal planning acknowledges the problem:

> 'The park, that is such an added value for these properties, that today lie by the park and previously lay by the highway, that it is clear that one can generate a multiple of returns solely because of this new park construction.' (250825_P44_ZH_Transcription, Pos. 45)

9.1.7.3 Perceptions of housing justice and equity in Schwamendingen

Civic actors consistently underline that Schwamendingen is a neighbourhood where urban redevelopment and displacement processes disproportionately affect groups that have crucially shaped its identity and that are already facing structural disadvantages. According to

frontline social workers, most people seeking support have a ***low socioeconomic status***, sometimes relying on social assistance or **working-poor** incomes, with a large share of women and people **without Swiss citizenship.** Civic organisations also highlight that displacement is changing the **social fabric of local institutions,** such as schools. Overall, displacement in Schwamendingen can produce cascading vulnerabilities as the following quote from a tenant activist illustrates:

> 'The awful thing is that once you get kicked out and must look for a new apartment — if you're searching in such a low-cost segment — you often end up again in a temporary lease. And then it just continues like that. And this is especially shitty when children are involved, or when people need their energy to build a stable everyday life.' (250806_P32_ZH_Transcription, Pos. 6)

Social workers acknowledge that the *Überlandpark* has increased the attractiveness of the neighbourhood and likely triggers rent increases, but marginalized groups remain largely excluded from the benefits it provides. For many, even knowing about the existence of the park is not self-evident. This demonstrates that **material improvements to public space do not automatically translate into equitable benefits** and can rather reinforce patterns of exclusion. A member of the local neighbourhood hub[156] states:

> 'I'm not a professional, but I can imagine that landlords can use the Überlandpark to show off and accordingly demand higher rents. Because the neighbourhood has certainly gained in attractiveness. I don't know if you can attribute it solely to the Überlandpark, but the issue for marginalized people that I see there is: How would they even know that this park exists?' (250805_P31_ZH_Transcription, Pos. 135)

Private for-profit actors in very few cases try to make their practices socially fair by offering long-term tenants low rents and secure tenure, thereby privileging extended stays. However, for temporary tenants on fixed-term contracts, this approach raises questions about entitlement to housing and duration of occupancy. In the *Frohburg project*, rents were deliberately set at very low levels to reflect tenants' affordability, particularly those of long-term residents. This illustrates a needs-based and socially sensitive rationale articulated by a private for-profit investor. As a representative of the private property owner states:

> 'I really think it's very important to find solutions for the existing population, so that people in Schwamendingen don't always have to look for housing in the second ring of the

[156] The City has established low-threshold neighbourhood hubs in Altstetten and Schwamendingen as a pilot initiative that is currently under evaluation. These offices complement existing neighbourhood centres but differ from them in their function and format: they do not have clearly defined or specialised mandates but are intended as open walk-in services with minimal administrative barriers.

agglomeration. Even if Eastern Switzerland is beautiful, they don't have their social networks there or their children in the schools.' (250730_P33_ZH_Transcription)

Most public representative argue that the *Überlandpark* development **benefits not only new residents but also people with lower budgets**, because many housing cooperatives hold plots in the neighbourhood, helping to secure long-term affordable dwellings. One public administration representative argued that not enough consideration was given on the effects such large infrastructural project would have on housing.

9.1.7.4 Perceptions of political mobilization in Schwamendingen

According to housing activists, Schwamendingen represents a context where **visible social consequences** acted as a catalyst for political and civic engagement. The concentration of low-income households, essential workers, families, and elderly residents meant that displacement quickly translated into concrete effects such as school changes and emergency housing placements. Consequently, a significant political mobilization around housing issues has been observed in recent years. An activist reports:

'At the first meeting, there were actually about 40 or 50 people there. From the neighbourhood. And all kinds of people, but mainly non-white residents of Schwamendingen who live in rented accommodation. And most of them had been directly affected by something.' (250606_P13_ZH_Transcript, Pos. 16)

Apart from public mobilisation, actors note a growing awareness of mass displacements also within municipal social services. However, the municipality's efforts are perceived as too late or insufficient to mitigate displacements.

Participants working with local NGOs or neighbourhood hubs describe the *Mietenplenu*m as a crucial player in raising awareness, coordinating grassroots efforts and empowering residents. However, while mobilisation has succeeded in **raising awareness** of exclusionary dynamics in urban development and bringing neighbourhood issues to the attention of the city authorities, affected tenants and representatives of NGOs agree that the most vulnerable residents often cannot always participate in campaigns or advocacy efforts, and their perspectives may remain underrepresented.

Representatives of public administration emphasize that the project to cover the highway was **initiated in 1999 by a *Volksinitiative* from residents themselves**; it was neither externally imposed nor top-down, and enjoyed the **overwhelming approval, with around 85% of the city voters in favour.** At the same time, public actors also acknowledge that the current housing situation is very different from the late 1990s and **also recognise that** Schwamendingen is affected by **displacement pressures**, particularly in the private rental sector.

9.1.7.5 Perceptions of positive social impacts in Schwamendingen

Different civic actors and residents describe the *Überlandpark* as a major environmental and spatial enhancement that has dramatically **reduced noise exposure** and created a high-quality communal landscape. They highlight that the park facilitates new forms of **social**

encounters across diverse population groups—something largely absent in the pre-enclosure era dominated by traffic and noise. A social worker living in the area himself states:

> 'Yes, one positive thing is certain: anyone who lives nearby would tell you that it has become quieter. The noise from the motorway was very disruptive, particularly for those who lived right next to it. It is a great relief for the neighbourhood.' (250918_P52_ZH_Transcription, Pos. 77)

A representative of the tenant's association highlights the **efforts of housing cooperatives** to mitigate displacement pressure. Other civic actors however criticise the cooperative actors to not take sufficient responsibility for displaced tenants.

From a private perspective, the *Überlandpark* is associated with enhanced everyday wellbeing: reduced traffic, calmer streets, and improved environmental conditions are expected to contribute positively to residents' quality of life. For-profit actors consistently describe it as a major environmental and **infrastructural asset**. The park's role is seen as a 'magnet', noting that such high-quality green infrastructure inevitably enhances a neighbourhood's appeal.

Public representatives widely present the *Überlandpark* as a flagship project, emphasising its symbolic and practical value. They emphasize Its urban role in reconnecting a **previously divided district** and in creating a large green space with ecological benefits, including enhanced biodiversity. The park is presented as a new type of social and ecological infrastructure that supports recreation, everyday use and informal encounters across age groups. Municipal planners stress that the **project for the *Überlandpark* originated from the neighbourhood itself.** Continuous involvement of local interest groups and multiple participatory votes ensured broad acceptance. As a member of the urban development states:

> 'From the very start, the neighborhood clearly demanded this, and throughout the entire development, the neighborhood strongly supported it. The neighborhood was continuously included, and it seems that it has been very well received, the area is well visited and attracts many people.' (250630_P16_ZH_Transcription, Pos. 125)

Public actors stress that the *Überlandpark's* positive social outcomes are closely tied to the surrounding ownership structure. The predominance of cooperative housing is seen as limiting displacement risks. This constellation is described as exceptional and difficult to replicate elsewhere. Public administration report widespread positive feedback, highlighting positive effects for health and well-being and the park's contribution to social interaction and neighbourhood cohesion.

9.1.7.6 Perceptions of negative social impacts in Schwamendingen

Civic actors perceive the development of the *Überlandpark* as a mixed-impact project with notable social downsides. While it has contributed to urban upgrading, they emphasize that the benefits are largely inaccessible to socially disadvantaged residents. The park's beauty carries a 'bitter aftertaste', because **those who long endured the motorway** pollution may not be able to enjoy its benefits in the long term, as described by a local resident:

> 'The Überlandpark is so beautiful. I've been there two or three times. It's really beautiful and has such lovely plants. But I walked through it and thought, it wasn't made for the people who

live there now. I mean, you can see the building pillars, right? I mean, they can all leave. And it's always like that, you know, something so beautiful, but it has a bitter aftertaste. In the evening, you see the children from these migrant families playing up there. I wonder how much longer.' (250811_P36_ZH_Transcription, Pos. 5)

A member of the neighbourhood-based hub (*Drehscheibe*) criticizes how urban development initiatives in the area have insufficiently promoted participation by residents with low socioeconomic status. Furthermore, construction and redevelopment, including demolitions, led to significant disruptions in the neighbourhood, **increasing housing costs** and contributing to **displacement pressures.** Civic actors and activists underline that, despite cooperative's efforts and municipal interventions, many of the negative social effects—such as the marginalization of vulnerable groups and the limited accessibility of new amenities—remain unaddressed.

Private for-profit representatives underline that Schwamendingen's redevelopment is triggering **major socio-demographic change**. While most **highlight the positive effects of change**, one actor describes the neighbourhood as previously aging and relatively stable, now undergoing rapid transformation through new housing cooperatives and large-scale development, causing significant displacement pressures that may **undermine social mix**. Private actors further link Schwamendingen's transformation to the **loss of everyday neighbourhood services**, noting that small local businesses initially celebrated as indicators of neighbourhood quality often disappear once post-renovation rents are introduced.

A representative of the administration notes that the *Überlandpark* drives speculative redevelopment, accelerating neighbourhood change and increasing displacement concerns. The municipal housing delegate considers Schwamendingen as **particularly vulnerable**, increasing the risk of hardship cases. Public actors observe that the development contributes to rising housing costs, even if median rents remain moderate due to legacy contracts and the high number of non-profit housing. The municipal spatial development department expects substantial **rent differentials between cooperative and privately developed housing**. Finally, the city's urban development office stresses that even where no immediate redevelopment is planned, extensive renovation will be unavoidable in many parts of the neighbourhood, particularly in older workers' housing estates. Due to the age and technical condition of these buildings, gradual transformation is considered inevitable over the medium term.

9.1.8 Perceptions of contradictions and tensions in Schwamendingen

Activists note that in Schwamendingen, private investors often justify demolitions and new constructions in ecological terms, presenting them as environmentally motivated while **masking strong economic incentives**—effectively amounting to a form of greenwashing. A tenant union representative argued that displacements have high social costs. Actors note that public investments in schools and youth programmes are undermined when residents are displaced, and that private developers externalise these social costs.

At the same time, public representatives point to a substantial refurbishment backlog that is likely to result in rent increases regardless. In this context, the Überlandpark can be understood as an accelerator within this dynamic, as it foregrounds the area's development potential, as described by an administrative actor:

> At the same time, rents in these areas are very low because, obviously, building cooperatives are not subject to market rents. If they were to build new properties today, the price would still be considerably higher than the existing rent, even in a project that is not subject to market forces. And this is where the tension arises in Schwamendingen. So even though we don't want to build more there than has been possible since the 1990s, there is tension between the possibility of new construction and what we have in our existing portfolio today. (251002_P54_ZH_Transcription, pos. 32)

9.1.8.1 The private real estate market in Schwamendingen

Civic actors perceive market pressures in Schwamendingen as increasingly destabilising the district's historically affordable housing landscape. The transformation is experienced as socially disruptive, generating widespread stress among residents and undermining the district's garden-city identity. Civic respondents emphasise that current developments illustrate how market logics progressively erode long-established social fabrics even in areas with significant shares of housing cooperatives.

Private profit-oriented actors describe Schwamendingen as an emerging growth area characterised by financialised investment logic, where institutional investors influence the feasibility of projects. Localised market data on transactions, rents and expectations are used to tailor the scope, phases and pricing of projects to specific demand in the region. Private stakeholders consider the neighbourhood's medium to long-term prospects improved thanks to the *Überlandpark*. Accordingly, they adjusted their investment strategies in anticipation of the opportunity to demand higher rents.

Public actors acknowledge that major public investments and infrastructure upgrades intensified market pressures in Schwamendingen; land values increase and may attract speculative interest. However, city officials emphasize that because much of the housing stock in the immediate surrounding of the park is **owned by cooperatives**, rent increases for many tenants are expected to remain more moderate than in areas dominated by private ownership. A representative of municipal development states:

> 'We are extremely fortunate in this location that 80-90% of the adjacent plots belong to cooperatives. This is something you hardly find anywhere else. And yes, I believe that is the cornerstone of why things have gone so well in terms of social space.' (250630_P16_ZH_Transcription, Pos. 123)

9.1.8.2 Perceptions of tools and innovations for Schwamendingen

Several civic actors identify targeted regulatory instruments as central to mitigating displacement risks in Schwamendingen. Some argue that long-**term neighbourhood**

protection *(Quartierschutz)*[157] should be considered to maintain both the existing population mix and current rent levels. This includes overarching planning frameworks that extend beyond individual projects. A representative from the tenant union further proposes **social impact assessments should** be mandatory for redevelopment projects exceeding 100 apartments with the aim of systematically documenting tenant displacement, rent changes, and social consequences, thereby enhancing transparency and political accountability.

Civic actors largely view housing cooperatives as stabilizing actors in Schwamendingen's redevelopment. Large **cooperative** estates are seen as buffering displacement by enabling residents to remain in the neighbourhood and maintain social networks, while smaller privately owned buildings remain highly vulnerable. However, their displacement-mitigating role is contested. Some actors describe cooperatives as **innovators**, noting cases where they provided interim or alternative housing to families displaced by investor-led redevelopment. Others emphasize structural limits: some activists argue that cooperative engagement in mitigating displacement **remains marginal** and relies on voluntary goodwill rather than obligations. A member of the tenant's union explains:

> 'Cooperatives are a solution for many. But they are not prepared to respond to urban renewal projects, displacement, or anything else. It's just... it's not in their mindset. The reports say that all cooperatives were asked if they would build subsidised housing. And they said no, we want to decide for ourselves.' (250522_P8_ZH_Transcription, pos. 101)

Neighbourhood-based support structures are seen as key social innovations. Organizations such as the *Drehscheibe* and local community centres provide low-threshold support to residents facing displacement or in search of housing. Civic actors call for expanded, decentralized housing-search assistance, as existing services are overstretched or at risk of closure. Digital platforms are sometimes viewed with scepticism as they are hardly accessible to marginalized groups.

According to private-actors, mitigating displacement is the **responsibility of the municipality and housing cooperatives**, which are seen as key actors in Schwamendingen. They describe cooperatives as having the technical and organizational capacity to renovate, densify, and meet sustainability standards in aging housing stock, while municipal funding is considered crucial for land acquisition and the delivery of affordable housing. Looking ahead, developers express interest in **digital tool**s for project and portfolio evaluation, and institutional investors call for formalized roundtables with municipal authorities to streamline approvals while safeguarding social sustainability goals.

[157] *Quartierschutz* refers to policies and legal instruments, originally from Germany, designed to preserve existing neighbourhoods and their resident communities by preventing displacement and limiting speculative redevelopment.

Municipal officials report active outreach to private property owners in Schwamendingen to clarify their redevelopment intentions. The city has also begun to institutionalize monitoring of new developments, including multi-year follow-ups to verify promised rents, affordability levels, and social measures. As for other large or sensitive projects within the entire city, high-level round tables between developers and municipal departments are used to coordinate phased construction and negotiate socially acceptable implementation in Schwamendingen.

9.1.9 Critical analysis: Zurich

Across private, public, and civil society actors, there is broad agreement that climate adaptation strategies—such as densification policies, energy retrofits, and large-scale greening projects like the *Überlandpark* in Schwamendingen—contribute to rising housing challenges. However, assessments diverge significantly regarding the specific drivers of housing challenges and appropriate policy responses. While **rising asking rents** and **displacement linked to renovation and demolition** are frequently highlighted as key challenges, actors consistently stress that these dynamics are not primarily, nor exclusively caused by climate adaptation strategies. Housing inequalities are thus the outcome of multiple, interrelated factors rather than of environmental policies alone.

Especially civic actors describe Zurich's housing situation as a systemic and long-term crisis with spillover effects into other domains, including **labour markets** and **social integration**. Three problems are emphasized. First, extremely high asking rents, which make access to the market impossible or increasingly difficult for households with low or medium incomes. Second, *renoviction*, where renovation or redevelopment leads to contract termination. Third, the increase of temporary housing solutions which postpones, but does not solve displacement pressure. Affected groups include not only low-income households but also segments of the middle class, seniors, families, and single households. The consequences of displacement have become more severe due to high asking rents: Especially social workers report that finding housing in Zurich has been difficult but is getting almost impossible for tenants with limited financial resources such as working poor or single-family households, tenants with digital or language barriers, insecure employment, or for households with specific spatial needs, such as families.

The **drivers for housing inequality** are perceived differently as well. Civil society actors emphasize speculation, rising land prices, limited municipal intervention capacity, and the insufficient stock of non-profit and cooperative housing as crucial drivers. They also identify changes in spatial planning—especially densification without social safeguards —and shifts in supply towards households with very high purchasing power as central in influencing rent prices. Energy refurbishments are not consistently perceived as a direct cause of displacement; rather, renovation is often described as a pretext to terminate leases and reintroduce dwellings to the market at substantially higher rents.

Quite differently are the perceptions on the driver of housing challenges within the private sector. For-profit private sector representatives stress the extensive regulatory frameworks, (the fear of) political initiatives regulating housing supply or rent levels, long waiting periods for

building permit, or general state-interventions as hindering housing supply. Property valuations, which rely primarily on expected market rents, vacancy rates, and demand indicators, contribute to reinforcing price dynamics. In new developments, projected rents are treated as the starting point from which construction costs and land prices are derived, not vice versa. Densification, particularly through adding floors, is framed as an essential investment strategy in land-scarce urban areas, supported by the perceived stability of Swiss real estate as financial asset.

Public authorities point to structural constraints, including demand pressure from higher-income in-migrants, limited tools to capture value increases from rezoning, or restricted leverage over private developers. Across these perspectives, a recurring concern is that densification without strong social requirements results in 'built density with displacement'. Energy regulations or public investments in large infrastructural projects such as the *Überlandpark* can also trigger premature refurbishments and accelerate the loss of affordable housing. At the same time, lengthy approval procedures and regulatory complexity are partly recognized as exacerbating supply shortages.

9.1.9.1 Housing inequalities in Altstetten: Key aspects

Historically an 'arrival neighbourhood' with a high share of migrants and working-class households, Altstetten has undergone **profound socio-spatial restructuring** over the past three decades. The first phase of new developments concentrated on industrial sites and brownfields—particularly along railway corridors—and accordingly did not cause much displacement, as substantial land reserves could be mobilised without directly affecting existing residents. These large-scale developments are associated with a high-income segment and/or demographic shifts: wealthier households with young children move in, contributing to a reconfiguration of age and class structures. However, recent redevelopments are replacing the existing housing stock leading to a rise in the cancellation of long-standing rental contracts and a growing risk of displacement. Here, seniors, families with teenage or young adult children, and low or middle-income tenant tend to move out.

Rising property values in Altstetten are then closely linked to rezoning, large-scale redevelopment processes and to improvements in transport and service infrastructure, including the upgrading of the railway station. These developments are widely understood as key factors enhancing the neighbourhood's **market attractiveness**. Private market analysts further acknowledge that environmental and green features, including nature-based solutions, influence property values indirectly. This perspective is consistent with broader investment logics in Zurich's real estate market, where expectations regarding projected rental income constitute the central reference point for development decisions and valuation practices.

Impacts of displacement

Altstetten has long functioned as an arrival neighbourhood in which public institutions and civil society actors invested heavily in integration through schools, youth centres, and social services. Forced relocation **interrupts educational trajectories**, social networks, and access to local support infrastructures. When families are displaced, these investments are lost, as children must change schools and households lose contact with familiar support structures.

Furthermore, displaced residents include also craftspeople in skilled trades and construction, elderly residents, families with children, and single-parent households. Hence, the affected population in Altstetten is highly heterogeneous. NGOs repeatedly encounter the same pattern: they support apartment searches, yet housing supply at affordable prices is largely absent. This creates a structural mismatch between public expectations—namely that social organisations can 'solve' housing problems—and their actual mandate and capacity. Social services alone cannot compensate for systemic scarcity.

Temporary rental contracts and early lease terminations are common, often linked to anticipated renovation or redevelopment projects. These practices increase insecurity and accelerate displacement into the peri-urban ring, particularly to municipalities such as Dietikon and Schlieren.[158] Elderly tenants are described as especially vulnerable, while digitalisation of housing searches constitutes a barrier for households with limited technological skills or language proficiency.

After relocation, many families disappear from local networks and support systems, making it impossible to assess their living conditions or long-term outcomes. The interviews reveal a knowledge gap regarding displaced residents: neither civic nor public actors track where they relocate or how they are affected.

Construction noise is repeatedly identified as a central stress factor shaping everyday life in Altstetten, symbolising the permanent state of transition characterising the neighbourhood.

Large-scale lease cancellations and redevelopment dynamics

Major redevelopment projects accompanied by mass lease cancellations, involving institutional investors and large private real estate developers are crucial to understand housing inequalities in Altstetten. Temporary contracts prior to renovation have become a recurring feature of such projects, systematically weakening tenants' security.

[158] Neighbouring agglomeration municipalities.

Figure 4: Mass cancellation of rental contracts of housing soon to be demolished by private developer, Altstetten. Source: Photo by Luisa Gehriger (2025).

Critics also note that some of these new developments achieve no or only limited increases in density. Especially in German-speaking Switzerland, occupants of replacement developments tend to consume more living space per person than residents of the buildings that were demolished. Consequently, construction-led densification does not translate one-to-one into higher occupancy density (Kauer et al., 2025).

Limited mobilisation and fragmented resistance

Tenant mobilisation in Altstetten is comparatively weaker than in neighbourhoods such as Schwamendingen. Civic actors attribute this difference to the great population heterogeneity in Altstetten and to the strong presence of the *Mietenplenum* and social service in Schwamendingen. In contrast to residents of housing cooperatives, households in the private rental sector face greater displacement risks but often lack organisational resources or long-term stability to mobilise collectively. Activists mention widespread resignation and a perception that structural forces are difficult to challenge. Beyond material displacement, civil society actors emphasise forms of social and economic dispossession: everyday life, social networks, and local cultural practices are gradually absorbed into rising land values and capitalised upon through redevelopment. At the same time, working-poor households experience a loss of work–life balance as displacement increases **commuting distances** and **transport costs**.

The city administration: Between densification agendas and displacement pressure

Densification is broadly recognised as necessary to address housing shortages and environmental goals by the municipality, yet it is also acknowledged to produce displacement in the absence of strong social requirements. In some cases, private developers design large-scale site developments (*Arealüberbauungen*), in ways that **avoid triggering the regulatory thresholds** that would require approval by the municipal council, thereby limiting political scrutiny and democratic oversight.

9.1.9.2 Housing Inequalities in Schwamendingen: Key aspects

The case of Schwamendingen illustrates how large-scale green infrastructure projects can become embedded in broader processes of market-driven urban restructuring. While the *Überlandpark*—has significantly improved environmental living conditions in terms of noise reduction, improved air quality, enhanced surroundings, and access to high-quality recreational space, it has also contributed to rising property values and redevelopment dynamics that **disproportionately affect socially vulnerable groups**. Displacement in the district is both ongoing and delayed, facilitated by temporary contracts and gradual tenure erosion. Civil society responses range from organised resistance to pragmatic cooperation yet remain constrained by structural shortages of affordable housing and limited regulatory tools. As in other parts of Zurich, housing inequality in Schwamendingen emerges less from environmental policy alone than from its interaction with market dynamics and insufficient social safeguards.

Accordingly, the Überlandpark is only *one* among several drivers of rising rental prices, redevelopment and displacement pressure in Schwamendingen. Long-term urban restructuring, an ageing housing stock, population growth, and the location of the district also play major roles. Nevertheless, large-scale infrastructure and greening projects are widely acknowledged to exert a strong influence on land and property values. Market analysts report a noticeable increase in the willingness to pay among prospective tenants in Schwamendingen.

Environmental upgrading functions as a **catalyst that accelerates market-led transformation rather than as its sole cause**. While the city's planning documents emphasise environmental and urban quality improvements, there is an absence of binding measures to secure long-term affordability or protect vulnerable tenants.

Low-income migrant and Swiss households, families, and older residents are particularly exposed to displacement risks. In the neighbourhood, redevelopment-related large-scale cancellations of rental contracts at comparable affordable rent levels constitute a central mechanism of displacement. For affected tenants, access to housing is constrained by multiple, overlapping barriers. Rapidly rising asking make it difficult to find housing within the neighbourhood or city. However, precarious employment relations, digitalised application procedures, and language barriers further restrict participation in the tide housing market. However, even in Schwamendingen, displacement does not affect a homogeneous population; rather, it encompasses a diverse and heterogeneous set of households whose vulnerabilities vary in form and intensity.

Displacement as a delayed and partially hidden process

Displacement in Schwamendingen must be understood as both an ongoing and a future phenomenon. City reports suggest that a portion of residents can remain in the district after redevelopment (Stadt Zürich, 2019b). However, both civil society actors and urban planners caution that this apparent stability is misleading, as many of these households hold temporary rental contracts that are likely to expire in the coming years. From this perspective, displacement is not a singular event but a **prolonged process** unfolding over time. The occupation of vacated dwellings by temporary tenants has also generated social tensions, including forms of alienation and conflict or racist resentment between established residents and newcomers.

A recurring theme then is the quality of follow-up housing solutions after renovictions. Temporary contracts, rents that exceed households' financial capacities, small or overcrowded apartments, and rising indebtedness are frequently reported outcomes.

Between resignation and resistance: civil society responses

Civil society reactions in Schwamendingen oscillate between resignation and organised resistance. The tenant network *Mietenplenum*, which coordinates solidarity actions in cases of mass lease terminations, directly interfered in several large-scale displacement cases in the district.

Figure 5: Tenant protest in Schwamendingen. Source: Photo by Mietenplenum (2024)

Interviewees therefore stress the need for stronger coordination between the city and cooperative housing providers, as well as complementary public instruments to address affordability at scale. However, while semi-public interventions and counselling have been tested in Schwamendingen, most cancellations and displacements in the private sector could so far not be prevented.

9.1.9.3 Cross-case synthesis: Stressors and actors in the production of (in)justice

Type of stressors

Across both case studies, housing inequality such as demolitions, renovations, or rising asking rents is shaped by a combination of interacting stressors. While infrastructural improvements play a role, the structural core of rent inflation lies in population growth driven by higher-income in-migrant tenants (from the surrounding region and abroad), alongside rezoning processes, and escalating land prices.

At the same time, several respondents highlighted that the most abrupt rent increases often occur not through institutional investors, but also through **private landlords following inheritance**, who rapidly adjust rents to the highest market level. Most property valuations take maximum profits as a benchmark, contributing to rising prices. For pension-fund-linked developers, renovations have also become a central investment strategy, also frequently targeting returns above legally permitted thresholds.

Types of actors involved

Among private actors, institutional investors—particularly pension funds and insurance companies—play a central role in shaping redevelopment. These actors emphasise their **dual responsibilities** to generate stable long-term returns to safeguard the interests of their insured persons, which structurally positions them in a conflict of interest with longstanding tenants. Investment strategies are typically defined by investment committees and boards of trustees and involve either acquiring projects already extensively planned by developers or developing them in-house.

New construction is presented as the **main solution** to housing shortages by private developers**,** often justified by demographic arguments linking population growth to the financial sustainability of social security systems. This perspective is accompanied by advocacy for **building higher and faster,** prioritising productivity gains, leaner planning procedures, and accelerated construction processes as the main levers to counter rising costs—thereby shifting pressure onto construction firms and property management companies.

Inside public administration: Growing awareness, but internal differences

In both case studies, public actors—particularly at the municipal level—emerge as **increasingly aware** of the social consequences of current housing and redevelopment dynamics yet institutionally constrained in their capacity to respond. **Progressive orientation within the City of Zurich** is driven less by abstract policy agendas than by practical pressure from within the administration itself. Municipal social services, which are directly confronted with the effects of skyrocketing asking rents and growing hardship among displaced tenants, have become key internal advocates for stronger intervention. Their assessments have been reinforced by political mobilisation, including protests against displacement and tenants self-organizing, which further elevated housing inequality on the local political agenda.

Governance constraints are pronounced at the cantonal level. This legal framework significantly **restricts municipal room for manoeuvre**, particularly regarding rent regulation, stronger tenant protection, or mandatory social quotas in private redevelopment projects. As a result, even where political will exists on the municipal level, implementation capacity remains limited.

Furthermore, within the municipal administration, there are **differences among departments** on how to address housing inequalities. Especially, there is no consensus on whether displacement constitutes a distinct and measurable problem, and responsibility for addressing it remains **institutionally diffuse**. While some municipal representative characterised current urban policy as marked by a trade-off between environmental ambitions and social concerns, others clearly emphasis an extensive will to act against unaffordability and displacement. In the past, enthusiasm for energy-efficient retrofitting and urban design quality has, in practice, **sidelined social issues** related to affordability and displacement. In this sense, ecological modernisation is not only a technical project but also an institutional priority that competes with social policy objectives for attention, resources, and political legitimacy.

This fragmentation is reinforced by the internal organisation of the city administration. Departments concerned with urban development and social sustainability are structured as largely separate entities. While the Office for City Development produces reports, concepts, and participatory formats on social sustainability, planning and building departments are only marginally involved and may not integrate these insights into concrete zoning and redevelopment decisions. Several interviewees from both public and civic organisations criticised this separation not only as inefficient and symptomatic of bureaucratic compartmentalisation, but also as **politically intended**, as it made it possible to postpone effective measures for mitigation in the past.

Growing civic pressure

Redevelopment pressure in Zurich has intensified markedly in neighbourhoods where **building typologies** have reached the end of their renovation cycle, **ownership structures** are dominated by large-scale rather than family landlords, and existing rent levels remain comparatively low, thus **enabling substantial increases** once new contracts are issued after redevelopment. Apart from low-income household, displacement risks extend across a socially heterogeneous tenant population, while **lower middle-income households**—particularly families who do not qualify for public assistance—are increasingly falling through existing support structures and face heightened vulnerability to be displaced.

Within this context, different tenant groups, tenant organisations, or neighbourhood centres have become crucial in coordinating collective responses to mass lease terminations, supporting displaced tenants, organising public demonstrations, engaging in media outreach, and negotiating with a broad range of stakeholders. Their activities illustrate both the growing scale of redevelopment-induced displacement and the increasing reliance on civil society actors to articulate housing justice claims.

Figure 6: Front housing demonstration Zurich, 2025. Source: Photo by Daniel Naef (2025)

9.1.9.4 Cross-cutting themes

A cross-cutting theme that emerged in both cases concerns the stabilising role of de-commodified housing—particularly **cooperative and municipal housing**—in shaping the social outcomes of green transition dynamics. In a market where asking rents reached levels that are increasingly **unaffordable for middle-income households**, older rental contracts and the non-profit housing stock constitute a crucial buffer against unaffordability and displacement.

At the same time, the protective function of cooperative housing is not uniform. The **allocation practices** of some housing cooperatives—at times conservative and occasionally exclusionary—can restrict access for certain social groups and limit the socio-demographic diversity of residents. Consequently, while de-commodified housing can mitigate the exclusionary effects of market-driven redevelopment, its capacity to counteract housing inequalities remains contingent on both the inclusiveness of allocation criteria and the scale at which such housing is expanded.

9.1.9.5 Implications for just transition debates in Zurich

Higher incomes, bigger flats

An important implication for debates on a just transition in Zurich concerns the distributive effects of residential space consumption. Green or energy-efficient redevelopment is often criticized when **targeting high-income households with large per capita space consumption**, undermining ecological objectives of densification. In designated densification zones in Zurich, both per capita living space and taxable incomes tend to be comparatively

low, whereas areas outside these zones are characterised by **larger dwellings and higher incomes** (Stadt Zürich, 2025i). Especially high asking rents in for-profit new developments are designed for a different clientele with a higher consumption of living space, in some cases producing outcomes that are the opposite to energy-efficiency measures.

Densification and energy-efficient construction, when embedded in **market-driven instead of needs-based allocation mechanisms**[159] risk reinforcing socio-environmental inequalities rather than mitigating them, thereby **challenging core assumptions of a just green transition**. In this sense, rising residential space consumption can be understood as offsetting the benefits of technically energy-efficient buildings by socially and environmentally regressive patterns of residential space use.

Public cost of displacement

Displacement can also generate substantial **public costs** that extend beyond the immediate loss of housing. Interviews with school representatives and local NGOs consistently highlight how public and civic investments in **social integration and education**—such as support for newcomer families, educational programs, and neighbourhood-based outreach—are undone when households are forced to move. For example, in Altstetten and Schwamendingen, initiatives that facilitate language acquisition, school enrolment, and participation in community life are disrupted, eroding social networks and undermining long-term cohesion. A further dilemma arises with older residents occupying larger, underutilised apartments: encouraging **early relocation to retirement homes** can free up units for larger families, but it can also imply significant public costs when elderly enter retirement homes prematurely and rely on public support to pay for care facilities. Civic actors and social organisations highlight that displacement often results in the loss of access to public services, social infrastructure, or care networks which in turn can exacerbate **psychological burdens** such as stress, depression, and social isolation—consequences that also place additional pressure on public budgets. In sum, the social costs of displacement are multi-layered, encompassing not only the material disruption of housing but also the erasure of community ties, the forfeiture of social investments, and the weakening of the social fabric that underpins equitable urban life.

Innovation though regulation?

The staged relocation (*Etappierung*) of a large housing estate by a for-profit actor, incorporating affordable rents for longstanding tenants, demonstrates how regulatory frameworks can serve as **catalysts for socially innovative practices** in private housing

[159] Market-driven allocation mechanisms are predominant in the private sector, where access to housing is determined primarily by the prospective tenant's ability to pay the asking rent. In contrast, needs-based allocation mechanisms are typical of most cooperative and municipal housing, where dwelling size is generally assigned according to household composition (number of residents plus one determines number of rooms).

renewal. Although many in the private sector view Zurich's housing affordability regulations as a significant constraint on the provision of sufficient housing, our data—including perceptions of for-profit private developers themselves—indicate that proactively anticipating and engaging with these **regulations became a key driver of social innovation** in project implementation. Political pressure on property owners, coupled with the risk of project delays due to opposition, produced mutually beneficial outcomes for both tenants and developers: it facilitated tenant security for longstanding residents, enhanced **planning certainty for the developer**, improved public acceptance of the project, and bolstered the developer's reputation within the civic and public sphere.

Three factors were crucial **drivers for action** on the side of the developer: (1) minimising political and regulatory hurdles through alignment with municipal priorities, (2) ensuring social responsibility towards existing tenants, (3) maintaining cash flow and long-term economic stability. According to the developer, the staged renovation process was much more related to internal property management, corporate culture, long-term investment horizon, and focus on stable tenant populations, and less to public recognition or reputational signalling to peers. Nevertheless, **challenges** remain. Communication with tenants regarding future rents and the timing of relocations was initially limited, a recurring concern also voiced by representatives of tenants. Consequently, only those tenants who were present before the planning phase fully benefited from the social implementation; tenants who arrived later were offered only temporary contracts, highlighting persistent inequities even within socially conscious redevelopment.

The rise of temporary contracts

Temporary contracts have emerged as a central mechanism shaping both the persistence and deferral of displacement in Zurich's redevelopment areas. In some cases, tenants receiving cancellations of their rental contracts can **remain within their neighbourhoods**, but **only temporarily**. Especially large-scale redevelopments, even in the cooperative sector, have often prioritised longstanding tenants (*Altmieter*), while later-arriving residents were offered only temporary agreements.

In Schwamendingen, data from local activist groups reveal a shift from long-term contracts to temporary tenancies among vulnerable tenants, with many residents remaining in the neighbourhood but lacking long-term security. Their eventual displacement remains likely, highlighting a deferred rather than resolved housing insecurity. Accordingly, the prevalence of temporary contracts **obscures the extend of displacement** in Schwamendingen.

9.1.9.6 Implications for policy mitigating housing inequalities

The following policy recommendations synthesize the key insights derived from the empirical data collected in this study.

Knowing the added value

Actors from the public, civic, and private sectors identify the reform of Article 49b of the Cantonal Planning and Building Act, within the ongoing revision of the Bau- und Zonenordnung

(BZO), as a key policy lever for mitigating housing inequalities in Zurich. This reform enables municipalities to require a proportion of affordable housing whenever redevelopment or rezoning generates additional land value, effectively linking urban densification and social sustainability.

Implementation of Article 49b illustrates the trade-offs involved in balancing economic viability, political acceptance, and social outcomes. Interviews with private actors indicate that socially sustainable measures—such as preserving low rents for long-term tenants—are frequently achieved only through strategic compromises. In particular, the municipality's negotiating power during **land-swap arrangements** often becomes a decisive factor in enabling such outcomes. Other trade-offs could include accelerated planning procedures, streamline building permit approvals, and reduce legal challenges in exchange of a **share of affordable housing**, while providing developers with **planning security** that supports socially responsible project implementation. In this way, regulatory frameworks like Article 49b not only **safeguard municipal influence** over land use but also create mechanisms through which private-sector development can advance social sustainability objectives.

Private sector as crucial lever for housing affordability

The private sector, particularly the stock of older rental housing, plays a central role in maintaining housing affordability in Zurich. While median rents may appear moderate, this is largely attributable to the prevalence of older contracts with low rents and the affordability of cooperative or municipal units; by contrast, newly developed units in the free market remain largely inaccessible to middle-income households. This underscores the importance of leveraging **private sector housing as a social resource** in conjunction with non-profit housing stock.

Civic actors strongly advocate for policy innovations that seek to more systematically harness private-sector development in pursuit of social objectives. For example, building permits could be conditioned on the provision of 25% affordable housing, and projects exceeding 100 units may require the submission of a **mandatory report** on socially sustainable development plans. Such instruments enhance the municipality's capacity to steer private investment toward socially desirable outcomes within a market-driven context.

Climate objectives could further strengthen municipal leverage, but only if the **grey emissions** associated with extensive housing demolition are properly accounted for and linked to policy measures and subsidies. Additionally, financial support for climate adaptation and retrofitting could be tied to **social criteria**, such as rent affordability and tenant security, ensuring that environmental goals are pursued in tandem with housing justice.

Expanding the role of non-profit housing

To achieve the city's *Drittelsziel* (one-third target of non-profit affordable housing), the municipality thus relies not only on expanding non-profit housing provision but also on leveraging private-sector housing through regulatory tools and planning mechanisms. Apart from the targeted interventions in the private housing market discussed above, in the context

of Zurich's growth mandate, the municipality has three main options: Purchasing and constructing **new municipal housing**—often prohibitively costly but worthwhile as long-term investment in municipal budgeting; developing municipal land—which is limited and contested; and supporting non-profit cooperative actors. Especially **large-scale** municipal and cooperative housing developments could have the potential to address housing challenges without directly placing additional pressure on the existing housing stock.

Complementing these strategies, actors from the civic, private and public sector stress that the *Wohnraumfonds* should be expanded to provide additional **interest-free loans** to non-profit housing providers. Non-profit housing providers have historically played a crucial role in ecologically and socially sustainable refurbishment and in enabling denser, yet socially sensitive, renewal. However, high regulatory requirements, lengthy approval processes, and frequent objections can prolong project timelines, and increase construction costs. The example of Zurich's first **high-rise cooperative housing project** demonstrates both the cautious approach and the potential of cooperatives to contribute meaningfully to a densifying city.

Campaigns and taxation as tools to limit overpriced sales

Actors across the public, civic, and private sectors emphasize that a major challenge in Zurich's housing market stems from inherited private property, which is often sold to the highest bidder and thereby contributes to rising rents. To address this issue, the **municipality or canton** could implement campaigns promoting **socially sustainable property transfers**, using **tax incentives** to encourage sales to **non-profit actors**, including cooperatives or municipal housing providers. Such measures would help **preserve and expand the affordable housing stock** while **mitigating speculative pressures** in the private housing market.

Rent caps after redevelopment

Experiences from Swiss cities such as **Basel** and **Geneva** illustrate the potential and limits of tenant-protection measures in mitigating displacement and rising rents. Regulatory interventions affect **property valuations** by altering projected income potential or increasing perceived risk, which is said to initially slows investment activity. However, municipal tenant-protection rules have **tempered the price spiral** in for-profit housing, resulting in fewer tenant displacement and the possibility of non-profit actors to re-enter the market.

As market analysts note, long-standing regulatory frameworks—such as those in Geneva—demonstrate that investors tend to adapt to new rules over time, with development activity resuming once regulatory effects become predictable and are incorporated into market expectations. This suggests that temporary slowdowns in construction are not inherently permanent but reflect an initial adjustment period.

Social sustainability label for the building industry

Several actors have proposed introducing **social sustainability labels** analogous to existing certifications for ecological or energy-efficient building practices. Such a label would provide a **clear regulatory framework** for developers, signalling expectations for socially responsible practices, including tenant protection, affordability, and community stability. For municipalities, the label could serve as a **lever to link building permits and approvals to demonstrated social sustainability**. This approach offers a mechanism to **institutionalize social criteria** in urban development, complementing environmental and technical regulations.

Reporting and monitoring

Effective reporting and systematic monitoring of displacement pressures and rent dynamics are essential for identifying which social groups are most affected and the specific forms of vulnerability they face. Robust reporting frameworks can also support social innovation among institutional investors, for instance by encouraging strategies that reconcile financial returns with tenant stability and long-term residential continuity.

However, cooperation between key actors—private real estate owners, tenant associations, public administrations, and civic organizations—remains limited. Initiatives by the municipality such as multi-stakeholder roundtables, intended to foster joint solutions, often result in **disillusionment**, as responsibilities are deferred. Consequently, most displaced tenants are forced to leave, emphasizing the need for robust monitoring and accountability mechanisms.

Neighbourhood-based support structures for tenants

Both civic and public actors emphasise that neighbourhood-level support services play a crucial role in mitigating housing inequalities, particularly for vulnerable groups such as low-income households, migrants, and older residents. Local neighbourhood hubs are central, providing **low-threshold access to tenant counselling**, outreach social work, and guidance in flat searches. Other municipal and NGO initiatives offer complementary support, helping residents navigate the housing market and access available units. However, despite the range of services available, support measures alone cannot compensate for the scarcity of affordable housing. Private-market rents are generally too high for very low-income groups, leaving cooperative and municipal housing as the main realistic options.

In response, some non-profit developers are introducing **new allocation criteria**, such as neighbourhood connections, to prioritize housing for residents with established local ties. Initiatives exploring flat-change mechanisms aim to maintain household stability in the context of rising rents and aging populations, highlighting the importance of neighbourhood-based strategies in fostering both social and spatial continuity.

9.1.10 Literature

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9.1.11 Appendix 1 – Glossary

Abbreviations

BZO	Bau- und Zonenordnung (Building and Zoning Regulation)
FDP	Freisinnig-Demokratische Partei; economic-liberal party
NGO	Non-profit organisation
NBS	Nature-based solution
SVP	Schweizerische Volkspartei; Swiss People's Party (national-conservative party)
PBG	Planungs- und Baugesetz (Planning and Construction Act)
SPA1	Spatial Planning Act (Revision 1)

Terms and Concepts

Arealüberbauungen	Large scale developments; according to the BZO, sites with more than 6000 m^2 can be developed with higher density than allowed for the zones they lie in.
Building and Zoning Regulation	*Bau- und Zonenordnung;* municipal building and zoning regulation
Cantonal Structure Plans	*Richtpläne;* cantonal planning tool, specifying zoning
Die Mitte	Centre to centre-right party
Drittelsziel	*Drittelsziel;* obliges the municipality to increase the market share of non-profit housing to one third
Frohburg	Housing estate with 307 dwellings; will be redeveloped with a staged redevelopment process with controlled rents for long-term tenants.
IG Nicht im Heuried	Neighborhood-based resistance group
Urban Equipe	Urbanists and consultancy in participatory processes
Mietenplenum	Tenant activist group
Right of first refusal	*Vorverkaufsrecht;* legal provision that gives municipality the priority to purchase a property before the owner can sell it to someone else

Spatial Planning Act	*Raumplanungsgesetz*; federal law introduced in 1979; in 2014, densification was introduced as a mandatory principle for cantons and municipalities
Überlandpark	*Überlandpark;* park on top of the highway enclosure in Schwamendingen
Volksinitiative	*Volksinitiative;* popular initiative
Wohnraumfonds	Municipal Housing Fund of 300 mio. CHF.

9.1.12 Appendix 2 – Key interview data and transcripts

#[160]	Position of Interviewee	Sector	Date of interview	Media
P8	Representative of tenants' union	civic	19.05.25	In person
P9	Representative of office engaged in participation and urban governance	civic	20.05.2025	In person
P12	Social worker, organisation for youth work	civic	06.06.2025	In person
P13	Representative of group of activists	civic	06.06.25	In person
P14	Representative of NGO, responsible for housing consultation	civic	19.06.25	In person
P15	Social worker, neighbourhood hub Altstetten	public	16.06.2025	In person
P16	Representative of city administration, department for urban development	public	26.06.2025	In person
P17	Representative of a private real estate investor	private	24.06.25	In person
P18	Activist and local resident	civic	08.07.2025	In person
P20	Representative of homeowners' association	private	09.07.25	In person
P21	Representative of housing cooperative	private	09.07.25	Online
P24	Representative of local school	public	17.07.2025	Online

[160] Gaps appear in the interviewee numbering because interviewees were numbered continuously across the three case studies Amriswil, St.Gallen and Zurich.

P29	Representative of real estate consultancy and data analytics firm	private	28.07.25	Online
P31	Social worker, neighbourhood hub Schwamendingen	civic	29.07.25	In person
P32	Representative of group of activists	civic	29.07.25	Online
P33	Representative of a private real estate investor	private	30.07.25	Online
P35	Representative of alternative homeowners' association	private	05.08.25	In person
P36	Local resident	civic	05.08.25	In person
P44	Representative of city administration, department for municipal housing	public	25.08.25	In person
P45	Representative of neighbourhood association	civic	04.08.25	In person
P46	Representative of city administration, responsible for housing questions	public	20.08.25	In person
P52	Representative of city administration, tenant support office	public	18.09.2025	In person
P53	Representative of real estate developer	private	25.09.25	In person
P54	Representative of city administration, planning department	public	30.09.25	In person

9.1.13 Appendix 3 – Key initiatives

Popular initiatives on housing Zurich

High levels of political participation on housing issues demonstrate the urgency of the housing crisis in the Zurich metropolitan area. Thousands have participated in mass demonstrations against the housing crisis, and various activist groups have formed to contest evictions and displacement. Meanwhile, many initiatives have been submitted at cantonal and municipal levels in recent years. Cantonal legislation is important for housing issues because municipal planning is based on the cantonal *structure plan* (Richtplan) and the cantonal *building and planning act* (PBG).

Popular initiatives Canton ZH:

- Cantonal popular initiative for *more affordable housing in the canton of zurich* (Mehr bezahlbare Wohnungen im Kanton Zürich) (2023) is currently discussed in the cantonal council
- Cantonal popular initiative for *more affordable and non-profit housing* (Wohnungsinitiative) (2023) is currently discussed in the cantonal council
- Cantonal popular initiative for *enabling more homeownership* (Wohneigentums-Initiative) (2023) is currently discussed in the cantonal council
- Cantonal popular initiative *housing protection initiative* (Wohnschutz-Initiative) (2024) was launched to improve conditions for tenants at cantonal level and curb gentrification and displacement. This initiative is specifically aimed at the problem of socially selective refurbishments in the city. It will be voted on in late 2025.
- In a popular vote in late 2025, the population will also decide whether the municipalities in Canton Zurich should have the right of first refusal in the event of major land and property sales in their area (Wohn-initiative).

Popular initiatives City of ZH:

- The municipal popular initiative *housing for everyone* (Wohnen für Alle) demanded that the non-profit sector covers a third of Zurich's rental market by 2040. As a result of the counter-proposal, which was accepted in a vote in 2011, the city council anchored a basic article on housing policy in the municipal ordinance, which, among other things, obliges it to increase the market share of non-profit housing to one third by 2050.
- Due to a revision of the *cantonal planning and building act* (PBG) in 2014, the municipality has rights to stipulate a minimum proportion of affordable housing in amendments to the building regulations and in design plans. In 2024, a popular initiative was started that pressures for the *implementation* of this law in the *municipal building and zoning regulation* (BZO) (Umsetzungsinitiative) (Alternative Liste, 2024). The city council is currently working on a counterproposal.
- A popular initiative demanding 2000 *more apartments for elderly people* (Mehr Alterswohnungen für Zürich) until 2035 was accepted by over 90 % in 2024, leading to an adjustment of the municipal ordinance.
- After a popular vote in 2023, a *municipal housing fund* (kommunaler Wohnraumfonds) of 300 mio. CHF has been installed as a counterproposal to the popular

initiative *affordable housing for everyone* (Bezahlbare Wohnungen für Zürich) and is available as part of the promotion of non-profit housing since 2025.

9.1.14 Appendix 4 – Visuals Altstetten

Fig. A4.1: New development of municipal housing in brownfields/industrial sites, Altstetten (Photo: L. Gehriger 2025)

Fig. A4.2: Housing to be demolished for redevelopment in Altstetten (Photo: L. Gehriger, 2025)

Fig. A4.3: Housing to be demolished for redevelopment in Altstetten (Photo: J. Duyne, 2026)

Fig A.4.4 Housing to be demolished for redevelopment in Altstetten (Photo J. Duyne, 2025)

Fig. A4.5: Bachmattstrasse 39, Altstetten, 2023 (Photo J.Duyne, 2023)

Fig. A4.6: Bachmattstrasse 39, Altstetten, 2026 (Photo: J.Duyne, 2026)

Fig A4.7 : Old low-densitiy cooperative housing being demolished in Altstetten, 2022 (Photo: J.Duyne)

Fig A4.8: Densified new cooperative housing in Altstetten, 2026 (Photo: J.Duyne)

Fig. A4.9: New development by star architects Herzog and De Meroun in Altstetten (Photo: J. Duyne, 2025)

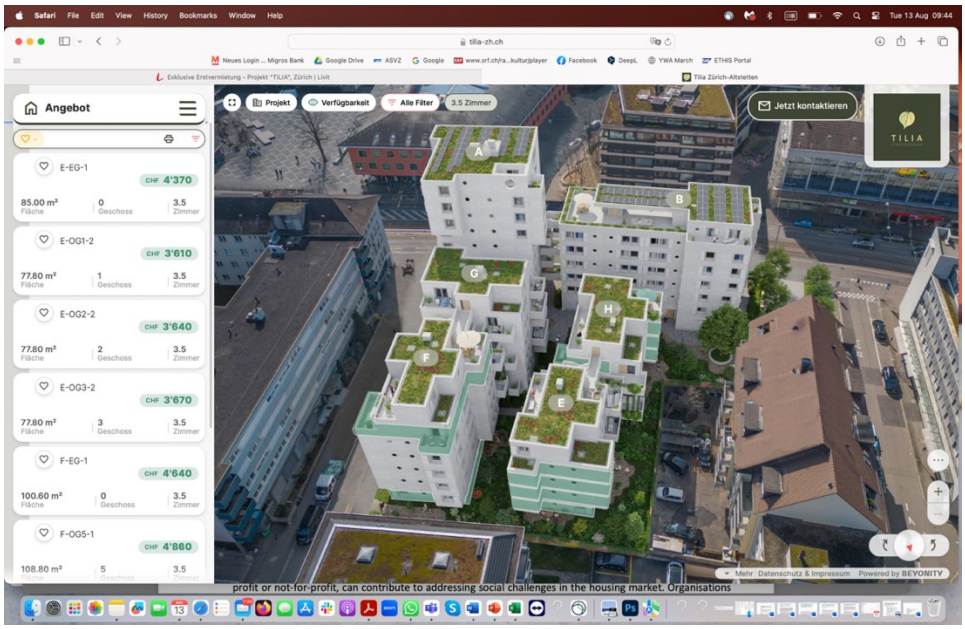

Foto A4.10: Rents in new Herzog and Demeroun development in Altsttetten (Photo: J. Duyne, 2025)

9.1.15 Appendix 5 – Visuals Schwamendingen

Fig. A5.1: The Überlandpark in Schwamendingen (photo. J.Duyne, 2025)

Fig. A5.2: Playground in Überlandpark in Schwamendingen (Photo: J. Duyne, 2025)

Fig. A5.3: View from the Überlandpark in Schwamendingen on the old housing stock (Photo: L.Gehriger, 2025).

Fig A5.4.: Soon to be replaced low-density cooperative housing in Schwamendingen (Photo: J.Duyne, 2025)

Fig. A5.5: New housing development along the Überlandpark (Photo: L.Gehriger, 2025)

Fig. A5.6: Old housing along the Überlandpark (Photo: L Gehriger, 2025)

Fig. A5.7 & A5.5.8: Cooperative showcasing their planned redevelopment at Überlandpark May 10th 2025 opening day

(Photo: J.Duyne)

Fig. A5.9: Tenants protest in Schwamendingen (Photo: Mietenplenum, 2024)

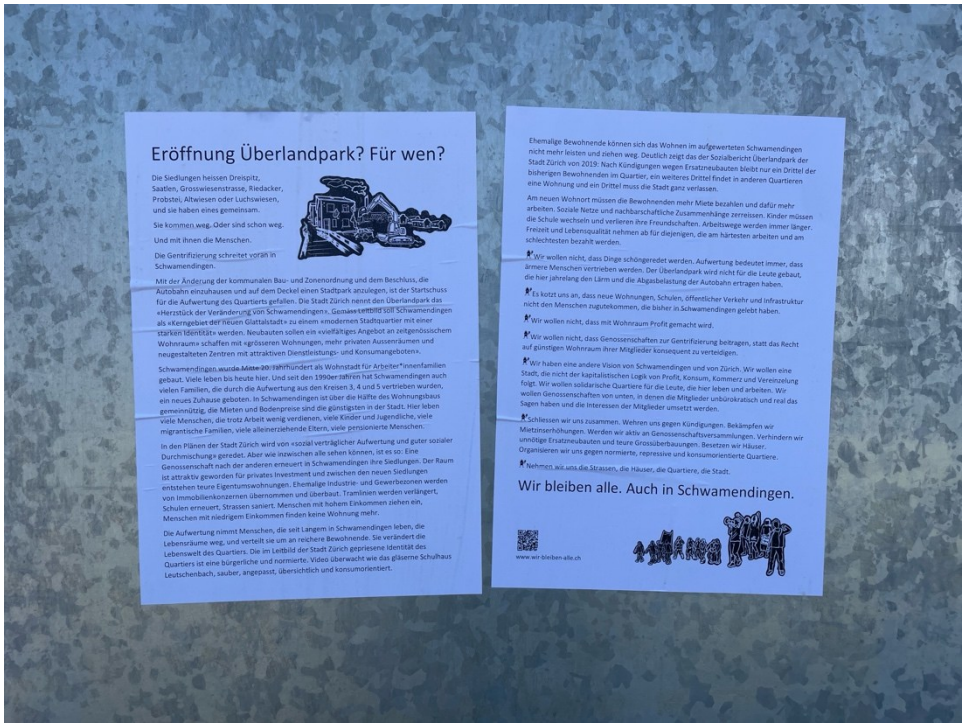

Fig. A5.10: Leaflet protesting park-induced gentrification and displacement (Photo: J.Duyne, 2025)

9.2 CASE STUDY (MEDIUM): ST-GALLEN

Authors: Salome Rohner, Hannah Widmer, Jennifer Duyne Barenstein (ETHZ)

Contributors: Elie Sieber & Luisa Gehriger (ETHZ)

9.2.1 City profile, challenges around just (housing and ecological) transition

9.2.1.1 Demographics and geography

With a population of 83,803 in September 2025 (Stadt St.Gallen & STADA2, 2025), St.Gallen is the eighth-largest city of Switzerland and the economic, political, social, and cultural hub of Eastern Switzerland. It is an urban centre in a region that is otherwise characterised by smaller settlements. Nestled in the valleys of the rivers *Sitter* and *Steinach*, the city's landscape is defined by its valley floors and surrounding slopes. The territory of the city of St.Gallen encompasses 39.4 km^2, of which around 50% is green space (Stadt St.Gallen & STADA2, 2025; see Figure 1).

In contrast to many other Swiss cities, St.Gallen's population is only growing moderately with an increase of 4.8% over the last decade (Stadt St.Gallen, 2025a). In the same period the city of Zurich grew by 10.8% (Stadt Zürich, n.d.). St.Gallen is home to a diverse population, with non-Swiss nationals accounting for 34.2% of its inhabitants, the vast majority coming from Germany (5232), followed by Italians (2775), Kosovaris (1940) and Serbians (1342) (Stadt St.Gallen, 2020c) (BFS, 2025c). The average age is 39.3 years, which is comparable to other

Swiss cities (BFS, 2024). With a population density of 2,002 inhabitants per km^2 (total area of the city), St.Gallen is moderately dense in the Swiss context (BFS, 2025d), with larger cities generally being denser – up to 13,100 inhabitants/km^2 in Geneva.

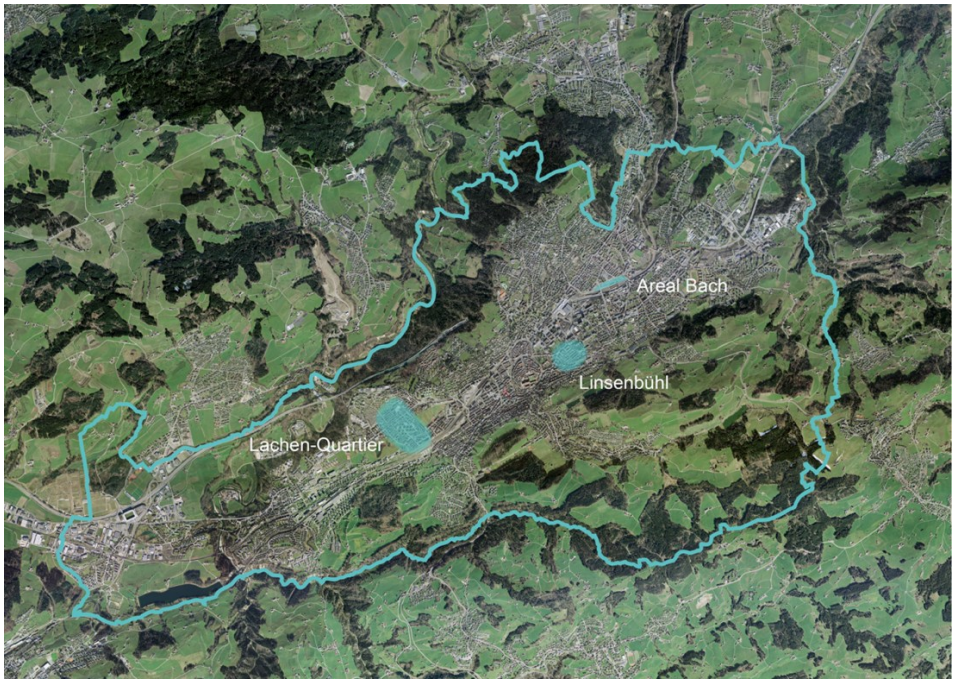

Fig. 1: Aerial photograph of St.Gallen with three current development areas Lachen-Quartier, Linsenbühl and Areal Bach. Source: Federal Office of Topography swisstopo.

Fig. 2: St.Gallen's old town, view to the hillside (© H.Widmer)

9.2.1.2 Economy and infrastructure

With 87,695 persons employed in the city (BFS, 2025a), St.Gallen remains an attractive employment centre, with many workers commuting into the city daily (Stadt St.Gallen, 2020b). However, with an average yearly pro capita income of 55,502 CHF, St. Gallen's figure is well below Zurich's, which stands at 73,023 CHF per resident per year (BFS, 2022).Most jobs (85.5%) are found in the service sector, 13.9% in industry and construction, and 0.2% in agriculture and forestry (Stadt St.Gallen, 2020b).

St.Gallen is home to the University of St.Gallen, one of the leading business universities of Europe (University of St.Gallen, 2025), and to the Abbey of St Gall containing the Abbey library, one of the richest and oldest monastic libraries in the world (UNESCO World Heritage, n.d.).

St.Gallen benefits from good connections to the Swiss transport network, being located on the main motorway (A1) and one of the main train lines (Intercity 1), albeit at the Eastern end.

9.2.1.3 Governance structure and political orientation

The city of St.Gallen is the capital of the canton of St. Gallen. The city council, the executive government, consists of 5 members of different political parties. Each of the council members is responsible for one department. One of the members is simultaneously the mayor, but the mayor is elected separately.

Politically, the Social Democratic Party (SP) is the strongest force in the city parliament, holding 27% of the seats in the current term (Stimmbüro St.Gallen, 2024). The conservative right Swiss People's Party (SVP) won 16% of the seats, and the Swiss Liberal Party (FDP) and the Centre Party (DieMitte) 14% each. The Green Party and the Green Liberal Party (glp) are represented with 10% and 11% respectively. Together with the Social Democratic Party, the parliament thus has a majority voting in favour of environmental topics.

Fig. 3: St.Gallen's historic city centre (© J.Duyne)

9.2.1.4 Housing situation

In contrast to the situation in larger cities and other regions of Switzerland, there is no evidence of a housing shortage in St.Gallen: in 2024 the vacancy rate was 2.1%, which is significantly higher than the national average of 1.08% (BFS, 2025b). Rental prices are among the lowest in Swiss cities (224CHF/m^2/year; Bosshardt & Ganarin, 2019).

In 2021, the city counted a total of 44,800 dwellings of which 8.2% belong to housing cooperatives (Urban, 2023). Homeownership is, as in most Swiss cities, rather rare. Only 17.4% of households own the dwelling they live in (Kanton St.Gallen, Fachstelle für Statistik, 2025). Most households rent their home on the private market.

The number of cooperative housing units has been growing steadily over the last ten years and there are several projects in the pipeline (WBG St.Gallen, 2025). Besides non-profit housing providers, the citizens' community (*Ortsbürgergemeinde*[161]) is one of the largest owners of land in the urban area of St.Gallen. The citizens' community is quite influential for urban development, as it grants building rights to private and institutional investors, and rents out houses, flats and allotment gardens (Ortsbürgergemeinde St.Gallen, 2023). The municipality currently owns about 700 apartments (as of January 2020; Stadt St.Gallen, 2020d). The city's Real Estate Strategy (*Liegenschaftentrategie*) aims to institutionalize an active municipal land policy and to monitor the market situation in order to steer and support the residential development through the public portfolio (Stadt St.Gallen, 2022b). Prospectively, public land is not to be sold anymore, but to be leased along with building rights to non-profit developers.

Fig. 4: Historic housing in the city centre (© J.Duyne)

[161] The citizen's community is described in more detail in Section **Error! Reference source not found.**.

In a recent report, the city council found that St.Gallen had enough affordable housing and relatively low rents compared to other cities of similar size in Switzerland. However, large parts of the buildings in St.Gallen are overaged (Stadt St.Gallen, 2021c). About 66% of housing stock was built before 1970 (Fachstelle für Statistik Stadt St.Gallen, 2023). It is estimated that 30-45% of all buildings will need refurbishment in the next 10 years (Altherr, Policy Lab 2025). Whether such refurbishments are being undertaken or whether the related buildings will be demolished and replaced depends on their owners. In both cases, it would entail rent increases, and – if no measures to keep housing affordable are taken – could lead to the displacement of low-income residents. This process may already have begun to some extent: since 2020, the market rents have increased by 13% in the canton of St. Gallen. This is less in comparison to central Switzerland, but significantly more than in other peripheral cantons (Elsener, 2025).

In 2020, the city of St.Gallen adopted the Municipal Housing Strategy (*Wohnraumstrategie*). The strategy addresses the challenges of residential development, including the overaged building stock, by formulating six fields of action and measures to make the city attractive for families and young professionals and secure housing quality in the future (Stadt St.Gallen, 2020d). One of the studies carried out in preparation of the Municipal Housing Strategy describes the 12 neighbourhoods of St.Gallen as key for securing a socially mixed population growth in the long term (Stadt St.Gallen, 2020a). The Municipal Housing Strategy also stipulates that a public fund, created in 1991 in response to the housing crisis of the 1980s, when 12 million CHF were dedicated to support low-income tenants with their rent, will be used to promote affordable, high-quality non-profit housing units, including renovations of the existing stock. The fund still amounts to 6 million CHF as it was hardly used in recent years, mainly because of a lack of demand. Funded activities should predominantly benefit people with low incomes (Hämmerli, 2024).

In 2013, the city's parliament counterproposal to the popular initiative for the promotion of non-profit housing (*Zur Förderung des gemeinnützigen Wohnungsbaus*) was accepted. While the counterproposal refrained from establishing a 10 million CHF fund for the promotion of non-profit housing, it contained a regulatory framework comprising various measures to be financed through the standard budgeting processes. Among the measures for the promotion of non-profit housing is the lease of municipal land under building rights to non-profit housing developers at a reduced rate, interest-free or low-interest repayable loans and partial financing of early stages of developing construction projects for non-profit housing providers.

The promotion of affordable housing is also facilitated by the Housing Promotion Agency (*Wohnbauförderung*)[162]. However, it should be noted that the Canton of St. Gallen has no

[162] The Housing Promotion Agency (*Wohnbauförderung*) of the Canton of St. Gallen administers all measures established by the federal government to promote housing. The Canton of St. Gallen also performs this task for the cantons of Appenzell Innerrhoden and Thurgau. It has the mandate to implement national measures for the

housing policy or strategy of its own. The agency simply manages federal measures for housing promotion (Kanton St.Gallen, n.d.).

