



REDUCING  
HOUSING  
INEQUALITIES



## Case Study Working Paper: WARSAW (POLAND)

An extract from Deliverable 5.1, 'Case study reports on green transition initiatives and their impact on housing inequalities,' of the ReHousIn project

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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

## 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 km<sup>2</sup> 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.

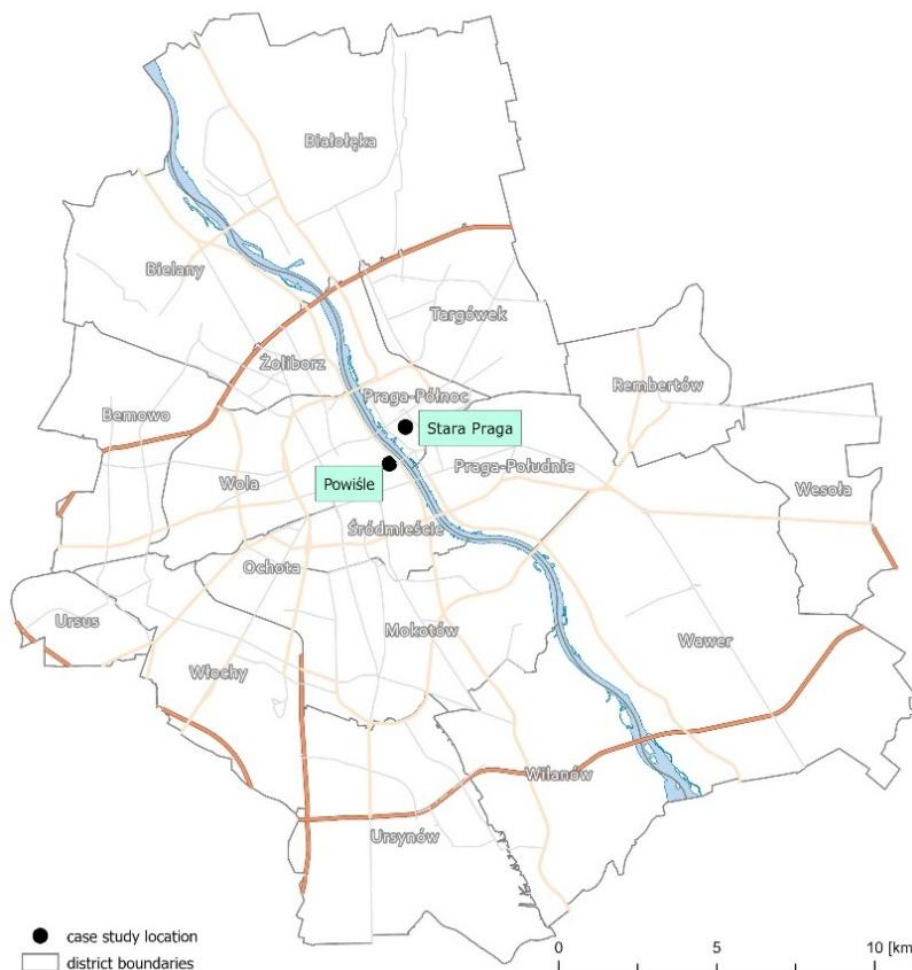


Figure 1: Location of case studies in the context of Warsaw's road network. Source: own elaboration based on BDOT10k spatial data (<https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/> accessed on 13-01-2026).

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 km<sup>2</sup>, 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.

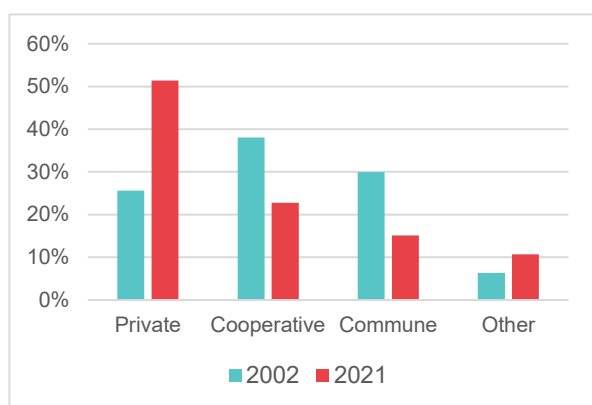
Warsaw operates under a two-tier governance system comprising central city authorities and district governments. Executive power rests with the mayor, while the City Council functions as the legislative and supervisory body. Districts implement delegated tasks in areas such as local services, housing 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 m<sup>2</sup>, the usable floor area per capita nearly doubled to 34.5 m<sup>2</sup>, and

