2 Building an affordable and accessible Brussels-Capital Region

This chapter examines critical urban policy challenges in the Brussels-Capital Region in the areas of urban planning and land use, housing and mobility. It argues that although the Brussels-Capital Region has comprehensive policy frameworks that guide development in these areas, their implementation could still be improved. The chapter discusses the challenges the region faces in using urban planning, housing and transport policies more strategically to realise its vision of a "20-minute city". The chapter proposes specific recommendations to finetune and complement ongoing reform efforts to build a more affordable and accessible region.

Introduction

Established by the Special Act of 12 January 1989, the Brussels-Capital Region is one of the three self-governing regions in Belgium, alongside the Walloon and Flemish Regions. Amongst others, regions discharge territorial planning responsibilities while the federal state holds prerogatives on matters that may have an impact on the organisation of the regional territory, such as railroads, regulation of air transport and ground mobility, as well as energy policy. The Brussels-Capital Region is home to 10% of the national population (1.2 million inhabitants in 2022).[1] However, as discussed in Chapter 1, its functional urban area (FUA) is much larger (15.6% of the national territory and 28.6% of the total national population), including urban centres of all sizes.

This chapter will discuss three key policy challenges in the region's urban development:

- Despite a comprehensive land use policy framework, the Brussels-Capital Region faces critical challenges such as urban sprawl.
- Housing affordability is a key concern for policy makers and urban dwellers due to the rise in property prices, the lack of social housing units and the poor state of the existing housing stock.
- The Brussels-Capital Region's comprehensive mobility strategy to improve public transport and accessibility reveals the need to plan and invest in urban mobility at a metropolitan level.

The planning system and land use in the Brussels-Capital Region

The Brussels-Capital Region is the political and economic heart of Belgium and the headquarters of several international organisations, such as the European Commission and the North Atlantic Treaty Organization (NATO). Among the three regions in Belgium, the Brussels-Capital Region has the highest level of gross domestic product (GDP) per capita and labour productivity per worker (OECD, 2020[1]). The region's strategic location connects it with major European cities such as Paris (France), Cologne (Germany), Amsterdam (Netherlands) and London (United Kingdom).

However, the Brussels-Capital Region faces critical policy challenges that may jeopardise the future development of the region. High cost of living, a lack of affordable housing and limited connectivity with other regions are some of the factors that are causing productivity loss, undermining people's well-being and which could lead to urban exodus. Compared to other OECD regions, the Brussels-Capital Region ranks among the bottom 10% in terms of regional disparities, more particularly in areas such as community, health, access to services and safety (OECD, n.d.[2]).

Thus, strengthening a vision for a more inclusive, compact and connected city-region would assist the region in shifting: i) from sprawl to orderly urban expansion and compact urban development; ii) from rising housing costs to a wide range of affordable housing options; and iii) from dominance of car use and congestion to sustainable mobility alternatives. Lessons from the COVID-19 pandemic and concepts that are gaining increasing traction (such as the 20-minute city[2]) have reinforced residents' expectations of mixed-used urban districts where people from different socio-economic backgrounds can live, work and socialise without having to travel long distances to meet their needs.

The Brussels-Capital Region's quest for densification and orderly expansion

In 2022, the Brussels-Capital Region had a population density of 7 528 inhabitants per square kilometre (km^2), a much higher level than in the Walloon Region (217 inhabitants per km^2) and the Flemish Region (492 inhabitants per km^2) (Statbel, 2023[3]). However, Table 2.1 shows that there is a considerable difference in density levels across the different municipalities of the Brussels-Capital Region. While all

municipalities have higher-density levels than the national average density (377 inhabitants per km²), some municipalities (such as Auderghem, Uccle and Watermael-Boitsfort) could still be further densified.

Table 2.1. Population density in the municipalities of the Brussels-Capital Region, January 2022

Municipality	Population	Size in km²	Population in km²
Anderlecht	122 547	17.91	6 841
Auderghem	34 986	8.96	3 902
Berchem-Sainte-Agathe	25 298	2.95	8 575
City of Brussels	188 737	33.80	5 704
Etterbeek	48 535	3.17	15 290
Evere	43 608	5.12	8 509
Forest	56 616	6.29	8 998
Ganshoren	25 252	2.43	10 359
Ixelles	87 052	6.41	13 578
Jette	52 751	5.18	10 165
Koekelberg	22 023	1.18	18 633
Molenbeek-Saint-Jean	97 697	6.10	16 241
Saint-Gilles	48 837	2.53	19 274
Saint-Josse-ten-Noode	26 965	1.16	23 234
Schaerbeek	130 690	7.90	16 540
Uccle	85 099	22.87	3 720
Watermael-Boitsfort	25 187	12.96	1 942
Woluwe-Saint-Lambert	58 541	7.29	8 026
Woluwe-Saint-Pierre	42 216	8.94	4 720

Source: Statbel (n.d.[4]), *Population Density*, https://statbel.fgov.be/en/themes/population/structure-population/population-density.

The Brussels-Capital Region also includes vast areas that remain underused, such as industrial wastelands and vacant buildings, which could be redeveloped and help serve social, economic and environmental objectives. This is why, to increase polycentricity and mixed-use densification, the regional authorities have identified 11 strategic zones to redevelop and contribute to a more liveable city (i.e. with access to transport, healthcare and education) while ensuring affordable housing. However, "[p]olitical and spatial fragmentation means that Brussels also does not have a strong record of creating neighbourhoods that embrace the principles of 'good density'" (Clark et al., 2016, p. 16[5]). High-density areas have been associated with social exclusion as the rising housing prices and undersupply of affordable housing have driven low- and middle-income households out towards the periphery. Migration flows towards the Brussels-Capital Region, progressively combined with emigration to the surrounding municipalities, have been a cause of urban sprawl. Across the world, urban sprawl has led to a high per capita use of land with high costs of energy and infrastructure provision and longer commuting times (ESPON, 2018[6]).[3]

Looking at the Brussels Metropolitan Area (BMA), which covers the 19 municipalities of the Brussels-Capital Region and 116 municipalities located within 30 km, provides a broader picture of the density trend. Since 2000, all parts of the BMA have registered population growth. Within the city of Brussels, 1 of the 19 municipalities within the Brussels-Capital Region, the growth has been partially driven by the region's policy to make the city centre more attractive for living. Implementing initiatives such as transforming former industrial buildings into housing has contributed to attracting more residents to the city centre (ESPON, 2018[6]). Densification in the inner circle of the region is a mixture of increasing

densification in the poorer parts of the city, renovation of old buildings and the construction of new premises on the few remaining plots of wasteland. However, in the outer circle of municipalities, population growth has been uneven. Population in the wealthy southeastern municipalities has stagnated, whereas population growth has been strong elsewhere (ESPON, 2018[6]).

For the Brussels-Capital Region, promoting higher density along with an orderly expansion can help it achieve its affordable housing, sustainable mobility, climate change adaptation and environmental goals (as will be discussed later in this chapter). To this end, the region's government has been reforming its regional development plans and land use instruments to recalibrate land use and control and authorise densification and de-densification.[4] For example, the Regional Land Use Plan (*Plan Régional d'Affectation du Sol*, PRAS), adopted in 2001, was amended in 2021 to clarify the balance between functions in mixed areas, integrate the objectives of the regional mobility plan and set up a framework for urban agriculture.[5] The Regional Sustainable Development Plan (*Plan régional de développement durable,* PRDD; *Gewestelijk Plan voor Duurzame Ontwikkeling*, GPDO) also promotes the principle of "reasoned densification" (*densification maîtrisée*) linked to a notion of public comfort and local services. The Brussels-Capital Region seeks to foster the development of new neighbourhoods for an orderly reception of new residents, allowing them to find housing that they can afford and have access to public facilities and green areas. This means identifying the conditions that can create the most value for the city, the places most appropriate for future residents and the use of land that promotes more economic development. In practice, the regional authorities' goal is to increase urban density over time through different means associated with public spaces, an efficient transport system and a high level of walkability and accessibility.

At the same time, Brussels-Capital Region authorities may need to pay further attention to the evolution of household size in the region and the country (e.g. individual preference to remain single), which will shape the residents' needs for infrastructure or services and will therefore have consequences in terms of urban planning. For example, single-person households tend to depend more on urban services (Hernández-Palacio, 2017[7]).

Both housing and transport will have a critical role to play in supporting densification and orderly urban expansion in the Brussels-Capital Region. On the housing front, pursing a "gentle" densification of the suburbs could contribute to meeting the region's housing needs. In London (United Kingdom), for example, another city with a severe housing crisis, research has suggested that increasing the density by just 10% in outer London boroughs would allow building 20 000 new homes per year and would make it easier to support public transport expansion and sustain lively high streets (Rogers, 2021[8]). Investment in transport infrastructure can also act as a catalyst for higher densification in the region. It could help reduce transport costs (Teller, 2021[9]) while increasing the cost of using personal vehicles to disincentivise their use, for example, through higher parking fees, fuel taxes and road use in central areas. Moreover, the experience of Santiago de Chile (Chile) suggests that densification may favour a more sustainable travel pattern but this should be achieved by balancing density rates and addressing spatial differences in the provision of social services and environmental amenities (Livert Aquino and Gainza, 2014[10]). At the same time, although investment in transport may improve accessibility and raise productivity and wages, it may also increase housing costs (OECD, 2020[11]). This is relevant for the Brussels-Capital Region as it seeks to increase functional density (population and jobs) while addressing its affordable housing challenge. Research suggests that a long-term combination of transport investments, urban policies and alignment of stakeholder priorities contribute to densification, rather than transport infrastructure alone. Teller (2021[9]) has concluded that even if investments in public transport target less affluent neighbourhoods, prices for housing and rents in those neighbourhoods will rise alongside accessibility improvements (OECD, 2020[11]). Thus, complementary policies to alleviate these cost pressures will be required, such as increased housing supply through densification around transport links (transport-oriented development), dedicated affordable housing and mixed land use to increase the proximity between people and opportunities.

Pursuing higher density alone may not solve all urban challenges in the Brussels-Capital Region. Several risks need to be properly considered. For example, the restricted land supply may have unintended consequences on housing affordability as it could inflate the cost of new housing projects and rental housing (Senserrich, 2019[12]). Land use plans must, therefore, allow for floor space to be created at an equal rate to the restricted land supply and this additional land space could be found via urban regeneration. Another potential risk associated with higher density can be higher construction costs, as it requires buildings with better insulation, underground parking space and a more efficient organisation of space, etc. These risks could be weighed against savings in land required and the services and infrastructure necessary to serve low-density neighbourhoods. Unless provisions are foreseen in the land use planning frameworks, higher densities might also hinder the development of green areas within the different municipalities, which should be avoided (Kurvinen and Saari, 2020[13]).

The implementation of the planning framework must be strengthened

Densification and orderly expansion could be further encouraged in the Brussels-Capital Region to create a more sustainable city-region and address growing concerns related to the lack of housing, the need to ensure zero emissions and reinforce productivity and competitiveness.

> *Developing a compact, reasoned-dense city is at the core of the region's planning instruments*

Land use planning is often the primary tool cities use to increase density and support high-quality urban infrastructure and public services (OECD, 2017[14]). The Brussels-Capital Region's urban planning concept, included in the Regional Development Plan although not yet developed in the Regional Land Use Plan, is the "20-minute city", where essential services are accessible within a 20-minute walk or bike ride. To achieve this concept, the Brussels-Capital Region has set up a comprehensive set of planning documents and tools that constitute the legal basis for urban and regional planning (Figure 2.1). They define how the region is laid out based on strategic objectives set by the regional government in conjunction with the municipalities and residents. These documents and tools apply to the entire territory or, in some cases, to specific parts of the territory. This allows for adapting the planning principles and priorities to different urban scales and for co-ordinating responsibilities across different levels of government (i.e. municipal and regional) to meet place-specific needs as well as regional challenges. Urban planning guides strategic decisions related to the public transport system and infrastructure, housing, heritage site conservation, natural resources (e.g. water), neighbourhood renewal and public service delivery.

While much of the urban planning in the Brussels-Capital Region aims to respond to the urban challenges, the region is also implementing proactive efforts to improve the quality of life while organising a controlled process of densification in its territory. The goal is to realise a vision for a city-region that is economically dynamic, environmentally sustainable and socially inclusive, has high living standards and delivers efficient public service delivery to meet its international role as the headquarters of European Union (EU) institutions.

The Brussels-Capital Region's planning framework broadly guides development, regulating general and specific areas of land and dictating how they can be used. Box 2.1 describes the scope and goals of each instrument. The Brussels Code of Urban Planning (CoBAT) seeks to promote compact and well-planned city forms. The Sustainable Regional Development Plan (PRDD) encourages densification and mixed land use to tackle urban challenges such as demographic growth, housing affordability, access to employment, economic growth, functional and social diversity, mobility and environmental preservation. The vision and goals set in the PRDD must be translated into land use and building regulations that will govern what is built in the region through more specific planning tools. Moreover, through the PRDD, the regional government is fostering a new approach to spatial planning based on the development of a wider territorial perspective than a single administrative unit based on the co-ordination of planning with the competent

authorities in other regions and municipalities. It supports regional development around different zones and axes, defining the urban architecture around a polycentric city at different scales: hyper-centres, urban centres, inter-districts and neighbourhoods.

Figure 2.1. Hierarchy of planning documents in the Brussels-Capital Region
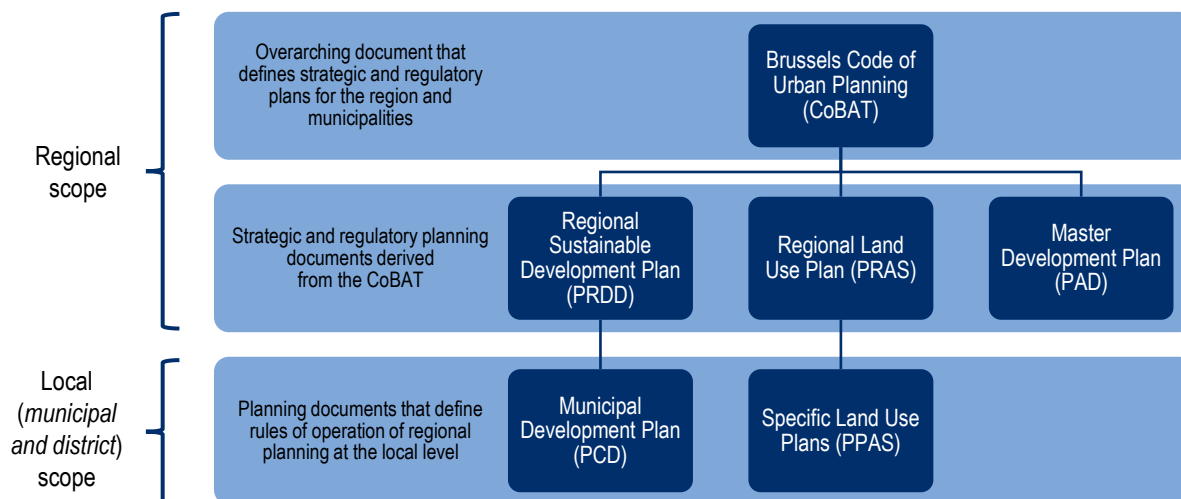
The regional and municipal plans promote a polycentric development of the territory, guaranteeing each neighbourhood and municipality the opportunity to develop urban nodes with enough public services, facilities and green areas (ESPON, 2018[6]). The plans also seek that the implementation of specific policy objectives in neighbourhoods contribute to the overall urban sustainability in the region. The PRDD and, in some cases, the Municipal Development Plan (*Plan communal de développement*, PCD) coincide with the need for a metropolitan approach to planning and emphasise the need for collaboration at the inter-regional level in the areas of mobility, housing and shared facilities.

The Regional Land Use Plan (PRAS) determines whether each plot of land is constructible or constitutes protected or green areas, among others (Box 2.1). When a plot is designated as constructible, the PRAS determines the type of construction allowed (e.g. housing, offices, stores or a mix of land uses). The Specific Land Use Plans (PPAS) apply to a specific reduced area, regulate the mode of land use and delineate the built-up and green areas and related requirements, and provide directions regarding the location, volumes and aesthetics of the buildings and their surroundings. The Master Development Plans (PADs) define the strategic and regulatory aspects of an urban strategy at a local level.

> **Box 2.1. Overview of the different urban planning instruments in the Brussels-Capital Region**
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> - **The Brussels Code of Urban Planning** (*Code bruxellois de l'aménagement du Territoire/ Brussels Wetboek van Ruimtelijke Ordening*, CoBAT), adopted in 2004, is the main document that guides urban development in the Brussels-Capital Region. It establishes and governs the main mechanisms of spatial planning in the region. Its aim is to ensure sustainable development to meet the social, economic, heritage, environmental and mobility needs of the residents by the planned use of land and its resources and the conservation and development of the cultural,

natural and landscape heritage and by improving the energy performance of buildings and mobility.

- **The Regional Sustainable Development Plan** (*Plan régional de développement durable,* PRDD/*Gewestelijk Plan voor Duurzame Ontwikkeling*, GPDO), approved in 2018, is a comprehensive planning instrument that provides a territorial development vision until 2040. It articulates spatial planning around four main themes: i) the framework of territorial development and the development of new neighbourhoods; ii) the development of a pleasant, sustainable and attractive environment; iii) the strengthening of the urban economy; and iv) the promotion of multimodal travel.

- **The Regional Land Use Plan** (*Plan régional d'affectation du sol,* PRAS/*Gewestelijk Bestemmingsplan*, GBP) has a binding force and regulatory value across the entire regional territory. It includes maps (graphic prescriptions) and a set of provisions (literal prescriptions) regarding land use in mixed zones, industrial zones, settlement areas, and business and green areas, among others, across the Brussels-Capital Region. Each planning permission must comply with the PRAS as it is binding for authorities and individuals.

- **Master Development Plan** (*Plans d'aménagement directeur*, PAD/*Een Richtplan van aanleg*, RPA*)* are a regional tool that: propose strategic planning and could determine land uses (e.g. housing, business, green areas) and the areas that must be dedicated to them; set the general fabric of public spaces such as roads, landscapes; define the characteristics of constructions; establish the organisation of mobility and parking; and define the measures to protect heritage. In their perimeters, each planning permission must comply with the PRAS and/or the PAD as it is binding for authorities and individuals.

- **Municipal Development Plans** (*Plans communaux de développement*, PCDs/*Gemeentelijk ontwikkelingsplan*, GemOP) are an indicative document adopted by each of the 19 municipalities to define their development strategy and translate principles of strategic development adopted in the PRDD at the municipal level. These plans indicate the municipalities' specific objectives, development priorities and implementation strategy. They contain the guidelines of the municipality concerning all aspects of development, such as housing and demography, economy and employment, environment, mobility, facilities, social policy, trade, tourism, culture, etc.

- **Specific Land Use Plans** (*Plans particuliers d'affectation du sol*, PPASs/*Bijzondere bestemmingsplan*, BBP) are municipal tools that define the rules of development at the scale of a district (one or more blocks) and determine the allocation and modes of land use. Each municipality within the Brussels-Capital Region may adopt a PPAS applicable to a part of its own territory. The PPAS specifies and complements the Regional Land Use Plan in line with the guidelines of the PCD. It provides the detailed allocations of the various zones.