9.2.2 Densification, energy refurbishments, and nature-based solutions (NBS) in St. Gallen

This section outlines the most important developments and policies regarding densification, energy refurbishments and nature-based solutions (NBS) in St.Gallen in recent years. While many aspects are driven by national policies – which are implemented at cantonal and local level, there are also specific instruments set up by the city itself. Generally, a 'boost' of environmental policies can be observed in the last couple of years. This can be attributed to the current progressive and environmentally conscious parliament that was elected in 2020 and by the acceptance on popular vote of an addition to the municipal constitution setting climate goals and the target to become a decarbonised city by 2050. To this aim, a roadmap and a catalogue with 150 measures was developed.

9.2.2.1 Densification

Densification has been a key policy goal in Switzerland since the 2014 revision of the Spatial Planning Act, when inward development became legally binding for cantons and municipalities, as a means to reduce soil consumption and prevent further urban sprawl. As a consequence, cantons had to align their cantonal structure plans (*Richtpläne*), with municipalities playing a central role in steering densification through utilization plans (*Nutzungspläne*) at the local level (Duyne Barenstein et al., 2025b).

St.Gallen's densification strategy (*Innentwicklungsstrategie*) defines the basic principles for densification for the city: the valley floor, where the city centre is located, is to be densified while the hillsides are to remain low-density and reserved for nature (Stadt St.Gallen, 2021b).

promotion of affordable housing, such as the WEG Act, which supported housing for low-income individuals and families, and the WFG Act, which promotes the construction of affordable rental housing for low-income individuals and research into housing.

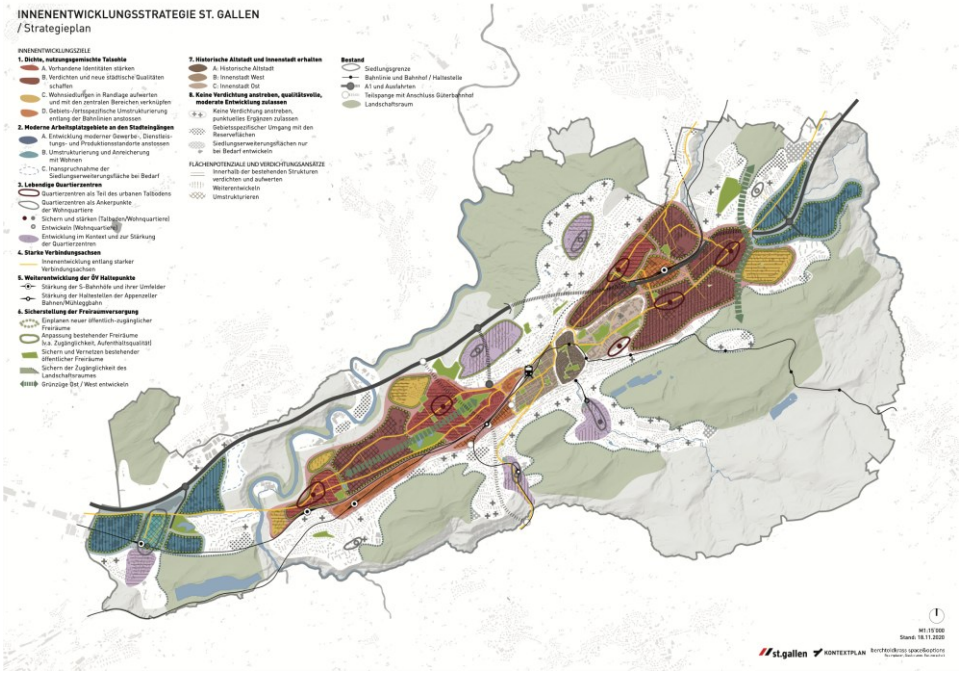

Fig. 5: Densification strategy for St.Gallen. Source: City of St.Gallen, May 2021.

The municipal structure plan (*Kommunaler Richtplan*), amended in 2022, integrates (amongst others) the densification strategy into a plan to develop a high-quality inner development and defines different potentials for the city. The structure plan will feed into the revision of the Building and Zoning Regulation (*Bau- und Zonenordnung, BZO*) by 2027, as mandated by federal and cantonal governments (Richtplananpassung 2022 Aufnahme Strategien / Richtplantext, 2022).

There are two land use planning instruments which allow St.Gallen to further steer densification and sustainability in the housing sector: land leases under building rights (*Land im Baurecht*) and contracts under administrative law (*Verwaltungsrechtliche Verträge*). The municipality can provide land leases to non-profit housing providers and other parties and thus steer to some extent – limited to its own land reserves – where developments happen. In setting up the land lease contracts, the municipality has some leverage as it can set the terms and conditions attached to the building right, e.g. fees below market-rate for non-profit developers (see Section 9.2.1.4). Contracts under administrative law are used in case of upzoning and rezoning. While federal law stipulates that 20% of the added value due to new zoning must be captured by cantons (Duyne Barenstein et al., 2025b), the Canton of St. Gallen does not provide for any value-capture measures in the case of upzoning and rezoning, and does not allow municipalities to set additional rules for capturing added value. Municipalities can therefore only rely on contracts under administrative law (Kantonsrat St.Gallen, 2024). With these contracts, they can capture added value from upzoning and rezoning, and set requirements regarding, e.g., the quality and environmental standards of the development, and the size and mix of housing units.

Another important element influencing densification processes is the Federal Inventory of Heritage Sites of national importance (*Bundesinventar der schützenswerten Ortsbilder der Schweiz von nationaler Bedeutung, ISOS*). This inventory lists townscapes that merit

protection. Importantly, it not only contains buildings, but also streets, squares, gardens, and other green spaces (BAK, n.d.). Cantons and municipalities are required to consider the inventory in their plans. The inventory should enable development whilst maintaining important elements of the built environment and thus increase the acceptance of densification but is sometimes also used to oppose densification projects. As mentioned by the representant of a local NGO, the inventory can also curb gentrification tendencies as it limits development.

9.2.2.2 Energy refurbishments

Already back in 2006, the *Energy Concept 2050* (*Energiekonzept 2050*) was introduced in St.Gallen as a binding planning tool for authorities. Initially it focused on heating only, but in 2011 it was complemented with the topics of electricity and mobility.

As part of the Energy Concept 2050, the Energy Fund (*Energiefonds*) subsidises energy-efficient measures. However, to receive financial support for structural adaptations or sustainable energy generation concepts, building owners must agree to a free energy consultation. With its municipal fund, the city complements the subsidies of the canton and the national government in the framework of the Buildings Programme (*Gebäudeprogramm*). Subsidies are available for sustainable heating, greening of roofs, rainwater harvesting, solar power systems, thermal insulation, etc. (Stadt St.Gallen, n.d.-a). The municipal energy provider (*St.Galler Stadtwerke, sgsw*) contributes to the green transition of the building stock by distributing district heating throughout the city. By 2050, 45% of all heating demand should be covered by district heating.

Fig. 6: St.Gallen Hinterberg, planned refurbishment in valley floor (© Ralph Ribi)

9.2.2.3 Nature-based solutions (NBS)

St.Gallen fosters the implementation of NBS through several policy instruments:

The cantonal Biodiversity Strategy 2018-2025 (*Biodiversitätsstrategie*, 2017) defines strategies, fields of action, and measures to encourage the development of biodiversity throughout the canton (Kanton St. Gallen, 2017). The municipal Biodiversity Strategy 2022-2032 (*Biodiversitätsstrategie*, 2022) is an important instrument for safeguarding and promoting biodiversity within the city. Free consultancies are offered to owners of private gardens and different NBS for residential areas are promoted online (Stadt St.Gallen, 2022a).

The Environmental Concept (*Umweltkonzept*, 2020) takes a conceptual approach to the topics of climate change adaptation and biodiversity and formulates goals in seven areas of action: urban climate, urban nature, radiation, air, noise, soil and water (Stadt St.Gallen, n.d.-b).

With its Tree Strategy (*Baumstrategie*, 2020) the city aims to increase the number of trees in public areas and to maintain them in private areas. The Street Tree Concept (*Strassenbaumkonzept*, 2024) promotes ecological networking and adaptation to climate change in the streetscape. The planned increase in the tree canopy cover on streets from 9% to 25–30% is also intended to improve the legibility of the urban structure (Stadt St.Gallen, 2024).

The Strategy for Open Spaces (*Freiraumstrategie*, 2021) aims to develop concepts for an easier access to parks and open spaces through spatial planning and an active shaping of their quality, functions, and uses (Stadt St.Gallen, 2021a).

With the Urban Area Concept (*Stadtraumkonzept*, 2023), the city aims to strengthen the interconnectedness of green spaces and to promote the greening of streets, although its main focus is on densification (Stadt St.Gallen, 2023).

Stadtgrün St.Gallen promotes biodiversity measures on public land and offers various consultancy services and moderate financial support to private landowners. There are three funding programmes that support private initiatives: one of them pays 50% of the investments in sponge-city projects (*Schwammstadtfonds*), one is for the ecological compensation of a landfill and includes all ecologically sustainable measures on municipal ground and the last one is for other individual ecologically enhancing projects (Beratung und Förderung, n.d.).

Besides the city administration, the association *Grünes Gallustal* is an important actor in the field of NBS. This grassroots initiative supported by the World Wildlife Fund, was initiated by a group of people in 2019. In 2022, it presented a “green masterplan” to the public, a 1500-page study with an extensive vision on how to implement a thorough green transformation in the city of St.Gallen (Verein Grünes Gallustal, 2022). The city administration and political actors have acknowledged the initiative’s concepts and use them as an informal yet influential green master plan. Several pilot projects are currently underway, and videos are being produced to support its educational goals (Verein Grünes Gallustal, 2022).

9.2.3 Methods

This case study report focuses on civic perceptions of green transition interventions and of their interlinkages the housing market in St.Gallen. In this city greening measures are implemented in a fine-grained yet comprehensive manner and cannot be narrowed down to isolated large-scale projects. Accordingly, the report does not focus on a single, clearly delimited intervention. Instead, we examine the overall state of implementation of urban renewal, energy efficiency projects, and greening measures in the city, and their effects on the housing situation. The interviews explored these dynamics by drawing on multiple sites as illustrative examples and points of reference. The perceptions, which tend to focus on the city's situation in general, include the views of various stakeholders: private investors and developers (for-profit and non-profit, e.g. cooperatives and foundations), public actors (members of the city council or representatives of the city administration), academic experts, and civic actors (i.e. NGOs, activists, media, etc.). As a core research method, we used semi-structured interviews focusing on green transition initiatives, housing, social sustainability in housing in relation to the green transition, and issues of multi-level governance. For the case of St.Gallen, we conducted 14 interviews between June and September 2025. Interviewees include members of the city council (including the mayor), representatives of the city administration, members of political parties, local associations and businesses, and researchers (See Annex 2 for the full list of interviewees). We used our preexisting knowledge from secondary data, preliminary visits to the case study city and form Policy Lab #1 (a workshop with stakeholders from the case study cities and from cantonal and national level in April 2025) to identify and contact an initial set of interviewees. Further interviewees were recruited via snowball sampling and through online research aimed at identifying relevant organisations.

Interviews lasted about one hour on average, and were conducted either in person, via video call or on telephone. Interviewees were asked to give informed consent. Interviews were audio-taped and later transcribed using the software *Buzz* which runs on OpenAI's speech recognition model *Whisper*. We manually edited initial transcripts generated by AI to produce the transcripts used for coding. Coding was aided by the software MAXQDA and was performed with the transcripts in their original language (German). Quotes used in this report are translated to English by the authors.

This report also relies on the analysis of grey literature, reports, legal documents, plans, and statistical data. It also draws on previous research in the framework of the ReHousIn project on housing inequalities in Switzerland (Widmer et al., 2024), environmental and energy policies (Duyne Barenstein et al., 2025b), and the Swiss housing system (Duyne Barenstein et al., 2025a).

9.2.4 Civic Perceptions of Green Initiatives in St.Gallen

9.2.4.1 Precedents and implementation

Perceptions of the city

This section focuses on perceptions of St. Gallen as a city and examines how its structural conditions shape the current housing situation and green transition initiatives. In several interviews, the city's regional position, political orientation, and tax framework were identified as key foundations of contemporary local housing developments. Many stakeholders characterize Eastern Switzerland as a relatively peripheral region with limited economic attractiveness (see appendix 8. Visuals, Figure 3). It remains largely unknown internationally and operates as an economic area distinct from Zurich, the country's primary economic centre. All informants share the view that the market pressure from Zurich has not yet reached St.Gallen, as the distance between the two cities makes commuting relatively uncommon (P48:4; P49:3; P50:66; P43:92). Nonetheless, frequent comparisons with Zurich reinforce the perception among several interviewees that St.Gallen is lagging behind in both legal and political development (p47:9). An administrative representative noted that Winterthur—a city situated between St.Gallen and Zurich—benefits more directly from Zurich's housing crisis than St.Gallen, as it absorbs displaced residents and increasingly functions as a commuter city (p50:71). This view was corroborated by an urban researcher, who noted:

> "I do not believe that the pressure from Zurich has already reached St. Gallen, because it is a completely different economic region."
>
> (250826_P43_SG_Transcript, Pos. 41)

Civic actors regard St.Gallen as the region's urban centre, where social services, employment opportunities, and essential infrastructure are concentrated. It attracts large numbers of commuters from surrounding municipalities, and its urban fabric is significantly shaped by infrastructure for cars, which civic actors now regard as a nuisance (p47,3,74,: p42,p38).

St.Gallen stands out in contrast to the cantonal political orientation: while the conservative right-wing party (SVP) is well represented in the cantonal council, it only has a few seats in the city parliament. Interviewees observe that the political orientation of St.Gallen's city council has changed in the past 30 years: awareness about green and environmental topics have increased significantly (p47: 3). There is a consensus that green topics currently enjoy strong support, both by the city parliament as well as by the city council (p50:28), and it was noted that over the past five years St.Gallen has introduced a range of new strategies addressing sustainability, biodiversity, and densification (p49:3). Nonetheless, some administration representatives argued that the region's relatively cool climate, which makes the effects of the climate crisis less immediately perceptible, leads to rather limited public awareness and political pressure for climate adapation or mitigation measures (p50:102). Within the city's geography this leads to a clear spatial disparity: the inner-city valley floor experiences more

heat days and is home to lower-income groups, while higher-income households tend to reside on the cooler, greener hillsides or in the surrounding municipalities. (p.47:43, P50:93).

Perception of green policies in St.Gallen

In St. Gallen, greening measures are implemented incrementally across the city rather than through isolated large-scale projects. Accordingly, this case study does not focus on a single intervention but examines the broader implementation and effects of urban renewal, energy efficiency, and greening measures.

There is a broad consensus that the municipality is aware of the importance of greening and climate adaptation and is investing in several related projects. Especially NBS topics have a very good stand in parliament and council. The ongoing revision of the Building and Zoning Regulation (BZO) is expected to integrate both densification and greening objectives into local planning rules. The municipality identifies significant potential—and need—for greening and high-quality outdoor spaces, particularly in the valley-floor areas of the city. According to a green civic organization, public concerns are largely financial: residents question whether St.Gallen can afford the city's green transition or whether greening is an unnecessary luxury. At present, public greening projects frequently face strong criticism from the liberal party in parliament. As most urban green space is privately owned, the cooperation with private owners would be integral for a green urban development, however this is described as difficult by a non-profit actor:

> "Firstly, the pace of change is too slow. And that is not necessarily due to politics alone, but primarily to the owners of the property."
>
> (250815_P39_SG_Transcription, Pos.32)

The City of St. Gallen has a range of instruments at its disposal to pursue its densification objectives, which have been listed above in Section 1.2.1. However, key instruments for local implementation—such as the municipal structure plan (*Kommunaler Richtplan*) and the Building and Zoning Regulation (*Bau- und Zonenordnung*, BZO)—have only recently been amended or are still pending revision, making their effects difficult to assess at this stage. In a neighbourhood-specific analysis (*Quartierprofile St. Gallen*), the City of St. Gallen evaluated the densification and housing potential of each area and has started to implement the adaptation of public areas according to their densification plan (*Innenentwicklungsstrategie*). Regarding densification, civic actors note that projects are often delayed or blocked by objections and political procedures, frequently motivated by neighbourhood initiatives to preserve existing green spaces. This is considered problematic for urban development, which increasingly depends on utilising the few remaining undeveloped plots (p. 42:56). These small-scale interventions form part of the municipality's densification strategy, which prioritises densification along the valley floor. Although newly constructed buildings invariably increase density, the issue of densification as a planning imperative itself surfaced only marginally in most interviews.

The municipal Energy Concept 2050 (*Energiekonzept 2050*) is considered effective and remains on track to achieve its stated objectives (Stadt St.Gallen, 2025b): The accelerated expansion of district heating is progressing according to plan toward the 2040 target. Since 2010, energy-efficient building renovations have reduced heating demand by approximately 20 percent. In addition, over the past three years, an average of 70 percent of heating systems have been converted to renewable energy sources. However, according to the perceptions expressed in the interviews, energy-efficient renovations in St. Gallen also face challenges. Although the non-profit sector, the municipal real estate department, and some private owners refer to having plans for refurbishing their existing stock, there is no sign of a broader refurbishment wave. Non-profit developers observe that private owners avoid investing in their buildings, instead rent them out until they decay whereafter they resell them for profit. By leaving major refurbishments to subsequent owners, they avoid investments, because the market conditions allow only a partly passing on of the costs to tenants (p39:35,40).

Concerning NBS, one of the most significant actors in the local debate on the green transition is the NGO *Grünes Gallustag* (GGT). The organization acts as a key reference point for greening projects at various scales, and its published concept of a citywide green network serves as a guiding framework for urban development. The city council has confirmed to realize the 14 proposed measures by GGT in the next 20 years, starting with different pilot project of which several have already been finished[163] (Grünes Gallus Tal, 2022). Actors of the non-profit housing sector are already applying the 'green formula' developed by GGT in their projects, and the organization's digital tools for ecological planning have gained recognition all over Switzerland (p38:4) *Grünes Gallustal* explicitly mentions green space equity *(Grünraumgerechtigkeit*) as one of its goals, pointing out that greening must be realized comprehensively in order to limit internal migration which can lead to gentrification and displacement:

> "I can only see one advantage for residents if greening is implemented comprehensively. (...) Because internal migration is not encouraged if a comprehensive approach is taken."
>
> (250814_P38_SG_Transcription, pos.4)

[163] Pilot project realized: Areal Bach, Kinderbaustelle, HEKS Gärten
- Pilot project realized: Migros Lerngarten
- Pilot project planned: Baumring am Spelteriniplatz
- Pilot project realized: Privatgarten im Tal, Privatgarten am Hang
- Pilot project proceeding: Baumboulevard am Oberen Graben
- Pilot project proceeding: Lebendige St. Jakobstrasse/ Langgasse
- Stadtgrün St. Gallen realized: Stadtbaum Poststrasse
- Stadtgrün St. Gallen realized: Naturpark Burgweiher

9.2.4.2 Participation and governance (procedural)

Perceptions of housing politics

The canton of St. Gallen, like most cantons in Switzerland, has no cantonal housing policy beyond the implementation of federal housing-promotion measures, a fact, which is being regretted by an administrative representative (P30). In St.Gallen city, however, administrative, academic, and civic actors describe a growing sense of optimism on the local government's commitment towards housing issues. A housing researcher confirms a growing political attention to the housing question, reflected in public events, strategies, and efforts to strengthen collaborations with diverse stakeholders (p49:3):

> "They are interested in this topic and willing to invest time in getting involved. (…) They have also, as part of the housing strategy and even before that, been active in networking issues. That is, networking with the players in the housing market by holding regular events. (…) And then it's about everything from governance issues to active land policy and cooperation with cooperatives."
>
> (250909_P49_SG_Transcription, Pos. 3)

As part of the new housing strategy, a study on the availability of affordable housing in St.Gallen has been made in 2021 (*"Günstiger Wohnraum in der Stadt St.Gallen; Postulatsbericht»).* Administration actors point out that the evaluation found that there is sufficient affordable housing in the city and that this should not be the main focus of the strategy (p50:52, p37:5). The strategy instead gives clear directions on what types of housing should be built, prioritizing support to projects that create family-oriented housing (p37:5). However, civic and administrative actors emphasize that the municipality does not have the required financial resources to promote the desired innovations, neither on its own housing stock, nor by funding third parties (p49:3, p42:5, p43:46, p41:5). As a result, the city dependents on private investors and housing cooperatives to initiate larger-scale developments (p42:73). This presently leads to a growing political interest in granting more leaseholds to the non-profit sector (p37:5) reports a member of the administration.

Several non-profit actors and civic representatives emphasize that the instruments available to promote affordable housing so far have not been sufficiently used (p40:6, p38:24). A civic actor expressed regret over the adoption of a counterproposal to a Social Democratic (SP) initiative that sought to strengthen the municipal council's promotion of non-profit housing, as it resulted in the elimination of a 10-million-franc fund:

> "Parliament approved the counterproposal, so we withdrew the initiative. There was no major debate either; the regulation now exists, but it is not being applied at all."
>
> (250826_P42_SG_Transcription, Pos. 60)

Moreover, the 12-million-franc fund for affordable housing — available since 1991 — is mentioned to be underutilized. Furthermore, multiple representatives of the non-profit sector identify the withdrawal of land from speculation as the most important instrument to tackle the housing question, noting that it contributes to stabilizing rents over time. Therefore, they strongly argue that the public sector should actively purchase land, describing this as a valuable public investment that yields slow but reliable returns for the municipality (p39:42,103). For the administration, however, participation in bidding processes remains procedurally and financially challenging (p37:5, p40:6). In response, the municipality has decided to grant the city council greater financial authority, allowing for faster real estate acquisitions without requiring approval from the municipal parliament (p41:5). Different actors seem to agree that a strengthening of public land politics will favour urban development.

Perception of governance processes and public administration

The political orientation of the municipal council of St.Gallen differs significantly from the cantonal one. This divergence is particularly evident in matters of urban green transformation: while municipal representatives align themselves with national sustainability goals, they mention resistance from the canton regarding their local greening initiatives and traffic calming goals (p47:36, p50).

The previously mentioned ecological orientation of the city council proves effective in advancing environmental policies, especially in collaboration with its so-called 'green parliament' (p51:102; p47:3; p50:18,20; p42:3). This political configuration does not align with the interests of private, for-profit developers, who feel that the expectations on ecological standards in new projects are too high. Generally, both non-profit and for-profit stakeholders find the administration of St.Gallen a pleasant and reliable contracting partner (p39:87). Only some for-profit actors perceive the feedback on projects by the different public instances as inconsistent, as they might switch their focus between densification and ecological measures (p51:50,57).

Conversely, the current government is viewed positively by the non-profit housing sector. Yet one member of parliament describes an overwhelming dominance of the green alliance, noting that social initiatives often need to be framed as ecological measures to gain parliamentary approval, as illustrated by the following quote from a member of parliament:

> "But the main focus in everything is actually on green, ecological issues rather than social issues. There is simply not enough pressure in this area, simply because of the majorities."
>
> (250826_P42_SG_Transcript, Pos. 92)

The non-profit sector also observes a high turnover of parliamentary members, which leads to a loss of expertise on housing issues (p39:129). A representative of the non-profit sector suggests that these structural challenges are closely linked to the direct democratic system, which grants considerable influence to short-term political majorities. While the non-profit sector values the municipality's housing strategy, it considers it insufficiently bold to effectively curb speculation (p39:102). Some actors criticize the municipality for implementing existing instruments intended to promote innovative housing and greening measures too slowly (P42,

P39). According to the administration, however, their current focus on specific housing typologies reflects a deliberate strategic choice rather than a failure to address the broader picture, as is illustrated by the following quote from a member of the administration:

> "(...) Because what is lacking in the city of St. Gallen is family housing. And so, what has changed there is that we are now more consciously promoting the things that are in short supply in the city.»
>
> (250812_P37_SG_Transcription, Pos. 5)

Private developers as well as members of the municipality mention the regular use of contracts under administrative law to capture value added in case of rezoning or land exchange. The municipality thereby circumvents a shortcoming of the city's regulatory framework. These taxes are mostly re-invested into the local environment and allow the municipality to develop public spaces (P51:2, p41:5). In case of such neighbourhood developments or park renewals, civic actors report that participatory processes are a regular component in St. Gallen and that an official participation ordinance is in place:

> "They really do that, and I think it's very good, with really large-scale participatory processes in advance. And that leads to a lot of things, and it can also... well, it also gives the population a different experience of development, let's say of the city."
>
> (250826_P42_SG_Transcript, pos. 121)

From this perspective, the administration is generally receptive to suggestions and civic involvement (p. 42:5, 121, p. 41:5). In practice, however, participation tends to be limited and dominated by well-educated and socioeconomically privileged groups, as another civic actor reports (p. 47:3):

> "Yes, they always set up a participation process when they establish something like this. But there is simply the experience that mostly Swiss citizens and a few foreigners get involved in the participation process. And the vast majority don't really care. Here, in the area where I now live, a communal space is planned. The response rate to the survey was 12 or 13 per cent. That's relatively low. But it doesn't bother the others either."
>
> (250826_P47_SG_Transcription, Pos. 3)

9.2.4.3 (In)equity (distributional)

As mentioned in Section 3.1, many interviewees consider St.Gallen to be the region's urban centre, concentrating most social services and workplaces. They consider it inequitable that the city receives no cantonal compensation for the social costs of accommodating the disproportionately high number of socially disadvantaged residents who settle there (p47:39; p41:5). The tax levels in the city are perceived as relatively high (p41:5; p49:3), contributing to an imbalance between the city's slow growth and the prosperity of adjacent municipalities that attract wealthier residents, amongst other reasons, with lower municipal tax rates. An administrative official suggested that neighbouring municipalities lack incentives to develop affordable housing, as St. Gallen attracts lower income residents and therefore carries a large share of social costs alone:

> As long as one municipality in particular has to provide for the socially disadvantaged and there is no compensation within the region or within the canton, regulations for social housing are difficult to implement.
>
> (250826_P41_SG_Transcription, Pos. 5)

These perceived "burdens of centrality," associated with the role of larger municipalities within predominantly rural regions, are a common feature in Switzerland. Differentiated municipal tax rates contribute to imbalances in attractiveness for high-income taxpayers, thereby reinforcing spatial and fiscal disparities.

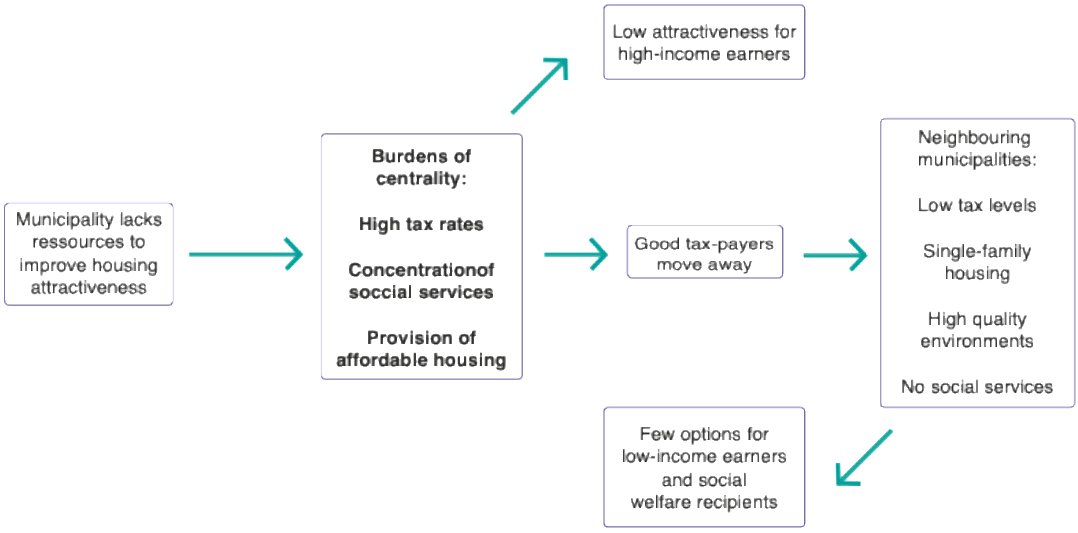

Fig. 7: Perceived vicious cycle of low tax income in St.Gallen compared to the region

9.2.4.4 Political mobilization

Political mobilization in EEP

In recent years, there has been a remarkable increase in public interest in environmental and energy policies (EEPs) in St.Gallen. Awareness on climate-related topics has spread in civil society, facilitating a public discourse, as observed by academic and civic interviewees. Issues such as urban greening and tree protection have mobilized many residents, and the administration reports feeling increasingly held accountable by the population on related issues (p50:32, p34:5). An academic actor comments:

> "I can see that in the city of St. Gallen, both politicians and civil society have been paying a great deal of attention to urban greening and climate adaptation projects over the last three to four years, let's say. These are also being demanded, they are being called for, and this is being communicated."
>
> (250826_P43_SG_Transcript, pos. 11)

However, much of this engagement remains highly localized, often driven by small resistance groups opposing developments in their immediate neighbourhoods. These neighbourhood protests, which frequently prioritize the preservation of green spaces over the development of new housing or other public projects, are considered problematic by both civic and administrative actors. They highlight an underlying conflict between the goals of greening and the need for additional housing or infrastructure (p49:3, p42:56, p37:5).

Various stakeholders agree that the NGO GGT is the most prominent advocate for green spaces in St.Gallen. The municipality frequently accepts and finances its proposals for greening projects across the city, a representant of GGT explains the process:

> " We always make suggestions for improvement. And then one or two things come in. There are always about 20 projects underway. And we get involved in all of them because we know there is funding available. And the funds should be used properly. So we no longer have to fight for fundraising, because the funds are already there."
>
> (250814_P38_SG_Transcription, Pos. 4)

Beyond these initiatives, GGT is also politically active and currently participates in the revision of the Building and Zoning Regulation (*BZO*) (p. 38:4). Other actors—such as nature conservation organisations and several political parties—are also actively involved in this revision process.

Political mobilization in housing

In St.Gallen, various interviewees agree that there is no substantial political debate on housing issues, nor any real problematization of profit-driven developments or gentrification (p49:3,

p47:40, p51:88, p41:5). According to the administration, most political parties refrain from taking clear positions on housing issues (p41:5). One civic actor noted that, due to the absence of an active political discourse, most changes in the housing sector are driven by practical circumstances — such as generational shifts in ownership or national regulations — rather than by local political initiative (p47:80). Overall, there are not many public conflicts concerning housing, people seem to feel neither threatened nor particularly pleased about the current situation (p41:5). There is no organized movement for housing rights (p47:16, p42:58, 84), but localized engagement can be observed in certain parts of the city, particularly in areas with more highly educated and bourgeois residents, who participate or antagonize in projects that would change their direct neighbourhood, for example replacing a green space with public infrastructure[164] (p47:3).

One notable instance of civic mobilization is the *igRuckhalde*, an association advocating for an early participatory involvement of the civic society on one of the few remaining building sites in St.Gallen. As the development of this particular area is being postponed, the municipality has trusted the group with the participatory development of a non-profit housing project nearby (*Guyerhof*) (P42).

Beyond such small-scale initiatives, stakeholders largely agree that the most influential housing cooperatives—*BAWO* and *WBG*—are the principal political actors, wielding significant influence on housing policy (p41:5, p39:116, p40:6). The non-profit sector remains the primary forum in which concerns about rising rents are voiced; however, even here, the momentum for organized resistance is limited (p39:178, p40:6). From a civic perspective, the stress perceived by individual residents appears insufficient to trigger collective action or public protest:

> "But the pressure isn't high enough, so it's not like the housing protests in Zurich, for example. That would be unimaginable in St.Gallen; no one would turn up. People aren't personally affected enough."
>
> (250826_P42_SG_Transcript, Pos. 58)

9.2.4.5 Socio-ecological impacts/ benefits (positive)

Overall, responses highlight generally positive social effects of broader housing conditions, yet did not explicitly attribute these outcomes to specific EEPs. Rather the benefits of the local housing market and the general improvement of liveability without major danger of gentrification were mentioned as positive.

[164] A good example for this is the initiative Wiesli (*Wiesli Initiative),* with which in 2020 a civic group protested the densification of their neighbourhood at the cost of green space and meeting zones. While their initiative was ultimately rejected in a popular vote, it created a big discourse about the involvement of residents in city development (Initiativkomitee 'Wiesli-Initiative', 2023)

Benefits of the local housing situation

Eastern Switzerland is widely recognized for having a high vacancy rate compared to the national average. This stable supply of housing is discouraging for investors and property owners, but --as observed by an administration representative-- it supports municipalities and tenants by contributing to price stability (p50:38, 41):

> "Eastern Switzerland is under less pressure in terms of housing in general. We also have a high vacancy rate. We have that, and fortunately it is at a healthy level for tenants at the moment. Property owners would then say that it is too high because it also pushes down prices."
>
> (250910_P50_SG_Transcription, pos. 38)

In St.Gallen, rents are considered moderate even in the city centre (p43:37), and there is an adequate supply of both affordable (p41:5) and subsidized housing for vulnerable groups (p50:49). There is a broad consensus among all stakeholders, that although new buildings tend to be more expensive and renewal processes are rarely carried out in socially sustainable ways, the existing older housing stock continues to provide sufficient affordable options (p51:68, p47:4,p48:4., p43:22 p41:5, p37:5, p38:4).

Positive social impacts of EEP

Most interviewees agree that, at present, gentrification driven by green transformation is not considered a major risk in St.Gallen—particularly if greening is implemented gradually across the entire city rather than concentrated in a few selected areas (p38:4). A private developer states:

> "Gentrification is not an issue in St. Gallen. It is not an issue because there is simply enough affordable housing in the city of St. Gallen."
>
> (250901_P48_SG_Transcription, Pos. 4)

While gentrification does not appear to be a major concern, *social mixing* is an explicit goal of the municipality and is regarded by civic actors as a positive outcome in several development areas in St.Gallen (p50:91, p38). Areas with a 'bad' reputation are being targeted for greening and valorisation with the aim of attracting different social groups, as indicated by a public actor:

> “And what is very noticeable, of course, is that the wealthier people live more in the hills. They have a nicer view and the location is also more expensive. And in the valley, the entire length of the valley, there are neighbourhoods everywhere that are perhaps less attractive now. (…) It is actually the responsibility of the city to ensure that good quality housing is also available in the valley areas. And that is where we would like to enable more inner-city densification, but also ensure that there is beautiful, good open space. They said that they want to build new flats in the whole neighbourhood. These are entire block, so a great many, where property has been sold in order to achieve a better mix.
>
> (250910_P50_SG_Transcription, pos. 90-91)

Interviewees frequently identify three development areas that are currently undergoing notable socioeconomic change (see appendix 8. Visuals, Figure 5), a process that is predominantly framed as beneficial:

- Linsenbühl: Greening of a former red-light district in the inner city and partial refurbishment of the old stock of low-quality housing. Residents reportedly requested greening and valorisation of the streets. Although housing prices are increasing, civic assessments suggest that the social mix and overall liveability of the neighbourhood are improving (p42:37).
- Lachen-Quartier: The development of a new luxury apartment tower and the enhancement of a nearby park have, according to various stakeholders, catalysed an improvement of the social mixing, with more Swiss residents moving into an area previously inhabited primarily by lower-income foreign nationals (p50:90, p38). Members of a green NGO suggest that gentrification is unlikely in this area, given that noise pollution from the nearby street limits the potential valorisation of low-quality buildings directly exposed to traffic (p38:4).
- Areal Bach, St.Fiden: Plans for a new park have triggered a broader redevelopment of the area. Currently different interim uses are reviving the area culturally entailing a new sense of neighbourhood. Civic voices claim that gentrification will not occur due to protection regulations of the townscape and the small size of the existing apartments (p38:4).

9.2.4.6 Socio- ecological impacts/harms (negative)

As discussed in Section 3.1, ecological measures are generally perceived positively in St. Gallen. Accordingly, survey discussions largely shifted away from environmental considerations and instead concentrated on the adverse social implications of energy efficiency policies (EEPs) and on broader issues related to the local housing situation. For this reason, the following section does not address ecological impacts.

Dangers of the local housing situation

Section 3.5 showed, that due to a relatively high vacancy rate, currently there is no affordable housing shortage in St.Gallen. However, private for-profit investors and some civic actors question the relevance of the vacancy rate as an indicator, noting that much of the older housing stock is small, outdated, and in poor condition, which may be a reason why it remains vacant, as typical tenants prefer newer buildings (p47:6; p48:4). Thus, the vacancy rate is considered misleading: affordable housing exists, but it is often unattractive and of low quality (p49:3). Even voices from the administration question the qualitative adequacy of the housing supply in St.Gallen, especially for people with higher incomes (P51, P48). There is a recognized shortage of newly built, high-quality housing, particularly of typologies suitable for families, elderly people, and intergenerational living (p41:5). Interviewees frequently identified two groups as having particularly restricted housing prospects: young families looking for attractive apartments and residents interested in alternative housing models (p47:45, p48:4, p39:3).

> "The city of St. Gallen, at least, says that it suffers from being insufficiently attractive. (...) Families in particular are moving away from St.Gallen because they want to move into cheaper, larger properties and houses. (...) And the urban space available is apparently not attractive enough for families or larger households."
>
> (250826 P43 SG Transcript, Pos. 22)

Although most interviewees currently do not view displacement as a major problem, there are nonetheless cases in which tenants face contract terminations with no possibility of returning to their apartments after they upon completion of refurbishments as they cannot afford higher rents. According to the tenants' association, the groups most affected are those already structurally marginalised—migrants, social assistance recipients, single parents, and the elderly. Still, displacement is generally not perceived as a major threat, as most tenants are able to find alternative accommodation in or near their neighbourhood (p34:5), albeit often at the cost of lower housing quality. Some non-profit actors assume that these groups merely lack a voice to problematize their housing situations (p39:175) and accept a low standard, as long as the rents stay low (p34:5):

> "(...) At some point, when I have a large housing estate that needs a major overhaul, that's just the way it is, isn't it? And then you get pushed out and have to see if you can find something suitable in the city. And you don't always find something equally good for the same price. (...) It's not a huge issue that you read about in the newspaper or anything. But that doesn't mean it doesn't cause a lot of suffering. In some cases, it also affects social classes that have no voice."
>
> (250815_P39_SG_Transcription, pos. 174-176)

Negative social impacts of EEP

Costs for energy refurbishments in Switzerland can be passed to the tenants, leading to rent increases. Moreover, the tenants' association is confronted with cases where the subsidies for refurbishments are wrongfully not being deducted from rent increases, which can be difficult for tenants to detect themselves (p34:5). Instances of displacement occur where deteriorated older buildings are demolished or extensively refurbished — processes that disproportionately affect marginalised groups and older residents. The administration acknowledges that opportunities for low-standard, low-cost housing are steadily declining (p. 47:42, p. 50:47). As a result, older people who previously lived in such buildings at low rents may face substantial rent increase or displacement. A non-profit actor points to the political dilemma this entails. In fact, when rents exceed what residents can afford with their minimum pension, the municipality has to provide higher additional state benefits (*Ergänzungsleistungen*). Ultimately, elevated rents—and thus the profits of private landlords—are indirectly financed by the public sector (P39). Nevertheless, various civic voices interpret the upgrading of certain areas or buildings—and the accompanying rise in housing prices—as a form of 'good gentrification,' arguing that replacing buildings of very poor quality is necessary (p38:4).

Furthermore, a civic organization observed that lower-income groups are often hesitant to advocate for green spaces, fearing that such measures could trigger rent increases or contract terminations (p38:4):

> "And then they said, yes, of course we would enjoy having green spaces, but we're afraid that the rents will go up, that the landlord will come and say, now you're better off and so on. So you can see that they can't get involved, they have no voice."
>
> (250814_P38_SG_Transcription, pos. 4)

Low-income groups seem to concentrate in areas where no measures have been taken. This aligns with other statements regarding the social impacts of insufficient environmental and

> "I read somewhere recently that rents are the new city walls. Those who cannot afford rent have to stay outside the city walls. And they can no longer really participate in city life."
>
> (250821_P34_SG_AM_Transcription, Pos. 7)

energy measures. Researchers note that the areas subject to the highest heat stress and lowest environmental quality, i.e. those on the left and right side of the railway tracks, are those where most affordable housing is located (p43:37). Similarly, the streets with the highest levels of noise pollution are predominantly occupied by the poorest residents (p34:7). These areas are oftentimes excluded from green urban development, according to a representative of the tenant's association:

According to the tenants' association and other civic voices, investors generally avoid these areas, deliberately leaving many buildings in a state of neglect ("*Gammelhäuser*") to minimize maintenance costs (p42:90; p38:4). The non-profit sector interprets this as a common profit-maximization strategy: landlords avoid investing in their properties and instead resell them later at higher land values (p39:35, p40:6). But also the municipality owns several aging

residential buildings in need of refurbishment but cannot afford extensive renovations due to financial constraints, as pointed out both by administrative and academic sources (p50:103, p49:3).

The non-profit sector, in contrast, views their energy refurbishments as socially sustainable: they improve long-term housing quality and, through climate measures, reduce costs for tenants. While such refurbishments unavoidably lead to rent increases, non-profit actors seek to mitigate negative social impacts by offering tenants the right to return, providing alternative housing options, and by minimizing gross rents as much as possible through energy savings (p39:17, 39, 149).

9.2.4.7 Tensions and power dynamics between stakeholders/actors

To examine the power dynamics among these actors, this section first introduces the key stakeholders shaping St. Gallen's housing landscape. Perceptions of tensions and contradictions within the local housing sector vary according to stakeholders' respective roles and positions. Nevertheless, due to the relatively low pressure on the housing market, no major conflicts are observed among them.

Housing actors in St.Gallen

St.Gallen's housing landscape is characterized by a diverse set of stakeholders whose organisational structure and profit orientations determine their perspectives on the green transition and housing affordability. While their assessments of the city's current situation often align, their views on the appropriate level of public intervention diverge: Most for-profit developers call for a reduction in regulation, whereas non-profit organisations and the civic society urge the municipality to pursue a more proactive land and housing policy. In the following section the three most important actors are portrayed.

Private for-profit investors

In St.Gallen, like everywhere in Switzerland, small-scale property owners are increasingly being replaced by corporate housing developers (p49). Moreover, large private developers perceive significant potential in the densification of less central regions such as Eastern Switzerland: unlike in high-pressure metropolitan markets—characterized by very high land prices, stringent regulatory requirements, and frequent delays due to public objections—weaker markets entail lower investment costs and reduced risks (p48:4).

According to civic actors only private for-profit developers can afford to develop large urban areas in St.Gallen (P42:73). Therefore, they play a significant role in the city's development. Some profit-oriented players actively draw private owners' attention to the potential for densification and development of their properties. This approach is viewed critically by non-profit and civic stakeholders, who are acutely aware of the profitability of real estate funds and note that for-profit actors often acquire far higher profits than the tenancy law technically permits (p34:5). They fear that densification is increasingly becoming a vehicle for maximising returns on land rather than a means of achieving higher use-density (p39:67, p38:4).

While private for-profit developers are seen as important partners for the municipality to implement the housing strategy, civic actors report that they build foremost small units which are considered more profitable, instead of the larger units for families which are needed (p42:58). They furthermore perceive for-profit investors as hesitant to invest into ecological measures, if not required by law (p38:4) (p49:3). The municipality therefore regularly uses contracts under administrative law to regulate housing typologies and to demand climate adaptions.

Citizens' community (Ortsbürgergemeinde)

The local citizens' community (*Ortsbürgergemeinde)* of St.Gallen is an organisation that owns and administers commons such as land, forests, and real estate on behalf of its members. Historically, it played a significant civic role in the city, operating public services including schools, hospitals, housing, and homes for the elderly, and issuing long-term leaseholds with building rights to non-profit housing developers (*Gemeinde – Ortsbuergergemeinde*, n.d.). The citizen's community never fulfilled political functions and does not take explicit political positions. Because it has traditionally been financed through returns on its own capital rather than tax revenues, it is structurally dependent on maintaining profitability. At present, surplus income from its real estate portfolio is used to cross-subsidise other areas of its activity. Despite its unpolitical nature, the goals of the citizen's community align with a conservative-institutional logic, with an emphasis on profit-oriented asset management (p51:6,7,32). Two perspectives on the current behaviour of citizens in the market, the first by a civic actor, the second by a representative of the non-profit sector:

> "The citizens' community are also very important players. (...) Well, they grant building rights and are also active as investors themselves. They are already somewhat caught up in this profit-oriented mindset."
>
> (250814_P38_SG_Transcription, pos. 4)

> "And the citizens' community wants to earn money with its building rights. It has also put some building rights up for tender, where you can then bid for the building lease rent in a bidding process. The speculative elements are back in building law."
>
> (250815_P39_SG_Transcription, pos. 156)

In St.Gallen, the citizens' community remains an important actor with substantial influence on the housing market (p38:4). Many of the historic leaseholds which they gave to non-profit housing developers below market value, which guarantee affordable rents (p51:32), will expire within the next 10–20 years. The non-profit housing sector is advocating for an extension of these contracts to preserve affordability. However, citizens' community's reliance on real estate profits restricts its willingness to grant new building rights to non-profit organisations at favourable terms under the current market conditions (p39). As a result, non-profit developers are effectively excluded from current land-allocation competitions for its sites (p42:50,111; p39:159). However, the public administration as well as private for-profit developers, describe

them as great development partners balancing sustainability goals and social factors like varying housing typologies.

Housing Cooperatives

According to a representative of the cooperatives in St.Gallen, most building and housing cooperatives are around 100 years old and originate from workers' organisations. They emerged as practical responses to historical housing shortages rather than as ideologically driven reform projects. For these necessity-driven cooperatives, the relatively low housing pressure in St.Gallen is not conducive to growth or renewal (p48:4). Today, representatives both from the non-profit sector and the civic community describe these cooperatives as stagnating and slow to innovate (p39:52; p42:24). Smaller cooperatives are regarded as unprofessional and marginal actors (p39:151), which effectively leaves the task of renewing the housing stock to profit-oriented developers. The representative of a cooperative comments:

> "Because the local cooperative scene is also relatively sluggish. These small, nicely run voluntary cooperatives are simply not professional enough for growth, sales and market presence. We need to move away from part-time, voluntary cooperative stuff. They need to have a board that makes decisions, but operationally they need to have professionals."
>
> (250815_P39_SG_Transcription, pos. 151)

Despite these limitations, non-profit housing still accounts for 8.2% of the city's housing stock (Urban, 2023) (250812_P37_SG_Transcription, Pos. 5), and the municipal administration reports an increasing political pressure to expand this share (p37). Interestingly, in St.Gallen, the few currently active cooperatives are not appreciated for their role in the provision of affordable housing, but rather as catalysts for innovation in housing typologies—a view shared by several stakeholders. The administration acknowledges the need for municipal collaboration with cooperatives to implement its housing strategy, particularly regarding family-oriented and alternative housing forms (p50:59). The remaining public land is planned to be developed primarily by cooperatives. According to both civic and non-profit actors, the two main cooperatives in St.Gallen *(BAWO* and *WBG*) are urging the municipality to actively acquire land on their behalf.

The non-profit housing sector also understands itself as fulfilling another key role: For example, the cooperative *WBG* and the foundation *Hausen and Wohnen* acquire and refurbish old, often abandoned building stock—an activity considered insufficiently profitable by the private sector. In this capacity, the non-profit sector positions itself as an ideological pioneer and role model in the green transition, promoting refurbishment as a viable and sustainable alternative to demolition and new construction. At the same time, these institutions serve as a refuge for residents of these substandard dwellings (p. 39; p. 40), offering them affordable options and preventing their displacement.

9.2.4.8 Perception of contradictions and tensions by different actors

Public actors

As argued by most respondents, the city administration faces multiple challanges: According to members of the administration, a quick ecological transition is not affordable to a city like St.Gallen. This is evidenced by the substantial refurbishment backlog even in the public building stock (p50:31, 103, 106). Furthermore, there is an internal conflict within the administration and between municipal and cantonal politics on whether to prioritize green or grey infrastructure. Civic voices observe a competition between ecological measures and the maintenance of mobility infrastructure and parking plots (p47:31,36) (p42:32), as well as between densified housing projects and green areas.

Second, green objectives are officially prioritized over social concerns. Local government law positions climate, ecological, and biodiversity goals above the development of housing and public space—a hierarchy acknowledged by developers, civil society, and the administration (p48:4, p42:92, p41:5). Private developers experience this tension when the municipality's high ecological standards lead to more sustainable project solutions, but also to higher construction costs, as additional ecological investments inevitably entail higher rents. The same dynamic contributes to neglecting participatory processes: greater social inclusion requires additional resources, whereas developments without participatory processes preserve budgets that can be allocated to ecological measures, as argued by a private investor (p48:4).

Third, the municipality faces a social dilemma caused by its regional role: it aims to provide sufficient affordable housing while simultaneously avoiding a further influx of low-income residents from neighbouring municipalities (p41:5).

> «And we also have significantly lower rents than Zurich. And it's not always that easy for investors, because construction prices in St. Gallen are just as high as in Zurich. That means there isn't much room for manoeuvre. If the public sector starts to exert a strong influence on prices, then it will become difficult.»
>
> (250826_P41_SG_Transcription, Pos. 5)

For-profit actors

Private investors struggle to meet the municipality's numerous and sometimes conflicting requirements on increased density, enhanced biodiversity, and additional social measures (p51:52,64,92; p48:4). Each additional requirement entails higher construction costs, but, as mentioned, the socioeconomic context of St.Gallen does not allow to have a return from these investement in the form of higher rents or selling prices. For landowners offering their property through leasehold arrangements, the dilemma is even stronger: higher municipal expectations increase building costs, which in turn reduce the price developers are willing to pay for the leasehold. Consequently, the landowners' returns decrease (p48:4, p51).

Non-profit actors

The non-profit housing sector is confronted with its own set of conflicting objectives. While these organisations seek to maintain their properties in good condition, economic constraints require that refurbishment costs be passed on—at least in part—to tenants to ensure the financial viability of such projects. This makes it difficult to determine the appropriate extent of renovation without placing excessive financial strain on residents. Ecological upgrades of old stock are particularly challenging, as their high costs stand in contrast to the low rents resulting from long-standing tenancy contracts. In participatory housing organisations, this often leads low-income tenants to oppose refurbishment measures altogether (p34:5, p40:6). The head of a housing foundation states:

> “So, in some cases, we also asked them whether they wanted green electricity and were willing to pay a little more for it. In most cases, the experience has been that people want to pay as little as possible, so they prefer not to take any measures.”
>
> (250821_P40_SG_Transcription, Pos. 6)

For social landlords, this opposition may lead to partial or gradual refurbishment—an approach that makes it difficult to secure subsidies, as noted by a cooperative representative (p39, p51:41, p40:6). Moreover, the non-profit sector argues that the high refurbishment costs lack a temporal dimension: moderate rent increases to finance ecological measures today may result in long-term savings, for example through lower energy consumption (p39:12) and preservation of the stock. As their focus is not on immediate returns, non-profit developers are aware of these advantages. However, communicating these long-term benefits to tenants is challenging. A representative of the non-profit sector suggests that refurbishments need to be considered now, to prevent a shock:

> «At some point, the renovation rate in the city of St. Gallen will increase significantly because we have a very large stock of old buildings. (...) And then I fear that it will happen relatively quickly until affordable housing disappears. That worries me a little. It would have been better if the renovation rate had been higher over the last 10 years, so that it doesn't happen suddenly.»
>
> (250815_P39_SG_Transcription, Pos. 44)

9.2.4.9 Innovative governance mechanisms

Public and civic actors agree that green topics have a very good stand in the city parliament and council (p50:28), and that several new strategies have been introduced in recent years. Densification, open areas, green spaces, diversification, biodiversity and needs-oriented housing are in the focus of the municipality (p49:3). An academic actor states:

> “There is an awareness and sensitivity to issues such as diversification, needs orientation, green issues and, of course, biodiversity. They have done a great deal in recent years with open space strategies, densification and inner development strategies. In other words, a great many concepts and strategies, urban development concepts of various kinds. Now they are going to revise their local zone planning, where open space also plays an important role.”
>
> (250909_P49_SG_Transcription, Pos. 3)

However, the lack of resources, discussed earlier in Section 3.2, emerges as a recurring theme. Both civic actors and academic commentators emphasize that St. Gallen faces structural challenges related to its administrative scale. The municipality is considered too large to enable informal, rapid decision-making and experimentation, yet too small to sustain fully professionalized administrative and organizational structures. Constraints in staffing and financial resources consequently limit the municipality’s capacity to address housing issues in a systematic and effective manner (p47:50, p49:3, p43:46). As a result, opportunities to invest in the implementation of the housing strategy and the various green goals remain limited.

A comparable tension is identified by a private for-profit investor with regard to market dynamics. While high-pressure housing markets can support higher levels of investment, weaker markets require a careful balancing of investment costs and achievable rents. In this context, the scope for private investment in innovation in St. Gallen is likewise constrained (p48:4).

9.2.4.10 Tourism and market pressures

While St. Gallen attracts a degree of local tourism due to its well-preserved medieval town and renowned monastery, secondary homes were not identified in the interviews as a factor exerting pressure on the local housing market. This section therefore focuses on perceptions of local housing market dynamics, as well as other influences on the local housing context identified by the interviewees.

Housing market in St.Gallen

There is consensus among the all actors that housing prices are still affordable in Eastern Switzerland. However, the tenant’s association observes that rents and prices have started to increase rapidly in the past few years. This trend, observed also at national scale, is perceived to be a consequence of the imperative of densification foremost, that causes an increase in land prices and a surge in renewal everywhere in Switzerland (p34:5).

A broad range of stakeholders point to a structural dilemma in St.Gallen’s new construction: while local rent levels are comparatively low, construction costs do not differ from those in other regions. This discrepancy creates strong pressure to minimise renewal expenses while still complying with high building standards, as residents are generally unwilling to accept higher rents (p39:100; p41:5). A member of a private real estate firm explains that high pressure markets always allow for higher investments, while in weaker markets such as St.Gallen investments and potential rents must be balanced (p48:4). This dilemma also affects

refurbishments: the relatively weak market and limited prospects for future rent increases reduce incentives to invest in existing buildings in St.Gallen, leaving many houses in poor condition. Actors from the administration and the for-profit sector agree, that under these market conditions, introducing stricter regulations for affordable housing or additional ecological requirements would slow down new developments and make St. Gallen even less attractive for profit-oriented investors (p41:5; p51:64, 92). Conversely, the use of contracts under administrative law —allowing higher densities in exchange for municipal co-decision on quality standards and housing typologies—is widely supported.

Members of the administration interpret the high vacancy rate as evidence that the housing market in St. Gallen is healthy: Competition for tenants, they argue, helps ensure higher quality and keeps rents within an affordable range (p. 50:41, p. 37:5). This view is confirmed by several profit-oriented players who argued that high-quality flats are easy to sell despite the high overall vacancy rate—especially those intended for owner occupation (p. 48, p. 51).

Competing local topics

Beyond housing policy and environmental and energy planning (EEPs), St.Gallen faces several interconnected challenges identified by various stakeholders. As mentioned in Section 3.3, there is broad consensus that St.Gallen is financially burdened by the costs of centrality: while the city must provide affordable housing and a wide range of public services, its tax revenues remain comparatively low. A major concern is the outmigration of high-income taxpayers to neighbouring municipalities, as noted by both administrative and civic actors. In this context, private developers emphasise the need for more high-standard housing options to retain or attract more affluent residents, arguing that such developments are essential to strengthening the city's tax base (p48:4):

> "Because we actually have more of a financial problem that cities like Zurich and Basel don't have, but that a city like St. Gallen does have: that good taxpayers have actually tended to move away to neighbouring communities (...). And good taxpayers need to be brought back to the city with appropriate housing."
>
> (250901_P48_SG_Transcription, Pos. 4)

The municipality echoes this view, highlighting that new, high-quality buildings would generate higher tax revenues than the older housing stock (p41:5; p38). Some private developers also perceive the city's tax framework itself as a barrier for investments, suggesting that more competitive conditions could attract additional developers (p51:91).

As the region's main employment centre, St.Gallen attracts a significant number of commuters. A civic representative notes that traffic-calming measures and reductions in parking spaces have become highly contentious political issues, generating tensions between conservative and green/social constituencies (p. 47:3, 34, 74). The neighbourhoods most affected by heavy traffic are often those with a high share of low-cost housing, home to many vulnerable residents. A green NGO emphasises that traffic impacts should be addressed primarily in these areas (p. 38). The public administration concurs, noting that improving these neighbourhoods would support greater residential social mixing, one of the city's declared objectives. However,

there seems to be a conflict between mobility infrastructure and the implementation of NBS: some landlords argue that replacing parking lots with NBS would entail a devaluation of their real estate.

Expectations for future development

The following section examines the recurring expectations articulated by the interviewees regarding the future development of housing-related issues in St. Gallen. Themes such as population growth, refurbishment rates, housing prices, and policy developments emerged repeatedly, reflecting both concerns and aspirations for the future of the local housing situation.

St.Gallen is preparing for a future scenario with 100,000 residents, even though the current population growth remains relatively low, and most relocations occur within the city. Nonetheless, the adaptation of urban infrastructure is already underway, with the municipality prioritising the renewal of public spaces and school facilities (p47:53). Some members of the administration question this focus, arguing that prioritising residential construction and strengthening the housing supply—alongside a robust job market—would be a more effective way to stimulate population growth (p41).

With its new housing strategy, the municipality of St.Gallen is prioritizing the development of specific housing typologies, targeting its funds to projects that provide family housing, according to a municipal representative (P37). At various points, the municipality has signalled an interest to incorporate social regulatory instruments into administrative contracts or zoning provisions. For the time being, however, both administrative and for-profit actors agree that such measures would be premature, fearing they might dampen residential construction activity (P41, p. 51). This cautious 'wait-and-see' approach also applies to stricter ecological regulatory issues. However, many stakeholders anticipate that debates on housing policy will intensify anyhow with the forthcoming revision of the Building and Zoning Regulation (BZO) and the implementation of future climate-adaptation requirements. A for-profit developer guesses:

> "I assume that with the revision of the Building and Zoning Regulation one of the next demands will be that a certain percentage of affordable housing be required in case of re-zoning. And we get some extra utilisation to make up for that, or something like that. We don't have any guidelines at the moment, but we are mainly talking about the mix of housing and the size of flats and a few other qualities. But in future, I think the discussion will move in this direction."
>
> (250910_P51_SG_Transcription, pos. 99)

Academics emphasise that St.Gallen's green transition is still in an early stage and that processes of gentrification are yet to start (p. 43). Multiple civic actors agree that St.Gallen lags behind in terms of urban renewal, and the rapidly rising rents are early indicators of an

> "These spaces are slowly disappearing too, not as quickly as in other cities, but they are slowly disappearing in St.Gallen as well. And then there is normal displacement."
>
> (250815_P39_SG_Transcription, Pos. 44)

impending housing crisis. Eventually, the refurbishment rate is expected to surge, and a large wave of renewal could entail the depletion of affordable housing. This concern is echoed by the non-profit sector, which observes that while affordable dwellings remain relatively abundant in St.Gallen, their numbers are starting to decline (P39). They fear that insufficient long-term planning for affordable housing is taking place today.

By contrast, academic and administrative actors consider the region's economic situation insufficiently attractive for rapid growth, making changes in the housing market in the near future unlikely (p41:4, P43). Remaining areas on the hillsides and the valley floor still offer considerable opportunities for densification, suggesting that displacement will not become a significant issue. Furthermore, the NGO GGT maintains that gentrification in St. Gallen will not occur solely because of NBS; additional factors, such as traffic calming or densification, will always play a role (p38).

> "Gentrification will never happen on this street just because there is a park upgrade, an ecological one."
>
> (250814_P38_SG_Transcription, Pos. 4)

9.2.5 Critical Analysis: St. Gallen

9.2.5.1 Green transition initiatives and housing inequalities

St. Gallen remains at an early stage of its green transition. The recent proliferation of local policy initiatives—outlined in Chapter 1, including the Densification Strategy, the Energy Concept 2050, and various greening strategies—has only begun to shape the city's development trajectory. The adaptation of the urban fabric to the ambitious objectives of the progressive and environmentally oriented parliament elected in 2020 has not yet produced substantial effects on the local housing market. Accordingly, most respondents indicated that recent green transition initiatives have not, thus far, exacerbated housing inequalities in St. Gallen. This assessment may, however, be attributed to the largely intangible character of these measures to date. Owing partly to time constraints, but also to fiscal and administrative factors—such as their pending integration into local planning instruments like the Building and Zoning Ordinance (BZO), which is currently under revision—these initiatives have not yet been implemented at scale, remaining instead limited to selective interventions and incremental renewal processes.

While rising housing prices and isolated cases of displacement have been mentioned, the majority of interviewees emphasized that the existing housing stock still offers many affordable options. Overall, housing inequalities primarily affect marginalized groups, particularly elderly and low-income residents. Moreover, the frequently mentioned refurbishment backlog in St.Gallen suggests that current inequalities are less a result of green transition measures and more a reflection of long-standing disparities in the quality of affordable housing. This is typical for a peripheral context which lacks the market incentive to refurbish its stock. Rather than driving new forms of exclusion, the green transition initiatives seem to foreground an already existing inequality concerning the condition of dwellings available to those with limited financial

resources. These groups either face displacement or reside in very low-standard housing (*Gammelhäuser*), often located in areas with high traffic exposure. It should be noted, however, that Swiss building standards are very high, and even older, unrefurbished housing generally provides a decent quality of life.

A frequently cited goal conflict is the tendency for ecological measures to be implemented at the expense of affordability, including in the non-profit sector. In St.Gallen, ecological objectives largely dominate regulatory frameworks and building permit procedures, while social objectives are often missing. In the low-pressured housing markets of peripheral cities, the tension between green and social sustainability is particularly pronounced, as—unlike in high-demand contexts such as Zurich—rent levels must remain competitive. According to several stakeholders, this imbalance is also attributable to the political orientation of the current city council, which is widely perceived as more green than social.

Interestingly, an administrative official interprets the relative absence of overheating in the local housing market as an advantage for the implementation of EEPs. From this perspective, developers are incentivised to invest in high-quality, sustainable construction to ensure that newly built units can be successfully rented out—unlike in more pressured markets, where virtually any apartment can be rented out, regardless of its quality. In the eastern Swiss housing market, environmental measures could become an important added value for the entire housing stock, while the problems associated with the environmental transition are likely to have a moderate impact on affordability.

The three EEPs examined in this report influence St.Gallen's housing market to varying degrees:

Densification, being a national policy priority, is widely recognized as contributing to increasing land prices, incentivizing the gradual upgrading of the housing stock, which eventually could attract higher-income residents. However, the issue of densification emerged only marginally in most interviews carried out in St.Gallen. This implicates that densification is primarily perceived as a secondary effect of broader urban renewal processes rather than as a distinct planning imperative. However, it may also be attributed to slow growth dynamics and the land reserves in designated building zones. Accordingly, densification currently does not necessarily threaten the existing housing stock. As opposed to Zurich, where densification entails the demolition of lower-density but affordable housing, in St.Gallen, it tends to take place in green- and brownfields. Interestingly, even the associated effects of renewal on housing prices are largely appreciated by all stakeholders, including the civil society, the administrative and the private actors, as they are expected to entail much-needed higher municipal tax revenues.

Regarding NBS, civic actors share the view that they pose no gentrification risks for St.Gallen, provided they are implemented across the entire city. On the contrary, the greening of public spaces and the enhancement of biodiversity in parks are considered a necessary compensations for the loss of green spaces due to densification. Such interventions are considered to contribute to an upgrading of low-quality open spaces in the valley floor and to improve the quality of life of the residents of these lower-income and socially mixed neighbourhoods. However, directly affected residents may have a different perspective, as

their primary concerns may be gentrification and rising rents. Private for-profit investors likewise appear to acknowledge the price-driving effects of NBS in construction and express concerns regarding their applicability within St. Gallen's low-pressure housing market.

Lastly, when discussing energy refurbishment, it is important to reiterate that in St.Gallen the rents of existing tenancies are comparatively low. According to private for-profit developers, energy refurbishments can therefore become a financial risk, as the local housing market does not allow the rent increases required to cover the costs. Non-profit developers, in turn, are reluctant to undertake major refurbishments because such measures would force them to raise the rents beyond what many of their tenants could afford. As a result, energy refurbishments—beyond minimal interventions such as the replacement of heating systems or public interventions like district heating —are implemented only cautiously, even though they are actively promoted and subsidized by the authorities. This contributes to the refurbishment backlog that dominates St.Gallen's building stock. As a result, even where housing remains affordable, inequalities persist due to the low-quality conditions faced by low-income households.

