

FINAL REPORT

ENSURE – Slovakia spin-off

Challenges and opportunities for urban brownfield
regeneration

Final Report// April 2022

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Coordination

Michaela Gensheimer, Caroline Clause, ESPON EGTC (Luxembourg)

Outreach

Nikos Lampropoulos, ESPON EGTC (Luxembourg)

Authors

Xavier Le Den, Lorraine Mazur and Damiano Ravera

Ramboll Management Consulting Belgium

Advisory group

Lucia Pospíšková, Jana Ondrejmišková and Veronika Reháková

Ministry of Transport and Construction of the Slovak Republic

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This document is a final report.

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The final version of the report will be published as soon as approved.

Table of content

| | |
|--|-----------|
| List of maps, figures, charts, and tables | 6 |
| Introduction | 7 |
| 1 Review of the specific policy and planning context in Slovakia for urban brownfield regeneration | 8 |
| 1.1 Structural changes from 1989 to nowadays..... | 8 |
| 1.2 Legal and institutional context..... | 8 |
| 1.2.1 At national level, the Urban Development Policy Framework provides guidelines and orientations..... | 8 |
| 1.2.2 ... applied and adapted at regional and local level..... | 9 |
| 1.3 State of knowledge and initiatives regarding brownfields' regeneration in Slovakia | 10 |
| 1.3.1 National and local studies compiling an inventory of brownfields..... | 10 |
| 1.3.2 Innovative (and often EU-driven) initiatives welcomed by local stakeholders | 13 |
| 1.3.3 A diverse range of national and local stakeholders willing to redevelop urban brownfields | 15 |
| 2 Analysis of challenges in urban brownfields regeneration and ways to address them..... | 16 |
| 2.1 Multi-scale and interlinked obstacles to brownfield redevelopment..... | 16 |
| 2.2 The need for integrated policies and planning methods..... | 17 |
| 3 Annex 1: Case study analysis of four urban brownfields regenerations in Europe.. | 19 |
| 4 Annex 2: A step-by-step guide | 20 |
| 5 Annex 3: Analysis of a survey conducted among Slovak municipalities..... | 21 |
| List of references | 24 |

List of maps, figures, charts, and tables

List of maps

| | |
|---|----|
| Map 1. Four European case studies selected for the scope of this analysis | 19 |
|---|----|

List of figures

| | |
|--|----|
| Figure 1 Timeline of relevant legislation in the sector of spatial planning in Slovakia | 10 |
| Figure 2 Timeline of the most relevant initiatives and studies involving Slovak cities, in the field of brownfield regeneration | 15 |
| Figure 3. Challenges for brownfield regeneration | 17 |

List of tables

| | |
|---|----|
| Table 1. Former use of mapped brownfields in Slovakia (as of April 2022). | 11 |
| Table 2. Ownership of mapped brownfields in Slovakia (as of April 2022) | 11 |
| Table 3. Contamination level of mapped brownfields in Slovakia (as of April 2022) | 12 |
| Table 4. Degradation level of mapped brownfields in Slovakia (as of April 2022)..... | 12 |
| Table 5. Size of mapped brownfields in Slovakia (as of April 2022)..... | 12 |

Introduction

According to CABERNET¹ (Concerted Action on Brownfield and Economic Regeneration Network) brownfields are areas and buildings that have all the following features:

- They are affected by a previous function
- They are derelict or underused
- They have real (or perceived) contamination problems
- They are located in built-up urbanised areas
- They require intervention from the external environment

Brownfields are the object of a double and contrasting perception. They often convey an image of abandonment and decay, negatively affecting the surrounding area and the urban landscape. However, they are acknowledged for their potential to achieve sustainable urban development. The regeneration of unused, underused, or abandoned areas and buildings can limit investments in greenfield and prevent urban sprawl. Through a balanced densification, oriented towards brownfield re-use, negative environmental, social, and economic effects such as soil sealing, loss of agricultural land, higher costs of infrastructure and transport-related emissions can be mitigated. Moreover, brownfield valorisation can remediate contamination, bring new investments, and strengthen the local identity through the re-discovery of the historic heritage (factories, public infrastructures...).

At the European level, there is a raising interest in brownfield regeneration as driver of sustainable urbanisation. Sustainable use of land has been acknowledged as a crucial condition contributing to the achievement of a climate-neutral EU by 2050, as drew up by the European Commission in compliance with the Paris Agreement. In this regard, ESPON has already supported research and knowledge building on the topic, notably through the SUPER (Sustainable Urbanization and land-use Practices in European Regions) and ENSURE (European Sustainable Urbanisation through port city Regeneration) projects. These reflections have been partially seized by Slovak national policies, and the new Operational Programme for the programming period 2021-2027 is expected to highlight the importance of brownfields (notably those located in central urban areas) transformation through sustainable innovative interventions. In Slovakia, the high presence of brownfields has become a raising concern. Although the national government is aware of the issue and some municipalities have carried out interesting implementation and research project, there is still a general lack of knowledge on the number, localisation, and potential of brownfields.

The project ENSURE/Slovakia is a crucial opportunity to give a new impulsion on the issue of brownfield and to establish a link between the European recommendations setting a target of no net land take by 2050 ([Land use and forestry regulation for 2021-2030](#)) and further policies in Slovakia, at both national and local level. In this report, we will highlight the main historical aspects explaining the presence of brownfields in Slovakian municipalities and analyse the current legislation in terms of spatial planning, through official documentation and interviews with local stakeholders. At a later stage, we will investigate the main challenges regarding brownfield regeneration and ways to tackle them. The analysis of four good practice case studies from different European countries will possibly inspire Slovak municipalities and practitioners. Lastly, based on these elements, we will elaborate recommendations for local and regional stakeholders in Slovakia on how to deal with urban brownfields.

¹ Oliver L. et al. (2005). The scale and nature of European brownfields. *CABERNET*

1 Review of the specific policy and planning context in Slovakia for urban brownfield regeneration

1.1 Structural changes from 1989 to nowadays

Since the end of the socialist regime in 1989, spatial planning policy in Slovakia has undergone drastic structural changes. In particular, three main trends have progressively emerged. On the one hand, **a reform of the public administration** was implemented, aiming to overcome the centralist model that had characterised countries of the Eastern bloc. Through this decentralisation process, which occurred between 2002 and 2005, responsibilities and powers were transferred from Ministries to local and regional governments. Spatial planning, intended as the use and organisation of territory, was among the delegated competences.

On the other hand, **the ownership structure of immovable property radically changed** in favour of private ownership, as a condition for the development of the property market. Consequently, private investments in real-estate arose, and people started to be more concerned about their quality of life, shifting towards suburban lifestyles. The construction of single-family dwellings and commercial parks led to an enormous **growth of urbanised areas**. Only between 1994 and 2007, built-up areas increased by 77%², despite a stable population dynamic. However, this upheaval has not been accompanied by an effective regulation by the public sector, and nowadays the uncontrolled privatisation of immovable property is seen by municipalities as an obstacle for further public-led interventions, also due to unclear and fragmented ownership structures.