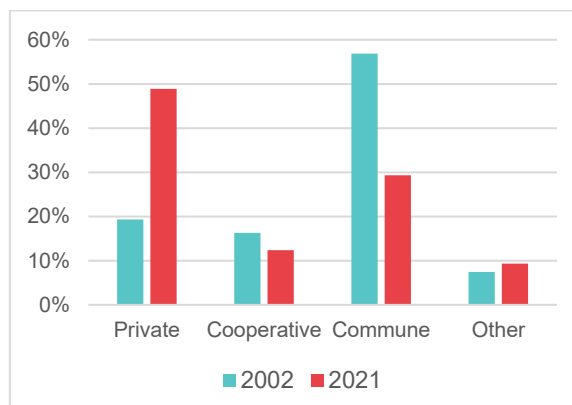
access to basic utilities is almost universal. More than 90 % of the housing stock was built after the Second World War, and nearly half after 1990. Over the past 15 years alone, approximately 250,000 dwellings have been completed, representing nearly one quarter of the current stock.

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 m<sup>2</sup>. 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<sup>1</sup>.



*Figure 2 Housing structure in 2002 and 2021 in Powiśle. Source: own elaboration based on Census Data.*



*Figure 3 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).

<sup>1</sup> 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.

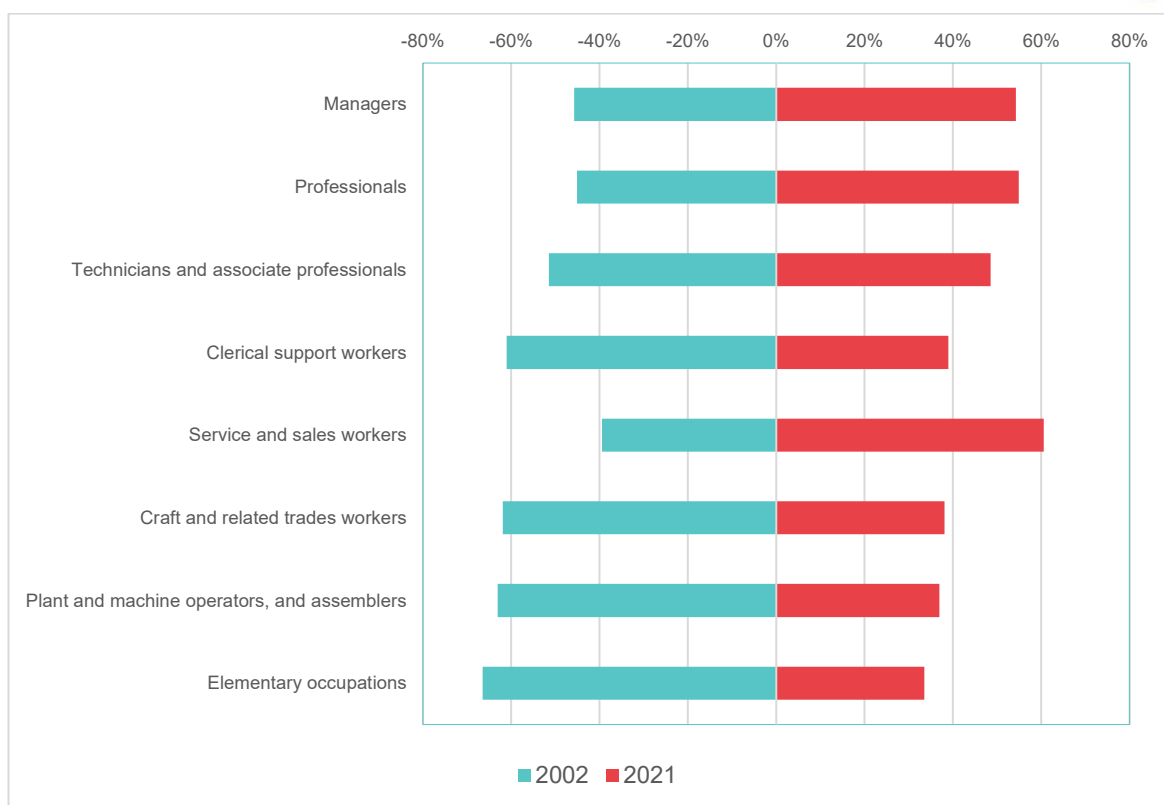


Figure 4 Socio-professional structure in 2002 and 2021 in Powiśle. Source: own elaboration based on Census Data.