While opinions differ widely regarding whether and how soon St.Gallen will be facing housing affordability challenges, it is reasonable to expect, that future regulations—particularly those related to densification and net-zero targets—or a growth in population will trigger a wave of refurbishments and renewals in the coming years. Partly due to the revision of the national Spatial Planning Act, also St.Gallen is experiencing rising land prices, which combined with increasing construction costs, translate into rising rents and a gradual increase in displacement. Compared with other regions of Switzerland, however, these price increases have limited effects, as St.Gallen's less pressured housing market can still cater to diverse needs. The continued availability of affordable housing fosters a general perception of stability in housing matters. Based on these considerations, the municipality is currently prioritizing the promotion of innovative housing typologies, rather than expanding the stock of affordable housing (Stadt St.Gallen, 2021c). The absence of acute hardship also inhibits the growth of the non-profit housing sector, leaving the city dependent on for-profit developers for the realization of large-scale projects. There are also concerns because one of the most influential actors in the housing market, the citizen's community (*Ortsbürgergemeinde)*, is increasingly adopting a more profit-oriented approach. As a result, the soon expiring longstanding ground leases held by non-profit housing organizations will be adapted to the current market price, which may result in a significant loss of affordable housing. The non-profit housing sector in St.Gallen currently occupies only a marginal share of the local housing market. Actors from the non-profit sector and civil society emphasized the need for a more proactive municipal land and housing policy, which they argue is essential to prevent a decline in the supply of affordable housing. Without such intervention, the shrinking share of affordable and non-profit housing could weaken the market's filtering capacity, leaving it vulnerable to future crises.

9.2.5.2 Housing issues in conversation with local context and market

Local market conditions and political context

As the urban centre of a largely peripheral rural region, St.Gallen occupies a position at the fringes of the housing pressures currently confronting large Swiss cities. Its moderate size and stagnating demographic growth exemplify the characteristics of a low-pressure housing market. St. Gallen, as is typical of many urban centres, exhibits a comparatively progressive political orientation. This stands in contrast to the surrounding canton, which is more conservative and may, at times, constrain or delay urban development processes. This urban–cantonal divergence differs markedly from the situation in smaller, more rural municipalities such as Amriswil, where local political orientations tend to be predominantly conservative and closely aligned with that of the canton.

As opposed to metropolitan centres like Geneva or Zurich, housing issues in St.Gallen are not politicised yet. This is because, according to all interviewed stakeholders, in St.Gallen supply is sufficient and prices are affordable for a large majority of the population. With 15.3 CHF/m^2 (Fachstelle für Statistik, Kanton St.Gallen, 2023) rent on average, they are relatively low compared to other Swiss cities like Zurich with 21.8 CHF/m^2 (Stadt Zürich, 2024).The potential influx of displaced households from high-pressure areas is even seen as an opportunity to expand the population and attract higher-tax-paying residents. As a result, displacement is frequently reported as a marginal issue, since tenants whose contracts are terminated generally find alternative housing within the city or even the same neighbourhood. Nevertheless, it is important to stress that involuntary relocation can entail significant social and psychological costs for affected households, even if moving occurs within a short distance.

St. Gallen lags behind larger cities not only in terms of population growth, but also with respect to ecological transition of the housing stock, urban renewal, and housing innovation. This may be attributed both to its medium size, which limits the availability of resources for these initiatives. These dynamics must be understood within the Swiss political system: a federalist structure grounded in the principle of subsidiarity, producing substantial variations in cantonal legislation and assigning to municipalities significant responsibility for local implementation. In a predominantly rural and thus largely conservative canton like St. Gallen, the political divide between the comparatively progressive city and the cantonal authorities is especially pronounced, which further constrains the implementation of local policy objectives. In addition, the frequent turnover of elected administrative bodies inherent to direct democracy leads to a loss of institutional knowledge and limits the expertise required to effectively balance competing interests in housing policy. Moreover, cantons and municipalities differ in their tax rates, reflecting their respective economic conditions and political orientations. The comparatively high tax rate reduces St.Gallen's attractiveness to higher-income taxpayers, resulting in lower tax revenues, which in turn constrain the municipality's capacity to pursue its urban development goals.

There are examples of how the municipalities circumvent cantonal regulations like the missing value added taxes (*Mehrwertabgaben*) in cases of re-zoning through contracts under administrative law. The so earned money is reinvested in greening public spaces. This

mechanism underlines how a municipality, characterised by a strong political support to environmental projects, finds its ways beyond legislation.

Socio-spatial characteristics

St.Gallen is characterized by a pronounced socio-spatial differentiation between the valley floor and the surrounding hillsides (see appendix 8.Visuals, Figures 5,6). The lower-lying areas, predominantly inhabited by lower-income and socioeconomically mixed people, provide limited access to green space and have a higher exposure to heat stress and traffic noise. In contrast, the green hillside neighbourhoods are largely occupied by higher-income and higher educated residents. Public urban renewal projects are primarily implemented on the remaining brownfields in the valley floor and are widely welcomed as a valorisation of low-quality neighbourhoods. However, as traffic calming measures become more widespread the affordable housing stock is likely to diminish, since improved environmental conditions will increase the neighbourhood's attractiveness and property values. This dynamic is already observable in more advantaged areas, where noise mitigation through speed limits, noise thresholds, and building regulations has contributed to rising housing costs. Numbers confirm that also in the Canton of St.Gallen, rent levels are increasing and have risen by 13% since 2020 (Enz, 2025). As a result, new housing for socially disadvantaged groups will continue to be disproportionately located along roads with high levels of noise and air pollution. This shows how competing local topics like traffic in combination with EEPs shape housing inequalities.

By contrast, hillside areas face a different constraint: public interventions towards densification and greening frequently encounter organized neighbourhood opposition, while fragmented small-scale ownership patterns further limit the feasibility of larger public developments.

Housing issues

As was mentioned, the city's low tax revenues entail a refurbishment backlog in municipal properties. Likewise, the private rental housing stock is also deteriorating, as the local housing market precludes rent increases sufficient to offset renovation costs. However, delaying refurbishments can also be strategic: buildings are left unrenovated until they are sold, with rising land values ensuring profitability regardless of their condition. Such strategically under-refurbished buildings constitute a form of housing inequality as the omission of (energy) retrofits perpetuates the low quality of a large share of affordable rental housing.

According to municipal studies and interviewees, there is a notable lack of qualitative, innovative, and family-oriented housing typologies. This deficiency prompts many families to move to neighbouring municipalities, thereby exacerbating St.Gallen's fiscal challenges. While the absence of an immediate market pressure causes delays in both refurbishment and innovation, the shortage of housing suitable for middle-class families cannot be defined as a housing crisis. Nevertheless, St.Gallen seeks to enhance its socioeconomic profile through public infrastructure investments and an expanded housing supply, with the aim of attracting higher-income residents. In this context, gentrification is often considered as beneficial to the city, rather than a threat. This view is widely shared by all civil society actors and local organisations. To steer housing provision from the public side, the municipality has recently adopted a housing policy and strategy. In practice, however, its resources and room for

manoeuvre remain very limited, which constrains the implementation of its ambitious goals. In particular, the municipality's limited ownership of public housing restricts its direct influence on the sector, which is largely limited to developments on public land under leasehold arrangements and to projects governed by administrative law.

Our interviews revealed that what is expected from the non-profit housing sector in St.Gallen is to contribute to architectural, social and environmental innovation. While at the moment, they focus on providing non-commodifiable, non-profit housing with rents that remain significantly below market rents, housing cooperatives are also perceived as important strategic partners to develop alternative housing options and reduce the shortage of attractive family housing. With a 8.2% market share (Urban, 2023), they play a role above the national average, and count as a politically influential actor in the current city council. Housing cooperatives also play a role in green transition dynamics. Especially the larger cooperatives (e.g. WBG SG) are committed to greener building practices. However, to expand their supply and ensure the long-term provision of high-quality affordable housing, the non-profit sector depends on the municipality to buy more land, which can then be leased with building rights to cooperatives.

9.2.5.3 Conclusion

Overall, St.Gallen's low-pressure housing market mitigates immediate affordability crises but at the same time produces more subtle and long-term forms of housing inequality. Despite the municipality's recognition of the importance of a local housing policy, the renewal of the housing supply remains largely in the hands of private, for-profit developers. Fiscal constraints, limit the municipality's steering capacity, and a low-pressure housing market contributes to a refurbishment backlog that disproportionately affects low-income households through persistently low housing quality. This occurs despite the recognition of housing quality as a key factor in attracting higher-tax-paying households.

With regard to environmental and energy policies (EEPs), it can be observed that a wide range of measures are already in place, supported by a broad societal awareness that facilitates further steps toward a green transition. However, low rent levels limit the feasibility of a comprehensive implementation, as investments remain low to keep rents competitive. While green transition measures, traffic calming and urban renewal are often welcomed as value-enhancing interventions, much of the existing affordable housing stock does not benefit of much-needed upgrades. Incentives and subsidies for energy refurbishment and nature-based solutions (NBS) exist, but so far appear to have little to no effect on housing inequalities.

While interviews consistently reported that there is no shortage of affordable housing in St.Gallen, it must be noted that the existing housing stock continues to serve as a source of affordable housing but is gradually decreasing. Simultaneously, the slow expansion of the non-profit sector increases the risk of a future affordable housing crisis. In this context, the absence of acute market pressure does not eliminate vulnerability but rather postpones it, creating risks of eventual revaluation, displacement, and the erosion of affordability in the coming years.

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9.2.7 Appendix 1: Glossary

Abbreviation

BAWO	Bau- und Wohngenossenschaft St.Gallen
BZO	Bau- und Zonenordnung
EEP	Environmental and energy policy
FDP	FDP. Die Liberalen; The Liberals (economic-liberal party)
GGT	Grünes Gallustal
GIp	Grünliberale Partei; Green-liberal Party
NGO	Non-profit organisation
NBS	Nature-based solution
ISOS	Bundesinventar der schützenswerten Ortsbilder der Schweiz von nationaler Bedeutung
SP	Sozialdemokratische Partei; Social Democratic Party
SVP	Schweizerische Volkspartei; Swiss People's Party (national-conservative party)
WBG St.Gallen	Wohnbaugenossenschaften St.Gallen

Terms and Concepts

Additional state benefits	*Ergänzungsleistungen;* supplementary payments from the municipality to pensioners whose retirement provisions are insufficient
Building and Zoning Regulation	*Bau- und Zonenordnung;* municipal building regulation and zoning
Cantonal Structure Plans	*Richtpläne;* cantonal planning tool, specifying zoning
Contracts under Administrative Law	*Verwaltungsrechtliche Verträge*; private-public contract, arranging special building rights in exchange for obligations or monetary levies
Housing Promotion Agency	*Wohnbauförderung;* federal housing promotion, distributed by the cantons
Housing Strategy St.Gallen	*Wohnstrategie;* municipal housing strategy St.Gallen

Hausen and Wohnen	Private foundation for affordable housing in St.Gallen, only for marginalized people
Social Mixing	*Soziale Durchmischung;* socio-spatial mixing
Spatial Planning Act	*Raumplanungsgesetz*; federal law introduced in 1979; in 2014, densification was introduced as a mandatory principle for cantons and municipalities
Utilization Plans	*Nutzungspläne;* utilizationplanning for the zones, by the municipality
Value added taxes	*Mehrwertabgaben;* in the event of rezoning, landowners must pay a value-added tax to the municipality. As this law is not enshrined in all cantons, there are municipalities that collect these payments by means of private-public contracts

9.2.8 Appendix 2 – Key interview data and transcripts

#[165]	Position of Interviewee	Sector	Organisation	Date of interview	Media
P30	Representative of cantonal administration, responsible for housing promotion	Administrational actor	Housing Promotion Agency	12.06.25	telephone
P34	Representative of tenants' union	Civic actor	Tenant's Association Eastern Switzerland	31.07.25	online
P37	Representative of city administration,	Administrational actor	Real estate department	11.08.25	in person
P38	Representative of local association advocating for greening	Civic actor	NGO *Grünes Gallustal*	11.08.25	in person
P39	Representative of housing cooperative	Non-profit actor	Housing cooperative *WBG St.Gallen*	11.08.25	in person
P40	Representative of a non-profit housing provider	Non-profit actor	Housing foundation *hausen und wohnen*	14.08.25	online
P41	Representative of city administration	Administrational actor	Planning department	14.08.25	online
P42	Representative of political party, member of	Civic actor	Member of parliament and of civic	18.08.25	online

[165] Gaps appear in the interviewee numbering because interviewees were numbered continuously across the three case studies Amriswil, St.Gallen and Zurich.

	parliament, representative of a local interest group for the development of a neighbourhood		association *igRuckhalde*		
P43	Academic, urban designer	Academic actor	Researcher at *OST* university of applied sciences	18.08.25	online
P47	Former journalist	Civic actor		26.08.25	online
P48	Representative of real estate developer	Private actor	Real estate developer *Halter AG*	28.08.25	online
P49	Academic, sociologist	Academic actor	Researcher at *OST* university of applied sciences	03.09.25	in person
P50	Mayor	Public actor	City council	10.09.25	in person
P51	Representative of citizens‘ community	Private (semi) actor	Citizens‘ community	09.09.25	online

9.3 CASE STUDY (SMALL): AMRISWIL

Authors: Elie Sieber, Hannah Widmer, Jennifer Duyne Barenstein (ETHZ)

Contributors: Salome Rohner & Luisa Gehriger (ETHZ)

9.3.1 City profile, challenges around just (housing and ecological) transition

9.3.1.1 Demographics and geography

Amriswil is a small, former industrial town in the Canton Thurgau with 14,825 residents (Kanton Thurgau, 2025a). The political municipality of Amriswil consists of the town Amriswil and several surrounding municipalities[166] (see Figure 1). Amriswil is located close to Lake Constance and within a rural region outside of a functional urban area (see map on cover page). The municipality covers an area of 19.0 km^2, around 78% of which is either agricultural land or covered in woods (Kanton Thurgau, 2025a).

After an extensive structural change from the textile industry to the service sector around the turn of the millennium, Amriswil's economy and population has been moderately growing. In

[166] Mühlebach/Schrofen, Oberaach/Niederaach, Biessenhofen, Schocherswil, Räuchlisberg, Hagenwil, Hemmerswil/Egg, Almensberg

the last decade, the population increased by 17%, from 12,699 to 14,825 (Kanton Thurgau, 2025a). In 2025, 52.6% of the newcomers came from other municipalities in Thurgau, 24.8% from other Swiss cantons, and the remaining ca. 22.6% came from other countries. This pattern is similar to the rest of the canton. The share of non-Swiss nationals is 29.5% is slightly above the average 26,9% of the canton (Kanton Thurgau, 2025a) and the national average of 27.6% (BFS, 2025f). The share of non-Swiss residents in Amriswil is similar to the cities of St.Gallen (34.2%) and Zurich (33.7%) (see case study reports St.Gallen and Zurich). Roughly 19.8% of these are of North Macedonian nationality, 15.8% Italian, 14.6% German and 7.4% Portuguese (Kanton Thurgau, 2025a). Details about the remaining nationalities are not reported. Amriswil has a higher than cantonal average population of North Macedonian origin. 19.6% of the population are 18 years old or younger, 29.5% are 19 to 39 years old, 31.7% are 40 to 64 years old, 13.8% are 65 to 79, and 5.3% are 80 years or older (Kanton Thurgau, 2025a). Around a third of households are either single-person or two-person households. Three and four-people households make up around 12% of the share respectively, households with more than five people making up around 7%. Single and two-people households are the categories that have been growing the most in the last decade, while the other households have remained relatively stable (Kanton Thurgau, 2025a). With a population density of 786 inhabitants per km^2 (total area of the municipality), Amriswil is not very densely populated (BFS, 2025c).

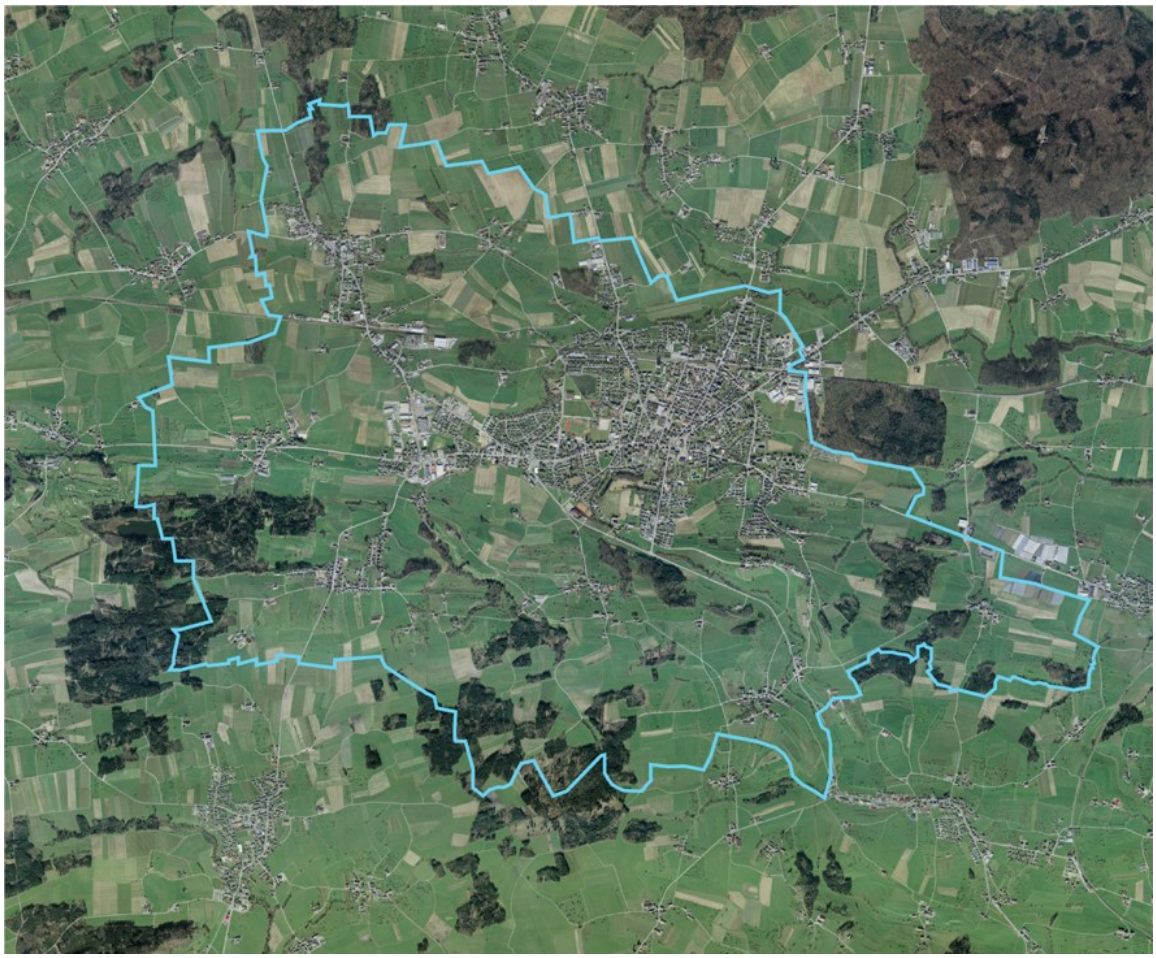

Figure 1: Aerial photograph of Amriswil. (© Federal Office of Topography swisstopo)

In 2022 the median income in canton Thurgau was 6,125 CHF/month which is below the national median income of 6,788 CHF/month (Amt für Statistik Kanton Thurgau, 2022a; BFS, 2022) and significantly lower, for example, than in Zurich where the median income in the same year was 8,128 CHF/month (Stadt Zürich, 2024).[167] In Amriswil, the median equivalised income (accounting for different household sizes and composition) is the lowest in the whole canton: 50% of the inhabitants have an equivalised yearly income of less than 48,000 CHF (Grossenbacher et al., 2021). Currently 1% of the households in Amriswil rely on social welfare, similar to the cantonal average of 1.1%. In the last decade, Amriswil has seen a decline from 2.2% to 1.1%, closing the gap between the average social welfare quote on the canton (Kanton Thurgau, 2025a). At 63%, municipal taxation is higher than in most municipalities in the canton (average municipal tax rate in the canton of Thurgau: 55.9%) (Amt für Daten und Statistik, 2025b; Kanton Thurgau, 2025a).

9.3.1.2 Economy and infrastructure

In 2023, 6,730 persons were active in the labour market in Amriswil. Most jobs (66.2%) are found in the service sector, but despite the transition from an industrial town to a service economy, a relatively large share of jobs (30.8%) can still be found in the industrial and construction sectors. 3.0% of jobs are in agriculture and forestry (Kanton Thurgau, 2025a). Overall, more people commute from Amriswil to other places (4,533) than from other places to Amriswil (2939; Kanton Thurgau, 2025a).

Compared to the Canton of Thurgau, Amriswil is significantly more indebted, with a net debt of CHF 1,621 per capita (Thurgau: net assets of CHF 238 per capita) and a net debt ratio of 145.4% (Thurgau: –16.7%). Although Amriswil can more than fully finance its investments, its financial flexibility is weaker due to a low self-financing share (5.0%) and a high gross debt ratio (180.1%; Kanton Thurgau, 2025a).

The town has good transport connections, with a fast train service to Zurich (approx. one hour needed for one way) and a regional road network making commuting convenient.

9.3.1.3 Governance structure and political orientation

The city council consists of 9 members of different political parties. Each of the council members is responsible for one department. One of the members is simultaneously the mayor, who is elected separately. The city does not have a parliament, but the eligible voters gather

[167] For the city of St.Gallen there is no municipal data available; however, the average income per inhabitant was 55,052 CHF while the same indicator was 73,023 CHF for Zurich, indicating that Amriswil has a more similar average income per person and year to St.Gallen than Zurich (see case study report St.Gallen and Zurich).

once a year for the municipal assembly where various issues (including the municipality's budget) are put to a vote.[168]

Politically, Amriswil is rather conservative; the strongest parties in the municipality are the conservative Swiss People's Party (SVP) with 30.0% of the votes and the Liberal Party (FDP) with 18.9%, followed by the Centre party (10.2%), the Social Democratic Party (SP; 11.9%), and the Green Party (8.0%) (Kanton Thurgau, 2025a). Compared to cities of similar sizes in the Canton of Thurgau[169], Amriswil had a 6.5% higher average SVP voters' share in the cantonal legislative election of 2024. Additionally, it had a 5.2% lower share of voters for the Centre party, as well as a 4.6% lower share of Social Democratic votes and around a 4% higher share of FDP voters (Amt für Daten und Statistik Kanton Thurgau, 2025). Compared to the average of the whole canton, Amriswil has a slightly higher share of FDP voters, and a lower Centre Party vote share. In comparison to the cities St.Gallen and Zurich, has a significantly higher SVP share and a much lower part of the population votes for the Social Democratic party (see case study reports St.Gallen and Zurich). Juxtaposed to the parties shares in the national parliament, the Social Democratic Party and the Centre party have a lower share in Amriswil, while the FDP has a higher share (BFS, 2023).

9.3.1.4 Housing situation

Amriswil has a total of 7,317 dwellings (Kanton Thurgau, 2025a). Recent years have seen an increase in construction activity, with twice as many new constructions between 2015 and 2020 than in the previous 15 years. Being a small town, this construction activity has a direct effect on the vacancy rate, which reached a historical peak of 8.8 % in 2020 (Stocker, 2023). In the following years the rate sank quickly to 1.76 % in 2024 (BFS, 2025b). However, Amriswil is still not facing a housing shortage. The numerous newly built apartments are covering the increasing demand while older buildings tend to stay empty longer (Stäheli, 2025). At the cantonal level, in 2023 two thirds of the newly built dwellings were in apartment buildings (Amt für Daten und Statistik, 2025a).

With 35.7% of homeowners in 2022, the city of Amriswil is very close to the national average of 35.9% and much higher than in the cities St.Gallen (17.4%) and Zurich (8%) (Amt für Statistik Kanton Thurgau, 2022b; BFS, 2025d; see case study reports St.Gallen and Zurich). 62.5% of the dwellings are rented out, and 1.8% are inhabited under other arrangements (e.g. leaseholding, reduced rate for employees, etc.; Amt für Statistik Kanton Thurgau, 2022b). There is only one non-profit housing provider: the housing cooperative "Thurgi-Hof" offers

168 This system is widely used in Switzerland. Of ca. 2,100 municipalities, only around 20% have a parliament. However, there are significant differences between language regions: small to medium-sized municipalities in French-speaking Switzerland and the Italian speaking canton of Ticino generally have a parliament, whereas in German-speaking Switzerland usually only large cities have one (Ladner, 2019).

169 Arbon, Kreuzlingen, Romanshorn and Weinfelden.

affordable housing for families, people with disabilities, and elderly (Wohnbaugenossenschaft Thurgi-Hof, 1992).

Most housing was built before 1970. A large share of single-family houses are currently inhabited by elderly people who will probably move out in the next decade. This is seen as a potential for structural and social renewal in the coming years (G. Macedo & M. Herzog, personal communication, 6 February 2025).

Roughly 53% of all residential buildings are single family homes. 27.7% are apartment buildings. The remaining ca. 20% are mixed-use buildings (Kanton Thurgau, 2025a). The proportion of small to large apartment buildings is not recorded at municipal level. However, in the canton of Thurgau, 41.5% of flats in multi-family buildings are located in small multi-family buildings (up to 6 flats), while 58.5% are located in large multi-family buildings (7 or more flats; BFS, 2025e).[170] In the Cantons of Zurich and St.Gallen, 35% and 39.9% of all dwellings in multi-family buildings are situated in small multi-family buildings. The Swiss average is reported at 41% (BFS, 2025e).

Figure 2: Vernacular house in Amriswil (© J. Duyne)

Compared to the cities of St.Gallen and Zurich, Amriswil has a significantly higher share of single family houses than St.Gallen (31.7%) and Zurich (25.4%; BFS, 2025a). Indeed, both these cities have a much higher share of apartment building (St.Gallen: 47%, Zurich: 48.5%)

[170] Note that these figures refer to the distribution of flats, not to the number of buildings, unlike the percentages reported above.

while having similar shares of mixed-use building (Zurich ca. 26.4% and St.Gallen 20.8%; BFS, 2025a).

Around 58% of the dwellings are three-to-four-room apartments, while one-to-two-room apartments, five-room and six-or-more-room apartments each account for around 15% of the total number of apartments. Over the last ten years, three-to-four-room apartments made out the largest share (58%) of newly built apartments, followed by 21% with five rooms. One-to-two-bedroom apartments only made out 12% and six-or-more-room ones 9%. Nonetheless, comparing year-over-year growth rates, five-and-more-room apartments have been on the rise, relatively (Kanton Thurgau, 2025a).

Figure 3: Amriswil's Central Square (© J. Duyne)

As one of the regional centres in the canton, Amriswil absorbs many social functions like housing and care for the elderly, assisted living and educational facilities. This represents quite a challenge for the municipality because, as was mentioned earlier, the average income of Amriswil's residents is comparatively low, resulting in a low tax income. To boost fiscal income (and eventually lower tax rates), the municipality aims to attract higher-income families and young professionals (G. Macedo & M. Herzog, personal communication, 6 February 2025).

Most new housing construction is carried out by private investors (94.5%; Kanton Thurgau, 2025a). This points to the crucial role of private owners for urban development and to the importance of a good cooperation between local authorities and private owners for steering any change, including the green transformation. A sort of "parallel housing market" was also mentioned by one interviewee who maintained that roughly 10% of construction projects are undertaken by companies owned by migrants from the Balkan region. However, no further details could be found on this issue.

The *Housing Promotion Agency* (Wohnbauförderung) is the only public agency providing housing support in Amriswil. The agency implements national measures for the promotion of affordable housing jointly for the Cantons of St.Gallen, Thurgau and Appenzell Innerrhoden.

Recent housing development projects in Amriswil include housing for seniors built in 2024 by the “Alters und Pflegezentrum Amriswil” (APZ, a Care Centre for the Elderly and Disabled) which includes 30 flats for elderly or disabled people that can be rented for independent living or for assisted living. Once completed, the APZ ("Alters- und Pflegezentrum Amriswil", 2024) will own close to 100 affordable flats. Furthermore, private investors recently started the housing project *Breitenaach*, which includes 107 apartments of different sizes for sale and for rent. The settlement is planned as an energetically sustainable construction and will also include nature-based water retention solutions (Stadt Amriswil, 2025d).

9.3.2 Densification, energy refurbishments, and nature-based solutions (NBS) in Amriswil

As a small town, Amriswil orients its policies primarily towards the implementation of cantonal regulations and subsidy programs, while municipal programs can be seen as supplementary. The conservative political orientation of the voting population (and hence also the city council) constrains the promotion of green transition measures if they are not mandated by higher levels of government. The following sections give an overview of environmental and energy policies (EEPs) currently implemented in Amriswil, with a focus on densification, energy refurbishments, and nature-based solutions (NBS).

9.3.2.1 Densification

Densification has been a key policy goal in Switzerland since the 2014 revision of the Spatial Planning Act, when densification became legally binding for cantons and municipalities. As a consequence, cantons had to align their cantonal structure plans (*Richtpläne*), and municipalities in turn play a central role in steering densification locally through utilization plans (*Nutzungspläne*) (Duyne Barenstein et al., 2025b).

The Cantonal Structure Plan of the Canton of Thurgau (*Kantonaler Richtplan*), last revised in 2023, identifies Amriswil as one of 6 cantonal urban centres, which means that the minimum density to be aimed for in zones with housing is higher than in other municipalities (86 inhabitants and full-time equivalent jobs / hectare; Kanton Thurgau, 2023a). The main instruments of municipal planning in Amriswil are the Municipal Structure Plan (*Kommunaler Richtplan*), the building regulations and the zoning plan, the plan for the protection of nature and cultural heritage (under the Federal Act on the Protection of Nature and Cultural Heritage (*Natur- und Heimatschutzgesetz*)) and the *Special Land Use Plans* (*Sondernutzungspläne)*.

Amriswil last revised its building regulations and the zoning plan in 2020. In the same year, it published a conceptual plan for the designation of areas where high-rise buildings are possible within the city (Konzeptplan Eignungsgebiete für höhere Häuser und Hochhäuser; Stadt Amriswil, 2020b). The new zoning plan identified several areas for upzoning, mainly in the centre (e.g. along the Bahnhofstrasse, see Fig. 4 and 5) and along the main traffic corridors (Hess, 2020). As a result, building zones now require a minimum building density, defined by a minimal number of storeys which new buildings must not fall below (Stadt Amriswil, 2020a). This should lead to a slow replacement of the old stock and an increase in building density over time (see Fig. 6).

Figure 4: Aerial photograph of Amriswil with Bahnofplatz and Bahnhofstrasse (central axis). Source aerial photograph: Federal Office of Topography swisstopo.

Figure 5: Amriswil's Bahnhofstrasse leading to the train station (© S.Rohner)

Figure 6: Buildings to be demolished at Bahnhofplatz (© J.Duyne)

9.3.2.2 Energy refurbishments

Amriswil received the 'Energy City' (*Energiestadt*) certification[171] in 2010 and was awarded the gold label in 2022. To some extent, this reflects an enhance awareness of and support for climate goals and green policies. However, the municipality rejected the petition of Amriswil's green and social democratic parties to ratify the Swiss Climate and Energy Charter (*Klima- und Energie Charta*), arguing that achieving the Energy City label was sufficient.

The municipality is committed to the target of the 2000 Watt Society (*2000-Watt-Gesellschaft*), which aims to reduce energy consumption per person to 2000 watts by 2050, of which at least 1500 watts must derive from renewable energy sources (Stadt Amriswil, n.d.). It also supports the goal of net-zero greenhouse gas emissions by 2050 and the conversion of Switzerland's entire energy supply to 100% renewable energy by 2050.

In an earlier revision of the cantonal structure plan in 2016 it was decided, that every municipality with more than 2000 residents must elaborate a "Municipal Energy Structure Plan" (*Kommunaler Energierichtplan*) until 2022 (GIS Verbund Thurgau et al., 2021). The first Municipal Energy Structure Plan of Amriswil was adopted in 2017 and is currently under revision. The new version will be published by the end of 2026: The municipal steering committee for the energy and climate strategy organized a meeting where residents were invited to discuss the revision of the energy structure plan which will be binding on the

[171] *Energie Stadt* is a national label awarded to municipalities that make efforts in the field of local energy and climate policy

authorities and the development of an energy and climate concept for the town of Amriswil (Stadt Amriswil, 2025a). To reach a net-zero greenhouse gas emissions target, the existing 940 oil- and 860 gas heating systems must be replaced at a faster pace, as currently only 40 per year are being replace (Stadt Amriswil, 2025b).

To promote and support energy refurbishments, several policy instruments are in place. The Canton of Thurgau has a programme promoting energy refurbishments that complements the federal Buildings Programme (*Gebäudeprogramm*). Together, the two programmes subsidise insulations and energy efficiency retrofitting, *Minergie standard*[172] retrofitting, energy performance certification and consultation, and the renewal of windows in protected buildings. They also subsidise the replacements of fossil heating with renewable energy (solar systems, heat pumps and long distance heating) and with wood heating (Kanton Thurgau, 2025b). Additional subsidies are provided by the municipality of Amriswil for energy-efficient renovations that meet *Minergie standard,* and systems for renewable energy production. Moreover, Amriswil complements the cantonal subsidies with regulated amounts and mostly under the same conditions as the canton (Stadt Amriswil, 2024). Around 50–100 applications for some sort of subsidies are submitted to the municipality each year, according to a member of the administration. However, no official data could confirm this estimate (p26).

The canton and the municipality jointly offer energy advice, first contacts being partly free of charge. The public energy experts in the canton of Thurgau offer free consultations for homeowners and tenants through a specialised agency named *eteam* (eteam, n.d.). The municipality of Amriswil's own energy provider (*Regio Energie Amriswil*, REA) also offers energy consultations and acts as a contact point for homeowners (REA, n.d.). Regarding the subsidies received by the federal buildings programme, only cantonal data is available; Thurgau has quite a high amount of subsidies per capita (74 CHF/inhabitant) compared to Zurich and St. Gallen (40 CHF and 48 CHF respectively) and the national average of 59 CHF / per capita. In contrast to Zurich, the number of applications to receive subsiides have decreased in St. Gallen and Thurgau after having reached a peak in 2023 (BFE, 2025b).

9.3.2.3 Nature-based solutions (NBS)

A popular initiative to promote biodiversity, called Biodiversity Thurgau (*Biodiversität Thurgau*), was accepted in 2020, entailed the development of a cantonal biodiversity strategy in 2023. The strategy foresees the investment of CHF 46 million in intact and diverse habitats and species. Part of the strategy aims at a better integration of biodiversity into residential areas and mobility infrastructure, and to raise public awareness on related issues (Kanton Thurgau, 2023c).

[172] *Minergie standard* is a Swiss building standard focused on energy efficiency, comfort and climate protection. It is common for cantonal and local governments to support Minergie certification. (Schweizer Baustandard, n.d.)

Amriswil participates in the cantonal programme 'Natural Advantage' (*'Vorteil naturnah'*). This programme was extended and expanded as part of the action plan for the biodiversity strategy (Kanton Thurgau, 2023b). The programme provides financial support and guidance to municipalities in their efforts to make urban open spaces more biodiverse. The programme also has an educational purpose, aiming to persuade private property owners to move away from conventional outdoor planning towards more biodiverse solutions in residential areas (Kanton Thurgau, n.d.). In Amriswil, the programme entailed the redesign of multiple public areas in residential zones, and the municipality is planning to continue the funding of biodiverse measures.

The municipality promotes biodiversity in private green spaces and the reduction of ecologically poor environments by subsidizing the removal of stone gardens and neophytes and by offering local and diverse plants for private gardens at reduced prices. The municipality organises so called 'plant pick-up days' (*Pflanzen-Abholtag*). These events also function as educational programmes on the subject of biodiversity (Stadt Amriswil, 2025c).

Amriswil further pushes NBS with subsidies for the greening of roofs and façades, with a maximum of 3,000 CHF per building (Stadt Amriswil, 2024). With the renaturation of the two streams *Geissbach* and *Hegibach*, the municipality, together with the NGO ProNatura, has contributed to the regeneration of a natural habitat that helps fish to migrate upstream to their breeding grounds (Nagel, 2021b).

The municipality is currently developing a project to renew the public square at the train station (*Bahnhofplatz*, see Fig. 4 and 7). In 2022, the majority of Amriswil voters approved a 9.2 million CHF project to build a regional bus station and public transport hub. The square will be redesigned as a green urban space, making the area more accessible, safer, and more attractive (Nagel, 2021a, 2022). Amriswil also plans to further develop and densify the adjacent buildings. For strategic reasons, the city has therefore purchased properties near the train station (Kohn, 2017).

*Figure 7: Render of the planned public square at the train station (© Tom Munz Architekt*innen)*

9.3.3 Methods

This report focuses on local perceptions of green transition interventions and their interlinkages with housing in Amriswil. In this small city, as discussed in the previous chapter, we could not find any site-specific green transition initiative with a perceived impact on housing inequalities: energy refurbishments and NBS initiatives are scattered across the whole territory, while some densification projects are planned but not yet implemented. As a core research method, we used semi-structured interviews focusing on green transition initiatives, housing, social sustainability in housing in relation to the green transition, and issues related to multi-level governance. For the case study of Amriswil, we conducted nine interviews between June and October 2025. Participants include members of the city council, representatives of the city administration, members of political parties, local associations and local businesses (the full list of participants can be found in Appendix 2). We built upon our knowledge from exploratory visits to Amriswil and informal interviews with the mayor and other members of the city administration and from the Policy Lab #1 (a workshop with stakeholders from the case study cities, from cantonal, and from the national level that was held in April 2025 in St.Gallen) to identify and contact an initial set of participants. Further participants were recruited via snowball sampling and through online research on relevant organisations.

While we interviewed stakeholders from the whole political spectrum and with different professional backgrounds, the report is primarily based on public and private actors, with civic actors being somewhat underrepresented. This is determined by the fact that in Amriswil there is hardly any political mobilisation around housing topics. Accordingly, we could not find any civic actor interested to engage in a discussion on related issues.

Interviews lasted about an hour on average, and were conducted either in person, via video call, or on telephone. Participants were asked to give informed consent. They were audio-taped and later transcribed using the software *Buzz* which runs on OpenAI's speech recognition model *Whisper*. We manually edited initial transcripts generated by AI to produce the transcripts used for coding. Coding was aided by the software MAXQDA and was performed with the transcripts in their original language (German). Quotes used in this report are translated to English by the authors.

This report also relies on grey literature, reports, legal documents, plans, and statistical data. It also draws on previous research in the framework of the ReHousIn project on housing inequalities in Switzerland (Widmer et al., 2024), environmental and energy policies (Duyne Barenstein et al., 2025b), and the Swiss housing system (Duyne Barenstein et al., 2025a).

9.3.4 Civic Perceptions of Green Initiatives in Amriswil

9.3.4.1 Precedents and Implementation

Perceptions of the city

In this section we focus on stakeholders' general perception of Amriswil as a city and the related housing situation. As will be shown, all stakeholders agree that Amriswil's current housing situation and progress with the implementation of EEPs needs to be understood in

relation to its industrial past, the current road and railway infrastructure, and the municipality's financial situation. Based on these considerations we start this chapter by focusing on our interviewees' overall perception of their city.

All interviewees underline the legacy of Amriswil's industrial past. As a result, even today the city is mainly inhabited by low-income workers (P23, 65-66; P25, 117; P28, 64-67; P55, 54-55, 62-65) (see quote below). This industrial past led to certain path dependencies, e.g. cheap, but low-quality housing, secondary sector enterprises, which resulted in the continued hosting of low-wage industries such as household appliances assemblage (65-66; P25, 117; P28, 64-67; P55, 54-55, 62-65).[173] With regard to housing, a civic-society representative mentioned that Amriswil has grown over a large territory, rather than as a compact and densely populated city (P28, 16). Additionally, many plots have been sub-divided over the last century, which has led to a high degree of land fragmentation (P55, 57).

> We do indeed have historical baggage. The textile industry has actually been […] a low-salary sector for a very long time. And there are perhaps certain sections of the population in Amriswil, still, where perhaps the next generation or two lives here. And accordingly, they are unable to fill the highly skilled jobs that perhaps need to be filled. That may also be a dangerous thing; I can't really back it up with figures, but it's just a gut feeling. (Civic society representative)

Due to the city's inability to attract higher wage industries the city is facing severe financial constraints, as it fails to attract higher-income residents, as reflected in low average income of its inhabitants. Eight out of nine interviewees mentioned this to be the municipality's biggest problem (P19, 62; P23, 66; P25, 117; P27, 71-74; P28, 17, 71). In fact, as discussed in section 1.1.1, the city has relatively high debts and not much financial flexibility. This is not only seen as having historical reasons but also caused by Amriswil's geographical location: in comparison to municipalities that are closer to the Lake Constance, Amriswil has not many 'environmental benefits', e.g. a good lakeside view (P19, 59; P27, 21-23; P28, 14, 22-23), a further constraint to attract higher income earners. This forces the municipality to keep their taxes comparatively high to make ends meet (P19, 59; P27, 21-23; P28, 14, 22-23).

The lack of a good road connection is another important factor contributing to the city's low attractiveness: as there is no direct highway from and to Amriswil, many industries avoid this location, according to a representative of the trade association (P25, 23). The absence of such a connection entails many additional problems such as traffic jams, which further lower the appeal of Amriswil to high-income-taxpayers (P28, 74). Until recently, an expressway that would have connected the easternmost region of the canton (*Oberthurgau)* to an existing highway, the *Nationalstrasse 23* (N23), was planned, but in November 2024, several national road expansion projects – including the N23 in Thurgau – were rejected by a national-level

[173] One of the largest employers of the town is specialised in the assembly of all-in-one coffee machines that are produced for large, international brands. Another large employer is focused on underclothing production.

popular vote. At present, it is unclear if this expressway will ever be built. In Amriswil, even public and civic-society voices critical towards a car-driven development, agree that there is a need to improve the region's road connections (P19, 104-106; P28, 14, 38, 74; P55, 23-28). Active forms of mobility such as walking and cycling, on the other hand, are not seen as a pressing problem in the municipality, although a concept is being developed in accordance with federal laws (P19, 116-117; P28, 29). This law obliges cantons and municipalities to plan their cycle path networks by 2027 and to implement them by 2042.

The express train connection which links Amriswil to larger cities like St.Gallen and Zurich is crucial to the city. The ongoing redesign of the station square (*Bahnhofplatz*, see Fig. 4*)* that will be completed by 2027 aims to increase the attractiveness of the station and to meet accessibility requirements to ensure that Amriswil will remain an express train stop, as mentioned by nearly all interviewees (P19, 63; P28, 26-27, 54; P26, 198; p55, 62) and underlined in the quote below. The project also includes biodiversity measures, but these are of secondary importance compared to the overarching goal of renewing the station square (P27, 124-128).

> Now we are [working on the] new station square, and we need to ensure that the infrastructure remains in place, on the one hand, that the […] [express train] stop remains, that the bus connections around it remain, that is extremely important for us, and then a beautifully designed station square is also part of it, so that people feel comfortable there. (Member of City council and representative of conservative party)

As highlighted in the quote below, all these factors are perceived to fuel a sort of vicious cycle: as Amriswil has historical, economic, and geographical constraints, building housing for higher-income-earners is not considered a viable option, nor is the lowering of the tax rate politically feasible (P19, 59, 70). This further amplifies the low attractiveness for high income earners (Fig. 8).

Nevertheless, according to several interviewees, the express train connection contributed, combined with the availability of relatively affordable housing (cf. Chapter 1.1.2 and 3.8)., led to a steady population growth, as an increasing number of commuters have moved to Amriswil (P23, 30; P25, 156-158; P26, 178; P27, 71-74; P55, 19; P28, 56-59).

Furthermore, interviewees confirm that Amriswil plays the role of a central city in the region (P19, 62; P55, 51-52), which comes at a high cost, as the town must assume responsibilities and related costs in several sectors for the whole region (care for the elderly, youth institutions, infrastructure etc.) while bearing the full costs (P19, 62; P55, 51-52).

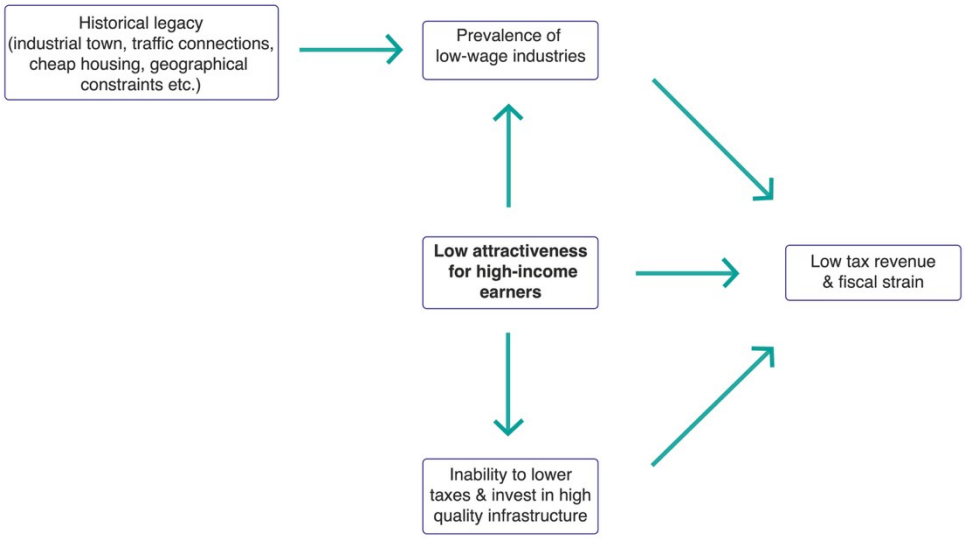

Figure 8: Perceived vicious cycle of low tax income in Amriswil

Implementations

New housing projects in Amriswil are in the mid-to-high-range price bracket and can often be rented out quickly (P19, 69-70; P25, 131-134). However, there is hardly any housing in the (very) high-price segment as high-income people have a preference for lakeside locations with lower tax rates than in Amriswil (P19, 59; P27, 21-23). A public actor mentioned an apparent shortage of larger flats for families and small (or micro) flats for single people (P27, 85, 141-142). In fact, as mentioned in Chapter 1.1.2, the share of small (less than three rooms) and large (more than four rooms) apartments is relatively small, although the number of large apartments is gradually increasing. Families in this region – like in many others – still have a preference for detached houses, but also in Amriswil they are only available in small numbers and at high prices. Public representatives mentioned that a factor contributing to the shortage of detached single family houses is that older people tend to stay longer in their houses than in the past (P27, 85; P55, 191-197):

> I think it would also be nice for the young people […]I have a lot of colleagues who are in their early 30s. They are now starting families and saying, yes, it would actually be nice if their parents moved out. Because of their age […], they are now around 55 or 60 years old. Yes, it would be cool if we had a detached house, we have children now and we can use it now. And there are still many [older people] who would probably say, no, we have our work there, we still appreciate the garden (City councillor, conservative party)

One project that was mentioned by almost all participants is the redevelopment of the area along the *Bahnhofstrasse*. This has been in the planning for some time and will continue for at least a few more years (P23, 14-28). A total of around ten older and smaller houses will be demolished (P27, 153–157). Some of them were purchased by the city and will subsequently be sold back to investors after the planning phase has been completed. According to a local

government representative, this will allow for a more coherent and attractive overall picture of this central city area (P27, 46-48):

> We have a whole area near Amriswil station that is undergoing densification projects. […] These are all small buildings that have also been rezoned. Several design plans are now underway there. Among other things, the city of Amriswil has purchased two properties there. Because they simply say that the properties are needed for the overall development of the area. […] Many small flats, two-and-a-half-room flats. Relatively few underground parking spaces, too. Because they say these are commuter flats with a direct train to Zurich. […] Of course, this is also with the support of the city of Amriswil, which purchased the key property. We also co-financed the design plan. But it's a private investor who is developing the project, and we simply said we could sell him the property. Because we didn't want anyone else to buy the property. Then the site would lie fallow, or we would have to plan around it. […] So it's just a precautionary measure. Because we said that if something happens there, we'll buy the property and then we can have a say and make sure that the area is developed intelligently. […] [I]n such a central location, if you see that something is happening […] then it is also in the city's interest that we need it, that there is something smart happening, then it is definitely an option for us to purchase a property. (Representative of conservative party, Municipal Council)

According to representatives of the local government, the project was largely well received by the population (P19, 100-101) and met with little political opposition (P27, 153-157). Another large development, the *Breitenaach*, is currently executed by the private company Thoma AG. It covers an area of 11,000 square metres and includes 100 three-and-a-half to five-and-a-half-room flats, half of which are for rental and half will be sold (P23, 14-26; P25, 131-132; P27, 79) (see also Chapter 1.1.2).

9.3.4.2 Participation and governance (procedural)

In this section we describe the different processes of governance that play a role in the housing situation of Amriswil by focusing on the processes that shape the dynamics between public/administrational bodies and private firms.

Perception of housing politics

As mentioned earlier and for reasons further discussed below (cf. 3.4, 3.6) housing is not perceived as a problem in Amriswil. In fact, Amriswil has quite a high number of vacant apartments and a high rate of new construction. Accordingly, there is no demand for the administration or government to become more active in housing policies, as was detailed by representatives of these branches (P27, 89, 117; p55, 90).

A public representative declared that the municipality as an actor is relatively weak (P27, 180-181). Despite its willingness to initiate projects, due to its financial constraints, it often lacks the resources to implement them consistently (P26, 48). Smaller initiatives – like the Fair Trade Town certification, which obliges the administration and local businesses to stock a minimum level of Fairtrade goods – are supported sporadically (P55, 36-37). The municipality also organises information events to involve and motivate people, for example in the case of larger projects or to promote energy refurbishments (P19, 64-67, 92-93).

Interviewees agree that the city is politically quite conservative (P25, 42, 98; P26, 13, 125; P27, 109; P55, 9; 77), also in comparison to other cities in the region. Indeed, as mentioned earlier (Chapter 1.1.1), Amriswil is significantly more conservative for example Zurich and St.Gallen, with a constituency more typical for rural communes than for cities, which generally tend to be more progressive.

Perception of governance processes and public administration

There is no regional cooperation on energy projects; moreover, cooperation with the cantonal energy advisory office does not always run smoothly, as was briefly mentioned by a member of the administration (P19, 65; P26, 30-31, 201-208).

In recent years, many framework conditions in Amriswil had to be revised and adapted to cantonal requirements (P55, 11-15; P26, 210-215, cf. Chapter 9.3.2). This was partly done with the participation of property owners and has laid the foundation for promoting densification (P55, 11–16, 57).

Another element that regulates the process between private individuals and the administration are the design plans. However, according to administration representatives and city councillors (P19, 10-13; P26, 94-99; P55, 58-61), the potential of these design plans is often not fully exhausted, particularly regarding green and energy measures. This is largely due to the opinion that an excessive number of requirements would increase construction costs in the municipality to such an extent that investors would no longer be willing to build in Amriswil (cf. Chapter 1.2.2), as illustrated by the following statement:

> In connection with your topic, it must be said that we repeatedly have design plans that we discuss in the city council, where we actually have room for manoeuvre. […] From a green perspective, we tend to make poor use of our opportunities, because we often already give the developers options […] one is a little inhibited about imposing conditions and demanding more, even though one is also giving more. This is quite pronounced in our case. […] It's really a bit of a fear that an investor might pull out, or the feeling that there are already so many requirements when it comes to construction. You can't impose any more requirements. That's kind of the general tone in this council […] (250715_P19_AM_Transcription, Pos. 10) (City councillor)

There are also few building regulations instruments to enforce these design plans (P27, 114-118). Nevertheless, the city uses design plans when it comes to bringing together several owners for large-scale projects, as it is aware of the responsibility to coordinate large projects. From a private developer's perspective, the design plans would also be used more if they contained 'sensible' instruments (P23, 52-53), as one of the interviews mentioned:

> But now, from our perspective as investors, it's always a bit... the whole political framework we have is relatively sluggish, sometimes not fully thought through, and we just take what we want to do. And if we see somewhere that it makes sense to create a little more green space, from the perspective that we can then create more attractive living space here and sell or rent it more easily, then we definitely do that. But at the end of the day, we have limited capital and we have to generate a return on that capital somewhere. And if we realise that the return is no

longer interesting or no longer justified by the risk we are taking, then we stop investing. At least, we stop investing in real estate. (Private real estate firm representative)

According to private developers, communication with the municipality before and during the implementation of projects as good but they find it more difficult to negotiate with the cantonal authorities (P23, 80, 86-89, 105-112). Formal objections and the subsidiarity of different governance levels also complicate the construction process (P23, 105-107; P28, 29). Private stakeholders point at a trend towards more regulations, such as for example the cantonal requirements for the use of photovoltaics in new buildings and extensions, or the cantonal energy law, which is perceived as too strict (P23, 53-55; P25, 45-47; P55, 29-32). Local private stakeholders have a knowledge about green construction techniques are also incorporated but there are no firms specialising in green construction (P23, 61).

Local stakeholders are aware of the energy promotion programmes at both cantonal and municipal level (P26, 8, 20-21; P55, 56-57). Even though the municipal programme only offers minor subsidies, the municipality is said to maintain a 'lively communication' with the population on related issues (P26, 96), but how this communication is practiced concretely was not specified. It is mentioned that municipal building regulations promote solar installations and green spaces (P27, 111-112). Starting from 2026 the amendment of the Swiss Electricity Act[174] will promote local energy communities (LEG), which could be particularly useful for the local economy, as argued by a member of the local trade association (P25, 27-36). Presently, excesses of solar electricity can be sold to other users of the grid, but to a limited geographical extent, i.e. only within the area of a few blocks. LEGs will allow users to buy and sell solar electricity within the whole municipal area.

9.3.4.3 (In)equity (distributional)

Evictions and displacement are not considered as a problem in Amriswil (P25, 139-140; P27, 91-92; P28, 61-62). Lower-income groups live in older, low-cost and lower-quality housing, of which there is a sufficient supply both in Amriswil (P23, 65-71; P25, 142-146; P55, 54-55, 64-65) as well as in surrounding municipalities (P27, 104-107). As the mayor explained:

I don't feel that socially acceptable or affordable housing is being built. I don't believe that. I believe more that people here still live in older properties that are more affordable. I believe that the new buildings that are being constructed are not affordable for these sections or classes of the population, the new ones here. I'm not aware of any projects being planned in

[174] The Federal Energy Law was amended by the federal council in 2024 and was adopted at the beginning of 2025, with a second set of amendments coming into effect at the beginning of 2026. Key points are market-based return tariffs for solar power, the possibility of local energy communities, and winter bonuses for large photovoltaics system (UVEK, 2025).

> Amriswil, such as cooperative housing or anything like that. So, these people are explicitly choosing to live in old properties, in old housing, which is simply cheaper. (Mayor)

As mentioned by private developers, older housing tends to be replaced rather than refurbished, as there is no large rent gap. Indeed, the difference between the current rents and the rents that could be potentially demanded after refurbishment are negligible (P23, 68-71). The building activities associated with densification are perceived as having a social impact to the extent that newly built dwellings are affordable only to somewhat higher-income households. In fact, over the last few years, housing prices have been constantly increasing, also in Amriswil (P27, 80-83).

Currently, according to a member of the city council, there is a high demand for places in retirement homes. The construction of 30 municipal retirement apartments was also discussed, particularly from an executive branch perspective (P19, 81; P27, 6). The rental prices are structured in such a way that an apartment can be financed with a minimum pension and additional social welfare benefits (*Ergänzungsleistungen*) (P27, 164-179). The retirement homes are managed as private companies, with the town holding the majority of the shares. There is also some private construction of retirement apartments that further covers the housing demand of the elderly population in Amriswil (P27, 63).

Despite these new constructions, and even though some senior citizens tend to put their names in the waiting list several years before having a strict need for a place, the list has increased to around 150 places according to a public representative (P27, 85):

> Of course, among the 150 people on the waiting list, there are always people who may be on it because it's too early or they're unsure. But we really got rid of these flats quickly. And that means we definitely have additional needs. (City councillor, conservative party)

Amriswil has seen a significant influx of senior citizens from surrounding municipalities (P55, 15, 4; P25, 133-134). This is also caused by the fact that Amriswil allows senior citizens from surrounding communities to move into their municipal retirement homes as well, a common practice in small(er) Swiss municipalities; however, until now, these have been allocated primarily to the local residents (P27, 14-18).

The perceived vicious cycle mentioned in Section 3.1 (cf. Fig. 8) can also be understood as some form of inequity; while it is not an immediate housing inequity, there exists some perception that it is a historical & geographical inequity that still has ramifications to this day and is – as was explained in the sections before – perceived as a burden for the city.

9.3.4.4 Political mobilization

Currently there is hardly any political mobilisation around housing issues in Amriswil (P23, 79-80; P25, 147-148, P27, 97-101, 153-157; P28, 63-64). Even when old buildings are being demolished, there are no protests from tenants, although observers cannot completely rule out the possibility that this is due to a lack of knowledge or time; however, it is argued, it is more likely that there are simply enough housing alternatives in Amriswil (P27, 153-157). According to the administration and the mayor, there are discussions among the inhabitants on the topic of growth (P26, 110-115; P55, 74-77, 80-81) and there are also discussions on densification,

which basically tends to be approved, but when it affects people personally (e.g. new construction next to their own property) or older, historic buildings, some residents are divided as mentioned by administration representatives and by the mayor (P26, 174-178; P55, 80-81):

> I would say less, but there is also resistance. For example, there are currently one or two new blocks that are really overshooting, in terms of height, […] And some people think that's stupid, or that it's logical, or if you live next door, you probably think it's stupid. But basically, I think people still think it's good. […] I keep hearing that we have so few historic buildings or something like that. If we tear them down, then we'll have nothing left. […] I can understand that. But I think that's something that no one on the conservative side is trying to prevent, at least for now. (Administrational representative)

Green issues are somewhat discussed by the population but remain largely a concern of the administration and executive. For example, a representative of a political party and a member of administration mentioned that whether to retain the Energy City label was discussed on several occasions at the municipal level, but these discussions were hardly noticed by the population (P26, 84-85; P27, 108-109).

> So it's not controversial, no, it's not widely discussed, I would say. I think a lot of people don't even think about this issue. (Representative of conservative party, Municipal Council)

Ecological issues did not gain much attention, not even after the greening of the city, as they are often considered 'luxury problems', as noted by a member of the administration (P26, 167-169). A civic-society representative stated that in particular lower-income people do not have the time and/or inclination to reflect on ecological and social issues (P28, 40-42). However, specific restrictions, such as the loss of parking spaces during the redesign of the railway station, led to heated discussions in the population (P19, 100-101; P27, 141).

Likewise, the greening efforts of the government did not lead to a change in the views of the residents, as stated by the mayor (P55, 44-45). From the perspective of some progressive members of the executive, the politically conservative city is basically oriented in favour of private transport and rejects effective green measures (P19, 15-16, 50-52, 58). One of the civic-society interviewees relates the lack of political discussion in general to the lack of a parliament in Amriswil (P28, 85-86, 90-91):

> Perhaps it has something to do with the fact that I think people need to be more involved in politics. And for me, that means that a town like Amriswil, with 15,000 inhabitants, should have a parliament. But we don't. […] I just feel that for a broader discussion about where Amriswil should go from here and how it should move forward, I think a parliament would be a better way to engage people. And one reason why I founded […] an association is simply because I feel, how else can we become politically active? […] And perhaps it also has to do with the fact that Amriswil didn't really see itself as a town, but rather as a large village. And that is definitely over now. We also have urban problems [...] Awareness is perhaps less than I would like it to be; less than in other towns of similar size. […] There is the municipal assembly, right? [For the budget], for example, and it usually goes smoothly and, of course, a vote is taken. As a rule, it goes through smoothly. […] That's certainly good, but what I find lacking are the visions, the perspectives, when it really comes down to the experiences or even the trend we

have seen in recent decades, that we are always lagging behind others in terms of development and finances. How can we tackle this, perhaps even make a new start? That's what I find lacking a little. (Civic Society representative)

9.3.4.5 Social impacts (positive & negative)

As was mentioned earlier, there are no large green transition projects in Amriswil. Accordingly, only few social impacts were mentioned, even though we explicitly asked interviewees about their perception of EEPs negative impacts. Indeed, practically nobody gave a concise answer regarding this topic. Most of the answers referred to some general social impacts, which are listed below, but did not explicitly mention any particular EEP as responsible for them.

In Amriswil so far there has not been any NBS project with a tangible impact on a specific neighbourhood and its inhabitants, as the only greening measures that are currently being implemented, such as for example the distribution of trees at subsidized prices and the subsidies for greening housing facades, are rather minor and distributed in the municipality's whole territory. The greening of the city through the '*Vorteil Naturnah*' project (see Chapter 1.2.3) was well received, as members of the city administration and a government official commented (P19, 49-50; P26, 71-75). A representative of a real-estate firm expressed the feeling that the implementation of NBS created aesthetically pleasing environments, which could lead to easier letting (P23, 56-57).

Through the construction of retirement homes, more housing for the elderly population could be created (P19, 81; P55, 91) All in all, it was also expressed that there was a satisfactory amount of living space in Amriswil (P26, 187-189):

Well, we have extremely affordable flats […] you can get really good flats at the moment, at affordable prices […] I can see that there is an extremely large supply of flats and a lot of construction is still going on. (Administrational representative)

9.3.4.6 Tensions and contradictions according to different stakeholders

Perception of contradictions by different actors

During the interviews, some tensions between EEPs and other goals were mentioned by private and private-civic society stakeholders.[175] A central concern was the profitability of real estate and its costs in relation to various other issues. These included the increase of costs caused by the large number of regulations (P23, 53; P25, 63-67, 84-85; P55, 97) and by green measures (P23, 98) and the large number of formal objections against new developments

[175] One interviewee representint the trade association (*Gewerbeverein)* spoke with a double role of private entrepreneur and is thus referred to as belonging to the category 'private-civic'.

(P23, 105-107). In addition, the rent increase when refurbishing older housing that can be asked from tenants is quite low, thus demolition and rebuilding is often considered more profitable, as will be further explained below. These additional costs, especially those for green measures, have an impact on rents and accordingly are only considered worthwhile if there were financial incentives for their implementation, as argued by a real-estate firm (P23, 58-59). This is a 'balancing act', especially in the case of housing for vulnerable groups, such as urban retirement homes, which must be profitable despite their low rents (P27, 89):

> […] I'd say that a certain standard of construction requires a certain level of quality. But also that it should not be gold plated, that it should remain affordable. And, of course, we have to calculate so that we can get through but not make too much profit. And that is, of course, a balancing act when we also say that we do not want to finance retirement homes with taxpayers' money, but that they should be self-supporting. Then we build our own buildings. (Representative of conservative party, Municipal Council)

A member of the administration mentioned that the implementation of green measures could also increase the attractiveness of the properties, which would also lead to higher returns and attract better taxpayers (P26, 143-146).

Another topic concerns the acceptance of densification. On this issue a private representative argued that individual residents still have to accept to prioritise public interest over their individual ones. It is also acknowledged that more densely built new dwellings will be more expensive (P23, 55, 102) (see quote below). Furthermore, a civic representatives mentioned that population growth related to densification would lead to more traffic problems (P28, 57-58).

> And you can't expect that if you build a new building on it, I'll still be able to rent the 4.5-room flat for 1'000.- afterwards. […] [I]n the end, you also have the entire building stock, which would then have to be halted. So, I can't say that I want to bring the building stock up to scratch, but I don't want to give notice of termination, because that's simply not possible. […] There is no alternative, […] but when you look at the big picture, yes, it's the same thing: everyone talks about densification, but not in my backyard. If I have a beautiful view of the lake, then I don't want a high-rise building to be built in front of it. But somewhere we have a design plan, a zoning plan, and if we say we don't want to expand further into green spaces, into agricultural land, then we have to densify the inner city. (Private real estate firm representative)

Individual tensions surrounding the issue of densification were also mentioned by a private stakeholder: on the one hand, excessive densification would not be readily accepted by the inhabitants (P23, 32-35), while on the other hand, individual needs might have to be put on hold, for example by restricting formal objections to speed up the proves of granting building permits (P23, 102).

Stakeholder dynamics

Private stakeholders are mainly concerned about the profit that can be extracted from their properties. Energy refurbishments of old properties generally not considered worthwhile, as tenants, more than for improved energy efficiency, are only willing to pay higher rents for better

floor plans and fittings, which can usually only be met by demolition and new construction (P23, 98). Renovations would also hardly be worthwhile due to the low rent gap, i.e. the negligible difference between the current rent and the potentially achievable rent (P23, 38-40). In addition, densification projects would be initiated where they would be financially worthwhile (P23, 47-48). Investors therefore prefer to purchase single-family homes in areas where densification is possible (P27, 198-201). The mayor of Amriswil pointed out that large construction projects are usually purchased by institutional investors, but only if they can be acquired on a turnkey basis from developers, i.e. as an already fully planned project (P55, 103-104, P23, 47-48).

Due to the city's small size, members of the administration maintain that there are no large contiguous areas undergoing gentrification (P26, 139-140) but moderate price increases can be observed in proximity to the railway station (P27, 91-94).