These changes (decentralisation, privatisation, and suburbanisation), within the context of economic transition from socialist to capitalist regime, leading to a decrease in the number of industrial, military, and administrative sites, can partially explain the emergence of unused, abandoned, and neglected buildings in urban areas.

The next sub-section will provide further details on the different scales of spatial planning legislation in Slovakia, that will be relevant when tackling the issue of urban brownfields.

1.2 Legal and institutional context

1.2.1 At national level, the Urban Development Policy Framework and the Slovak Spatial Development Perspective provide spatial planning principles...

At the **national level**, the “Urban Development Policy of the Slovak Republic by 2030” is a framework document defining the strategic vision for Slovakia’s urban areas and proposing urbanisation principles. This document encourages municipalities to foster strategic decision making and integrated, comprehensive approaches. Among the measures introduced in the Urban Development Policy framework, the Ministry of Transport and Construction of the Slovak Republic financed a study called “Analyse obstacles to re-use and revitalisation of unused, abandoned and neglected areas in urban areas and propose support measures”. This research has been conducted by the SPECTRA Centre of Excellence of the Slovak University of Technology. Although the study has the merit to raise the discussion on brownfields, through a very complete overview of challenges, no operational action directly followed.

² Ministry of Transport and Construction of the Slovak Republic (2016) Habitat III. National Report, 36 p.

Brownfields are at the crossroad between several policy areas. This multi-disciplinary specificity explains the diversity of actors and the scattered competencies between different ministries. In fact, the Ministry of Transport and Construction of the Slovak Republic is only responsible for spatial planning and provides national principles through the Urban Development Policy framework. The Ministry of Environment of the Slovak Republic is responsible for environmental issues and decontamination interventions, while the Ministry of Investments, Regional Development and Informatisation of the Slovak Republic oversees socio-economic strategic planning of regions and municipalities, included the European funds. From a legislative point of view, spatial planning interventions are implemented in accordance with the Land Use Planning and Building Order (Building Act³) from 1976 and the Decree of the Ministry of the Environment of the Slovak Republic on land-use planning materials and land use planning documentation from 2001⁴. In terms of urban sprawl prevention, the law on the protection and use of agricultural land, voted in 2004⁵, is still considered as easily circumvented and partly ineffective⁶.

It is important to stress that in the Slovak Republic, spatial planning is divided into three different levels of governance: State, self – governance regions and municipalities. The Ministry of Transport and Construction is responsible for spatial planning at national level, through the national framework “Spatial Development Perspective of the Slovak Republic”. This national territorial planning document reflects the ideas regarding optimum spatial interconnections at the national and international level. It is a long-term strategic document that includes a significant section on the indicative nature of the planning process. As we will see in the next section, the second level of responsibility consists of self – governance regions. Their documentation should be in accordance with principles stated in national documentation. The third (and last) level is up to municipalities, having their own responsibility for spatial planning at local level, applied through land-use plans in accordance with the documentation at higher level.

1.2.2 ... applied and adapted at regional and local level

The Urban Development policy sets only principles and vision but without activities and ways how to achieve it. These principles and visions contained inspire the Territorial Plans elaborated by **regions and municipalities**, determining their development priorities and strategic investments, as well as forestry and agricultural policies.

All **municipalities** with a population above 2,000 are obliged to have a land-use plan in place. This document, binding for territorial decision-making, must contain:

- Regulations on the functional use of territory
- The boundaries of built-up areas and protection measures of cultural and natural heritage
- Details on public equipment and services

As previously mentioned, the acknowledgment of municipalities as key actors of territorial development has substantially increased during the 1990s. The Act on Municipal Establishment⁷, voted in 1990, was based on the principle of the equal position of municipalities, meaning that they fulfil the same functions on their respective territories. This led to several problems, notably for smaller municipalities whose capacities were limited, devolution of powers towards local governments having not always been accompanied by a transfer of financial means.

³ Act No.50/1976 Coll. the Planning and Building Code (the Building Act)

⁴ Decree of the Ministry of Environment No.55/2001 Zz of land-use planning documents and land use documents

⁵ Act of the National Council of the Slovak Republic No. 220/2004 Coll. On the protection and use of agricultural land and amendments to Act No. 245/2005 Coll. on integrated prevention and control of pollution and the environment and amendments to certain laws

⁶ Palšová L. et al. (2017) Agricultural Land Protection – the Case of Slovakia. In Management, Enterprise and Benchmarking in the 21st century, 15 p.

⁷ Act of Slovak National Council SR No. 369/1990 Coll. On Municipal Establishment

As a result, after Slovakia became a member of the European Union in 2004, the role of European Structural and Investment Funds (ESIF) has become crucial in financing regional and local development programmes. In 2016, 80% of the municipalities' expenditures on spatial development were reimbursed from the ESIF⁸. This dependency relation highlights, on the one hand, the financial weakness of local governments and, on the other hand, the high interest of Slovak stakeholders in European policy priorities and funding.

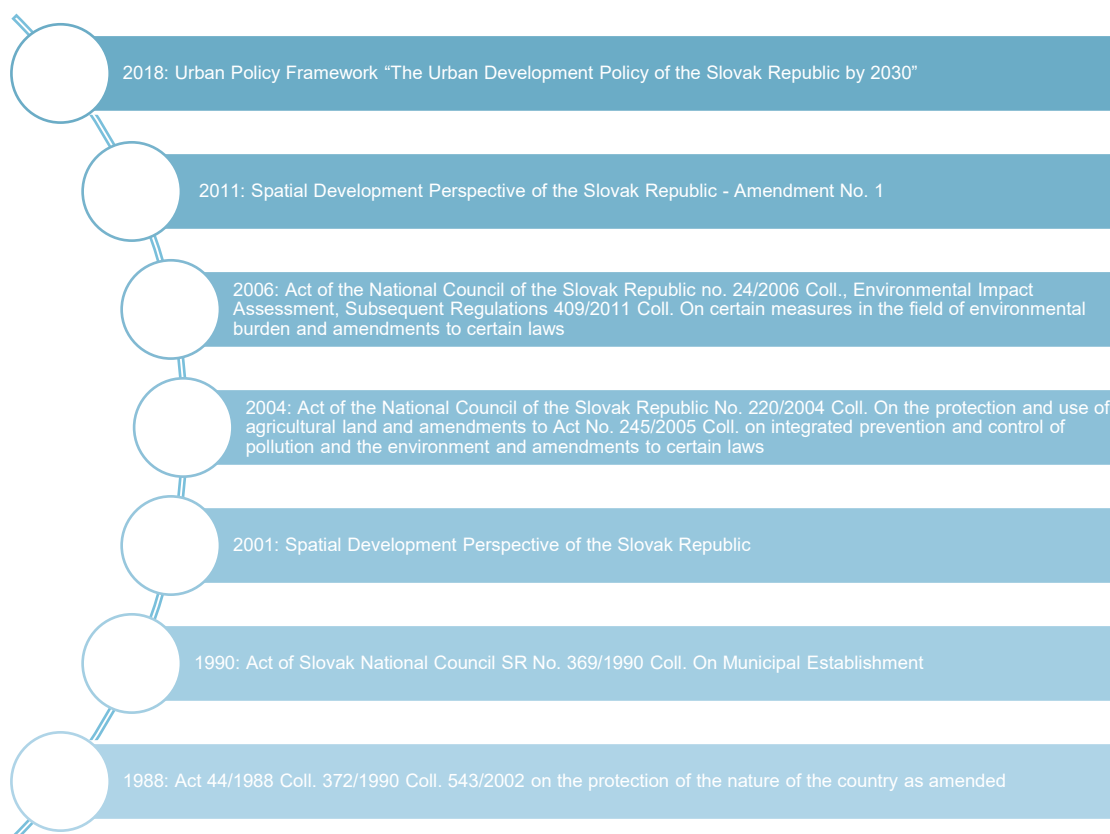


Figure 1 Timeline of relevant legislation in the sector of spatial planning in Slovakia