Source: Région de Bruxelles-Capitale (2022[15]), *Code bruxellois de l'aménagement du territoire (CoBAT)*, http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&la=F&cn=2004040935&table_name=loi; Région de Bruxelles-Capitale (2018[16]), *Plan Régional de Développement Durable (PRDD)*, https://perspective.brussels/fr/plans-reglements-et-guides/plans-strategiques/plan-regional-de-developpement-prd/prdd; Région de Bruxelles-Capitale (2023[17]), *Plan communal de développement (PCD)*, https://perspective.brussels/fr/plans-reglements/plans-strategiques/plan-communal-de-developpement-pcd; Région de Bruxelles-Capitale (2013[18]), *Plan régional d'affectation du sol (PRAS)*, https://urbanisme.irisnet.be/lesreglesdujeu/les-plans-daffectation-du-sol/le-plan-regional-daffectation-du-sol-pras; Région de Bruxelles-Capitale (2023[19]), *Plan particulier d'affectation du sol (PPAS)*, https://perspective.brussels/fr/plans-reglements/plans-reglementaires/plan-particulier-daffectation-du-sol-ppas; Région de Bruxelles-Capitale (2023[20]), *Plan d'aménagement directeur (PAD)*, https://perspective.brussels/fr/plans-reglements/plans-strategiques-et-reglementaires-plan-damenagement-directeur-pad.

By establishing mechanisms for planning at different levels, the Brussels-Capital Region's planning framework seems to avoid a mismatch between the different levels of planning. Municipalities may differ in how they develop their territory and use land. However, they all follow the directives or guidelines of overarching planning documents (e.g. CoBAT, PRDD and PRAS) by translating them into land use and building regulations that govern urban development projects.

The Brussels-Capital Region is updating its regulatory tools to adapt more closely to the new needs in the region. In particular, the Master Development Plan (PAD) and Regional Land Use Plan (PRAS) are undergoing revisions to recalibrate land use in construction programmes, control and authorise de-densification and densification, and set up a framework for new land uses such as urban agriculture.

Implementing the planning framework requires co-ordination among two main regional bodies

As in most OECD countries, urban and land use planning in the Brussels-Capital Region is under the purview of the regional and local governments (municipalities). There are no spatial plans at the national level in Belgium. The logic behind this is that land use planning is place-based and highly context-specific. In the region, the regional government has two main bodies leading regional and land use planning: perspective.brussels (officially known as the Brussels Office of Planning) and urban.brussels (previously known as Brussels Urbanism and Heritage) (Box 2.2). Perspective.brussels has a knowledge and strategic planning function, while urban.brussels is more related to the implementation of urban policies. However, both bodies work in close co-ordination to complement each other's activities and fulfil their mandates.

Box 2.2. Two main bodies in charge of regional and land use planning in the Brussels-Capital Region

Perspective.brussels, created in 2015, is the body in charge of regulatory and strategic planning in the Brussels-Capital Region. It is responsible for the analysis of regional statistics produced by the Brussels Institute for Statistics and Analysis (*Institut Bruxellois de Statistique et d'Analyse*, IBSA/*Brussels Instituut voor Statistiek en Analyse*, BISA) to inform planning and the preparation of rules and strategies for territorial planning. Perspective.brussels also conducts studies and analysis to advise the regional government on development strategies, develop a multi-disciplinary and prospective expertise to detect tendencies, propose a vision for territorial development and support its implementation through territorial planning tools and rules.

Urban.brussels supports territorial development in the Brussels-Capital Region through the implementation of regional policies related to urban development, movable and immovable cultural heritage, the management of operational programmes for urban renewal and the organisation of public awareness campaigns about heritage and architecture. It also offers services related to subsidies for the restoration of heritage and grants for renovation. Furthermore, in co-operation with perspective.brussels, it also provides legal advice related to the Brussels Code of Urban Planning (CoBAT) and the Regional Development Regulations (RRU).

Source: perspective.brussels (2022[21]), *Rapport Annuel 2021*, https://perspective.brussels/sites/default/files/bbp_ra_2021_fr_web.pdf; urban.brussels (n.d.[22]), *About*, https://urban.brussels/en/about.

The Brussels-Capital Region regional government, through perspective.brussels and urban.brussels, develops strategic plans and guidelines with spatial implications to co-ordinate territorial development across its entire territory. In Belgium, regions enact the legal framework that guides planning but delegate many tasks to municipalities. Thus, local plans developed by the municipalities are required to follow

regional plans. The regional government influences land use by preparing the Regional Sustainable Development Plan (PRDD) and is responsible for critical policy fields such as environmental legislation, energy and building code regulations. As in the rest of Belgium, municipal governments in the Brussels-Capital Region prepare Municipal Development Plans (PCDs) and detailed municipal implementation plans. When a municipality wishes to make changes to land use, it must consult with perspective.brussels, which may approve the changes on behalf of the regional government. Any changes in land use must be accompanied by an environmental impact analysis prior to the approval. Request for changes to the land use plan can be made at any time but this requires investment in time and financial and human resources. Depending on the changes, special commissions may be created together with the municipalities to assess the changes requested.

Barriers to efficient and effective urban and land use planning

The outcomes of the planning system have been limited as long-standing urban challenges persist

Despite its comprehensive, multi-level strategic planning framework, which is revised and updated periodically, the Brussels-Capital Region still faces challenges related to weak socio-economic development and attractiveness, lack of affordable housing and a deterioration of the existing housing stock and mobility (see Chapter 1). At the metropolitan level, urban development is becoming a source of concern for regional authorities. In the region, at least three factors may hinder the effectiveness of the planning system:

- **Weak capacity at the local level**. Municipalities must operationalise the regional strategic plans and land use plan and implement the general guidelines. However, some municipalities do not seem to have the capacity to implement and follow up on those plans. For example, municipalities are in charge of implementing a mobility plan but the municipal division in charge of mobility may be understaffed and existing personnel is responsible for many different tasks such as planning, implementation, follow-up, co-ordination with other stakeholders, etc.[6] (see Chapter 3). Therefore, there is some disparity across municipalities in implementing strategic and land use plans, producing timely and accurate information, and participating in regional planning processes. Moreover, while the PRDD and the PCD define objectives and strategies to achieve them, there is no implementation taskforce to co-ordinate and follow up on the implementation of the PRDD and the PCD, guide the management and personnel involved in the implementation of the plans, and engage with different stakeholders where appropriate.

- **A complex organisational framework for land use planning**. Urban governance in the Brussels-Capital Region is institutionally overcrowded and highly fragmented (see Chapter 3). This hinders the adoption of an integrated approach to urban development and, particularly, to land use and urban regeneration projects. Planning procedures generally require the consultation of other levels of government to ensure vertical co-ordination. The nature of a plan may also require the consultation of local governments with neighbouring jurisdictions. In the absence of effective co-ordination mechanisms, social and political divisions among the 19 municipalities stand in the way of a collaborative strategy to pursue urban regeneration and ensure cohesive mixed-use development (Clark et al., 2016[5]). The insufficient co-ordination across numerous authorities and agencies works against an ambitious vision for the Brussels-Capital Region's development and attractiveness. Apart from the inter-regional forum organised twice a year, there are few opportunities for co-ordination on land use planning among the three different Belgian regions (OECD, 2017[23]).

- **Possible overlapping among different plans**. The Brussels-Capital Region is currently working on new urban development regulations known as Good Living. These new regulations will guide the construction, renovation and redevelopment of buildings, streets and parks in the region,

contributing to the implementation of the CoBAT. The guidelines, expected to be approved in 2023 and implemented in 2024, will cover topics such as buildings, habitability standards for housing and public space design. However, there are two potential pitfalls that the new regulations will need to avoid: limited interaction and coherence with other plans and programmes, such as Good Move, and more rigid urban planning as a result of the ongoing reform that would prevent urban renewal. Beyond spatial policies, the CoBAT regulates some aspects of land use (e.g. property rights and expropriation rights, and the obligations associated with land use), whereas the civil code sets general rules on property rights across the country.

Constant changes to the regulatory and planning framework without clear evaluations

Planning instruments in the Brussels-Capital Region tend to change frequently, although this does not necessarily mean they improve over time. An update to the planning instruments may last from one to several years, depending on the nature and scope of the changes made. For example, the Regional Land Use Plan (PRAS), adopted in 2001, is currently undergoing a general update but it had been amended in 2010, 2013, 2017, 2018 and 2023 to allow specific projects such as the construction of the metro and the redevelopment of the Heysel Plateau in northern Brussels. Such constant changes may hinder compliance with the regulation, as it is necessary to amend systems and processes and monitor possible additional financial costs and times for the development of investment projects. Updating regulation is not a challenge per se; in fact, it is essential to adapt it to changing contexts but updates should consider the overall burden it may impose on individuals and businesses as well as administrative departments.

Changes or partial amendments to the regulatory and planning framework or plans are also conducted mostly following the priorities of the administration in place. The lack of monitoring and evaluation about how land is used makes it difficult to identify which regulations and plans are working well and which ones are not. The process of adapting the land use regulatory framework and policies to the changing conditions should be based on lessons learned and practical evidence. As OECD research has shown, monitoring and evaluating land use regulations remains relatively rare across OECD countries because of the lack of data (OECD, 2017[14]). There is no evidence that the Brussels-Capital Region collects data on how land is used or has a methodology to measure the impact of the land use regulatory framework. For example, an evaluation of the land use regulatory framework of the Brussels-Capital Region could focus on analysing if land use policies provide strong incentives and reduce restrictions on promoting density and mixed use.

Competing objectives from different policy areas impact urban and land use planning

The way land is used has important implications for the environment, public health, economic growth, wealth distribution, social outcomes and the attractiveness of cities and towns. For example, a large part of the rising wealth inequality across the OECD in recent decades can be explained by rising land and property prices (OECD, 2017[14]). Any increase in land and property prices tends to benefit wealthier and older households as they are the primary owners at the expense of younger generations and poorer households.

Land use in the Brussels-Capital Region needs to maintain affordable housing while accommodating new residents from different socio-economic backgrounds. If housing demand in the Brussels-Capital Region cannot be met adequately, housing and rental prices could rise to the extent that many residents may not be able to afford in the region. Some residents may be pushed towards the periphery in municipalities located in different regions, which would go against the region's goal of building a compact city.

Land use in the Brussels-Capital Region has a key role to play in meeting housing demand. The PRAS, PAD and PPAS can open up new areas for development, transforming existing spaces and uses and encouraging more density in line with the objective of building a 20-minute city. As mentioned above, these three strategic plans describe what can or cannot be built where and the time a project takes to receive

planning permission. All provisions in the PRAS, PAD and PPAS also affect construction costs that are ultimately borne by homeowners and renters.

For city planners and officials, it is difficult to meet the current housing demand due to the difficulty in finding suitable land for the construction of social housing in densely populated areas already equipped with infrastructure for public services and the need to preserve green and open spaces in the city-region. A key part of the housing strategy is to renew and repurpose existing buildings and zones in the different neighbourhoods across the region. The Sustainable Neighbourhood Contracts (*Contrat de quartier durable*/*Duurzame wijkcontracten*, CQD/DWC) and the Urban Renewal Contracts (*Contrat de renovation urbaine*/*Stadsvernieuwingscontracten*, CRU/SVC) (see below) operationalise the PAD or PPAS as they allow carrying out construction and renovation of housing units. These documents, which focus on specific districts of municipalities, provide an analysis of the neighbourhood regarding the environment, mobility, housing, use of public space, buildings that need renewal or constitute part of the urban heritage, and list the different initiatives or projects to renew the neighbourhood. For developers and local authorities, renewing high-concentration areas may be more difficult than expansion or low-density districts because there are often more stakeholders involved (e.g. established residents and businesses) and higher market prices.

The PRAS, PAD and PPAS also have a role in defining mobility projects. Investments in public transport, such as the new metro line 3, can increase connectivity within the Brussels-Capital Region and potentially with the surrounding regions. A common example of land use to improve mobility is the regeneration of the Neerstalle roadway (Chaussée de Neerstalle/Neerstalsesteenweg). Improving mobility around the Neerstalle roadway was important for renewing the surrounding districts as inhabitants rarely leave their neighbourhood despite the different mobility options available (e.g. trams and buses) (urban.brussels et al., 2021[24]). The high traffic of vehicles and pedestrians on the Neerstalle roadway is perceived as too dangerous for children who cannot cross it alone to go to Bempt Park (Parc du Bempt/Bemptpark) or school due to the high speed of vehicles. In addition, the sidewalks are too narrow for pedestrians and bordered on either side by parking spaces (urban.brussels et al., 2021[24]). Land use and urban regeneration can help improve quality of life around the roadway by improving street design and the reconfiguration of the Neerstalle network. The intervention of the regional government is required in these cases as they are responsible for certain roads within the city and co-ordination with municipal authorities is needed for a coherent and comprehensive renewal process.

A major task for the regional transport and planning authorities is to balance the interests and needs of the different users, such as cars competing with public transport and bicycles competing with pedestrians for street space. Moreover, authorities in the Brussels-Capital Region need to balance sustainability with accessibility considerations. In other words, as automobile use lessens – which is a clear regional objective – sustainable transport options are required. How land is used is a critical factor in achieving this balance. Density, land use mix and street design are three variables that need to be considered carefully in all PRAS, PAD and PPAS across the region, as they have a significant impact on the likelihood of walking or using other forms of active mobility (e.g. cycling).

A metropolitan approach to urban and land use planning is lacking

Planning instruments have a clear territorial dimension, as they are focused on the developments and priorities of the territory of the Brussels-Capital Region and its 19 municipalities. The FUA, i.e. the territory across which people live, work and commute, is larger than the Brussels-Capital Region's territory, which means more dispersed employment functions, amenities and services. This has been driven to a large extent by automobile commuting and the expansion of road networks (see Chapter 1 for an in-depth discussion). Because the Brussels-Capital Region is subject to inflows of people and goods from outside the region and vice versa, planning its development needs to take into account development priorities and trends in neighbouring regions, although this is seldom the case in practice. There is currently no

metropolitan planning body in the Brussels-Capital Region. Perspective.brussels is the planning body for the region but there is no organisation that takes a broader view and includes the metropolitan area, although some ad hoc consultations such as the Buda+ project are taking place between the Brussels-Capital Region and the Flemish Region (Box 2.3).

Box 2.3. The Buda+ project

The Buda+ project is an inter-regional collaboration project between the Flemish Region and the Brussels-Capital Region and in which the City of Brussels and the municipalities of Machelen and Vilvoorde are main partners. The purpose of this collaboration is to develop a common vision to redevelop the economic zone north of Brussels, an area called Buda+ in reference to the Buda Bridge. Through this project, the Noordrand territorial development programme – a collaboration between perspective.brussels (Brussels-Capital Region), Omgeving Vlaandered (Flemish Region), the province of Flemish Brabant (Vlaams Brabant) and the Flemish public waste management agency (OVAM) for the development of the northern periphery of the Brussels-Capital Region and the municipalities of Grimbergen, Machelen, Vilvoorde and Zaventem – is looking to design a plan for the redevelopment of the industrial area with the following criteria:

- Transition to a circular economy.
- Support for companies experiencing healthy development, by accompanying them throughout their life cycle: from training to start-ups and fully-fledged companies.
- Optimisation of the area in terms of land use planning.
- Internal and external promotion of the area, facilitating actions in public spaces, communication campaigns, events, etc.
- Finding and implementing solutions to mobility problems.

Source: Ville de Bruxelles (n.d.[25]), *Projet Buda+*, https://www.bruxelles.be/projet-buda.

According to OECD research, metropolitan areas without a governance body tend to sprawl more than those that have one (Ahrend, Gamper and Schumann, 2014[26]). In metropolitan areas with a governance body that works on spatial planning issues, population density is approximately 20% higher (Ahrend, Gamper and Schumann, 2014[26]). This is likely due to the fact that in the absence of a consistent and systematic metropolitan approach to planning, consultation and co-ordination with neighbouring regions and municipalities is limited on issues such as land use, housing or strategic planning. The Brussels-Capital Region and the neighbouring regions may be pursuing opposing objectives, which would undermine the impact of the respective regional development plans (see Chapter 3 for further discussion). The lack of co-ordination within the Brussels-Capital Region itself also hinders the adoption of a metropolitan approach. This is reflected in competing decisions on the use of the public space when it is divided between different municipalities. It is not uncommon in the region to share one plot of land between two municipalities with different projects on its use. While one municipality promotes residential use, the other may promote commercial activities or other economic activities. This reflects a lack of co-ordination among municipalities on how to build synergies and co-ordinate the use of land. A broader territorial vision is absent on how these decisions may act to the detriment or in favour of the region as a whole.

By contrast, public transport is a policy field that is more subject to metropolitan governance in Belgium. For example, there are mechanisms through which the regional governments of Flanders and Wallonia co-ordinate their approach to transport planning under the supervision of the federal government so that investments in transport infrastructure serve the priorities of all regions. Extending these co-ordination

instruments to include the Brussels-Capital Region would strengthen planning from the location of transport infrastructure to the preservation of natural reserves across the functional area.

Fostering urban regeneration

Urban regeneration or urban revitalisation has been a policy priority for the Brussels-Capital Region since 1993. The core objective of urban regeneration projects is to improve the quality of life of residents, increase affordable housing supply, enhance the quality of public space, housing and public services, make mobility and logistics more efficient, foster economic activity, strengthen the labour market and trigger cultural activities. Like many other regions, the Brussels-Capital Region includes pockets of underused land, distressed areas[7] or areas that could be used more efficiently to meet social, environmental and economic goals. For example, the housing projects developed by Community Land Trust Brussels (located on former industrial land in Anderlecht and Molenbeek (Interreg, n.d.[27])) and the densification projects concentrated in the Canal Zone where former industrial sites have become available (Mabilde, 2020[28]) aim to serve such goals.

> *The Brussels-Capital Region has developed co-ordination and investment instruments for urban regeneration*

The Regional Sustainable Development Plan (PRDD) has renewed the framework for urban regeneration through the introduction of the "urban revitalisation zone" (*zone de revitalisation urbaine*, ZRU / *stedelijke revitaliseringszone,* SR). To define the ZRU, the Brussels-Capital Region takes into account criteria regarding the age and quality of buildings and houses. Its novelty lies in the fact that it focuses on socio-economic criteria in addition to the physical criteria of buildings. The new ZRU is used to delineate the perimeter of intervention of the urban regeneration tools – the Sustainable Neighbourhood Contracts (CQDs) and the Urban Renewal Contracts (CRUs) – as well as support for the improvement of buildings (Région de Bruxelles-Capitale, 2018[16]).

The regional government, through the Large Cities Policy (*Politique des Grandes Villes*/*Grootstedenbeleid*, PGV/GSB), provides financial assistance to municipalities to face urban challenges such as mobility, security, cleanliness and others, but also in terms of urban development, such as serving the needs of a population with different socio-economic profiles, density, population ageing, etc. In the Brussels-Capital Region, in the municipality of Molenbeek, the Large Cities Policy has supported projects to improve the collective and individual living environment, prevent and secure public space, promote well-being, better living, integration and solidarity, and activate projects through employment and the fight against poverty.

To pursue urban regeneration projects, the Brussels-Capital Region has introduced three main instruments with different dimensions or perspectives: i) the CQD with a more local dimension; ii) the CRU with a more regional perspective; and iii) the Axis Contract and Block Contract (*Contrat d'Axe et le Contrat d'Ilot*/ *Huizenblokcontract*, CACI/AHC) (Box 2.4). CQDs generally focus on ZRU areas chosen on the basis of objective criteria and consultation between the Brussels-Capital Region and the municipalities (urban.brussels, n.d.[29]), and are designed and implemented with local participation. These are areas characterised by high levels of unemployment; lower-income levels; strong social inequalities; poorly equipped, undersized or unsanitary dwellings; and high densities. In general, private companies have little interest in investing in these areas as the return on investment is not regarded as attractive. CQDs constitute a mechanism of regional intervention in the most deprived and impoverished neighbourhoods through building renovation and public space revitalisation. Since their creation in 1994, 1 891 housing units have been built or renovated through the CQD scheme.[8] Since 2010, emphasis has been placed on the environmental dimension of projects intended to minimise waste during construction processes, the use of environmentally friendly materials and the recycling of rainwater. The projects are based on the assumption that neighbourhoods should include residential, employment, leisure and cultural functions to increase the prosperity of the districts and reduce suburbanisation (Romańczyk, 2015[30]).