9.3.4.7 Innovative governance mechanisms

Perceptions of green policies

This section focuses on the projects and mechanisms deployed by the local administration. As no larger EEP projects have so far been implemented in Amriswil, this section takes a broader approach by focusing on the mentioned smaller projects that fall into the scope of NBS or 'green policies', as mostly conceived by local stakeholders.

A project that was mentioned by the administration and public officials was the general greening of the city of Amriswil (P26, 42-48; P55, 39-43) subsidized by the canton in the framework of the *'Vorteil Naturnah'* programme (P19, 20-33, cf. Chapter 9.3.2.3). A landscape architect has carried out a study to assess the feasibility of related measures in various locations in Amriswil (P26, 42-48; P55, 43). This triggered a debate in the administration about the need for such measures. Those supporting the greening had to convince the sceptics, as exemplified by this quote:

> First, we had to convince our city gardeners and our maintenance depot that green spaces can be designed in a simple and inexpensive way and, above all, with low maintenance. That, in addition to simply looking good, it also makes an important contribution and has benefits for nature and the environment. Simply convincing them internally of the advantages. I think that was a challenge. (Mayor)

It was also important to communicate the advantages of the greening measures to the inhabitants, as a public official detailed:

> I think externally it was simply a matter of persuasion and perhaps also certain myths that needed to be debunked or concerns that needed to be allayed. Or perhaps simply backing it up with facts: it requires less effort. It looks good at some point, maybe not right away at the beginning. It has to grow and come to life first. And I think that convincing people of certain prejudices and myths took time to convince them that it wasn't insanely expensive. It's also about cost-benefit. […] And this relationship, this area of tension, simply needs to be accompanied and demonstrated through communication and examples. (Mayor)

One of the city's concrete instruments is the discounted sale of plants to residents. According to members of the municipality this programme has received very good responses, (P19, 30-33; P26, 73-75; P27, 109) and is considered efficient as it requires little effort (P26, 103). Another instrument is the Energy City label (c.f. 9.3.2.2), which the city has received, among other things, for the construction of district heating and battery storage facilities (P28, 40-44). However, there are currently no further projects within the framework of the Energy City label (P28, 40-44).

9.3.4.8 Market pressures and competing local topics

Housing market in Amriswil

A key issue in relation to the property market – mentioned by all interviewees – is the rise in land prices, even if moderate compared to other locations in Switzerland and not limited to a specific area in Amriswil (P19, 77-79; P27, 81-83; P28, 16). One civic-society interviewee thinks that this might be related to the growing role of institutional investors in the Amriswil property market (P28, 16). We could not find any concrete evidence to support this hypothesis even though this is a well-known trend all over Switzerland.

According to a representative of a private real-estate firm, rising prices in larger, more central cities have led to a slight increase in the number of people looking for housing in Amriswil (P23, 81-82). Above all, however, detached single family houses are becoming more expensive and less common, with more apartment buildings being built instead (P27, 20, 27, 31-33).

> Apartments, no. We have quite a lot of those. In fact, I would say we have a surplus. There are also many condominiums still under construction. Houses are certainly problematic, because many people, especially young families, still want to have a detached house. That's the dream of a house and garden. Yes, but it's becoming increasingly difficult because supply is simply declining and certainly not increasing. (Representative of conservative party, Municipal Council)

This, combined with uncertainties in the financial market, is leading to an increase in condominium ownership, which is also more profitable for developers, as mantained by a local real estate firm (P23, 90-95) who also argued that expert assessments on rental prices in Switzerland, for example those of Wüst Partner[176], do not always reflect the reality in Amriswil as they are often overrated because they do not consider the local market conditions, which play a decisive role (P23, 32-35, 110-112).

[176] Wüest Partner is a company that offers real estate valuation, consulting services, and data related to the real estate market. Founded in Zurich, it has become the market leader across Switzerland.

A private stakeholder also mentioned a form of "parallel housing market": in his view, roughly 10% of construction projects are undertaken by companies owned by migrants from the Balkan region. These companies often carry out rapid renovations of older housing, to be rented out primarily to Balkan emigrants (P25, 185-220). While this interviewee assumed that this housing was relatively inexpensive, a city council member noted that prices were not always low, as some of these "Balkan projects" also consist of entirely new construction. (P55, 82-87).

Expectations for future development

Several among our interviewees in Amriswil made some predictions related to factors affecting the future housing conditions, such as population growth, building activities, and housing prices. Accordingly, in this last section we focus primarily on included these predictions.

Most respondents recognise Amriswil's potential for densification in in the future (P26, 174-176), as well as the possible benefit of renewing the city centre (P28, 77). Interviewees also believe that the city will continue to grow in the coming years (P55, 16). However, the implementation of densification projects, such as *Bahnhofstrasse*, will take several more years, as noted in Section 3.1.2 (P23, 14-28).

The wishes of the interviewed stakeholders are sometimes very different. Private developers advocate for more restrictions on the submission of formal objections (P23, 105), while civic society representatives would like to see greater coherence and efficiency in discussions between different governance levels (cantonal – municipal) (P28, 33-34). The local trade association (*Gewerbeverein*) criticises the lack of training and support regarding green transformation, the lack of support in pressing issues such as rising electricity prices[177] and expressed the desire for more training and support on green transformation (P25, 241-242).

Some members of the government of the right-leaning SVP party expressed the desire for less interference in the planning and implementation of local projects by higher governance levels (canton/federal government) (P27, 163; P55, 94-97). On the other hand, left-leaning members of government and administration tend to long for higher-level planning, guidelines and stricter rules (P19, 103-111) or at least for assistance, even though they agree that implementation should always remain within the municipal authority (P26, 164-165):

> We have building regulations, for example, and sometimes I wish there were stricter measures in place. Energy legislation, green spaces – I would like to see more regulations so that we don't always have to have discussions at municipal level, but given the high value placed on municipal autonomy in Thurgau, this is just my personal wish and not shared by everyone. (City Councillor)

[177] This was in relation to the electricity price increases across Switzerland and Europe from 2022 onwards, which have fallen slightly again since then (Eidgenössische Elektrizitätskommission, 2025).

More support from the canton in the form of resources would strengthen the implementation of energy refurbishments and NBS in the city (P26, 156). Furthermore, some members of the administration would like to see a stronger enforcement of green measures in design plans (P26, 94). However, according to a member of the administration, this should be implemented through incentives rather than strict regulations (98-103). However, these incentives would have to be revised on a regular basis (P26).

Other more specific wishes expressed by the interviewed stakeholders refer to everyday issues related to the central tax-issue discussed in Chapter 3.1.1: promoting a more vibrant city and thus attracting better tax payers (P26, 146; P28, 77), improving the situation for active mobility (P19, 118-119, P28), creating more areas on public land that are climate- and biodiversity-friendly (P26, 55-57), or creating high-wage jobs in the region (P28, 47; P55, 23).

9.3.5 Critical Analysis: Amriswil

9.3.5.1 Green transition initiatives and housing inequalities

Amriswil, situated in Eastern Switzerland and with a historical legacy of low-wage industries, is characterised by a housing market with comparatively low pressure. Basically, all interviewees agree that there is enough affordable housing and different housing segments cater to different needs and levels in willingness to pay. Affordability is not perceived as an issue, not even in relation to green transition initiatives. On the contrary, there is hope that measures in the framework of environmental and energy policies could contribute to upgrading the existing building stock and help attract more affluent households and thus increase tax revenue – a key concern that will be further developed below.

Displacement or any other forms of housing inequalities were hardly mentioned. In fact, responses to related questions often diverted to other issues, presumably because housing is not widely discussed in Amriswil and does not feature in debates within the city council or the administration. Socio-spatial differences between different neighbourhoods in Amriswil were barely mentioned. In fact, the absence of housing debates and political mobilisation around related topics is one of the key findings of our research in this small city. According to our interviewees, green transition initiatives had no substantial impact on housing inequalities, at least so far. However, it was mentioned, albeit not in connection with housing inequalities or green initiatives, that new buildings are primarily inhabited by households with higher incomes while lower-income households tend to live in older properties. This potentially reflects housing inequalities in the form of lower-quality housing. Furthermore, inequalities exist between Amriswil and surrounding, more attractive municipalities. This reflects socio-spatial inequalities at regional level with more affluent households choosing to live in more attractive municipalities with negative social and fiscal consequences on Amriswil. The absence of (negative) impacts of green transition initiatives on housing inequalities needs to be put into a broader perspective: what has been implemented so far is relatively limited and diffused over the whole territory. Furthermore, we also observed a reservation towards the implementation of environmental and energy policies enforced by higher levels of government (Canton of Thurgau or the Swiss Confederation). This can be traced back to the political orientation of the municipality, a lack of resources (financial as well as personnel), and a certain dependency on the private market.

When it comes to energy refurbishments, there is a fundamental tension between the costs of energy refurbishments and a slack housing market that does not allow tangible rent increases. Due to a low rent gap, landlords don't consider renovations as profitable. In fact, the potential rent that could be demanded for renovated apartments is reportedly not sufficiently high to compensate the renovation costs. Overall, the offered subsidies are not sufficient to change this situation substantially as they cover at best 50% of the refurbishment costs (BFE & EnFK, 2016). Moreover, if tenants are willing to pay a higher price for a renovated flat, they often have higher expectations in terms of floor plans and fittings that cannot be met by the old building stock. Landlords therefore prefer demolition and new construction, particularly in areas where densification is possible. Factors affecting energy refurbishments beyond the economic one (ecological, social) are hardly discussed.

As energy refurbishments for apartment buildings are not profitable in Amriswil, it is likely that the bulk of subsidies is granted the owners of single-family homes, which potentially reinforces inequalities between homeowners and tenants. While data for Amriswil lacks, national data shows that around 50% of the subsidies are allocated to the renovation of single-family homes (BFE, 2025a).

Densification in Amriswil, as in all of Switzerland, is regulated by the Spatial Planning Act. With its revision in 2014, densification became mandatory for cantons and municipalities. The municipality of Amriswil is actively steering densification through its building regulations, the zoning plan of 2020, and designated areas where high-rise buildings are possible. Especially around the area of the train station, the municipality promotes a higher density with a more urban flair. To this aim, it purchased properties so that it can have a stronger influence on the development of the area. These properties will later be sold again to private investors.

Generally, densification is well accepted in Amriswil, although it should be mentioned that so far it only occurred on a moderate scale, as other places promise higher returns on densification projects. Also, in Amriswil there have been cases of NIMBYism (Not in My Backyard, i.e. resistance to a development locally while approving of the project more generally). Overall, Amriswil remains a town with a relatively low density with plans for moderate densification in the centre and along traffic corridors.

As for NBS, there are some efforts by the municipality to make urban open spaces in Amriswil more biodiverse, and to provide incentives for owners of private gardens to remove stone gardens and neophytes and replace them with plants promoting biodiversity. These measures can be seen as low-risk, low-cost measures that do not interfere with the private market and raise few concerns among Amriswil's population as they are not considered to influence housing inequalities. NBS subsidies so far benefit primarily the owners of detached single-family houses with private gardens rather than tenants, but they are currently being supported at a scale that they are not being perceived as reinforcing inequalities between homeowners and tenants. If having any social impact at all, the greening measures are thought to potentially increase property values, which is generally regarded as positive since the town tries to attract more affluent households for tax reasons.

9.3.5.2 Role of the municipality and the private market

Amriswil is largely seen as a peripheral town in the network of cities in Switzerland, but one that has nevertheless the role of a small centre for its region, providing functions and services (e.g. a care centre for the elderly) that are not available in the surrounding villages. This, however, is perceived as a burden for the municipality, as it generates costs. At the same time, Amriswil is not as attractive as other municipalities in the region and therefore fails to attract more affluent households. In Switzerland's tax system, municipalities directly benefit from income taxes. Accordingly, Amriswil's government aims to boost the town's tax revenues by attracting companies in higher-paying sectors and by creating an environment appealing to higher-income households. However, the municipality as a public actor plays only a marginal role in urban development, essentially limited to planning. When it comes to actual development, the municipality depends on private actors. Investors consider profitability across regions, and as Amriswil appears less promising, especially in comparison to towns in the agglomeration of Zurich, the municipality does not want to deter private actors who *are* willing to invest in Amriswil. This leads to a situation in which the municipality is reluctant to impose excessive regulation on the private market (e.g. by requesting additional benefits to the municipality in design plans, as other cities, such as for example St.Gallen and Zurich, do.[178]

There is some speculation that the very tight housing market in Zurich could at some point in time benefit Amriswil as it may motivate households unable to find suitable and affordable housing in Zurich to divert their search to more distant places that are well connected to Zurich by train, such as Amriswil. This would generate the much-needed tax revenue for the municipality, indicating that a crisis in one city or region could become an opportunity for another.

In contrast to the strong role of the private market, the non-profit housing sector is only marginally present in Amriswil where the only housing cooperative was not mentioned by anyone. Indeed, many interviewees even reported that there was no non-profit housing sector in Amriswil at all. The cooperative itself was not available for an interview. This suggests that the only housing cooperative in Amriswil has a different role from the one commonly attributed to cooperatives in the Swiss housing system, namely providing affordable, non-commodifiable housing to lower-income and middle-class households.

It should be noted that the municipality of Amriswil is not actively providing housing (besides affordable housing for the elderly), nor does it have a municipal housing policy. A more active stance in shaping the housing stock in Amriswil using for example land leases under building rights or instruments to support non-profit housing providers (as, for example, observed in

[178] See case study reports on St.Gallen and Zurich.

St.Gallen with its municipal housing strategy[179]) might be useful to ensure affordable housing for lower-income households. However, Amriswil seems to be in a situation where the housing market is functioning well enough that the local authorities do not face pressure to intervene.

Regarding housing policy as well as EEPs, there are diverging views on multi-level governance. While most interviewees maintain that the implementation of policies should primarily happen at municipal level, interviewees from the right of the political spectrum advocate for less or no regulations in planning and construction from higher governance levels whereas more progressive actors would welcome more support, incentives or regulations from the Canton of Thurgau or the Confederation.

9.3.5.3 Conclusion

Overall, Amriswil is a small town with a housing market that basically satisfies the needs of different types of households, with no reports of housing shortages, affordability problems, or other forms of housing inequalities. Amriswil is neither affected by the pressure from a growing population due to a flourishing economy such as Zurich and surrounding regions[180], nor affected by tourism as many of Switzerland's alpine regions. Amriswil is representative for many other municipalities in Eastern Switzerland[181], where housing remains affordable due to low demand. It could be hypothesized, however, that once the housing crisis in the Zurich region spreads even further and also the housing market in Amriswil comes under greater pressure), housing inequalities might rise.

Being in competition with other municipalities, there is a general view that Amriswil is disadvantaged in terms of location and environmental qualities in spite of the central functions it assumes for the whole region. Like in St.Gallen[182], there is a wish to attract households with higher incomes to strengthen the tax base. In this sense, Amriswil is a typical example of a Swiss municipality outside the larger, economically successful urban centres and the tourist regions, whose relative lack of attractiveness, the low municipal tax revenue, the related dependency private actors, and the conservative political orientation limits public influence on housing.

With regard to EEPs, we conclude that even though there are many policies in place – not least the ones mandated by higher levels of governance – many of them remain ineffective in Amriswil (and presumably many other small and peripheral towns) where the low rent gap discourages the private sector from refurbishment investments, and constrains local government to act due to the relatively small tax revenue. Often, the local government's focus

[179] See case study report on St.Gallen.
[180] See case study report on Zurich.
[181] See also case study report on St.Gallen.
[182] See case study report on St.Gallen.

does not lie on EEPs as other topics such as the municipal tax income or mobility infrastructure are prioritised.

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9.3.7 Appendix 1 – Glossary

Abbreviations

APZ	Alters- und Pflegezentrum Amriswil; care center for the elderly and disabled
EEP	Environmental and energy policy
FDP	FDP.Die Liberalen; The Liberals (economic-liberal party)
NBS	Nature-based solutions
SP	Sozialdemokratische Partei; Social Democratic Party
SVP	Schweizerische Volkspartei; Swiss People's Party (national-conservative party)

Terms and Concepts

Cantonal structure plan	*Richtplan;* cantonal planning tool, specifying zoning
Design plan	*Gestaltungsplan*; is established in a cooperative planning procedure between private developers and the municipal authorities. It can contain benefits for developers (e.g. higher density) in exchange for contributions of public interest (e.g. public spaces).
Energy City label	*Energiestadt-Label*; national label awarded to municipalities that make efforts in the field of local energy and climate policy
Housing Promotion Agency	*Wohnbauförderung;* federal housing promotion, distributed by the cantons
Spatial Planning Act	*Raumplanungsgesetz*; federal law introduced in 1979; in 2014, densification was introduced as a mandatory principle for cantons and municipalities

9.3.8 Appendix 2 – Key interview data and transcripts

#[183]	Position of Interviewee	Sector	Organisation	Date of interview	Media
P19	Member of city council	Public actor	City council, Green Party	08.07.25	online
P23	Representative of local real estate firm	Private actor	Real estate firm *thoma Immobilien*	10.07.25	online
P25	Representative of local trade association	Private actor	Trade association *Gewerbeverein Amriswil*	22.07.25	in person
P26	Representative of city administration, responsible for environmental issues	Administrational actor	Responsible for environmental and energy issues	22.07.25	in person
P27	Member of city council	Public actor	City council, *SVP Amriswil*	22.07.25	in person
P28	Representative of local cycling association	Civic actor	*IG Velo Amriswil*	24.07.25	online
P30	Representative of cantonal administration, responsible for housing promotion	Administrational actor	Housing Promotion Agency	12.06.25	telephone
P34	Representative of tenants' union	Civic actor	Tenant's Association Eastern Switzerland	31.07.25	online

[183] Gaps appear in the interviewee numbering because interviewees were numbered continuously across the three case studies Amriswil, St.Gallen and Zurich.

P55	Mayor	Public actor	City council	20.10.25	in person

10 UNITED KINGDOM

10.1 CASE STUDY (LARGE): LONDON

Image of Holloway Park Source: Phoebe Stirling

Authors: Phoebe Stirling, Sonia Arbaci, Margaux Daly (UCL)

10.1.1 City profile, challenges around just (housing and ecological) transition

London Borough of Islington

The London Borough of Islington (LBI) is a central inner borough in the north of London, governed by Islington Council and at the metropolitan level by the Greater London Authority (GLA). Islington is London's third smallest borough by area, at 15 km^2, and the most densely populated local authority in England and Wales (State of Equalities in Islington: Annual Report 2021, 2021). The borough has the second lowest proportion of green space in England at just 13%. Islington is an accessible area with direct rail links connecting Islington with Inner and Outer London and the wider Southeast of England (State of Equalities in Islington: Annual Report 2021, 2021).

The population of the borough is highly diverse, with a mixture of high wealth and high deprivation, containing some of the country's most deprived neighborhoods (State of Equalities in Islington: Annual Report 2021, 2021)). There is a broad multi-ethnic population from a variety of backgrounds, a variety of faith communities, a significant proportion of disabled people, as well as one of the most concentrated LGBTQI+ populations in the U.K (Islington Local Plan: Strategic and Development Management Policies, 2023). Despite proximity to high wealth, the effects of poverty and lack of affordable housing are considered crucial issues for the borough.

Islington is known as the first borough in London to be identified as a site of 'gentrification', during the 1970s. The borough has since been identified as moving into a phase of 'super-gentrification', with a contrast between very wealthy residents (with an average income of £78,000), and poor families living in social housing with an average income of £15,500. Increasingly, even middle earners have been understood as having been 'squeezed out' of living in the borough. As such, while gentrification has been taking place for decades, Islington continues to be a borough in which gentrification itself can be identified and studied (Islington Local Plan: Strategic and Development Management Policies, 2023).

The population of Islington is estimated to be around 220,584 in 2023, with a 5.1% population increase between 2011 and 2021, therefore growing at a slower rate than the rest of London (7.7%) and England (6.6%) (*Data and analysis from Census 2021*, 2023d). The population contains a mix of affluent and socially deprived residents, with an average economic inactivity rate just below the rest of England (7.1% compared with 2.01%), a slightly higher employment rate (79.3% compared with 76.8%), a higher claimant count (5.8% compared with 3.2%), higher gross disposable household income (£38,628 compared with £21,359), and higher gross domestic product per head at current market prices (£123,409 compared with £31,133) (ONS, 2023) (*Data and analysis from Census 2021*, 2023d). These statistics have changed significantly over the past 20-30 years. The economic inactivity rate is down 13.6% since 2003, the employment rate is up 16.6% since 2004, the claimant count is up just 0.8% since 2001, gross disposable income up of 22,083 since 1997, and gross domestic product per head is up £80,447 since 1998 (*Data and analysis from Census 2021*, 2023d). It is estimated that Islington's population will grow by 6,600 people between 2022 and 2032 (Comer-Schwartz, n.d.), which will only serve to increase housing burden and affordability issues described in the first section.

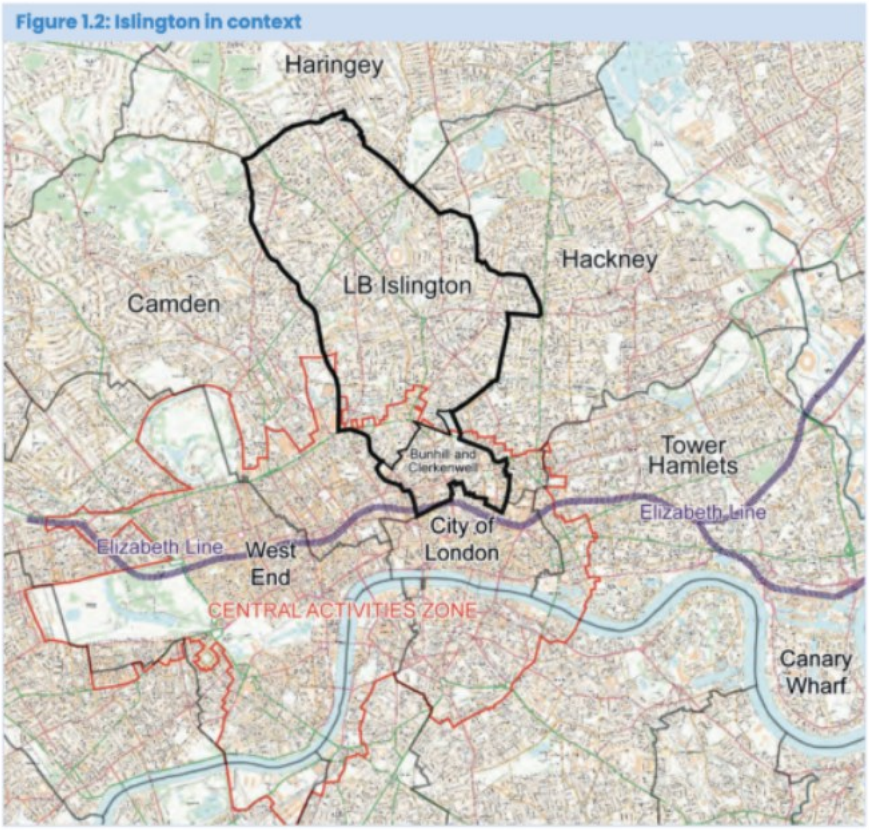

Figure 1. *Location of London Borough of Islington (Islington Local Plan: Strategic and Development Management Policies, 2023)*

Islington's housing sector contains the highest social-rent market in all of England at 38.85% (16.73% in England), a moderate private-sector rental market at 21.18% (20.84 % in England) of housing stock, and an owner-occupation rate of 28.97% (62.44% in England), 11.83% of which is owned outright (Housing prices in Islington, 2025). Since 2011, the private-rented sector has grown by 5.8% and the social-rented sector has shrunk by 3.2% (Housing prices in Islington, 2025).

The median house price in Islington was £693,000 as of May 2025, down 7.7% since May 2024, but higher than median house prices across London (£566,000) and the rest of England (£269,000). Average private rent in Islington is £2,697 (as of May 2025), a 7.1% increase since May 2024, higher than private rent across London (£2,252) and England (£1,399). The affordability ratio for Islington's private rental market is 38.7% as of June 2025, which is above the 30% affordability threshold in the UK (Housing prices in Islington, 2025). The private-rented sector faces quality issues, with approximately 3,100 private rented properties in Islington likely to have at least one serious housing hazard (Category 1 or high-scoring Category 2, HHSRS) and higher levels of deprivation (Housing Strategy 2021-2026 Action Plan, 2021).

Islington's current housing strategy for 2021-2026 prioritises the delivery of affordable housing, with a target that all development projects include 50% affordable housing on site, that homes are built to adapt to changing needs including integration of renewable technologies low-carbon

building options in line with the council's green agenda, that developments make use of landscaping strategies to improve green space and decrease potential for anti-social behaviors, and that local residents needs are consulted and attended to through acknowledgement of annual audits of lettings and community consultations (Housing Strategy 2021-2026 Action Plan, 2021).

There is an additional objective to make homes and estates safer and more comfortable, for example through identifying opportunities to increase energy efficiency and reduce fuel poverty in the area. Energy efficiency measures are a concern in Islington, as 14.8% or residents experience fuel poverty, which is slightly higher than England's average (13.4%) and the Southeast of England (7.5%) (*Improving our Private Rented Sector*, 2024).

Islington's Local Plan, adopted in September 2023, outlines strategic development and management policies for the borough. This plan is developed downstream of the London Plan and is a legislative requirement of the National Planning Policy Framework (NPPF). Policy H2: New and existing conventional housing states 'Islington aims to meet and exceed the housing target of 7,750 units by 2028/29, which equates to an annualised target of 775 per annum. The overall housing target for the plan period from 2020/21 to 2036/37 is a minimum of 13,175 homes' (Islington Local Plan: Strategic and Development Management Policies, 2023).

Policy H3: Genuinely Affordable Housing contains multiple clauses to ensure developers deliver the maximum proportion of affordable housing possible. As stated previously, the target is 50% affordable housing units for all developments of 10 or more units or 1,000 sqm of residential floor space, and all developments that propose to deliver less than 50% will be subject to detailed review mechanisms. There is an additional clause for site-specific viability claims, which are only to be accepted in exceptional cases pertaining to significant shifts in macro-economic conditions, or significant shift in the typologies of housing initially planned for. Additional policy directives included in Islington's Local Plan include those pertaining to Sustainable Design of new developments and Green Infrastructure (Islington Local Plan: Strategic and Development Management Policies, 2023). 'Islington Council is the second largest Council landlord in London managing 35,000 homes. We look after over 25,000 tenanted and nearly 10,000 leasehold properties of which we estimate that approximately 40% are sublet.' (Woolf, 2025).

Table 1. *London Borough of Islington housing size mix priorities for each housing tenure (Islington Local Plan: Strategic and Development Management Policies, 2023)*

Table 3.2: Housing size mix priorities for each housing tenure

Tenure	Studio/ Bedsit	1 Bed	2 Bed	3 Bed	4 Bed
Social rented	None	Low/Medium	High	Medium	Low
Intermediate rent – at London Living Rent levels (or rents akin to social rent)	None	Medium	High	Medium	Low
Intermediate rent – other Discounted Market Rent products	None	High	Medium	None	None
Intermediate/ shared ownership	None	High	Medium	None	None
Market	None	Low	High	Medium	Low

Islington currently has over 16,000 households on the Council's Housing Register in need of an affordable home and therefore seeks to increase the supply of genuinely affordable, high quality, energy efficient, well designed accessible homes, including larger homes to tackle overcrowding (*Delivery Strategy for the New Homes Programme, including the Procurement Strategy for New Build and Major Construction Contracts*, 2025). The council's objective to build 750 new council homes between 2021 and 2027 has been challenged by the introduction of new building safety regulations, interest rate rises and cost inflation, making housing construction much riskier. Islington Council has found that due to insufficient funding available for the Council to build new council homes on identified sites, alternative delivery models are required to enable the delivery of more social rented homes to meet local need (*Delivery Strategy for the New Homes Programme, including the Procurement Strategy for New Build and Major Construction Contracts*, 2025). The Council finds that the most pragmatic and cost-effective solution is to implement a series of external frameworks to gain access to a broad range of contractors who will be awarded contracts in line with the Procurement Act 2023 and Procurement Regulations 2024 (*Delivery Strategy for the New Homes Programme, including the Procurement Strategy for New Build and Major Construction Contracts*, 2025).

There is a shortage of developable land in Islington, and opportunities to facilitate further growth are decreasing significantly (Local Plan: Topic Paper Housing, 2020). Additional capacity that would materially increase available large sites to meet housing targets is unlikely to emerge, particularly given that employment sites are protected by the Council to meet employment needs and housing estates are unlikely to lead to large-scale delivery of new unites given the existing quantum of units (Local Plan: Topic Paper Housing, 2020).

Islington's Delivery Strategy states that new homes are to be built to 'an ultra-low energy efficiency standard' to reduce energy use and mitigate climate change and environmental

impacts (*Delivery Strategy for the New Homes Programme, including the Procurement Strategy for New Build and Major Construction Contracts*, 2025).

According to Policy S1: Delivering Sustainable Design, 'All development proposals must maximise energy efficiency and minimise on-site greenhouse gas emissions.

According to Policy S2: Sustainable Design and Construction, 'All development proposals are required to submit a Sustainable Design and Construction Statement which must demonstrate that the proposal meets all relevant sustainable design policies'. This includes an Energy Strategy demonstrating how the net zero carbon target will be met and justify the heat source selection, an Adaptive Design Strategy demonstrating the application of circular economy principles (including the impact and efficiency of construction materials and how the development has been designed to adapt to change), a Landscape Design Strategy demonstrating an integrated approach to hard and soft landscape design which maximises urban greening, soft landscaping, biodiversity and sustainable drainage, including the incorporation of sustainable urban drainage systems (SuDS) into the landscape design; Integrated Water Management and Sustainable Drainage – demonstrate an integrated approach to water management which considers sustainable drainage, water efficiency, water quality and biodiversity holistically; Operational sustainability, demonstrating how the development will be designed to facilitate ongoing effective and sustainable use, management and maintenance, Air Quality, demonstrating how the development will be designed, constructed and operated to limit its contribution to air pollution, improve local air quality, and reduce exposure to poor air quality, especially for vulnerable people (Islington Local Plan: Strategic and Development Management Policies, 2023)

According to Policy S4: Minimising greenhouse gas emissions, 'The following on-site reductions in carbon emissions are required in accordance with the energy hierarchy: (i) Major developments must achieve a minimum on-site reduction in total (regulated and unregulated) emissions of at least 27 per cent beyond Part L of the Building Regulations. (ii) Major developments able to connect to an existing heat network must achieve a minimum on-site reduction in total (regulated and unregulated) emissions of at least 39 per cent beyond Part L of the Building Regulations (Islington Local Plan: Strategic and Development Management Policies, 2023).

Section 5 of Islington's Local Plan pertains to green infrastructure, which is inclusive of blue infrastructure. Developers are required to consider green infrastructure at an early stage of the design process, assess the value and benefits of green infrastructure on and adjacent to the site, and identify interventions that could improve the value and benefits of green infrastructure. Major developments are required to conduct an Urban Greening Factor assessment in accordance with the methodology contained in the London Plan, and residential developments must achieve a UGF score of 0.4 (Islington Local Plan: Strategic and Development Management Policies, 2023).

Policy G4: 'Biodiversity, landscape design and trees' dictates that developments must protect, enhance, and contribute to biodiversity value of the site. Under this policy, 'all development

proposals involving the creation of new buildings, redevelopment of existing buildings or large extensions must submit a Landscape Design Strategy', maximising green infrastructure, biodiversity, and drainage features, considering landscape design at the outset. This includes maximising biodiversity benefits and ecological connectivity, incorporation of suitable wildlife habitats, including micro-habitats; consideration of the potential impact on biodiversity of lighting, noise or shading, and adoption of a lighting scheme design that minimises impacts on biodiversity; and incorporation of appropriate maintenance arrangements that will be put in place from the outset of the development, including a requirement for a specific management plan secured by planning condition where necessary. Incorporation of biodiversity must proceed in accordance with the Council's Biodiversity Action Plan (Islington Local Plan: Strategic and Development Management Policies, 2023).

Islington Council has pursued various retrofit efforts. The Council has sought the support of the UCL Energy Institute to develop detailed feasibility studies and cost out pathways to decarbonise the Council's 33,000 social houses. The most ambitious package was costed out at £1.6bn to reduce emissions by 70% by 2030 (the remaining 30% deemed out of the Council's control) (UCL, 2025). The report generated through this study served as evidence in a bid Social Housing Decarbonisation Fund (SHDF), resulting in £4m to retrofit the first 400 homes (*UCL Consultants Ltd*, 2025). Multiple retrofit interventions have been launched including support for private property owners to access finance for energy efficiency improvements through a PAYS scheme (similar to the Green Deal); creation/promotion of a "Retrofit Together" scheme that creates a streamlined source of energy efficiency measures with pre-procured contractors for property owners; and further investigation of available funding streams (such as the Mayor's Energy for Londoners scheme) to support retrofitting zero carbon energy systems and installing insulation (Champion, 2020). In January 2025 Islington published a Draft Retrofit Handbook, which opened for public consultation and is currently undergoing an editing process. The purpose of the handbook is to motivate and support residents and business to reduce building carbon emissions through dissemination of locally relevant information and guidance on retrofit measures (Draft Retrofit Handbook, 2025).

London Borough of Barking and Dagenham

London Borough of Barking and Dagenham (LBBD) is an outer borough in the east of London, governed by Barking and Dagenham London Borough Council, also known as Barking and Dagenham Council, and at the metropolitan level by the Greater London Authority (GLA). The borough positions itself as one of London's best-connected boroughs due to rail and road links to Central London and Essex, with multiple transport links underway to support eastward growth of the capital (London). The borough welcomes the opportunity to absorb continued population growth in the region, with a strong focus on house building strategy and acknowledgement of relative affordability given average house prices in the borough are the lowest in London (*Connections and infrastructure*, n.d.).

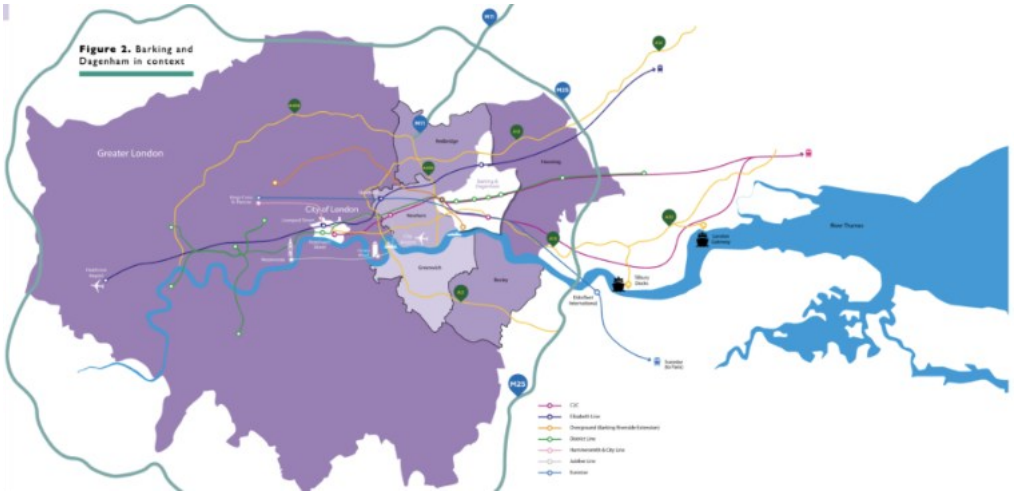

Figure 2. *Map of Greater London, highlighting Barking and Dagenham (LBBD, 2024)*

The population of LBBD was 218,900 in 2021, a significant increase of 17.7% since the previous census in 2011 and the second largest population increase in London (first being the London Borough of Tower Hamlets at 22.1%) (*Data and analysis from Census 2021*, 2023a). This growth is significantly higher than both London (7.7%) and England (6.3%) (*Data and analysis from Census 2021*, 2023a). Growth projections suggest LBBD could reach a population of 263,980 by 2036, a 42% increase from 2011 (*London Assembly*, 2014).

This area in outer London has traditionally been perceived as more socially deprived than other London boroughs. Of the 316 local authorities in England, LBBD is ranked 20th most income deprived (*Office for National Statistics*, 2025a). When compared to the median of local authorities in Great Britain, LBBD has a higher economic inactivity rate (25.5% compared to 21.0%), a lower employment rate (72.2% compared to 76.8%), a higher claimant count (7.6% compared to 3.2%), lower gross disposable household income (£19,246 compared to £21,359), and lower gross domestic product per head at current market prices (£22,104 compared to £31,133) (*Office for National Statistics*, 2025a).

Key drivers for local plan policies involve further investment in ageing industrial stock (LBBD has around 446.3 hectares of strategic industrial land and 1.5M metres of commercial floor space), increasing housing delivery (with an emphasis on the high need for affordable housing), becoming the green capital of the capital with targets to become a climate neutral council by 2030 and climate neutral borough by 2050, with high standards of energy efficiency, sustainable design and construction, utilisation of renewable energy technology, and vast improvement of air quality, water conservation and natural resources (*Barking and Dagenham Local Plan 2037*, 2024). The vision for Barking and Dagenham 2037 (published in 2024) sets the objective to build over 40,000 high quality new homes, with targets to build 2,121 homes between 2020/21-2028/29, 2,876 homes in the 2029/30-2033/37 period, and 2,085 homes in the 2034/25-2036/37 period (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). There are around 446.3 hectares of strategic industrial land in the borough that could support the objective to increase housing delivery) (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023).

Barking and Dagenham's housing sector is currently a fairly even spread between tenure types. As of 2023, owner-occupation accounted for 34%, private-rented accounted for 30.6%, and social-rented accounted for 30% (Private Sector Housing Strategic Statement, 2023). However, these tenure spreads have experienced significant change over the past 10-15 years. According to national statistics, between 2011 and 2021 the rate of social renting fell from 33.7% to 31.5%, the rate of home ownership decreased from 46.4% to 42.4%, and the rate of privately rented homes grew from 17.7% to 24.2%, which is 6.5% above the average across England (*Data and analysis from Census 2021*, 2023a). Between 2001 and 2023, the number of residents privately renting increased by 412%, home ownership has decreased by 16%, and social renting has decreased by 7% (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023).

Despite relatively low house prices when compared to the rest of London, the house price-to-earnings ratio in Barking and Dagenham increased by 100.73% between 2013 and 2023, as average house prices rose by £202,500, while median annual earnings increased by only £2,182 (Fowler, 2024), making affordability a serious issue in the borough.

Available housing size is an issue in the borough, featuring the second highest rate of households living without enough bedrooms (17.8%) (*Barking and Dagenham Local Plan 2037*, 2024).

The Strategic Housing Market Analysis (SHMA) and Housing Needs Survey (HNS) (2020 update) shows need for 1,581 affordable homes per year, however in 2022/23 666 affordable homes were delivered, in 2021/22 295 affordable homes were delivered, and in 2020/21 291 affordable homes were delivered (LBBD, 2024). In LBBD, 24.5% of the population rent property from the council, the third highest proportion in England and Wales (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). LBBD has the second highest rate of households living without enough bedrooms (17.8%) (*Barking and Dagenham Local Plan 2037*, 2024). There has been an increase in demand for social housing, with 5,800 applicants on the housing register without access to suitable accommodation as of 2023 (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023).

The private-rented sector also presents many issues. LBBD has one of the highest rates of landlord possession action in England, with 347 claims per 100,000 households owned by private landlords from October to December 2022 (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). The borough's Private Sector Strategic Housing Statement (2023) listed five priorities, the first being to 'tackle poor conditions in private housing and take robust action against rogue landlords' (Private Sector Housing Strategic Statement, 2023).

The Barking and Dagenham Corporate Plan 2023 to 2026 states Priority 5 to involve benefit to residents from inclusive growth and regeneration, including a local house-building programme to create 'thousands of new homes, with new affordable homes to rent or buy (3,000 high quality affordable rent home by 2025, 40,000 affordable housing by 2028) (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). The vision for Barking and Dagenham 2037 (published in 2024) sets the objective to build over 40,000 high quality new homes and around 85 additional

hectares of parks and natural space, which when combined with the development of energy-efficient homes and a decarbonised energy system, while make the borough the 'Green Capital of the Capital' (LBBD, 2024).

Housing targets as per the LBBD 2037 plan are to build 2,121 homes between 2020/21-2028/29, 2,876 homes in the 2029/30-2033/37 period, and 2,085 homes in the 2034/25-2036/37 period (*Barking and Dagenham Local Plan 2037*, 2024).

The council has taken the 2021 London Plan policy approach, aiming for the strategic target of 50% affordable homes (with a 35% threshold on most sites) across housing developments over 10 units (or more than 1,000 sqm residential floorspace), and at least 50% affordable housing on public sector sites and industrial land (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023, B*arking and Dagenham Local Plan 2037*, 2024).

Policy DMH 1: Affordable Housing states that "all development with the capacity to provide 10 or more self-contained units, or which have a gross internal residential floorspace of more than 1,000 sqm, will be required to provide affordable housing (measured in habitable rooms)" (LBBD, 2024). This is in accordance with LBBD's broader strategic Policy SP3: delivering homes that meet people's needs, that "seek a 50% strategic target for affordable housing on all housing schemes (in line with Policy H4 in the London Plan 2021)" (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). The 50% target is seen as more of a strategic target, with a minimum threshold of 35% to be retained, as outlined in the LBBD Draft Local Plan Viability Study, September 2020 (London Borough of Barking and Dagenham Local Plan, 2024).

Arguments have been made in the context of developments in LBBD that "the 50% affordable housing target is more of an aspirational target than one that can be feasibly delivered in all cases" and that "the effect will be to weigh-down all applications, or permissions in length renegotiations making even greater claims on already stretched local authority resources" (London Borough of Barking and Dagenham Local Plan, 2024). The affordable housing strategic policies in LBBD are therefore seen as negotiable, at least in part, due to stretched financial resources from the point of view of both private developers and local authorities.

The LBBD seeks to meet its legal obligation that all public bodies consider how to deliver additional economic, social and environmental benefits to the community, termed 'Social Value' when procuring goods and services on bidders of all contract's worth over £100,000 (Social Value Policy, 2020). In terms of environmental sustainability, this includes the support of LBBD's target to reduce carbon emissions by minimising energy consumption, considering environmental performance of the wider supply chain, and supporting initiatives to improve local environment e.g. through local growing schemes and measures to address air pollution and fly-tipping (Social Value Policy, 2020).

Under Strategic Policy SP7: securing a clean, green and sustainable borough, which encompasses policy DMSI 1: sustainable design and construction, all developments are required

to incorporate sustainable designs and construction. All residential refurbishment development of 10 dwellings or more must be designed and built to meet/exceed BREEAM Domestic Refurbishment 'Excellent' rating and are strongly encouraged to meet a Home Quality Mark 3-star rating. Under Policy DMSI 2: Energy, heat and carbon emissions, major development proposals must submit a detailed Energy Assessment and contribute to or exceed the borough's target of becoming carbon neutral by 2050 by maximising energy efficiency and carbon reduction on-site (major developments need to demonstrate achievement of net-zero carbon buildings and neighborhoods) (*Barking and Dagenham Local Plan 2037*, 2024).

Where clearly demonstrated that zero-carbon targets cannot be achieved on-site, with a well-justified shortfall, applicants must make a financial contribution in agreement with the Council (cash or contribution to Council's Carbon Offset Fund) or agreement of sufficient offsetting arrangements within the borough via planning obligations (*Barking and Dagenham Local Plan 2037*, 2024). Energy efficiency standards on new builds are officered by Be First Sustainability, Be First Planning Policy Team, and Inclusive Growth (Barking and Dagenham Net Zero Delivery Framework 2023, 2023).

LBBD has the objective to become the 'Green Capital of the Capital', aiming to protect and enhance parks, open spaces, Green Belt, Metropolitan Open Land (MOL), allotments, ponds, rivers and waterways, the natural environment. The target open space provision requirement is 2.4 hectares per 1,000 head of population as defined by the Council's Parks and Open Spaces Strategy (London Borough of Barking and Dagenham Local Plan, 2024). There is one overarching strategic policy 2P6 Green and Blue infrastructure, and 6 sub policies (Policy DMNE 1-6: Parks, open spaces and play space; Urban Greening; Nature Conservation and Biodiversity; Water Environment; Trees; and Local Food Growing including Allotments (London Borough of Barking and Dagenham Local Plan, 2024).

Policy DMNE 2: Urban greening states that development proposals will be supported where they maximise opportunities for urban greening (landscaping, street trees, green and brown roofs, green walls, food growing, rain gardens, nature-based sustainable drainage) and contribute to the All London Green Grid, the Council's Green Infrastructure and Biodiversity Strategy, and the Council's Parks and Open Spaces Strategy (London Borough of Barking and Dagenham Local Plan, 2024). Major development proposals are expected to calculate the Urban Greening Factor (UGF) of the site in line with Policy G5 of the London Plan 2021 with a target score of minimum 0.4 for primarily residential developments, otherwise robust justification must be made (London Borough of Barking and Dagenham Local Plan, 2024).

Policy DMNE 3: Nature conservation and biodiversity states that development must not lead to adverse effects on the integrity of Special Area of Conservation (SAC) or loss or degradation of Sites of Importance for Nature Conservation (SINCs), including all nature reserves. All development proposals are required to minimise impact on biodiversity and nature in accordance with Policy G6 of the London Plan 2021, demonstrate 10% biodiversity net gain – in the event where this is not possible on site, developers should work with the council to deliver

off-site but within the borough, and prepare a long-term monitoring and management plan of biodiversity net gain sites for 30 years, preferably within the development area.

Biodiversity Net gain proposals should follow the council's Green Infrastructure and Biodiversity Strategy and Green Design Codes for different parts of the borough. Major developments and required to contribute to strategic networks of green and blue spaces as identified in the Council's Green Infrastructure and Biodiversity Strategy and in accordance with Policy G1 of the London Plan 2021; contribute to improving local access to nature in accordance with London Plan 2921 and Natural England's Accessible Natural Greenspace Standards defined in the London Plan 2021; submit an ecology assessment demonstrating biodiversity enhancements contributing to the Council's strategies; and submit a habitat management plan setting out long-term maintenance and monitoring of all biodiversity protection and enhancement measures (London Borough of Barking and Dagenham Local Plan, 2024).

There is a national expectation that local authorities will have lifted the energy rating of all fuel poor households to C by 2030 and all housing stock by 2050. In 2010, Savills conducted a Council stock condition survey suggesting that LBBD had an average EPC rating of D, and more recent analysis suggests 1,300 homes are rated the least warm at EPC ratings of E, F, and G. An addition 4,000 properties in the private-rented sector could be eligible for heating and insulation works and over 10,000 owner-occupied homes have solid wall requiring insulation (B&D Greener Together: A summary of our plans for the Environment in Barking & Dagenham, 2021).

The council has been undertaking a high-level investment appraisal and feasibility study for deep retrofitting across the Council's housing stock (*Programmes and Strategies*, n.d.). To become a net zero borough by 2050, 57,300 homes need to be retrofitted (13,700 by 2025; 22,400 by 2030). London Councils estimate the unit cost for deep retrofit of residential properties (EPC A or above) at £50,000 to £80,000 and basic fabric upgrades to achieve EPC C at £10,000 to £25,000. This would mean the total cost of delivering deep retrofit measures on council stock alone could cost between £850m and £1.5bn. For the owner-occupied and private rented sector, over £2bn is estimated to be required. These are considered prohibitive costs, the overcoming of which is dependent on changes to government policy and corresponding investment.

The Council' appointed a partner E.ON to roll-out the Cosy Homes programme of heating and energy efficiency measures up to mid-2022 (part of the Government's Energy Company Obligation (ECO) programme), targeting qualifying households that can access EC03 funding, developing attractive funding and installation packages for landlords and owner-occupiers, and utilising the Green Homes Grant (B&D Greener Together: A summary of our plans for the Environment in Barking & Dagenham, 2021). The 'Cosy Homes' programme under the ECO3 London scheme was able to deliver free installations to 2,000 low-income households between 2021-2023 (London Borough of Barking and Dagenham Local Plan, 2024).

There was also a deep retrofitting pilot on at least ten homes on the Beacontree estate (involving external wall insulation, solar arrays, battery storage, air source heat pumps and EV charging

points to create zero carbon homes) (BD GT, 2020). Additionally, the Mayor's Retrofit Accelerator-Homes Innovation Partnership, of which Barking and Dagenham is one of seven social housing providers included in partnership with four building firms (Equans UK, Bell Group, Cardo, United Living) to deliver 'warm, comfortable and affordable net zero housing retrofit at scale across the UK'. This was backed by the European Regional Development Fund (ERDF) in partner with Turner and Townsend, Energisprong UK and the Carbon Trust. This scheme closed in July 2023) (*Programmes and Strategies*, n.d.).

10.1.2 Green Transition Interventions in London: Islington (Holloway Park) and Barking and Dagenham (Dagenham Green)

10.1.2.1 LBI: Holloway Park

Densification / brownfield redevelopment

Holloway Park is the redevelopment of the former Holloway Prison site in Islington. The prison closed in 2016 and the owner, the Ministry of Justice, had been looking for a buyer for the 10-acre site (*BBC*, 2019). During the initial planning policy process for the site, City Hall and Islington Council set a minimum expectation of 50% affordable housing.

The site was purchased by the Peabody housing association, working in partnership with the private developer London Square, for £81.5m in March 2019 (*BBC*, 2019; *Mayor of London Press Release*, 2019). The deal eventually involved a loan from the Mayor's Land Fund of £41.6m, enabling Peabody to purchase the site under the stipulation that 60% of the proposed 1,000 homes be affordable rent, 70% of which must be social rent and the remainder shared ownership or London Living Rent (*Mayor of London Press Release*, 2019). Under the terms of the agreement between the GLA and Peabody, Peabody will be required to repay the loan in full.

Figure 5. *Holloway Park site CGI rendering (Former Holloway Prison: Sustainable Design and Construction Statement, 2021)*

Upon announcement of the 'ground-breaking loan to Peabody', the Mayor of London stated that that "For too long, Londoners have rightly been fed up of seeing public land sold off to the highest bidder and then developed with little or no social or affordable housing. We have made sure the Holloway prison site will be different… This shows what is possible on public land. We've been able to do this even with the limited powers we currently have. Ministers now need to play their part and give us the step-change in investment and powers over land we need to truly fix London's housing crisis." (*Mayor of London Press Release*, 2019). The Mayor's Land Fund comprises £250m of City Hall investment and nearly £500m of Government investment to speed up housing development delivery with a minimum of 50% affordable housing on public land sites (*Mayor of London Press Release*, 2019). Peabody also received £39.2m in the form of Greater London Authority Strategic Partnership grant, and a further £10m grant in 2020, to support the delivery of affordable housing and council-level rented social housing, on the site.
The Holloway Park redevelopment project is therefore a key case for understanding the interactions between investment of public funds and densification including the provision of a high proportion of affordable housing.

Planning permission was granted by Islington Council in April 2022. The Holloway Park masterplan included 985 homes, 60% of which are affordable, and 60 units designed as specialist social rent homes for older people (HPC, 2022).

The site also includes a 1.4-acre public park featuring play spaces and a nature garden, in addition to numerous community spaces. Phase one of the development includes construction of 429 new homes (215 social rent, 18 shared ownerships, 196 private sale) and the public park, expected to be delivered by the end of 2027.

Emerging challenges since 2022 require the original plans for phases 2 and 3 be revisited. These challenges include the legislation of new building regulations regarding second staircases affecting building layouts and available floor space, rising construction costs, higher interest rates, and static sales values (About the Development, 2025). The proposition for changes to phases 2 and 3 includes delivery of a higher number of homes overall across the site. The two options are an increase of 160 homes with 60% affordable homes across the entire site or an increase of 128 homes with 58% affordable housing across the entire site. The practical effect of these changes is a reduction in the overall size of homes delivered, for example plans for 3-bedroom units converted now into 2-bedroom units and a reduction in the number of homes with wheelchair accessibility (About the Development, 2025). Revised plan options for phases 2 and 3 underwent public consultation in April 2025 and the revised planning applications, including a new full viability assessment, are under review by Islington Council.

All homes are to be built to modern energy-efficiency standards and include sustainable features including Air Source Heat Pumps (ASHPs), enhanced insulation, and layouts that mitigate overheating risks. Options to include solar panels and other low-carbon technologies were also considered for inclusion in the Holloways Park energy strategy (About the Development, 2025). The sustainability report for the proposed development outlines the energy strategy, in line with Islington policy including the energy hierarchy (be lean, be clean, be green, be seen) and key

policy targets from the London Plan (2021) (Former Holloway Prison: Sustainable Design and Construction Statement, 2021).

Nature Based Solutions

Islington Policy DM 6.4 Landscaping, Trees and Biodiversity requires developments to maximise biodiversity benefits through soft landscaping, including trees shrubs and other vegetation and to maximise the provision of green roofs (substrate depth of 80-150mm) and green vertical surfaces. Green roofs are to be designed to maximise benefits for biodiversity, sustainable drainage, and cooling potential.

Biodiversity measures are outlined in the sustainability strategy in terms of the landscape design strategy and the climate change adaptation strategy (which encompasses the SuDs strategy) (*Former Holloway Prison: Sustainable Design and Construction Statement*, 2021).

Key character areas of the landscape design strategy include a Public Garden, a Nature Garden, planting on City Street, and the creation of a Plant Tree Gateway. The Public Garden is to feature ecologically focused planting and a flexible lawn area. The Nature Garden is to include production plots, self-grow beds, greenhouses, and an orchard, and enhanced vegetation integrated with existing trees to provide an eco-buffer for privacy and protection of space to encourage wildlife habitats and refugia. The City Street (Camden/Parkhurst Road) involves reinforcing the existing tree line and canopy and introducing 'botanically rich swathes of new planting beneath the trees', with the objective to improve the pedestrian experience and creating views into the Public Garden. The Plant Tree Gateway along the main pedestrian entrance to the site centers around the retention of the large London Plane tree, featuring surrounding seating to encourage contemplation. Additionally, there is a pedestrian walkway connecting the Holloway site to surrounding schools and greenspaces. This connection is to be framed by a lineal tree line and vegetation. A Women's Garden, Extra-Care Garden, and communal resident gardens are also featured as elements of the landscape design strategy (*Former Holloway Prison: Sustainable Design and Construction Statement*, 2021).

The Climate Change Adaptation strategy responds to the Islington Policy regarding flood prevention and heating and cooling measures. Surface water runoff is a key concern to be managed through a combination of hard and soft systems. Biodiversity is implemented to manage surface water run off through establishment of green roofs and rain gardens. Proposed green roods are expected to reduce surface water runoff by up to 90%.

Retrofit

The Holloway Park development project does not include a retrofit strategy

10.1.2.2 LBBD: Dagenham Green (London)

Densification/Brownfield redevelopment

Dagenham Green is a development in the London Borough of Barking and Dagenham (LBBD). LBBD, one of London's twenty outer boroughs, sits just north of the Thames River at the heart of the Thames Gateway, approximately 11 miles east of central London (Waker, n.d.). LBBD is governed by the Barking and Dagenham London Borough Council, and more broadly governed by the Greater London Authority (GLA). The Barking and Dagenham London Borough Council is responsible for housing policy in Barking and Dagenham and is therefore the focus of this section.

Dagenham Green sits on the brownfield redevelopment site that was occupied by the former Ford stamping works site in Dagenham for ~90 years. The Ford site was closed to cope with a drop in new vehicle demand. It was sold for around 26M for a 42-acre brownfield site. The sale occurred between Ford Motor Company and Europa Capital Partners on behalf of one of its funds, St Congar Land, 3 years after the plant's closure. The property agent Cushman and Wakefield advised. The plan is for 2,650 homes on the land (Hodgson, 2016).

Europa Capital and advisors St Congar Land remediated the site over 4 years (*Mayor of London Press Release*, 2021) and the land was purchased from Europa Capital and St Congar Land in January 2020 by Peabody Trust for an undisclosed amount that includes a 83.7M Affordable Housing Grant from the Mayor's Affordable Housing Programme (2016-2021) to enable delivery of 3,1000, 50% of which (1,550) are to be genuinely affordable (*Mayor of London Press Release*, 2021). The delivery programme allows for the development to be phased over the next 15-20 years. The funding is mainly based on tariff rates set out as 775 units at 70,000 grant rate per unit for London Affordable Rent units and 775 units at 38,000 grant rate per unit for London Shared Ownership/ London Living Rent. (*Mayor of London Press Release*, 2021). Repayment risk assessments investigated the financial stability of the Peabody Trust; Peabody was rated V2 by the Regulator of Social Housing (RSH), meeting viability requirements; listed as A3 Stable by Moody's in November 2019; listed as A by S&P global in July 2019 (*Mayor of London Press Release*, 2021).

In 2021 Peabody Trust released the Masterplan for the Dagenham Green site, calling for over 3,500 homes including 1,550 affordable homes (London Affordable Rent and London Shared Ownership). The plan also includes 'extensive public realm and landscaping including a central 5-acre urban park', focuses on the image of a 'new biodiverse neighborhood', and state five sustainable principles for the new neighborhood (carbon reduction/providing comfort, responsibly made, healthy homes, place for nature, and thriving/inclusive).

In 2022 Peabody was granted permission for the first phase of Dagenham Green with plans to build 935 homes, 35% of which will be affordable (*General news*, 2021). At this time The Hill Group, an award-winning housebuilder, entered a joint venture partnership with Peabody to deliver the project (*General news*, 2021). This is described as a 50/50 joint venture. In 2025 a Third-Party partnership with real-estate developer and investment manager Goodstone Living

was developed in a deal valued at 116M, one of the largest in the Build-to-Rent (BTR) sector that year (*The Hill Group*, 2025). Goodstone Living is to deliver 360 high-quality BTR homes of high environmental performance (e.g., EPC B, WiredScore Platinum, Fitwel 3-star ratings) consisting of one, two, and three-bedroom apartments across three residential buildings ranging from 14-18 stories high. The first homes are expected in summer 2027 and completion in summer 2028 (*The Hill Group*, 2025).

Goodstone Living's financing for the Build-to-Rent component was secured through a 95M debt facility from Bank ABC and AIB GB and managed through the investment vehicle Goodstone Living Partners 1 (GLP1), capitalised by Macquarie Asset Management and the Northern Local Pension Scheme (Northern LGPS) (*News*, 2025). In 2024, Peabody states that the project would deliver 3,500 homes with 1,640 set to be affordable for local residents (*Corporate news*, 2022), termed affordable rent and shared ownership (*The Hill Group*, 2025).

Nature Based Solutions

The Hill Group states that one of the 5 key sustainability strategies for Dagenham Green is 'Place for Nature', which aims to enhance biodiversity, improve climate resilience, and provide high-quality green space for residents to enjoy (*The Hill Group*, 2025). The 45-acre masterplan developed by Peabody for Dagenham Green includes an urban park, a lake, children's play areas, community gardens, and other green spaces that enhance biodiversity and provide amble opportunities for recreation.

Energy Efficient Retrofit

Dagenham Green is not a retrofit project as it does not involve the upgrading of pre-existing homes, but rather the redevelopment of a former industrial site. However, by pioneering the development of District Heat Networks through Barking and Dagenham Energy, the Council makes it easier for developers to meet low-carbon obligations (Barking and Dagenham Net Zero Delivery Framework 2023, 2023)

Table 1. Key data on two case study areas in London

	Islington	Barking & Dagenham
Neighborhood characteristics	A central London borough and the most densely populated local authority in England and Wales. The first borough to be identified as a site of 'gentrification', during the 1970s, Islington is widely recognised as one of the most unequal areas in London and across the UK, with concentrations of high wealth (and housing wealth) and high deprivation (and overcrowded housing conditions). Despite proximity to high wealth, the effects of poverty and lack of affordable housing are considered crucial issues for the borough.	Dagenham Green sits on the brownfield redevelopment site that was occupied by the former Ford stamping works site in LBBD for ~90 years. Of the 316 local authorities in England, LBBD is ranked 20th most income deprived. Significant population growth in recent years. The house price-to-earnings ratio in Barking and Dagenham increased by 100.73% between 2013 and 2023, making affordability a serious issue in the borough. Affordable housing delivery has been improving but lags significantly behind identified need. The private-rented sector also

		presents many issues, with BBD having one of the highest rates of landlord possession action in England.
Duration	Planning permission was granted by Islington Council in April 2022. Phase one of the development includes construction of 429 new homes (215 social rent, 18 shared ownerships, 196 private sale) and the public park, expected to be delivered by the end of 2027.	The land was purchased from Europa Capital and St Congar Land in January 2020. In 2021 Peabody Trust released the Masterplan for the Dagenham Green site, and in 2022 was granted permission for the first phase with plans to build 935 homes, 35% of which will be affordable. The delivery programme allows for the development to be phased over the next 15-20 years.
Funding	Public. The site was purchased by the Peabody housing association, working in partnership with the private developer London Square, for £81.5m in March 2019. The deal involved a loan from the Mayor's Land Fund of £41.6m, enabling Peabody to purchase the site under the stipulation that 60% of the proposed 1,000 homes be affordable rent, 70% of which must be social rent and the remainder shared ownership or London Living Rent. Under the terms of the agreement between the GLA and Peabody, Peabody will be required to repay the loan in full. Peabody also received £39.2m in the form of Greater London Authority Strategic Partnership grant, and a further £10m grant in 2020, to support the delivery of affordable housing and council-level rented social housing, on the site.	Both public and private. On 28/01/2020, the GLA approved the allocation of £83.7m of affordable housing grant to the Peabody Trust from the Maryor's affprdable housing programme. The funding faciliated the acquisition of the former Ford Stampint Plant site in Dagenham. Subject to planning consent, this funding was made to enable the delivery of 1,550 affordable homes, understanding that the development should deliver circa 3,100 new homes, of which at least 50% would be 'genuinely affordable'. Financing for the Build-to-Rent component was secured by Goodstone Living (third-Party partner, real-estate developer and investment manager) through a 95M debt facility from Bank ABC and AIB GB.
Actor constellation	Joint venture partnership between Peabody (developer) and London Square (housebuilder). London Borough of Islington (LBI). The GLA provided significant finance for site acquisition. Arange of local community groups and activists working on development issues in Islington.	Joint venture partnership between Peabody (developer); The Hill Group (housebuilder), Goodstone Living (real-estate developer and investment manager responsible for the Build-to-Rent (BTR) component). London Borough of Barking and Dagenham (LBBD) and Be First, their arms-length development company. The GLA provided significant finance for site acquisition.
Aims and objectives	For the GLA, the purpose of providing Peabody with a loan for the site acquisition was to accelerate housing delivery on surplus public-sector land; to safeguard delivery of 60% affordable housing. LBI are an ambitious borough in terms of their housing strategy, which encompasses a target that all	To tackle poor conditions in private housing and take robust action against rogue landlords (Private Sector Housing Strategic Statement, 2023); To benefit residents from inclusive growth and regeneration (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023);

	development projects include 50% affordable housing on site, the integration of renewable technologies and low-carbon building options, improvement of green space and consultation with local residents.	To make the borough the 'Green Capital of the Capital' (LBBD, 2024). To create thousands of new homes, with new affordable homes to rent or buy (3,000 high quality affordable rent home by 2025, 40,000 affordable housing by 2028) (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023); To build over 40,000 high quality new homes and around 85 additional hectares of parks and natural space, which when combined with the development of energy-efficient homes and a decarbonised energy system (LBBD, 2024)
Specific physical measures	The Holloway Park masterplan included 985 homes, 60% of which are affordable, and 60 units designed as specialist social rent homes for older people (HPC, 2022). The site also includes a 1.4-acre public park featuring play spaces and a nature garden, in addition to numerous community spaces, planting on City Street, and the creation of a Plant Tree Gateway.	The 45-acre masterplan developed by Peabody for Dagenham Green involves delivery of over 3,500 homes including 1,550 affordable homes. The plan also includes 'extensive public realm and landscaping including a central 5-acre urban park', a lake, children's play areas, community gardens, and other green spaces that enhance biodiversity and provide amble opportunities for recreation. The plan focuses on the image of a 'new biodiverse neighborhood', and states five sustainable principles for the new neighborhood (carbon reduction/ providing comfort, responsibly made, healthy homes, place for nature, and thriving/inclusive).
Accompanying housing policy/ regulatory measures	Islington's current housing strategy for 2021-2026 prioritises the delivery of affordable housing, with a target that all development projects include 50% affordable housing on site. Policy H2 of Islington's Local Plan (adopted in September 2023) aims to meet and exceed the conventional housing target of 7,750 units by 2028/29, which equates to an annualised target of 775 per annum. Policy H3 (Genuinely Affordable Housing) contains multiple clauses to ensure developers deliver the maximum proportion of affordable housing possible. Islington's housing strategy also prioritises that homes are built to adapt to changing needs including integration of renewable technologies low-carbon building options in line with the council's green agenda, that developments make use of landscaping strategies to improve	The council's affordable housing policy extends from the 2021 London Plan policy approach, aiming for the strategic target of 50% affordable homes (with a 35% threshold on most sites) across housing developments over 10 units (or more than 1,000 sqm residential floorspace), and at least 50% affordable housing on public sector sites and industrial land (Barking and Dagenham Local Plan 2037, 2024).

	green space and decrease potential for anti-social behaviors, and that local residents needs are consulted and attended to through acknowledgement of annual audits of lettings and community consultations.	
Key social tensions or/and benefits between greening and housing	Despite substantial GLA funding for site acquisition, limited grant backing at the build stage was understood to have limited the scheme's 'headroom' to absorb the cost of high affordable housing delivery, undermining some green initiatives. Commodification of nature as a means of adding value to the development could increase the cost of market units, now and in the future.	Similar to Islington. Despite substantial GLA funding for site acquisition, limited grant backing at the build stage was understood to have limited the scheme's 'headroom' to absorb the cost of high affordable housing delivery. A landscape first approach could imply the commodification of nature as a means of adding value to the development, potentially increasing the cost of market units, now and in the future. Aditionally, symbolic exclusion of existing communities is suggested through reports on local community sentiment.