1.3 State of knowledge and initiatives regarding brownfields' regeneration in Slovakia

1.3.1 National and local studies compiling an inventory of brownfields

National stakeholders (the Ministry of Transport and Construction of the Slovak Republic and the Slovak Environment Agency), but also local governments and institutions (the City of Bratislava, the Metropolitan

⁸ Ministry of Transport and Construction of the Slovak Republic (2016) Habitat III. National Report, 36 p.

Institute of Bratislava, and the Slovak University of Technology) have been involved in comprehensive studies aiming at localising and mapping brownfields. As a matter of fact, these actors have recognized the role of knowledge building as the first step towards brownfield regeneration interventions.

Among these **studies** and **research**, we can mention the following:

- The Slovak Environment Agency is currently (2022) conducting an in-depth analysis and mapping of brownfields at national level. This study, financed by the Ministry of the Environment of the Slovak Republic, has been started in 2017 and is expected to be completed in 2023 (6 out of 8 regions have been mapped already). The experts have first used sources such as Google Maps, local newspapers, and maps to identify all abandoned areas and buildings. At a later stage, fieldwork was conducted to confirm and enrich the theoretical analysis. An identity card for each of the brownfields has then been designed, indicating the localisation, former use, owners, and other criteria (consistent with the CABERNET methodology). Finally, a GIS database has been created. The managers responsible for this study are organising meetings with municipalities to present and improve the data. Practitioners of the Slovak Environment Agency have categorised brownfields according to several features (shown in the tables below).

- *Former use.* Abandoned industrial sites make the largest surface in the country, although “mixed use areas” represents the higher number of brownfields.

| Former use | Number of sites | area (ha) |
|---|-----------------|---------------|
| Industrial areas | 159 | 670,92 |
| Mixed use areas | 224 | 238,18 |
| Areas of agricultural and forestry production | 44 | 155,77 |
| Mining areas | 17 | 263,11 |
| Areas of sport, recreation, and tourism | 54 | 88,72 |
| Landfill areas | 5 | 33,38 |
| Military areas and facilities | 10 | 322,39 |
| Transport areas and facilities | 26 | 93,57 |

Table 1. Former use of mapped brownfields in Slovakia (as of April 2022).

- *Ownership.* Private-owned areas and buildings represent the highest number of brownfields in the country, followed by municipality- and government-owned sites.

| Ownership | number of sites | area (ha) |
|-----------------------|-----------------|----------------|
| Government ownership | 65 | 257,30 |
| Municipal ownership | 85 | 409,40 |
| Cooperative ownership | 3 | 0,59 |
| Private ownership | 346 | 1063,53 |
| Others | 16 | 65,93 |
| Combined | 29 | 76,72 |

Table 2. Ownership of mapped brownfields in Slovakia (as of April 2022)

- *Level of degradation and contamination.* Most of the brownfields are “moderately degraded”, while only 6 are listed as contaminated sites. This figure might confirm the high potential for short-term redevelopment without the need for massive investments due to remediation.

| Contaminated site | Number of sites | area (ha) |
|-------------------------------|-----------------|-----------------|
| Potentially contaminated site | 13 | 261,0465 |
| Contaminated site | 13 | 169,9842 |
| Remediated, reclaimed site | 6 | 33,09252 |
| not in register | 512 | 1409,339 |

Table 3. Contamination level of mapped brownfields in Slovakia (as of April 2022)

| Degradation of sites | Number of sites | Area (ha) |
|--|-----------------|---------------|
| Potential risk sites with assumption of degradation | 35 | 138,39 |
| Slightly degraded - facilities and buildings abandoned but preserved | 90 | 324,91 |
| Moderately degraded - facilities and buildings partially dilapidated | 249 | 665,82 |
| Heavily degraded - facilities and buildings devastated | 142 | 617,71 |
| Heavily degraded without buildings | 28 | 126,64 |

Table 4. Degradation level of mapped brownfields in Slovakia (as of April 2022)

- *Size.* The majority of brownfields measure between 0.5 and 5 hectares (“medium size”).

| Category by area in hectares | Number of sites | Area (ha) |
|------------------------------|-----------------|-----------------|
| Small (0.1 - 0.5 ha) | 191 | 55,39453 |
| Medium (0.5 - 5 ha) | 269 | 473,6136 |
| Large (5 - 10 ha) | 55 | 338,8552 |
| Very large (over 10 ha) | 29 | 1005,599 |

Table 5. Size of mapped brownfields in Slovakia (as of April 2022)

This study, originally targeting only contaminated sites, but later readjusted following a broader spatial planning approach, is the first example of in-depth brownfield mapping at the national scale. It will certainly provide invaluable inputs for further territorial policies targeting brownfield regeneration in Slovakia.

- LUDA (Large Urban Distressed Areas) was a research project of the Key Action 4 “City of Tomorrow 1 Cultural Heritage” of the programme “Energy, Environment and Sustainable Development” within the Fifth Framework Programme for Research and Technological Development (later called Horizon Programme) of the European Commission. Implemented between 2003 and 2005, it promoted

the transfer of knowledge between six European cities (Bratislava, Dresden, Edinburgh, Florence, Lisbon, and Valenciennes). The goal of the project was to contribute to improvement of quality of life in large urban distressed areas through a systematic strategic planning and development approach, considering degraded housing, environmental risks, unemployment...). In Bratislava, the peripheral district of Východný/ Žabí Majer, marked by the presence of railway depots and former manufacture warehouses, was selected as target area.

- The BROWNTRANS project (Brownfield regeneration know-how transfer for Bulgaria, Romania, Czech Republic, Slovakia) was financed by the Lifelong Learning Programme in 2012. The project focused on professionals in the field of civil engineering, developers, reality agents and technicians as well as people working at municipalities and their managers. The aim was to prepare educational material based on the Brownfield Handbook⁹ and to prepare a teaching course in the form of e-learning. In Slovakia, the SPECTRA Centre of Excellence of the Slovak University of Technology (STU) was an official partner.
- The study “Analyse obstacles to re-use and revitalisation of unused, abandoned and neglected areas in urban areas and propose support measures” commissioned by the Ministry of Transport and Construction of the Slovak Republic.
- The project “Brownfield 2019” conducted by the Metropolitan Institute of Bratislava. Architects and engineers of the MIB mapped 131 brownfields in the capital of Slovakia (630 hectares, 3% of the urban area) and created a “passport” for each of them, to investigate the ownership and put the basis of potential further development.
- A national survey launched by the Association of Towns and Municipalities of Slovakia in February 2022. Ramboll has participated in the design phase of the survey and analysed the main takeaways in a dedicated annexe (page 20). The results of the survey highlight the gap both in terms of knowledge and awareness on the topic between larger and smaller municipalities. This initiative is an important step that can put the basis, well beyond this specific study, of a national policy and programme aiming at empowering local authorities towards integrated regeneration investments.