The CQD and CRU complement each other but are managed by different authorities. The municipalities are responsible for the CQD as they focus on specific neighbourhoods or districts within the municipality, while the regional government operates the CRU in co-ordination with the municipalities. This is a difference in terms of territorial scale as the CQD is implemented within a municipality while the CRU is spread over several municipalities, hence the intervention of the regional government. The municipal or regional budget covers every project under the CQD or CRU, sometimes with federal resources (e.g. Beliris) or European funds (e.g. through European Regional Development Fund programmes).

Both the CQD and CRU mobilise several stakeholders and institutions in the public, private and voluntary sectors, including citizens. However, citizens are much less part of the CRU process than of the CQD. All stakeholders involved have their own interests and may perceive the challenges and benefits of urban regeneration projects differently. The diversity of ideas, interests, competencies and motivations may have been one of the reasons for the creation of the CQD and CRU to ensure that different actors agree on urban regeneration projects. Moreover, the large number of stakeholders involved shows the impact that urban regeneration projects may have on local, regional and even metropolitan scales. However, their buy-in is essential to ensure the sustainability of regeneration projects. This is why the regional government plays a key role as a broker in cases of disagreement, reaching political compromise and co-ordinating action for successful projects. Although municipal governments have control over projects conducted within their territories, compromises are inevitable in the implementation of major urban projects. However, such compromises require transparency to ensure they are a unifying force rather than divisive as opposition movements may take place (Hubert et al., 2017[31]).

The implementation of the CQD and CRU is not without difficulties. A key aspect is the need to improve municipal staff skills in effective project management as the success of the contracts depends largely on this (Sacco, 2010[32]; Romańczyk, 2015[30]). The leadership of the mayor or alderman can also have a decisive impact on the final results of the projects (Noël, 2009[33]). Moreover, while the contracts have been introduced partly to increase citizen participation, there are still concerns it may be reduced to an expression of opinion rather than real participation in decision making. Limited financial participation of the private sector could also hinder the outcomes of a CQD or CRU, as public financing is generally insufficient to conduct urban revitalisation or construction projects. Finally, there are questions regarding the lack of involvement of immigrants in the contracts. This would be important for life in the neighbourhoods but they need to be politically represented to see their needs taken into account in decision-making processes (Sacco, 2010[32]).

Box 2.4. Programmes for urban regeneration in the Brussels-Capital Region

The **Sustainable Neighbourhood Contracts** (*Contracts de quartier durable / Duurzame wijkcontracten*, CQDs/DWC) are action plans that are limited in time and space and agreed upon among the region, municipality and residents of a specific district. Their objective is to improve quality of life through the revitalisation or renewal of the strengths or main assets of a neighbourhood. The contracts establish a work programme within a specific budget. All projects structured under the CQD aim to meet residents' needs on:

- Equipment and local infrastructure, with priority given to early childhood and youth.
- Public spaces, to promote conviviality and accessibility through soft mobility.
- Socio-economic actions, through socio-professional integration and training, awareness raising, school support, social cohesion, prevention, etc.
- Productive economic and commercial spaces, through proximity economy.

- Sustainability and environmental management, through passive buildings, revegetation, biodiversity, etc.
- Housing giving priority to low- and middle-income households.

Every year, depending on the available funds, the regional government identifies the neighbourhoods that can benefit from a contract. For example, in 2023, for the 13th series of CQD, the government selected 3 new perimeters: Conscience in the municipality of Evere; Petite Suisse in the municipality of Ixelles; and Villas de Ganshoren in the municipality of Ganshoren. Municipalities are in charge of the implementation of every contract and contribute at least 5% of the total cost of the project. CQDs are designated based on four main criteria: i) the territorial targets based on environmental and social indicators (e.g. vacant buildings, degradation of public spaces); ii) the integrated approach that takes into account urban and social challenges; iii) the contractual character of the programme approved by all public and private stakeholders responsible for implementation; and iv) the level of participation of public and private actors, organisations and individual citizens.

The **Urban Renewal Contract** (CRU/SVC) is a programme for urban regeneration projects on a multi-municipal perimeter to improve the urban space and urban network, build infrastructure and housing and enhance the environmental and economic activity of neighbouring municipalities. The CRU complements the CQD by targeting the regional scale. Since the CRU has a more regional view, it is managed by the regional government through perspective.brussels, which oversees the strategic and programmatic aspects; urban.brussels is responsible for the operational aspects in co-ordination with other departments, such as environment and mobility.

The **Axis Contract and Block Contract** (CACI/AHC), adopted in January 2022, is the newest urban renewal tool in the Brussels-Capital Region. It is a unique system at the hyper-local level (based on one or two blocks or axes). It acts in specific territories not covered by more macro urban renewal policies. The CACI pursues several objectives: i) de-densification and de-waterproofing of block interiors and climate change mitigation; ii) requalification of the building through renovation; iii) requalification of the public space to integrate an urban and environmental quality; iv) intensification of the uses of the axis through the implementation of housing, local public facilities and economic activities along it; and v) better consideration of citizens' projects.

Source: urban.brussels et al. (2021[24]), *2 Cités – Contract de Quartier Durable*, https://cloud.urban.brussels/s/dNXnDyZZJtwLGzn ?dir=undefined&path=%2F2%20Cit%C3%A9s&openfile=1338679; Ministre-Prèsident de la Région de Bruxelles-Capitale (2022[34]), "De nouveaux territoires à découvrir ! Lancement de la 13e série des Contrats de Quartier Durable", https://rudivervoort.brussels/news_/de-nouveaux-territoires-a-decouvrir-lancement-de-la-13e-serie-des-contrats-de-quartier-durable/; https://perspective.brussels/fr/projets/perimetres-dintervention/contrats-de-renovation-urbaine-cru; Sacco, M. (2010[32]), "Cureghem: From demolition to revitalisation", https://journals.openedition.org/brussels/815; urban.brussels (2022[35]), "Contrat d'Axe et le Contrat d'Ilot (CACI)", https://urban.brussels/fr/articles/contrat-d-axe-et-le-contrat-d-ilot-caci; Ville de Bruxelles (n.d.[36]), C'est quoi un Contrat d'Axe et le Contrat d'Îlot (CACI) ?, www.bruxelles.be/cest-quoi-un-contrat-daxe-et-le-contrat-dilot-caci.

Urban regeneration projects need to consider the heterogeneity of the population from a socio-economic point of view, notably in terms of housing quality. For example, the south and southwest parts of the Pentagon (Brussels' city centre) are mainly home to low-income households, while the northwest and east are undergoing gentrification. Housing quality is also a key issue, as the rise in property prices has led to overcrowding of the existing housing stock, which is generally of poor quality. A challenge for urban regeneration projects in the Brussels-Capital Region, like in many other cities, is to ensure that improvements in the public space do not lead to further increases in house prices so as not to create further inequality and social exclusion of certain population groups from central areas.

A key concern and priority for urban planning in the Brussels-Capital Region is to facilitate the use of public spaces as places of urban sociability that contribute to residents' well-being. This is also linked to the goal

of better distributing public space by promoting active forms of mobility (i.e. walking and cycling) and public transport and reducing the use of private cars. Urban renovation works suggest that the use and distribution of public space are no longer enough to encourage active mobility and public transport use. Additional objectives need to be considered, such as the use of large-scale renovation of public spaces as a tool for neighbourhood revitalisation, the promotion of social cohesion and climate change adaptation.

A potential drawback in the urban regeneration strategy is that most reconversion and densification projects are developed on parcels of land freed up when other functions cease to be operational, as in the case of the Canal Zone (Box 2.5). This case shows the need to supplement urban renewal projects with more diverse, smaller-scale and more open space initiatives and greater variation of open spaces and housing typologies. This highlights the importance of initiatives such as the CACI (Box 2.4), which focus on the micro level and provide support for social and citizen life, public space improvement and municipal facilities. Open spaces such as parks, playgrounds and fields are critical for urban areas, as they are not only places for recreation and physical exercise but also build a sense of community. They also help mitigate the effects of pollution and can reduce the urban heat island effect (i.e. heat trapped in built-up areas). For example, the redevelopment of Cinquantenaire Park to celebrate the 200th anniversary of Belgium's independence aimed to transform the place into a socio-cultural beacon for the city and the country. By 2030, it is expected that the redeveloped park will offer a combination of public gatherings to encourage meetings between various associations, as well as social, sports and cultural movements in the country. The project plans to modernise the museums and their offer with a particular focus on decolonisation.[9]

Box 2.5. Urban renewal projects in the Canal Zone

The Canal Zone forms a string of new, large-scale developments in an already dense environment, with a large proportion of small apartments in generally closed urban blocks inhabited by a socio-economically vulnerable population. Many new densification projects continue to be concentrated in this area where former industrial sites become available and existing buildings are being repurposed. Along the waterfront, densification becomes more affordable and profitable for project developers and they are less likely to face opposition from residents who see their homes threatened by densification. Despite the need for affordable homes for the existing population, including for larger families, developers systematically choose to build a one-sided offering targeting the upper middle classes and investors, consisting of small one- and two-bedroomed apartments, a type of housing that delivers the highest profit per square metre.

Different renewal projects around the Canal Zone quarters integrate innovative architectural and urban design concepts. The repurposing of the WTC I & II towers in the Brussels-Capital Region could serve to make the Manhattan quarter around the North Station a lively, mixed and dense residential and commercial area again, based on its connectivity advantage for being around the North Station. The project aims to transform the monofunctional office block into a mixed-use building in which living and working are layered and alternate per floor.

Source: Mabilde, J. (2020[28]), "Brussels, compact city", https://a-plus.be/fr/projet/brussels-compact-city/ (accessed on 11 August 2023).

Urban regeneration in the Brussels-Capital Region seeks to promote sustainable mobility

A key component of urban regeneration projects in the Brussels-Capital Region has been to facilitate more sustainable mobility, notably through the pedestrianisation of the public space. Regional and local authorities have sought to connect different modes of travel (e.g. walking, public transport and/or limited car traffic in shared spaces), improve accessibility and adapt to heatwaves (see examples in Box 2.6).

According to research, in the Brussels-Capital Region, space sharing between different modes of travel takes place mainly through isolated interventions aiming to restrict the access and speed of cars (e.g. speed limits, speed bumps, widening of pavements and dedicated lanes for public transport, etc.) and seldom through the complete closure to road traffic (Hubert et al., 2017[31]).

Box 2.6. Examples of urban regeneration projects in the Brussels-Capital Region

- **The redevelopment of Avenue Stalingrad Laan**. Avenue Stalingrad Laan is located on the territory of the City of Brussels, within the Pentagon, and provides an important north-south connection to the city centre, linking the Gare du Midi/Zuidstation and the historic centre. While the avenue has been used heavily by motorists so far, it has been redesigned to become a more attractive place for pedestrians, including children, tourists, cyclists and shopkeepers. The redevelopment project aims to activate mobility, reinforce the attractiveness of the avenue, increase landscape quality and strengthen the mixed use of land.

- **The redevelopment of the intersection between Rue Emile Delvastraat and Rue Steylsstraat**. This intersection is an important axis for pedestrians, cyclists, public transport and cars but it includes a substantial part of lost public space. Cars can park across it (diagonally), which can limit visibility when entering and exiting. The width of the Rue Emile Delvastraat also tends to encourage cars to drive too fast. The Brussels-Capital Region has designated the intersection as a "zone of high concentration of accidents" (*Zones à concentration d'accidents*/*Concentratiezones voor ongevallen*, ZACA), which refers to the most dangerous intersections in the entire region. The redevelopment project involves eliminating cross-parking spaces and narrowing the road surface to improve traffic safety. Public transport stops will be adapted to the needs of people with reduced mobility and will be better integrated in the overall urban design. Trees will be planted to ensure cooling functions during heatwaves and collect rainwater on site. Ten bicycle racks will be added and street lighting will be renewed.

Source: BXL (n.d.[37]) Avenue de Stalingrad redevelopment, at https://www.brussels.be/stalingrad; BXL (n.d.[38]) Redevelopment of the Rue Emile Delva and Rue Steyls intersection, at: (BXL, n.d.[38])https://www.brussels.be/steyls-delva.

The Belgian Highway Code (*Code de la route belge*/*Belgische wegcode*) distinguishes several types of zones or areas that prioritise pedestrians and cyclists, e.g. pedestrian zones, residential zones, meeting areas (*espaces de réunion*), local circulation roads, streets reserved to pedestrians or cyclists, etc.[10] Each of these zones has specific rules of access and circulation. For example, the pedestrian zone's main function is trade and tourism; the residential zone's is habitat and the meeting zone's is habitat, trade, tourism and leisure activities (e.g. the development of Place Eugène Flagey in 2008). In residential areas, public transport is generally limited. Considering that pedestrianisation projects in the Brussels-Capital Region aim for both urban redevelopment and commercial attractiveness, some risks associated with the latter need to be taken into consideration. For example, pedestrianisation may create a risk of proliferation of café terraces, hindering mobility, and a trend towards mono-functionality of the area in the sense that a rise in rents driven by the commercial attractiveness or catering tends to make use of all the space available and the upper floors may no longer be used for residential purposes (Brandeleer, Ermans and Hubert, 2016[39]).

Therefore, pedestrianisation efforts in the Brussels-Capital Region need to be conducted as part of a clear vision of the main activities to be conducted in the public space. Research suggests that commercial, political/symbolic and aesthetic or cultural functions need to be applied and managed in a complementary manner under a cross-cutting approach (Hubert et al., 2017[31]). Equally important is ensuring that the

different regeneration projects support a wider strategic vision for the use of public space and land in the Brussels-Capital Region. Although urban regeneration projects have a strong local focus (through CQDs), they may have impacts on other projects and the wider region, such as housing provision and congestion. Urban regeneration projects in the Brussels-Capital Region could be reinforced by better taking into consideration the level of accessibility by public transport and increasing the frequency of public transport services. In some cases, the route of the bus network may be changed due to pedestrianisation goals and may unintentionally limit access to public transport services. Pedestrianisation efforts in the region should, therefore, be part of the overall mobility strategy of the region and the different neighbourhoods (Boussauw, 2016[40]). Connecting different pedestrianised areas across the Brussels-Capital Region by public transport is critical for the success of urban regeneration projects, as this will impact the level of economic activity (e.g. facilitating local commercial activities) in the region and its neighbourhoods. For example, connecting pedestrianised areas among themselves and making them accessible by bicycle could be enhanced.

One of the objectives of pedestrianisation, as a mode of urban regeneration, has been the revitalisation of economic activity in the areas under renewal. Pedestrianisation often leads to an increase in the number of visitors, sales revenues and rental prices for commercial space. However, small businesses tend to be negatively affected due to the increase in rents, which only large distribution chains can afford to pay (Hubert et al., 2017[31]). Moreover, Boussauw (2016[40]) argues that the economic success of a pedestrian area largely depends on its residential density. However, pedestrianisation often leads to an increase in housing prices (ownership or rental). A large focus on commercial purposes tends to lead to a mono-functionality of an area, making it more worthwhile to increase profits (Boussauw, 2016[40]; Hubert et al., 2017[31]). The residential attractiveness of newly pedestrianised areas could be undermined due to disturbances in relation to commercial activities and difficulties in accessing the buildings. This may also further incentivise the development of residential spaces for tourists or short-stay visitors. In 2019, there were over 11 400 dwellings on the Airbnb platform in the Brussels-Capital Region, half of which were offered by investors or professionals and not by local residents.[11] These are dwellings that are not going to local residents for rental or ownership and contribute to increasing the pressure on the housing market. Thus, the challenge for authorities in the Brussels-Capital Region is twofold: to ensure that pedestrianisation leads to the revitalisation of the areas under intervention while controlling gentrification and to ensure permanent and affordable housing for residents in the context of increased short-term rentals for the tourism industry.

Strategies for reinforcing densification and pursuing an orderly expansion in the Brussels-Capital Region

To complement regional land use policies and strategies, the regional leadership may wish to consider the following recommendations to strengthen densification and an orderly expansion:

Ease land use regional and municipal restrictions that prevent densification

Currently, restrictive zoning regulations and planning decisions limit the possibilities for densification. Thus, the regional and municipal governments could review the Regional Sustainable Development Plan (PRDD), the Municipal Development Plans (PCDs), the Regional Land Use Plan (PRAS) and the Specific Land Use Plans (PPAS) to identify both explicit (e.g. through floor-to-area ratios) and implicit (e.g. minimum lot-size requirements and restrictions on multi-family homes) density restrictions. The PRAS, for example, sets several requirements for building in zones of mixed land use and conditions to be met to authorise development. The regional government may wish to revisit the extent to which those requirements and conditions prevent densification and even make construction harder. This is especially relevant in low-density municipalities and areas close to the core city, the 14 areas of regional interest (*zones d'intérêt régional*/*gebieden van gewestelijk belang*, ZIR/GGB)[12] and along public transport corridors. Gradual densification should be permitted across the region.

Deploy a broad range of sectoral policies beyond mobility to support the vision of a liveable and green region

Current densification and urban renewal efforts focus on neighbourhood accessibility, for example by improving mobility options through pedestrianisation. While neighbourhoods or districts must be accessible, mobility should not be the only guiding option. Other environmental (e.g. taxes on vehicle use, infill development), economic (e.g. real estate market) and social (e.g. social housing near transport hubs) policy instruments should be used. The final goal is that sectoral policies should contribute to optimising density and an orderly expansion of the city-region. This implies a need to identify the conditions that can create the most value for the Brussels-Capital Region, specify the places most appropriate for future residents and activities, and promote spatial justice through different instruments such as the improvement of the soil and the water system, the expansion of green areas and the increase in open space in and around the different districts. The 20-minute-city concept must be included and operationalised in the land use plans (PRAS and PPAS) to ensure its implementation based on every neighbourhood's needs. Challenges brought about by climate change must also be considered, such as heat stress, drought and flooding, as well as the need to promote urban agriculture. Possibilities for densification should also consider the capacity of the urban fabric, the street network and the public space. To achieve its vision as a liveable and green region, the Brussels-Capital Region should continue to promote a polycentric model of urban development as stated in the PRDD, instead of a one-sided orientation to the Pentagon, the historical city centre of Brussels within the contours of the small inner ring road. Multiple cores should be connected to one another via a network of public transport and cycling infrastructures. This is even more important if the Brussels-Capital Region is going to provide more innovative forms of stacked homes, which are more spacious than those being offered by private developers in the city and more affordable than classic family homes.

Pay greater attention to fiscal incentives to steer land use and promote density and orderly expansion

Although the Brussels-Capital Region has a wide array of planning documents that guide the use of land in the region, most of its focus is on setting rules to guide and authorise construction. Such instruments need to be supplemented with incentives provided by other public policies, in particular taxation. There is little evidence that the Brussels-Capital Region is using tax policy incentives to their full potential to steer the use of land, for example, through the use of land value capture instruments (see Chapter 4). Since the impact of property taxes on land use is ambiguous according to research (OECD, 2017[14]), the Brussels-Capital Region may wish to consider the option of a land value tax that does not take the value of buildings into account as it can help curb urban sprawl and foster the densification of developed land instead of greenfield development, as those taxes are independent of what the land is used for. In the United States, for example, several cities such as New Castle and Pennsylvania have taxed land at a higher rate than buildings, thereby incentivising the redevelopment of buildings and discouraging unused plots of land.[13] Another alternative for the region is to set a ground lease system to complement active land use policy as it is done in Amsterdam in the Netherlands. Through this system, the city keeps approximately 80% of the land while the leaseholder is entitled to the benefit of the use of the land (Box 2.7). Leaseholders are, therefore, encouraged to develop land, as it would be too expensive to pay a lease for a plot of land without using it.