10.1.3 Methods

Between July and September 2025, 19 interviews were undertaken with a range of interviewees, associated with development at Holloway Park and Dagenham Green. Interviews included those with development partners, including with Peabody, an non-profit housing association and the lead developer for both sides, and other development partners including sustainability consultants, architects, and housebuilders. Interviews also included a range of local civic organisations, notably however this was only the case in Islington; for Dagenham Green it was not possible to interview local community groups or residents. Interviews also took place with both local authorities.

Potential interviewees were initially identified during the preparation for the ReHousIn Policy Lab held in March 2025, and from desk-based research for the preparation of this report. Particular attention was paid to ensuring that a range of potential interviewees were identified, including from across development partners, and from local community groups, to ensure that a range of data on civic perceptions could be sought. Potential interviewees were approached initially by email, and sent an information sheet and consent form to explain the parameters of the project. Additionally, a snowball sampling strategy was employed whereby subsequent interviewees were recruited based on introductions by earlier interviewees. All interviews were carried out remotely via Microsoft Teams. Profiles of interviewees may be found in Appendix 2. Prior to participation, participants were sent an information sheet and consent form by email, and informed consent was obtained.

Interviews were audio-recorded using Microsoft Teams. Automated transcripts generated by the Teams transcription tool were subsequently reviewed in full by the researcher. Transcriptions were verified against the original recordings and corrected to address any errors or inaccuracies.

Qualitative thematic coding and analysis were conducted by a single researcher, following a predefined coding framework aligned with the study's analytical objectives. This qualitative analysis has focused on civic perceptions and is outlined below. This is also supported by desk-based background research, which involved a review of policy documents, submitted planning documents, strategic plans, technical reports, grey literature and academic literature. This desk-based research provides documentary evidence against which to contextualise the observations and perceptions of civic actors engaged in both developments.

The particular limitations of this case relate to the range of interviewees. We have sought to include a broad range of perspectives from across development partners and local stakeholders however it was not possible to identify interviewees from amongst local residents or community organisations in Barking and Dagenham. The failure to secure interviews from local community groups represents a particular limitation for our analysis of gaps in perceptions between civic groups and public agencies. Analysis for this aspect of this case rests on reflections from the local authority and development partners, who, through community engagement have reflected on the perceptions of the local community. Nevertheless, there are likely to be resident populations who are directly affected by redevelopment who have not had their perspectives heard for this research.

10.1.4 Civic Perceptions of Green Initiatives in Case Study Areas: Islington

10.1.4.1 (Civic perceptions of) precedents and implementation

Early community involvement

The new Holloway Park housing development is on the former site of the Holloway women's prison in Islington. The prison closed in 2016, and the Ministry of Justice sought to sell the land for development. This case (and the borough of Islington more broadly) is a particularly interesting case insofar as local community groups were involved in discussion with the local authority about the development site well before the land was sold, before a developer had been identified and before a vision had emerged as to how the development would take shape. This is perhaps one of the defining features of this case for the ReHousIn study.

> "2016 was a key moment [...] a number of us involved in housing issues at the time were very concerned that this should be... This was an opportunity and it should not be just any old private developer pushing up private housing, with whatever concerns for the environment or not that they wanted." (Activist)

There are still tensions between different groups around the final outcome of the development, including concerns around housing inequalities. These concerns are largely focused on the difference in quality between the social/affordable housing units and the private market housing units, and differences in access to amenities between these different tenures. Nevertheless, the development contains a relatively high proportion of affordable and social

housing for rent, when compared to the national and London averages. Part of achieving this high proportion of affordable housing on the site has been bringing in a housing association (Peabody), supported by the Greater London Authority (GLA) to buy the land through 50% grant and 50% loan, rather than a private developer. Achieving both sustainability and affordability goals within the development, which both represent costs to the developer, has indeed come with trade-offs as the developer seeks to recoup costs elsewhere. But while a private developer may have argued for a lower provision of affordable housing on the site as a consequence of higher sustainability standards and associated costs (see Case Study Report for Bicester, for example), at Holloway Park, and with a housing association as the development lead, this has largely manifested in the form of a higher density site, with very high buildings, to provide higher numbers of housing units overall, rather than a reduction in the number of affordable units per se.

This is not to ignore community concerns about the development, or about the underlying governance mechanisms. The height of the development has been contentious, and interviewees from the community argue that this has resulted in the social housing units being compromised in terms of light exposure and ventilation, which is not irrelevant to our analysis of housing inequalities on this site. Nevertheless, the Holloway Park case represents an example of (relatively high provision of) affordable homes alongside a 'green', sustainable development. Our interviewees consistently reflected the perception that this was associated with active community engagement and political mobilization in Islington. Our analysis of governance mechanisms that can underscore better housing outcomes and a more equitable distribution of housing (access and affordability) alongside green initiatives, therefore focuses on the resources and capacities that have enabled community engagement in this case.

Policy context

Interviewees perceived both national, regional (GLA) and local policy frameworks as central to the project's trajectory. Sustainability obligations pertinent to the Holloway Park development were perceived to have been set by both national and GLA, including Biodiversity net gain (BNG) requirements at the national level, and the Urgan Greening Factor as a GLAmandated target intended to increase greening in urban areas. One interviewee noted the particular requirements for on-site reductions in carbon emissions, and for homes to be built to low energy efficiency standard, set by Islington's local policies.

On affordability, the GLA's financial support for land acquisition was understood as being conditional on Peabody delivering a substantial proportion of social housing (60%). Local policy was also viewed as progressive in this respect, with interviewees describing the Council as acting quickly after the site became available, producing a specific supplementary planning guidance document further committed to high levels of affordable delivery at the site:

> "Actually we were hugely supported by the Council. There were always tensions between voluntary organisations, campaigns and councils, but actually the Council at this point was leading on this [and] did move very quickly to produce a supplementary planning document. I think that was very significant because it meant that private developers who just wanted to put up private housing could see very clearly that this was not going to fly, which is how we ended up with Peabody." (Activist)

These policy signals were interpreted by interviewees as effectively signalling a preference for a housing association-led scheme, providing the context for Peabody as lead development partner.

Funding context

The funding context was also commented on as making 'a massive difference' to the scheme. Peabody's acquisition of the site in 2019 and subsequent planning process (application submitted in 2021 and approved in 2022) occurred alongside substantial public subsidy. Peabody received £40M f grant provited upfront from the GLA, and another £40M loan to enable them to buy the site in full, at £80M. This highlights targeted regional funding steering the development towards a relatively high proportion of affordable housing to be delivered by a housing association, which may not have been possible without it.

10.1.4.2 (Civic perceptions of) participation and governance (procedural)

The main community group that coalesced around the Holloway Park development was a group called Community Plan 4 Holloway (CP4H). This groups' formation, and the other community and social infrastructure that was necessary for local political mobilisation, is discussed in Section 3.4 below. This section details the perceptions of interviewees around how this group was included in procedural governance and enabled to participate in the formal governance processes relating to the development at Holloway Park.

Interviewees largely reported a perception that engendering participatory governance has required willingness and active engagement from all parties, including the local authority (Islington), the developer (Peabody) and the local community (formalised as Community Plan 4 Holloway), to create opportunities for full community participation in the development process. Interviewees suggested that CP4H had proactively sought involvement from the outset. They described regular monthly meetings with Peabody, held independently of the council, as well as initiatives to broaden participation, such as youthfocused consultation activities supported by grant funding. These accounts suggest that community actors viewed themselves as active participants in the development process.

Interviewees from the local authority described a longstanding pattern of active and structured engagement with the community group. They referred to quarterly meetings and joint sessions involving the council, the developer, and CP4H, as well as inviting them to sit on the steering group for the development.

> " they [CP4H] had a member on the the steering group, so we actually had them actively on a steering group that steered how we would move forward with Peabody... So they had an active role that could make decisions at one point." (Official)

At certain stages local authority governance over the site therefore also incorporated community representatives directly into strategic discussions. This implies an attitude within the local authority towards community involvement not only as consultative but also in a

substantive sense. This was reinforced by a broader institutional commitment to community engagement voiced by local authority representitives, describing this as part of the council's ethos. This emphasized an explicit commitments to work with residents to understand their needs and priorities, and an inference that the local authority attributes particular value to participatory governance.

> "I don't think we're entirely unique. I think most authorities have the ambition to do this level of engagement. I know all politicians want to represent their people, but I think we have a strong mantra of representing the residents and we have political statements as well... And that says we will engage with our residents to understand what they need and want and what they think is best. So we have a commitment, publicly made, that we will work with residents." (Official)

Local authority representitives also discussed the role of the developer in enabling community participation. Peabody was perceived as particularly open to community influence, when contrasted with other developers who might be less willing to engage. While both residents and the local authority were understood as being able to advocate for specific changes to the Holloway Park scheme, Peabody's engagement was framed as fundamental as the developer, without whom such changes could not be realised. These perceptions support the idea that participatory governance, while not conflict free, has depended on the engagement of all actors.

> "[...] they [CP4H] are able to generally have influence on what's happened to the scheme, also because you've got a developer who's willing to listen here. Some developers would not. I think that's crucial because we can push as much as we like and so can residents. If a developer just says no and it meets a planning policy. We can't really say no, and Peabody are open to discussion and willing to involve the community." (Official)

Despite these positive accounts, significant frustrations were also expressed by community interviewees regarding the consultation process. One framed the process as 'extremely poor', describing it as dismissive and lacking in communication. This included the repeated refusal of requests for site plans until after the planning application had been submitted. This suggesting at least some community members felt that consultation was superficial, although one local authority representative noted a similar incident, explaining that some information could be released only subject to agreement by the developer, and could not be shared due to commercially sensitivities.

> "[...] for me, the consultation process was [...] absolutely the most disgraceful process I've ever experienced. ... have never come across such an outrageously arrogant, dismissive approach ... there was no communication period. It was just, we'll talk to you when we're ready. Can you show us a layout? Can you can you give us, not just show us, but give us a site plan. And they refused. Absolutely. The only way we got a site plan eventually was because we managed to persuade them to have a conversation about the roads. They said we'll show you the scheme when we're ready. And when we're ready, what that meant was when they submitted the planning application and a 400 page DAS [Design and Access Statement]." (Activist)

Despite these tensions, the overall perception was one of working together through conflicts. Interviewees from the community reported a perception that the opportunity for active

participation and engagement came also from the local authority as well as from the developer, even where these actors did not see eye to eye.

> "[Researcher: following that public consultation process, did you feel that Peabody and the council were able to respond to the concerns of the residents?] I think Peabody tried their hardest to listen, and I think they did what they could" (Activist)

Interviewees acknowledged that frustrations were inevitable on all sides and that developers often claimed to have consulted adequately even when their methods were perceived as ineffective. Contrary to this, community representatives described their relationship with Peabody as variable but generally positive, with regular monthly meetings providing a forum for raising issues such as construction disruption, dust and noise, and accessibility concerns. These meetings were framed as allowed for reasoned discussion rather than confrontational exchanges.

10.1.4.3 (Civic perceptions of) (in)equity (distributional)

Perceptions on distributional implications of housing - affordability

The headline of 60% affordable housing delivery at Holloway Park was widely perceived of as a significant win, both by interviewees and across GLA publicity for the site. Some interviewees still viewed this as a compromise, given that 42% will be at social rent, and 18% Shared Ownership. The categorisation of Shared Ownership within 'affordable housing' was perceived as problematic by some, especially considering local market rents can mean 'affordable' tenures do not map straightforwardly onto local housing need.

> "we got the most, the highest percentage of those of any development in London […] So that that was a major success." (Activist)

> "That's a major victory... we just had to work with Peabody because they got the contract, they bought the land, they borrowed the money and got the land. We wanted that to be all council, it was government land owned by the public. We wanted to let the council have that land as a public asset and build what we want on it. But we couldn't. But the London Mayor supported them and we've got this massive amount of social housing out of it, and that's an achievement." (Activist)

Interviewees linked affordability outcomes to governance choices including LBI's early planning brief and insistence on a minimum of 50% affordable housing on former public land, combined with GLA grant/loan for site acquisition by a registered provider (Peabody) and conditional on 60% affordable housing delivery.

Perceptions on distributional implications of housing – quality, type and aspect

However, even as the acquisition of the site was supported by public loan/grant, the scheme is nevertheless still subject to cross-subsidy from market sale housing units, rather than through subsidy, for the finance of affordable housing construction. As higher proportions of affordable units are achieved, interviewees reflected that this is achieved via the creation of a taller, denser scheme. This was represented by one interviewee as an alternative to skewing

the hosuing mix towards 1–2 beds, as another means of improving the viability of hosuing units for sale.

> "So we had several three-bedroom units they were reduced to two-bedroom and we objected at the planning committee and made sure that the next stage compensated for the lost rooms, so that's why they've gone much higher now, to make up for those lost rooms." (Activist)

Community interviewees pointed towards a pattern of inequality manifested in the internal quality, typology and environmental performance that maps onto tenure and unit allocation. The need to maintain a high share of affordable homes as well as stringent sustainability requirements was understood to place viability pressure on the development that would be released elsewhere – notably by increasing the number of housing units overall. At Holloway park, this has translated into taller buildings, also noted in Section 3.6 below. Perceptions of distributional impacts were reported in terms of the prevalence of single-aspect dwellings with a risk of overheating and inadequate cross-ventillation, linking the design of the building to health-related housing inequalities.

> "they've gone into a lot of details about the windows being only one side ... this will probably affect more the social renting side, and the increased risk of overheating and having serious health implications" (Activist)

Interviewees also report reductions in ground-floor accessible homes, illustrating how quality and inclusivity can become variables to adjust for viability while preserving the delivery of affordabile housing units overall.

Perceptions on distributional implications of urban greening

Urban greening was also framed as having benefits that are unevenly distributed. The central park have been welcomed for placemaking, climate and amenity value; it is also recognized as helping to support market-sale values – explicitly cited as important for maintaining viability and cross-subsidy. Interviewees from the community perceived a spatial and tenure bias in how such green amenity is *experienced*: premium units are understood to be oriented towards the park, while social-rented homes are more likely to face externally or towards commercial spaces, raising concerns about unequal access to environmental benefit.

While green gentrification and direct displacement were not widely anticipated in this specific scheme, participants foresaw the potential for spatial segregation via the commercial offer that co-locates with higher value housing delivery: cafés and retail at price points that don't align with local budgets, potentially reducing the inclusivity of the public realm.

> "the sort of businesses that come in to take up these new shops are not necessarily ones that actually serve the poor community because of gentrification, they tend to be more for the owner occupiers" (Activist)

10.1.4.4 (Civic perceptions of) political mobilization

As introduced in Section 3.1, the Holloway Park case (and the borough of Islington more broadly) is particularly interesting in that local community groups were involved in discussion with the local authority about the development site well before the land was sold, before a developer had been identified and before a vision had emerged as to how the development would take shape. We have also seen (detailed in Section 3.2), that community groups have actively participated throughout the planning and development phases, albeit not without criticisms of these processes. Community involvement, particularly at a very early stage, has been credited by interviewees as being part of what lead to the local council managing to advocate for a high proportion of affordable housing on the site, and eventually drafting a planning guidance that cemented a policy commitment to a minimum of 50% affordable housing, in effect precluded private developers from bidding for the site, and making space for a housing association, with funding support from the regional tier of government (GLA), to acquire the site.

> "[...] it's a huge development but early on in the in the planning stages people were, you know... interested in making sure that there's as much social housing on there as possible, that environmental standards were met..." (Activist)

Our analysis of governance mechanisms that can underscore better housing outcomes and a more equitable distribution of housing (access and affordability) alongside green initiatives, therefore focuses on the resources and capacities that have enabled community engagement in this case.

> "Nonprofits and civic groups have been instrumental in developing the agenda at Holloway Park in terms of providing a greener development and also with enough affordable housing... there was a group of community activists that were very key." (Official)

This section details the nature of political mobilisation in Islington, and what has been required in this case to ensure that the local community was able to mobilise around the issue of affordable housing and secure a space to influence the development process.

Barriers to political mobilisation in Islington

Interviewees describe significant personal socio-economic pressures that inhibit sustained civic engagement. One interviewee with lived experience of acute deprivation recalled periods of food insecurity and homelessness, emphasising that under such conditions, participation in planning discussions is not feasible. This perception highlights how immediate survival needs can eclipse the capacity to engage in community action. Others note that the prolonged nature of the Holloway Park process, spanning nearly a decade, means only those with stable time and resources are able to remain consistently involved. These perceptions underscore a structural imbalance in who can participate in long-term planning processes.

> "I remember when I had hardly anything to eat. My house has been taken away from me... The last thing you want to be doing is attending events and thinking about a development or what's going to happen in

the future about the community, because you don't even know if you're going to survive tomorrow." (Activist)

Interviewees also framed the complexity of planning procedures as a barrier for many residents. The iterative nature of planning applications, amendments, and consultations was described as overwhelming for individuals already managing significant personal challenges. Some residents report edattending occasional meetings but avoiding deeper involvement due to time constraints or competing responsibilities. These perceptions illustrate how the technical and procedural demands of planning processes can ultimately exclude those without the additional capacities required to navigate them.

Another recurring theme was the importance of funding for the effectiveness of community groups. Grassroots organisations are described as overstretched and underfunded, limiting their ability to engage meaningfully with developers or the local authority. One interviewee described how the CP4H group initially operated informally, with members juggling fulltime jobs and other commitments. It was only over time that the group was able to secured grant funding to hire dedicated employees. This professional capacity was framed as essential to sustaining a multiyear campaign, accessing legal expertise, and ensuring that the group could independently scrutinise planning information rather than relying solely on local authority or developer narratives.

"funding is so dire, and to run these organisations, they're already so overstretched. So even if they [the grassroots organisation] actually want to engage and in input, it's a very difficult environment for people to be able to do that." (Activist)

"Having workers has been very important, I think, and the workers were also able to access funds at one point to get legal advice from a planning lawyer, and that was very important... You can actually get a second opinion and then work out what what's the best way forward and ideally, all groups and communities should have that kind of access, but I don't believe they do." (Activist)

These perceptions highlight the structural importance of financial resources in enabling community groups and broader public participation.

Strong organisational structures and capacity was also emphasized as important for community groups. This was also reflected in a perception of acceptance of local groups by the local authority, with CP4H represented as being highly organised and with a clear social agenda.

"[...] there is a very active group called Campaign for Holloway, they've changed their name now to Community plan 4 Holloway. And they are an extremely well organised with them, have a very positive social agenda and climate agenda and they have been involved in this from day one [...] Last night somebody stood up and talked about housing prices ... to make a decision that genuinely delivered for the local residents and new residents. So we do listen and we do go out and talk to those groups. And we do involve them throughout the planning process and particularly on this site as well." (Official)

The role and function of a community b-ased Intermediary

Interviews with Islignton residents also documented the emergence of a communitybased intermediary group - Residents without Borders (RwB) - as a significant actor in the development process. The intermediary function of this group was emphasies at interview, with the group positioning itself as neutral and acting as a mediator rather than an advocate for particular interests. RWB's mission was framed at interview as community capacity building, supporting residents and groups to develop the skills, knowledge, and organisational structures needed to participate effectively in civic processes.
Nevertheless, their neutrality was presented as being essential to bringing together actors from the community and development partners, and therefore facilitating engagement with more politically motivated groups.

A central function of RWB has been to raise awareness amongst Islington residents about the scale and significance of the Holloway Park development. RWB also give community groups a platform to articulate their concerns and priorities, while also providing a platform to development partners, including Peabody. This included hosting open community events where groups including CP4H and others representing women and ethnic minority communities could explain the implications of the Holloway Park development and encourage broader residential engagement. This function was framed as essential in the context of barriers to participation in political mobilization, described above.

> "We are looking at not simply giving a platform but actually, through the various phases, there were adjustments made. And that's when I became aware that was important to give Peabody a platform." (Activist)

> "Peabody [...] They're very good at community engagement and giving funding to charities to help you actually provide various services to the community... I really wanted them to come to our event, not just to talk about the Holloway Park development, but all the developments that they're doing in London. Yeah, they're doing a lot." (Activist)

These public events were framed as a 'co-production', with RWB acting as facilitator and inviting a wide spectrum of participation from across stakeholders. The events moved beyond planning issues to addressing wider community needs as a means of cultivating inclusivity. This involved providing food, music, guest speakers and a platform for a range of advice services offered in Islington including benefits advice, and advice on housing issues, as an effort to foster social cohesion in a diverse borough. This suggests a role for such intermediaries not only in building local political mobilization but broader community capacity.

> "[...] we had international music videos and they were in different languages... because we have people from all different nationalities, races, ethnicities. So part of that social cohesion is actually getting people to hear their languages and get other people to be familiar with those languages. Islington's got 40% of the population that weren't born in Britain. So they're first generation immigrants and also having food from different [...] cultures, we have the Kurdish and Middle Eastern women's organisations." (Activist)

> Also we have a high number of LGBTQ plus as well in that group, and they've been able to safely speak about the kind of discrimination they've suffered and ... to know they're in a safe space and they can actually talk about that and not feel... we've got other people that are very religious that probably won't accept a gay person, but they are in that room. It's a safe place for everybody." (Activist)

Vulnerability and priviledge in Islington

A further theme emerging from interviews in the area of political mobilisation was of Islington as a borough marked by extreme inequality, with residents experiencing severe hardship living alongside extremely affluent residents. This was framed as shaping participates in civic processes. However, those facing deprivation were not simply framed as lacking the capacity for political mobiliasation. Rather, both groups were represented as being highly politically motivated.

> "[...] we have extreme poverty and deprivation, and extremely rich. [...] a lot of these groups are still trying to represent some of the more deprived people. It's not just, I don't want this because of my luxury home. You stood up and said I genuinely want you to deliver the scheme because we need affordable homes and I'd like you to go further, which is quite unique, really." (Activist)

Local authority support in this regard was framed as a crucial enabler of local political activity, with the authority providing substantial support to community groups, including meeting spaces. This was in some cases represented as institutional priviledge rooted in the borough's relative affluence, enhancing the capacity of local groups to mobilise, and ultimately impacting the outcomes of urban development.

> "Islington is one of the boroughs that actually has a lot of committees and those committees have a lot of residents that sit on them, and they actually influence the planning [...] I mean, when you look at the East End of London, you get high number of people where English isn't their first language, never mind about struggling, you have to help them in terms of reading. That impacts the outcome in terms of the developments." (Activist)

Interviewees also described a broad ecosystem of stakeholders involved in the mobilisation around Holloway Park, including organisations focused on women in the criminal justice system, political party representatives, faith leaders, trade unionists, and housing campaigners. This network is perceived as having evolved over time into a more formalised structure, contributing to the strength and coherence of community mobilisation.

Ultimately, this strong civic infrastructure was framed as a barrier to the erosion of affordable housing provision or environmental standards at Holloway Park. Many interviewees felt that community's aspirations, such as ensuring public access to open space, and increasing the number of social housing units, had been or were likely to be achieved.

10.1.4.5 (Civic perceptions of) socio-ecological impacts/benefits (positive)

Affordable housing

Islington's current housing strategy for 2021-2026 prioritises the delivery of affordable housing, with a target that all development projects include 50% affordable housing on site, that homes are built to adapt to changing needs including integration of renewable technologies low-carbon building options in line with the council's green agenda, that developments make use of landscaping strategies to improve green space and decrease potential for anti-social behaviors, and that local residents needs are consulted and attended to through acknowledgement of annual audits of lettings and community consultations (Housing Strategy 2021-2026 Action Plan, 2021).

Interviewee perceptions reflect a strong sense of achievement regarding the proportion of affordable and social rent homes secured at Holloway Park, exceeding typical delivery levels. These affordability ratios were stipulated as a condition of the subsidy secured by Peabody from the GLA for site acquisition. The case therefore illustrates how public investment and planning requirements can lead to high levels of affordabile housing in urban development schemes.

However, this is also a particularly interesting case insofar as local community groups were involved in discussion with the local authority about the development site well before the land was sold, before a developer had been identified and before a vision had emerged as to how the development would take shape. The local authority were also reported by community interviewees as ‚hugely supportive' pariciulatly in responding with the creation of a supplementary planning document outlining an aspiration for high levels of affordable housing delivery on the site. The scale of affordable housing delivery at Holloway Park is thereby frame das a positive outcome of sustainaed campaigning and local authority capacity.

Place making impacts of green space upgrades

As noted in Section 3.1, the policy context for green initiatives to be included as a central aspect of the Holloway Park development came largely from the national level (particularly the new Biodinersity Net-Gain (BNG) legislation), and from the regional level (GLA requirements for urban greening).

The public park at the centre of the Holloway Park development is the focus for the developers' efforts in BNG and urban greening. This has involved the creation of new park space but also the preservation of several historic trees. Peabody expressed the benefits of this green space largely in terms of place-making:

> "[...] these are trees that have been here since the Victorian prison and it also helps that place-making. So I think for us in terms of that, those green initiatives in terms of good landscaping and a high amount

of biodiversity and the urban greening factor. … we generally see that those sorts of green initiatives really help create a place and a sense of community in place." (Development partner)

This frames green infrastructure not primarily as an ecological intervention but also as a tool for creating a cohesive and attractiveurban environment. However, this also feeds into more complex (and not straightforwardly positive) dynamics of creating a high value housing scheme:

"[the benefits of green space]… not only is it a nice place to live, but also it helps support our sales values as well, which we need to make sure it's in a viable scheme." (Development partner)

Training & green skills

"[…] for example, the Holloway Park site, we pushed Peabody to train apprentices to train people, women to do construction work. We pushed them to train people in green skills." (Activist)

Training, apprenticeships, and green skills development were also identified as important socioeconomic dimensions of the Holloway Park project.

"[…] a group of us came together from different housing campaigns, from the Trades Council. And I think the Trades Council is important because that also includes interest in jobs and training in the construction industry, jobs, women and girls in sustainable technologies, and so that has been a feature alongside the affordable housing and the green aspects of the development." (Activist)

Another interviewee described community efforts to 'push' Peabody to provide apprenticeships and training specifically in construction and green skills during the development process, suggesting these benefits may not have automatically been embedded in the process (see reference to Social Value in the case of Barking and Dagenham, below), but were the result of organised advocacy.

10.1.4.6 Civic perceptions of) socio-ecological impacts/harms (negative)

While the development is broadly perceived to have been socio-ecologically beneficial by interviewees, perceptions about the potential negative impacts of the development are more complicated, and require careful unpacking.

As outlined in Section 3.1, achieving either sustainability or affordability goals in new housing developments each represent direct costs to the developer. This is partly because of the UK's national policy frameworks for green initiatives and for housing affordability, which rely less on supply-side intervention and grant funding, and rather use regulatory structures requiring housing providers and other developers to deliver affordable housing and greening initiatives as part of their development activity. As the viability of schemes are affected, this means that there are usually trade-offs, as developers seek to recoup their costs elsewhere, for example negotiating down affordable housing provision to account for the increased costs of sustainable construction or urban greening. This pattern was reflected in the perceptions of planning officers in this case, for example:

> “Commercial developers, the bottom line is cost... And they see these things as all of these are cost. And I think ultimately access to affordable homes is impacted by how viable a scheme is because if you could build a nice building that met all our planning policies and had a load of green space and still deliver affordable homes, we wouldn't have a problem. You can't do that because of all the costs involved in it, whether through legislation or inflation or whatnot or build costs. So I think access to homes is being directly impacted by the amount of requirements on developers and ultimately the cost is there.” (Official)

Design

At Holloway Park, with a housing association as the developer, a commitment to 60% affordable housing, and environmental contributions required by law, this space for improving the viability of the site has been more limited. A major perceived negative impact relates to the increased density and height of buildings at Holloway Park, with increasing the total number of housing units on site seen as the primary mechanism for addressing viability. Development partners described this crosssubsidy model in which private units help offset losses on affordable units. Community interviewees also perceived the developer to have justified height increases on viability grounds, with one noting that the maximum height rose from nine to nineteen storeys to accommodate an additional 160 units.

> “So obviously as a housing association, we're essentially we are here to provide affordable housing. That is what we're here to do. And increasingly, we do have to provide a level of private homes as well, to essentially pay for the loss we make on the affordable. So it's all about that kind of cross subsidy of the homes from the private into the affordable.” (Development partner)

Community interviewees expressed concerns that the height and density of the development compromised the quality housing units, particularly in relation to overshadowing, ventilation, and overheating. One interviewee described ‘the economic model’ as unsound and linked it to the presence of singleaspect flats maximise unit numbers, with those facing south or southwest being especially vulnerable to overheating.

> “The economic model doesn't work even when it's subsidised by the GLA to the extent that it was and the consequences these buildings are too tall in relationship to one another, and they have ... say 15% of single aspect flats, and a single aspect flat will overheat.” (Activist)

Development partners acknowledged that dualaspect units are preferable for ventilation and heat resilience, but perceived that compromises such as using bay windows were necessary to meet social housing targets.

> “a lot of the units weren't dual aspects, which is like, you know, essential if you want good ventilation in extreme heat. And units without dual aspect, they're famous for overheating when there's hot weather. [They] made some sort of compromise and they made sort of bay windows. But that was a challenge, we had to just accept, to get the number of social units we got on there.” (Activist)

Environmental considerations

Although the development delivered the intended 60% affordable housing, interviewees involved in development decisions perceived ongoing tension between affordability and environmental obligations. They described internal deliberations about what could be delivered within viability constraints, particularly when considering landscaping, urban greening, biodiversity net gain, netzero carbon measures, and in the absence of additional grant funding:

> "Obviously we're pushing for high quality materials, we're pushing for the best quality, that's all the right thing to do. But can you do all of those things and still deliver without the grant point? I said earlier, no, at the minute you can't. Something is having to give every time." (Development partner)

> "sometimes if the capital expense is too much or when the viability so challenged it can be difficult really. But so getting some of this grant will potentially allow us to take some of those initiatives" (Development Partner)

One interviewee described assessing which environmental features were financially feasible while maintaining the affordable housing commitment. They perceived that certain sustainability measures, such as higherquality photovoltaic panels, might only be possible if compromises were made elsewhere, including potentially within the affordable housing offer.

> "basically we had we had an appraisal to say ... 60% affordable, which is a very high provision ... it was essentially at that point, you know, we were starting to ask questions around what can we ... factoring in kind of everything we wanted to do in the landscaping, hitting the urban greening factor, hitting the biodiversity net gain. But what it didn't cover was kind of any kind of net-zero carbon initiatives, really. So essentially what we did, we started looking at that and starting to cost it and ultimately said, what could we, what could we swallow? What becomes too costly or too risky for us?... obviously we could do that if we don't, if we do something different on the affordable" (Development partner)

Accessibility

Community interviewees also expressed concerns that the development included too many one and twobedroom units and insufficient larger units for families, particularly amongst the social housing units. Interviewees also perceived the number of accessible social housing units to have been reduced during the planning process. These perceptions highlight concerns that the development is not aligned with local housing need, given high levels of overcrowding in Islington, instead being deprioritized in favour of the viability requirements of the site.

10.1.4.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

Perceptions around the tensions and power dynamics surrounding the Holloway Park development reveal how the distributional outcomes outlined in Sections 3.2 and 3.5 are shaped by divergent priorities across governance levels and stakeholder groups. These perceptions can be understood through the lens of vertical tensions (struggles by the local public and non-profit sector to secure adequate national grant funding) and horizontal tensions (particularly around

viability negotiations). These dynamics could influence the ability of local authorities like Islington to enforce ambitious affordable housing policies, and the capacity of developers - especially housing associations like Peabody - to deliver affordable homes alongside green transition initiatives.

Vertical tensions: funding

From both the local authority and the developer. Both perceived themselves to be in need of more grant money from central government

Both the local authority and development partners presented a general perception that national funding was insufficient to support the delivery of affordable homes alongside green transition initiatives. Local authority representatives highlighted the impact of sustained budget cuts, while development partners highlighted declining grant levels over successive funding programmes making newbuild schemes less viable, especially when combined with rising costs and obligations to upgrade their existing stock.

> “So the things we're basically asking for really with the recent lobbying, probably a few things. One was essentially basically grant money basically... we need more grant for new build schemes because basically viability isn't working.” (Development partner)

These shared perceptions reveal a vertical tension in which both local authorities and developers feel unsupported by national frameworks.

Horizontal and vertical tensions: viability

Interviews revealed a perception amongst all types of interviewees that viability was of crucial concern in at Holloway Park, and highlights for the broader case of London and of the UK the importance of viability negotiations for managing housing outcomes and reducing housing inequalities.

> “Peabody is a business, and they've got the money they're spending. They've got to make it back.” (Activist)

> “[...] our viability has taken a significant hit with bill cost inflation and due to the number of affordable homes we're trying to provide” (Development partner)

> "[...] viability is the biggest one because ultimately, you [the developer] give us a viability and say ‘I can only afford 20%’, we push them obviously for the correct mix of houses [becuase] we just don't have any family homes. But a developer will always want to build one or two beds because you know you maximise the values of one bed... so it's all about the marketability. Developers do want to do one or two beds because they fly off the shelves.” (Official)

In the UK context, where developers are able to negotiate their contributions to affordable housing and other social infrastructure on the grounds of viability, can create horizontal tensions

with local authoroities with abmitious housing targets. This is also compounded by vertical tensions between local and regional authorities, as was expressed the case in Islington, with the GLA discouraging London Boroughs from enforcing a 50% affordable housing contribution from housing developers.

> "The last time I talked to a GLA councillor with responsibility for housing... Basically she's focused on, we've got to get as many units as possible." (Activist)

> "[...] we've had a directive that carries material planning terms from the Mayor of London saying 50% affordable housing targets will not be accepted as part of local planning examinations and we should be targeting 35%, and not seek to go any higher. So we are being challenged as we speak by lots of developers saying even the Mayor doesn't think your target's now a viable target." (Official)

This direction in regional policy was frame das an attempt by the GLA to incentivise the delivery of more housing units overall. Nevertheless, this may lead developers to feel they are supported in lower affordable contributions by higher levels of government.

In the case of Islignton, the local authority are known for challenging developers on their viability positions (see also Section 3.8 below, for a recent case where Islington challenged a developer who did not account for Islington's affordable housing policies and the proportion of affordable homes to be included in a scheme, before paying an over-inflated price for a parcel of land). This was reflected in perceptions of interviewees in this case, and underscores the variation between different local authorities in their ability to negotiate and secure different housing equality outcomes from private development:

> "Islington does have a track record. A recent track record of challenging developers who pulled the viability stunt and challenging them and actually winning." (Official)

> "Islington's policy policies are strict ... I was on the planning committee for years and quite a few developers would get stuff through that didn't abide by our policies, but we would get other stuff from them, you know, to compensate for that." (Official)

10.1.4.8 (Civic perceptions of) innovative governance mechanisms

Local political mobilisation and community engagement

Despite the various trade-offs in building height, quality and design that were noted in Section 4.6, the Holloway Park case represents an example of a relatively high provision of affordable housing delivery as noted in Section 3.5, alongside a 'green', sustainable development.

Interviewees consistently reflected the perception that this was associated with active community engagement and political mobilization in Islington. Our analysis of governance mechanisms that can underscore better housing outcomes and a more equitable distribution of housing (access and affordability) alongside green initiatives, has focused largely on the

resources and capacities that enabled active community engagement in this case (see Section 3.2 and 3.4 above).

Local authority innovation: The Parkhurst Decision

Within the policy context for green initiatives in the UK, the task of managing and coordinating those initiatives is often the responsibility of local authorities, with private developers, registered housing providers and other actors involved in delivering housing and new development obliged to shoulder the cost of these initiatives as part of their development activity. The cost of green interventions is then intended to be recouped by these actors through their own commercial mechanisms or revenue streams. This places a particular challenge on local authorities, who are also responsible for coordinating affordable housing delivery, to manage trade-offs between environmental initiatives and affordable housing delivery.

Across the UK cases for this project, interviewees spoke to this challenge in raising various innovative mechanisms they are trialing in order to deliver on their obligations withing tight financial constraints.

In this case, Islington were perceived across the board to be a strict local authority concerning affordable housing delivery targets, and challenging developers who argued to reduce their affordable housing contributions on the basis of viability.

> "Islington does have a track record. A recent track record of challenging developers who pulled the viability stunt and challenging them and actually winning." (Official)

> "I mean the dreaded viability because they [the developers] pay too much for the land... So that's the problem." (Activist)

The 'Parkhurst Decision' represents a recent case where Islington challenged a developer who did not account for Islington's affordable housing policies and the proportion of affordable homes to be included in a scheme, before paying an over-inflated price for a parcel of land. As the council reported on the case: "the Planning Inspectorate upheld the council's refusal of planning permission for a site in Parkhurst Road, on the grounds the application does not provide the maximum reasonable amount of affordable housing. The developer, who applied to build 96 homes on a former Territorial Army Centre, initially sought to avoid providing any affordable housing...The council refused planning permission on 13 May 2016. The developer appealed and eventually increased its offer of affordable housing to 10 per cent. The Planning Inspectorate has now dismissed the developer's appeal." [https://www.islington.media/news/islington-wins-landmark-case-against-a-developer-on-affordable-housing]

This decision turned on the manner that the developer had determined the price they would pay for this parcel of land, which did not account for the Borough's affordable housing policy and which, if it had done so, would have precluded the price eventually paid. The decision paves the way for local authorities to require that developers include the additional costs

implied by their affordable housing policies, when calculating the value they are prepared to pay for particular parcels of land.

10.1.4.9 (Civic perceptions of) tourism and market pressures

The housing market in Islington is characterized by high housing costs including house prices and rents, as well as having over 16,000 households on the Council's Housing Register in need of an affordable home. Overcrowding is a particular issue in Islington and was consistently raised by interviewees, perceived as being exacerbated by a preference for developers to build of one- and twobedroom housing units in viabilityled schemes. Viability constraints also result in a pressure to densify in order to maximise cross-subisdy on site, in the case of Holloway Park this has manifested in taller buildings. Community activists interviewed here noted that Shared Ownership (an ownership-based 'affordable housing' product) is priced beyond the reach of lower income households in Islington. This reflects a broader pressure whereby local incomes and national affordability definitions are are seen as disconnected from one another. From the *local authority perspective*, a major pressure arises in defending local affordability policies from regional (GLA) directives (as discussed above in Section 3.7).

10.1.4.10 Gaps in perceptions between civic groups and public agencies

Achieving a broad spread of interviews in the case of Islington, including community groups and activists, development partners for the Holloway Park site, and from the local authority, allows for a strong understanding of how perceptions converge and diverge between these actors.

Across interviews, there is no single strong division between the views of civic groups and the local authority. It was acknowledged that tensions were inevitable between these groups, nevertheless both community groups, the local authority and even the development partners spoke about their relationships as generally positive, working through conflicts with regular meetings as a forum for raising issues such as construction disruption, dust and noise, and accessibility concerns. Interviewees largely reported a perception that participatory governance has required willingness and active engagement from all parties, including the local authority, the developer and the local community, to create opportunities for full community participation in the development process.

Both sides recognise the high proportion of affordable homes at Holloway Park relative to elsewhere in London, although community groups sometimes felt this was a compromise rather than an unqualified success, noting concerns about the the shortage of larger family units, and pressures on the number of accessible dwellings.

> "We wanted that to be all council, it was government land owned by the public. We wanted to let the council have that land as a public asset and build what we want on it. But we couldn't." (Activist)

Community activists noted considerable concern around the design of the scheme, noting a link between the height of buildings, the number of single-aspect homes, and overheating/ventilation risks, seeing these as direct distributional impacts of viability-driven densification.

Community groups were also more ambivalent about green space-led placemaking at Holloway Park. While not overly negative about this aspect of the development, some reflected a view that the amenities planned for the site, including the park at its centre, did fully not reflect community priorities. Here, the green space represented a further compromise, representing the developers' ambition to create a high value mixed tenure scheme, rather than delivering affordable homes as a priority for Islington.

> "[Researcher: And what are the negative impacts for residents?] There are certainly people who share the view that more units is better, and we don't need all this green space. We need housing desperately. That this is kind of middle class people with environmental ideas who aren't living the reality of people very poor private housing in the area." (Activist)

Local authority interviewees were more likely to point towards the social and ecological benefits of the park, with development partners also pointing towards its placemaking benefits, and the support this gives to sales values in order to support cross-subsidy for affordable housing provision.

> "[the benefits of green space]... not only is it a nice place to live, but also it helps support our sales values as well, which we need to make sure it's in a viable scheme." (Development partner)

Nevertheless, all interviewees offered an account that communicated respect for the others; all also recognized fincancial constraints as the primary impediment to securing maximum social benefit from the site.

> "[Researcher: following that public consultation process, did you feel that Peabody and the council were able to respond to the concerns of the residents?] I think Peabody tried their hardest to listen, and I think they did what they could. As with everything, it's always money that's the constraint." (Activist)

10.1.5 Civic Perceptions of Green Initiatives in Case Study Areas: Barking and Dagenham

10.1.5.1 (Civic perceptions of) precedents and implementation

The new housing development Dagenham Green sits on the brownfield site of the former Ford stamping plant. As with Holloway Park, this site represents a housing development where no housing existed previously. However, unlike Holloway Park, which sits within a busy residential neighbourhood, the surrounding area (particularly to the South) at Dagenham Green is largely former industrial land. There are some residential areas to the North, closer to Dagenham train

station and Old Dagenham Park, nevertheless the fact that development is taking place in a formerly industrial area has limited our ability to find active resident groups involved with the development or with neighbourhood advocacy. Therefore, this case reflects a somewhat limited picture of the development process, largely from the development side.

Approach to green initiatives on the site

Interviews pointed towards a strong political will to forefront green initiatives as part of the development activity within the borough, and in this specific case. The development has been advertised as a "green oasis" by Peabody's private development partner, the Hill Group, and a case of "urban living, naturally inspired". Natural landscaping and NBS at the centre of its design, implemented through a 'landscape first' approach (see Section X.X):

> "The politicians in the borough are very supportive of wanting the borough to green. Barking and Dagenham has a kind of aspiration to be green capital of the capital." (Official)

Again, this approach has been enabled by the brownfield nature of the development land, meaning the developer was able to take a wholistic approach to urban change.

> "As the landscape lead of Dagenham Green, we started with the master plan stage and shaped the master plan together with the architects and submitted an outline planning application for the whole site [...] The urban park, that's the park that sits within the development, already this shows you what was the direction of travel in this development, which was about putting landscape first." (Development partner)

The area also sits on the floodplain, which implies a very specific form of biodiversity on the site, and consultants were keen to discuss how working with this aspect of the site was central to their approach to biodiversity and nature restoration:

> "So starting from floodplain, with wetland areas to the South of the site, which is the area that's prone to the influence of water, and then creating a series of diverse meadows and species with grasslands in the park and then ribbons of woodland traversing all the way through the diagonal connecting route. So really, really maximizing on biodiversity, looking at what was once there and how we could reinstate some of this typologies in the new in in the new neighborhood." (Development partner)

> "Blue infrastructure, I guess backbone again was very much a consideration from the early master planning stage [...] So we have a series of swales and rain gardens that collect what surface water run off from the streets and then they... direct the storm water from the whole development to the park itself, which is counted as a large basin. Then we have a pond that's varying in levels in the South side, a permanent pond that's just again seasonal, seasonally varying in levels." (Development partner)

Policy frameworks

In terms of the policy context for this approach, interviewees mostly mentioned the national policy context as being significant, in terms of the new biodiversity net-gain legislation (BNG),

obligating all developers to deliver and increase of 10% biodiversity on every site. While brownfield sites may not be considered the most biologically diverse, it was expressed to us that these sites are often very diverse and carry huge natural value, especially where they have been derelict and undeveloped for some years. Added to this a report from our interviewees that the site will achieve above 10% BNG on the pre-existing biodiversity values, illustrates the extent to which natural capital is perceived to be central to the development activity in this case.

> "There's a minimum 10% net gain requirement on all sites. Here, as I said, we are on target to achieve a minimum of 54% for phase one, which is an incredible score." (Development partner)

Funding

From the local authority, who might have acted as the main coordianting developer for such sites in the past, the precedent for partnership with Peabody as a development partner was understood to have stemmed from local authority funding cuts:

> "I guess Barking and Dagenham and other local authorities and now with the kind of lack of funds are actually looking more to public-private ventures. So yeah, we might be seeing more of that." (Official)

10.1.5.2 (Civic perceptions of) participation and governance (procedural)

In this case, community participation and engagement was represented by interviewees in more in procedural and organizational terms, detailing their working operations rather than reflecting on or describing actual participatory activities that had taken place. One interviewee, involved in borough-wide initiatives, perceived their role as introducing models of participation supported jointly by the council and grant funders, again foregrounding a procedural rather than experiential reflection of participatory governance. This may be due to the limitations of this research, without interviews with resident populations directly affected by the Dagenham Green development. Nevertheless, interveiwees' reflections of participatory governance are notably different to the case of Islington for example, where public engagement was perceived to be a central feature across interviews. Islington represents a paradigmatic case for understanding the resources and capacities that have enabled extensive community engagement, which are understood to have had a direct impact on the planning process and development at Holloway Park. The absence of similar reflections in the case of LBBD suggests that this level of engagement may be uncommon, even within London.

Nevertheless, interviewees represented community engagement as a vital component of the 'success' of projects, even if in relatively broad terms. These reflections usually frame community involvement as an important part community buy-in, and encouraging long-term stewardship.

> "engagement with the local community is like kind of a critical in success in those projects, I think if you just do it and you don't bring the people with you. You'll get a lot of opposition or, you know, people then

> just dump stuff in these spaces or whatever, you know, they disrespect them, so. Yeah, I guess I think done well in co-creation it can really work" (Official)

Specific reflections on how community engagement shaped the development in this case included one interviewee describing how the masterplan had incorporated a key pedestrian desire line identified through engagement with local residents, improving connectivity through the development. A further reflection highlighted community engagement and participatory governance as a means of managing trade-offs between the ecological and social interests. This is exemplified for example by one interviewee who described tensions between biodiversity objectives and resident needs:

> "often quite a difficult balance is how do you build a space and you focus on biodiversity, but you try and make it all right for people? Do you focus on making it a good space for people and try and bring in biodiversity? ...there is usually a trade off one way or the other. But I think if you can get people involved, you get so much more possibility. What you need is people, communities and ecologists together, because then you can really hash out how you want to go with it. But quite often they'll just get the ecologist in because they're thinking about biodiversity, and then people get neglected." (Development partner)

This excerpt suggests that involving communities is perceived as helping to negotiate the inherent trade-offs of a "landscape first" approach. The benefits of community inclusion was also stressed in a report that residents had suffered from a lack of information about green landscape features in the development, leading to confusion and misuse of a green space designed as a retention basin (a form of SuDS).

> "The SuDS, Like drainage pits, they were green you know, they were just grassed over. Instead of just a flat green space, they'd have a big dip in them so that this could be a retention or detention basin. But when people moved in, nobody told them what. They didn't tell them what their function was or their purpose or anything. So residents were like, why is our football pitch got a great big dip in the middle of it and people just started using it to dump stuff. And it was really obvious that they hadn't been told anything about their green spaces and what they were and why they were there." (Development partner)

Once more this underscores a general perception amongst interviewees about the importance of community involvement for long-term environmental stewardship. Nevertheless, while reported in broadly positive terms, the case is lacking in reflections about specific interactions with the local community, or any specific any conflicts or resolutions that had been reached.

Social Value

A major thematic strand in relation to community participation in development activity concerns the notion of *Social Value*. Interviewees referred to this concept to describe developer-led activities intended to benefit the local community and economy. These activities were perceived as mechanisms to ensure that development is embedded in the area and that residents feel they are beneficiaries rather than bystanders. Social Value initiatives were reported as being paid for through the developers' procurement mechanisms. This requires that contractors outline in

tenders how they plan to deliver on socially valuable activities (for example, engagement with local gardening groups to coordinate provision of community gardens) as part of their contractual offer.

> "Our policy says that there should be a 20% weighting for social value in that procurement" (Development partner)

Social Value was positioned as adjacent to, but distinct from, both autonomous community mobilisation and formal public engagement processes. Interviewees from amongst the Dagenham Green development partners described their involvement in Social Value commitments from the bidding stage through to delivery, emphasising commitments to local employment, apprenticeships, work placements, and procurement from local businesses, as well as support for business mentoring, careers advice, and training for unemployed residents. These reports frame social value activities as a broad suite of interventions aimed at strengthening local socio-economic capacity.

Interviewees also framed social value as intending to foster community stewardship and empowerment as part of the development project, ensuring that neighbouring residents feel welcome in the new development and do not perceive it as something happening 'to' them.

> So how can we get that existing community around the edge to feel like they're welcome? We want to see them there [...] We need to make sure that other people are on the journey, people don't feel like it's happening with no impact on them, what are you doing for those community groups and how are you helping build capacity?" (Development partner)

For this to occur, interviewees stressed the importance of supporting local community groups, small charities and other organisations, also perceiveing these to act as conduits to wider community sentiment. It was noted that there are significant challenges for developers – in this case also the ongoing housing provider for the development – in engaging directly with local residents. Interviewees framed themselves as reliant on local partners to identify needs, increase capacity, and reach less vocal groups. This suggests that while development partners frame their role as facilitating and supporting community-led capacity building, pre-existing community infrastructure can also play a crucial role for development partners in enabling co-production and broader community acceptance of new development.

> "I always say we're not the experts in every area that we go into to build. We're the experts in building. [...] It's not for us to go, 'Oh, you poor community'. Let's do this and you're going to feel so much better. It's just for us to understand, facilitate where we can help build capacity and hopefully support them in, doing all that themselves." (Development partner)

While Social Value may to a certain degree step into any breach in other community engagement activities, it also exists within the commercial requirements of development partners and is therefore subject to commercial constraints. Social Value as an 'innovative governance mehcanism' is addressed below in Section 4.8.

10.1.5.3 (Civic perceptions of) (in)equity (distributional)

In light of the previous section (Section 4.2) highlighting the perceived importance of community engagement by development partners, this section presents a counter narrative about the community relationship the new development at Dagenham Green, and at the neighbouring Barking Riverside, also developed by Peabody. By and large, interviews reflected a feeling that the existing community in the surrounding area did not feel these new developments were 'for them'.

Perceptions on affordable housing

Interviews highlight a clear divergence between the council's stated intentions and the perceptions of existing residents. For example, according to local authority accounts, officers perceived themselves as making substantial efforts to maximise affordable housing contributions within new developments. This was framed as a deliberate and proactive commitment to ensuring affordability across schemes, with the council believing it was working to deliver a significant proportion of affordable units.

> "the council would make a huge effort to sort of try and ensure that from any development there was as much affordable housing as could be provided." (Official)

However, the reported perceptions of local and longstanding residents (albeit not from interviews with these residents themselves), differed markedly. Local residents were understood to be septical about the affordability of the scheme, with affordable categories (ranging from social and affordable rent but also including Shared Ownership) as out of reach for many households in the area. This was perceived to have contributed to negative sentiment towards the development, with residents feeling it had not been designed with them in mind.

> "Like you get in the whole part of London, there would be a lot of suggestions of, well, affordable to who because we can't afford this. Even though there were the different levels from very affordable to shared ownership and all those things in between. I think there was a lot of negative feelings about that." (Official)

Perceptions on distributional implications of neighbourhood improvment

The council's perspective emphasised an awareness of the political and social sensitivities surrounding uneven investment across the borough. Local authority interviewees described being attentive to concerns raised by constituents about perceived imbalances, and they characterised their approach as one that sought to distribute improvements fairly across neighbourhoods.

> "people might speak to their local councillors if they feel that there is more investment in one part of the borough than another. I think, yeah, the Council's always very mindful of that, to try and keep things evenly distributed" (Official)

In contrast, residents' perceptions conveyed a strong sense of exclusion from the benefits of regeneration. Residents were also reported as perceiving the physical and aesthetic transformation of the area as reinforcing social boundaries, with the new development described as "posher looking" than the existing social housing which was in poorer condition and less well maintained, while investment flowed elsewhere. This frames residents' perceptions of the new developments as being "for somebody else" - newer, more affluent populations.

> "my view from the engagement was that that those developments were seen as for somebody else... that the local residents who'd been here, in some cases their families for decades generations were the ones that were going to bear all the pain and get none of the benefits. That that was the sort of stuff that you would hear people talk about." (Official)

> "it was new and let's say, posher looking than where they were. And so I think they felt, yeah, they found that unwelcoming and they felt a bit forgotten and on the outskirts and neglected, I think, really. As it had changed, they started to feel like they weren't allowed to go there anymore. And like I say, I think the old because there's a quite a bit of social housing and it wasn't in great condition and it didn't look particularly well maintained. And I don't know that there's really much social housing provision [and] it's a different style, a different quality and I think they felt that they'd just been forgotten about, really." (Official)

These perceptions collectively point to a narrative of marginalisation, in which regeneration is experienced not as an inclusive process but as one that deepened existing inequalities.

Perceptions on distributional implications of urban greening

Council interviewees articulated an expectation that new green and public spaces would be inclusive and beneficial to local communities:

> "from a resident to local communities point of view ... there was a high level of expectation that what was going to come was going to bring benefits to them. It was investment, but so therefore should be inclusive. ... but there was this idea of having ... quite a generous central space and having a relatively high level of public realm and space was there from the beginning." (Official)

However, residents' perceptions again diverged significantly. The existing community was described as feeling excluded from the new green spaces, perceiving them as belonging to the new development rather than to the wider neighbourhood. The design and layout was also framed as a physical and symbolic barrier between older residential areas and the riverfront. The perception of being "excluded" or "marginalized" from these new amenities illustrates how urban greening, even where intended for universal community benefit, can be experienced as reinforcing spatial and social separation.

> "The new development almost created like a barrier between the older residential areas and this bit to the river, and a lot of those people really felt like they couldn't go through. That's not their green space, that's not their area. They couldn't go through it. So there's like communal green spaces that anybody could use, but they never felt that they could use them. And they also felt like they couldn't get down to the river anymore. And it was quite understandable because there was quite a sense of a barrier to getting down there... they felt completely kind of excluded, marginalized from that." (Official)

A consistent pattern is reflected across interviews of a significant gap in the perceptions of public agencies and local residents. This is therefore noted also in Section 4.10. While the local authority perceived interventions as inclusive and equitable, longstanding residents are reported as perceiving the new developments as not intended for them, both in terms of housing, neighbourhood improvement, and green space provision.

10.1.5.4 (Civic perceptions of) political mobilization

As reflected on in section 4.2, the nature of the interviewees for this case meant that no direct voices were heard from the local community. Notably though, interviewees from the development partners, including the local authority, represented community engagement in a very procedural way, noting the various institutional structures that existed for dialogue with the community, rather than specific occasions, activities, meetings or the arguments and conflicts that took place regarding this specific development.

We are therefore left with a relatively thin understanding of political mobilisation in Dagenham. Noted above are reflections that in the existing community felt excluded and margianalised by the 'green' urban developments taking place across the borough, even in the face of efforts by the council to make these spaces inclusive. These are not accompanied, unfortunately, by a clear picture of the extent or type community action that took place alongside these developments.

Since many development partners foregrounded the concept of 'social value' and an underlying principle of including local/community partners in their development activity, we do have a sense of community *involvement*, rather than mobilisation. This presents a framing of community action that is more aligned with the development partners:

> "the people in the development, you know, they set up, they had a community group, they got a community interest company who were in the process of taking on responsibility for actually managing all of the public realm, the green space stuff as well." (Development partner)

10.1.5.5 (Civic perceptions of) socio-ecological impacts (positive)

Ultimately, the positive impacts of green transition interventions in this case have been expressed in relatively straightforward and generic terms. This is reflected by one interviewee referring to delivering a 'pitch' ("as I used to say when I was presenting"), and by others in terms or high-level design principles ("this goes back to the 15 minute city" / "the priority is to maximise biodiversity"). While commenting on the positive impacts of the site and of green transition initiatives more generally (although particularly in reference to green space upgrades), interviewees' reflections seem to lack a sense of the distribution, trade-offs or tensions implied by specific positive impacts of green initiatives.

Health and wellbeing impacts of retrofit upgrades and green space upgrades

Across our interviews, the positive impacts of green transition initiatives are framed largely in terms of enhanced health and wellbeing impacts for residents. While retrofitting is not part oft he development of Dagenham Green (an entirely new development on brownfield land), LBBD have undertaken a range of retrofit projects within the surrounding borough, as ist he case in both Bicester and Blackpool. The positive impacts from retrofit were framed in relation to energy efficiency, and largely for social reasons: reduced fuel poverty, lower energy bills and improved comfort being the primary perceived benefits of retrofit initiatives.

Green space provision was frame das offering access to nature and improved air quality, which interviewees associated with better physical and mental health. Some described the intention behind new parks and open spaces in the development as creating inclusive destinations for both new and existing communities, suggesting a perception that such spaces foster social interaction and community cohesion.

> "The vision from the start was to create an actual meeting place, not only for the new community but for the wider community, so creating a large destination park that people of all ages can use to support their mental and physical health and well-being is very much one of the key benefits of the development." (Development partner)

This stands in contrast to reflections on the perceptions of the existing community as outlined in Section 4.3; nevertheless it indicates a relative consensus amongst development partners that green space improvements in the development will contribute positively to residents' everyday lived experience in an inclusive way.

Ecological impacts of green space upgrades

On specific ecological benefits, one interviewee from a sustainability consultancy also pointed towards the ecological benefits arising from new landscape design principles. They report landscape design as having shifted away from more traditional lawns and bedding plants a spart of new housing development, which was viewed as offering limited biodiversity value. The approach employed at Dagenham Green, prioritising a ‚landscape first' approach, is reported as prioritising more diverse planting and naturalistic NBS, simultaneously reducing maintenance demands while contributing greater biodiversity.

> „when the priority is to maximise biodiversity [...you are…] looking at a transition from the formal landscape to much more informal, naturalistic nature-based solutions and approaches to planting." (Development partner)

Accessibility impacts of green space upgrades

A number of interviewees highlighted perceived improvements in accessibility and spatial connectivity resulting from green space planning. The introduction of green walking routes and low-car environments was frame das improving mobility. Others pointed to examples where environmental risks, such as flooding, had been integrated into landscape design through specific features like wetlands. The parks on the site have been designe das an interconnected

networks of open space, squares and play areas, linking smaller neighbourhoods in the same development. As noted above, teferences to concepts such as the "15-minute city" indicate that some have interpreted these benefits through high-level planning principles rather than through specific localised benefits for existing communities.

> "There's a wide variety of open space, as I used to say when I was presenting, you can see along a green spine, along a desire line that connects Dagenham Dock Station to New Road that the new and existing community will benefit from." (Development partner)

> "Bring forward greater benefits in terms of in terms of ecology, biodiversity and wildlife, and people too, because these connections are, you know, how wonderful is it to be able to start from one park and then walk and cycle to another park or through a series of interconnected green spaces. So this is very much a priority, creating green spaces that are interconnected and connected with each other through pedestrian or cyclist connections. And this goes back to the 15 minute city, which is a term that's been used widely." (Development partner)

10.1.5.6 (Civic perceptions of) socio-ecological impacts (negative)

Delivery constraints

A consistent theme across the UK cases has been the broader national policy context that creates a regulatory obligation for green transition initiatives to be managed and funded as part of development activity by housing developers (whether public, non-profit or private). This therefore produces trade-offs as developers seek to improve their viability in the face of these obligations, through recouping their costs in different places. Elsewhere in our cases, developers have sought to recoup the additional costs of green initiatives through reduced affordable housing provision (see the case of Bicester), or through building more housing units overall, with knock-on effects on the design of buildings and distributional impacts of building design (see the case of Islington, above).

In the case of Barking and Dagenham, as elsewhere, there was a perception in interviews that while leading this scheme Peabody – a non-profit housing association and registered social housing provider – was struggling to shoulder the costs of greening activities:

> "There was an expectation on us as a developer that we would do everything on this site. Every single thing would be done on this site to satisfy everything and we couldn't make it work technically and commercially and we ended up writing a document called 'Green Things We're Not Doing and Why', and putting that in with the planning application. Which was saying, well, we can't." (Development partner)

Interviewees also perceived that viability pressures had intensified in recent years due to rising costs, including materials and time. These pressures were seen as part of a broader national trend affecting development feasibility. Interviewees articulated the tradeoff detailed above: when green infrastructure or sustainable construction increases costs, affordable housing is often the element that is reduced. One interviewee described this as a "common tradeoff," noting

that developers could justify lower affordable housing contributions by emphasising the cost of environmental measures.

> "there is a challenge of viability when you're looking more strategically at implementing more sustainable measures and delivering more efficient buildings." (Development partner)

> "They've got to somehow... build a higher value or a cheaper scheme. And so pushing back on policy is one of the ways they can make it cheaper." (Official)

> "And they say well we can do all these things but you will get 10% affordable housing instead of 20% in your in your area." (Official)

Low land values in Barking and Dagenham were also perceived to have exacerbated viability challenges in this case, making it difficult to deliver both affordable housing and enhanced sustainability measures. Additionally, it was noted that the policy framework for development on the Dagenham Green site was particularly ambitious in terms of environmental requirements, potentially increasing build costs further.

> "the rest of the policy framework was almost drafted to suit a private developer better, who would probably come and push back and say, 'Oh well, if you do all this, we can only do 5% affordable housing' or whatever. So Peabody were trying to genuinely do everything and found that it didn't add up. So what do you do then? You go and have a chat with the policy makers and say, well, which one gives?" (Official)

The perception among developmentside interviewees was that this combination of low land values, ambitious affordable housing targets, sustainability requirements and high construction costs combine to created a particularly acute viability problem in LBBD. However, Peabody's status as a housing association alters this dynamic. Being committed to delivering policycompliant or better levels of affordable housing, there was a perception in interviews perceived that the tradeoff had shifted in the opposite direction: rather than reducing affordable housing provision, Peabody were required to account for 'Green Things We're Not Doing and Why'.

Where neither affordable housing nor green interventions can be reduced as part of a development, our interviews suggest that developers face a pressure to treat environmental 'assets' as a commodity. This results in framing greening as an investment designed to increase the commodification of development and generate uplift in asset value.

> "What am I trying to say? Oh, supporting with value creation. So a development that's set within a beautiful, attractive landscape is likely to be able to hit higher sales values, right? Developers and housing associations have recognised how the delivery of beautiful, biodiverse landscape will assist with value creation." (Development partner)

This value creation was linked in places to residents' emotional or cultural connection to nature, which could be exploited as a marketing tool, particularly in London where private developments

have historically lacked in green service provision. Elsewhere, this framing of sustainability initiatives as part of the commodification of development activity was seen to lead to internal discussions about the relative investment benefits of different measures, implying that some sustainability solutions might be selected not on ecological or environmental merit, but on the basis of assetisation.

> "There is always a commercial financial angle to sustainability. If you're going above and beyond your requirements, there will always be questions around, 'Is that the right thing to invest in?' And 'Is it an investment?' You can ask your design team 'If we went for product X over product Y' – and you still disappointingly get the answer, 'Well, it's going to cost you more to do the green one'." (Development partner)

This approach also highlights the potential for the commodification of nature: highquality, biodiverse landscapes are seen as a means of achieving higher sales values. Even where other sustainability aspects have been discarded on the grounds of viability, this role of landscape in value creation may be particularly relevant in the case of Dagenham Green, with its 'landscape first' approach.

Gentrification

With Peabody's commitment to substantial affordable housing on the Dagenham Green site, our coding of interviews suggests that the housing provider has struggled to relieve viability pressure elsewhere. Interviews link the pursuit of higher development value to the pursuit of urban greening as a form of commodification, and an effort to "improve the character of the area" to aid the creation of higher value housing products. As discussed in Section 4.3, the creation of higher value neighbourhoods can reshape the social landscape of an area, sometimes in ways that are felt to exclude existing (in this case, lower-income) communities, and thus create the potential for gentrification in Barking and Dagenham.

Interviewees reported congruent aspirations for the area from local authority representatives, for example imaging a a transformative, highvalue urban environment, and using metaphors such as "Barcelona on Thames" and "Mini Manhattan", signalling a shift away from the area's existing socioeconomic profile.