1.3.2 Innovative (and often EU-driven) initiatives welcomed by local stakeholders

Against the backdrop of missing structured national guidelines on the topic, dedicated policies, and funding, but also human and financial means, only few municipalities have tackled the issue of brownfield regeneration. In the last twenty years, no official programme aiming at developing underused areas has been implemented. Nevertheless, interesting experiments have been carried out, sometimes in collaboration with local organisations (such as the MIB, partially financed by the Municipality). Most of the implementation and research projects have been financed through European programmes.

⁹ Petříková D., Vojvodíková B. (ed.) (2012). Brownfields – Handbook. BROWNTRANS, 212 p.

Among these **projects**, we can mention the following:

- In 2004, in Poprad, a steam-power plant has been transformed into an art gallery ([Tatra Gallery](#)), mostly through EU funding,
- The CircUse project, implemented through the Operational Programme Central Europe from 2010 to 2013 and involving ten European regions. The goal of the project was the limitation of the use of new green spaces through the valorisation of used or underused land (avoid – recycle – compensate principle). In Slovakia, the city of Trnava (65,000 inhabitants) identified 62 brownfields in its own administrative area and mapped them, proposing potential development orientations.
- Ambitious brownfield development interventions were also financed in Košice, (239,000 inhabitants, European Capital of Culture in 2013), notably through the European Regional Development Fund. The most iconic change in Košice urban landscape has been the transformation of an abandoned municipal swimming-pool into a multifunctional space for contemporary art ([Kunsthalle Košice](#))
- In the city centre of Lučenec, an abandoned synagogue from the 18th century was carefully renovated and hosts now a [cultural centre and memorial museum](#). The project costed € 2,5 million, almost entirely funded by ERDF. It is considered nationally as a best practice of respectful requalification of the historic heritage.
- Following their brownfield mapping exercise, the Metropolitan Institute of Bratislava is now implementing a flagship brownfield regeneration project, in collaboration with the city. The historical [Grössling City Bath](#), an iconic building of the capital dating from the end of 19th century and abandoned for years, will be restored to its original function, mixing public bath, a library, and a park.

Nevertheless, as these examples show, many of the experiments carried out in the last twenty years in Slovakia have involved large urban areas, notably Bratislava and Košice. Moreover, action plans and methodologies to achieve brownfield regeneration were financed in the framework of European cooperation projects (Framework Programme for research and innovation, INTERREG Central Europe, etc.). Small towns are underrepresented, since they are suffering the most from the lack of structural national policies, but also tools and resource regarding brownfield redevelopment. This lack of involvement and knowledge affecting small urban areas is confirmed by the difficulty, expressed by experts from the Slovak Environment Agency, in establishing a collaboration or even a simple dialogue with small towns after the mapping exercise that is currently being conducted (described in section 1.3.1).

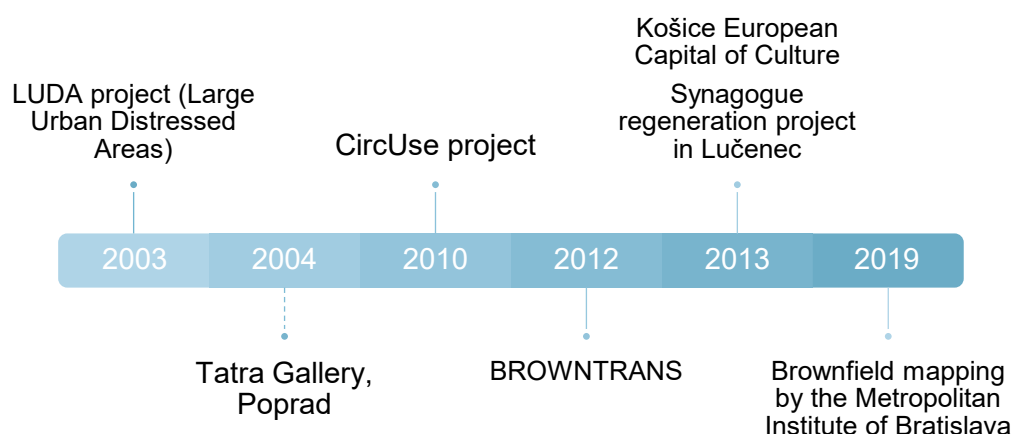


Figure 2 Timeline of the most relevant initiatives and studies involving Slovak cities, in the field of brownfield regeneration

1.3.3 A diverse range of national and local stakeholders willing to redevelop urban brownfields

In Slovakia, several stakeholders are involved in developing solid knowledge on the issue, knowledge being a condition for future action. Both the Ministry of Transport and Construction and the Ministry of the Environment of the Slovak Republic (through the Slovak Environment Agency) have contributed to raising the discussion and commissioned research projects and studies.

At the local level, the Metropolitan Institute of Bratislava, partially funded by the City of Bratislava, is a reference in both research (brownfields mapping) and implementation project (e.g. Groessling Bath renovation).

The Association of Towns and Municipalities of Slovakia (ZMOS) is contributing to knowledge gathering through a survey addressed to member municipalities (early 2022). Moreover, the organisation SPOLKA, working on territorial development issues, has showed interest in promoting abandoned spaces for cultural, social and economic activities.

2 Analysis of challenges in urban brownfields regeneration and ways to address them

2.1 Multi-scale and interlinked obstacles to brownfield redevelopment

When dealing with brownfield regeneration, Slovak municipalities face several challenges.

The most urgent is related to **institutional** and **legislative barriers**. The lack of clear definition of brownfields¹⁰ makes it difficult to classify unused areas, notably regarding the number of years the building or the area needs to be abandoned to be defined as such (a period of 3-5 years is often considered¹¹). Moreover, the privatisation trend described in section 1.1. has led to unclear ownership relations and fragmentation of parcels, increased by the inheritance process and the multiplication of landlords, often unmotivated to use the land and protected by the legislative impossibility of expropriating. This unclearness in legislation and property structure is a major obstacle to the inclusion of brownfields regeneration opportunities in municipalities' territorial plans.

A second major obstacle regards the **absence of immediate economic value** of brownfields, worsened by environmental pollution. Often private developers are not willing to invest, while owners speculate on future real-estate dynamics, tactically waiting several years to get more value. The total cost of brownfield renovation and (even more) of environmental remediation is a main obstacle, notably when compared to lower greenfield construction costs. Above all, municipalities do not dispose of sufficient financial resources to address the issue.