Box 2.7. Amsterdam's ground lease system

In the Netherlands, the city of Amsterdam has operated a ground lease or leasehold system since the end of the 19th century. The city remains the owner of the land, while the ground lessee or leaseholder is entitled to the benefit of the use of the land for a long period in return for a ground rent (canon) payable at regular intervals. The right is associated with the land rather than the person occupying it. The ground lessee can transfer the ground lease and the change will be registered with the Land Registry (*Kadaster*). The basic principle of the ground lease system is that the city owns the land. The city government determines a ground lease for 50 years, 75 years or in perpetuity. Upon land (re)development, the city sets an annual ground lease (set for a given timeframe) or determines a lump-sum payment at once. After those 50 or 75 years, the city sets a new ground lease according to the rules of the then-applicable ground lease system. In doing so, it is able to capture the increase in land value and use it to further public investments that benefit residents. For a given year, the city generates ground lease income, which consists of the aggregate of lump-sum payments and annual payments. In 2015, for example, the net annual profit was EUR 105 million. This is a high value; the average net annual profit in recent years has been closer to EUR 80 million. The city remits approximately 50% of the net annual profit from the ground lease to the central municipal budget and the remainder to the balanced and social housing funds.

Source: OECD (2017[41]), *The Governance of Land Use in the Netherlands: The Case of Amsterdam*, https://doi.org/10.1787/9789264274648-en.

Moreover, the Brussels-Capital Region needs to assess whether the homeownership tax is treating single-family homes in a preferential manner over other types of residential property. Since the region is facing a shortage of housing (see Chapter 1), the regional government, in co-ordination with the national authorities, may wish to seek ways to increase the fiscal benefits that municipalities receive from new housing developments or redevelopments by developing and making the most of land value capture instruments (see Chapter 4). In case this is not feasible, the Brussels-Capital Region can encourage municipalities to engage in inter-municipal land use plans. Due to the already complex planning environment in the region, making consultation and co-ordination of land use plans among municipalities compulsory would be a first step in that direction. The aim would be to build synergies among municipal land use plans and avoid conflicting objectives. In France, for example, inter-communality is regarded as the most relevant scale for co-ordinating urban planning, housing and travel policies.[14] One example is the metropolitan area of Clermont-Ferrand that replaced its *Plan local d'urbanisme* (PLU) with a *Plan local d'urbanisme intercommunal* (PLUI) to organise land occupation for a community of communes, while bringing more coherence in the distribution of local land uses and real estate policies and initiating new modes of collaboration, especially between public and private bodies (OECD, 2017[42]). Although France is a unitary country, this is still relevant to Belgium and in particular to the Brussels-Capital Region, as it could inspire how co-ordination for planning among different municipalities could be conducted.

Regularly assess the impact of land use regulations on affordable housing

Restrictive land use policies generally lead to rising housing costs (OECD, 2017[14]), which is why proper assessment of their impact is crucial in the context of affordable and social housing scarcity. OECD research has concluded that most land use regulation has the effect of restricting land supply and, as a consequence, construction costs (OECD, 2017[14]). The experiences of the cities of London (United Kingdom) (Cheshire and Hilber, 2008[43]) and New York (United States) (Glaeser, Gyourko and Saks, 2005[44]) suggest that, in the long term, the difference between construction costs and actual house prices is a measure of the impact of land use regulations on cities. Both London and New York are among

the most expensive cities in the world and estimates suggest that land use regulations are responsible for prices that are two to eight times higher than they would be without regulations (Glaeser, Gyourko and Saks, 2005[44]; Cheshire and Hilber, 2008[43]).

Strengthen the metropolitan dimension of land use planning

There is a growing acknowledgement in the Brussels-Capital Region that land use decisions affect the neighbouring regions and municipalities, which therefore requires a co-ordinated approach at the metropolitan level. From the location of new housing developments and transport infrastructure to the preservation of greenery, a wide range of interactions connect the broader functional area where people live, work, study and travel, which goes beyond the 19 municipalities of the Brussels-Capital Region. The region should ensure that the Regional Land Use Plan (PRAS), the Master Development Plan (PAD) and the Specific Land Use Plans (PPAS) keep pace with changing functional territorial boundaries, in particular in the context of developing a more polycentric urban form. The three regional governments and national authorities may wish to set up a metropolitan planning body for spatial planning at the appropriate, functional scale. Such a metropolitan governance body would likely assist in overcoming administrative fragmentation and fostering a more co-ordinated approach to land use for densification and an orderly expansion (see Chapter 3 on how a metropolitan governance body in the Brussels-Capital Region could be arranged). For example, Metro Vancouver (Canada) is the planning body for the entire metropolitan area of Greater Vancouver and co-ordinates planning across different policy fields and bodies (MetroVancouver, 2024[45]). Research suggests that, in the United States, for each 1% increase in the number of local governments in a metropolitan area, the per capita area of developed land is 0.12% higher (OECD, 2017[14]). However, not all has to be planned at the metropolitan level. It is important to be aware of working at the appropriate urban scale (e.g. metropolitan, regional, municipal or neighbourhood) to avoid negative outcomes.

Promote monitoring and evaluation of land use and related regulations

Like in many OECD regions and cities, the lack of land use monitoring and evaluation makes it difficult to identify which policies are working well at the local level in pursuing densification and an orderly expansion, especially in cases where such policies focus more strongly on providing incentives and less strongly on setting restrictions. For example, inappropriate building density limitations can lead to further sprawl and the expulsion of lower-income households to the periphery but need to be identified in order to adjust them. More effective monitoring and evaluation can ensure that land use policies in the Brussels-Capital Region achieve their densification and urban development objectives and facilitate the shift towards more flexible and incentive-based instruments. Despite their importance, monitoring and evaluation of land use policies is rare across OECD countries (OECD, 2017[14]); therefore, it is impossible to recommend a particular method or tool. However, ensuring access to quality data on land use and land use regulations is paramount and this requires municipalities in the Brussels-Capital Region to upgrade their capacity for data collection. The Global Human Settlement Layer (GHSL) prepared by the European Commission may help ensure detailed and up-to-date data for more effective land use evaluation (European Commission, 2023[46]).

### *Revise the planning process to make it more inclusive*

The Brussels-Capital Region could include more public participation in the planning process. At present, the ways by which residents can give feedback to planners are often time-consuming and limited to residents who can afford to access the right information, attend public hearings and wait long enough to get to speak. Statistics Brussels (BISA/IBSA) may help enhance public participation by collecting data about community input to analyse whether the planning process is not biased towards particular groups of the population. Another option is to request input from the public through social media or web fora and

make greater efforts to explain the projects to citizens in Dutch, French and, in some cases, English to harness the multicultural character of the Brussels-Capital Region population. In the region, the participation of residents in the conceptualisation and implementation of renovation projects is a common practice, mostly in the framework of the CQD, despite related consensus-building challenges that a multiplicity of stakeholders involved may cause.

Supporting affordable housing in the Brussels-Capital Region

The Brussels-Capital Region faces an important housing crisis, which has a negative impact on the productivity of the region. On average, households in the region spend 35% of their income on housing, slightly more than in the other two Belgian regions, without considering expenses on electricity, heating and water, for example (Ibsa.brussels; perspective.brussels, n.d.[47]). The rise in property prices, the lack of social housing units for low- and middle-income households, and the poor state of many housing units are some challenges Brussels-Capital Region residents face. As Chapter 1 showed, the region has more houses than households but not enough social housing units to meet the demand, notably because of demographic growth and increasing housing prices (Dessouroux et al., 2016[48]). The development of affordable housing is a top priority of the PRDD and PRAS (and, to a lesser extent, the PAD's main goal), which acknowledges the need to increase housing options for residents regardless of their income levels. Affordable housing refers not only to social housing but includes affordable rental housing and home ownership generally provided at below-market prices targeted at low- and middle-income households (Figure 2.2).

Figure 2.2. Housing continuum
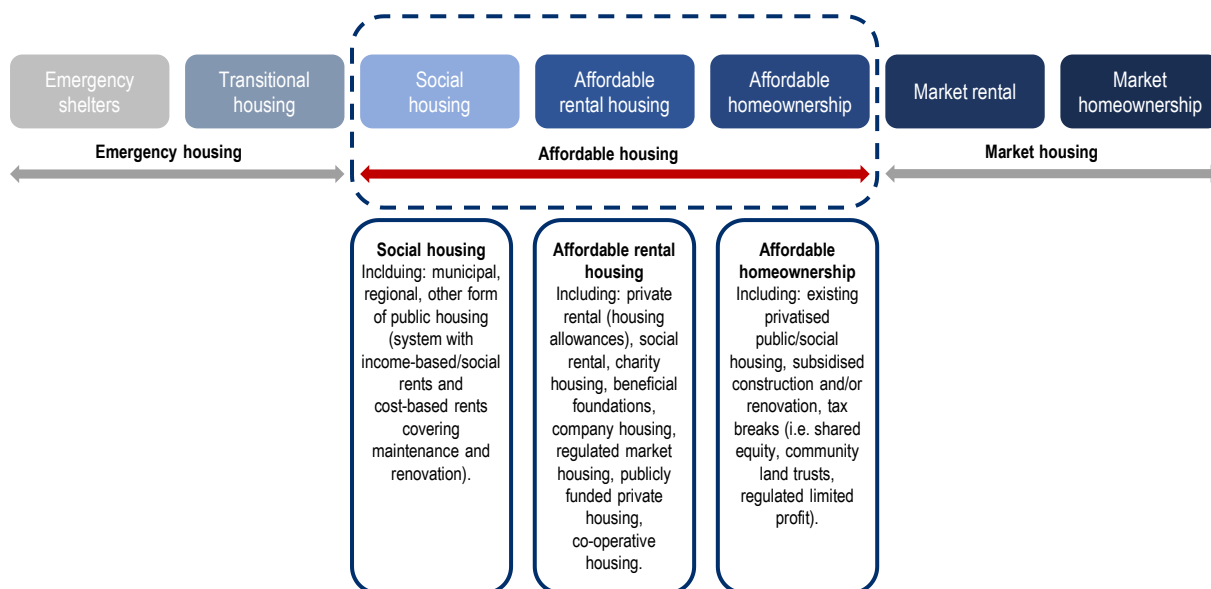
Source: The Housing Partnership (2018[49]) *The Housing Partnership Action Plan*, https://ec.europa.eu/futurium/en/system/files/ged/final_action_plan_euua_housing_partnership_december_2018_1.pdf.

The Brussels-Capital Region suffers from a multi-faceted housing crisis

Housing construction and demographic trends are not aligned

The housing market in the Brussels-Capital Region has been influenced by the position of the City of Brussels as the capital of the country and the seat of the European Union, making it a national and international employment hub. This has created the conditions for the production and renovation of residential buildings and has boosted investment in the transformation of the existing housing stock, although it is insufficient to meet a growing demand.

The challenge for the regional authorities is to increase the affordable housing stock to reduce existing shortages and meet future demand derived from demographic movements. The Brussels-Capital Region attracts a large part of the population from abroad but it is struggling to retain it on a long-term basis. The fact that the City of Brussels hosts several international organisations means that it attracts a highly qualified, mostly young workforce but they soon look for housing in the periphery to enjoy higher-quality affordable accommodation, live in a more attractive environment and have the possibility of owning real property at affordable prices. As Chapter 1 showed, the Brussels-Capital Region has experienced a demographic surge boosted mainly by immigration and peri-urbanisation, which have transformed the housing market. Indeed, research has noted that middle- and upper-income households as well as migrants from foreign origin are more likely to leave the Brussels-Capital Region, despite efforts from the regional government to retain them (Dessouroux et al., 2016[48]).

The Brussels-Capital Region has a very diverse population in terms of income groups, ranging from very low income (e.g. international refugees, asylum seekers) to high-income groups (e.g. employees of international organisations such as the EU), and including people in a situation of temporary residence (e.g. students in flats with or without flatmates, diplomats, workers with short-term contracts, owners of a second residence).

According to forecasts, it is expected that the rate of the increase in households will be lower than the rate of population growth (i.e. 7.5% by 2030). This means that the region will need 40 000 additional housing units by 2030 to meet only the additional demand coming from population growth, not the accumulated one. If this target is not achieved, a possible consequence will be the continuation of internal migration towards the periphery into other regions. Moreover, the traditional housing configuration no longer corresponds to the social diversity of households in the Brussels-Capital Region, which includes more isolated people, single-person households, people in transit, blended families, and co-renters (Ternon and Ledent, n.d.[50]).

The size of the Brussels-Capital Region households has increased over the last two decades. In 2001, the average size of a household in the Brussels-Capital Region was 2.01 in 2001, but it increased to 2.15 in 2022 (Ibsa.brussels; perspective.brussels, n.d.[51]). At the national level, the trend has been the opposite, as the average size of a household dropped from 2.37 in 2001 to 2.26 in 2022. Certainly, household size varies among different municipalities in the region. For example, whereas in the affluent municipality of Ixelles the average size of a household is 1.72, in the popular municipality of Molenbeek-Saint-Jean, it is 2.52. This suggests that young people in poor areas may be more likely to live with their parents than those from more prosperous municipalities. Part of the explanation may be the difficulties of entering the housing market. Young people may seek small housing units (e.g. studios) that are scarce and expensive in the Brussels-Capital Region and they are the ones staying in the region longer than older and married residents (Dessouroux et al., 2016[48]).

A region with limited land reserves

Like many other densely populated cities, the Brussels-Capital Region has a limited reserve of land for further housing development. It is therefore paying greater attention to the repurposing of former office

buildings into residential units and the refurbishing of inadequate housing, even more so after the COVID-19 pandemic. According to statistics, in 2021, half of newly authorised housing involved the repurposing of non-residential buildings, demolition-reconstructions and transformation of existing buildings. Although these interventions could help alleviate the housing deficit to a certain extent, they create some other challenges, such as the need to provide mobility options to new residents and access to public services. In some cases, former office buildings are not suitable for residential use and are transformed into schools (perspective.brussels, 2022[52]).

An additional factor contributing to the scarcity of land reserves has been the mechanisms for enhancing the value of sites, particularly those where large-scale construction could take place. The level of complexity in the administrative, technical and financial management aspects of housing construction may disincentivise investment in the housing sector.

Of the total number of housing units built in recent years in the Brussels-Capital Region, two-thirds have been the work of private companies that aim to sell the property to owner-occupiers or other investors. One-fifth of the production is self-construction by private individuals who are owner-occupiers and this phenomenon is more common in the other two regions of the country. Only one-tenth of the housing production is conducted by the public sector through regional or municipal organisations (perspective.brussels, 2022[52])

Unevenly distributed regional housing production also adds to the trend. Central neighbourhoods (i.e. Dansaert Quarter, Freedom Quarter, Îlot Sacré, Marolles, Royal Quarter, Quays, Sablon) located in the inner ring concentrate the higher volumes of production. Other areas in the region with more land reserves are not developed due to land retention mechanisms, citizen protests regarding densification as well as high prices limiting the number of investors.

Property prices are the highest in the Brussels-Capital Region compared to the rest of the country

The housing crisis in the Brussels-Capital Region also has an economic dimension. The current housing stock does not fully meet the needs of all households and is not affordable. The region has the most expensive homes in the country despite having the lowest disposable income per household (Van Gompel, 2021[53]). At the national level, existing dwelling prices rose by 6.7% year-on-year in the first quarter of 2022 (-1.2%, inflation-adjusted), while new dwelling prices increased by 5.1% (-2.7%, inflation-adjusted) (Delmendo, 2023[54]). At the regional level, the Brussels-Capital Region is the most expensive for all types of dwellings in the country (see Table 2.2). In the first semester of 2023, in the region, attached and semi-detached houses cost on average EUR 480 000 (EUR 175 000 in the Walloon Region and EUR 295 000 in the Flemish Region), a decrease of 1% compared to the same semester the previous year, while a detached house cost EUR 902 500 (EUR 285 000 in the Walloon Region and EUR 405 000 in the Flemish Region) (Statbel, 2023[55]). Although the prices of apartments have increased more in the Walloon and Flemish Regions over the last two years, the prices in the Brussels-Capital Region remain the highest. The median price for apartments was EUR 255 000 in the first semester of 2023, a price increase of 2% compared to 2022. Research suggests that the number of new homes across the three regions has been rising, leading to an oversupply. However, in the Brussels-Capital Region, the increase in new housing relative to the number of households has reversed an earlier reduction, suggesting a low or no oversupply in the region (Van Gompel, 2021[53]).

Table 2.2. Regional differences in real estate property prices across regions in Belgium, median price

Region	2021 (S1) (EUR)	2022 (S1) (EUR)	2023 (S1) (EUR)	% evolution 2022 (S1)/ 2021 (S1)	% evolution 2023 (S1)/ 2022 (S1)
Walloon Region					
Houses with 2 or 3 outside walls (attached and semi-detached houses)	160 000	170 000	175 000	+6.3	+2.9
Houses with 4 outside walls or more (detached houses)	265 000	285 000	285 000	+7.5	+0.0
Apartments	160 000	172 000	180 000	+7.5	+4.7
Flemish Region					
Houses with 2 or 3 outside walls (attached and semi-detached houses)	260 000	280 000	295 000	+7.7	+5.4
Houses with 4 outside walls or more (detached houses)	365 000	390 000	405 000	+6.8	+3.8
Apartments	217 000	230 000	244 750	+6.0	+6.4
Brussels-Capital Region					
Houses with 2 or 3 outside walls (attached and semi-detached houses)	434 000	485 000	480 000	+11.8	-1.0
Houses with 4 outside walls or more (detached houses)	1 100 000	1 150 000	902 500	+4.5	-21.5
Apartments	239 000	250 000	255 000	+4.6	+2.0

Note: Data published on 26 September 2023.
Source: Statbel (n.d.[56]), *Real Estate*, https://statbel.fgov.be/en/themes/housing/real-estate.

In the Brussels-Capital Region, municipalities located in the east and southeast of the region tend to be the most expensive for buying apartments and houses, whereas the northern and northwestern municipalities are the least expensive (Table 2.3). Properties in the municipalities of Uccle/Ukkel (for houses) and Ixelles/Elsene (for apartments) are the most demanded and costly. Since property prices in the private market are aligned with the purchasing power of high-income buyers, it creates a financial challenge for the lowest and moderate-income households.

The Brussels-Capital Region can also be divided according to the price per square (m²). The average cost in the north and northwest of the region is approximately EUR 2 450/m² while approximately EUR 4 600/m² in the south and southeast (IMMOWEB, 2013[57]). In the City of Brussels, for example, 95% of apartments are between EUR 2 752/m² and EUR 4 565/m²; 2.5% of apartments are cheaper than EUR 2 752/m² and the remaining 2.5% of apartments are more expensive than EUR 4 565/m² (IMMOWEB, 2013[57]). According to research, in Belgium, households need to put aside between four and six annual gross salaries to afford a new dwelling, similar to countries such as Denmark, Norway and Portugal (Deloitte, 2022[58]).

Table 2.3. Most and least expensive municipalities in the Brussels-Capital Region, houses and apartments, first semester 2023

Most expensive municipalities	Median price (EUR)	Least expensive municipalities	Median price (EUR)
Houses			
Ixelles (42)	812 500	Anderlecht (99)	321 000
Woluwe-Saint-Pierre (88)	757 875	Molenbeek-Saint-Jean (28)	342 500
Uccle (135)	645 000	Berchem-Sainte-Agathe (45)	375 000
Woluwe-Saint-Lambert (75)	605 000	City of Brussels (113)	405 000
Watermael-Boitsfort (41)	600 000	Jette (49)	405 000
Apartments			
Woluwe-Saint-Pierre (165)	345 000	Anderlecht (361)	194 000
Uccle (359)	337 000	Jette (223)	201 000
Ixelles (399)	335 500	Berchem-Sainte-Agathe (74)	205 000
Woluwe-Saint-Lambert (278)	310 500	Molenbeek-Saint-Jean (356)	210 000
Auderghem (100)	295 000	Koekelberg (84)	217 000

Note: The data in parentheses represent the number of transactions. Data published on 26 September 2023.
Source: Statbel (n.d.[56]), *Real Estate*, https://statbel.fgov.be/en/themes/housing/real-estate.