> "The senior people who were on board, some of it was, I was going to say, a bit more crazy. You know, they got this kind of idea of it being Barcalona on Thames, you know, sort of a nod to Barcelona and they call it the 'Mini Manhattan'." (Official)

A more critical perception came from one interviewee who questioned whether longstanding residents would feel that the new housing was "for them," as reflected in Section 4.3. Their perception was that this approach is systemic rather than unique to Barking and Dagenham, framing gentrification as an inherent outcome of development models that rely on value uplift to resolve viability constraints.

> "I mean, I do wonder what people who've lived there for a long time... I think they're probably right. Is that a place for them? Are these new places for them? I don't think that's new nuclear barking and Dagenham problem. If you went to Southwark and you were looking at the Haygate estate, huge numbers of people at the other end of the socio-economic spectrum moved out, and the people that live there now are not the same people. I think that is the system. Can I be as glib to say it's a system and it's the way things work? Yeah, I think that's probably how things are." (Official)

This excerpt further underscores the discrepancy in perceptions between public agencies and the local community. Local authority representatives reported trying to achieve an inclusive, green development, while the existing community reflected a sentiment that this new area of housing wasn't 'for them'. In this case, even where gentrification is not directed by direct displacement of previous residents – since Dagenham Green is built on an industrial brownfield site – the potential for gentrification is signalled by a sense that the development may reshape the socioeconomic landscape of Barking and Dagenham.

10.1.5.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

Interviewees' perceptions about the tensions and power dynamics shaping development, housing provision, and green infrastructure delivery in this case illuminate how housing inequalities and the distributional impacts of green interventions emerge in LBBD. Interviewees describe a fragmented policy environment, constrained public budgets, and market-driven development logic that collectively shape what is feasible on the ground. They also highlight how responsibilities for delivering public goods (such as affordable housing, biodiversity improvements, and high-quality green space) are increasingly devolved to developers, operating within viability constraints. This contextualises our understanding of distributional outcomes in this case.

Vertical policy tension

As noted in Section 4.6, across the UK cases has been the broader national policy context that places regulatory obligations on developers and coordinating obligations on local authorities, ultimately meaning that these actors feel unable to provide the full range of public goods they are expected to deliver as part of specific development schemes. It was also noted that the environmental aspects of the policy framework for Dagenham Green were particularly ambitous, and presented a particular challenge for a housing association as development lead.

At interview, part of this issue was understood to have manifested in a form of policy disintegration, with different policies being developed in isolation from one another, at different times and different levels of government. According to this perception, developers (whether public, non-profit or private) and local authorities are tasked with navigating a complex policy landscape that has not been coherently designed. Instead, these actors manage the policy requirements for each site on a policy-by-policy, case-by-case basis, implying that these will be inconsistently adhered to rather than comprehensively addressed.

> "GLA policy is a moving fast and different bits get updated all the time... So you're often in a position where you are trying to design a scheme to the current policy, but you're aware that the new policies out for consultation and might come in by the time you put it [the scheme] into planning. So you're having to kind of anticipate stuff. Barking and Dagenham and Be First had a high expectations for the site. The GLA had high expectations for the site. Peabody are a very diligent organization who wants to do the right thing. So there wasn't any expectation that they couldn't do everything. [But] I think the reality is many pieces of policy are developed in isolation of other pieces of policy. ... If you're trying to run a project that complies with all the policy, do you actually properly test whether that policy works? And I think that was where Dagenham Green got to. Saying, well, whether it's affordable housing or energy performance or best practice on flood risk or best practice on biodiversity or, you know, what gives? Actually it doesn't really add up. And I guess that's partly because each policy has been developed to get the best outcome, but slightly in isolation." (Official)

This also expressed as having an impact on the outcomes of development insofar as it determines the specific space in which developers are able to "build a higher value or a cheaper scheme", or the way in which each developer is able to seek a return on their investment.

> "I would say some of the biggest political challenges are around the short termism of policy, so short political cycles. Goodness knows how many housing ministers I think at one point it was something like 21 in seven years or something. So, so there's no continuity. Strategy doesn't really extend beyond the next general election. I would say that's the same for energy policy. It's the same for any of this big infrastructure in the broader sense. It's too bound up with political cycles. And that means that you end up doing short term, or the investment is looking for a return that's too short term." (Official)

As we have seen, it is these decisions taken by developers (whether it is a decision to 'build higher value' through commodification of the assets on each site, including housing, sustainable building, and nature; or a decision to 'build a cheaper scheme' by pushing back on policy commitments to affordable housing delivery or greening) that ultimately create the type and degree of housing inequalities that will be felt from each scheme.

Funding constraints and market delivery

Interviewees also described the longterm erosion of local authority budgets, perceived to have forced difficult tradeoffs between provision of statutory services (such as social care and education) and discretionary spending on parks and community assets. Housing associations and other registered housing providers are also perceived to have lost access to public funding streams that previously supported the inclusion of lowcarbon or renewable energy measures in new builds. One interviewee noted that funding for such measures has largely disappeared, with government support now focused almost exclusively on retrofit.

> "I think it's also gone hand in hand in hand with a reduction in public money for these housing providers. So they've had to look elsewhere. I think on energy stuff in particular, that has changed a lot in the last... 10/15 years ago you could attract government funding to put renewables or at least low-carbon energy efficiency improvements into new buildings […] I would say that feels like it's all gone and the funding for energy now is solely linked to retrofit. Presumably the government policy

direction is that you build and business has risen to address that, and market forces will make it competitive or it won't." (Development partner)

The cumulative perception is that green initiatives have effectively been marketised: local authorities cannot afford to deliver on environmental goods, and developers are pushed to incorporate green initiatives into development through regulatory compliance rather than through grant funding, but this is undermined when it fails to align with viability constraints.

Despite its limitations, interviewees consistently emphasized the centrality of central government funding to green initiatives in LBBD. This included grant funding for retrofitting within the borough, noting a heavy reliance on funding to delivery these programmes, as well as the limited, demand-led nature of retrofit funding meaning that even successful bids were scaled back.

"So I think availability of funding, not just what's available from the government which was cut back because it's based on demand, so even though we'd bid for more grant funding, there's only a certain amount available. So we had to scale back our programme slightly as well as did many other local authorities." (Development partner)

This demandled approach to retrofit funding is therefore frame das inherently restrictive, with total funding pots are capped, local authorities can receive less than they bid for, creating uncertainty and limiting longterm planning.

Interviewees also argued that nationallevel funding is essential for delivering developments that prioritise affordable housing and climateresilient landscapes, with schemes like Dagenham Green framed as insufficiently supported in their aim to combine affordability with environmental provision. The overriding perception of interviewees is that higher availability of grant funding would enable more ambitious delivery of green space alongside affordable housing.

10.1.5.8 (Civic perceptions of) innovative governance mechanisms

Social Value

In Section 4.2 we outlined Social Value as an internal policy used by both the housing provider and their contracted housing developer in the case of Dagenham Green. Social Value places a commercial value on social and community focussed activities, by requiring contractors attribute 20% of the value of procured activities towards socially beneficial outcomes.

"Our policy says that there should be a 20% weighting for social value in that procurement" (Development partner)

While this signals an attempt to integrate community benefit into commercial decision-making, these contributions are therefore also necessarily guided by commercial constraints. They are also aligned with developer interests insofar as they are designed to foster local community acceptance of new developments. They are not designed to facilitate contestation or broaden

democratic deliberation and therefore are not seen as a replacement for participatory planning methods. Social Value contributions represent a contribution from the non-profit and private development partners that sit alongside autonomous community mobilisation (in the form of community organisation etc.) and community engagement activities undertaken by the local authority. Nonetheless, the emergence of social value as a policy area is framed as opening new opportunities for community benefit that historically may not have been considered within development processes.

This policy is also reinforced at the local authority and national government level. Local authorities are legally required to consider how to deliver additional economic, social and environmental benefits to the local community; LBBD seeks to meet this obligation through procurements worth over £100,000 (Social Value Policy, 2020). Nevertheless, Social Value is not a mandatory requirement for private and non-profit developers.

> "It's still in the space of best practice which is both an opportunity and a risk becuase then the more commercially minded people might clap back and say oh, well, it's not required. So why don't we just scrap social value on this procurement." (Development partner)

Since Social Value remains a matter of best practice rather than regulation, one interviewee noted that commercially driven actors may resist or attempt to remove such requirements. This underscores the limitations of Social Value which remains contingent on organisational will.

10.1.5.9 (Civic perceptions of) tourism and market pressures

LBBD has traditionally been perceived as more socially deprived than other London boroughs, and housing pressures in the borough relate particularly to pressure in the social and private rented sector. 24.5% of the population rent property from the council, and while there is an identified need for for 1,581 affordable homes to be built each year, delivery has lagged each year from 2020. There has also been an increase in demand for social housing in the borough, with 5,800 applicants on the housing register without access to suitable accommodation as of 2023 (Our Barking & Dagenham Corporate Plan 2023 to 2026, 2023). LBBD has one of the highest rates of landlord possession action in England, and the borough's Private Sector Strategic Housing Statement (2023) listed a priority to 'tackle poor conditions in private housing and take robust action against rogue landlords' (Private Sector Housing Strategic Statement, 2023).

In terms of new development activity, the reliance on cross-subsidy for affordable housing provision in the UK creates an environment in which developers, including non-profit housing providers, become increasingly reliant on higher-value housing to offset development costs. A central pressure therefore arises from the borough's exceptionally low land values, which interviewees described as making development viability "very tricky". This may create an even greater incentive for developers such as Peabody to produce higher value housing products, running counter to the needs of the borough.

10.1.5.10 Gaps in perceptions between civic groups and public agencies

This is addressed in full in Section 4.3, which details differences in the perceptions between local authority representatives, and representations of the views of local residents offered by interviewees. Interviews reveals a consistent divergence between the perceptions of longstanding local residents and those of the local authority and its development partners. These differences span across three themes: affordable housing, the distributional implications of neighbourhood improvement, and the experience of urban greening. While the local authority perceived interventions as inclusive and equitable, longstanding residents are reported as perceiving them as exclusionary, unwelcoming, and not intended for them.

10.1.6 Critical Analysis: London

10.1.6.1 Have new green transition initiatives caused or exacerbated housing inequalities?

Islington

In Islington, decarbonisation and urban-greening mandates set by the local authority and through the London Plan as well as national frameworks such as BNG legislation, have set an ambitious framework for environmental housing development. This was noted by interviewees to represent a huge cost to the developer, interacting with a viability-driven housing delivery model, and therefore shaping what gets built.

Despite substantial GLA funding for site acquisition, limited grant backing at the build stage was understood to have limited the scheme's 'headroom' to absorb these costs. Aditionally, Peabody's commitment to 60% affordable housing delivery on the site was framed as constraining viability further. This has pushed a design response that prioritises building height for the purposes of cross-subsidy, rather than reducing the share of affordable housing. The distributional impacts of this noted by community interviewees included increased numbers of single-aspect flats, carrying the risk of overheating.

Landscaping and green space-led place-making was framed as supporting market sales values to shore-up viability, with some community interviewees feeling that this did not adequately respond to local hosuing need in Islington.

In terms of innovative governance mechanisms that can ameliorate housing inequalities, This case is particularly interesting insofar as local community groups were involved in discussion with the local authority about the development site well before the land was sold, before a developer had been identified and before a vision had emerged as to how the development would take shape. Interviewees consistently reflected the perception that this was shaped by active community engagement and political mobilization in Islington. Our analysis of governance mechanisms that can underscore better housing outcomes and a more equitable distribution of housing (access and affordability) alongside green initiatives, has therefore focused largely on the resources and capacities that enabled active community engagement in this case (see Section 3.2 and 3.4 above).

Barking and Dgenham

Housing inequalities in Barking and Dagenham (LBBD) arise from the interaction of affordability pressures, viability-driven trade-offs, and symbolic forms of exclusion. Although the borough remains one of London's least expensive in terms of house prices, these have risen far faster than earnings, producing a an affordability gap. This sits alongside significant shortages of appropriately sized homes and an acute unmet need for affordable housing, with annual delivery falling far below the 1,581 units required.

A central mechanism through which green transition initiatives exacerbate housing inequality in LBBD is through developer viability. Major schemes such as Dagenham Green succeed in increasing the housing stock, but the costs associated with development create trade-offs between environmental ambition and affordability. As a non-profit housing association committed to affordable housing delivery, Peabody has been unable to reduce affordable housing provision on site. Meanwhile, development partners interviewed noted that compliance with BNG requirements, extensive landscaping, SuDS, and higher environmental performance standards imposed significant additional cost burdens. This resulted in a perception that the expectation to "do everything" was not technically or commercially feasible, and exemplified in the creation of a document called "Green Things We're Not Doing and Why" submitted as part of the planning application for the site, explicitly outlining sustainability features that were cut from the proposal on viability grounds. In the UK, and particularly under privatesector development, viability pressures are often resolved through reduced affordable housing contributions. In this case, where the affordable housing quota is nonnegotiable, environmental ambitions may be curtailed.

A further aspect is the commodification of NBS in this case, leading to the potential for green gentrification. Green amenities were perceived by some interviewees to have been leveraged for value creation on the site, with biodiversity and landscape design used to increase the desirability and price of new housing. Consultants and development partners acknowledged that green initiatives "support value creation" in this regard, and potentially affecting the socio-demographics of residents at the new development. In LBBD, this is particularly significant because the borough has historically served as a more affordable area with low land values. The creation of a high specification, ecologically branded new neighbourhood (branded as a "green oasis" and "urban living, naturally inspired"), creates a material and symbolic contrast with the housing in the surrounding area, including older council estates that have seen decades of disinvestment. Residents in neighbouring longestablished communities are reported here to perceive new, 'high value' developments as exclusionary, reinforcing a sense that new green neighbourhoods are "not for them" despite formal affordable housing commitments. A sense of exclusion may therefore emerge not only from unit pricing but also from landscape design choices. Interviewees described new green corridors and riverside amenities in the borough feeling socially and physically inaccessible, functioning as a psychological barrier between older communities and the new development.

10.1.6.2 Key critical points defining housing justice/inequalities in the case in conversation with local/national context and histories

UK policy ultimately comodifies green transition initiatives by treating these as goods to be privately delivered. In the retrofit space, supplier obligation schemes levy charges against all energy users and national grant funding is limited to small demand-side schemes aiming to stimulate consumder demand rather than fund retrofit programmes at scale. In the NBS space, BNG mandates biodiversity contributions from developerled plans, while National BNG compliance markets treat nature as an investable asset. Densification entails the provision of affordable housing through negotiable cross-subisdy from private housing provision.

The UK's national policy frameworks for these green initiatives and for housing affordability, rely less on supply-side intervention and grant funding, and rather use regulatory structures requiring housing providers and other developers to deliver affordable housing and greening initiatives as part of their development activity. As the viability of schemes are affected, this means that there are usually trade-offs, as developers seek to recoup their costs elsewhere, for example negotiating down affordable housing provision to account for the increased costs of sustainable construction or urban greening.

In each of these three green transition policy areas, implementation costs are pushed onto developers (whether public, private, or non-profit), and in the absence of consistent funding frameworks these costs are ultimately passed on to end-users – the residents – rather than being covered by national investment.

Islington

In terms of NBS and green space, landscape-led place-making through a new public park can be viewed as part of the creation of high-value residential assets, as an aspect allowing for the cross-subsidy of affordable housing. While not explicitly noted as driving gentrification in this case, this can be seen as part of a broader pattern whereby green interventions are commodified as part of viability-driven development.

Densification at Holloway Park development was not understood by interviewees as an aspect of environmental policy. Rather, denisification flows from viability constraints due in part to the additional cost of environmental obligations on the part of the developer. Islington was noted to be particularly ambitious with regard to sustainability requirements placed on hosuing developers. Additionally, the UK's affordable housing model hinges on **cross-subsidy** within mixed-tenure hosuing schemes, incentivizing greater numbers of homes on any given site. With limited grant at build stage, the costs of affordable housing provision, green compliance, rising construction costs and building safety at Holloway Park are internalised through **height intensification (densification) as well as smaller unit sizes**, more **single-aspect dwellings**, and reduced **accessible units. With** Peabody's commitment to 60% affordable hosuing delivery on the site**, housing quality and typology are most vulnerable aspects, with** equity implications noted by community interviewees**.**

Barking and Dagenham

Nationally, retrofit installations are far below UNCCC trajectories; schemes exclude homes in the worst conditions homes and rely on piecemeal measures. In a borough with high deprivation and significant PRS/social housing stock, this can lock households into **higher** energy costs and thermal inequity, even as newbuilds tout new low-carbon performance. Area-based Warm Homes proposals may help, but with current funding scales they may not redress the backlog at borough level.

The national history of densification (Opportunity Areas, Housing Zones, and estate regeneration) and planning in the UK privileges land value uplift and cross-subsidy over direct public provision of affordable housing. While lead by a non-profit housing provider, the development model at Dagenham Green necessarily fits within this template. The structural consequence is that affordability is contingent on market sales (owner occupation) and private rents. When viability is constrained due to inflated construction costs, interest rates, or the additional costs of environmental initiatives, the consequence is usually either less affordable housing provision or, as suggested in this case, the pursuit of higher value development. This ultimately leads to higher housing costs, and the potential for gentrification. In LBBD, the creation of high-amenity landscapes may act as a device for value-creation, with environmental initiatives fuelling price premiums and changes in the socio-economic landscape of the borough.

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10.1.8 Appendix 1 – Glossary

Abbreviations

CP4H	Community Plan 4 Holloway
GLA	Greater London Authority
LBBD	London Borough of Barking and Dagenham
LBI	London Borough of Islington
LGBTQ	Lesbian, gay, bisexual, transgender and queer
NHS	British National Health Service
PRS	Private rental sector
RSH	Regulator of social housing.
RwB	Residents without Boarders.
SuDS	Sustainable urban drainage systems.

Terms and Concepts

15-minute city	A high-level concept used in urban planning sphered to dennote a neighbourhood whereby residents can access daily necessities (housing, employment, food, healthcare, education, culture and leisure, within a 15 minute walk or cycle of their home.
BNG	Biodiversity net gain. Legislation mandated by the Environment Act 2021, requiring a 10% increase in on-site biodiverity value on development sites following construction.
BTR	Build to Rent. Purpose-built housing for rent, that is institutionally owned, retained and managed, rather than being for sale.
Green Deal	A UK retrofit policy (2013–2015) designed allowing homeowners, landlords to acquire 'Green Deal Loans' to cover domesitc energy imrpovements, repoad through energy bills savings.
SHMA	Strategic Housing Market Analysis. An evidence-based study undertaken by local authorities to determine future hosuing requirements in the area.
UGF	Urban Greening Factor. a planning tool used by local planning authorities to calculate the quantity and quality of urban greening in new developments.

10.1.9 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Official - Housing and development	Local authority housing company	28-05-2025	MS Teams
2	Development partner	Housing association	16-06-2025	MS Teams
3	Activist	Grassroots community organisation	03-07-2025	MS Teams
4	Development partner	Housing Association	08-07-2025	MS Teams
5	Official	Local authority	16-07-2025	MS Teams
6	Activist	Grassroots community organisation	24-07-2025	MS Teams
7	Activist	Grassroots community organisation	29-07-2025	MS Teams
8	Development partner	Housing association	05-08-2025	MS Teams
9	Development partner	Housing association	05-09-2025	MS Teams
10	Development partner	Housing assocaition	05-09-2025	MS Teams
11	Official	Local authority	11-09-2025	MS Teams
12	Development partner	Sustainability consultancy	12-09-2025	MS Teams
13	Activitst	Grassroots community organisation	16-09-2025	MS Teams
14	Official	Local authority	17-09-2025	MS Teams

15	Development partner	House builder	17-09-2025	MS Teams
16	Development parnter	Architect	19-09-2025	MS Teams
17	Development partner	Sustainability consultancy	23-09-2025	MS Teams
18	Official – Housing and development	Local authority housing company	29-09-2025	MS Teams
19	Activist	Grassroots community organisation	30-09-2025	MS Teams

10.1.10 Appendix 3 – Visuals

Photos of Holloway Park (Source: Phoebe Stirling)

10.2 CASE STUDY (MEDIUM): BLACKPOOL

Stanley Park. Photo Source: Wikipedia

Authors: Phoebe Stirling, Sonia Arbaci, Margaux Daly (UCL)

10.2.1 City profile, challenges around just (housing and ecological) transition

The Blackpool Town Centre redevelopment project is underway in the town of Blackpool in the region of Lancashire, a post-industrial region in Northwest England. Blackpool is governed by Blackpool Council, which handles both county and district council functions.

During the industrial revolution, the area was very wealthy due to its status as an international hub of cotton and textile mills. The town also historically drew tourists from around the UK to its beaches, aided by the growth of the railway in the 1800s, which boosted tourist numbers and formed the base of Blackpool's economy. Industrial decline in England reduced investment in the area, compounded with an underinvestment in railway infrastructure and reduced funding for local services. Reduction in tourism has also worsened the local economy as foreign travel became cheaper and more attractive in the mid-1990s.

Blackpool has a population of approximately 144,200 residents (as of mid-2024), a slight increase of 1.4% since 2011 (ONS, 2023). It is one of the most densely populated areas in Northwest England with 4,135 people per square km. Long-term projections suggest the population will increase by 5% by 2047, more modest growth projections than the rest of England (forecasted at 11%) (JNSA, 2025). The population of Blackpool is older than the rest of England, with 42.2% of the population over 50 (compared to 37.8% nationally) (KNSA, 2025).

Inner Blackpool, where the Blackpool Town Centre regeneration project sits, is home to the most intense concentration of deprivation in England, with 8/10 of the most deprived neighborhoods in the country being in inner Blackpool (BTP, 2024). Blackpool has a higher economic inactivity rate compared to the median of all local authorities in Great Britain (28.4% compared with 21.0%), a lower employment rate (69.7% compared with 76.8%), a higher claimant count (6.3% compared with 3.2%), lower gross disposable household income (£17,413 compared with £21,359) and a lower gross domestic product per head at current market prices (£26,598 compared with £31,133). (ONS, 2025).

The area has overall poor education and skills, low life expectancy, poor health and drug abuse, and population decline and transience (IBHR, 2025). Blackpool has the lowest life expectancy for both men and women of any local authority in England at 51.8 years for men (compared to 60.6) and 52.9 years for women (compared with 60.7) (ONS, 2025). In terms of household deprivation classification across four dimensions: education, employment, health, disability, households in inner Blackpool are more likely to be deprived in two, three or four dimensions compared to the rest of Blackpool, according to the 2021 Census (JNSA, 2024).

Inner Blackpool's housing market is dominated by the private rental sector. The proportion of households renting privately is higher in Blackpool than England (31.8% compared with 20.5%), and in inner Blackpool, where 45.1% of residents privately rent. Social rent is lower than the English average (10.3% compared with 17.1%) and just 8.9% in inner Blackpool. Between the 2011 and 2021 census there has been an increase in outright ownership (335 inner Blackpool, 1,052 all of Blackpool), decrease in mortgage/loan or shared ownerships (-1,025 in inner Blackpool, -3,251 all of Blackpool), increase in private rent (1,077 inner Blackpool, 3,141 all of Blackpool) and a decrease in social rent (-49 inner Blackpool, -280 all of Blackpool) (JSNA, 2024). The net additions to the housing stock are lower than the English average (2/1,000 stock compared with 8/1,000 stock), and first-time buyer mortgage sales are slightly lower than the national average (9.7/1,000 stock compared with 10.5/1,000 stock). (ONS, 2025).

Much of the deprivation experienced in Blackpool has been linked to the poor condition of properties in the private rental market, where often vulnerable residents are housed in dense, poorly converted flats, bedsits and former guesthouses. In inner Blackpool over 80% of private rented tenants receive housing subsidy in the form of Housing Benefit or Universal Credit, with 40% being paid directly to landlords due to tenant vulnerability. This system has been framed as an incentive for landlords to contribute to overcrowding by offering larger numbers of smaller homes, since landlords are paid per housing unit, and units are not qualified by other discernable factors (size and/or quality of accommodation) (BTP, 2024). During the Decent Homes Enforcement Pilot, a comprehensive and ongoing inspection programme of properties, 679 homes in Blackpool were inspected, of which 74% were found not to meet the Decent Homes Standard and 61% were found to have Category 1 Hazard (could lead to serious death or injury (IBHR, 2025) and 50% do not meet minimum standards (BTP, 2024).

In March 2022, Blackpool Centre had been identified as the most deprived borough nationally and Blackpool was named one of three 'Levelling-Up Pilot Areas' in the UK to support intervention for positive transformation of the town, wholistically and systematically. At that

time, the UK's 'Levelling Up' policy aimed to address the regional disparities in the UK which meant that London and the Southeast were receiving more investment and a greater proportion of the country's wealth.

This formed part of the policy context behind the town centre regeneration, leading Blackpool Council to work with public and private sector partners to implement a £2BN+ growth and prosperity investment programme 'Making Blackpool Better,' aiming at ensuring a 'better' housing market, 'stronger' economy, and strengthening skills to meet the Blackpool vision of sustainable employment, a balanced housing offer, and become more desirable living and tourism location (BCHR, 2024).

Retrofitting

There is an acknowledgement that Blackpool's domestic sector is responsible for 48% of greenhouse gas emissions, and that 'becoming a Sustainable Blackpool' requires increasing energy efficiency and retrofitting homes (BC, 2024). Blackpool Council was awarded £1,400,000 in the first wave of the Social Housing Decarbonisation Fund (SHDF) programme, as well as leading a consortium that was awarded £2,649,000 in the second wave of the programme. The funds will be used by several housing associations to retrofit their stock in and around Blackpool. There is some evidence that the cost of retrofitting social housing, as well as being shouldered by the national SHDF programme and by local authority funding, will be shouldered by local authority housing revenue accounts (i.e. through an increase in social rents). The Blackpool proposed rent review 2024/25 proposed a recommendation that "rents for all Housing Revenue account properties are increased by 7.7% in 2024/25 to maintain the health and future viability of the Housing Revenue Account in line with official guidance […] Reasons for recommendation: will ensure that the necessary investment to maintain and grow the Council's stock can continue, alongside measures to decarbonize our stock."

There may be structural constraints to more comprehensive retrofitting of homes in Blackpool, given the context of the UK's retrofit strategy on the one hand, and the concentration of privately rented homes in the town centre on the other. Both Supplier Obligation Schemes (whereby energy suppliers are obliged by the government to offer domestic energy improvements to customers living in those properties most in need of upgrading, paid for using a cross-subsidy charged across all customers) and publicly funded retrofit schemes for owner occupiers and the PRS, require that individual homeowners and landlords engage with energy and retrofit providers in order to improve their homes. Landlords have been shown to be slow to apply for such schemes as energy efficiency upgrades do not always benefit them directly (Rosenow and Eyre 2016). This may be a particular issue in inner Blackpool: the private rental housing stock has a reputation for being owned by 'absentee landlords' who charge low rents in exchange for housing that is not well maintained; this is combined with a transient community and high levels of deprivation. Residents living with limited means are not necessarily incentivised to seek out more energy efficient but more expensive accommodation, thus, neither landlords nor tenants are likely to pursue domestic retrofit measures in the town centre.

The council has pursued an initiative of purchasing, refurbishing and retrofitting some derelict properties in the town centre, as an element of the Council Plan for Blackpool (BCHR, 2024). The Housing Strategy team of Blackpool Council also coordinates actions with the Cosy Homes in Lancashire (CHiL) energy efficiency scheme and coordinates specific insulation projects in Blackpool that are deemed 'hard to treat' (of which ~8,000 have been identified). Nevertheless, retrofitting the private housing stock at scale is likely to be prohibitively expensive. The UK's national retrofit schemes, whether funded via the market (Supplier Obligation Schemes) or publicly coordinated, are not intended to fund retrofit measures at scale, but rather as limited demand-side incentives to 'set the right conditions' for the retrofit supply chain to grow. Ultimately this approach has failed to boost productivity and innovation, and the cost of retrofit installations remains extremely high. Our analysis below points towards a perception that the high cost of retrofitting properties could act as a barrier to improving the homes in the town centre, and rather as an incentive for demolition and replacement of the existing homes.

Densification / brownfield redevelopment

Under the Levelling Up agenda, Homes England (a non-departmental public body which manages the funding for affordable housing provision in England) was commissioned to work with Blackpool Council (alongside the then Department for Levelling Up, Housing and Communities), to develop a detailed proposal for interventions that address poor quality housing in the town's inner wards. Under this scheme, the leader of Blackpool council noted that she hoped to remove housing 'that does not meet modern standards, with new and better housing created in its place'. Given its emphasis on demolition and replacement of homes in the town centre, it is pertinent to consider the impact that this regeneration could have on housing access and affordability.

In March 2024 Blackpool Council entered a Grant Funding Agreement (GFA) with Homes England to receive £90.4M in regeneration investment, to "support the creation of new well-designed homes and neighborhoods" and help regenerate the town centre, referred to as the Central Housing Regeneration Area (the initial area of focus in inner Blackpool for housing-led regeneration) (IBHR, 2025).

Blackpool Council has overall responsibility for the Housing Regeneration programme. The Blackpool Housing Company (BHC) [operating with the brand My Blackpool Home (MBH)] was established as a subsidiary of the Blackpool Council in 2016 to acquire, remodel, and manage problematic properties in inner Blackpool. It is responsible for the design, master planning, planning including Environmental Impact Assessment and Planning applications, engagement with the local community, land assembly including acquisition of property and land for redevelopment and demolition, and forward delivery (IBHR, 2025).

The planning policy context in Blackpool means that sustainability and decarbonisation are of central concern in all redevelopment and in the town centre regeneration in particular. As a backdrop, the Emergency Action Plan (published in 2019 when Blackpool Council declared a climate emergency) provides a sustainability encouraging "passive environmental design" within developments and measures to minimise energy usage (BCHR, 2024). More

specifically, the Blackpool Central Housing Regeneration Area Framework (2024) details guidelines including 'Building Sustainability' (by incorporating high-performance envelopes to minimise heat loss/gain, maximising use of natural and low energy lighting systems, use of low temperature heating and cooling systems based on heat pumps where possible, and encourage the use of whole life carbon assessments) and use of 'Renewable and Low Carbon Energy' (embracing the use of renewable zero carbon technologies (e.g., solar PV, heat pumps), incorporation of zero/low carbon measures to offset energy requirements (e.g., electrical vehicle charging infrastructure in suitable locations), and consideration of systems such as heat networks in concentrated areas of new build).

Decarbonisation is a key consideration for Blackpool Coastal Housing (BCH) and My Blackpool Home (MBH). The Grange Park redevelopment scheme, a £20Million project to build 131 new homes (96 affordable homes, five bungalows and 60 sheltered apartments), is particularly notable. This development is split across two sites (Chepstow Road and Dinmore Avenue), with RP Tyson Construction appointed as the principal contractor for the development. As part of the development, a specific £1.1Million project has been used to implement climate change measures on the estate, also using a £660,000 contribution from the European Regional Development Fund to increase community resilience to climate change and carbon reduction. This builds on several successful pilot projects that aimed to 'clean and green' the estate. Phase 1 of the Grange Park housing site development was fully electrified with air source heat pumps, solar panels and battery storage and a predicted EPC rating of 97-A. Further regeneration of existing housing stock is aimed to improve EPC ratings and create annual savings of 108 tonnes CO2e (BTP, 2024).

NBS

Existing green space is limited in Blackpool, with just 4% of Blackpool featuring a tree canopy (compared to 16% average in England). Nine neighborhoods in Blackpool fall significantly short of the standard 4 hectares of open space per 1,000 population. Almost 75% of Blackpool's land is developed. The relatively low green space in Blackpool is attributed to the coastal weather, dense Victorian urban fabric, prevalence of the private rental market, and demand for car parking space (GBI, 2019).

Existing housing density makes the greening of inner Blackpool particularly challenging. However, the Core Strategy of regeneration in Blackpool is to rebalance the housing mix, making housing estates more attractive for family life, of which green infrastructure is acknowledged to be an integral part. Significant deficiency in all types of green infrastructure is acknowledged to depress property values and discourage family life (GIB, 2019). The housing area transformation involves three principal road corridors into the town with scope for tree-planning and green infrastructure enhancement; vegetation, green walls and pleached trees along the pedestrian movement corridor between the Blackpool South station and the town centre; weather proofing through rain gardens, soak aways and swales, retainment of greenery and planting of trees (GIB, 2019). There are additional plans to create a new community green space that features pedestrian links between residential development areas (BCHR, 2024).

Blackpool Council's Green and Blue Infrastructure (GBI) Strategy states six goals: 1) attracting visitors and tourists; 2) enabling productive businesses and workers; 3) greener housing and infrastructure; 4) engaging people in health and wellbeing; 5) promoting a green image and culture; and 6) creating habitats for wildlife and pollinators. As such, nature-based solutions are bound up in the broader regeneration of the city, and the councils strategy to boost the local economy. Currently, Blackpool is listed as one of the five least wildlife-friendly urban areas in the UK. The ten-year strategy aims to address this by enhancing existing parks and open spaces across the city, as well as delivering new green spaces: "Blackpool is looking forward to a period of sustained transformation, with several major regeneration projects started and more are to come. Our housing areas, our town centre and our business areas will be refreshed and rejuvenated with massive public and private sector investment".

Blackpool's GBI strategy also responds to Blackpool's coastal location. Blackpool is vulnerable to the impact of storms, requiring adaptation to potential risks associated with changing climate. Wetter winters will require investment in drainage to minimise local flooding (BTO, 2024). There is therefore an objective to ensure new housing developments adhere to SUDS hierarchy to reduce the likelihood that surface water overwhelms combined systems (BTP, 2024). Additionally, all Blackpool households have been offered a free 'water butt' to mitigate localised flood risk (BTO, 2024). Blackpool's flood management strategies, and promotion of SuDS, is a part of the broader Lancashire Flood Risk Management Strategy (GIB, 2019).

10.2.2 Green Transition Interventions in Blackpool town centre

In May 2024 the Blackpool Council formally committed (EX16/2024) to commence delivery of phase 1 of the transformational housing intervention activity in Blackpool's Inner Area. The expectation is a 15–20-year programme of comprehensive regeneration, with housing-led regeneration being the starting point and catalyst for transformational change (IBHR, 2025). The Blackpool Town Prospectus, published in 2024, aims to create 2,000 new quality homes in Blackpool to mitigate the concentration of deprivation in the inner area (BTP, 2024).

The Council Plan for Blackpool, first published in 2019 and then updated in 2024 for the 2024-2027 period, outlines Blackpool's Strategic Policy Context with regards to sustainable regeneration, diversification and growth. This involves tackling problems with housing, which includes:

- The concentration of poor quality, small, terraced houses with limited private amenity space
- The high prevalence of homes occupied by multiple households in short-term rental agreements, which undermines community potential
- The high proportion of private rental housing
- The prevalence of absentee landlords with poorly maintained properties
- The challenges of the tenant population regarding physical and mental health issues, low incomes, those in receipt of benefits

A strategy has been developed to address these issues, which involves:

- Selective stock clearance;

- Redevelopment alongside refurbishment, with a focus on investment in quality;
- Private renting enforcement actions;
- Energy efficiency improvements;
- Public realm enhancements that balance public and private space for the community;
- Promotion of SuDS including soft and hard engineering features (e.g., small scale rain gardens, swales, mini wetlands, underground storage) and promotion of permeable surfacing in the public realm and parking areas.

With regards to housing development plans, there is a concerted effort to transform the choice and quality of homes, with attention paid to the socio-economic and lifestyle characteristics of future occupants. Regeneration plans include the objective to provide:

- 100-150+ new homes at a 2-3 storey terraced heigh range and 40/ha density for families, couples, and elderly/retired demographics;
- 150-175 new homes at a 2 storey terraced, detached, and semi-detached height range and 35/ha density for families, couples, and elderly/retired demographics;
- 40-60 new units in the 3-4 storey mixed-use range and 15/ha density for singles, students and professionals;
- 20-30 new units in the 3-5 storey mixed use range and 15/ha density for retail, singles, visitors, students and professionals;
- 70-70 new homes in the 3 storey townhouse range and 25/ha density for families, couples, elderly and retired demographics.
- 10-20 refurbished homes for visitors, families couples and elderly and retired demographics (BCHR, 2024)

As of April 2025, Blackpool Council is empowered to use selective licensing to target the poorest private rented housing stock across Blackpool's most deprived inner wards.

Sustainable regeneration plans for Blackpool Town Centre as outlined in the Council Plan for Blackpool 2024-2027 include strategies to enhance the public realm, balancing private and public space for the community, and a focus on promotion of SuDs, including small scale rain gardens, swales, mini wetlands, underground storage, and promotion of permeable surfacing in the public realm and parking areas (BCHR, 2024). There is an objective to ensure new housing developments adhere to SuDS hierarchy to reduce the likelihood that surface water overwhelms combined systems (BTP, 2024).

These plans extend from the Green and Blue Infrastructure strategy of 2019, which outlines the importance of integration of green infrastructure to create housing estates that are more attractive for family life. Regeneration activities are observed as an opportunity to create green spaces throughout Blackpool including pocket parks, play areas, civic trees, community food-growing areas, and other imaginative landscapes (GIB, 2019).

These initiatives have two common threads: the importance of green infrastructure and safe outdoor spaces for the promotion of healthy communities and demotion of anti-social behaviors; and the importance of SuDS features to mitigate flood risks associated with Blackpool's highly developed land character, coastal landscape, and the growing potential for hazardous storms associated with climate change.

Additionally, the housing area transformation involves three principal road corridors into the town with scope for tree-planning and green infrastructure enhancement; vegetation, green walls and pleached trees along the pedestrian movement corridor between the Blackpool South station and the town centre; weather proofing through rain gardens, soak aways and swales, retainment of greenery and planting of trees (GIB, 2019).

Some NBS have been controversial, for example there have been plans to create a 25km 'greenway' linking Blackpool to Blarney. However, part of this greenway would run on top of a 350-metre section of the River Bride as it flows through Blackpool and would involve culverting the river (channeling the river through a subterranean waterway), thereby removing this section of river and its benefits for otters, fish and birds.

Table 1. Key data on case study area in Blackpool.

	Blackpool
Neighborhood characteristics (general social type, economic activities, density etc)	Dense Victorian terraced housing; Dominated by the private rental sector and 'absentee landlordism'; Concerns about the poor condition of properties and high number not meeting Decent Homes Standard; High concentration of social deprivation; Limited green space.
Duration	Commencing in May 2024, the expectation is a 15–20-year programme of comprehensive regeneration.
Funding	Blackpool Council entered a Grant Funding Agreement with Homes England (the UK government's non-departmental housing and regeneration agency) to receive £90.4M of public money in regeneration investment, to "support the creation of new well-designed homes and neighborhoods" and help regenerate the town centre, referred to as the Central Housing Regeneration Area.
Actor constellation	Blackpool Council; Blackpool Housing Company; Blackpool Coastal Housing; Homes England; private landlords and homeowners with housing in the area designated for regeneration; previous and existing residential tenants and their associations; various grassroots neighbourhood organisations.
Aims and objectives	Tackling problems with housing, which includes: The concentration of poor quality, small, terraced houses with limited private amenity space; The high prevalence of homes occupied by multiple households in short-term rental agreements, which undermines community potential; The high proportion of private rental housing; The prevalence of absentee landlords with poorly maintained properties; The challenges of the tenant population regarding physical and mental health issues, low incomes, those in receipt of benefits.

Specific physical measures	Selective stock clearance (demolition of existing housing); Redevelopment alongside refurbishment; 380-485 new homes, 10-20 refurbished homes; Private renting enforcement actions; Energy efficiency improvements; Public realm enhancements (e.g. pocket parks, play areas, civic trees, community food-growing areas); Promotion of Sustainable Urban Drainage Systems (SUDs) including soft and hard engineering features (e.g., small scale rain gardens, swales, mini wetlands, underground storage) and promotion of permeable surfacing in the public realm and parking areas.
Accompanying housing policy/ regulatory measures	Prioritization of local residents for new social housing Affordable housing delivery Policy for those moving out of the area
Key social tensions or/and benefits between greening and housing	Demolition of existing housing inevitably involves a certain degree of displacement of the existing community. There is a notable divide in the perceptions between civic groups and public agencies about the degree to which the regeneration project is indicative of state-led gentrification. Sustainability improvements and urban greening as outlined in the plan for the Central Housing Regeneration Area are largely perceived by public agencies as a means to improve housing conditions and neighbourhood quality, thereby health, wellbeing and quality of life for residents in the town centre. However, these are perceived by some local residents to be a mechanism for gentrifying the area, being a means to attract wealthier residents and being disconnected from the current use of existing buildings, public space and green space by existing residents.

10.2.3 Methods

Between July and September 2025, 12 interviews were undertaken with a range of interviewees, both from development partners, and from the local community. Interviewees comprised Blackpool Council officers, officers from the council's two arms-length housing companies, academics, local councillors, and activists from several grassroots neighbourhood organisations. Potential interviewees were initially identified during the preparation for the ReHousIn Policy Lab held in March 2025, and from desk-based research for the preparation of this report. Particular attention was paid to ensuring that a range of potential interviewees were identified, including from across development partners, and from local community groups, to ensure that a range of data on civic perceptions could be sought. Potential interviewees were approached initially by email, and sent an information sheet and consent form to explain the parameters of the project. Additionally, a snowball sampling strategy was employed whereby subsequent interviewees were recruited based on introductions by earlier interviewees. All interviews were carried out remotely via Microsoft Teams. Profiles of interviewees may be found in Appendix 2. Prior to participation, participants were sent an information sheet and consent form by email, and informed consent was obtained. Interviews were audio-recorded using Microsoft Teams. Automated transcripts generated by the Teams transcription tool were subsequently reviewed in full by the researcher. Transcriptions were verified against the original recordings and corrected to address any errors or inaccuracies.

Qualitative thematic coding and analysis were conducted by a single researcher, following a predefined coding framework aligned with the study's analytical objectives. This qualitative analysis has focused on civic perceptions and is outlined below. This is also supported by desk-based background research, which involved a review of policy documents, submitted planning documents, strategic plans, technical reports, grey literature and academic literature. This desk-based research provides documentary evidence against which to contextualise the observations and perceptions of civic actors engaged in the town centre regeneration programme in Blackpool.

The particular limitations of this case relate to the timeline for redevelopment in Blackpool. Planning approval was secured in [date], and work has begun, nevertheless the redevelopment initiatives are ongoing and anticipated to continue for another 10-15 years. Therefore, our findings relate to perceptions of the current activity and anticipatory perceptions for the future, rather than perceptions of finalised outcomes. They also preclude perceptions from Blackpool Council's development partners who have not yet been estqablished. There are also limitations that relate to the range of interviewees. We have sought to include a broad range of perspectives from across development partners and local community organisations, which necessarily includes those people who are most active and involved in civic activity relating to this development. While interviewees from across this spectrum have reflected on local communities and their experiences of redevelopment in Blackpool, there are resident populations who are directly affected by redevelopment who have not had their perspectives heard for this research.

10.2.4 Civic Perceptions of Green Initiatives in Case Study Areas: Blackpool town centre

10.2.4.1 (Civic perceptions of) precedents and implementation

Economic development post-2008

The 'Levelling Up' policy context to the town centre regeneration project is outlined in Section 1.1. Interviewees persistently characterised Blackpool as being very deprived, and in particular the Revoe district, an area being redeveloped under the town centre regeneration project, as an area of concentrated deprivation (although accounts and perceptions between different interviewee groups varied, as noted below). While development in Revoe will consist mostly of new housing and urban greening, alongside the retrofit of some homes in the town centre, the development was not straightforwardly / only connected by interviewees with a need for new housing, improved housing quality and greener areas. Rather, the project was connected more with a longer history of economic development in Blackpool, and the need to raise the town out of deprivation.

Interviewees' understanding of where the plans for Blackpool's Town Centre regeneration came from are firmly rooted in the 2008 financial crisis: this is framed as a turning point in Blackpool's strategy to develop economically. Prior to this, Blackpool's strategy for economic development had been grounded in an appeal to its history of tourism; particularly with a bid

to become the home of the UK's 'Super Casino' (this national policy was intended to test whether a regional ('super') casino could impact economic development in a highly deprived area; Manchester was chosen over Blackpool in 2007 before the plans were completely dropped, partly due to worries around problem gambling).

> "It was around the 2008 mark when we went into the recession and RDAs [Regional Development Agencies] disappeared and funded public money's kind of really tightened up and that kind of regeneration element died to death, effectively, didn't it? So Blackpool kind of pivoted slightly and has been focusing on economic development activity." 2025 07 02 / SS

This need for economic development as the guiding principle for urban transformation is framed as being the context for the regeneration activity pitched by Blackpool Council since the crisis:

> "So that set that wider economic context in terms of all the projects and all the things that are happening across the town centre and Blackpool as a whole. It's got an enterprise zone down at the airport. It's got a new CBD, as it would have been referred to, in terms of the town centre hub with the office developments, with the DWP's [UK Government Department of Work and Pensions] new office in in the town centre, the new tram link up to Blackpool North station, the MOD's [UK Government Ministry of Defense] building another office block in the town centre as well." (Official)

The housing development, urban greening and retrofit component of the town centre regeneration project in Blackpool – which is occurring largely in the Revoe area and is the aspect we have been studying for the ReHousIn project – was framed by interviewees as the housing 'element' of this broader economic development strategy:

> "So that's kind of been the focus over the last kind of, you know, 15 years or so has been that, that, that element of economic development and the bit that's always been lagging behind with that is housing." 2 (Official)

In this framing, the housing-related development occuring in Revoe, and the funding structures for this development, are understood as a component or part of a broader strategy for the economic development of Blackpool, and ties in to the Multiversity development, the new DWP (UK Government Department of Work and Pensions) and MOD (UK Government Ministry of Defense) buildings, redeveloped transport links, and other elements of the broader regeneration strategy:

> "look, this is the inner area, this is the spatial challenge around it. And this is over a long term 15/20 years what we want to do in terms of the ambition to really transform and change this area to support the work that's going on in respect of the economic development activity. So on the back of that, we got a full business case with Homes England and that eventually got approved by Treasury and that's where the 90 million funding for the central area came from." (Official)

> “This is what we want Blackpool to look like and this is the housing offer that will support that economic development activity that's happening around us.” (Official)

Housing and greening

The green initiatives offered as part of Revoe’s development were not generally framed by public agencies as being for greening’s ‘sake’ or in terms of environmental or ecological benefits. Rather, initiatives such as urban greening were more consistemtly framed as being a part or component of broader economic development:

> “the framework document that I'll send over will give you that high level principle that that kind of ambition and aspiration to meet the energy efficiency, low carbon agenda of buildings and the wider place making benefits of biodiversity net gain through. You know trees, greening sustainable drainage is absolutely embedded in the overall aspiration for what we're trying to do in the central area.” (Official)

Neighbourhood change and the quality of housing stock

A slightly different narrative emerges when asking about or discussing the Revoe district directly. In this context, interviewees discussed the development as stemming from the need to improve the quality of housing in Revoe specifically.

This narrative emerging in interviews frames the regeneration of the Revoe area not in the broader context of the economic development of Blackpool, but identifies housing quality issues within the neighbourhood and improving these as the central aims and objectives of development.

This understanding of the quality of the housing stock was presented across interviewees both from the local community and from public agencies. All interviewees presented a broad consensus that the quality of housing in Revoe is an issue to some degree. It was also presented by most interviewees across different stakeholders that housing conditions intersects with social deprivation:

> „It's a grid of densely packed terraced houses. They're small, so they just have a very small backyard and a lot of them. The front room opens directly out onto the pavement, which is nice in the summer because people then bring their furniture out and sit on the on the pavements. So we've got a significant Romanian population has appeared in the last couple of years with large families. So they're around, there are isolated older people living in private tenancies or owner occupiers. There are some of the houses have been broken up into HMOs and so you get working age people, particularly men living in living isolated in HMOs. It's an area of lots of private renting, often poor quality, private renting“ (Activist)

Where voices from the community and from public agencies diverge is in their preferred approach to how they feel neighbourhood improvement should be approached.

Transient community

As we have found, the area has overall poor education and skills, low life expectancy, poor health and drug abuse, and population decline and transience (IBHR, 2025). Transience is a particularly important issue for understanding housing inequalties in Blackpool. Central Blackpool has a high level of transience, something that manifests as a high turnover of renters in the central area. This means that both individuals and families move into and out of the neighbourhood at a relatively fast pace, understood to be attracted by the often poorly maintained housing for rent that offers low-cost accommodation in moments of urgent need.

> "It's a transient population that live here. Some people go and stay for a year, you know, year or two. And I think they just think well, this is just part of the journey I'm on." (Official)

> "[...] they end up here because there's no questions asked cheap accommodation. And so they stay here for a short time. They arrive here, not intending to stay for long, and then they leave." (Activist)

While the poor condition of housing in this area is understood to be a concern for public agencies, there is a contradiction in its also being understood to serve a particular socio-economic purpose, which creates a tension around the aspiration for improving housing conditions in central Blackpool. Even where this is implicit rather than explicitly stated, the implication is that improving the condition of housing in the area through wholesale regeneration, which is necessarily costly and results in higher housing costs, has a potentially negative impact on housing inequalities (excluding certain groups and individuals from access to housing in the neighborhood), even while it has a positive impact on housing inequalities (tackling poor quality housing and improving housing and neighbourhood conditions for Blackpool residents).

There is a further tension in that while central Blackpool has a high level of transience, it also has an enduring community who are in turn affected by wholsale neighbourhood change.

> "[...] there are also people like the older people who are owner occupiers or long term renters. And they've been here for ages that, you know, they really love the place. [...] And so that's why we're particularly concerned about this gentrification thing because they're going to move people out who have been here for years and just force them to go somewhere else. And somebody else is going to take that space." (Activist)

This tension is at the centre of divergent perceptions between public agencies and the local community. Voices from public agencies showed a perception that wholesale regeneration of the area would be the best route to improving conditions and wellbeing for Blackpool residents, also given the contextual challenges of managing urban change as well as constraints to funding and local authority capacity. Voices from the community were more likely to frame wholesale neighbourhood change as gentrification, and favour a more incremental approach to neighbourhood improvement that would allow residents to remain in place.

Tenure mix

Another aspiration of public agencies in this case has been to 'break up' the PRS in central Blackpool, which is perceived by these interviewees as a core component of housing problems in the area.

> "BHC (Blackpool Housing Company), when they came into force, you know, probably, I don't know, 10 years ago now, maybe 8/10 years ago they were their primary reason for coming about was to break that private sector market in the town centre really. Because Blackpool, it's a bit like the Wild West, the PRS in Blackpool. So it was to break that." (Official)

> "[...] the real housing challenge is in the inner area. And that's the bit that it's not been able to properly tackle because it's in primarily in private ownership. [...] wholesale intervention that is required, which is, you know, BHC like I say has been. Buying property for the last 10 years or so and doing this activity, but it's not at the scale that's really required to really go in and hit and say look, this is a step change, this is transformational change." (Official)

This perspective provides another rationale behind public agencies' preference for a more wholesale approach to regeneration, preventing absentee landlordism from dominating the property rights regime in the area and allowing for a transition towards a different tenure mix. Once again this touches on the tension between the public aspiration to improve housing conditions in central Blackpool, and the particular socio-economic purpose that poorly maintained but low-cost rental housing serves in Blackpool.

10.2.4.2 (Civic perceptions of) participation and governance (procedural)

A clear gap emerged between different interviewees' perceptions of the governance and practice of community engagement surrounding regeneration activity in Revoe. This is also referenced in Section 3.10 below. Interviewees from public agencies tended to refer to the various challenges that made engaging with the community difficult; nevertheless they framed this as active, and part of the local authority's work in ensuring effective urban change. Local authority interviewees tended to refer to the challenges of engaging with the community; nevertheless they consistently described engagement as an active and structured process, emphasising the presence of a dedicated engagement team working directly with residents and community groups.

> "there's a dedicated engagement team of officers who are on the ground in that area, building relationships with the residents, community groups and being that kind of public facing on the ground." (Official)

Interviewees from or connected to the local community framed the community engagement enacted by the council as being poor, sometimes framing this as an effort to manage urban change with as little push-back from the community as possible:

> "Revoe is a very, very good example of a situation where the regeneration strategy is being imposed with exceptionally poor consultation and exceptionally poor community engagement." (Activist)

This perception was accompanied by broader concerns about the absence of community capacity and organisational infrastructure. One community interviewee depicted Revoe as lacking effective organisations capable of advocating for residents, portraying the area as socially fragmented and unsupported, with residents "left to their own devices". This was linked to deprivation and transience in the area, but also to a sense of disempowerment that was framed as stemming from the council's approach. It was suggested that residents felt unable to influence outcomes and therefore saw little point in engaging. One interviewee noted that people felt protesting was futile because decisions were already made.

A significant actor in this regard is the local national-lottery funded community organisation Revoelution, who run activities such as community gardening, music groups, art groups and other social events aimed to reduce social isolation, as well as providing help accessing support services including door-knocking by community outreach officers to discuss local residents' needs and concerns. Revoelution have done some work on behalf of the local authority in terms of community engagement, initially regarding unplanned hospital admissions of residents from Revoe, engaging in door knocking and attending public meetings. Revoelution also received funding from Homes England in 2019 to contribute towards for community engagement for a masterplan for Revoe in partnership with the local authority and urban planning consultants GL Hearn. Some tension was expressed by local residents that the organisation was not substantially involved in later stages of local outreach for community engagement in Revoe.

A recurring theme in community accounts was the perception that consultation was seen as one-directional. Rather than facilitating open-ended dialogue about priorities for the area, the council was perceived as offering opportunities to comment on plans that had already been developed. One interviewee criticised the reliance on individualised, door-to-door conversations, arguing that this approach prevented residents from forming a collective understanding or raising shared concerns. They suggested that public meetings would have enabled more substantive debate, including questioning the rationale for demolishing housing in the area.

> "[The local authority] did point out that there will be an opportunity later on to for people to express their views about the plans, but it feels like that's a bit late in the process and they could have been having these conversations much earlier on because it would have made sense to have public meetings about it, get people together in the room and say, what do you think of this." (Activist)

Interviewees with this perspective were critical of the local authority and framed the community consultation as being a one-directional, rather than open-ended, conversation: an opportunity for people to "express their views about the plans", rather than be a part of a more open-ended discussion that might shape those plans from the outset. The perception here was that

consultation by the local authority had taken place in a way that limited input from the community.

Interestingly, both local authority and community interviewees described engagement as a more communicative/informational, than deliberative/participatory process. A council representative for example, noted that the council's engagement team's role was to explain decisions to residents. However, the two groups interpreted this dynamic differently: the council relate this not only as standard procedural practice, but also note their own constraints (both in budgetary and capacity terms) as well as this being a pragmatic response to the complexities of regeneration in an area with high deprivation and transience. Community members viewed it as a failure to tailor engagement to the specific social and spatial realities of Revoe. Capacity constraints on both the local authority and community side may therefore be relevant to understanding limitations to community involvement and co-production in Blackpool.

> "we, you know, sat here doing all this master planning and design and delivery programming work. But they [the engagement team] are the ones that have actually been out there talking to people and explaining to people what we're doing and why." (Official)

This divergence was particularly evident in discussions of urban greening. Community interviewees argued that generic questions - such as whether residents wanted more green space - might predictably be answered positively, but could then be used to justify interventions that did not ultimately reflect the existing character or needs of the neighbourhood.

> "You can't turn around and say 'no' to any of that. Like, if the question is, would you like greater access to green space in your community, then the answer is yes. But then, [...] that 'yes' is then used to justify the application of something that actually doesn't understand the green space and the public space and the street space that is already there ... that doesn't actually engage with the issues within that neighbourhood that have caused it to be the place that it's deemed to be right now..." (Activitst)

This account frames the regeneration project as applying urban greening strategies that do not respond to the existing social, environmental and physical place of Revoe itself, but rather as being 'laid over' to create benefits that are disconnected from that place and the specific nature of its perceived challenges.

Challenges of engagement for the local authority

Alongside this it is therefore important to note the various challenges perceived by the local authority in relation to community engagement. These include operating without prior experience of community engagement, in the context of a transient local community, and funding constraints:

> "We've not had an engagement team in previous regen schemes and this is the first region scheme that I've been involved in, so I think that that has been kind of instrumental in getting those messages out to the Community, utilising that team to do that, so they will. [...] We've

just been through the Homes England funding, we've just been able to facilitate that." (Official)

Such perceptions of challenges for community engagement from the local authority suggests that there may be constraints on all sides to full community engagement that might help to better draw out benefits for existing local residents.

10.2.4.3 (Civic perceptions of) (in)equity (distributional)

Neighbourhood improvement and gentrification

As with section 3.2 above, perceptions varied greatly between interviewees from the local authority and those from the local community, evidencing a real divide between the experiences of these groups.

Interviewees from or connected to the community consistently framed regeneration in Blackpool and in Revoe particularly as 'gentrification'. Interviewees spoke about the demolition and redevelopment of houses as leading to inevitable housing inequalities in the form of displacement of the local community for the duration of the redevelopment; a reduction in the overall numbers of homes available (with 400 homes being demolished and replaced with 280 homes); and the potential for rent rises locking existing residents out of the area (See also Section 3.6 below).

This is in contrast to interviewees from or connected to the local authority, who were wary of terms like gentrification to describe what they perceived as the only means towards improving housing conditions and deprivation in Revoe. These interviewees framed their role as working to improve an area of huge deprivation, population churn, and poor quality housing, for the benefit of all Blackpool residents.

"It's not about gentrifying. [...] It's creating a baseline in terms of quality of housing and environment for people to actually create sustainable community [...] you've just got row after row of the same types of properties with no amenity space around them and no quality in terms of the internal challenges that those properties are facing." (Official)

While it was understood this would lead to some inevitable displacement of the existing community, these interviewees differed from those from the local community in framing this as a challenge of, rather than the defining feature of, regeneration in Blackpool town centre.

Urban greening

In terms of the distributional inequalities pertaining to green space specifically, one perception coming from community interviews was an assumption that displaced low-income residents would not benefit from green interventions as these residents simply move out of the area as it is improved for future (higher-income) residents. In this understanding of the benefits and function of urban greening, existing residents are simply excluded from receiving its benefit (whether ecological, social, or otherwise):

> “what has never been, I think really, really clear is, is actually who they're aiming to make that livable for.”

(Activist)

Another framing of the benefits and function of urban greening in the context of urban regeneration in Revoe was to associate greening activities more with ‘aesthetics’, than improved ‘livability’:

> “Compared with what's there now [...] on seeing some of the artists’ impressions it feels like it's a, you know, a massive cosmetic exercise to make the place look and feel cleaner, tidier, modern. A nicer place to be. It's really kind of revising the physical side of things.” (Activist)

This perspective frames urban greening in Blackpool as being enacted in the service of regeneration (and economic development, see Section 3.1), rather than for the benefits of urban greening on its own terms (whether these benefits are considered to be ecological, social or otherwise).

10.2.4.4 3.4 (Civic perceptions of) political mobilization

There was a recognition by all interviewees of resistance to the regeneration by the community, with motivations ranging from people living in the area who don’t want to move, people who feel they are part of the community in Revoe, and people with links to community support groups e.g. receiving food parcels and employment support. The local authority also noted resistance from landlords with houses in the area, who have an interest in their investments and a percieved inflated sense of the value of their properties.

Challenges for political mobilisation

Despite this perceived resistance, political mobilisation was perceived to be weak in Blackpool. Interviewees from both the local authority and the community presented a perception that community engagement with the project would not come autonomously from the community, but necessarily rely on local authority engagement initiatives. This is distinct for example from the case of Islington, in which community groups were active and engaged from the start of the project, approaching the local authority and development partners autonomously. In Blackpool, the capacity for community engagement was framed by all interviewees as limited, with interviewees pointing towards high levels of deprivation and disaffection, and the challenges of daily life for more deprived residents, as a barrier to autonomous engagement.

> “On a day-to-day basis, [the residents] they're not bothered about the regeneration. They're just, you know, they're very, very low income. They're just they're bothered about getting through their day-to-day lives.”

(Activist)

> “People are not very engaged in trying to get stuff done. I mean, you know, let's not get into politics. But I think because they are, you know there's a lot of deprived areas in Blackpool. I think people have sort of given up in a way. So it's very difficult to get people engaged.”

(Official)

> “I'm not actually sure how engaged the residents are because it's very difficult to get people to, from my experience trying to set up the community gardens and stuff, it's quite difficult to get people engaged and get people activated.”

(Activist)

> “It's quite a challenging conversation to be able to get them to kind of interact in terms of that wider benefit.”

(Official)

From local community groups, this also translated into a sense of frustration about the challenges of building community participation from the bottom up:

Local community groups also expressed frustration at the difficulty of fostering bottom-up engagement. Their perceptions suggested that mobilising them around contentious political issues was far more challenging than other community-based activities. This was linked to a broader sense of resignation, and the sense that individuals did not feel able to influence change.

> “I don't think I could get a group together. I can pull groups together short notice for, you know, fun activities, social groups, kids activities, things like that. But if I tried to pull together a group to protest against the regeneration project I would struggle.”

(Activist)

Structural factors were also seen as a challenge mobilisation. Interviewees highlighted the transient nature of the population, limited community organisation, and a lack of relevant experience in planning or civic processes. This suggests a perception that human capital and institutional literacy are viewed as necessary, but missing, for meaningful activism and participatory activities.

> “I think the white flag's gone up with a lot of people. [...] I'm not big enough strong enough, bothered enough to try to create any change, so I'll just take it on the chin, just get on with it and you know, maybe I'll be out of Revoe when, a couple of years or whatever, because my life will take me there.”

> “Revo is so is so poor there really aren't. There aren't people here who have got any sorts of life experience of planning, liaising with the Council, you know.”

(Activist)

10.2.4.5 (Civic perceptions of) socio-ecological impacts/benefits (positive)

Green space upgrades

From the community perspective, perceptions about the benefits of green interventions related particularly to the positive potential for new green space in Revoe (rather than to retrofitting or sustainable building, which are also being implemented in the area). Several residents connected the benefits of green space upgrades to negative perceptions about the physical qualities of the neighbourhood, and how green space might produce benefits for existing residents' wellbeing and mental health:

> "if you ask about mental health and their living conditions here, they will say that looking out the window at litter tumbling down the streets and just loads of houses and grey just makes them miserable, so having a bit of green space around would be nice and that will make them feel better." (Activist)

While improvements to green space was framed as something that local residents could envisage benefitting from, neighbourhood improvement was more commonly connected with demolition, and negative perceptions about displacement. This may explain why interviews from local residents or those connected to the community focused less on the fabric of homes as a benefit of the regeneration project, while the potential for green space upgrades, particularly of spaces already used by the community, was framed more positively.

Health and wellbeing impacts of green space upgrades

The benefits of green space coming from the local authority and their partners were sometimes related to improving proximity between the housing in the area and local parks, increasing local residents' sense of 'ownership' of local parks, creating safe spaces for families to play, and increasing the outdoor space connected directly to the housing itself. These benefits were then also connected to mental and physical well-being impacts.

These green space improvements were usually talked about in contrast to the negative features of the area as it currently stands: 'there's no safe space'; 'it's not really suitable for families'; 'properties are straight onto the pavement'; 'they don't go to the park'; 'they don't see that green space as being theirs'; they generally don't utilize that space'. Achieving positive wellbeing impacts from green space upgrades are therefore framed as being achieved in relation to a more wholesale change and improvement of the existing area:

> "you asked before about benefits of green spaces, that area in particular is the most deprived, contains the most deprived, lowest super output area in England. So when you're looking at the indicators for deprivation and you're looking at the impact of mental and physical well-being on all those indicators. Income, employment, health. If people aren't having regular physical activity, are they more likely to support more pressure on the NHS, are more likely to have less success in education, less likely to be in meaningful employment if employment at all. But it's all linked, isn't it?" (Official)

This points to a perception that regeneration implies not only a wholesale change and improvement of the existing area, but also of the kind of life that it is possible to live within the area, at a population level. Green space upgrades are linked to physical activity, mental and physical health, education and employment indicators. From the local authority perspective, this frames the town centre regeneration as an aspiration to improve life in Blackpool in a more fundamental way.

Health and wellbeing impacts of retrofit and service upgrades

Retrofit in Blackpool town centre is implemented through the UK's social housing retrofitting programme (previously the Social Housing Decarbonisation Fund, now the Warm Homes: Social Housing Fund), alongside the local authority purchasing privately rented dwellings in the town centre, retrofitting these and then letting through their arms length housing companies (providing both affordable and market rent options). Local authority interviewees saw both social and ecological benefit from retrofitting properties in the area.