Figure 5 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.

## 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 19<sup>th</sup> and early 20<sup>th</sup> 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.

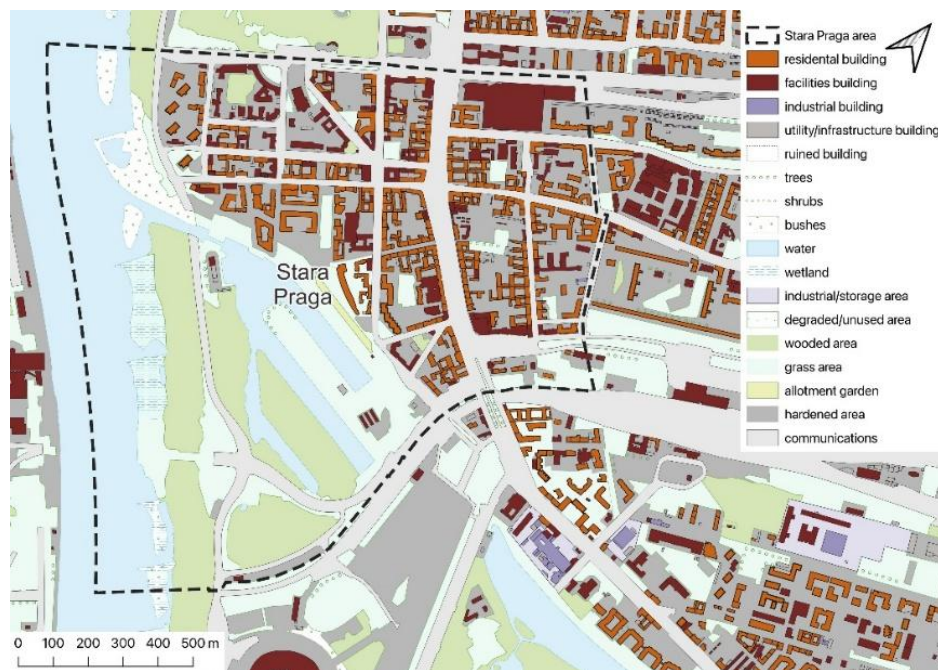


Figure 6: The land use in Stara Praga. Source: own elaboration based on BDOT10k spatial data (<https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/> accessed on 13-01-2026).

Since the early 21<sup>st</sup> 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 7: 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 8: 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 19<sup>th</sup> and early 20<sup>th</sup> 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 20<sup>th</sup> and early 21<sup>st</sup> 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).