A factor that helps explain the increase in prices is the demographic growth in the Brussels-Capital Region. Price increases are largely due to the growing demand for housing (owning or renting), particularly in the most prominent neighbourhoods with the highest quality of life or those under gentrification, such as central municipalities (e.g. the City of Brussels). This factor is exacerbated by the borrowing capacity for mortgages as a result of reduced mortgage rates in recent years. For example, in the Brussels-Capital Region as in the Walloon Region, registration fees are set at 12.5% versus 3% (for the sole owner-occupied home), -12% (for the purchase of a second property or building lot) in the Flemish Region[15] but buyers in the Brussels-Capital Region can benefit from an allowance (reduction of the tax base) of EUR 200 000. The first instalment of the price of a property is not subject to registration fees, representing savings up to EUR 25 000. If owners in the Brussels-Capital Region conduct a substantial energy renovation of their property and make it gain at least two categories on the pro-environmental behaviour scale, they can obtain an additional allowance of EUR 50 000 provided that the total amount of the property does not exceed EUR 600 000 (including price and costs), the owner does not have another property and the property has been the owner's main residence for at least 5 uninterrupted years (Inside Properties, 2023[59]). It must be noted that these conditions should be met for the general reduction of renovations (Fiscaliteit.brussels, 2023[60]). Moreover, the Brussels Housing Fund provides mortgage loans at rates ranging from 3% to 4.5% to those occupying the property as a main residence for the entire duration of the loan and who not homeowners elsewhere in the country or abroad. Their taxable income should not exceed certain ceilings depending on the composition of the household.

An additional factor for rising housing costs is the increasing presence of European expatriates with high purchasing power. Approximately 23% of the residents in the Brussels-Capital Region are expatriates working for the different international organisations and agencies located in the region (Engel & Volkers, n.d.[61]). They compete with local households for the purchase or rental of houses and apartments, particularly in the most demanded municipalities of Ixelles and Uccle. In addition, the rise in construction costs since 2017 (CEIC, 2023[62]) and the strong demand for housing in the higher-end segment of the housing market have indirectly impacted house prices in less expensive areas. As the most desirable areas cannot satisfy demand, housing seekers look for housing in other areas, increasing prices too (Van Gompel, 2021[53]).

Rental housing is dominant in the Brussels-Capital Region but becoming unaffordable

As shown in Chapter 1, rental is the most common form of housing tenure in the Brussels-Capital Region. This may be due to the high house prices. In 2020, the rental market represented 61% of the housing market, significantly higher than in the Flemish (28%) and Walloon (33%) Regions (JLL Belgium, 2020[63]). Homeownership represents 41% of the share of housing tenure, well below the national average of 75% (Région de Bruxelles-Capitale, 2018[16]). The Brussels-Capital Region has experienced a shift from homeownership to tenancy over the last decade. The reasons may be due to the high prices of real estate that force half of first-time buyers leaving the region to buy a property in other parts of the country (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]), the inflow of international migrants (expatriates) who are mostly focused on the rental market and flexibility, as people tend to prefer housing adapted to their personal situation as they may move to other places due to professional reasons. The COVID-19 crisis has driven rental housing prices even further up in the Brussels-Capital Region as residents look for housing options with access to exterior spaces (e.g. terraces and private gardens). Rental prices in the region increased by 23% between 2021 and 2023.

Finding accommodation on the rental market is becoming unaffordable to the lowest-income households. In particular, the increases in acquisition prices have led to an increase in rental prices. According to the *Observatoire des Loyers*/*Observatiecentrum van de huurprijzen*, 40% of the lowest-income households have access to only 10% of the rental market and a household with a monthly income of between EUR 1 500 and EUR 2 000 has access to less than 13% of the rental housing stock (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]). As a reference, monthly rent for an unfurnished two-bedroom apartment in the Brussels-Capital Region may cost between EUR 1 000 and EUR 1 800.[16] The regional government has modified the rules to prevent evictions of people who are unable to pay their rent by giving a moratorium to tenants and supporting low-income households with subsidies to cover the rent. This measure, originally taken during the COVID-19 pandemic, has been made permanent. However, it is unclear how long the regional government can help tenants who are unable to pay their rent.

Moreover, the Brussels-Capital Region attracts a large student population in higher education institutions (e.g. universities, colleges, etc.), who represents almost 25.5% of the 300 000 students in the region (be.brussels, 2023[65]). This group has particular housing needs as some of them live in a dwelling independently of their parents, others live with a flatmate or roommate and others in an individual room in the home of a private individual. Research suggests that one-third of higher education students in the Brussels-Capital Region are not registered officially, representing a significant group of unaccounted tenants (Dessouroux et al., 2016[48]). Moreover, due to the increases in housing prices, stricter mortgage rules and tax changes, young people prefer to delay buying a home, leaving them with renting as the only alternative for independent housing. Indeed, in the Brussels-Capital Region, buyer-occupiers must finance approximately 10% of the purchase's value and all transaction costs. One-fifth of loans exceed 50% of the borrowers' monthly income, while the general advice is to maintain it to levels lower than one-third (JLL Belgium, 2020[63]).

Social housing is in low supply and the number of potential beneficiaries increases

Due to population growth, among other factors, there has been an increase in demand for social housing in the Brussels-Capital Region in recent decades. Part of this population growth has been due to immigration from non-European countries, particularly asylum seekers. Part of the growing demand for social housing could also be due to the decline of living standards in some parts of the population (Romańczyk, 2015[30]). Thus, new residents in the Brussels-Capital Region tend to be more disadvantaged than middle-income households who return to the city after living for some time in the suburbs (Bernard, Zimmer and Surkin, 2009[66]). The delivery of new social housing is a key priority of the regional government and forms an important element of the overall new housing delivery. The region's General Policy Declaration 2019-2024 establishes that 15% of the housing stock should be social housing

(Gouvernement de la Région de Bruxelles-Capitale, 2019[67]). However, less than 10% of the regional housing stock is considered social housing (Région de Bruxelles-Capitale, 2018[16]). Only 5 municipalities (Anderlecht, Ganshoren, Molenbeek Saint-Jean, Saint-Josse-ten-Noode and Watermael-Boitsfort) out of 19 municipalities and 38 out of 119 neighbourhoods in the Brussels-Capital Region have achieved the target of 15% of social housing (perspective.brussels, 2022[52]). This is an example of inclusionary zoning, which in general is effective but costly, as it requires developers to rent or sell 15% of housing units below-market prices or contribute to an affordable housing fund. However, this strategy might satisfy only a small portion of the demand for affordable housing and increasing development costs may reduce the total housing production and, thus, affordability. This is particularly problematic in infill developments, as land use restrictions and the impossibility of conducting large-scale housing projects limit supply (Litman, 2016[68]). If developers are required to sell or rent 15% of units below production costs, they must recover the costs by building larger and higher-priced units and fewer smaller, lower-priced units. This reduces the total housing production and increases future prices, particularly for middle-income households.

Social housing aims to ensure that low-income households can live in cities and neighbourhoods with high housing costs, such as the Brussels-Capital Region. However, it faces many challenges: for example if the waiting list and waiting time are long, occupants must accept the units that are available even if they are suboptimal in terms of design and location; in some cases, social housing can concentrate poverty in some municipalities and neighbourhoods and the process of accessing social housing may discourage households from moving to new locations offering better living conditions, as they would have to join the waiting list again.

The Brussels-Capital Region housing policy promotes social mix. All social housing projects must encourage social and economic wealth diversity but also include vulnerable populations such as people with disabilities and battered women, etc.

The increase in property prices poses a particular challenge for low-income households as they have a small margin of financial manoeuvre and only limited options to meet their housing needs. According to regional authorities, half of the households in the Brussels-Capital Region could be eligible to apply for social housing but only 50 000 households (i.e. approximately 10% of the population) are currently on the waiting list (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]). The social housing stock in the Brussels-Capital Region amounts to 41 000 units, i.e. well below the number of households on the waiting list, and most of these units are already occupied. The number of social housing applicants and waiting periods have been increasing over the last decade, although the number of social housing units has also increased, albeit slowly (see Chapter 1). This overview reflects the difficulties that households in the region face in accessing housing on the private market as owners or tenants.

Existing social housing units are old and require investment to comply with current construction standards. Most of the existing social housing units were built during the 1970s and 1980s, and the social housing construction programme was suspended. The quality of social housing also varies depending on the construction year and the standards applicable at the time of construction. The regional government has planned to invest EUR 500 million to renovate social housing over the next 10 years.

The lack of social housing impacts not only low-income but also middle-income households, who often struggle to find affordable and high-quality housing. They do not necessarily live in substandard housing but their options to find affordable housing that meets their specific needs are reduced (Dessouroux et al., 2016[48]).

As a result of limited social housing stock and slow construction, households in the Brussels-Capital Region must wait 12 years on average to access social housing and households with 4 or 5 children may wait for 17 years or more, with no guarantee they will be able to acquire an affordable home. While waiting for social housing, households may need to find accommodation in the private sector, which is generally expensive for their budgets, and once they get access to social housing, they may need a larger unit as children may have grown up in the meantime. Moreover, in the region, private housing developers can pay

off their obligation to build social housing and the revenue goes to the municipality, which should invest it back in housing. Since waiting times are long, the government offers rent allowances for the most vulnerable people on the waiting list so that they can rent on the private market in the meantime. The allowance could range between EUR 120 to EUR 160 per month, depending on income, plus EUR 40 per child on top of that (de Jong, 2022[69]).

The governance of the social housing sector is complex. Perspective.brussels and Bruxelles Logement/Brussel Huisvesting are in charge of conducting territorial diagnosis on housing and defining strategies, while various institutions and organisations are in charge of implementing those studies. Municipal authorities may define their own priorities and strategies and may face residents' complaints that could potentially suspend a social housing project. Interaction with citizens for social housing occurs through the regional social housing organisation (*Société du Logement de la Région de Bruxelles-Capitale/Brusselse Gewestelijke Huisvestingsmaatschappij*, SLRB/BGHM), which oversees 16 social housing providers that operate across the 19 municipalities with different capacity to build and develop social housing.[17] Other providers of low-cost housing include: the Social Estate Agencies (*Agences immobilières sociales/Sociale verhuurkantoren*, AIS/SVK), which provide private sector rentals for low-income households; the Brussels Housing Fund, which manages a stock of low-cost rentals for the poorest households and individuals in the region; and the municipalities, as in some cases, they manage and provide housing directly at a reduced rent to low-income households (Brulocalis, 2023[70]). The existence of these institutions for the management and provision of social housing reflects the priority given to the needs of low-income households and may also signal the growing level of poverty in the region's population.

An unknown number of vacant housing units

Authorities in the Brussels-Capital Region acknowledge the challenge of vacant housing in the region and they aim to put those vacant units back onto the housing market. However, there is a lack of data on the exact number of unoccupied housing units. A 2009 study reported that there were between 15 000 to 30 000 vacant dwellings in the region, 80% of which belonged to the private sector, but this number does not take into account the vacant floors above shops and businesses, which are generally not accounted for (Bernard, Zimmer and Surkin, 2009[66]). Since 2016, the regional government has subsidised municipalities in an attempt to detect the number of vacant houses. Only 11 out of 19 municipalities have requested the financial and technical assistance of the regional government to detect vacant housing and most of them are still in the process of experimenting with detection techniques. This has led to a diversity of methodologies to detect vacant housing and different levels of progress in the identification of such dwellings. No catalogue or database on the number of vacant housing across the region presents an inventory of the type, state and size of vacant units. Bruxelles Logement/Brussel Huisvesting has been given the responsibility of centralising the identification of vacant housing across the region and build a regional cadastre with that information.

The Brussels Housing Code (*Code bruxellois du Logement*), which contains all the measures intended to regulate the quality of rental housing, provides a mechanism to fight against real estate vacancies (i.e. an administrative penalty of EUR 500 per m^2 of the longest façade multiplied by the number of storeys other than the basements and unfinished attics) but it is rarely used (Region de Bruxelles-Capitale, 2013[71]). There are at least three reasons for this: i) the difficulties in obtaining financing to implement the "right of public management" – which consists of the management by a public real estate operator of unoccupied or unsanitary private property with the aim of putting it back onto the rental market at below-market value after a possible renovation; ii) the cumbersome administrative procedure to act against unoccupied private housing; and iii) the possibility for the owner to take the property back at any time during the management procedure, subject to the reimbursement of the costs paid by the public real estate operator. The Housing Emergency Plan (see below) contemplates extending the scope of the public management law and limiting

the ability to take the property back but it does not provide concrete actions to this end (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]).

An old housing stock in need of renovation to comply with energy-saving standards

The Brussels-Capital Region has a large share of old housing units. According to estimates, 70% of housing units were built before 1945, 5% were built after 1981 and only 0.7% were less than 10 years of age (Albrecht, Hamels and van de Water, n.d.[72]). Renovating the housing stock is a priority to meet environmental goals in terms of reduction of carbon dioxide (CO_2) emissions set for 2050 (i.e. a reduction of 90% of direct regional emissions compared to 2005) (FI Group, 2022[73]). Only 0.3% of the housing stock in the region complies with the energy legislation standards for 2050 and the modernisation of the real estate stock remains too slow, at only 0.25% per year (Albrecht, Hamels and van de Water, n.d.[72]). This means that only 1% of property owners without budgetary restrictions actually conduct renovation works. In some cases, the housing stock needs to be renovated not only to meet energy standards but also to improve comfort, functionality and resale value.

Property owners generally lack sufficient resources to renovate their dwellings. Estimates suggest that property owners are often individuals with 1 or 2 properties and are part of the region's wealthiest 40% of households. However, 36% to 39% of owners are unable to finance renovation works to meet energy-saving standards. If renovations to improve comfort are added, the share of owners unable to finance the works goes up and oscillates between 42% and 47% (Albrecht, Hamels and van de Water, n.d.[72]). Property owners tend to carry out the renovations with their own resources and, to a lesser extent, with bank loans. Most of the renovation work is done in stages or spread over time. Estimates suggest that 20% of owners have a financial deficit between EUR 25 000 and EUR 50 000, and 7% more than EUR 50 000 to renovate their properties (Albrecht, Hamels and van de Water, n.d.[72]). However, giving them subsidies to conduct the work would potentially contribute to inequality, as subsidies would be a way to contribute to their wealth as the resale value of their properties would increase.

When considering that a large part of households in the Brussels-Capital Region depend on the rental (social or private) market, it may be assumed that most of them live in dwellings that do not comply with environmental regulation standards and need renovation that their owners are, for the most part, unable to provide. The challenge for the regional authorities is to incentivise the 99% of property owners who have the necessary resources to renovate their properties but do not make use of them. It is essential that the factors that lead owners to renovate do not differ from those who live in the property they own and those who rent out their property. Apart from financial barriers, other factors that could determine whether owners renovate their properties or not include hassle factors (e.g. level of effort and disruption), unclear financial benefits (e.g. the return on energy efficiency investments are often delayed in time), perceived financial risks (e.g. unclear profitability and risk aversion) and the lack of skilled workers to advise on energy efficiency renovation measures and conduct the works.

Planning permits are difficult to obtain

The CoBAT determines all works and acts that require a planning permit to be carried out. In general, all construction, demolition, renovation, transformation and change of use of a building require a planning permit (*permis d'urbanisme*) (Région de Bruxelles-Capitale, 2022[15]). Moreover, developers may also need to obtain a municipal planning permit depending on the specific municipal regulations. Even changes of assignment or changes of use that do not require construction require a permit, for example transforming an apartment building into an office or rehabilitating an old disused workshop to establish an office or loft-type housing.

The municipalities have the competency to issue planning permits except in certain specific cases where responsibility lies with the delegated official. In the event of an administrative appeal, the Brussels-Capital Region government issues the permit. Urban.brussels is responsible for permits in some specific cases,

such as public demands. The planning permit expires if, within three years of its notification, the holder has not started its implementation in a significant way. This three-year period can be extended for one year at a time, subject to justification. Some planning permits are issued for a limited period. The Brussels-Capital Region government adopts the list of acts and works for which the duration of the permit is limited because of their nature or purpose,[18] for example, advertisements and signs, construction site installations, satellite dishes, acts and temporary works. The issuance of the permit may also be subject to urban planning charges, which may be demanded in kind (construction work) or in cash. In case of disagreement with the decision on the permit, either the applicant or the municipality may submit an appeal to the regional government. The Urban Planning College[19] first has up to 75 days to issue an opinion; then, the government has 60 days to notify its decision.

Building housing units or transforming offices into residential units in the Brussels-Capital Region start with a planning permit and obtaining the permit is not an easy task. According to the planning code (CoBAT), obtaining the planning permit to build housing, including social housing, may require up to 400 days for the largest projects. During this time, feasibility studies, which include the integration of the project into the neighbourhood, mobility and accessibility aspects, as well as environmental impact studies, need to be conducted to grant the permit. This is a costly and lengthy procedure that hinders investment in real estate in the region. This process also gives neighbours an opportunity to complain about the project in any given district or neighbourhood, arguing against increased density in the area or even social housing construction for example. Thus, for private developers, obtaining a construction permit can be a significant barrier to further investment in housing development, including social housing.

OECD research has noted that, over time, Belgian governments at all levels have been active in the development of programmes to reduce burdens in specific regulations (OECD, 2010[74]). Over the last decade, the Brussels-Capital Region has been working on administrative simplification to cut unnecessary regulatory burdens and costs for the administration, such as excessive paperwork needing to be handled by officials on the frontline of public services. However, further efforts are needed to reduce the burden and make the granting of building permits more efficient.

In a quest to make the planning permit procedure more efficient, in 2020, the Brussels-Capital Region introduced the MyPermit platform, which makes it possible to apply digitally for regional and/or municipal planning permits.[20] Six out of the 19 municipalities in the Brussels-Capital Region are participating in the pilot phase of the platform: Berchem-Sainte-Agathe, Evere, Koekelberg, Molenbeek-Saint-Jean, Schaerbeek and Woluwe-Saint-Lambert. Permit applications for planning, environmental or mixed projects can be submitted via the platform. Although digitalising the application procedure for permits is a move in the right direction towards efficiency, there is still the issue of the time needed to process an application and the requirements needed to obtain it. A further 11 municipalities are expected to join before the end of 2023.

In 2018, the Brussels-Capital Region reformed the CoBAT to simplify urban planning rules and procedures. This reform had an impact on different aspects of urban development: planning regulations, building and environmental permits, environmental impact assessments, commercial establishments and others:

- The Master Development Plan (PAD) contains the region's main urban planning objectives and ensures the implementation of projects in strategic priority areas selected by governments. Although only indicative, it is possible to assign a regulatory value to certain of its provisions and, in the case of conflicting provisions, the master plan takes precedence over other instruments.

- For municipal governments, it is mandatory to provide zoning and planning information within 30 days for real estate transactions and lease agreements with terms of at least 9 years.

- Municipal governments have between 75 and 160 days to issue a permit, depending on the applicable procedure. When the permit is not issued during the indicated deadline, the file is transferred to the regional office, which has up to 450 days to take a decision. If the permit is not

issued within the deadline, the application is considered declined but the applicant can appeal to the regional authorities.

- For commercial establishments with a surface area that exceeds 1 250 m² (instead of 1 000 m² as it was before the reform), an environmental impact assessment report must be prepared to issue a building permit. A more in-depth study is required if the area exceeds 5 000 m² (instead of 4 000 m² as before the reform). To develop the environmental impact assessment, a public enquiry must be carried out and should last for 30 days.[21]

The CoBAT also includes a Housing Emergency Plan, which contemplates an "accelerated procedure" of 95 days maximum for granting a planning permit for projects involving at least 25% of social housing by shortening the investigation period but keeping the 30 days period to submit observations on the part of the public (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]).