> "I don't think they particularly care whether they've got an air source heat pump, a gas boiler, electric... The big selling point is, what we're trying to do will make your homes warmer and in turn, will reduce your utility bills going forward." (Official)

> "People aren't spending a lot on their gas and electric bills. They're absolutely ecstatic about how little they've spent and how little they have to have the heating on because it's a warm, comfortable home. [...] the benefits are absolutely clear to the tenant [...] So it's the right thing to do from a social perspective and environmental perspective. But there's no benefit to the landlord other than further cost and maintenance issues." (Official)

These quotations show a perception that retrofitting activity is understood as having a large social component, with the price of energy bills for tenants being one of the main concerns mentioned. Once again this connects to the perspective expressed by local authority representatives that green initiatives are less about sustainability indicators and more about improving the (in this case economic) life of Blackpool residents in a more fundamental way:

> "obviously primarily, yes, of course we want to reduce that carbon. But the measures they're putting in are helping the Blackpool, I think 8 out of 10 of the wards indices, the most deprived areas in the country [...] if we can give people more efficient and lower energy bills. That's the main driver." (Official)

10.2.4.6 (Civic perceptions of) socio-ecological impacts/harms (negative)

Tensions between greening and housing provision

One theme emerging from our interviews concerned the perceived incompatibility between delivering high-quality green and blue infrastructure and meeting housing targets. Council

officers emphasised the spatial and financial constraints that make it difficult to provide both adequate public open space and the number of housing units required.

> "The only conflict is what I said earlier about getting the number of units on a piece of land as opposed to putting green space in that land."

(Official)

> "Just thinking about green space, public open space contribution, we're not going to be able to provide the level of POS [Public Open Space] that the policy demands in the area because it's not big enough. If we could either provide green space or we can provide housing, you can't fit everything in."

(Official)

Also on the development side, a local housing provider noted the significance of viability pressures. With grant funding being tied to affordable housing unit numbers, and sales revenue linked to market unit numbers, this created a pressure to "put as many units as possible on" a site, reducing the feasibility of incorporating green space.

> "I suppose it's cost, because the focus has got to be the number of units and that's where you get your grant funding for. [...] The cost of the land will be necessary to put as many units on as possible for sale or to meet any grant requirements. Therefore there is less land available to provide open spaces."

(Official)

Displacement

Stakeholders across interviews acknowledged that displacement will occur as part of the regeneration programme, with housing in Revoe earmarked for acquisition and demolition. The plan to demolish 400 and redevelop 280 homes in Revoe, over the 10-15 year time period for the town centre regeneration, also lead interviewees to raise questions about who the positive outcomes and benefits of development (outlined in Section 3.5 above) are for. These questions were implicit across all interviews, including public agencies who recognised that many current residents would be displaced, and community representatives who spoke about their concerns about residential displacement. Revoe has a highly transient community even before residential displacement occurs as an impact of demolition and new development; with these features being acknowledged, the question of positive impacts and benefits were consistently framed as a question of 'benefits for whom?'.

Local authority representatives interviewed spoke about displacement alongside a hope that regeneration would improve the urban environment for all residents in Blackpool, retaining some of the current population living in the town centre and serving the best interests of those who are displaced. These interviewees framed displacement as an unavoidable consequence of necessary regenerative development, as part of the effort to address deprivation in the area and foster broader socio-economic development across Blackpool.

> “So displacement is going to happen. But if we don't start to do this, if we don't start to make that step change and intervene at that scale and make that transformational change for the housing market in Blackpool and for the then the recurring benefit in terms of the socio economic side, it's only going to get worse.”

(Official)

Community representatives expressed concern about the immediate impacts of displacement, framing this more in terms of socio-spatial segregation. For example, some expressed a fear that current residents would be unable to remain in or return to the area, with one commenting that people “won’t be able to live in Revoe anymore.” This perception reflects local resistance to the reshaping of the area’s demographic profile.

> “I suppose you could say that I think they're [the council are] very eager to address the social issues and the transient population and the health qualities that are seen in Blackpool. They want to encourage people to move in that don't fit those demographics.”

(Avctivist)

Local authority officers described a structured approach to mitigating the harms of displacement, grounded in compulsory purchase order (CPO) guidance. They emphasised that residents will receive compensation, including home loss and disturbance payments, and that legal and moving costs would be covered. They also stressed that housing options teams and tenancy support officers would be involved to ensure residents are not “pushed out” without suitable alternatives. The role of engagement teams was also highlighted for assessing individual needs, including individuals with protected characteristics, disability requirements, and specific housing needs such as ground-floor bedrooms or larger family homes. One Local authority officer suggested that while there are inevitably negatives for some of the community, displacement “isn’t all negative,” suggesting that some residents may welcome the opportunity to move elsewhere. However, this view contrasts sharply with the majority of community perceptions that while some individuals may benefit financially from compensation, displacement also risks marginalising existing residents.

Rising costs of housing

Interviewees from the community also expressed concern that regeneration would ultimately increase housing costs in the area. This was perceived as linked to two mechanisms, neither of which can be substantiated at this point but both of which represented a concern to local residents. The first of these is the possibility that regeneration activity, including green transition activities such as domestic retrofit and the introduction or improvement of green and blue infrastructure, could lead to the local authority’s arms length housing companies raising their rent levels for tenants in order to cover costs. Nonetheless, Blackpool’s housing providers emphasised that their purpose is to provide housing for those on lower incomes, and the need to be ‘really mindful’ that properties remained affordable. This included complying with

statutory national affordable and social rent regulation but also considering affordability in any additional service charges that might affect affordability of affordable housing products.

The second is associated with gentrification (see below), with residents expressing concern that environmental and neighbourood improvements could increase demand for new housing in the area, allowing private landlords to raise their rents and pricing out existing low-income residents.

> "there is an underlying fear about the affordability for properties in this area. It's a bit of a catch 22, really, because there's the Council wants to improve the environment in the area that effectively that makes the demand for properties in the area greater, which then has a knock on effect of allowing landlords to expect a higher rent for their properties [...] It's nice to have a cleaner, tidier, smarter, brighter part of the town. But it could also backfire."

(Activist)

Gentrification

A contentious issue across interviews was whether the regeneration programme amounted to gentrification in Blackpool. Community representatives expressed a strong perception that the programme is designed to reshape the community, drawing higher-income residents into the neighbourhood rather than support existing residents. For these interviewees this represented an explicit gentrification agenda by the local authority.

> "Well, gentrification is what we're talking about. [...] Of course, the plan is gentrification because they want all the low income people in this area to be moved out and they want people who are working in the DWP and Ministry of Defence on the Multiversity to move into the area to improve it. That's it right? So the council plan is gentrification. That's what it is."

(Activist)

Local authority officers, by contrast, frame the programme as a rebalancing of the current tenure mix, skewed largely towards poor quality PRS, rather than gentrifying. These interviewees argued that this mix is structurally imbalanced towards perpetuating deprivation in the neighbourhood, and creates barriers to the smaller scale housing improvement in the area that many residents would prefer to see. They spoke about an effort to reduce transience in the area and create a more sustainable community by diversifying tenure types, improving the public realm, and making the area more accessible by improving mobility between Revoe and the rest of Blackpool.

10.2.4.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

Demolition vs improvement

One theme coming out of community interviews is a strong community preference for improving the existing housing stock in Revoe, rather than it being demolished and replaced. Community interviewees refer to the terraced housing in Revoe as structurally sound, solid, and characteristic. The main issue identified in these interviews is damp, sometimes attributed to previous poor-quality retrofit measures. Some expressed an acceptance that selective demolition of a proportion of homes could be beneficial to create new green parks in the neighbourhood and as an alternative measure to full-scale demolition. However, most were staunchly opposed to demolition and some highlighted that green space already exists and is well used in the neighbourhood, including small community gardens and meanwhile spaces, albeit not conforming to planning ideals of high-quality public realm.

> "But when you sit down with them and talk to them about options and you say actually we could keep these buildings here and just change them so that they're more efficient and better to live in and we could knock down some of them to make some green spaces in amongst them. They'll say, yeah, well, that's a good idea. Let's do that."

(Activist)

Underlying this resistance was a perception of prejudice; that the area is being judged as "not very nice" and that the regeneration programme is being used as a mechanism to attract "better people," rather than address the needs of existing residents. These interviewees acknowledged extreme deprivation and the breadth socio-economic problems experienced within the neighbourhood. Nevertheless demolition was broadly framed as an aesthetic approach, rather than one grounded in the reality of these problems.

However, a counter-theme emerging from interviews with the local authority represented perceived challenges of housing improvement in Blackpool. Interviewees from the local authority suggested that mass housing improvement would be unfeasible.. This related to constraints such as the national policy context, the cost of land and construction, and the coordination of markets for green initiatives including retrofitting. For example, one expression of this coming out of interviews was the perception that the cost of acquiring properties for improvement would be too great for the local authority. Most of the housing in central Blackpool is owned by 'absentee' landlords and managed through the PRS. There was a view presented by the local authority that landlords are not motivated to improve these properties; additionally, while the local authority can in principle purchase these properties for improvement, this presents too great a cost to manage at scale:

> "there's a significant cost for the landlord because you've got the installation cost and then you've got the maintenance cost. And the landlord doesn't get any benefit from solar is a good example, whereas the tenant gets a huge benefit from it"

(Official)

> “the housing company [Blackpool Housing Company] work... You buy a property for maybe £60,000. You might spend £60,000 doing it up. It's not worth £120,000 when you're finished.”

(Official)

There was also a suggestion that retrofit measures are still prohibitively expensive for housing improvement at scale by local authorities, who are limited in their ability to pay for measures since they must also ensure that the housing they deliver is affordable and/or available at below market rents.

> “But you've still got this really hard position in terms of there just isn't enough cash... So you're not generating that level of income to be able to offset the additional costs that the greening actually brings to it [....] if the government really wants this to happen [...] they're going to have to put the money where their mouth is. They can't expect providers to keep doing it [retrofitting] because they're just going to go under ... I can't find anybody who disagrees with the ambition and the desire. But how are we actually going to do it? Let's get down to the actual delivery details of how we maintain that.”

(Official)

Two key vertical tensions are visible here. The first is between local authorities who believe in ‘the ambition’ of retrofitting domestic properties, but who perceive the national government as not providing adequate support for delivery at the local level. The second relates to the extremely high cost of retrofit measures, something that relates to poor coordination of UK retrofit policy and its failure to support the creation of a fully functioning retrofitting industry at a national scale. These tensions are linked to a perception of constraints to large-scale local authority-led housing improvement programmes.

10.2.4.8 (Civic perceptions of) innovative governance mechanisms

Local authority innovation

Blackpool is unusual insofar as it has chosen to retain its social and affordable housing stock, rather than transferring these to housing associations. The local authority are also leading regeneration in the town, rather than this being coordinated by a private or non-profit developer. While development partners will be sought for the project, this may in part be because of low land values in Blackpool and tight viability constraints, meaning private developers are less likely to crowd-in to investing in development than in cities like London.

In the absence of national level grant for funding green initiatives, the task of managing, coordinating and funding these is largely the responsibility of the local authorities. The cost of green interventions must then be covered by the local authority. This represents a challenge particularly since the authority (and its arms-length housing providers) are also responsible for managing, coordinating and funding affordable housing options. For example, interviewees

noted that national policy expectations around decarbonisation outstrip available grant funding, perceiving full decarbonisation by 2030 as “unfeasible”.

This has the potential to create trade-offs between greening and affordability, as identified in our other UK cases. However, one concern expressed by interviewees from both the authority and their housing providers was exactly the extent to which the costs of environmental initiatives might be shunted along to tenants, and how they could continue to ensure their housing offer would remain affordable. These interviewees spoke about trialling innovative mechanisms to deliver on environmental obligations within tight financial constraints. One involved positioning the housing provider as an energy provider, recovering costs through service charges and rents to create a new revenue stream while also sustaining decarbonisation efforts.

> “There are a couple of models out there with. [...] you end up becoming like an energy company. So you, you're selling your energy. [...] you can recoup service charge for providing, you know, solar PV because that resident will be saving X amount of energy. We had some discussion recently about increasing rents by 5%. There's all these measures to try and you know recoup some of the costs.”

(Official)

A second involved long-term financing arrangements for solar installations. This involved the housing provider acquiring and retaining solar assets and the associated income streams over time.

> “I'm also wanting to explore whether we can fund solar panels through a service charge which is housing benefitable or Universal Credit benefitable. So I'm just looking at creative ways of how we can bring in additional funding to fund these...”

(Official)

As part of this discussion, interviewees stressed the importance of affordability safeguards. This involved investigating the option to fund acquisition of solar panels and battery storage through a service charge levied on tenants, but ensuring that this could be paid for by tenants through housing benefit, ultimately meaning these costs would be funded by the national government. It was also stressed that additional charges would need to comply with social rent regulations and remain affordable for tenants not in receipt of benefits. Ultimately, these attempts to secure innovative finance streams for meeting environmental obligations represent the vertical tension highlighted in Section 3.7 above: while local authorities believe in the ‘ambition’ of environmental policies, there is a perception of a lack of support for delivery from the national level of government, incentivising local workarounds.

Community engagement innovation

On the community side, community representatives described local interventions involving a range of community actors engaged in small-scale, incremental, and experimental forms of urban development that embed local people directly in shaping green and public spaces. This

approach is exemplified by projects like Revoe Public Square, led in collaboration between Revoelution, the University of Central Lancashire's live-action studio Other People's Dreams, and a local socially-engaged art practice called LeftCoast. This involved creating a new temporary public square on a small vacant site in Revoe, co-designed and constructed with local residents. This approach was characterised by community interviewees as enacting incremental urban development activities that involved the community and allowed for small, incremental change in the area, while also building human capital.

> "How do we genuinely involve and engage local people in the development of green and public space, in a more organic, incremental, responsive way?"

(Activist)

However, these interviewees also acknowledged significant structural constraints to this approach, in terms of enacting more profound change. While this approach to urban change champions small and incremental over transformational, this neverthless requires institutional support, capacity, and funding. There is a perceived need here for dedicated resident representation and well funded community organisations capable of coordinating activity.

10.2.4.9 (Civic perceptions of) tourism and market pressures

There was no data emerging from interviews in Blackpool relating to tourism, nor specific market pressures. Rather, the pressures in Blackpool are essentailly the opposite. While Blackpool was historically a touristic centre of the UK, it has struggled to find a path for economic and social development since the decline of domestic tourism throughout the 1970s, 80s and 90s. The neighbourhood of Revoe is characterised by low land values and suffers from the extraction of value through absentee landlordism targeting the lowest end of the housing market, which maintains an incentive for landlords not to upgrade properties or maintain them at minimum standards. Rather than market pressures in the traditional sense, this creates a pressure on the local authority to improve conditions in the area.

10.2.4.10 Gaps in perceptions between civic groups and public agencies

Gaps in the perceptions between civic groups and public agencies are particularly accute in the case of Blackpool, and have been noted throughout as a major theme emerging from interviews.

Perceptions about the distributional implications of housing and neighbourhood improvment varied between these groups, with voices from the local authority expressing a perception that wholesale regeneration of the area would be the best route to improving conditions and wellbeing for Blackpool residents, also given the contextual challenges of managing urban change as well as constraints to funding and local authority capacity. These interviewees recognised that many current residents would be displaced, but spoke about displacement alongside a hope that regeneration would improve the urban environment for all residents in Blackpool, retaining some of the current population living in the town centre and serving the best interests of those who are displaced.

Voices from the community were more likely to frame wholesale neighbourhood change as gentrification, and favour a more incremental approach to neighbourhood improvement that would allow residents to remain in place. Interviewees spoke about the demolition and redevelopment of houses as leading to inevitable housing inequalities in the form of displacement of the local community for the duration of the redevelopment; a reduction in the overall numbers of homes available (with 400 homes being demolished and replaced with 280 homes); and the potential for rent rises locking prior residents out of the area.

There was a perception amongst community representatives that benefits of neighbourhood improvement would be felt mostly by newcomers; there was a perception amongst local council representatives that improving the local area was imperative, with benefits for current Blackpool residents, and more of an open question about the impacts of displacement on the distribution of benefits.

A clear tension emerged between different interviewees' perceptions of the governance of community engagement employed by Blackpool Council around the development taking place in Revoe. Interviewees from the authority tended to refer to the various challenges that made engaging with the community difficult; nevertheless they framed this as active, and part of the local authority's work in ensuring effective urban change. Interviewees from or connected to the local community framed the community engagement enacted by the council as being poor, sometimes framing this as an intentional effort to manage urban change with as little push-back from the community as possible.

10.2.5 Critical Analysis: Blackpool

Have new green transition initiatives caused or exacerbated housing inequalities?

The perceptions of green transition initatives' impact on housing inequalities is not straightforward in the case of Blackpool. Interviewees rarely framed sustainability initiatives as having a direct relationship (let alone a direct positivie or negative impact) on housing inequalities in the area. Nevertheless, a relationship between green transition initiatives and housing inequalities can be teased out in interviewees perceptions of the development process.

As outlined in Section 3.1, while the key physical measures of the project involves housing and neighbourhood improvement in the Revoe area (selective housing stock clearance, development of 380-485 new homes alongside 10-20 refurbished homes, energy efficiency improvements, public realm improvements and the promotion of sustainable drainage systems), the primary driver of this project is framed by interviewees as being a broader economic and social development strategy for Blackpool. Within the town centre, the area of Revoe is perceived to suffer in particular from housing quality issues, nevertheless the organising force behind this project is consistently framed as the need for socio-economic, rather than simply physical, improvement.

Green transition elements (in particular energy efficiency, public realm and urban greening improvements) are not generally framed by public agencies as being for greening's 'sake' or

in terms of environmental or ecological benefits. Rather, these intiatives were more consistently framed from within this broader socio-economic imperative for redevelopment in Blackpool. This frames green initiatives at the service of a broader regeneration strategy, rather than being the driving force of urban change in and of themselves. The green aspects of this regeneration project are unlikely to have 'caused' or 'exacerbated' housing inequalities in themselves. However, a connection can be made between the perceived need for urgent neighbourhood improvement in central Blackpool, including improvements to energy efficiency, public realm and urban greening, and residents' concerns around displacement and gentrification.

The concern of many residents is that the benefits of regeneration may not be felt by those currently living in the area, either because demolition of the existing housing stock requires that they move, or because rising housing costs in the area prevents them from moving back. There is no suggestion from interviewees of a perception that urban greening, energy improvements or any other environmental initiatives would directly lead to higher housing costs through their specific contribution to the improvement of the neighbourhood. It seems more likely that the role of green transition initiatives within the potential for gentrification in Blackpool relates more to the way that these initiatives are integrated into urban regeneration, through the policy frameworks that govern all urban change in Britain. In particular sustainable construction and the provision of biodiversity net-gain on all development sites are now regulated and compulsory aspects of development, the costs of which are to be met directly by developers (whether public, private or non-profit). Local authorities are compelled by national policy frameworks (and by policy discourse at both local and national level) to include these environmental considerations in all local plans and any strategies for urban development and improvement. These environmental aspects of development cannot, in practice, be separated from the other aspects of development governed by these local plans and strategies.

In this case, with the imperative of socio-economic development at the centre of regeneration plans for Blackpool, environmental strategies have been deployed within this context. As such, perceptions of the role and function of green initiatives within the broader regeneration strategy divide along the same lines as perceptions of the regeneration strategy in general. Perceptions from public agencies focus on better health outcomes and economic and social wellbeing for Blackpool residents. Perceptions from the local residents focus more on the 'aesthetics' of green upgrades, with urban greening being a part of making the area seem 'nicer', 'cleaner' and more 'modern'; and a part of the economic development strategy that may ultimately price them out from the area.

Key critical points defining housing justice/inequalities in case 1 in conversation with local/national context and histories

Within the policy context for green initiatives in the UK, the task of managing, coordinating and funding those initiatives is often the responsibility of local authorities, registered housing providers and other actors involved in delivering housing and new development (including private developers). The cost of green interventions is then intended to be recouped by these actors through their own commercial mechanisms or revenue streams: national policy treats green transition initiatives as a compliance that must be priced into the viability of projects.

One theme coming out of community interviews in Blackpool is a strong preference for improving the existing housing stock in Revoe, rather than it being demolished and replaced. However, the broader UK policy context implies constraints to large-scale local authority-led housing improvement programmes. The decision to demolish and rebuild housing in central Blackpool is clearly a complex one, involving interconnected pressures. Some of this pressure may also be related to structural constraints flowing from the UK's approach to the green transition, as outlined above.

As described in Section 3.7, this relates to the cost of land acquisition, construction, and the coordination of markets for green initiatives including retrofitting. For example, one perception coming out of interviews was the cost of acquiring properties for improvement would be too great for the local authority. Most of the housing in central Blackpool is owned by 'absentee' landlords and managed through the PRS. There was a view presented by the local authority that landlords are not motivated to improve these properties; additionally, while the local authority can in principle purchase these properties for improvement, this presents too great a cost to manage at scale. As well as land values, this may be related to the cost of retrofit measures are still prohibitively expensive for housing improvement at scale by local authorities, who are also limited in their ability to pay for measures since they must also ensure that the housing they deliver is affordable and/or available at below market rents.

Two key vertical tensions are visible here. The first is between local authorities who believe in 'the ambition' of retrofitting domestic properties, but who perceive the national government as not providing adequate support for delivery at the local level. Across the UK, grant funding for local authority led retrofit programmes is inconsistent and oversubscribed.

The second relates to the extremely high cost of retrofit measures, something that relates to poor coordination of UK retrofit policy and its failure to support the creation of a fully functioning retrofitting industry at a national scale. The UK government has prioritised small-scale demand-side incentives that are not intended to achieve retrofit at scale, but to catalyse innovation in retrofit supply chains, helping to kick-start genuine market delivery of retrofit on the supply-side. However, this piecemeal and inconsistent approach has had limited results. Meanwhile supply-side blockages are not properly addressed, and subsidy for the currently prohibitive cost of retrofit insterventions is not forthcoming at scale. The retrofitting sector is likely to require significant levels of public investment to become a fully functional industry. One impact is that while government focuses on small scale demand-side schemes, the cost of retrofit installation remains extremely high.

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10.2.7 Appendix 1 – Glossary

Abbreviations

BHC	Blackpool Housing Company.
BCH	Blackpool Coastal Housing.
CBD	Central Business District
DWP	Department of Work and Pensions
GBI	Green and blue infrastructure
GFA	Grant funding agreement
HMOs	Housing of multiple occupation
MoD	Ministry of Defence
MVHR	Mechanical ventillation heat recovery
POS	Public Open Space
PRS	Private rental sector
RP	Registered housing provider.
RDA	Regional Development Agency
SuDS	Sustainable urban drainage systems.

Terms and Concepts

CPO Compulsory purchase order	A legal mechanism allowing locala uthorities and other public bodies to purchase land for development, regeneration and infrastructure without the existing owner's consent.
BHC Blackpool Housing Company	Arms-length housing company owned by Blackpool Council. Coordinate development for Blackpool Council.
Homes England	The UK government's national housing agency
Levelling up	A long-term programme of the UK government to reduce economic and social disparities between regions in the UK, particularly the Midlands and the North. Launched in 2019, until the change of government in 2024.
MVHR Mechanical ventillation heat recovery	A whole-house energy efficiency system extracting heat from air.

SHDF Social Housing Decarbonisation Fund	Now branded as the Warm Homes: Social Housing Fund. The UK retrofit policy for providing grants to social landlords to retrofit their housing stock.
Solar PV	Solar pholtovoltaic technology, used to convert sunlight into energy.
RP	Registered housing provider, or provider of social housing.

10.2.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Official - Local authority	Local authority	28-05-2025	MS Teams
2	Official - Housing and development	Local authority Housing Company	10-07-2025	MS Teams
3	Official - Housing and development	Local authority Social Housing Company	02-07-2025	MS Teams
4	Official - Local authority official	Local authority	31-07-2025	MS Teams
5	Activist	Community Association	20-08-2025	MS Teams
6	Local councillor	Blackpool Council	03-09-2025	MS Teams
7	Activist	Local social enterprise	09-09-2025	MS Teams
8	Official – Housing officer	Local authority Social Housing Company	11-09-2025	MS Teams
9	Activist	Research	15-09-2025	MS Teams
10	Activist	Community Association	18-10-2025	MS Teams
11	Activist	Community Association	18-10-2025	MS Teams
12	Activist	Community Association	18-10-2025	MS Teams

10.3 CASE STUDY (SMALL): BICESTER

Garth Park. Source: Wikipedia

Authors: Phoebe Stirling, Sonia Arbaci, Margaux Daly (UCL)

10.3.1 City/Town profile, challenges around just (housing and ecological) transition

The NW Bicester Eco Town is a development in the town of Bicester, which is a part of the non-metropolitan Cherwell District and a part of the larger county of Oxfordshire. Bicester is governed by three successive levels of local government: the Bicester Town Council, the Cherwell District Council, and the Oxfordshire County Council. The county of Oxfordshire has a two-tier system of local government, with responsibilities divided between the county and district levels. Cherwell District Council is responsible for developing and implementing housing policy in Bicester (*Cherwell District Council Housing Strategy 25-30*, 2025).

The population of Bicester is around 30,000, projected to be around 55,000 by 2034 due to rapid expansion of new planned housing and employment growth (*Bicester Local Cycling and Walking Infrastructure Plan*, 2020). Cherwell District has a population of about 166,300 in 2023, with 13.5% population growth between 2011 (141,900) and 2021 (161,000) and projected population

growth of 15% to 185,500 by 2031 (*Oxfordshire Data Hub*, 2023). A similar trend is seen throughout Oxfordshire County, with projected growth of 9%, or 68,600 residents between 2021-2031) (Oxfordshire Data Hub, n.d.). The growth rate is higher than observed between 2011-2021 in the rest of Southeast England (7.5%) and the rest of England (6.6%) (*Office for National Statistics*, 2025c). That being said, Cherwell is the 13th least densely populated local authority area in England's Southeast (*Data and analysis from Census 2021*, 2023b).

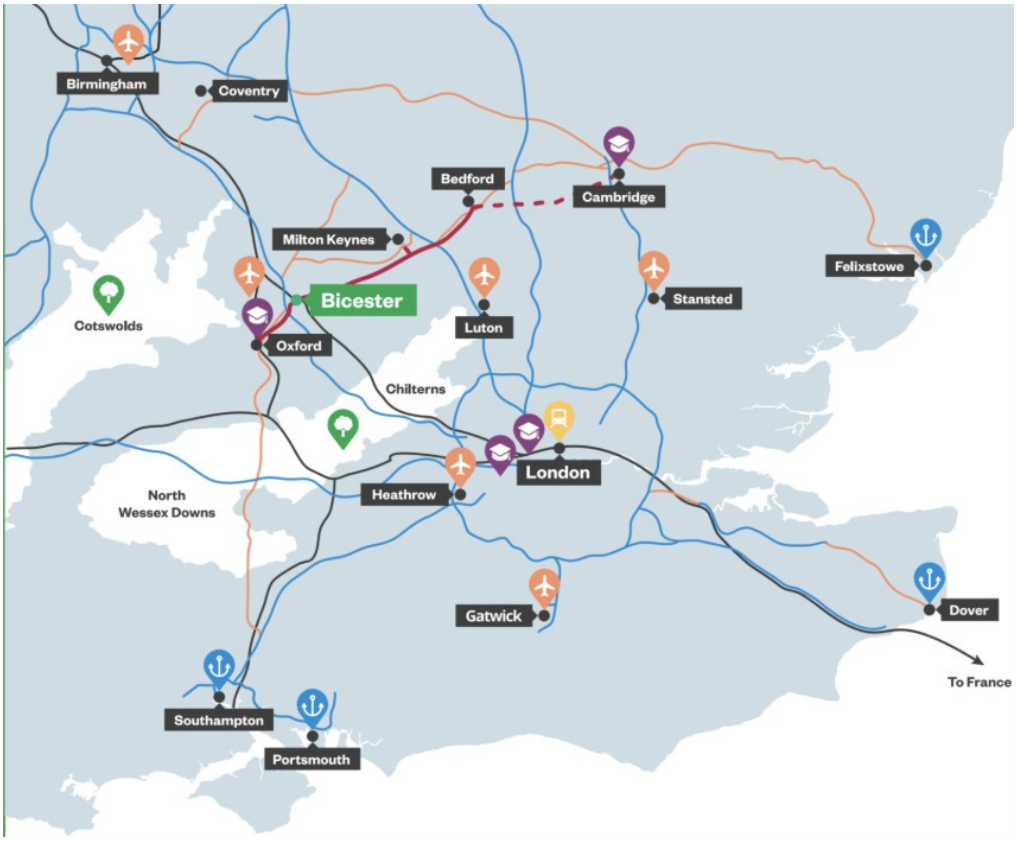

Figure 3. *Map showing connectivity of Bicester in England (2025)*

The population is relatively affluent when compared with other local authorities within Great Britain. The people of Cherwell District have a lower economic inactivity rate (15.3% compared with 21.0%), a higher employment rate (84.7% compared with 76.8%) a lower claimant count (2.3% compared with 3.4%), higher gross disposable household income (£24,927 compared with £21,359) and higher gross domestic product per head at current market prices (£40,539 compared with £31,133) (*Office for National Statistics*, 2025c).

Cherwell's housing sector is dominated by owner-occupation; however, this has fallen from 2011 (69.3%) to 2021 (65%). This is followed by the private rented sector, which has risen since 2011 (16.2%) to 2021 (19.8%) and the social rented sector, which has risen since 2011 (12.1%) to 2021 (13.3%). Shared ownership takes up a small part of the tenure mix, however, has also risen from 2011 (0.8%) to 2021 (1.9%). While the social rented sector is smaller compared to the rest of England (17.1% in 2021), Cherwell is seeing a rise in social rent (+1.2% from 2011-2021)

compared to the rest of England, which has experienced a decrease (-0.6% from 2011-2021) (*Data and analysis from Census 2021*, 2023c).

The median house price in Cherwell District in 2023 was significantly higher than the UK average (£396,000 compared with £282,000) and sold houses in Bicester are 21% higher than those in Barnbury, the other town within the district (*Cherwell District Housing Delivery Action Plan 2025*, 2025). The workplace earnings to house price ratio within Cherwell (10x in 2021, 13x in 2023) is wider therefore than at a national level (9.5x in 2023), meaning achieving owner-occupation is challenging or highly unlikely for many working households, and more difficult than across many regions in the UK (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

However, affordability is a cross-tenure issue, with median rents in Cherwell rising 11% between 2022-2025. High demand in the private rented sector means those on the lowest incomes face significant challenges accessing private rented sector tenancies. There are currently just over 2,000 households on the Cherwell Council housing register, however, there has been a 100% increase of available tenures between 2020 and 2025. The smaller social housing supply is considered strong, with shorter waits compared to larger 4/4+ bedroom housing, of which wait times are 2 years and 11 months (*Cherwell District Housing Delivery Action Plan 2025*, 2025). In the 2023/24 monitoring year, 266 net affordable housing completions accounted for ~33% of total net housing completions. That being said, the annual monitoring report of the Cherwell District Council acknowledges an imbalance between high demand for social housing and limited supply, especially for larger family homes (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

According to the National Planning Policy Framework (NPPF), Local Planning Authorities (LPAs) need to demonstrate a 5-year housing land supply to meet housing needs. Using Standard Method calculations, there is a need to provide 1,118 dwellings per annum to meet Cherwell's needs (*Cherwell District Housing Delivery Action Plan 2025*, 2025). Despite the fact that net additions to the housing stock are slightly higher than England's average (11/1,000 compared to 8/1,000) (ONS, 2025), this level of housing delivery is unprecedented in Cherwell (*Cherwell District Housing Delivery Action Plan 2025*, 2025). Cherwell's Local Plan (adopted July 2015) seeks to build 22,800 homes in Cherwell, with 10,129 in Bicester between 2011-2031 (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

The Housing Strategy (2025-2030) has three priority areas: increase supply and diversity of affordable housing, improve the quality and sustainability of homes, enhance choice of suitable housing (*Cherwell District Housing Delivery Action Plan 2025*, 2025). Given that Cherwell District Council transferred its housing stock as part of the Large-Scale Voluntary Transfer process in the late 1990s and early 2000s and is therefore no longer a large Registered Provider or direct enabler and landlord for new affordable housing (*Cherwell District Council Housing Strategy 25-30*, 2025), affordable housing delivery is subject to viability assessments of developers. Core Policy 36: Affordable Housing states that all proposed developments of 10 dwellings or more (gross) or provided on sites suitable for 10 or more dwellings (gross), are expected to contain a minimum of

30% affordable housing. Of this, 70% is to be affordable/social rent and 30% as other affordable homes. The housing mix needs identified are summarised in the table below.

Table 1. *Housing mix needs by size and type (Cherwell Local Plan Review 2042, 2024)*

Type	One Bedroom	Two Bedrooms	Three Bedrooms	Four + Bedrooms
Social/Affordable Rented	35-40%	25-30%	20-25%	10-15%
Affordable Home Ownership	20-25%	40-45%	25-30%	5-10%
Market Housing	5-10%	35-40%	35-40%	15-20%

Cherwell is significantly challenged to deliver housing at required rates and is currently falling short of the required 1871 new homes per annum by 131 dwellings per annum. Of the 13,117 homes built since 2011, 30% are in Bicester. Bicester, one of the strategic sites allocated in the 2015 Local Plan for Cherwell District, has an allocation of 10626 homes, 52% of which have been granted planning permission and 15% of which have been built. Northwest Bicester has the largest allocation in the area with 6000 allocations, 44% of which have been granted planning permission and 7% of the allocation that have been built (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

Challenges to the delivery and planning process include insufficient electricity supply to meet growing demand due to stalled grid capacity, issues with transport infrastructure – particularly for the Northwest Bicester development, due to a lack of funding to construct a new strategic link road to serve the NW Bicester allocation. Other factors influencing delays include market conditions, construction costs and infrastructure providers (roads, utilities, schools, healthcare) (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

Environmental regulations are considered increasingly stringent (e.g. biodiversity net gain) and contribute to significant hurdles and delays in housing developments due to the requirement of complex mitigation strategies (*Cherwell District Housing Delivery Action Plan 2025*, 2025). A minimum of 10% net gain in biodiversity must be demonstrated according to the Department for Environment, Food & Rural Affairs (DEFRA) Statutory biodiversity metric, and all applications must be accompanied by a Biodiversity Net Gain Assessment and Ecological Enhancement Scheme, setting out how the site will be improved and maintained over at least a thirty-year period (Cherwell Local Plan Review 2042, 2024). A major concern is that the introduction of these requirements is creating a novel financial burden for both the developer and local authority responsible for regulating short and long-term ecological maintenance, leading to reassessment of project viability. This creates a risk for reduction in the number and/or size of affordable units

provided (a consequence further elaborated through interviews).

10.3.2 Green Transition Interventions in Bicester: NW Bicester Eco Town

10.3.2.1 Densification

The NW Bicester Eco Town development is on a 390-hectare site in the town of Bicester. The site does not count as brownfield development, but rather greenfield development, as the site was formerly low-grade agricultural land. The site is in multiple ownerships, requiring an effort for land assembly and phasing of development. Given preexisting high traffic on surrounding roads and forecasted population growth associated with the proposed development plan, surrounding roads require reconfiguration to accommodate forecasted traffic flow associated with population densification (North West Bicester Supplementary Planning Document, 2015).

The development project stems in part from a need for increased housing supply across the UK and within Cherwell District. Cherwell's 2040 Draft Local Plan outlines that in addition to the projected need to build 25,860 homes between 2020 and 2040 to accommodate growth projections in Cherwell and absorb additional housing needs from Oxford. Bicester is to absorb the majority of this housing need through development, with a projected addition of 10,760 homes by 2040. Within Bicester, NW Bicester is the largest development site with 6,000 homes planned, and 3,000 homes planned for delivery by 2040.

The development also stems from a response to the UK government's Eco Towns Planning Policy Statement (2009), which sought to incentivise creation of towns with zero carbon emissions through sustainable building standards and microgeneration of clean energy (Barclay, 2011). The NW Bicester Eco Town is one of the four pioneering Eco Town sites approved of a projected 10 towns by 2020, and the only site that has proceeded with construction. The idea of the eco town was to plan a community as scale (~5,000 homes), rethinking how transport, employment, retail, and local education are provided, while designing houses to exemplary standards, to promote sustainable living in new communities (North West Bicester Supplementary Planning Document, 2015). The UK's eco town program was ideated by the Liberal government in 2007, published in 2009, audited by the coalition government in 2010 and cancelled for all areas except NW Bicester in 2015, however has laid foundations for subsequent garden city and garden town initiatives (Barclay, 2011).

The site's aspect is considered favorable for roof mounted solar photovoltaic panels and in proximity to make use of the Ardley energy from recovery plant (North West Bicester Supplementary Planning Document, 2015), making it suitable for integration of clean energy systems into development planning.

The Cherwell District Council made a bid to the UK Government in 2009 for over £20 million pounds of funding, resulting in receipt of £9.7m (£3m for demonstration projects, £1.7m revenue

and £5m capital) reported in 2010. A second-round bid in 2011 resulted in an additional £3.4m capital and £150,000 revenue in 2011, received as a block grant that not specifically tied to any project. The financial monitoring statement for the project showed that funding allocation was prioritised for a primary school in NW Bicester, followed by an Eco Business Centre (Barker, 2012).

The exemplar for NW Bicester, called Elmsbrook, began in spring 2014, involving construction of the primary school, eco-business centre, community centre, and 393 'true zero carbon' homes (WD, 2025). The lead developer was A2Dominion, who appointed construction company Willmott Dixon to build the first phase of homes to an environmental rating of Level 5 code for Sustainable Homes and BioRegional's (sustainability consultancy) One Planet Living Status (*Wilmott Dixon*, 2025). The town is also one of ten schemes in the UK to have NHS Healthy New Town Status (*Healthy New Towns Demonstrator Sites*, n.d.). So far, only phase one (Elmsbrook) is complete. This resulted in 413 private and affordable homes (HDAP, 2025). Residents began to move in in 2016 (First residents move into Bicester's 'eco-homes', 2016).

In 2023, A2Dominion (the developer) submitted plans to build 1,000 more homes in NW Bicester in a joint application with the Thames Valley Policy. The project is halted as discussions persist between A2Dominion, Cherwell District Council and Oxfordshire County Council regarding the need to improve infrastructure routes around the development site (*A2Dominion*, 2023). According to the 2015 Local Plan for Cherwell, 6,000 homes have been allocated for the NW Bicester site. According to the 2025 Housing Delivery Action Plan for Cherwell District, 2,230 homes have been granted planning permission (*Cherwell District Housing Delivery Action Plan 2025*, 2025).

There are several concerns regarding extent of infrastructure upgrades required to support a larger population in the area including already congested roadways, a lack of local public transport options due to economic viability associated with a relatively low local population, congested power grid, insufficient local water supply, and concerns with foul drainage (*Cherwell District Housing Delivery Action Plan 2025*, 2025). In 2019, there was a successful bid (£6.7m) from Cherwell District Council for Government Marginal Viability Housing Infrastructure Fund to support housing allocation in NW Bicester via facilitating passenger transport routes across a rail-line dividing areas of the development (Marginal Viability HIF Funding Agreement & Implementation Agreements - NW Bicester, 2019). There is currently an estimated £87,142,894 funding gap for transport infrastructure, £2,200,000 funding gap for community infrastructure, and £1,222,000 funding gap for open space, recreation and biodiversity, considering all known sources of funding available for Bicester (Community Infrastructure Levy (CIL) Draft Charging Schedule, 2024). The co-development of these amenities is needed to make ongoing development projects sufficiently livable for the increasing population.

10.3.2.2 Nature Based Solutions

The greening and biodiversity strategy implemented in NW Bicester is mainly in response to the Eco-Towns Planning Policy Statement (PPS) 2009. The Eco-Towns PPS was developed just after

the national 2008 Climate Change Act as an effort to deliver specific, zero carbon communities as exemplars for future development.

The NW Bicester Eco Town project was awarded funding in 2010 for progress towards completion of the plan outlined in the One Shared Vision document, which largely followed the national Eco-Towns PPS in terms of green space and biodiversity strategy. Objectives included that 40% of total land area in NW Bicester allocated to green space, that half that land area (20% total land) should be public land, that a range of types of green space, e.g. community forests, wetland areas, public parks were to be integrated, that the green space was to be multi-functional (including accessible play/recreation, walking/cycling safety, supportive of wildlife, urban cooling and flood management; allotments/commercial gardens) (Eco Bicester - One Shared Vision, 2010).

The biodiversity strategy for NW Bicester Eco Town was completed by Hyder Consulting, commissioned by the developer A2 Dominion, in August 2014 (the biodiversity strategy at this time did not therefore reflect the specifications that later emerged in the national Environmental Act 2021, that all developments (unless exempt) must demonstrate a net gain of biodiversity of at least 10% from 2024). Additional habitats created in the development include a country park, a nature reserve, sustainable drainage features, a wetland waste water treatment facility, a green burial site, green roof water treatment, general amenity green space, and other green amenities including allotment, play areas, school playing fields, and business park green space (Biodiversity and planning in Oxfordshire, 2014).

10.3.2.3 Energy Efficient Retrofit

Retrofit activities in Bicester are not formally associated with the NW Bicester Eco Town development project. However, retrofit initiatives have been included across Bicester as part of this overarching greening movement, and as a strategy to create a sense of connection between the existing town of Bicester, and the new eco-development. This includes energy-saving upgrades made to 14 homes and two small businesses using a grant from the Department for Energy and Climate Change, which included insulation, new gas-fired boilers, LED lighting and solar energy.

Table 2. Key data on case study area of Bicester

	Bicester
Neighborhood characteristics (general social type, economic activities, density etc)	The Cherwell district population is relatively affluent when compared with other local authorities within Great Britain. The housing sector is dominated by owner-occupation. The median house price in Cherwell District in 2023 was significantly higher than the UK average (£396,000 compared with £282,000) and sold houses in Bicester are 21% higher than those in Barnbury, the other town within the district.
Duration	Since 2009-ongoing. The Cherwell District Council made a bid to the UK Government in 2009. Phase one of the development is complete. In 2023, A2Dominion (the developer) submitted plans to build 1,000 more homes in NW Bicester;

	however the project is currently halted around discussions on necessary infrastructure improvements.
Funding	The Cherwell District Council made a bid to the UK Government in 2009 for over £20 million pounds of funding, resulting in receipt of £9.7m (£3m for demonstration projects, £1.7m revenue and £5m capital) reported in 2010. A second-round bid in 2011 resulted in an additional £3.4m capital and £150,000 revenue in 2011, received as a block grant.
Actor constellation	Bicester Town Council, Cherwell District Council, A2Dominion (registered housing provider and phase one lead development partner), Willmott Dixon (phase one construction company) BioRegional (sustainability consultancy), local politicians and councillors, local community activists.
Aims and objectives	The UK government's Eco Towns Planning Policy Statement (2009) sought to incentivise creation of towns with zero carbon emissions through sustainable building standards and microgeneration of clean energy. The 2009 Eco Towns PPS has a wholistic approach to development, aiming to integrate transport, employment, health and social care, retail, arts and culture and local education, to promote sustainable living in new communities. In terms of green space, there is an objective that 40% of total land area in NW Bicester allocated to green space, that half that land area (20% total land) should be public land, that a range of types of green space should be included (e.g. community forests, wetland areas, public parks) and that the green space should be multi-functional (e.g. accessible play/recreation, walking/cycling safety, supportive of wildlife, urban cooling and flood management; allotments/commercial gardens). As well as being zero carbon as part of the whole built environment, the 2009 Eco Towns PPS states that homes in eco-towns should provide for at least 30% affordable housing (including social rented and intermediate housing)
Specific physical measures	The exemplar for NW Bicester, called Elmsbrook, began in spring 2014, involving construction of the primary school, eco-business centre, community centre, and 393 'true zero carbon' homes (WD, 2025). 6,000 homes are planned in total, with 3,000 homes planned for delivery by 2040. Natural habitats created in the development include a country park, a nature reserve, sustainable drainage features, a wetland waste water treatment facility, a green burial site, green roof water treatment, general amenity green space, and other green amenities including allotment, play areas, school playing fields, and business park green space.
Accompanying housing policy/ regulatory measures	Core Policy 36: Affordable Housing: all proposed developments of 10 dwellings or more (gross) or provided on sites suitable for 10 or more dwellings (gross), are expected to contain a minimum of 30% affordable housing. Of this, 70% is to be affordable/social rent and 30% as other affordable homes. It is expected these conditions be met without the use of social housing or another similar grant.
Key social tensions or/and	Where greening initiatives add cost to housing development and therefore to the cost of homes, this sits uncomfortably with the need for

benefits between greening and housing	more affordable housing in Bicester. Affordability is a cross-tenure issue in Cherwell district and Bicester. Achieving owner-occupation is challenging or highly unlikely for many working households, and more difficult than across many regions in the UK. Median rents have risen and demand in the private rented sector means those on the lowest incomes face significant challenges accessing private rented sector tenancies.

10.3.3 Methods

Between July and September 2025, 5 interviews were undertaken with a range of interviewees, both from the District authority, development partners (development consultants), and with local councillors (local politicians). Potential interviewees were initially identified from desk-based research for the preparation of this report. Potential interviewees were approached initially by email, and sent an information sheet and consent form to explain the parameters of the project. Additionally, a snowball sampling strategy was employed whereby subsequent interviewees were recruited based on introductions by earlier interviewees. All interviews were carried out remotely via Microsoft Teams. Profiles of interviewees may be found in Appendix 2. Prior to participation, participants were sent an information sheet and consent form by email, and informed consent was obtained.

Interviews were audio-recorded using Microsoft Teams. Automated transcripts generated by the Teams transcription tool were subsequently reviewed in full by the researcher. Transcriptions were verified against the original recordings and corrected to address any errors or inaccuracies. Qualitative thematic coding and analysis were conducted by a single researcher, following a predefined coding framework aligned with the study's analytical objectives.

This qualitative analysis has focused on civic perceptions and is outlined below. This is also supported by desk-based background research, which involved a review of policy documents, submitted planning documents, strategic plans, technical reports, grey literature and academic literature. This desk-based research provides documentary evidence against which to contextualise the observations and perceptions of actors engaged in the Eco Town development.

The particular limitations of this case relate to the range of interviewees. We have sought to include a broad range of perspectives from across development partners and local stakeholders however it was not possible to identify interviewees from amongst local residents or community organisations. However, we were able to secure interviews with two local councillors (locally elected politicians). The failure to secure interviews from local community groups represents a particular limitation for our analysis of gaps in perceptions between civic groups and public agencies. Analysis for this aspect of this case rests on reflections from the local authority and development partners (consultants), contrasting these with reflections from local councillors, who are locally elected and therefore have some insight into the views of local residents. However, local councillors are also connected to and work with the local authority, and therefore there are likely to be resident populations who are directly affected by redevelopment who have not had their perspectives heard for this research.

10.3.4 Civic Perceptions of Green Initiatives in Case Study Areas: Bicester

10.3.4.1 (Civic perceptions of) precedents and implementation

Interviewees were keenly aware of the policy context that lead to the development of NW Bicester Eco Town, as an extension of the existing market town of Bicester. Published in 2009, the UK government's Eco Towns Planning Policy Statement sought to incentivise the creation of 10 completely new towns with zero carbon emissions through sustainable building standards and microgeneration of clean energy (Barclay, 2011). The statement also prioritized high standards in biodiversity and green infrastructure, stipulating that 40% of total land area should be allocated to green space, and that half of this should be public land. On the social side, the statement also prioritises enabling healthy lifestyles for residents, at least 30% affordable housing provision, and continuous community involvement and engagement, to develop social capital.

Importantly however, while the words 'Eco Town' were consistently used by interviewees when describing this national policy, the way the policy manifested locally in Bicester and the ways that interviewees framed the trajectory of this policy did not prioritise the 'eco' credentials of the development. Rather, interviews showed that the key features and local benefit of this policy were understood (at local level) to be connected with local economic development, and housing delivery.

Economic development

The original proposal for an Eco Town in the Cherwell District was for an entirely separate, 15,000 house settlement between Bicester and Oxford. Interviewees reported local political resistance to the development of a completely new town in the district, for reasons of economic development and the preservation of the existing towns' economy:

> "It would have been really bad for Bicester and Killington because it would such investment out of those two centres into the new centre" (Interview #1, Local councillor)

> "that would be a de facto whole new town [...] it would have been an economic drain [...] for the council at that time, there was a clash of styles of investment strategies that was not good for us" (Interview #2, Local councillor)

Interviewees reported a concerted effort by local politicians across the political spectrum, and within the local planning authority (Cherwell District Council) to propose an alternative vision for an Eco Town within the district. One interviewee, a local councillor, described the prospect of a completely new town in the district as "a disaster" not only for reasons of economic drain but also for local traffic conjestion. However, it became clear that the District Council had prioritized the proposal for an Eco Town partly on account of the housing need identified in the district. Bicester Town Council responded with a counter proposal for an Eco Town on land identified to

the north of Bicester but as an extension of the existing town, as part of the local plan making process. This site had the benefit of satisfying the requirements of the District Council in terms of the potential for housing provision and other Eco Town principles, as well as being part of the existing town rather than a separate entity, and therefore guarded against local economic drain.

Housing delivery

As well as serving local economic needs, the new area proposed for an Eco Town development is described by interviewees as carrying particular benefit in terms of housing delivery. Crucially, interviewees framed the benefits of this development opportunity more in terms of its ability to serve the delivery of local housing need, than in terms of sustainability or eco 'credentials':

> "[...] officers identified the whole area north of Bicester as being a potential area where we could deliver enough houses to satisfy the requirements of being an Eco Town and the main benefits for us is that it would count towards our housing numbers" (Interview #2, Local councillor)

Thus, the 'Eco Town' element of the development is associated by interviewees largely with the national policy requirements and broader policy context, as a means of providing the framework for greater housing delivery at the local level. In terms of local priorities, including for the Town Council, interviewees represent the environmental considerations as far less important than housing delivery.

> "I don't really think that overall we were too worried about the green part. It wasn't the main driver, you know. It wasn't a green initiative in that respect. We took it on board and ran with it because it's not a bad thing, let's put it that way. But the but the main to me, [...] it was more about securing the housing numbers" (Interview #1, Local councillor)

While the 'Eco' framing (and requirements) for NW Bicester were derived from the national level, at the local level, the main driver of development is framed as being for housing delivery, and a political drive to maintain the economic primacy of Bicester within the surrounding area. The 'greening' aspect of the development is thus framed as a way to make local development aspirations fit within national policy frameworks.

10.3.4.2 (Civic perceptions of) participation and governance (procedural)

Community participation: existing Bicester residents

Without interviewees from the local community, it is difficult to discern community perceptions around the governance of community participation, or what worked and what didn't in terms of community engagement. Reflections from interviews remained relatively neutral about consultation processes, although there were more strident reflections about local political mobilization from existing Bicester residents (see Section 3.4).

"[...] there was some consultation particularly with the town regarding the Eco Town" (Interview #1, Local councillor)

Local councillors represented their engagement as a process of guiding existing residents through their aversion to development in order to see the gains on the other side.

"There was a lot of convincing to be done, a lot of explaining, a lot of packaging up things in as positive a way as you can and demonstrating the gains. [...] but time is the big deliverer because when you begin to deliver change rather than talk about it, then [comes] the positivity, the 'Well, that wasn't too bad, was it?', and 'You gained this and you got that', and 'Turned out OK, didn't it?'. 'OK, you've got a point, yeah, it did turn out OK'." (Interview #2, Local councillor)

Since this view is offered by a local councilor this represents the more political aspect of local engagement, rather than procedural (e.g. formal community engagement activities initiated by the local authority). without more detailed observations from interviews with the local community, it is difficult to understand local sentiment and perceptions around participatory governance for the project.

Community participation: new NW Bicester Eco-Town residents

While relatively little was said about community participation, public engagement, or co-production during planning stages of the development, interviews with Bicester local councillors were more vocal about their attempts to encourage community engagement by the new residents of NW Bicester Eco Town. There was clearly a perception that the town would not work as a cohesive community without some effort being made to introduce community infrastructure and spaces for new residents to meet and engage with one another.

"For the very earliest residents, we got A2 [A2 Dominion, the housing association developer of NW Bicester Eco Town] to make one of their properties available. You called it a community house, so there was somewhere where people could meet. [...] I mean, it was just an ordinary three bed house, so it wasn't masses of room, but you know, you could get a dozen people around there and through that they did form gardening groups and that sort of thing." (Interview #3, District council official)

Interviewees made the observation that creating community infrastructure was 'not easy', and represented a coordination challenge. These reflections suggest the perception that community engagement within the new development would not happen by itself, without the right resources (including the efforts of the local authority and resources of the developer).

"we worked quite extensively with A2 and also with a group of existing local residents to set up a residents' association ... one of the things we really wanted to make sure was that that the residents' association had a balance of people on it from the market and the affordable

housing and that there was integration. Sounds really easy. It's actually quite hard" (Interview #3, District council official)

"the long-term aim was to try and find a way of the local residents being able to own and control things like community halls and green spaces going forward. But it's not an easy." (Interview #3, District council official)

10.3.4.3 (Civic perceptions of) (in)equity (distributional)

Interviews highlight two key mechanisms through which inequalities manifest in the context of the Eco-Town development. First, interviewees perceived a downshift from the ambitious principles of the national Eco-Town policy, through operational delivery constraints including the challenge of coordinating with the private sector, resulting in challenges in affordable housing delivery. This shift can be understood in the broader national context of the weakening of the public sector's ability to secure socially equitable outcomes, through developers' ability to negotiate affordable housing delivery.

Second, interviewees expressed the view that the high cost of delivering environmental principles within the development (including sustainable construction and building standards) inflated build costs and therefore ultimately housing costs, creating a form of socio-economic stratification in the town. Since building sustainably increases the price of new homes, interviewees reported that it is largely more affluent households that have been able to participate in the 'Eco-Town' model of home ownership, embedding inequality into the structure of the development.

Distributional effects of affordable housing delivery

NW Bicester Eco Town is a case of housing development in the UK where green interventions increase development costs and, as these costs are shouldered by the private rather than the public sector, place pressure on developer viability. Interviewees reported on this trade-off between greening and affordability, not insofar as the exact numbers of affordable homes delivered, but as a live issue for consideration from the operational perspective:

"we'll deliver less affordable housing because we've spent more money on the quality of what we're delivering." (Interview #3, District council official)

As identified at the national level, the private delivery model for green transition initiatives can ultimately lead to fewer social housing units being produced, as developers negotiate down their contributions to affordable housing delivery in order to recoup costs. Those interviewed for the Bicester case study expressed this perception largely in relation to watered-down aspirations for high levels of affordable housing in the new town.

These perceptions reflect a broader concern that the Eco-Town's social aspirations were diluted over time. Interviewees suggest that in this case, the potential trade-off between environmental

quality and affordability was resolved in favour of environmental provision. This aspect marks this case apart from our other cases in the UK, and in particularly in London where the developer, being a non-profit registered housing provider in the receipt of regional grant funding as well as an additional loan, was constrained in terms of affordable housing provision and required to deliver higher levels of affordable homes. While the developer for Phase 1 of NW Bicester Eco Town was also a registered housing provider, funding was linked to Eco-Town priniciples rather than affordable housing provision per se, and was more volatile due to a shifting national policy landscape and the withdrawal of Eco-Town frameworks. Ultimately, the non-profit housing provider responsible for development has withdrawn from the project and been replaced by a private developer. This opens the door to private negotiations around affordable housing delivery, with interviewees reporting a perception that private-sector delivery had weakened mechanism for delivering both environmental and social goals simultaneously.

> "we're desperate for social housing, is 10% of something better than nought percent of 30% of nothing?" (Interview #1, Local councillor)

> "So the developer [...] came along and they wanted to build, I forget about 400 houses. [...] However, on their viability studies, they argued that they could only afford, they could only put in 10% affordable housing and officers of the District Council agreed. [...] and I was absolutely infuriated by this decision." (Interview #1, Local councillor)

Distributional effects of high construction costs

Interviewees also highlighted the distributional implications of the higher build costs associated with sustainable construction and building standards, with these costs being passed directly to purchasers through elevated house prices. As a result, access to the Eco-Town was seen as contingent on relative wealth, effectively transforming sustainability into a lifestyle choice rather than a public good. Several interviewees described this as creating a form of social segregation or exclusivity, with the Eco-Town attracting newcomers with the means to "buy-in" rather than serving existing Bicester residents.

> "The houses are not cheap [...] You can buy a house the same size somewhere else in Bicester for less money, but you have less buy-in to the lifestyle that you seek. So there is a sociological thing going on here as well." (Interview #2, Local councillor)

> "[...] there was a concern that we were in effect creating a lifestyle choice for people. Well, in effect that was what was going on." (Interview #2, Local councillor)

The phrase 'lifestyle' was used consistently by interviewees to describe the distributional effects of higher housing costs in the new town. This was also expressed by interviewees as excluding existingr Bicester residents, with one interviewee noting scepticism about whether long-standing residents had benefited from the development at all. Ultimately the Eco-Town's appeal was

framed as attracting capital from elsewhere rather than providing sustainability or affordability benefits locally:

> "Did the people come from Bicester? And did they move a few 100 yards from one bit of Bicester up the road? Few." (Interview #2, Local councillor)

> "How do people feel? I think you'll still find there's skepticism within the town about whether or not they benefited from it." (Interview #3, District council official)

10.3.4.4 (Civic perceptions of) political mobilization

Interviewees' reflections on political mobilization in Bicester described mobilisation characterized primarily by opposition from segments of the pre-existing local community, and manifesting in the creation of local lobby groups and local elections. Unfortunately, our account of perceptions is limited due to having no interviewees from this members of this opposing group directly, nor with other local residents. Nevertheless our interviewees consistently framed local political mobilization as being rooted in anti-development sentiment, rather than concerns about housing inequality, environmental degradation, or access to urban amenities.

Interviewees described the emergence of a local movement, commonly referred to as "Bicester Against the Eco Town," which functioned as a focal point for community resistance. According to the local councillors interviewed, mobilisation was driven by residents who were broadly unhappy about the prospect of new housing in their area. One interviewee characterised this as a predictable reaction to development, suggesting that local dissatisfaction was an expected feature of large-scale planning proposals.

> "There were some very, very unhappy local people. That's always the case when you put a development up" (Interview #1, Local councillor)

These perceptions indicate that local opposition to the Eco Town was not understood as a response to distributional effects such as displacement, gentrification, or unequal access to housing, particularly because the eco-town was planned on greenfield land, did not require demolition of existing homes, and during initial stages held an aspiration for a (relatively) high level of affordable homes (30%). Political opposition to the development was therefore represented more as an expression of NIMBYism (Not In My Back Yard). Local residents were perceived as resistant to new development and increases in housing supply. This feature of local politics can be associated with the distributional effects of higher housing supply on local house prices, but also with a desire to preserve the existing character and scale of an area. This interpretation positions political mobilisation in Bicester within a broader pattern of local resistance to urban growth rather than a targeted critique of social or environmental equity.

Political mobilisation also manifested through formal democratic channels. Interviewees involved in local governance (local councillors) described investing significant political capital in

defending the project during local elections. They perceived that opposition groups fielded candidates explicitly to challenge pro-development councillors, although these candidates were ultimately unsuccessful.

The tone of mobilisation was described by interviewees as being highly conflictual. Interviewees recounted experiences of hostility from opponents, including aggressive behaviour and organised pressure tactics.

> "[...] they were quite noisy and quite aggressive in some of the things that [...] I was told that I was going to be...." (Interview #1, Local councillor)

> "There was, um. You know, almost a kind of like, how very dare you? You know, who the hell do you think you are? And sometimes the antipathy became semi organised, pressure group style organised, and I had to say to myself, hold on, we're getting a bit too carried away. Hold on, you know, I didn't join local government for this." (Interview #2, Local councillor)

These perceptions suggest that the development created a charged political environment in Bicester, despite being rooted in anti-development sentiment rather than structural inequalities.

10.3.4.5 Civic perceptions of) socio-ecological impacts/benefits (positive)

Interviewees consistently framed the negative impacts of the NW Bicester Eco-Town development as distributional in nature, echoing the concerns about equity outlined in Section 3.3. Interviewees framed the costs and operational constraints associated with delivering green interventions as generating uneven burdens and uneven benefits for the local community. Negative effects are framed as falling disproportionately on lower-income groups due firstly to constrained affordable housing delivery and secondly to higher house prices in the new development.

These effects can be understood not as isolated planning failures but as symptoms of broader national frameworks in which the burden of sustainability requirements – implemented without adequate support from the national level – are shifted onto developers (whether public, private or non-profit). In the case of private sector delivery in particular, viability pressures can cause developers to recoup costs by passing these on to end-users, ultimately limiting access to housing and reinforcing existing socio-economic divides.

Housing delivery

Interviewees expressed a strong perception that green interventions directly undermined the delivery of affordable housing. They believed that the additional costs associated with sustainable construction—borne by developers in the absence of national policy frameworks or central government funding—reduced scheme viability and encouraged developers to negotiate down affordable housing contributions.

As outlined in Section 3.3, the case of NW Bicester Eco Town provides an example of green interventions interacting with developer viability. In this case, interviewees perceived this as producing a pressure on affordable housing delivery. Interviewees from the local council felt that the Eco-Town had failed to meet the area's acute need for affordable housing and especially larger family homes. They described a sense that the social aspirations of the project had been "watered down" with financial recovery prioritised over social outcomes.

> "[...] we've got a shortage of affordable housing in the district ... we do have a particular problem with larger properties... the waiting list for four bed is ridiculous. We're not building enough of them. [...] there's a problem and the eco town has not dealt with that because [...] the developers want to build 1-, 2-, 3-bedroom properties for social housing rent" (Interview #2, Local councillor)

Interviews also highlight concerns that much of the housing for rent in the development was closer to commercial rent levels than truly affordable, suggesting the development has not been seen as meeting local needs. This may reflect the distinction between social rented housing and other forms of affordable rental housing available in the UK such as Shared Ownership ‚affordable' rents which are usually set at 80% of local market rents. As such, this concern would relate more to national-level housing frameworks than to the local (negative) effects of envronmental approaches to urban development. Nevertheless, these perceptions can also be seen to reflect a broader concern that despite private developers being required to shoulder the costs of green interventions, the distributional consequences are ultimately absorbed by those least able to carry them.

> "I'm not sure how much of that is actually affordable because quite most of it is commercial rent." (Interview #1, Local councillor)

The link between green interventions and affordable housing delivery is described in more detail in Section 3.7 below. The connection, whereby the cost of environmental development is shouldered by developers in the absence of grant funding, is complex and not always linear. While developers may negotiate down affordable housing contributions to rebalance viability pressures, this can also take the shape of reduced housing sizes (as indicated here), or approaches to design that allow build costs to be reduced (as indicated in the case of Islington). In the case of Bicester, interviewees showed a consistent perception that the affordability and type of homes on offer in the final development at NW Bicester Eco Town had been shaped less by what was needed in the area, than operational and commercial constraints.

Housing costs

As noted in Section 3.3 above, the high price of environmental development was perceived as having an impact on house prices, meaning only the more privileged could afford to 'buy-in' to Eco-Town home ownership. We have already noted that interviewees frequently characterized sustainability as a 'lifestyle choice' available to more affluent households, with many local residents being priced out of the development. Thus the eco-credentials of the project are

perceived to have manifested a form of social exclusion, whereby the local benefits of green development are unevenly felt.

Gaps in perception around negative effects

It seems important to note here a distinction between perceptions of negative effects as reported directly by our interviewees, and their reports about local political sentiment and objection to the development. Instead, there appeared to be a disconnect. Interviewees perceived the negative impacts of the Eco-Town as distributional – particularly regarding affordability and access as described above. Perceptions of local opposition to the Eco-Town however were not strongly linked to distributional concerns, being linked more to anti-development sentiment. This suggests that while the development generated significant distributional effects, these did not translate into a coherent or sustained political response.

10.3.4.6 (Civic perceptions of) socio-ecological impacts/harms (negative)

NW Bicester Eco Town is another example of housing development in the UK where green interventions increase development costs and, as these costs are shouldered by the private rather than the public sector, place pressure on developer viability. This model ultimately leads to fewer social housing units being produced, as developers negotiate down their contributions to affordable housing delivery in order to recoup costs. Those interviewed for the Bicester case study expressed perceptions around harmful impacts (of green intervention as part of the broader Eco Town development) as revolved mostly around watered-down aspirations for high levels of affordable housing in the new town.

> "we'll deliver less affordable housing because we've spent more money on the quality of what we're delivering." (Interview #3, District council official)

> "we're desperate for social housing, is 10% of something better than nought percent of 30% of nothing?" (Interview #1, Local councillor)

> "[...] we've got a shortage of affordable housing in the district ... we do have a particular problem with larger properties... the waiting list for four bed is ridiculous. We're not building enough of them. [...] there's a problem and the eco town has not dealt with that because [...] the developers want to build 1-, 2-, 3-bedroom properties for social housing rent" (Interview #2, Local councillor)

> "I'm not sure how much of that is actually affordable because quite most of it is commercial rent." (Interview #1, Local councillor)

The link between green interventions resulting in fewer affordable housing units is described in more detail in Section 3.7 below. This involves the cost of sustainable building being shouldered by the developer in the absence of national policy frameworks or central government funding.

This ultimately puts additional pressure on the viability of new development – with affordable housing provision being one area where developers can negotiate to reduce their costs. The connection is complex and not always linear, but interviewees showed a consistent perception that the affordability and type of homes on offer in the final development at NW Bicester had been shaped less by what was needed in the area, than by the profit requirements and commercial constraints of developers.