From a **policy** point of view, the difficulty for towns and cities in embarking in multi-sectoral integrated projects has also been stressed. This is mainly due to the **absence of a comprehensive approach** in urban planning, but also to a short-term vision characterising decision-making in local development process. The fragmentation of competences between the national, regional, and local level, but also between different Ministries (the Ministry of Environment of the Slovak Republic could only finance contaminated brownfields, for instance) further complicates the situation.

From a **planning** point of view, the **level of qualification of human resources at the local level**, as well as their experience in complex territorial projects, is often insufficient. Moreover, another limit to an effective reuse of abandoned areas and buildings is the absence of a flexible instrument for temporary use, which is not foreseen in legislation.

Lastly, from a **social** perspective, vicious circles of **poverty and exclusion can be triggered**, both in case of non-action (poverty concentration, ghettoization, unemployment after shutdown of activities and degradation of territorial image) and regeneration (social exclusion, loss of identity, lack of social mix).

¹⁰ Although the term of brownfield is not a part of any official legislation, it is used by some State institutions, such as the Slovak Investment and Trade Development Agency (SARIO)

¹¹ SPECTRA Centre of Excellence, Slovak University of Technology (2019). Analysis of barriers to the recovery of unused and neglected areas in the built-up area and proposal of support measures.

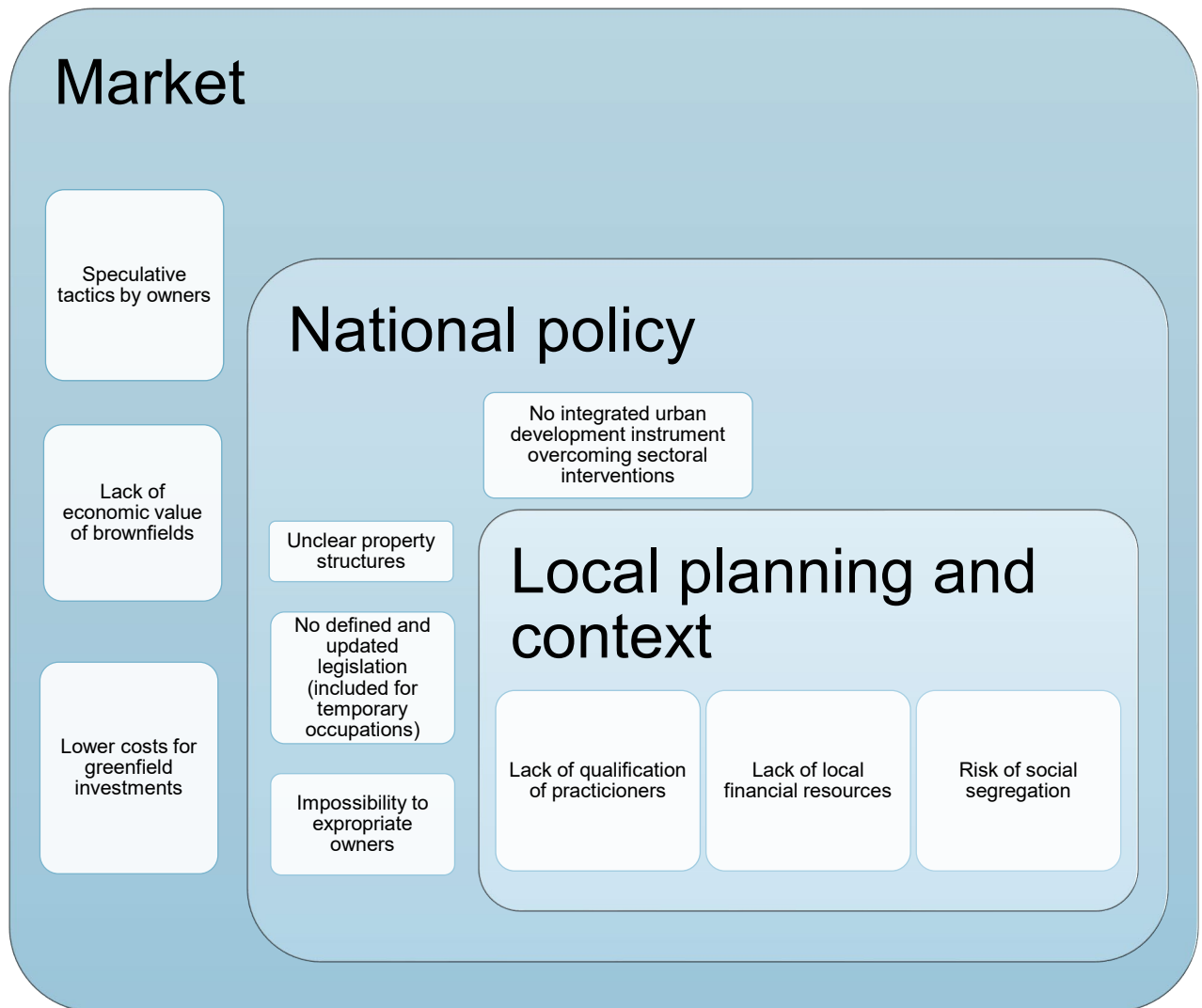


Figure 3. Challenges for brownfield regeneration

Figure 3 illustrates and sums up the multi-scale challenges faced by local governments in implementing brownfield regeneration actions. Economic factors (“market”) are presented in the largest scale, based on the fact that the Slovak national policy, like most of the world, is integrated into a market economy, to which it responds and can only limitedly interfere. Similarly, local planning has adequate leeway but mostly relies on programmes and development priorities defined at the national level.

2.2 The need for integrated policies and planning methods

To overcome or at least mitigate the difficulties abovementioned, some changes can be proposed, based on the review of official studies, documents, and interviews with national experts.

Above all, the **institutionalisation of the notion of brownfield** could address the legislative unclearness and inconsistency on the topic. At the national level, this can happen through the legislative definition of unused, underused, or abandoned areas, also by clarifying and distributing competencies and responsibilities, according to the principle of subsidiarity. At the local level, mapping and classification efforts might be undertaken. In this regard, the knowledge and review of brownfields (according to their localisation, size,

former use, level of contamination and heritage value, for instance) would be the first step towards the definition of feasibility studies and, at a later stage, tailor-made, and systematic interventions.

Secondly, the **introduction of economic instruments** such as levies on the underuse of land (targeting owners that strategically choose to wait before redeveloping their land) might be effective in preventing speculation. Moreover, taxes applied to the urban sprawl (also by reinforcing the national law from 2004 on the protection of agricultural land), but also incentives to attract developers investing in built-up areas, could be considered. In this regard, the mobilisation of European funds might be pursued.

Thirdly, the **economic classification of brownfields** can be contemplated. For instance, the model proposed by CABERNET and adopted by the Metropolitan Institute of Bratislava, identifies four types of brownfields:

- Category A, meaning high economic feasibility, often attracting private investors
- Category B, often financed on a public-private partnership
- Category C and D, meaning low profitability. The regeneration of C- and D- brownfield mainly relies on public investments and initiatives (including strong incentives).