The CoBAT has been reviewed on several occasions to rationalise and simplify planning permit procedures. It is currently subject to an external evaluation involving a wide number of actors (e.g. citizens, academia, lawyers, architects, regional administration, etc.). This evaluation is expected to lead to further reforms towards more efficient and faster planning permit procedures.

Urban renewal and social housing development projects may face social opposition

Neighbourhood opposition to social and affordable housing infill development is common in the Brussels-Capital Region, as in many other cities. Concerns often relate to the lack of information, preconceptions about people from other socio-economic backgrounds, misinformation and a poor communication strategy. Such an opposition constrains the supply of housing and may increase rents, exacerbate spatial inequalities, exclude low-income households from places with economic opportunities and urban amenities, reduce economic productivity or have negative environmental consequences (e.g. unused industrial areas may lead to pollution of land) and disincentivise private sector participation in housing construction projects.[22] In the Brussels-Capital Region, opposition to housing development may delay or cancel ongoing projects, even when a building permit has been granted by the authorities.

Opposition to new housing development is certainly not unique to the Brussels-Capital Region. In the city of Los Angeles (United States), 75% of the residential land area is dedicated to low-density single-family housing and this land houses half the city's population. Neighbourhoods zoned for single-family homes tend to be higher income with higher homeownership rates and are much less likely to have their zoned density increase, which pushes housing development and conflicts to other parts of the city (Monkkonen, 2016[75]). In New York City (United States), residents have opposed new construction by using a wide array of instruments, ranging from environmental lawsuits to public demonstrations restricting construction and affecting housing prices (Glaeser, Gyourko and Saks, 2005[44]). In the Brussels-Capital Region, the situation could be even more complex due to the politicisation of development projects that could turn public opinion in favour of a project or against it, such as the Dockside Tower project, a housing tower built alongside Brussels' canal in the municipality of Molenbeek.[23] Fears of gentrification were also part of the factors driving opposition to the project.

An overcrowded housing policy sector

Many institutions and organisations from public, private and non-profit sectors intervene in the design and implementation of housing policy in the Brussels-Capital Region. Housing policy is a shared responsibility between the regional and municipal governments. Each level of government prepares its own housing plans in line with one another. Housing policy requires fine-tuned co-ordination mechanisms and clear governance frameworks.

Within the regional administration, there are at least four main actors in the housing policy domain:

- **Bruxelles Logement/Brussel Huisvesting**: the housing administration of the Brussels-Capital Region, responsible for the implementation of the regional housing policy, the provision of financial aid to individuals that meet the eligibility criteria, the identification of unoccupied and unsanitary housing and the provision of subsidies to housing actors such as associations (Bruxelles Logement, 2023[76]).

- **Perspective.brussels**: produces analysis and evaluations on regional development and housing, and, within the framework of the PAD, may plan housing and social housing.

- **Urban.brussels**: supports the territorial development of the Brussels-Capital Region by implementing regional policy in terms of urban planning, movable and immovable cultural heritage and the management of operational programmes for urban revitalisation.

- **Brussels Environment**: provides the energy performance of buildings (EPB) certificate on the energy performance of a dwelling when an owner wishes to rent or sell a property of more than 18 m^2 in the Brussels-Capital Region.

Moreover, several additional organisations intervene in housing policy, for example:

- The ***Société du Logement de la Région de Bruxelles-Capitale/Brusselse Gewestelijke Huisvestingsmaatschappij*** (SLRB/BGHM): supports the acquisition of land, existing buildings, office buildings, industry or other property to create and develop housing (slrb-bghm.brussels, 2023[77]).

- The ***Société de Développement pour la Région de Bruxelles-Capitale/Gewestelijke Ontwikkelingsmaatschappij voor het Brussels Hoofdstedelijk Gewest*** (SDRB/GOMB - CityDev): offers new housing to individuals, subsidised by the Brussels-Capital Region (citydev.brussels, n.d.[78]).

- The ***Fonds du Logement de la Région de Bruxelles-Capitale/Woningfonds van het Brussels Hoofdstedelijk Gewest***: promotes access to housing for all by offering credits to buy or rent a housing unit or conduct renovation works (fonds.brussels, n.d.[79]).

- The ***Agences immobilières sociales/Sociale verhuurkantoren*** (AIS/SVK): aim to rent part of the Brussels rental market -housing that mainly belongs to private owners- at an affordable price to low-income households (fedais.brussels, n.d.[80]).

- The ***Syndicat National des Propriétaires et des Copropriétaires/Nationaal Eigenaars- en Mede-eigenaarsSyndicaat*** (SNPC/NEMS): an apolitical association that acts as the sole interlocutor for the defence of property owners with regard to public authorities (SNPC-NEMS, 2021[81]).

- The ***Fédération bruxelloise de l'Union pour le Logement/Brusselse Federatie van Unie voor de Huisvesting*** (FEBUL/BEFUH): acts as a meeting place for several member associations working for the effective realisation of the right to housing in Brussels.[24]

The municipalities and the Public Centre for Social Welfare (CPAS/OCWM) are also responsible for ensuring access to affordable housing for all residents. Municipalities and CPAS/OCMW are allowed to acquire existing empty properties for a subsidy of 50% in the case of an allocation to social housing or 33.33% in the case of an average housing. They also have the possibility of using urban renovation contracts for housing production.

The Housing Advisory Council (*Conseil Consultatif du Logement/Adviesraad voor Huisvesting*, CCL/ARH) acts as an advisory body that brings together representatives of public housing operators, associations, workers' unions, employers' unions, private sector and a few experts.[25] The CCL can also carry out studies and analysis on its own initiative, and submit proposals to the Brussels-Capital Region government.

In the Brussels-Capital Region, each public housing operator prepares its own prospective plan for the acquisition of either housing units or land. There is no defined regional strategy on land for housing and

acquisitions are therefore done on a case-by-case basis. This creates a situation where operators compete for land and housing construction. Moreover, information about land and available housing units is not centralised, as each municipality has its own database or records. To improve the situation, the Brussels-Capital Region government has created the Brussels Housing Referent (*Référent bruxellois du Logement*/*Brusselse referent huisvesting*) as a specific position within the administration to boost the production of (all types of) public housing and private housing for social purposes by updating the dashboard of public housing projects in the region, developing cross-functionality among the different housing stakeholders in the region, in particular public operators, and keeping up communication with municipalities to ensure the functional and social mix of the housing projects. There are plans to renew the land cadastre managed by perspective.brussels to make the search for land and buildings more efficient. The cadastre has not been updated since the 1970s.

The housing crisis has been approached through reactive policies

Authorities in the Brussels-Capital Region have been working to address the housing crisis in the region for almost two decades. A series of sometimes isolated interventions have been adopted to fix the dysfunctionalities of the regional housing market.

The adoption of a housing and urban revitalisation policy

The General Policy Declaration 2019-2024 sets a vision to guarantee access to housing at a reasonable cost and to public services within a ten-minute walk from a place of residence (Gouvernement de la Région de Bruxelles-Capitale, 2019[67]). To this end, the Brussels-Capital Region has developed: i) an emergency plan for social housing policy; ii) a policy to support the quality and accessibility of the rental market; iii) an urban revitalisation policy that places the district at the centre; and iv) a policy of access to property.

In 2020, the regional government published the Emergency Housing Plan 2020-2024 (*Plan d'Urgence Logement,* PUL), which includes 33 actions to speed up access to housing for the most vulnerable households in the region, either through social housing or the private rental market (Gouvernement de la Région de Bruxelles-Capitale, 2020[64]). Some of those measures aim to simplify and accelerate administrative procedures, for example those linked to granting permits. The PUL constitutes a guide to clarify the responsibilities of different stakeholders in the development of social housing across the region, although there is a lack of precision on how each of the 33 actions will be carried out.

Promoting home ownership through financing mechanisms

As a result of the regionalisation of fiscal policy and powers related to housing, the Brussels-Capital Region has adopted a series of measures to facilitate homeownership, for example exempting from registration fees the purchase of dwellings up to a certain amount, the introduction and financing of the Brussels Housing Fund that offers services such as mortgage loans, rental housing provision, housing production, etc. (fonds.brussels, 2023[82]). Moreover, through CityDev – a regional public company that produces new housing intended for acquisition by a middle-income population – housing units can be sold at two-thirds of the market price in neighbourhoods under renovation.[26] The different aid mechanisms may be combined and, in some cases, may even cover up to 75% of the price of a dwelling (Dessouroux et al., 2016[48]). Despite the efforts to support homeownership, home rental is still the most common form of housing tenure (as mentioned above). It should also be noted that to access these mechanisms; a household must already have a certain amount of financial resources to pay for a dwelling, which means that middle-income, rather than low-income, households are the main beneficiaries.

A recent initiative has been the collaboration between the Brussels Housing Fund and the Community Land Trust Brussels (CLTB), which has facilitated the construction of housing following the objectives of the Alliance Habitat programme (Région de Bruxelles-Capitale, 2018[16]). The CLTB focuses on building

affordable housing for low-income households in the Brussels-Capital Region by helping buyers acquire the building, not the land, considered as a common good. The result has been the production of homes that cost 40% less than those on the private market; resale is possible but a capped price is set to maintain the quality of affordable housing (CLBT, 2021[83]). Buyers can resell or rent the property acquired under the scheme under "exceptional" circumstances established by the regional government (Gouvernement de la Région de Bruxelles-Capitale, 2021[84]).

The implementation of programmes to promote homeownership also aims to incentivise households to stay in the region rather than move out to the suburbs or other parts of the country. However, research suggests that homeownership is not enough to keep households in the region (Berns et al., 2022[85]). The focus on housing ownership for households with children has not yielded the expected results as they still move out of the region. Elderly and single-parent households are more likely to stay in the urban area, as they depend more on services and facilities readily available in the city. Due to financial constraints or changes in their personal needs, the residential demand of these cohorts focuses on smaller dwellings closer to services and public transport and, generally, in the rental market.

Assistance to low-income households to access affordable housing

A regional priority has been to assist low-income households in finding affordable housing. In 2005, the Brussels-Capital Region launched the Regional Housing Plan to build 3 500 social housing units and 1 500 middle-sized housing units. In 2013, with the aim to expand the targets and policy, the region launched the Alliance Habitat programme to build 3 000 social housing units and 1 000 middle-sized houses.[27] The city of Brussels also launched a plan to build 1 000 housing units through the Plan 1000 Logements (Brussels City, 2015[86]). These plans helped increase the stock of financially affordable housing. Moreover, the region has been experimenting with other instruments, such as providing a financial complement to pay for rent, but municipalities are not using it to its full potential. Moreover, this instrument is highly restrictive as it covers households in the public non-social housing sector (e.g. municipally controlled companies); however, the households most in need of support are in private sector housing. In addition, some of the households registered for social housing may receive support to pay for rent in the private sector while waiting to access social housing. The rental allowance is paid monthly for a period of five years. It was adopted in October 2021 and, until December 2022, more than 7 500 households had received the subsidy (budget.brussels, n.d.[87]). This measure, although well-intentioned, may lead to increases in rents or displace other households seeking low-priced housing, such as students or people with disabilities.

Incentives for the private sector to participate in housing construction

The Brussels-Capital Region government has also provided incentives to the private sector to participate in the affordable housing market. The reason is that the public sector alone will not be able to meet the demand for social housing as the gap between demand and supply grows constantly (see Chapter 1). For a long time, office developers have had to pay planning permission charges to compensate for the use of land for offices. The municipalities use the resources to cover the construction or renovation of social housing, construction of facilities, etc. Since 2013, housing construction has also been subject to those charges for projects more than 1 000 m^2 in surface. However, housing developers have the possibility to avoid paying the fee if they dedicate 15% of the housing units to subsidised or supported housing. Subsidised housing is rented or sold by the developer to private individuals directly but under social conditions, while supported housing is rented or sold to a public housing operator or a social housing agency. Private operators play a key role in the supply of housing in the region. However, their actions are driven by parameters of economic profitability rather than social goals. The lack of strict control on the free housing market in terms of prices and production volumes has given rise to a new regional geography of housing, dividing the territory in broad terms into a more disadvantaged north and a prosperous south. Research has concluded that, in the Brussels-Capital Region, the lack of regulation of the private segment

of housing leaves the regional housing market unprotected against the growing inequalities in terms of access to housing, affecting the most disadvantaged households (Dessouroux et al., 2016[48]). Since most of the housing production is carried out by the private sector, this creates a discrepancy with the target of housing policies aimed at providing affordable housing to low- and middle-income households. However, restrictive regulation leads to higher housing production costs and thus higher prices, as the Manhattan area in New York City experienced in the 2000s (Glaeser, Gyourko and Saks, 2005[44]).

Land policy has been used to stimulate the private production of housing. The Regional Land Use Plan (PRAS) was modified to allow the construction of housing in industrial areas or highly mixed areas where housing had a secondary function. The modification has included the creation of urban enterprise zones (*zones d'entreprises en milieu urbain,* ZEMU) aimed at productive activities and integrated business services but that can also accommodate housing and commerce (perspective.brussels, 2023[88]). This measure has freed up large portions of land in places where housing was previously not authorised. The reinforcement of the residential function in areas dedicated to offices, such as the European Quarter, has facilitated the emergence of mixed-use areas.

Repurposing office buildings into social and affordable housing

Converting or repurposing former office buildings into social and affordable housing is seen as an additional instrument to bridge the housing gap since the sole construction of new housing does not suffice to meet the demand. However, conversion projects face financial and administrative obstacles. Repurposing office buildings into other functions is not a new activity in the Brussels-Capital Region. But over the last decade at least, most of the conversions (56% between 2018 and 2020) were for the creation of new housing units (perspective.brussels, 2022[52]). These projects fall within the framework of restructuring the diversity, re-densification and mixed land use of the different neighbourhoods. Vacant buildings, due to their obsolescence and a lack of surrounding public services (i.e. public transport), or new ways of working (i.e. remote working), are regarded as opportunities for urban renewal. However, experience shows that owners of those buildings tend to rehabilitate them into offices as a first option. If those buildings are too old, without any hope of producing revenues, preferred options are to modernise, destroy or transform them for other uses. Repurposing those buildings follows an economic logic that is not always consistent with revenues expected from housing (perspective.brussels, 2022[52]; ADIHBH-V, 2013[89]).

Converting former office buildings into social and affordable housing may be costly and technically complex. In the Brussels-Capital Region, only the SLRB/BGHM develops social housing projects based on repurposing buildings. For example, it is redeveloping an old factory called Projet Luttre into a mix of social housing and offices. It bought the property for EUR 624/m^2 but the conversion costs will raise the price to EUR 2 600/m^2 once finished (perspective.brussels, 2022[52]). Another example is the conversion of the Ariane building in the municipality of Woluwe-Saint-Lambert. It was bought for EUR 758/m^2 in 2020 but conversion costs have raised the price to EUR 2 000/m^2 on average, although this is still considered reasonable as there is potential to develop 250 social housing units and other facilities (perspective.brussels, 2022[52]).

High conversion costs are part of why social and affordable housing production based on the repurposing of former office buildings is still low. Local authorities face budgetary constraints to buy vacant properties and private investors face lower revenues if they transform them into housing for low- and middle-income households compared to houses for the private market. In addition, municipal and property taxes must be paid during the entire process of obtaining the planning permit. Moreover, the SLRB/BGHM must go through an internal procedure to allow the purchase of the property and then obtain the planning permits to convert the building, which could lead to the project failing.

Strategies for ensuring affordable and quality housing in the Brussels-Capital Region

To meet its housing and urban development objectives, the Brussels-Capital Region government may wish to consider the following recommendations:

Develop a housing policy based on long-term planning and a prospective approach

As discussed above, the Brussels-Capital Region faces a double challenge: meeting the current demand, particularly for social and affordable housing, and preparing for future demand due to population growth and changes. Moreover, the housing policy of the Brussels-Capital Region should not only adopt a social approach but be part of a wider urban development policy that links housing with the habitat and includes financing mechanisms. For example, Vienna (Austria) and Berlin (Germany) have resorted to different options to regulate and finance long-term social housing and meet the housing affordability challenge. While Vienna fosters a permanent social housing perspective, Berlin binds social rental dwellings to a temporary social housing commitment (Box 2.8). It is certainly up to the Brussels-Capital Region authorities to decide which approach to emulate but, whatever the approach, it is necessary to guarantee a constant supply of social housing units either by construction or renovation with the participation of semi-profit organisations and/or the private sector. Another important consideration, based on the experience of Berlin and Vienna, is how the Brussels-Capital Region intends to finance social housing in the long term. Financing costs can influence the rent-setting mechanism, affecting for whom and how long the social dwellings are and will remain affordable (OECD, 2020[90]). However, as the housing landscape changes due to the economic context, the region may wish to look into a greater range of ways to finance social housing, such as direct public expenditure (grants or loans), government intermediaries or loans via private financial institutions.

Box 2.8. International approaches to social housing – The examples of Berlin (Germany) and Vienna (Austria)

In the city of Berlin, each social rental dwelling is provided at sub-market rental prices until public subsidies are amortised, typically after 10-40 years. This is a semi-permanent approach based on a temporary social housing commitment that allows policy makers the flexibility to adapt to fluctuating housing markets, incentivises landlords to maintain the quality of social dwellings to compete with market-rate housing once the social tenancy expires and facilitates mixing social and market-rate housing across neighbourhoods. However, as the number of social dwellings for which the public subsidies have been amortised outdoes the pace of new social housing construction, there has been a decline in the total social housing stock.

In contrast, the city of Vienna embeds social housing as a permanent and broadly available affordable housing option as part of its long-term planning and comprehensive policy framework. To sustain efforts, the institutional rules ensure that the tax-exempt limited-profit housing associations continuously re-invest profits into social housing, leading to a relatively constant high supply of units. Social dwellings remain permanently under regulated rents. Thanks to this arrangement, Vienna has so far been able to maintain a large share of long-term affordable housing options.

Source: Marquardt, S. and D. Glaser (2020[91]), "How much state and how much market? Comparing social housing in Berlin and Vienna", https://doi.org/10.1080/09644008.2020.1771696; OECD (2020[90]), "Social housing: A key part of past and future housing policy", http://oe.cd/social-housing-2020 (accessed on 27 July 2023).

Review the planning permit granting procedure to make it more efficient

The procedure to obtain a planning/construction permit has been a barrier to housing construction in the Brussels-Capital Region. While the permit procedure aims to ensure that the regulations and standards are followed and that housing construction will not represent a risk for the community, its length and bureaucracy may discourage investment in the housing sector. Applying for a planning permit and obtaining approval add expenses, delay and uncertainty, which increases the total cost. Research has found that for every month of delay in approving new building permits, a housing market's ability to meet housing demand falters more in the long term than restrictive zoning (McLaughlin, 2016[92]). Accelerating affordable housing approval and the permit granting process to reduce construction costs and uncertainty would make projects more attractive to developers. For example, the regional and municipal governments may consider eliminating elements of the soil state recognition (*reconnaissance de l'état du sol,* RES) for infill development and shortening the planning review and permitting period for developments that meet affordable housing guidelines as stated in the Good Living plan. The Brussels-Capital Region authorities could also consider four key actions:

- First, reform the current CoBAT so that when planning permission is not issued by the indicated deadline, the application should be considered automatically approved rather than rejected, as is currently the case. This may assist in stimulating public authorities to be more proactive in reviewing the applications.

- Second, remove municipalities from the permitting procedure and concentrate the function at the regional level. This would prevent situations where different municipalities are deciding on land uses of a shared street, develop an overarching regional and political vision on housing development as power is currently spread across different levels of government and departments, and reduce the time for approval of planning applications, as only one authority with more capacity will be responsible for analysing the application file.