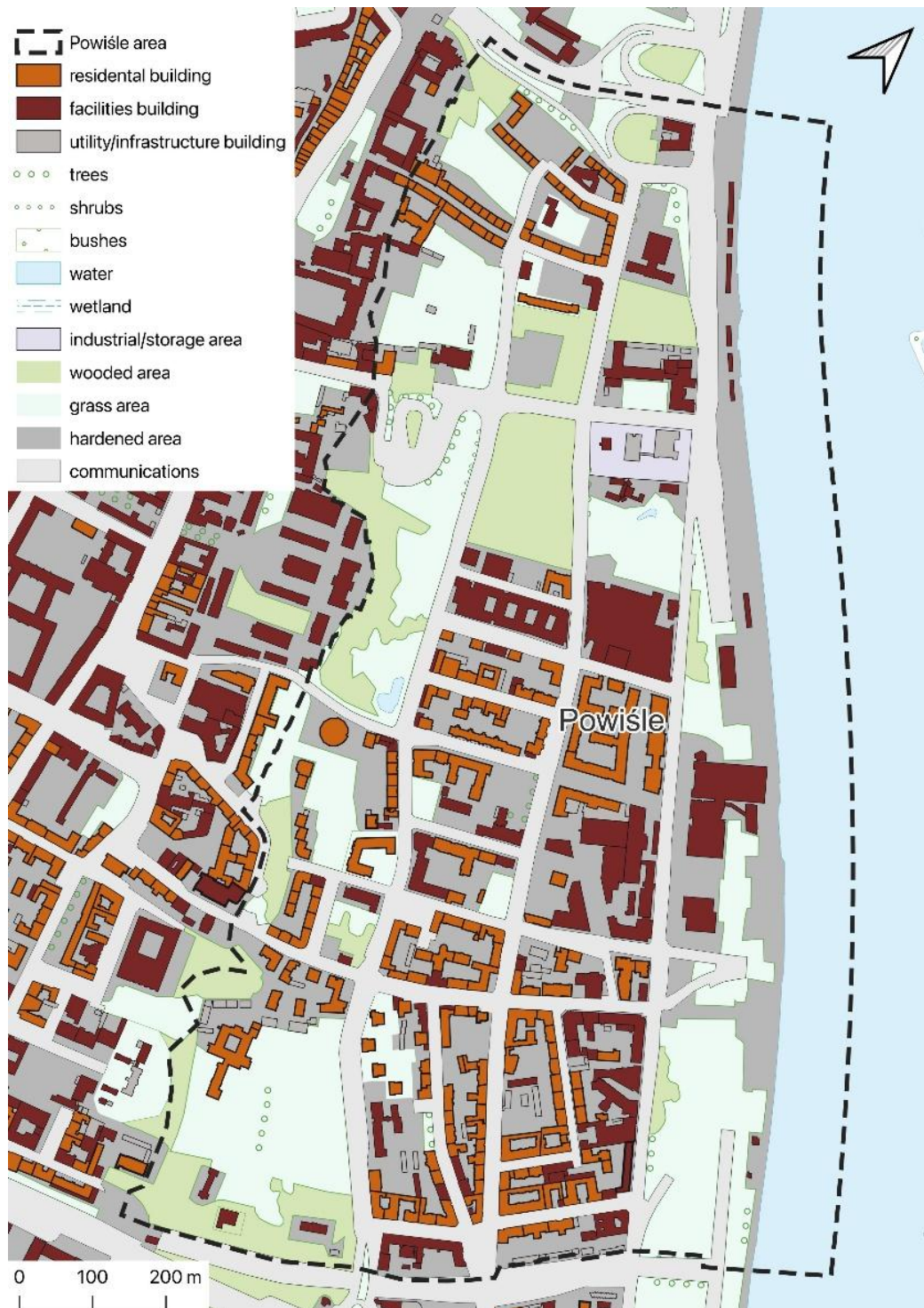


Figure 9 : The land use in Powiśle. Source: own elaboration based on BDOT10k spatial data (<https://www.geoportal.gov.pl/en/data/topographic-objects-database-bdot10k/> accessed on 13-01-2026).

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 10: Vistula Boulevards in Powiśle. Source: The Office of Warsaw (accessed on 13-01-2026: <https://go2warsaw.pl/bulwary-nad-wisla/>).*



*Figure 11: 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-universytetu-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/km <sup>2</sup> .	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/km <sup>2</sup> .
Duration	Intensive revitalisation since around 2010, based on the <i>Integrated Revitalization Programme 2016–2022</i> and continued in the <i>Municipal Revitalization Programme</i> ; 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.

	<b>STARA PRAGA</b>	<b>POWIŚLE</b>
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.

## 2 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.

## 3 Civic Perceptions of Green Initiatives in Case Study Areas: Stara Praga

### 3.1 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*)

### 3.2 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<sup>2</sup> 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)

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)

<sup>2</sup> pl. Zakład Gospodarowania Nieruchomościami m.st. Warszawy (ZGN)

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<sup>3</sup>, 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*)

### 3.3 (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

<sup>3</sup> 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.