10.3.4.7 (Civic perceptions of) tensions and power dynamics between stakeholders/actors

Interviewees' reflections on tensions and power dynamics between stakeholders in this case can be used to contextualise the perceptions around housing inequality and the distributional impacts of green interventions in the case of Bicester, reported in previous sections of this report. The tensions reported in this case offer an insight into how these perceived effects are understood to manifest through interactions between stakeholders. In particular, this relates to the structural conditions that lead to problems in housing access and affordability at local level. This relates largely to vertical governance dynamics (the interplay of different levels of vertical governance) and the watering down of ambitious public interest principles. Firstly, these relate to national-level policy fragmentation creating uncertainty and leaving local politicians with a sense of carrying forward Eco-Town principles with limited tools. Secondly, private-sector actors operating under commercial imperatives increasingly shaped the development trajectory of NW Bicester Eco Town, at the expense of public affordability goals.

Vertical governance dynamics

The original national Eco-Town policy framework, which mandated high sustainability standards and a substantial proportion of affordable housing (30%) as Eco-Town principles, is perceived by interviewees to have gradually weakened through shifting national policy and inconsistent funding frameworks. The clear standards set out in the government's 2009 Eco Towns Planning Policy Statement included extensive green infrastructure, high-performance building standards, and shared energy systems. Interviewees felt the development was intended to be fundamentally different from conventional housing schemes, with sustainability embedded from the outset. Affordability was also seen by interviewees as a core national requirement for Eco-Town development, with national development frameworks thereby designed to secure both environmental and social objectives simultaneously. One interviewee observed that the principle of substantial affordable housing delivery had lead to an early partnership with A2 Dominion, a registered housing provider, rather than a private developer, for the site.

These perceptions clearly reflect the significance of national policy frameworks for local development frameworks and practices in the case of Bicester:

> "[…] the government published a planning policy statement on eco towns and that set out what the standards were for eco towns." (Interview #3, District council official)

"We needed to have a housing association as a partner embedded in the Eco Town concept and believing in the philosophy" (Interview #2, Local councillor)

"the policy structures were taken from the eco town principles [...]this is not an ordinary town, this is an Eco Town. (Interview #2, Local councillor)

However, interviewees perceived that national policy instability significantly undermined the Eco-Town philosophy. The Eco-Town planning guidance was abolished following national elections in 2015, leaving the local authorities (the District and Town Council) to decide whether to continue with the scheme. Local actors, particularly Cherwell District Council, were reported as attempting to preserve Eco-Town principles for the development by embedding them in supplementary planning guidance. This move was perceived as an effort to maintain continuity after an abrupt withdrawal of national support.

"[...] eco towns came in right at the end of their Labour government, so they got them in and shoved out some money, and then were out of government [...] so that political dimension actually makes it very difficult... all the policy commitment, [then] actually, rug pulled out from underneath you." (Interview #3, District council official)

In the vacuum created by the abolition of the Eco Towns framework, new frameworks were sought to maintain momentum. The District Council applied numerous development frameworks while planning for NW Bicester Eco Town, including Garden Towns, Healthy Towns, and the One Planet Living sustainability framework developed by Bioregional (a UK-based social enterprise and charity). At the local level, this may have created confusion and weakened the coherence of the development narrative. Interviewees suggested that this rebranding cycle generated mixed messages for residents and stakeholders, undermining confidence in the long-term vision.

"And of course the Conservative government then eventually had garden towns, so we just jumped on the bandwagon and took money where we could and rebadged elements of what we were doing. And then they had healthy towns, so we did the same again. But in a way, that wasn't helpful. I think for people, they'd be like, oh, last year you were telling me it was a garden town, and this year you're telling me it's a healthy town. [...] that wasn't overly helpful." (Interview #3, District council official)

"[...] when the planning policy statement was abolished, in the sort of vacuum when the government said forget the eco towns, A2 Dominion used One Planet Living, and so we carried on being involved and wanting to see it through." (Interview #5, Consultant)

One interviewee also noted the benefit that would have been brought through the establishment of a development corporation – a statutory public body that could coordinate infrastructure, funding, and long-term planning. The absence of a development corporation for this project was framed as leaving it structurally vulnerable. Without the institutional capacity associated with development corporations, development partners are understood to have lacked the power to

resolving major infrastructure questions (such as integrated education, healthcare and transport).

While the early involvement of a housing association was seen as beneficial for maintaining affordability commitments, interviewees also perceived the additional pressure of coordinating an entirely new development as placing an unsustainable burden on a non-profit organization.

> „It actually put too much pressure on A2 Dominion [...] was not a profitable, you know, being the developer who has to sort that all out is expensive... And yes, they're in business for good, but we're not a charity, we can't make a loss. Otherwise we can't pay everyone's wages and we'll go out of business everywhere." (Interview #5, Consultant)

These perceptions highlight a potential governance gap: in the absence of consistent national frameworks, consistent funding, or institutional structures designed to coordinate large-scale development projects (such as development corporations) the responsibility for delivering both housing and environmental principles fell to actors who were unable to carry the associated risk.

Shift from high principles to delivery constraints

> "All of these things start with high principle and then you have to see, yes, what is your delivery program?" (Interview #2, Local councillor)

Ultimately, the registered housing provider acting as development partner stepped away from the Eco Town project after Phase 1, and were replaced with a private developer. In terms of power dynamics between actors, Bicester therefore represents a case in which structural constraints to public and non-profit coordination of development projects has lead to private-sector coordination. Ultimately, this makes the project subject to commercial imperatives that can undermine public interest principles, such as a commitment to simultaneous environmental and social (affordability).

The concept of viability emerged repeatedly in interviewee perceptions. Developers were described as arguing that the combined demands of affordable housing, Section 106 contributions, and green infrastructure provision rendered schemes financially unworkable.

> "I completely support that we need to do stuff around biodiversity net gain. On the other hand, when you can't get a housing scheme away because either you've got to pay so much money to spend it somewhere outside the city, or you're losing chunks of land which you would otherwise develop, you think, I'm not sure we've got this right." (Interview #3, District council official)

> "Down the road, it bumps into what is known in housing delivery, as viability. "Excuse me, I've got. X hectares of land on which to provide houses and you need me to provide 30% in the affordable category and you need me to contribute my 106 [Section 106 developer

contributions to the local authority]. Oh dear, what a calamity. [...] Oh, and you want me to keep a large amount of my land a parkland, or as a wild Meadow, or as a community orchard, or as any number of stuff but not houses?" - "Yes, that's right" - "Oh, what a calamity. I don't make any profit on this model. So which of the list of things that you want are you going to give away?"" (Interview #2, Local councillor)

Interviewees perceived that sustainability requirements (such as biodiversity net gain (BNG) or the inclusion of green space) imposed significant costs, including reducing the land available for housing development and making the scheme harder to deliver. While interviewees expressed support for environmental goals they also perceived that these requirements could therefore significantly undermine affordability commitments.

"So [the] developer came along and they wanted to build, I forget about 400 houses. [...] However, on their viability studies, they argued that they could only afford, they could only put in 10% affordable housing and officers of the District Council agreed. [...] and I was absolutely infuriated by this decision." (Interview #1, Local councillor)

"Planning inspectors have weakened their enforcement of the planning policy statement for NW Bicester. I would have thought that something that was set out in law and enshrined in the planning legislation which said the eco towns will have 30% [affordable housing] would be enforced. But Oh no. [...] I was really shocked and horrified that that that they would allow this to be weakened. But you know, then you also say we're desperate for social housing, is 10% of something better than nought percent of 30% of nothing?" (Interview #1, Local councillor)

Perceptions around the distributional outcomes of NW Bicester Eco-Town – particularly associated with housing affordability – can be seen as closely tied to the interplay of national and local governance and funding structures underpinning the project. Interviewees implied that large-scale, sustainability-oriented developments require strong strategic oversight, stable policy frameworks, and robust funding mechanisms. In the absence of these, public-interest objectives became vulnerable to commercial constraints. Private-sector involvement was understood to have introduced a shift from the high-level principles of the Eco-Town concept to the constraints of viability.

10.3.4.8 (Civic perceptions of) innovative governance mechanisms

Ultimately, NW Bicester Eco Town was perceived as being a success in terms of coordinating a new town development, and in saving Bicester itself from economic drain by the creation of an entirely new town in the district. However, interviewees were not positive about the affordability of the housing nor particularly enthusiastic about the green credentials of the site. There was very little discussion in interviews around innovative governance mechanisms that had, or that could have, improved these outcomes. Indeed, interviewees mostly focused on how difficult it had been to hold on to their aspirations, given the existing mechanisms for delivery:

> "[...] we kept seeking to live up to the whole of the ecotown concept [...] Now that turned out to be extremely difficult to do in the long term." (Interview #2, Local councillor)

Perceptions around governance mechanisms and policy frameworks expressed by interviewees mostly expressed frustration that these have failed to empower local authorities and result in compromised delivery of public benefit through urban and housing development. There was a sense that local authorities were being asked to coordinate development in ways that would secure affordable housing provision and that would secure green transition initiatives, but without adequate support from central government:

> "I've seen it happen with the civil servants. They say, oh, we've got some money, we want something to happen, we'll ask the local authorities to do it because they've got some special power in MHCLG that they can bypass going through parliament. I'll just ask the local authorities to do it or give them a bit of money. But at the same time, they're having all the cuts. So, I think too much is asked and piled up on local authorities. And if they were properly resourced, of course they'd do a great job." (Interview #5, Consultant)

Interviewees suggested they felt that local authorities' limited resources and capacity left them unable to deliver adequate public benefit:

> "Housing provision, society, planning, you know, "How shall I improve the quality of life of people in this area? I know, I'll give them well insulated houses, I will provide houses for social rent, and I shall have a lot of open space that's well managed [...] and the schools will be good and life will be great... Oh, how do I do that then?" (Interview #2, Local councillor)

Overall, the interviews conveyed a picture of governance mechanisms that were experienced as limiting rather than enabling. The perceived lack of adequate resourcing, powers, and institutional support was seen as undermining the ability of local authorities to hold onto their aspirations for NW Bicester, particularly in relation to affordability. These constraints shaped interviewees' reflections on alternative governance models, including the potential role of Development Corporations.

The potential to establish of a Development Corporation was the major policy proposal to be made in relation to institutional and coordination challenges experienced with the project. This was perceived to offer stronger land assembly powers and a more unified approach to public-service integration, rather than leaving coordination to a housing association and later phases to a private developer. This perception reflects a belief that sustainability-oriented developments require strong strategic oversight, as well as stable policy frameworks.

> "This could have all been done a lot quicker if the value in the land would have gone back into making the place." (Interview #5, Consultant)

One theme here was the challenge of land ownership and land value capture, with farmers and other landowners described as holding out against land purchase in hope of higher land prices. This relates back to the structural function of land as a long-term asset in the UK. Where landowners are able to capture most of the land value, this can leave insufficient resources for infrastructure. It also leaves space for intermediary stakeholders to secure options on land, obtaining planning permission and prioritising sale for profit rather than for placemaking. It was suggested that this behaviour may have contributed to delays in infrastructure delivery and a speculative approach that did not align with Eco Town principles. The establishment of Development Corporations can mitigated these issues by securing land at appropriate values early in the process, thereby enabling land value uplift to be reinvested into the site.

10.3.4.9 (Civic perceptions of) tourism and market pressures

The population of Bicester is around 30,000 and projected to be around 55,000 by 2034, due to rapid expansion of new planned housing and employment growth (Bicester Local Cycling and Walking Infrastructure Plan, 2020). Cherwell is significantly challenged to deliver the housing required in the district, and Bicester is one of the strategic sites allocated for delivery of this housing in the Cherwell District 2015 Local Plan. Bicester has an allocation for 10626 homes, 52% of which have been granted planning permission and 15% of which have been built. NW Bicester Eco Town has the largest allocation in the area with 6000 allocations, 44% of which have been granted planning permission and 7% of which have been built (Cherwell District Housing Delivery Action Plan 2025, 2025).

However, speaking with interviewees suggested that market demand is perceived as mismatched with the higher development costs (and higher housing costs) associated with environmental development at the Eco Town site.

> “Why are people going to want to live in a in an estate which restricts car ownership, doesn't provide enough parking, and where we're having to spend more on these houses to make them of a higher energy efficiency standard than ta house that we've got to build just 2 miles down the road?” (Interview #1, Local councillor)

As such, and as reflected in Section 3.3, the Eco-Town’s appeal is framed as a ‘lifestyle choice’ attracting capital from elsewhere rather than providing sustainability or affordability benefits locally.

10.3.4.10 Gaps in Perceptions Between Civic Groups and Public Agencies

While we have sought to include a broad range of perspectives from across development partners, it was not possible to identify interviewees from amongst local residents or community organisations. However, we were able to secure interviews with two local councillors (locally elected politicians). The failure to secure interviews from local community groups represents a particular limitation for our analysis of gaps in perceptions between civic groups and public agencies. Analysis for this aspect of this case rests on reflections from the local authority and

development partners (consultants), contrasting these with reflections from local councillors, who are locally elected and therefore have some insight into the views of local residents. Nevertheless, local councillors are also connected to and work with the local authority, and therefore there are likely to be resident populations who are directly affected by redevelopment who have not had their perspectives heard for this research.

Across interviews, there is no single division between the views of local councillors (as a proxy for civic groups) and those of the local authority or their development partners. Narratives converge around Eco Town principles and the erosion of these over time due to operational delivery constraints. Both councillors and the local authority frame NW Bicester Eco Town less as a green exemplar and more as a vehicle for housing delivery and for protecting Bicester's economic primacy within the district.

One gap emerges not between councillors and the local authority, but between all our interviewees' accounts of negative, distributional impacts and their portrayal of local residents' perceptions of the harms of development. Interviewees characterise local political mobilisation in Bicester as anti-development NIMBYism, rather than rooted in concerns around equity and the districutional benefits of hosuing access and affordability. This gap highlights potential differences between the priorities of public institutions and the priorities of public individuals, in the context of this case.

10.3.5 Critical Analysis: Bicester

10.3.5.1 Have new green transition initiatives caused or exacerbated housing inequalities?

The perceptions of green transition initiative's' impact on housing inequalities is relatively straightforward in the case of NW Bicester Eco Town, and exemplifies how sustainability initiatives and housing inequalities often intersect in the broader case of the UK.

NW Bicester Eco-Town is a greenfield expansion built on formerly agricultural land, inequality here is not characterized by gentrification or displacement. There has been a net increase in housing numbers, including of affordable homes, in the area. The only impact felt in Bicester has been an effort to roll out small scale retrofit measures in the existing town, in order to encourage greater acceptance and cultural integration with the 'eco credentials' of the new town. Rather, housing inequalities are manifested through inflated housing costs and challenges to affordable housing delivery, amid rapidly growing housing demand and high house-price-to-earnings ratios in the district.

One fundamental tension between green transition activities and housing inequalities, as exemplified in this case, is viability-driven erosion of affordable housing delivery. Sustainability requirements (e.g., high energy standards, expanded green infrastructure, biodiversity net gain) intersect with developers' viability. The UK policy context is one where public legislation compels

all developers (whether public, private or non-profit) to include sustainability and affordability provision as part of their development activity, paying for these aspects of development through their own revenue streams. In the absence of public funding for sustainability initiatives, and in the absence of grant funding for affordable housing provision, developers can be compelled to negotiate reduced provision in order to improve the viability for each site. Since the UK planning context enables negotiations particularly around reducing affordable housing provision, the costs of sustainability requirements are often capitalised into schemes and then traded off against Section 106 obligations, which can lead to reduced social provision.

In practice this has enabled development to proceed with challenges to affordable housing shares, with the project becoming too expensive for the registered housing provider contracted to deliver phase 1 of the project. Subsequently, interviewees report the developer for Phase 2 of the project to have proposed viability to deliver 10% affordable housing on site. It is not clear that this is the final percentage of affordable homes to be delivered in phase 2, and a higher percentage has already been delivered in phase 1. Nevertheless, this aspect points towards the constraints of coordinating affordable housing provision alongside environmentally sustainable development in the UK.

Another key area where developers can re-coup some of the costs of provision is in the sales value of homes, which if raised can be used to cover higher costs of construction. Phase 1 of the Eco Town development is understood to command a price premium relative to comparable local stock across Bicester. Interviewees repeatedly characterise the development as a “lifestyle choice” for higher-income in-movers, skewing access to the benefits of high-performance homes, and entrenching a form of eco-exclusivity. The potential for the new town development to impact on housing inequalities in the existing town of Bicester, lies in the potential exclusion of existing Bicester residents from the development, and the growing unmet need for affordable housing locally.

Another area where the higher costs of 'green' development can impact housing outcomes is in developers' preference for smaller housing units which sell well and at a proportionally higher unit-cost. As was the case in Islington, interviewees perceived there to be a shortage of four-bedroom and larger family homes being supplied relative to need.

10.3.5.2 Key critical points defining housing justice/inequalities in the case in conversation with local/national context and histories

NW Bicester’s housing inequalities can be understood as relating to the context the UK’s national green-transition policy frameworks. The distributive outcomes observed at NW Bicester – both the viability-driven erosion of affordable housing and hosue price-mediated social exclusion – can be related to national policy frameworks for marketized development and negotiated planning gain, as outlined in the UK National Report.

NW Bicester began under the Eco-Towns PPS with a clear 30% affordable housing expectation, which Cherwell then embedded locally (Core Policy 36). Yet interviewees describe later phases involving materially reduced affordable housing proposals. We also seen from interviews how viability constraints can be exacerbated from high energy standards and green infrastructure provision. Without central government subsidy or a dedicated delivery vehicle (such as a Development Corporation), affordability targets can become soft constraints to viability at the application stage, with inspectors and officers potentially acceding to downward revisions to secure some affordable housing delivery. In short, the national system encourages ambitious goals while institutionalising their negotiation away at site level.

The national densification paradigm is also relevant in this regard. Over three decades the UK has used planning (S106), land disposal, and regulatory flexibilities to crowd in private capital to deliver public goods (including homes and green space), with social housing delivered via cross-subsidy and thus exposed to the profitability of market units. This model residualises public provision and structurally privileges private negotiation at the project level. NW Bicester's tenure mix and unit typologies (smaller, higher-margin homes; under-provision of larger social homes relative to need) reflect these systemic incentives.

This dynamic is reinforced by funding rollback at the national level. The national shift to demand side support over supply side provision for public goods, including environmental initiatives, leaves local authorities to navigate complex and costly environmental requirements without corresponding central finance.

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10.3.7 Appendix 1 – Glossary

Abbreviations

NIMBY	Not In My Back Yard
MHCLG	Ministry of Housing, Communities and Local Government

Terms and Concepts

NPPF	National Planning Policy Framework. The document produced by the UK government setting out their central planning policies for England.
NIMBYism	A tendency of residents to be opposed to new development and other land-use projects in their immediate local area, despite recognising that these are necessary for society in general.
One Planet Living	A holistic sustainability framework developed by Bioregional and WWF, and containing the following 10 principles: 1. Health and happiness, 2. Equity and local economy, 3. Culture and community, 4. Land and nature, 5. Sustainable water, 6. Local and sustainable food, 7. Travel and transport, 8. Materials and products, 9. Zero waste, and 10. Zero carbon energy.
S106 or 106	Section 106 developer contributions to the local authority.

10.3.8 Appendix 2 – Key interview data and transcripts

#	Position of Interviewee	Sector/company	Date of interview	Media
1	Local Councillor	Local Council	4-08-2025	MS Teams
2	Local Councillor	Local Council	14-08-2025	MS Teams
3	District council official	District Council	14-08-2025	MS Teams
4	Consultant	Principle sustainability consultancy	10-09-2025	MS Teams
5	Consultant	Principle sustainability consultancy	30-09-2025	MS Teams

11 APPENDIX D5.1

11.1 Appendix 1 Case Study Selection (T.51)

11.1.1 Case Study Selection Process

Each country should select:

1. The **functional urban area (FUA)**[i] **of a capital city** (except Zürich, Milan, and Barcelona). You are asked to focus on two neighborhoods/projects within the core municipality OR one initiative that is *either* city-wide *or* encompasses multiple municipalities within that same FUA.
2. **A small city** (pop. approx. 50,000-200,000) and its FUA. You will be asked to focus on two neighborhoods/projects within the core municipality OR one initiative that is *either* city-wide *or* encompasses multiple municipalities within that same FUA[ii].
3. A town that serves as the **center of a predominantly rural region**[iii] (pop. approx. 10,000-20,000), outside of a FUA. You will be asked to focus on the entire town *and/or* initiatives that encompass nearby municipalities.

As we discussed in Budapest the Spanish team finds it most useful to focus on three different locations within Catalonia, since Spain's government is organized by Autonomous Communities, the implementation of laws is decentralized, and relevant cases can be found within this same region. In cases of countries with more centralized governance structures, or due to territorial characteristics, it may be less important or possible to select cases in the same region. We leave this up to you.

We understand that this is a basic framework that may need to be adjusted based on the geographical characteristics of the countries you are studying, but for the purposes of comparability, we would ask you to conform to these criteria when possible.

11.1.1.1 Characteristics of Proposed Case Studies

Each case study should include *at least one, and preferably more*, of the following three approaches. They should ideally be underway or have been completed within the last fifteen years, though planned projects will provide useful context[iv]. Emphasis should be placed on projects framed as addressing climate change (and potentially also the increasing of biodiversity) through adaptation and/or mitigation. Projects should include planning/design interventions.

- Nature Based Solutions
- Publicly subsidized (or otherwise incentivized) residential building retrofit/refurbishment/renovation
- Densification

Suggestions

To find relevant initiatives, review websites and policy documents from municipal and/or metropolitan authorities, as well as other scales of government as necessary. You may also find resources of projects that have been funded by different scales of government (municipal, metropolitan, regional, state/province, national, EU, etc.). Focus on land use planning, housing, and environmental policy.

Some suggested keywords: green transition, just transition, energy transition, ecology/ecological, energy efficiency, green, green space, greening, density/densification, environment/environmental, nature/natural, nature based solutions, sustainable/sustainability, sustainable development, green infrastructure, renovation, retrofit, refurbishment, climate, adaptation, mitigation, renaturalization. Others will depend on language.

The previous list is non-exhaustive: there may have been other EU, national, or local initiatives to consider. Municipalities have funded—and continue to finance—green projects outside of EU frameworks, grants, and other funding schemes. Other initiatives may be driven or funded by regional or national governments. We will focus on publicly-funded schemes whether or not they operate within EU frameworks. However, we will place preference on EU funded projects when possible.

Some current EU funding schemes to focus on:

- EU Next Generation (NextGen)
- New European Bauhaus
- European Green Deal
- NetZeroCities/100 Cities

Scenarios

Each country group is to send us two or three *scenarios:*

- 3-4 different areas (or city-wide greening and retrofit processes) within the large city (assuming we will select 2)
- 2-3 small cities (assuming we will select 1)
- 2-3 rural centers (assuming we will select 1)

With each scenario, partners will identify whether it included NBS, densification, and/or retrofits with a few sentences about each location and some basic information about its profile (ex: *shrinking city, brownfield site, tense housing market, increasing second-home ownership, destination for teleworkers, rural tourist destination, etc.*); greening/green transition activities underway and/or completed; hypothesis about the relationship between these initiatives and housing inequalities.

11.1.2 Thematic Clusters

Cluster	Large City	Small City	Rural Town
1-Hard densification and NBS on brownfield/infrastructural site in municipalities under housing market pressure, nearly all with TOD component. (can perhaps divide by green-led vs. densification-led, public vs. private led, amount of new commodified/ decommodified ho using, etc.)	Spain (Sants-La Bordeta, La Marina) UK (Barking & Dagenham) Switzerland (Altstetten, Langstrasse+Gewerbe schule) Italy (Navigli + Porta Nuova) France (Batignolles, Olympic district) Austria (Nordbahnviertel) Norway (Nydalen) Poland (Powiśle/Stara Praga)	Italy (Reggio Emilia) Switzerland (St. Gallen) Norway (Stavenger)	Norway (Songdal)
2-Hard densification replacing lower-density, affordable housing	Switzerland (Altstetten) UK (Barking & Dagenham) Spain (La Marina) Austria (Innerfavoriten)	Norway (Stavenger) Switzerland (St. Gallen)	
3- Green-blue infrastructure/ renaturalization/co rridors with flood management and resilience, public space	Norway (Nydalen) Poland (Powiśle) Spain (Sants-La Bordeta, La Marina) Italy (Navigli + Porta Nuova)	Spain (Tarragona) Norway (Stavenger) Austria (Linz) UK (Blackpool)	Switzerland (Amriswil) France (Sens) Hungary (Nyírbátor)

		Italy (Reggio Emilia)	
4-Site-specific retrofit-led approach (perhaps comparing impacts relating to commodified/decommodified housing) **D=decommodified, C=commodified**	Norway (Haugenstua) D Austria (Innerfavoriten) D UK (Islington) D Hungary (11th District) C Poland (Stara Praga) C	Poland (Pabianice) D Italy (Reggio Emilia) D Austria (Linz) D UK (Blackpool) D Hungary (Veszprém) C Switzerland (St. Gallen) France (Orléans) D	Italy (Assisi) Switzerland (Amriswil)
5- Complex social regeneration/soft densification (in already built-up residential area)- not clearly led by one approach (NBS, densification, retrofit)	Austria (Innerfavoriten) Hungary (Magdolna) Poland (Stara Praga) UK (Islington) Spain (Sants-La Bordeta)		Austria (Gmunden) Spain (Olot) Poland (Poddębice) UK (Bicester) Italy (Assisi)

= site/neighborhood-specific approach

=networked/distributive NBS

The table illustrates an early thematic clustering used for case selection, though several cases were subsequently revised after preliminary fieldwork and further desk research.

11.1.2.1 Cross-Cutting Themes: Important Commonalities

Cluster	Large City	Small City	Rural Town
Tourist pressure and second homeownership impacting housi ng market in area undergoing greening initiatives	Spain (Sants-La Bordeta) Italy (Navigli + Porta Nuova)	Spain (Girona) UK (Blackpool)	Spain (Olot) Austria (Gmunden) Switzerland (Amiriswil) Norway (Alta) Italy (Assisi)
Decommodified housing (existing or new cooperative or public housing) playing a role in the dynamics of densification, NBS, and retrofit	Spain (Sants-La Bordeta, La Marina) Switzerland (Altstetten, Langstrasse+Gewerb eschule) Italy (Navigli + Porta Nuova) Norway (Haugenstua) Austria (Nordbahnviertel)	Italy (Reggio Emilia) Poland (Pabianice) Switzerland (St. Gallen)	Spain (Olot) Switzerland (Amiriswil)`

11.1.2.2 Municipality-wide Approaches (Important for WP3)

Cluster	Large City	Small City	Rural Town
Municipal retrofit policy (dispersed, though in some cases might be area-based) a good opportunity for multi-level comparison within individual countries	Spain (Barcelona) UK (Barking & Dagenham) France (Paris) Switzerland (Zurich) Norway (national) Hungary (Budapest) Austria (Vienna)	Spain (Girona) Italy (Reggio Emilia) Switzerland (St. Gallen) Hungary (Veszprém) Norway (Stavender)	Spain (Olot) France (Sens) Poland (Poddębice) Austria (Gmunden) Switzerland (Amriswil) Italy (Assisi)
Municipal climate adaptation policy/strategy/bioclimactic zoning plan or recent revision to plan to address green transition	Spain (Barcelona) France (Paris) Norway (Oslo) Italy (Milan) Austria (Vienna)	Spain (Girona) Austria (Linz) Switzerland (St. Gallen) Norway (Stavenger) Italy (Reggio Emilia)	Hungary (Nyírbátor) Italy (Assisi)

11.2 Appendix 1 – Methodological Guidance (T5.2/T5.3)

11.2.1 Overall Research Design for WP5

A total of 27 municipalities will be investigated. Qualitative case study research will take place over the period of April-December, 2025 (M14-22).

The first phase, T5.2 (mapping and analyzing the development of local green transition and related activities), will be completed between March and September, 2025, and rely on a combination of secondary data and insights from the Policy Lab 1 (WP7, March-April, 2025, M13-14).

The second phase, T5.3 (civic perceptions and mobilization for greater housing equality in the green transition) (March, 2025-December 2025 or M13-19), will include 5-10 (in rural town and in mid-sized city) and 20+ (in large city) semi-structured interviews.

11.2.1.1 Summary of outputs to be submitted for each case study

Task	Method	Output per case study	Deadline	To feed into Deliverable
T5.2	Desk research	Snapshot Reports	October 31, 2025	5.1
T5.3	Recorded interviews	Completed and transcribed interviews	Sept. 30, 2025	5.1
T5.3	Interview coding and analysis	Case study working papers (for UAB review)	January 2026	5.1
D5.1	Case Study Report	Deliverable 5.1 elaborated by UAB	February 28, 2026	

11.2.2 Research Methods and Data Collection

Each case-study will involve the following research methods:

- **Policy/document, media, and grey literature analysis** on each city/town green and housing policy, on overall greening policies (broadly focused), and on each greening project examined in interviews
- **Semi-structured interviews**

Ethical considerations: Research questions will be investigated with the help of all above methods. Before starting interviews, each team should have ethical approval from their respective institutions, provide all participants with the ReHousIn information sheet in

the appropriate language(s), and ensure that informed consent is sought for all research participants before beginning interviews and workshops. Original consent forms should be stored in a secured, locked university office, and scans of these forms should be stored on password-protected individual computers of project partners and/or on encrypted cloud storage provided by their respective institutions. Primary data will be stored on individual, password-protected computers of project partners and/or on encrypted cloud storage provided by their respective institutions, while processed data will be stored on the MRI ReHousIn Sharepoint.

11.2.3 Policy documents, media and grey literature analysis (T5.2)

Material related to green transition activities will be collected from official and semi-official sources, including policy, business and community organizations, consultancies, think tanks, newspapers, radio and television programs, blogs, social media, websites, etc.. In some cases, additional useful materials will be the recordings, transcripts, or other documentation of public hearings and plenaries, city council and committee meetings, etc.. This can provide essential context for debates around different green transition activities, as well as helping to find interviewees representing different institutions and organizations. The review of policy documents, media and grey literature should offer insight into the appropriate individuals and organizations to contact to arrange for research interviews.

Task 5.2 should be completed through the production and delivery of what we can call Snapshot Reports.

Snapshot Reports should include:

- 1,000-1,500 words (each) on the housing policy/housing inequality context for each city/town, possibly taken from analysis in WP2 and WP4 but complemented by secondary desk research to fill any gaps (especially for mid-size and small size case studies), Previous text from case study selection process may be recycled here (updated as necessary).
- 500-750 words (each) on the overall greening policies and plans in each city/town (1 on related retrofits, 1 on brownfield redevelopment/densification, 1 on NBS), possibly taken from analysis in WP3 but complemented by secondary research when needed (especially for mid-size and small size case studies)
- 1,000 words on each green initiative examined in each city/town (total 3,500-4,000 or so for all the green initiatives together), Please add a few good quality pictures for each green initiative.
- One single bibliography of the documents consulted, focusing on key aspects/insights in relation to the research themes and sub-questions

The Snapshot Reports will allow all partners to have a good understanding of which green transformations have been completed, or are underway, in each case study area, also serving to build the Context/Background section of academic papers.

11.2.4 Fieldwork + Semi-Structured Interviews (T5.3)

To access specialist expertise from key actors and organizations involved in, or effected by, green transition activities, **semi-structured key informant interviews** will be conducted, lasting approximately 60 minutes, with the possibility for follow-up interviews. Each case-study could involve interviews with the following types of actors:

- Current and former employees/officials of municipal/metropolitan authorities;
- NGO representatives;
- Community groups; neighborhood organizations, tenants' and labor unions; homeowners associations; housing cooperative assemblies;
- Political party representatives (especially if project has been subject to public debate and they have taken varied positions);
- Public and PPP urban redevelopment, regeneration, planning and housing agencies;
- Property developers and major landowners;
- Utilities (e.g. energy, water, waste);
- Academic/knowledge institutions and research groups
- Engineering, urban development, design, architecture and other involved firms;
- For retrofitting: associations representing or regulating of property managers;
- SMEs affected by land use planning changes;
- Representatives of local commercial interests, as relevant (Business Improvement Districts, commercial associations, etc.);
- Any additional organized groups who consider themselves affected by, or have taken a stance on, a particular planning process/intervention in the built environment

Special emphasis should be placed on interviewing actors from the public and non-profit sectors, as well as individuals representing community groups (which will differ in their composition and roles depending on the geographical/cultural context). If there is a debate, we want to know the terrains of conflict and dominant discourses.

In some cases, whether for lack of time or for later clarification, a follow-up interview may be conducted. *This is not considered an additional interview*, but an extension of the first.

Researchers should review appropriate documents before conducting interviews: in general, questions should not be asked if they can be reliably answered by documents produced by the organizations that interviewees represent or other reputable sources. Rather, questions may be used to deepen understanding around a theme, or to elaborate the meaning or intention behind a particular statement (in a plan, manifesto, etc.) that might be found within a document produced by the organization they represent.

11.2.4.1 Contacting Interviewees

Potential interviewees will be initially identified by the researchers by virtue of their roles within public, non-profit, and civic organizations and be initially contacted through their institutional email addresses whenever possible. They may often be identified through their role in public events, quotes in the news media, etc. All potential interviewees should ideally be contacted via email from the institutional email address of the researcher working on ReHousIn. Contacts

should be made directly by researchers on the project (as opposed to interns, students, administrative staff, etc.).

In the case that the direct email of a specific individual cannot be identified, researchers should contact the primary email of the agency/institution with a query that introduces the research (ex: contact@xyz.org). In some cases, public bodies and organizations may need to be initially contacted by an online form. It is recommended that potential contacts, their contact information, when/how/where they were contacted, if the interview was completed, and other pertinent information be kept in a spreadsheet shared between team members in a password-protected shared drive on a university server.

Follow-ups to initial emails may be by telephone to publicly listed numbers of relevant institutions, as well as contacts through social media (Ex: LinkedIn), but this should only occur following an initial attempt at email contact through formal channels. We expect research teams to use discretion based upon the professional norms of the place being studied: (ex: in Spain, WhatsApp messaging for professional purposes is common). The use of private email addresses should be avoided.

Interviews should be conducted in an appropriate local language and, to the greatest extent possible, in a neutral space, the interviewee's place of work, or when necessary, online through a password-protected video chat. It is best to avoid loud spaces (busy cafes, for example). Researchers may choose to conduct interviews in a public space under discussion (ex: a new park under analysis); if so, caution should be taken to use a windscreen on the audio recorder. Ideally, a more professional audio recorder should be used, with a smartphone as a back-up. If this approach is taken, it is essential that the core semi-structured interview questions are still followed.

In line with ethical conventions of qualitative research, special care should be taken regarding working with vulnerable populations. We expect that this issue has been suitably addressed in all respective ethical approval processes. For example, minors should not be interviewed, and those interviewed who are over 65 years of age should either continue to work professionally or represent a community organization, suggesting that these institutions consider that the individual is capable and sufficiently cognisant to consent to being interviewed.

In all cases, we should remind individual interviewees who represent a specific organization or initiative to respond *on behalf of the position of their organization*. This is one thing that distinguishes this element from the Policy Labs and Scenario Workshops, where people are responding as *individuals/themselves.* They should be encouraged to distinguish if/when they are responding based on their own individual opinions if they are distinctive from that of the institution/initiative they represent. This also reduces ethical concerns when there is a possibility that an interviewee will be responding about their own socio-economic vulnerabilities, potentially causing emotional hardship or discomfort.

We will take advantage of "snowball sampling" in the interview recruitment process: as part of the interview (or potentially via email), we should ask for suggestions for additional people to interview (see Appendix). In some cases, people contacted may suggest others within or outside their organization that they consider more appropriate. In the case that an

interviewee suggests other professionals and/or community members with relevant knowledge that might be willing to be interviewed, researchers should ask that interviewee of they are willing to make an introduction by email, using the researchers' institutional email address.

Interviews will be split, sequentially, into 4 parts:

1. The interviewer(s) should briefly introduce themself, provide the interviewee with the information sheet, allow the interviewee time to look through it and ask any questions. Once they have had a chance to ask any questions, they will be asked to complete the informed consent form. They should be reminded that they can stop the interview at any time or decline to answer any specific questions, and that they can remove themselves from the study at any time. Only once the form has been signed should recording start.
2. A brief self-introduction of the interviewee, their trajectory, and their role within the initiative/institution they represent.
3. Semi-structured questions included in the interview
4. Additional questions building upon geographically-specific questions (site, neighborhood, municipality, etc.) drawing on issues arising from documentary analysis, news media, previous interviews, and discussions arising from Policy Lab These questions should be refined based on the circumstances of each individual case study, the role of the interviewee (ex: policy maker vs. technician), and the organization they represent.

We strongly recommend that **all interviews, whether in-person or online, are digitally audio recorded,** and release forms should require the interviewee to consent to being recorded. If they refuse, detailed notes should be taken in situ and after the interview. In addition, taking good field notes and writing down reflections after the completion of the interview are an important element of collecting interview data. We strongly encourage all research teams to do so. If a discussion refers to maps, models, a landscape element, or other visual materials, it will also be useful to document these materials photographically. In this case, a smart phone should suffice. For interviews that are conducted online, interviewees should still return a signed form to interviewers (whether signed with a digital certificate or printed, signed, and scanned) to be saved with the rest of the forms. Verbal confirmation is sufficient to complete the interview, but they must be reminded to send this form upon its completion so we can file them appropriately.

Interview Tips and Pointers

If you have unfamiliar with the process of conducting semi-structured interviews, here are some suggestions:

- Before you start the interview, check the audio recorder and make sure you know how to use it, that you have enough batteries, have a smartphone and a notebook as a backup.
- Start the interview with a familiarity of the questions so that you can ask them more naturally, and make sure you have sufficiently researched the interviewee's background and the remit of the organization they represent. Do not ask

questions on the organization or position of the interviewee for which you can or already have found information online. We need to ensure we make the best use of the interview and interviewee time.

- Begin with a little bit of small talk to build rapport (but not too much!).
- Be flexible: we want to follow a general structure, but to be flexible enough to adapt and improvise in the conversation. Sometimes elements of questions will be addressed out-of-order, and that is okay.
- Interview guides are just that: a guide. You will need to balance the structure with openness, in which you allow participants to expand on topics. This may raise additional questions that you want to explore beyond the interview guide.
- For unscripted questions and when probing for more detail, make sure what you're asking are open-ended ("can you tell me a bit more about…", "how did you react to…", "can you give an example…"). Avoid questions that can be simply answered with "yes" or "no" unless they are purely to verify something.
- Try to leave pauses in case the interviewee wants to think more or elaborate; try not to interrupt. If necessary, you can try to do a follow-up interview or ask additional questions by email.
- Try not to ask "leading questions" (questions that suggests a particular answer or "puts words in the mouth" of the interviewee).
- Try not to show strong reactions to responses, try not to take an obviously adversarial or sympathetic position (this may be less possible in cases where the interviewee is known to have a clear position or social relationship with the interviewee, but try…).
- Without interrupting, politely redirect the conversation if it is digressing from the topic.
- If a sensitive topic arises or the interviewee seems uncomfortable, remind them that they can skip questions.

11.2.4.2 Interview Notes

Try to keep some notes during the interview, even if just light, on:

- Important points you want to follow up on
- Important aspects/answers that might be particularly intriguing, interesting, novel, or unexpected
- Non-verbal communication
- Unclear aspects

These brief notes should be added to the end of transcripts, which may help you towards brief 500-word interview summaries to be provided for each interview by each team.

11.2.5 Data analysis for interviews

11.2.5.1 Data transcripts and storage

Personal data collected for interview-based research may include the names, emails, phone numbers, employers, and/or work addresses of potential participants, and interviewees who

consent to participate will ideally have their voices recorded as part of the interview process, to identify their age and gender, and may identify the neighborhood where they live and/or work.

Data from interviews will be kept in the form of digital audio recordings. **Partners will transcribe the interviews in the language of the interaction and then translate the text to English**. This translation can be done using automated tools. Both the audio and transcripts of the interviews will give pseudonyms during the transcription process. A key linking the pseudonyms and the participants' real names will be saved digitally in a different, password-protected location available only to the researchers of the team conducting these interviews. Once the interview recordings are fully transcribed, the original audio should be deleted. This data is not meant to be shared beyond researchers associated with the project (only potentially with project interns or students if they sign a data use agreement).

Remember: transcribing and translation are time consuming! Manually transcribing a one-hour interview can take up to six hours. Members from the UAB team can suggest various tools that can be used for transcription, including audio-to-text AI and translation programs, though their use may be conditioned by the ethical guidelines of specific institutions or governments. Thus, their use is at the discretion of each individual team. Pseudonyms should be provided before the uploading of transcripts to any AI tools for translation.

UAB will be using the offline version of the OpenAI software Whisper, which is currently free and secure (the offline version, not the API, should be used to fulfill ethical concerns). This requires some basic coding and patience to install, but we were able to do it with little difficulty on both PC and Mac computers following instructions from ChatGPT. We have no preference on what software are used by other teams.

Transcripts should have timestamps be "cleaned" in the original language before translation, in which someone listens through once and fixes any errors (especially around proper nouns, place names, and other things AI are likely to get wrong).

There is no need to transcribe irrelevant "small talk", etc. If something is clearly superfluous or otherwise has not been included, simply explain why in the transcript with a timestamp, written in italics.

Alternatively, teams may inquire into what transcription services are available at/through their institutions, especially for languages that are less well-served by AI.

Primary data (e.g. contact lists, transcripts, and audio recordings) will be stored on password-protected individual computers and/or institutional cloud storage of project partners, while anonymized, processed data should be shared between the project partners, will be stored on the MRI Sharepoint.

Each transcript should be accompanied by a 500 word, AI-produced (if preferred) summary of the interview. If partners want to add any of their notes from each interview as part of the summary, this is encouraged.

11.2.5.2 Data coding and analysis

Data analysis will be done iteratively, where a mix of approaches will be used, in particular:

- **Thematic analysis** – using research themes and research questions identified by the overall ReHousin research project as an entry point for analysis for all cases.
- **Your own inductive coding**, based on themes arising from individual case studies/country contexts. If relevant to other cases and overlooked in original UAB coding, we can consider adding additional codes to the overall codebook in consultation with the MCB. *This should be employed to the extent that each team find its useful, it is not a requirement.*

For coding, research teams are asked to freely choose between on of the following processes for conducting the analysis an entering data into an Excel Workbook provided by UAB. Using *Atlas TI*, or *Process 2* is not obligatory, it is an alternation option to Process 1.

Pay attention to:

- Definitions;
- Relationships between themes (e.g. governance vs. financial frameworks)
- Overlapping codes (e.g., a quote may relate to multiple codes)

To start, **ensure the full transcript is ready and cleaned** and in Word format**.** Being as the codebook is in English, you would likely want to use the translated version of the interview transcript. Familiarize yourself with all of the categories and code names in the Codebook.

Start off by reading the entire transcript once *without coding*. **Highlight and/or note emerging themes and keywords, or particularly rich sections/quotes related to defined research themes/sub-themes.** Then, re-read and begin applying codes from the codebook.

- Use one or more codes per passage (a quote can reflect multiple themes/code names)
- Code **segments of meaning**, not only single words (typically 1-5 sentences)
- Try to be consistent in how you apply each code

For reference, here's an example:

"We support the city's retrofit plan, but there's nothing in it to prevent landlords from raising rents."

Apply codes:

- BuildRetrofit_Policy
- Displacement_Risk
- Equity_Inclusion_Strategies

Once coding for each transcript is completed, summarize key findings and insights, illustrated with the evidence gathered in the Excel Workbook, in the template for case-study working papers. This should be regularly updated through the process of data analysis

before the final version is created. In the “Memos & Notes” section, you may write in any doubts you have about whether/why a code should be applied, flag uncertainty for discussion, and **capture reflections that don’t neatly fit in any code**.

You may use one of two analysis processes:

Analysis Process 1

Identify specific parts f the text to ode in relation to defined/emergent themes and enter those into the provided Excel Workbook in the form of direct quotes and/or short summaries

OR

Analysis Process 2

- Use AtlasTI (or similar software) to code the transcripts/recording according to the agreed themes/codes
- Use AtlasTI to identify the coded material to be entered into the provided Excel file in the form of direct quotes and/or short summaries

11.2.5.3 Post-coding review

Review your coded transcript, with a focus on:

- Checking for consistency across similar kinds of comments
- Revising and refining any absent/misapplied codes
- Ensuring that the memos and notes flag any doubts, uncertainty, or reflections not adequately caught in the coding.

Then, **Save your final coded transcript with interviewee’s name (or pseudonym if applicable), name of coder, team, date. Ex:** Marco_Brian_UAB_May7.

With the completion of each coded transcript, enter direct quotes and short summaries in the Excel Workbook.

11.2.5.4 Refining and updating thematic codes

Throughout this process the internal validity, external validity, construct validity and reliability of the data will be tested by researchers asking themselves the following questions:

- Are you telling a convincing story? Is it really backed up well in the data?
- What alternative explanations, if any, of the results can be given?
- Have you reached your findings with integrity? Have you checked your procedures?
- Have you been systematic in your data analysis techniques and stages?
- Are there negative cases/counterfactuals that show the contrary case to the one you are making?
- Are your interpretations available for discussion?
- How do the findings impact research participants and broader social context?

We may use AI tools to identify repeated themes/keywords in transcribed interviews for consideration in revising the codebook, but coding will be a task emerging from researchers' own questions, observations, and priorities.

11.2.6 Case Study Working Papers

UAB will provide a template for this document, which should include a synthesis of the interview's outcomes per themes, after coding, and with some selected quotes, summarized and synthesized into those themes. Approx. length of working papers per case study: 12,000 words (no bibliography/references needed).

These case study working papers will be reviewed by the UAB team. Revised reports will be used as submission for the final Case Study Reports.

11.3 Appendix 3 – Interview Topic Guide

This interview guide is based upon the key topics of the case study reports on green transition initiatives and their impacts on housing inequalities (D5.1). Interviews are split into three parts: Part 1 introduces the interviewee and their role within the initiative/institution they represent. Part 2 is focused on their perceptions and analysis of specific details of green transition activities, cross-cutting themes (as relevant), and their social/political agenda. While semi-structured, **we want these questions to be asked in similar ways in all cases to have some basis for comparison**. The third part will include questions that are more specific on particular case studies (areas, in the case of the large cities) and initiatives, drawing on Snapshot Report materials, local debates, and previous interviews. These questions will be refined based on the circumstances of each individual case study/area, the role of the interviewee, and the organization they represent. *UAB therefore offers examples, but these must be tailored to the specific geographies in question.*

11.3.1 Interview A: local civic servants, planners, and representatives of quasi-governmental organizations

Part 1: Introductory Questions: Individual and Organization role (10 minutes)

-What are the key activities that [your agency/department] is involved in that focus on socially-just green transition activities?

-What are the key activities that your agency/department is involved in that focus on affordable housing provision and protection?

-What support, if any, do these activities receive from other levels of government (metropolitan, regional, national, EU, etc.)?

Part 2: Analysis of green agenda at city and neighborhood scale (10 minutes)

- What are your organization's key goals and approaches in terms of housing and/or green transition activities (retrofit, nature-based solutions and/or densification) in [neighborhood/case sites /etc.]? What are the most important benefits and values that you see in creating a greener [city name and neighborhood when relevant]?

-What are the main housing and/or green transition challenges in [case study area]? (if not covered by prior responses)

‣ Why were these approaches to greening, either NBS/Retrofits/Densification, chosen by [AGENCY NAME]? What were the most important trigger points or incentives for deciding to approach urban greening in those ways?

Part 3: Perceived impacts of green projects (30 minutes)

-What benefits do you think that green transition activities in [case study area] have had on housing and neighborhood change? What have been positive points in addressing local needs and for the most vulnerable?

- As the main greening interventions have been executed [name a few], what, if any, were the greatest challenges your [agency/department/etc.] encountered, and what were possible negative impacts or disadvantages for residents? To what extent was [public body, etc.] able to overcome them? How?

- Generally speaking, have social issues been integrated into this greening agenda? (if not covered by prior questions)

- To what extent have those projects raised community concerns or resistance (remain general here)? Which ones? Have there been other conflicts over the greening agenda that come to mind? Examples?

OR

What kinds of neighborhood, community, or other social issues have come up around NBS/Retrofits and/or densification green initiatives?

- In our field, we talk about green inequalities in reference to the undesirable social and economic impacts of green projects on the ability of long-term, often times socially vulnerable residents, to remain in place because of rising real estate prices or because those residents perceive that their neighborhood is changing for the benefits of more socially privileged groups. To what extent is this concept relevant for a place like [city name] and, in particular, with [initiative X, Y and Z, those under study]?

Part 4: Actions and Partnerships to decrease impacts (15 minutes)

-What are the current political opportunities and constraints to implementing the green transition through [X, Y and Z initiatives] while decreasing housing inequality in [case study area(s)]? What are the barriers to succeeding with your goals?

- What other (state and non-state, including industry, businesses, non-profits and civic groups) actors have been instrumental in developing this agenda and related strategies? How do your positions differ? How can they help mitigate greening-related inequalities/exclusions/displacement

- Do you see a relationship between your work and addressing issues of displacement and possible gentrification – one way or another? If yes, in which way? If not, why?

Part 5: Around 5 questions tailored to sets of initiatives under analysis (at area scale for large cities) (25 minutes)

Here it is especially important to bear in mind the cross-cutting themes if/when relevant

- Ex: What do you think the impacts of [EU NextGen, etc.] publicly funded initiatives around the green transition have been in [case study area(s)]?

-Ex. What do you think the impacts of the implementation of the new Spanish Housing Law have been in your town/city?"

- Ex. (Olot) How, if at all, has Olot's approach to housing and the green transition differed from other municipalities because of it being governed by Junts (a center-right Catalan independentist party)?

- Ex. (Tarragona) How and why has Tarragona's approach to housing and the green transition changed as a result of its government shifting from Comuns (leftist, municipalist) to PSC (center left Spanish unionist) leadership?

- Ex. (La Marina del Prat Vermell) This area has been a focal point for the construction of new public housing, but new private complexes are also well above what longstanding residents could afford and have spillover effects on housing prices. How do you try to achieve a balance between public and market-rate housing in this area?

Then summarize the key points, as if there is anything they would like to add, or if they have any final comments. Thank them for their time and insights, ask if it would be alright to follow-up with additional questions. If they haven't said so already, ask if they have suggestions/contacts for potential interviewees. **If online, remind them to send a signed copy of the consent form.**

11.3.2 Interview B: representatives of civic groups and initiatives

In this case, as these figures will be more aware of policy initiatives, debates, and challenges, we can spend a bit more time on Part 2.

Part 1: Introductory Questions: Individual and Organization role (10 minutes)

-Could you please tell us a bit about yourself and the role of [your organization/initiative] within [local area]?

- To what extent have recent environmental issues or greening been shaping your group/organization's goals/focus? What about key initiatives or campaigns related to housing and/or the green transition?

Part 2: Greening agenda and project(s) of city/town (30 minutes)

- When was the first time you heard about [particular urban greening project]? How did the project seem to you at first? How do you perceive it now?

- What do you think was the city's intention or vision behind [project name]? How do you feel about it?

- What do you think of the way it was designed and conducted [probe to understand how the planning and design process worked from their perspective]?

Part 3: Perceptions of green benefits and exclusions

-What benefits do you think that green transition activities in [case study area] have had on housing and neighborhood change? What have been positive points in addressing local needs and for the most vulnerable?

- As the main greening interventions have been executed [name a few], what, if any, were the greatest challenges [your organization] encountered in regard to possible negative impacts or disadvantages for residents? To what extent was the municipality able to overcome them? How?

- Generally speaking, have social issues been appropriately integrated into this greening agenda? (if not covered by prior questions)

- To what extent have [those projects] raised community concerns or resistance? (remain general here)? Which ones? Have there been other conflicts over the greening agenda that come to mind? Examples?

OR

- What kinds of neighborhood, community, or other social issues have come up around NBS/Retrofits and/or densification green initiatives?

-In our field, we talk about green inequalities in reference to the undesirable social and economic impacts of green projects on the ability of long-term, often times socially vulnerable residents, to remain in place because of rising real estate prices or because those residents perceive that their neighborhood is changing for the benefits of more socially privileged groups. To what extent is this word/process relevant for a place like [city name] and in particular with initiative X, Y and Z (those under study)?

Part 4 Actions and Partnerships to decrease impacts (15 minutes)

‣ What have been, if any, interesting tools/policies/decisions taken by public authorities to make (X project) more inclusive or make sure it also benefits more socially vulnerable residents?

‣ How do you perceive the neighborhood quality of life now, especially considering these/this new urban greening project? What about housing prices? Housing affordability?

‣ What have been, if any, interesting tools/policies/decisions taken by the City to respond to concerns about housing affordability [or other concerns related to GG]?

‣ What do you consider are important tools/policies/decisions to achieve a more environmentally just [neighborhood]? If you could change any current policy, what would it be?

Part 5: Questions tailored to particular initiatives under analysis (at area scale for large cities) (20 minutes)

-Ex. (Tarragona) What do you think the impacts of the implementation of the new Spanish Housing Law have been in [town/city]?"

-Ex. (Tarragona) The need for planning reform has been a challenge to building new public housing in Tarragona, what do you think needs to happen?

-Ex. (Tarragona) What impacts do you expect the renaturalization of the Francolí River and increased connections across the river will have on housing inequalities in the city? Might it already have contributed some impacts as it was announced already?

-Ex. (Tarragona and Olot) How has the tourist economy impacted housing inequalities in _____, and what could be done about it?

- Ex. (Olot) What impacts have previous EU-funding greening initiatives (x,y,z) had on the town?

- Ex: (Olot) How do you think that migrant farmworkers could be provided more adequate housing in the town? How has their presence impacted the overall housing provision in the town?

- Ex. (La Marina del Prat Vermell) Is new housing development in the area driving residential displacement, even though the area was previously zoned for industrial uses? What surrounding areas are most impacted by this?

- Ex. (La Marina del Prat Vermell) In what ways will longstanding residents of the surrounding area benefit from the new facilities and greenspaces created in La Marina del Prat Vermell? Who will benefit and who will potentially be impacted badly?

- Ex: (Can Batlló): How did the 2020 Catalan rent control law being in place impact the negotiations between activists and the city hall in terms of creating the park and facilities on the site? Had you known this law would be overturned, would tactics have been different?

- Ex: (Can Battló): Could you please explain the current conflicts between activists and the city hall, housing cooperatives, and any other pertinent actors?

- Ex: (Can Battló): What are the tensions between members of the Can Batlló platform who focus on anarchist action and those involved with publicly-funded cooperative housing and green transition activities? How is this navigated within the self-management commission?

Then summarize the key points, as if there is anything they would like to add, or if they have any final comments. Thank them for their time and insights, ask if it would be alright to follow-up with additional questions. If they haven't said so already, ask if they have suggestions/contacts for potential interviewees.

11.3.3 Interview C: Semi-structured interviews with experts

This will be a less formal and structured form of interview which will be tailored to the experts' work as a researcher/consultant:

-Could you please tell us a bit about yourself and your research as it relates to

[green transition and/or housing inequalities] in [neighborhood/municipality/region/etc.]?

-Is/was your research funded by an institution (public body, institution, private body, etc.)?

-Have you played a role in shaping policy through your research or consulting work? If so, what has been that role?

-Have you played a role in contributing to civic or political initiatives related to your research or consulting work? If so, what has been that role?

-What impact do you think that green transition activities in [neighborhood/town/city,etc] have had on housing and neighborhood change?

- Which groups have been mainly affected and profiting from the initiatives? Is there any group of residents that may have been disadvantaged?

-In your professional opinion, what has been done right, and what could have been done better, in green transition activities in [town/city/neighborhood, etc.]?

-What are the current political opportunities and constraints to implementing the green transition while decreasing housing inequality in [town/city/neighborhood, etc.]?

-(If relevant) Based on your research, what do you think the impacts have been of publicly funded initiatives around the green transition and/or affordable housing in your local area?

-Any suggestions on specific trends, studies, or data we should be conscious of in our project?

If relevant, more questions tailored to local case study context.

Then summarize the key points, as if there is anything they would like to add, or if they have any final comments. Thank them for their time and insights, ask if it would be alright to follow-up with additional questions. If they haven't said so already, ask if they have suggestions/contacts for potential interviewees.

11.3.4 Informed Consent Form-Interviews

Project title

ReHousIn: Contextualized pathways to Reduce Housing Inequalities in the green and digital transition (Horizon Europe Grant Agreement 101132540)

Short description

The project "Reducing Housing Inequalities in the Green and Digital Transition" (ReHousIn) seeks to understand the impact of recent crises on housing inequalities across Europe, with a focus on how the European Union's green transition affects these disparities. It aims to explore the mechanisms driving the (re)production of housing inequalities in different national contexts and varying degrees of urbanization. ReHousIn examines how the green transition may exacerbate existing inequalities and investigates pathways for fostering inclusive local housing initiatives.

Through a multi-level and comparative analysis, ReHousIn will focus on nine European countries—Austria, France, Hungary, Italy, Norway, Poland, Spain, Switzerland, and the United Kingdom. It will analyze metropolitan regions, middle-sized cities, and rural areas, using a mixed-methods approach. This includes quantitative data analysis to identify recent trends in housing inequalities and their links to crisis, as well as qualitative research on environmental policy and housing system through national level analysis followed by 27 local case-studies.

These studies will explore the influence of housing systems, welfare regimes, and environmental policies on local housing inequalities. ReHousIn aims to generate insights into how local communities can develop inclusive housing initiatives in response to challenges posed by the green transition. Policy recommendations will be formulated through policy labs, aiming to mitigate the negative social impacts of the EU's green transition at various governance levels: EU, national, and local.

How long will the project last?

The project started on 1 March 2024 and will last until 28 February 2027 (36 months).

Project Lead researcher (name and e-mail address): *Dr. Brian Rosa- brian.rosa@uab.cat*

Institution: *Universitat Autònoma de Barcelona*

Duration: Interviews will take approximately 40-60 minutes. You may be contacted for a follow-up interview at a later date.

What would you be asked to do if you took part?

You will be asked about your knowledge and perceptions of local green transition initiatives, such as nature-based solutions, building retrofits, and densification, and how they have impacted housing inequalities in your area. We would also like to know your thoughts on how these initiatives might influence housing justice in the future, considering the political and financial opportunities and constraints at the local level.

What happens to the information you have given and how confidentiality is secured?

All the information you provide will be used for research purposes (e.g., scientific papers, policy recommendations). We will store your personal data (name, address, phone number, email address, etc.) only to stay in contact with you during the project's duration. We are required to store this information for seven years after the project ends, after which it will be deleted. The information you provide will be handled in accordance with your consent, including any potential quotes referring to your name, institution, or field of expertise.

At the end of the information sheet, you can give (or withhold) consent for us to use photos or videos of you. You can change your decision at any time, requesting either anonymization (e.g., pixelation techniques to make you unrecognizable) or removal of pictures in which you appear. Please note that some visual materials may remain online in the future, so we kindly ask you to consider your decision carefully regarding this matter.

You can withdraw from the study at any time without giving explanations and with no negative consequences: just by letting us know through any communication channel. As well as this, you can exercise your rights under the European General Data Protection Regulation by making a request to *Brian Rosa (brian.rosa@uab.cat)*. Request forms for this purpose are available on the website of the UAB Data Protection Office (https://www.uab.cat/web/coneix-la-uab/itineraris/proteccio-de-dades/drets-de-les-persones-interessades-1345764799916.html).

In all cases you will receive a written response within the legal time limit, stating what action has been taken.

Will you be paid for the research?

You will not be paid for your participation in this project.

Contact for further information

For further information, feel free to contact the *Institute for Environmental Science and Technology at the Universitat Autònoma de Barcelona* through the telephone number *+34 935 86 83 85* or the email address *brian.rosa@uab.cat*, or the leader of the project in Budapest, Hungary (Iván Tosics, tosics@mri.hu).

If you are happy to participate, please complete and sign the consent form below. Please initial the box next to each statement that you feel comfortable with; you do not have to agree to all the statements.

	Initials
1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.	
2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason.	
3. I understand that the interviews will be audio-recorded	
4. I agree to the use of my quotes without using my name	
5. Alternatively: I agree that my real name can be used for quotes	
6. I agree that any data collected may be passed to other researchers without my identifications (name, address)	
7. I agree to have photos/video of me used in research presentations/publications	
8. Alternatively: I agree to have photos/video of me used in research presentations/publications if it is pixilated or otherwise altered to avoid revealing my identity	
9. I give permission that the pseudonymised data I provide can be archived in the Universitat Autònoma de Barcelona repository so it can be used for future research and learning.	
10. I would like to be informed about the results of this study..	

The research process may only continue on in case the consent is given to at least points 1, 2, 6, 9. In case other restrictions are noted, these restrictions must be kept.

I agree to take part in the above project.

Full name of the participant _____

Signature _____

Place and Date: _____

11.4 Appendix 4 – Code Book

A codebook was provided for review on May 2, 2025 . Following the first stage of data collection (May, 2025), UAB arranged meetings to update the codebook. This process served the following objectives:

- Refining the initial categories (deductive reasoning);
- Checking whether the process works well across all countries/cases;
- Adding new categories, in function of concepts/issues/discussion emerging in the data (inductive reasoning); and
- Clarifying doubts and any queries that have been emerging along the way.

CATEGORY	SUBCODES	NOTES/GUIDANCE	EXAMPLE
HISTORY & IMPLEMENTATION	early development timeline	Focus on how/why projects (NBS, retrofit, densification) began and evolved.	The project started as a pilot back in 2010, long before the green transition became a major policy goal.
	triggers or catalysts for action		It was the flood in 2015 that really pushed the municipality to act on green infrastructure.
	role of pilot or legacy projects		They built on lessons from an earlier retrofit initiative in a nearby district.
PARTICIPATION & GOVERNANCE	quality of consultation/participation process	Includes both formal governance and public participation experiences.	We had three community meetings, but none of our suggestions made it into the final plan.
	impacts of policy/legal frameworks		Changes in regional zoning laws made it easier for developers to bypass local input.
	civic inclusion/exclusion		Only the homeowners were invited to participate - renters didn't get a say.
(IN)JUSTICE & (IN)EQUITY		Use when interviewees speak about who benefits/loses from the projects.	It felt like they cared more about aesthetics than solving our housing needs.
	distribution of benefits and burdens		The new park is nice, but its mostly used by newcomers with kids - not by the long-time residents.
	effects on vulnerable groups		My grandmother had to move out because the rent doubled after renovation.

POLITICAL MOBILIZATION	protests and/or campaigns	From both activist and institutional actors.	There were weekly marches to demand that the green space stay open-access and not privatized.
	neighborhood advocacy		The local association pushed hard for affordable housing in the new developments.
	mobilization around housing rights		We created a tenant union to fight the evictions tied to the retrofit program.
	mobilization around environmental themes		
SOCIAL IMPACTS - POSITIVE	improved housing accessibility	Focus on what residents gained.	Finally, my daughter could apply for cooperative housing here - something she couldn't afford before.
	green space and/or service upgrades		Now we have trees, benches, and shaded areas wehre there was just concrete before.
	improved health/social wellbeing		With the new green areas, my asthma's been much better, theres less dust and traffic.
SOCIAL IMPACTS - NEGATIVE	gentrification- displacement or pricing out	Captures gentrification, exclusion, etc.	since the development started, I can't afford to renew my lease - its becoming luxury housing.
	construction disruption		We had noise from 7am for over a year and it affected our shops customers.
	reduced housing accessibility		They removed the old ramp, so now people with mobility issues can't use the entrance.

CONTRADICTIONS & TENSIONS	conflicting goals (e.g. green vs. affordable)	Look for contradictions within narratives.	They platnted trees but tore down affordable housing to do it - how is that sustainable?
	disputes between actors		The housing co-ops and city planners couldn't agree on how much of the land should be green.
	mixed or unclear messaging		First they said it was for social housing, then they marketed it was 'eco-luxury living'.
STAKEHOLDERS &DYNAMICS	role of NGO or co-ops	Good for mapping actors and power.	The co-op was the only one pushing for truly inclusive planning meetings.
	institutional coordination or conflict		The city and regional authority kept blaming each other for the project delays.
	private sector influence		Developers had more say than the community - they even dictated which trees would be planted.
TOOLS & INNOVATIONS	public-private and public - commons/co-op models	Record mentions of tangible policy or planning tools.	Thanks to the cession-of-use-model, we finally got long-term affordable housing.
	green building and retrofit techniques		The retrofitted buildings now use 60% less energy - its amazing.
	legal/policy instruments for housing security		The rent cap really helped us stay in our homes during construction.

TOURISM/MARKET PRESSURES	short-term rentals/AirBnB	Especially. but not only, when green projects accelerate these dynamics.	All of the new flats are being listen on AirBnB.- not a single one is for locals.
	second/holiday home pressures		Pepople buy homes here just for vacation - we only see them during summer.
	market speculation/financialization		Real estate prices doubled in ayear, and all because of that new 'green corridor'.