- Third, provide guarantees that planning permits granted will not be cancelled unless they represent a threat to national or regional safety. Once a permit is granted, it is understood that it follows the regulations and complies with regional and municipal development plans. Therefore, it should not be cancelled by *ex post* objections to the building project. One possibility to ensure all voices are heard would be to include a notification to the neighbours about the planned construction project as part of the permitting procedure. If no objection is made during this time, no objection should be accepted once the project has been approved.

- Finally, streamline development regulations and requirements. In line with the need to reduce the time needed to grant a planning/construction permit, the Brussels-Capital Region may wish to make the administrative process related to the planning permit application more efficient in terms of waiting periods and less heavy in terms of content by conducting a review of the development regulations and requirements to streamline them. Research suggests that regulations may be a barrier to housing production and, as a consequence, a cause of high house prices (Monkkonen, 2016[75]; LAO, 2016[93]; 2015[94]). For example, in the state of California (United States), authorities have streamlined the approval process for affordable infill multi-housing development, making such housing "by right", thereby eliminating discretionary local regulations that often delay or prevent affordable housing construction (Box 2.9). To support the production of affordable housing, the Brussels-Capital Region should relax the planning and urbanistic rules related to the housing function (PPAS, RRU) and grant identical tax benefits to private investors and developers willing to conduct housing projects similar to those of CityDev on the market and seek action from the federal government to reduce value added tax (VAT).

> **Box 2.9. Local government planning and approval of new housing in the state of California (United States)**
>
> Cities and counties in California make most decisions about when, where and to what extent housing will be built. They are required to develop a general plan that outlines the community's vision of future development through a series of policy statements and goals. A community's general plan lays the foundation for all future land use decisions, as these decisions must be consistent with the plan. A community's general plan must include a housing element, which should outline a long-term plan for meeting the existing and projected housing needs.
>
> The housing element must show how the community plans to accommodate its "fair share" of its state's housing needs. To do so, each community establishes an inventory of sites designated for new housing that is sufficient to accommodate its fair share. Communities also identify regulatory barriers to housing development and propose strategies to address those barriers. State law requires cities and counties to update their housing elements every eight years.
>
> Housing developers must obtain city or county approval before they can build new housing. Developers generally must obtain one or more permits from city or county planning departments. In many cases, they must also obtain approval from local planning commissions, city councils or county boards of supervisors. However, city or county planning staff can permit some housing projects without further approval from elected officials. These projects are typically referred to as "by right". By-right projects require only an administrative review designed to ensure they are consistent with existing general plan and zoning rules, as well as meet standards for building quality, health and safety. By-right approval is uncommon for large housing developments as these projects are vetted through both public hearings and administrative review.
>
> Source: LAO (2016[93]), *Considering Changes to Streamline Local Housing Approvals*, https://lao.ca.gov/Publications/Report/3470.

Complement affordable housing mandates with additional incentives to encourage housing development, including housing energy efficiency renovation

The fact that property developers should dedicate 15% of their housing units to social housing and that there is not enough space in the Brussels-Capital Region for large housing developments may have a negative impact on the production of affordable housing for other households. To minimise such detrimental effects, the region could implement other incentives to encourage development, such as minimum/maximum densities and reduced parking requirements. The Brussels-Capital Region may also consider applying the 15% requirement only where significant latent demand for new housing exists. For example, according to regional authorities, it may apply the 15% requirement to projects where housing units are over the price considered affordable. Additionally, the Brussels-Capital Region government may consider minimising development fees and providing discounts and exemptions for affordable infill housing development projects if they include some social housing units. Setting those fees and charges per square metre rather than per unit would be important to reduce the fees charged for smaller and cheaper units. In this way, developers may be encouraged to build smaller housing units suitable for smaller households. In addition, the Brussels-Capital Region government should become a partner of the private sector in housing development to develop and pursue a joint vision of the future of housing in the region.

An additional measure could be allowing higher densities and greater heights than normal in exchange for more social housing. This would be in line with the compact, affordable, infill development plans of the Brussels-Capital Region while preventing land use increases. Moreover, this would prevent land value increases that would result if increased density were allowed for higher-priced housing units. Municipalities

may introduce minimum requirements of building density and height in accessible locations (e.g. areas close to transport hubs) or areas undergoing renewal (e.g. urban revitalisation zones, ZRU). The city of Seattle (United States) offers an example of the introduction of density bonuses and requirements (Box 2.10). However, these policies need to be introduced carefully to be successful. For example, the Brussels-Capital Region would need to develop a thorough understanding of the market conditions and conduct a "before-and-after" feasibility study to ensure developers obtain an interesting return on investment. The experience of the city of Seattle indicates that additional revenue from upzoning is far lower than costs related to affordable housing mandates, reducing total production and affordability (Bertolet, 2017[95]).

Box 2.10. Seattle's Mandatory Housing Affordability (MHA)

In 2019, the city of Seattle (United States) adopted the MHA programme, which is a developer contribution. To achieve the goal of providing affordable housing, the MHA requires all new commercial and multi-family development either to include affordable housing on site or make an in-lieu payment for affordable housing. In exchange for the new affordable housing requirement, additional development capacity is granted in the form of zoning changes. A community input process helps inform the details and location of the zoning changes to implement the MHA. Developer contributions are either a payment or benefit provided in consideration of a proposed project. The city of Seattle requires MHA developer contributions to mitigate the impacts of new development.

Source: City of Seattle (n.d.[96]), *Seattle Department of Construction & Inspections, Mandatory Housing Affordability (MHA) Program*, https://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/mandatory-housing-affordability-(mha)-program; City of Seattle (n.d.[97]), *Housing Affordability and Livability Agenda (HALA)*, https://hala.consider.it/find-more-ways-to-help-tenants-stay-in-market-rate-housing-even-as-rent-increases?tab=Feedback%20on%20key%20principles.

To increase the housing renovation rate, the Brussels-Capital Region needs to address the barriers that disincentivise property owners to renovate their properties, mostly those for the rental market. This is a complex issue as behavioural factors also need to be considered, such as people's preference to maintain the status quo or loss aversion. The Brussels-Capital Region may wish to:

- Adopt a combination of financial assistance measures for scaling up energy efficiency investment in buildings. Retrofitting requires a significant amount of costs upfront; thus, a variety of financial incentives can be used (e.g. including tax breaks, low-interest-rate mortgages and grants) together with stricter regulations to incentivise property owners to invest in deep energy retrofits as well as to reduce the burden of these regulations, especially on vulnerable households.

- Increase awareness on the advantages of renovation works through media information campaigns aiming at tackling misinformation and filling information gaps, and providing free advice and assistance on energy savings and what it entails as well as the different options to obtain bank loans.

- Clarify the financial benefits of conducting energy-saving renovation works through free financial advice. Property owners are not always fully aware of the savings that increased energy efficiency will produce and focus only on the immediate cost. This information should be made available to both homeowners and tenants. The reason is that tenants should be aware of the savings of living in an energy-efficient unit as they pay the energy bills in most cases.

- Include incentives for renovating when buying a new property and combine with financial instruments ensuring that those are targeted to house buyers, particularly first-time buyers.

- Develop a database of contractors to facilitate homeowners contacting qualified workers, which could be done at the level of municipalities.
- Revise the administrative procedures to apply for loans and permits aiming at simplification, which would not only accelerate decision-making but could reduce hassle for owners and address their perceptions of risks.

Adjust the housing policy target population to include a wider social spectrum and different needs

As discussed above, the Brussels-Capital Region housing policy is largely focused on lower-income households with children and the location of social housing has led to a socially divided city. Across OECD countries, social mix is a key objective of social housing but it has sometimes led to a higher concentration of lower-income and vulnerable tenants and a reduced cross-section of income levels (OECD, 2020[90]). In the region, housing policy should be used to promote a socially mixed city by recalibrating the target population. This could be achieved by undertaking three main actions:

- **Focus on meeting the residential needs of people who value and require dense urban environments**. As research suggests, the Brussels-Capital Region's housing policy should be reoriented to meet the demands of the elderly, single-parent households, students, single-person households and others who are more likely to require access to services provided in an urban environment (Berns et al., 2022[85]). This would require embracing both lower- and middle-income residents. Access to social housing, in particular rental housing, should be open to a wider share of the population.

- **Prioritise the social housing rental sector and facilitate access to housing solutions for people from different socio-economic backgrounds**. This would help meet the temporary residential needs of individuals or households who require quick access to public services (e.g. transport, health and education) and the labour market. To strengthen the social housing rental sector, the Brussels-Capital Region government may wish to consider regulating rental prices to ensure tenants do not pay more than, for example, 30% of their household income for housing (i.e. a common measure on housing affordability (OECD, 2022[98])) as is done by the city of Vienna (Box 2.11). To access social rental housing, the Brussels-Capital Region should continue applying income criteria as it has done so far but only when tenants first move in. Tenants should not necessarily be required to move out if they increase their income. They may be asked to pay extra rent or solidarity rent as it is called in France[28] or reduce their social rent benefits at higher income levels, as with the income-dependent rent increases introduced in the Netherlands.[29] Another alternative is to develop smaller social housing estates that are more evenly distributed throughout and across the region, effectively deconcentrating social housing estates and not the people living in them and, in turn, helping with social acceptance. The aim of this arrangement should be to promote social integration by mixing together residents with different income levels. Through this action, the Brussels-Capital Region would ensure that housing developments do not turn into low-class enclaves and become stigmatised concentrations of poverty. As part of the regulation of the rental market, the Brussels-Capital Region could consider requesting the federal government to tax rents (see Chapter 4 on tax revenues in the region) as the fear of moving to a higher income bracket may stop owners from increasing rents; renovation of the housing unit may be incentivised as the actual costs could be deducted from income in the tax system and the need to declare possible works, as this is needed to deduct from tax, will reduce undeclared works.

- **Foster residential mobility of social housing tenants**. Tenants should not be required to re-join the queue to access social housing if they take up employment in a different part of the region, even a metropolitan area, as done in England (United Kingdom) with the Right to Move policy.[30] Another option is to build an online platform that collects information from social housing providers

to enable social housing tenants to exchange their dwellings, as done in the Paris region in France through the platform *echangerhabiter.fr*.

- **Promote the development of housing configurations that match a new household diversity to deal with the issue of overcrowding**. This could involve facilitating self-construction, owner home renewals or even the construction of community housing. The legal framework should be revised to ensure that new housing practices are protected and facilitated, for example by easing the registration and issuing permits and ensuring that inhabitants participate in the decision-making process.

Box 2.11. Social housing policy in Vienna, Austria

The city of Vienna's housing policy aims to provide affordable, secure housing for low- and medium-income level residents. Social housing is intended for a broad stratum of the population. The city government safeguards the construction of thousands of subsidised dwellings every year and contributes to the rehabilitation of older building stock. The annual investment in affordable housing amounts to EUR 450 million.

Vienna has about 1 million housing units. Of these, 33% belong to the private housing sector, 21% are co-operative dwellings, 22% municipal flats, 19% condominiums and 5% other types of housing. Social and affordable housing accounts for 43% of the housing market. The roughly 220 000 municipal flats (i.e. built and managed by the city) and around 200 000 subsidised dwellings (i.e. built and managed by non-profit or/and limited-profit housing developers) underpin social housing in the city. Approximately 50% of Vienna's population live in 1 of these 2 housing types. Social housing strives for a more equitable society that involves both the middle-class and lower-income groups. Uniform and transparent allocation criteria allow for a good social mix in social housing estates.

To develop housing projects, the city buys land deemed suitable for residential development and retains control over the type and nature of development. It then requests proposals from various private developers, which will build and retain ownership of the housing units. A jury evaluates these proposals based on four criteria: architectural quality, environmental performance, social sustainability and economic parameters (e.g. rent levels and costs). Once the project and the developer have been selected, the city sells the land to the developer at an affordable price. In addition, the city gives the developer a loan with favourable terms such as low interest rates and extended repayment periods. Private developers who build affordable housing in co-operation with the city government must allow the city to rent half of the new apartments to lower-income residents; the developer generally leases the remaining units to moderate-income residents.

Rehabilitation and refurbishment are a critical component of the city's housing policy. Since 1984, 7 463 residential buildings with more than 322 700 housing units have been renovated in the context of the "gentle urban renewal" programme. Currently, 210 residential buildings with approximately 16 800 housing units are under refurbishment. A large part of these projects is conducted under the subsidised thermal-energy renovation programme to ensure a reduction in energy consumption.

Affordable rents boost purchasing power as the large share of social housing contributes towards more affordable prices for a major proportion of the entire housing market. A special feature of the Vienna housing market is that 76% of the population are tenants. Rents are regulated by the city government so that no resident pays more than 20% to 25% of their household income for housing. The housing rental market ensures: i) social stability and financial predictability by open-ended tenancy contracts and affordable rents; ii) a reduction in energy consumption through subsidised rehabilitation and refurbishment projects; iii) prevention of segregation through the "gentle urban renewal" programme;

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iv) access to the housing market for both lower- and medium-income groups; v) comprehensive tenant protection as well as manifold, free-of-charge counselling services; vi) rents tied to the consumer price index; and vii) eco-friendly construction methods that safeguard a healthy living environment and improve environmental protection.

Source: City of Vienna (n.d.[99]), *Affordable Housing as a Public Task*, https://socialhousing.wien/policy.

Build synergies among different initiatives for affordable and accessible housing in the city-region

Most of the housing and mobility initiatives in the Brussels-Capital Region are in line with the objective of building a compact, connected and sustainable city, but more needs to be done to make this a reality. It is necessary to build synergies among the different initiatives and plans already approved. To make the Brussels-Capital Region more affordable, regional authorities may consider ensuring that households, especially those in low- and middle-income groups, do not spend more than 30% of their income on housing or 45% on housing and transport combined.[31] According to the Household Budget Survey 2022, households in the Brussels-Capital Region spend 43% of their income on housing (34.6%) and transport (7.6%) (Statbel, 2022[100]). As a reference, low-income households in the Metro Vancouver Regional District (Canada) may spend up to 70% of their income on rent and transport. Thus, authorities in the Metro Vancouver region have set the target of ensuring that households do not spend more than 45% of their income on housing and transport combined (TransLink, 2022[101]). Although households in the Walloon and Flemish Regions spend more on transport (11.5% and 9.1% respectively) and slightly less on housing (32.2% and 31.1% respectively), it should be noted that many residents tend to commute to the Brussels-Capital Region for work, school and access to services. Therefore, any measure aimed at improving transport and housing planning should adopt a metropolitan approach as co-ordination with the two other regions is essential to building synergies and planning joint investments.

Other actions the Brussels-Capital Region may consider include the following:

- **Use urban development as an instrument to meet housing needs and avoid sprawl**. Locating new housing developments near transport networks can help make the Brussels-Capital Region more affordable. For example, to meet the rising demand for housing, the city of Vienna has issued an Urban Development Plan (STEP 2025), defining a compound strategy combining urban expansion with "compaction" of the built stock. The main objective of the plan lies in land-conserving urban development and the preservation of a high share of green spaces, which amounts to 50% of the municipal territory. Thus, the local government aims to ensure that new urban development projects attain a density of 2.5 gross development area and that existing old urban neighbourhoods are further developed. Housing and densification objectives should be mutually supportive but the Brussels-Capital Region should note that it is not necessary to build taller buildings to accommodate a denser population, as shown already by the experience of Jardins de la Couronne in the municipality of Ixelles.

- **Optimise the link between housing policy and urban regeneration**. For the Brussels-Capital Region, urban regeneration is a way to support vulnerable neighbourhoods by improving public infrastructure and revitalising deteriorated or abandoned buildings. The region has a larger number of housing units than households but many of these housing units are in poor condition. Thus, the regional government may wish to shift from a quantitative approach to a qualitative vision of housing policy focused on housing renovation. Further deterioration of the housing stock and some neighbourhoods would require the implementation of costly and complex regeneration strategies to repair the urban and social fabric.

- **Link housing development further to urban sustainability**. The Brussels-Capital Region needs a broader habitat policy to avoid implementing a siloed housing policy and, in that way, build more

liveable neighbourhoods. Providing affordable and decent housing to residents, in particular low-income households, should not be at the expense of urban sustainability. Ensuring that urban spaces are resilient in environmental, economic and social terms should be part of housing development projects in which the habitat is regarded as an extension of housing. For example, Mexico introduced the Sustainable and Comprehensive Urban Developments Certifications (*Desarrollo Urbano Integral Sustentable*, DUIS, now called *Desarrollos Certificados*) and applied a comprehensive evaluation grid, which defined three scales for quality and sustainability: dwellings, neighbourhood and connection to the city. The initiative consists of a package of public subsidies in several fields (education, health, social inclusion, etc.) that are granted to the certified projects. This example offers the Brussels-Capital Region an example of a methodology to introduce sustainability criteria comprehensively in the production of social housing, especially regarding new large-scale social housing urbanisation projects (OECD, 2015[102]).

- **Reduce impediments to developing lower-priced, infill housing in walkable neighbourhoods** and as part of the urban regeneration programme of the region. Pedestrianisation efforts are already underway in several parts of the region but they must ensure that the construction of social and affordable housing is part of the urban renewal project.

- **Adopt land value tax and undeveloped land surtax to foster a more efficient use of urban land**. This could complement the initiative promoted by CityDev, which allows home buyers to buy the building but not the land. To reduce the cost of constructing buildings, improve and maintain the housing units, and discourage land price increases and speculation, the Brussels-Capital Region may wish to adopt land value taxes that shift property tax burdens from buildings to land value to encourage more compact, accessible urban development (see Chapter 4).

- **Ensure that taxes, development fees and utility rates support compact development**. The Brussels-Capital Region government, in co-ordination with the municipalities, may wish to use development fees, taxes and utility rates to encourage compact development by providing discounts or exemptions for smaller and cheaper housing units, for housing with fewer vehicle trips (i.e. those located in transport hubs) and for compact, infill development, reflecting the lower costs of providing public infrastructure and services to housing units. Research suggests that development fees should be charged by square metre rather than by housing units to reflect public costs more accurately in providing public services (Parent, 2017[103]). Larger housing units for more affluent families would pay more than those living in smaller units in the same neighbourhood.

Develop a diversified package of measures to finance further development of affordable housing

The challenge for the Brussels-Capital Region is to promote construction and build affordable housing units (see Figure 2.2). The lack of social housing units will require using public funds to continue providing allowances to low- and middle-income households to find accommodation in the private market. Only, in 2023, the budget for social protection represented 25.6% of the total regional budget and almost 37% of these resources were for housing, which includes the rental subsidy, a slightly lower share than in 2022 when 38.3% of the social protection budget was devoted to housing (budget.brussels, 2023[104]).

Since the rents that low- and middle-income households can afford are often too low to cover the full costs of owning or managing a rental property, countries and cities tend to fill the gap via subsidies. The subsidy can be used to help cover construction costs, rents and/or operating costs or to help tenants pay the rent in private sector housing, as done in the Brussels-Capital Region. Keeping the same level of investment in social housing may be challenging in a context of limited resources and, still, the available resources do not cover social housing construction. Thus, the region needs to explore different policy options, which include tax incentives, tax exemptions for development on certain types of land or in designated areas (i.e. those considered for renewal) or for the conversion of office buildings into residential buildings, and government-guaranteed bonds to provide low-cost finance to community-based organisations to create

and manage social housing across the region. Table 2.4 provides some examples of measures introduced by OECD countries to finance affordable housing and could be of inspiration to the Brussels-Capital Region. These examples refer to measures implemented at the regional or local level of government, not by the national government.