From a policy perspective, **encouraging and supporting pilot projects** could be a way to address the lack of knowledge on the topic and create a set of good practices for further replication. In fact, the adoption of more flexible tools and instruments (not always fitting in the sectoral allocation of ESIF) could facilitate the implementation of multi-sectoral integrated approaches tackling several at the same time - physical renovation, mitigation of urban poverty and social exclusion, heritage protection, creation of green infrastructures.... At the local level, important efforts of depoliticisation of building permits process are crucial to prevent corruption and cronyism. In addition, to develop solid knowledge and skills, local practitioners might benefit from capacity building for strategic management, as well as from training and exchange of experience initiatives.

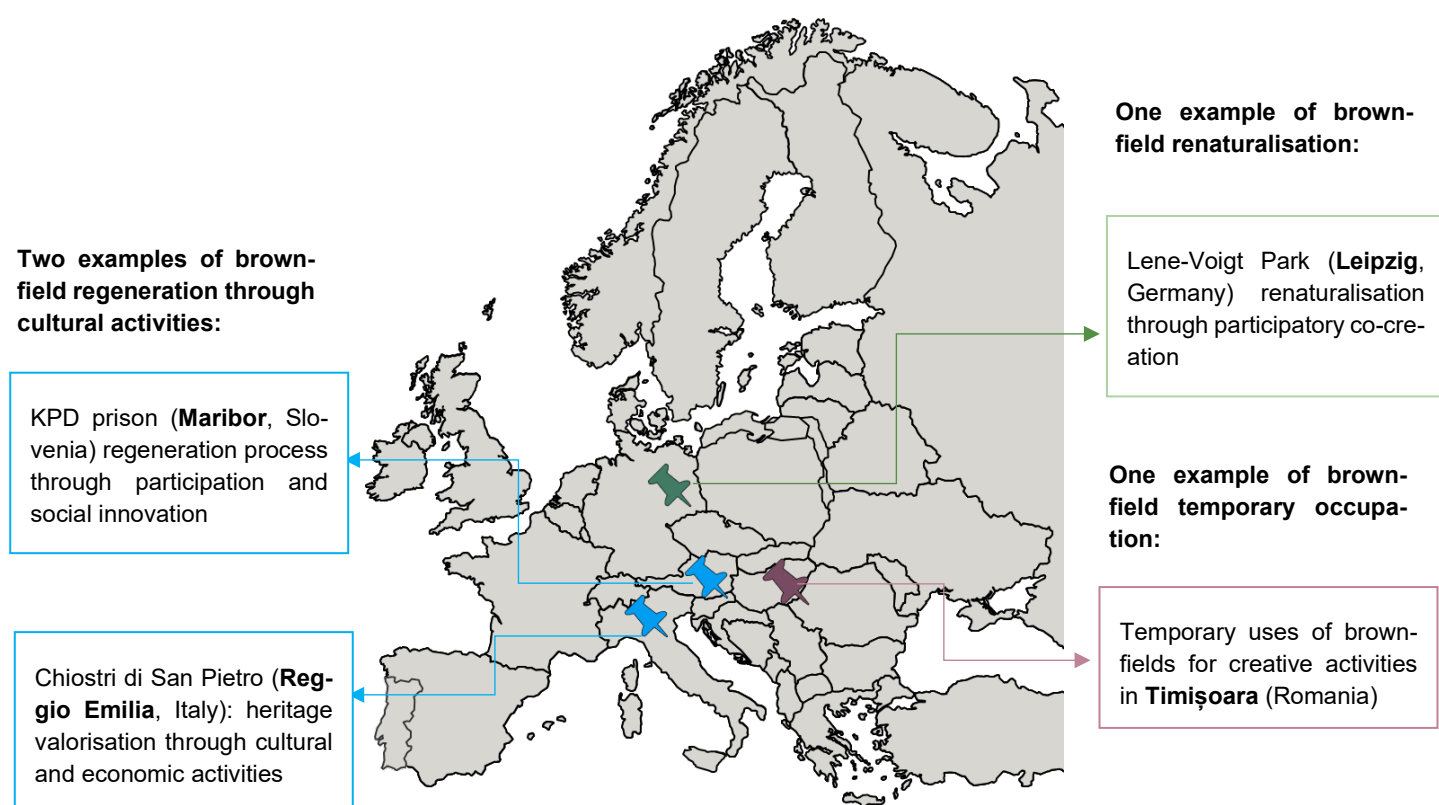
Planning tools and capacities to limit the construction of greenfield sites are crucial in addressing urban sprawl. Also, temporary land-use instruments and experiments can be implemented, such as economic or administrative support provided by local authorities to activities and businesses willing to temporarily reinvest unused buildings. In fact, the temporary use of brownfields mitigates the degradation of the building and surrounding area and acts as a bridge towards more defined and structured revitalisation projects.

A last set of practices concerns **awareness** raising and capitalisation. Citizens and decision-makers at the local level should be aware of brownfields' potential in addressing climate change (reduction of greenhouse gases emission in a compact built-up environment and mobility network) and sustainable use of land. Through participatory approaches, innovative initiatives -such as guided visits, workshops, focus groups- can be collectively designed.

3 Annex 1: Case study analysis of four urban brownfields regenerations in Europe

To deepen the knowledge on brownfield regeneration processes, four best practices in four different European countries have been investigated through desk research, analysis of masterplans and official reports, as well as online interviews with local stakeholders. The main objective was to provide Slovak municipalities and decision-makers with valuable inputs concerning assets, barriers, and opportunities for brownfield redevelopment. Despite the different legislative, socio-economic and planning context, the following best practices might be a source of inspiration for towns and cities willing to increase their knowledge on the topic.

Eight cases have been initially presented by Ramboll on the occasion of a meeting with ESPON and the Slovak Ministry of Transport and Construction. Four cases, represented in the map below and clustered according to their intervention area, were finally selected by the experts from the Slovak Ministry of Transport and Construction. The selection was made according to three criteria. First of all, a reasonable budget for “ordinary” intervention, beyond flagship world-known projects. Second, the historical and geographical proximity to the Slovak context (three of the four selected cases are post-socialist towns and cities). Last, the experts appreciated the participatory dimension and bottom-up approaches put in place in such cases.