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

„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)

### 3.4 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*)

### 3.5 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)

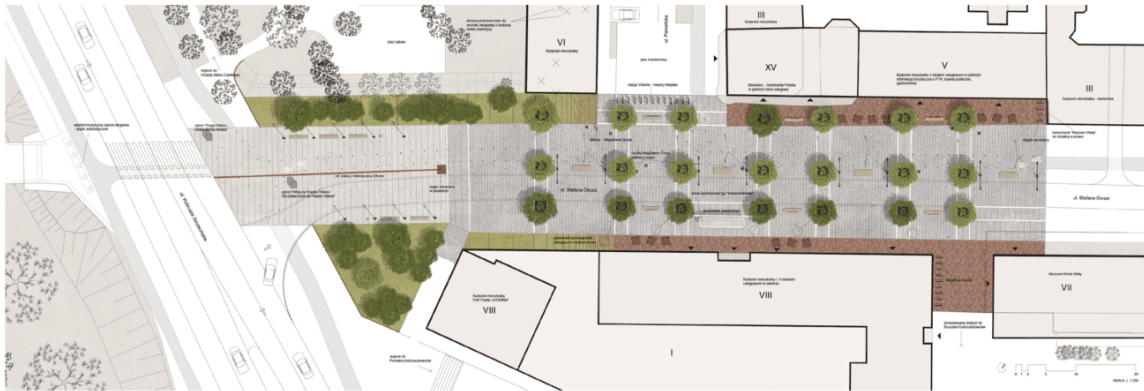


Figure 12: Architectural, urban and functional project for the reconstruction of Stefana Okrzeja Street. Source: The City Office of Warsaw (accessed on 13-01-2026: <https://pragapn.um.warszawa.pl/-ulica-okrzei-w-nowej-odslonie>).

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 Kępną 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)*

### 3.6 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*)

### 3.7 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)

### 3.8 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)

### 3.9 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)

### 3.10 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.

## 4 Civic Perceptions of Green Initiatives in Case Study Areas: Powiśle

### 4.1 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 13: 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>).

## 4.2 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.

### 4.3 (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*)

#### 4.4 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<sup>4</sup>. City

<sup>4</sup> 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\\_scsfBEFgewzqGV0oGIFn?utm\\_source=chatgpt.com](https://www.rdc.pl/aktualnosci/warszawa/powisle-czerniakowska-spoldzielnia-nowy-blok_scsfBEFgewzqGV0oGIFn?utm_source=chatgpt.com) - accessed on 29.01.2026)

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, 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.

#### 4.5 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)

#### 4.6 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.

#### 4.7 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*)

## 4.8 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<sup>5</sup> 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

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<sup>5</sup> The apartments are located in the newly constructed TBS buildings.

in urban management is the implementation of planning practices that go beyond the mandatory regulatory minimum. Planning documents specify a biologically active area index<sup>6</sup>, 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)

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.

## 4.9 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.

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<sup>6</sup> 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.

“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.

## 4.10 Gaps in perceptions between civic groups and public agencies

Powisłe, 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 Powisłe'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.

## 5 Critical Analysis: Warsaw

### 5.1 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.

## **5.2 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<sup>7</sup> 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).

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<sup>7</sup> 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.

- 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.
- 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.

### **5.3 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.

## 5.4 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.

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## Appendix 1 – Glossary

### Abbreviations

AI	Artificial Intelligence
BGK	Polish Development Bank (pl. <i>Bank Gospodarstwa Krajowego</i> )
BUW	University of Warsaw Library (pl. <i>Biblioteka Uniwersytetu Warszawskiego</i> )
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. <i>Spółeczna Agencja Najmu</i> )
SIM	Social Housing Initiative (pl. <i>Spółeczna Inicjatywa Mieszkaniowa</i> )
TBS	Social Housing Association (pl. <i>Towarzystwo Budownictwa Społecznego</i> )
ZGN	Warsaw Real Estate Management Department (pl. <i>Zakład Gospodarowania Nieruchomościami m.st. Warszawy</i> )

### 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.

## 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

## Appendix 3 – Visuals



Figure 14: The frontage of the new Port Praga housing estate. Source: T. Mikołajczyk (20-11-2025).



Figure 15: Development in the new Port Praga estate. Source: T. Mikołajczyk (20-11-2025).



Figure 16: Buildings before and after modernisation - Brzeska Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).



Figure 17: Historic buildings of Stara Praga – Brzeska Street. Source: T. Mikołajczyk (20-11-2025).



*Figure 18: Frontage of buildings on Targowa Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).*



*Figure 19: Frontage of buildings on Brzeska Street in Stara Praga. Source: T. Mikołajczyk (20-11-2025).*