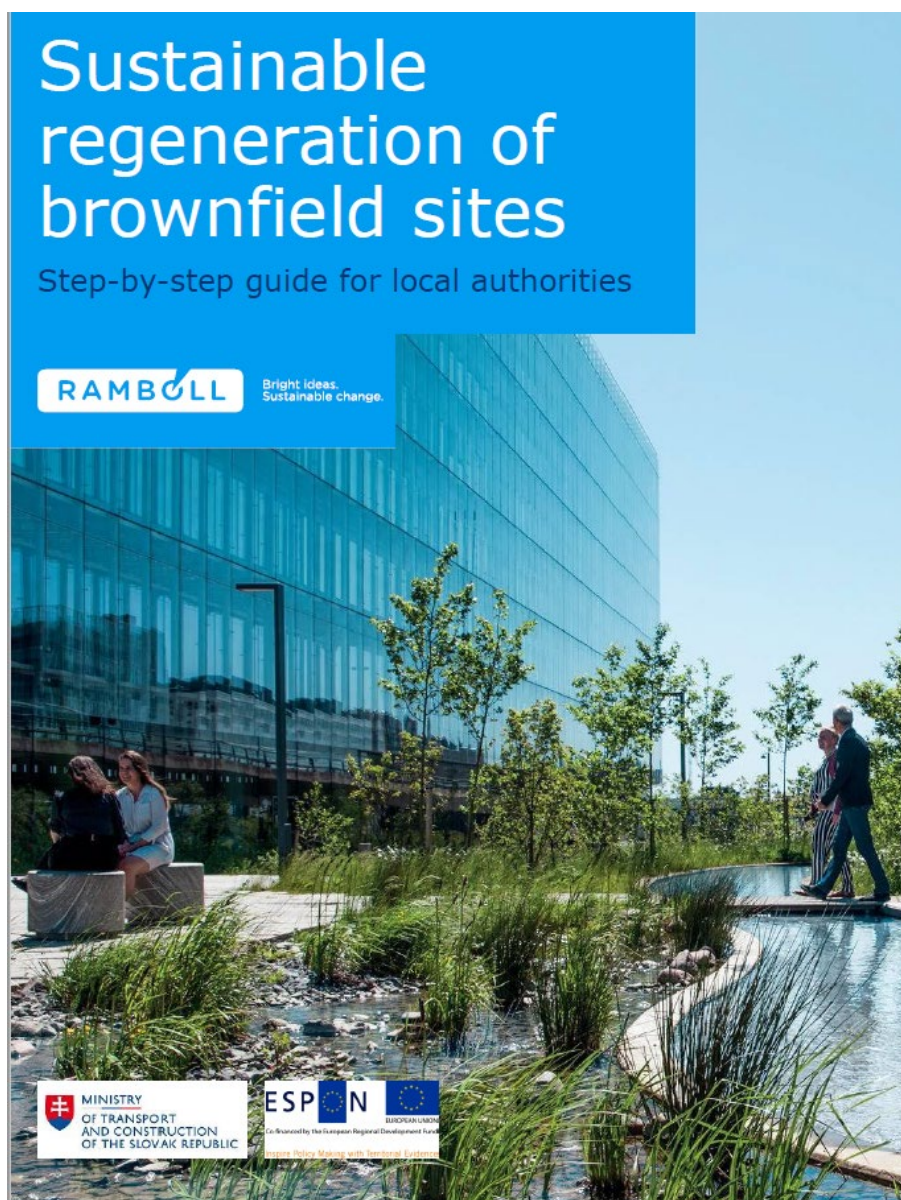


Map 1. Four European case studies selected for the scope of this analysis

The four *fiches* on the selected case studies will be joint to this report for further dissemination.

4 Annex 2: A step-by-step guide

Against the backdrop of a raising interest on the topic of brownfield regeneration, the ESPON Programme and the Slovak Ministry of Transport and Construction designated Ramboll Management Consulting for the design of a step-by-step guide. This document aims at informing local authorities and provides guidance in developing new brownfields activation practices, considering aspects such as knowledge creation, design methods, funding opportunities and financial arrangements. The guide will be joint to the report for further dissemination.

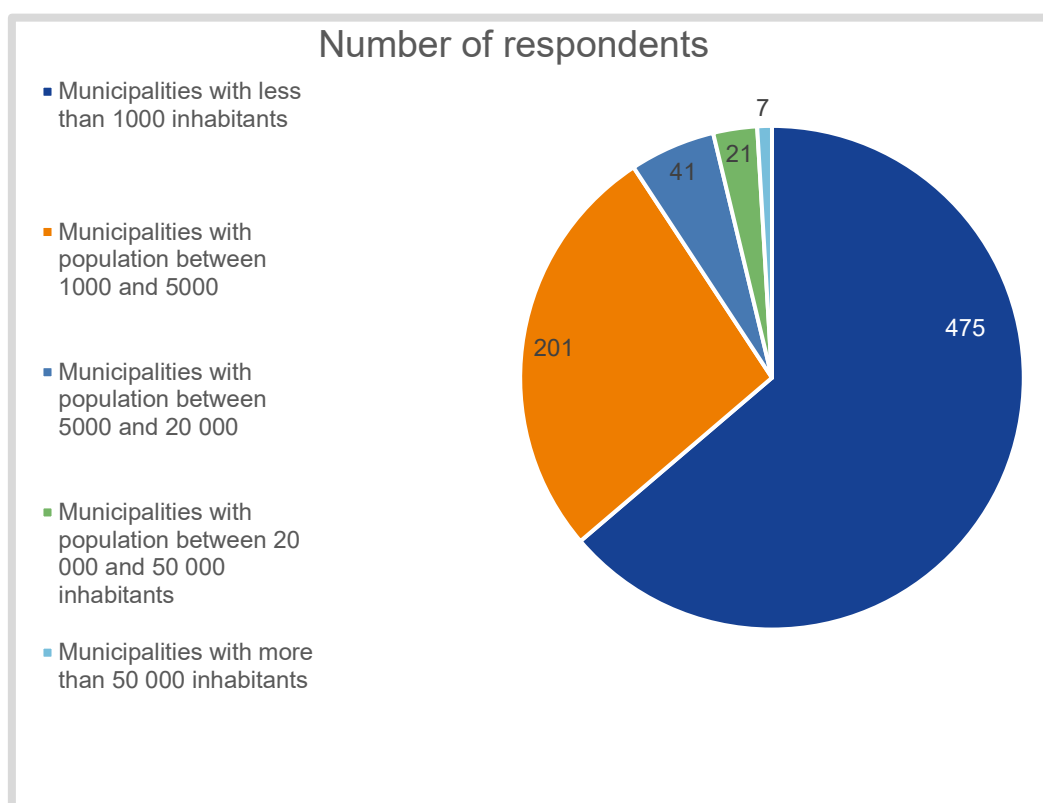


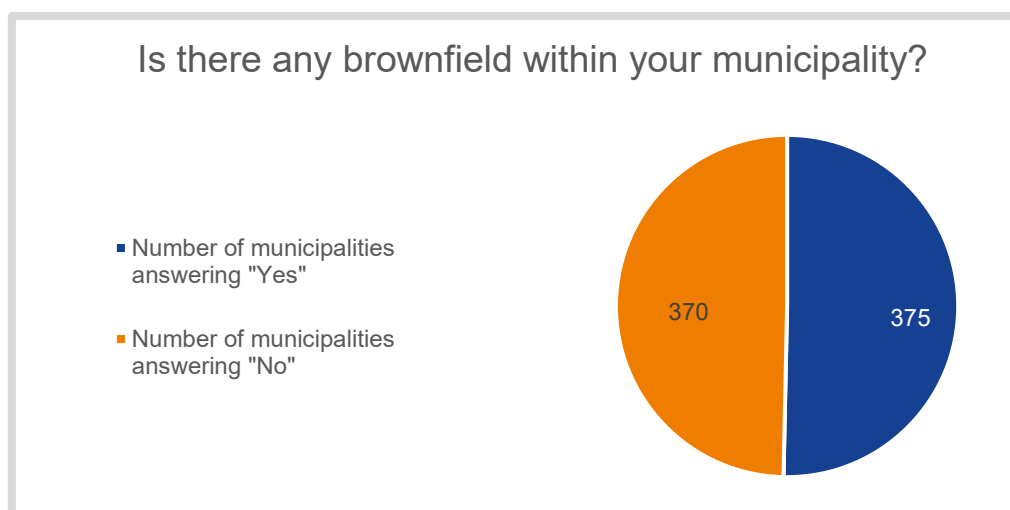
5 Annex 3: Analysis of a survey conducted among Slovak municipalities

Early 2022, the Slovak Association of Towns and Municipalities (ZMOS) contributed to this project by launching a survey among its members. This survey provides in-depth information regarding the presence of brownfields in Slovak municipalities and the challenges related to potential activation projects. The survey allows us to rely on statistical figures to better investigate issues mentioned throughout the report, such as the high potential for brownfield regeneration (half of the municipalities declared the presence of abandoned or unused buildings and areas), but also the need for systemic knowledge building.

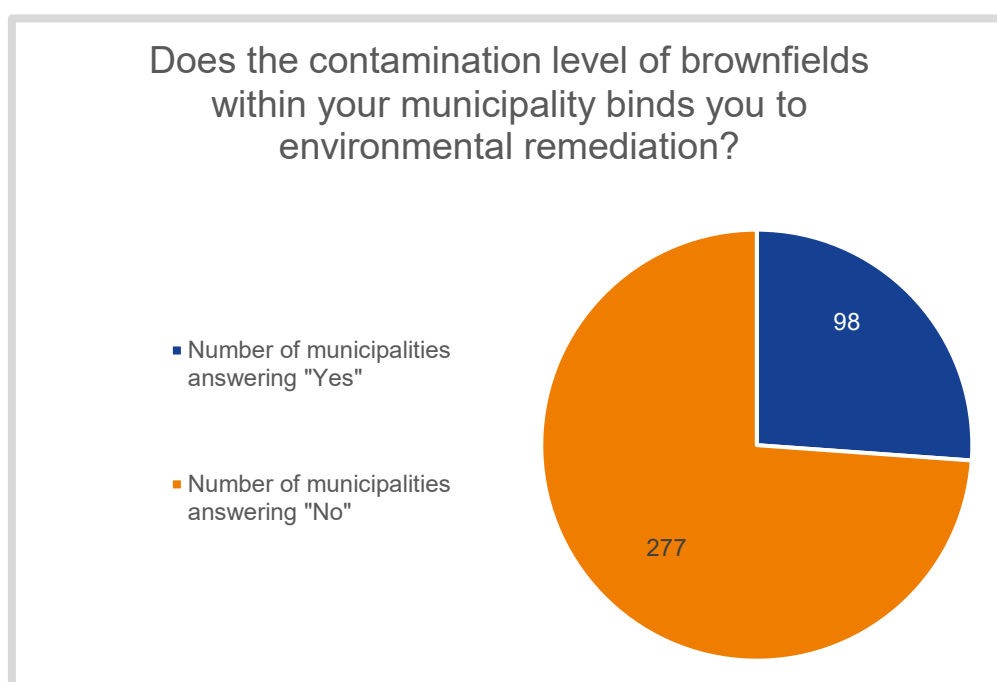
A diverse range of local authorities participated in the survey, evenly concerned by the presence of brownfields

745 Slovak Municipalities participated in the survey. Most of them are small local authorities, with less than 5000 inhabitants. About half of the respondents (375) declared the presence of one or several brownfields within their administrative area.





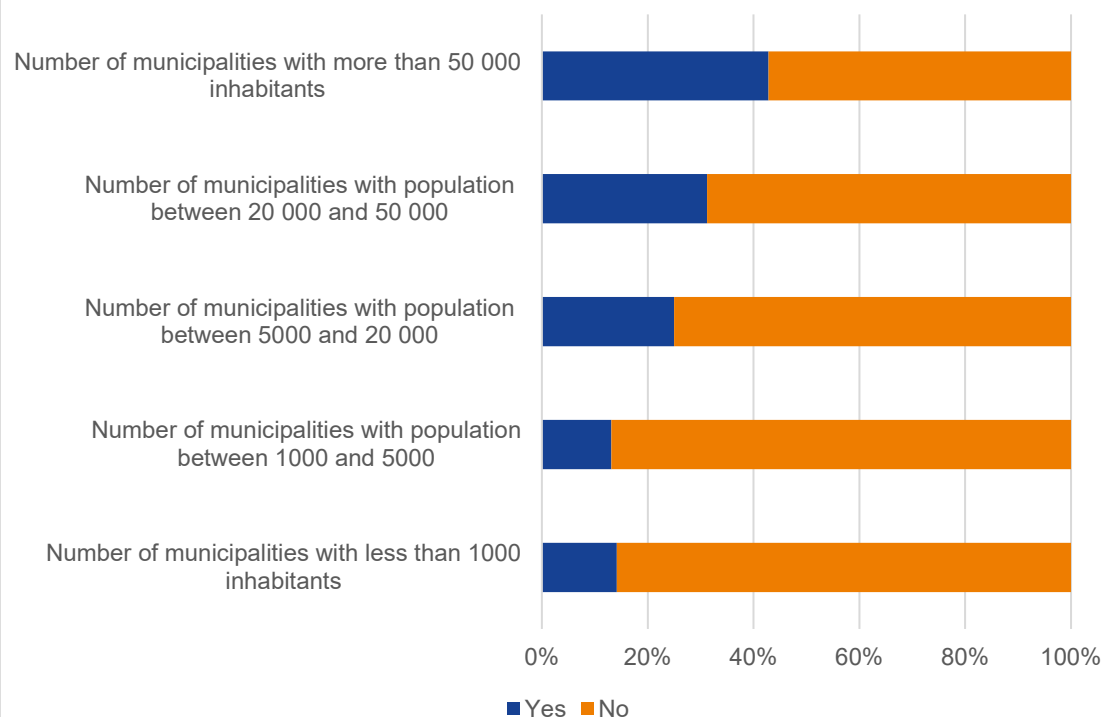
Among the municipalities directly concerned by the presence of brownfields, the majority did not pinpoint the need for environmental remediation as a crucial issue. Most of the respondents declared that the contamination levels are not binding as regards remediation.



A preliminary reflexion and assessment are more common among mid-sized and large municipalities

Another crucial figure highlights the link between the size of municipalities and their state of knowledge and state of action as regards brownfield regeneration. It appears that the larger the municipality is, higher are the chances that a regeneration project has already been designed. In other words, the survey shows that mid-sized and large local authorities are more likely to start the reflexion on brownfields activation compared to smaller municipalities. This can be explained by several factors. For instance, mid-sized and large municipalities benefit from a higher number of qualified practitioners. They might also be part of national and international city networks (e.g., Eurocities, URBACT), making knowledge and experience exchange easier.

Do you have already designed a brownfield regeneration project within your municipality?



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ESPON 2022

ESPON EGTC
4 rue Erasme, L-1468 Luxembourg
Grand Duchy of Luxembourg
Phone: +352 20 600 280
Email: info@espon.eu
www.espon.eu

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