Table 2.4. Examples of measures to finance affordable housing in OECD countries, adopted at the regional/local level of government

Country	Name/description	Tenure type	Requirements applying to the dwelling and/or household	Income thresholds for end users/type of aid
Australia	Among other provisions, the **State Environmental Planning Policy (Affordable Rental Housing) 2009** includes floor space incentives for villa, townhouse and residential flat building development projects in accessible locations, where residential uses are already permitted if the development includes affordable rental housing for ten years and is managed by a community housing provider.	Affordable rental dwelling	Affordable rental housing is provided for very low-, low- and moderate-income households. Different eligibility restrictions apply. Under a restriction on the title, dwellings must be used for affordable rental housing for ten years and must be managed by a registered community housing provider. A maximum price applies to dwellings built with support from this scheme.	Income threshold *Type of aid*: density bonus
Austria	**Subsidies Schemes of the Austrian Provinces** (*Wohnbauförderung der Länder*) offer grants, soft loans and guarantees for the construction of new owner-occupied dwellings.	Both affordable owner-occupied and rental dwellings (including collective living facilities, e.g. for students and the elderly)	A maximum price applies to dwellings built with support from this scheme. There are also standards in terms of quality/energy efficiency. Requirement for end users: permanent residents with Austrian or European Union citizenship or recognised asylum seekers.	Income threshold *Type of aid*: grant, soft loan, guarantee
Ireland	**Local Infrastructure Housing Activation Fund (LIHAF)** is a key element of Pillar 3 of *Rebuilding Ireland: An Action Plan for Housing and Homelessness*. The objective of the fund is to provide public offsite infrastructure to relieve critical infrastructure blockages. This will enable the accelerated delivery of housing on key development sites in Dublin and in urban areas of high demand for housing. Funding is 75% grant funding from the Department of Housing, Local Government and Heritage, with 25% matching funding provided by the local authority.	Both affordable owner-occupied and rental dwellings		*Type of aid*: Grant
Netherlands	The **housing deals** (*Woondeals*) (reached with the municipalities of the tightest housing markets) include terms on acceleration of current development projects, availability of sufficient affordable housing and the rental sector.	Both affordable owner-occupied and rental dwellings	Support is given on a broader scale to local governments for large developments (e.g. new neighbourhoods in green field developments), not on a house-by-house basis.	*Type of aid*: improved access to construction sites; expedited planning and construction procedures
Spain	**Tax relief** to property developers to finance the construction of affordable housing. The Local Tax Law (RDLeg 2/2004) establishes a mandatory tax relief on the property tax (*impuesto sobre bienes inmuebles*, IBI). This tax relief may be between 50% and 90% of the total tax charge.	Both affordable owner-occupied and rental dwellings	A maximum price applies to dwellings built with support from this scheme. There are also standards in terms of dwelling size.	Income threshold *Type of aid*: tax deduction

Source: OECD (2021[105]), "PH5.1 Measures to property developers to finance affordable housing construction", https://www.oecd.org/els/famil y/PH5-1-Measures-financing-affordable-housing-development.pdf; For Australia: Government of New South Wales (2009[106]), *State Environmental Planning Policy (Affordable Rental Housing) 2009*, https://legislation.nsw.gov.au/view/pdf/asmade/epi-2009-364; For Ireland: DLR County Council (n.d.[107]), *Local Infrastructure Housing Activation Fund (LIHAF)*, https://www.dlrcoco.ie/cherrywood-sdz-news/local-infrastructure-housing-activation-fund-lihaf; For the Netherlands: Ministry of the Interior and Kingdom Relations of Netherlands (n.d.[108]), *Woondeals Groningen 2022-2030*, https://www.volkshuisvestingnederland.nl/onderwerpen/woondeals/documenten/publicaties/2023/04/21/wo ondeals-groningen; For Spain: Auxadi (2019[109]), "Spain: tax relief in property tax under construction", https://www.auxadi.com/blog/2019/11/13/spain-tax-relief-in-property-tax-under-construction/.

Transform the Housing Advisory Council (CCL) into a policy formulation body

The Brussels-Capital Region already has a Housing Advisory Council (CCL) that advises and provides opinions on different housing projects and initiatives; it offers a forum for the exchange of experiences and consultation among housing actors operating in the region. However, it is not a decision and policy-making forum per se. Indeed, housing policy is the prerogative of the regional government in co-ordination with municipalities. Tackling the housing crisis in the Brussels-Capital Region requires co-ordinating actions on different fronts under a unifying approach and vision. Transforming the current CCL into a housing co-ordination council (HCC) would help facilitate the elaboration of a more coherent policy. In particular, it would enhance the awareness and understanding of the nature of the housing challenge, develop collaboration schemes and strategies, improve efficiency and effectiveness in the use of resources, including land, financial and human resources, and create new opportunities for partnerships to deliver solutions in specific cases. The HCC would continue to fulfil the current tasks of the CCL but one new important task would be the co-formulation of a housing policy by all regional actors. The membership of the proposed HCC would be the same as the current CCL but it could be chaired by the Brussels-Capital Region represented at the political level by Bruxelles Logement, perspective.brussels and urban.brussels.

Some specific new tasks of the HCC would include:

- Building relations with key housing actors within the region, to gather evidence, set priorities and define policy options to tackle the housing crisis.
- Providing a bridge between the regional housing policy and operational levels (e.g. municipalities or housing providers).
- Conducting surveys on the current housing policy and its effects, which could also be a way to consult citizens and obtain their views.
- Supporting municipal authorities and housing operators to make better use of available data, including tapping into unused resources.
- Supporting the construction of a regional database on land and vacant or available housing units or buildings.
- Mapping current initiatives and practices across the 19 municipalities of the Brussels-Capital Region as well as regional actions to build synergies, identifying good practices (e.g. on housing allocation policies, building new housing, securing or buying properties) and discouraging individual local authorities from duplicating housing policy actions.
- Evaluating the different approaches to address the housing crisis across the different municipalities and the region to stimulate performance improvement.
- Piloting specific new policies or practices to facilitate access to affordable housing.
- Creating economies of scale by bringing together personnel responsible for housing from across the different municipalities for joint training sessions on the legal framework or specific housing issues such as vacant housing and overcrowding.

Address local resistance to urban and (social) housing developments across the region

Opposition to urban, land use and housing development often occurs in a variety of ways. For example, mortgage interest deduction promotes the use of housing as an investment but homeowners may oppose it if they perceive a negative impact on the value of their homes. Research suggests some possible avenues to face opposition to housing projects, which authorities in the Brussels-Capital Region may wish to consider (Monkkonen, 2016[75]; Litman, 2017[110]; LAO, 2016[93]):

- **Shift the scale of land use decisions to the regional or even metropolitan levels**. Research suggests that the decision-making process for land use and housing development is more likely to find support on a citywide basis as opposed to a neighbourhood one (Parent, 2017[103]). Citywide policies can attract political support from diverse and powerful constituencies. Unlike community plan updates, a regionwide approach does not single out individual neighbourhoods, which tend to attract and organise opposition that favours the status quo. Increasing the geographic scale of political action on land use allows the representation of all those affected. Combining this with a more inclusive planning process would allow local housing policy to reflect the Brussels-Capital Region's overall needs rather than the interests of each municipality or neighbourhood alone. Therefore, if the Brussels-Capital Region approaches urban and housing policy on a regionwide basis – or even on a metropolitan level - it may create the right dynamics for projects to be politically viable.

- **Enforce and enhance the existing housing regulatory and legal framework**. Since only a minority of municipalities in the Brussels-Capital Region have reached the 15% target of social housing, the social housing policy mostly performs a symbolic function. Considering that the municipalities that do not meet their targets face no consequences, the system lacks "carrots and sticks". The regional government could provide the rewards such as infrastructure investment and legal penalties by sanctioning those municipalities that do not comply with their targets. The housing policy may also be amended to allow municipalities to conduct joint housing projects to achieve their targets.

- **Provide public information to strengthen trust in governments' housing policy**. The Brussels-Capital Region regional and municipal governments should produce and provide non-partisan information and analysis on housing-related issues. For example, if there are concerns about the capacity of the neighbourhood or municipality to ensure access to public services such as water or public transport, governments could produce reports and host clarification meetings or community workshops regarding the ability of power companies, water agencies, sewage lines and other utilities to handle increased density in the urban core.

Enhancing accessibility in the Brussels-Capital Region

The Brussels-Capital Region has initiated a shift towards a new urban development model based on urban accessibility. Urban accessibility means that people should not only move around efficiently but can get to everything they need to satisfy their needs and thrive (Rode et al., 2014[111]; 2021[112]). Regional and municipal governments are conducting major investments in public transport and street design – through urban regeneration projects – for more equitable mobility and to make rational use of private cars and increase the share of trips made by public transport modes, cycling and walking. Research has highlighted that compact, transit-oriented developments with high-quality public transport and active mobility alternatives can provide much more balanced access to jobs, education and essential services than sprawling, car-dominated urban areas (Gulati et al., 2020[113]).

Facilitating urban accessibility at the metropolitan level is one of the region's priorities

Mobility in the Brussels-Capital Region is planned based on the Regional Sustainable Development Plan (PRDD), which identifies accessibility as one of the main challenges for the region. The PRDD stresses the need for an integrated and intermodal mobility plan that combines and promotes the use of different transport modes while reducing the use of individual cars and anticipates new behaviours induced through new technologies and ways of life. Critically, the PRDD calls for reducing travel by promoting the development of the "city of proximity" (*ville de proximité/Buurtstad*). This is in line with the region's general goal of promoting density and a 20-minute city.

Ensuring accessibility in the Brussels-Capital Region, like in any other city or metropolitan area, depends on a combination of factors such as: i) the management and use of land, the geographical distribution of the population and of opportunities within and around the city; ii) how affordable services and amenities are accessed and the social barriers to access them; and iii) the ease of movement (transport) and the availability of telecommunications (Rode et al., 2021[112]). If the Brussels-Capital Region combines these elements with carbon-neutral and metropolitan-wide public transport policies, it would use resources more efficiently, improve productivity and reap more agglomeration benefits. The challenge for the Brussels-Capital Region is to generate new physical proximities (e.g. city of proximity, higher densities, metropolitan approach) to foster greater social inclusion at lower environmental costs without triggering outward migration.

The need to improve mobility and accessibility in the Brussels-Capital Region stems from many factors, such as: demographic growth, albeit slow in recent years (see Chapter 1); the dissociation between the place of residence and the place of work, as well as the interdependencies between the Brussels-Capital Region and the periphery (metropolitan zone); the traffic jams caused by the use of private vehicles by commuters from the suburbs; and the need to improve logistics in the face of an expected increase in e-commerce. The consequence of these dynamics is a deep social and territorial inequality in access to mobility (Bruxelles Mobilité, 2020[114]). Moreover, the Brussels-Capital Region suffers from severe traffic congestion despite an extensive public transport network. Part of the explanation is that earlier development patterns have left the region socially and physically fragmented (Clark et al., 2016[5]). As Chapter 1 shows, almost half of the jobs in the region are taken up by commuters from generally wealthier municipalities and provinces outside the Brussels-Capital Region who do not contribute fiscally to financing urban infrastructure. This model has led to high levels of car usage in the region (Clark et al., 2016[5]). Moreover, traffic congestion caused by private vehicles forces trams and buses to reduce their speed and it is estimated that it increases by 25% the time they need to cover a given route (Gailly, 2022[115]).

Promoting accessibility at the metropolitan level will probably require higher densities. Few places in the Brussels-Capital Region could be labelled as "low-density" and most neighbourhoods are relatively well connected through public transport. However, relatively low densities at the metropolitan level (see Chapter 1) are making the provision of public transport costly. Research suggests that the operation of public transport becomes cost-efficient only above certain threshold density levels (OECD, 2020[11]).

For the Brussels-Capital Region, promoting urban accessibility may also help reduce the operational costs of urban transport. The reason is that urban form characteristics and density levels have a clear impact on the cost-effectiveness of transport provision. Low-density urban development tends to increase the costs for public and private motorised transport and disincentivises non-motorised transport, considered as the most effective means of urban travel (Rode et al., 2014[111]; OECD, 2020[11]). Expanding the public transport network to cover and link different remote areas is not only expensive but also prevents the provision of efficient and regular service at a low cost for the operators and users. Thus, in the Brussels-Capital Region, pursuing urban accessibility objectives is a way to provide better mobility choices to larger groups of people at lower costs.

Transport is also a major source of carbon emissions in cities. The co-dependence of urban transport systems with urban form has a key role in the transition to a low-carbon economy (Rode et al., 2014[111]). Urban travel in the Brussels-Capital Region is the second largest source of local air pollution. The transport sector represents 27% of the greenhouse gas (GHG) emissions in the region, a level that has been stable for the last 20 years (Bruxelles Mobilité, 2020[114]). In 2022, more than 330 million trips were made by public transport in the Brussels-Capital Region (over 270 million in 2021) (STIB-MIVB, 2023[116]). Moreover, energy consumption by the public and private transport sectors has increased since the 1990s and accounts for more than a fifth of energy consumption in the region (Bruxelles Mobilité, 2020[114]). Thus, measures to reduce the need for mobility in the first place, promote the use of public transport and reduce the use of private cars are in line with the objective of improving air quality.

The Brussels-Capital Region has relatively strong planning instruments and infrastructure to foster accessibility

Facilitating access to jobs, services and people calls for strategic planning and the availability of transport infrastructure. The Brussels-Capital Region has reached an inflection point in which policies and investments already made should be reinforced. If not, the region would risk remaining in a "business as usual" situation in urban development patterns that could aggravate the housing crisis and accelerate outward migration. The Brussels-Capital Region should leverage its planning and infrastructure assets to advance better accessibility.

The Brussels-Capital Region has a comprehensive mobility plan

In 2020, the Brussels-Capital Region adopted the Regional Mobility Plan 2020-2030 (known as Good Move), a comprehensive mobility strategy that provides strategic and operational orientations for improving mobility in line with and as a complement to the sustainable regional development policy objectives. While the regional mobility plan is adopted and revised every ten years, Good Move represents a new generation of regional mobility plans. The 1998 Iris I plan and the 2010 Iris II plan were the first efforts to build a culture of sustainable mobility in the region. However, these plans had a larger focus on planning at the regional and communal levels rather than on outcomes or action and lacked a metropolitan perspective. Good Move aims to focus less on plan making and more on actions.

Contrary to previous regional mobility plans, Good Move was developed through a large consultation process following a more bottom-up approach based on a process of negotiation and dialogue with the 19 communes and residents. Good Move places people at the centre of decision-making on mobility and is part of the region's policy response to social, economic and environmental challenges. It is divided into a City Vision, which identifies goals to improve quality of life through a mobility policy in line with the PRDD; and a Mobility Vision focused on reducing car traffic and favouring the development of public transport and active modes of travelling (Box 2.12). Good Move also includes an Operational Action Plan with 50 actions divided into 6 focus areas. Transport planning in the Brussels-Capital Region aims to serve diverse mobility demands (e.g. pedestrians, cyclists, drivers, people with limited mobility, children) to build an efficient and equitable transport system that allows travellers to use the most efficient option for each trip.

In general, it promotes increased and facilitated access for people, goods and services, which is the basis for economic development. Good Move seeks to make this access more efficient to increase the quality of life of residents and visitors, and reduce the negative impact of transport on the environment. These improvements are expected to help the Brussels-Capital Region seize economies of scale and agglomeration effects. The relatively small territorial size of the Brussels-Capital Region is expected to allow for short distances (i.e. 60% of movement in the region is less than 5 km) and help achieve the objectives of the plan. The PRDD and the Good Move plan seek the physical concentration of people, services and economic activities, the distribution of functions and a degree of mixed use to facilitate accessibility. For the Brussels-Capital Region, this implies particular attention to planning, land use, urban

design, building and managing the specific conditions of each neighbourhood in the region. The reason is that at the neighbourhood level, density, land use mix and street design have an important impact on the likelihood of walking (Ewing and Cervero, 2010[117]).

Both the PRDD and the Good Move plan seem to acknowledge that transport policy is essential to enhance urban accessibility but that it is only one of several elements. Focusing only on urban mobility – the ease of movement of people and goods – either by favouring walking, cycling, public transport or the use of cars would not have the desired impact on accessibility. Enhancing urban accessibility requires considering elements such as the use and management of land and the way economic activities, services and amenities are distributed across the urban area (Rode et al., 2021[112]).

Box 2.12. The Brussels-Capital Region Regional Mobility Plan (Good Move): Objectives and City Vision dimensions

The Regional Mobility Plan 2020-2030 seeks to improve quality of life in the different neighbourhoods in the Brussels-Capital Region by influencing residents' mobility habits through the creation of the "city of proximity" (*ville de proximité*/*Buurtstad*) where walking and cycling are promoted. The plan outlines 50 actions to make the city more liveable by 2030.

The objectives of the plan are to: i) improve quality of life in neighbourhoods by improving (reducing the level of) traffic and offering quality public spaces; ii) guarantee optimal accessibility conditions to the main existing and future urban functions in the Brussels-Capital Region (economic zones, touristic and commercial); and iii) encourage the development of a city of proximity that is dense, mixed and multipolar and a densification strategy linked to good accessibility to the public transport network.

The plan includes a City Vision on how mobility helps confront social, economic and environmental challenges in the region. It is made up of seven dimensions that cover all urban challenges the region must face:

- **Green**: Diminish the impact of the different mobility forms on the environment. Cut 35% of GHG emissions by 2030 in relation to 2005 levels.
- **Social**: Offer different mobility forms that allow all residents to move efficiently and comfortably. Reduce household spending on travel, aiming for a cut from 12% in 2015 to 8% by 2030.
- **Pleasant**: Reconcile mobility needs with a good quality of life for residents. 250 km of quiet areas in 2030 (pedestrian, residential or meeting areas).
- **Healthy**: Promote mobility forms that have a positive impact on physical and mental health.
- **Performant**: Design mobility forms favourable to socio-economic development.
- **Safe**: Ensure safe and secure mobility forms.
- **Efficient**: Develop mobility forms that optimise resources.

The Mobility Vision proposes to achieve six main goals:

- Influence the general demand of travel through denser urban development.
- Reduce the need for a personal vehicle by offering attractive mobility options.
- Reinforce mobility services through, for example, mobility as a service (MaaS), car sharing, taxis and a strategy for autonomous vehicles.
- Ensure a structured and efficient public transport network that provides everyone with a place in the public space.

> • Support initiatives of urban distribution through a 10% reduction of road space by 2025.
>
> • Develop a parking policy that promotes off-street parking and reduces the number of parking spaces in the public space.
>
> Source: Bruxelles Mobilité (2020[114]), *Plan régional de mobilité 2020-2030. Plan stratégique et opérationnel*, https://mobilite-mobiliteit.brussels/sites/default/files/2021-04/goodmove_FR_20210420.pdf.

The Good Move plan is a critical asset for the region to end the bias that led to historical over-investments in automobile infrastructure and under-investments in more affordable, efficient and inclusive transport modes (Table 2.5). However, while the Brussels-Capital Region has shifted from a focus on cars to prioritising bike lanes, it must be highlighted that the Good Move plan is not an anti-automobile plan. By prioritising investments in non-automobile modes, the Good Move plan aims to make driving easier by reducing traffic and parking congestion, driving burdens and car accidents. It also aims to provide good commuting alternatives to drivers when they cannot use their cars. In this respect, research suggests that for traffic reduction to be effective, it is necessary to implement multiple strategies (i.e. congestion pricing, fuel taxes, limited traffic zones, traffic bans, transit-only lanes, etc.) to maximise impact and reduce potential challenges related to political will and equity (ITDP, 2021[118]). Reallocating road space for people, as the Good Move plan does, should, therefore, be part of a wider traffic reduction strategy. Road space reallocation should be only the first step of a shift towards sustainable transport modes.

Cycling is a key part of transport and one of the priorities of the Good Move plan. It also provides the opportunity to rethink green spaces and space distribution in the city. Pedestrianisation projects in the Brussels-Capital Region are giving new emphasis to cycling through the construction of adequate infrastructure and green spaces for neighbourhoods, taking advantage of the momentum created by the COVID-19 pandemic.

Besides the regional mobility plan, the Brussels-Capital Region has a series of thematic strategic plans called "roadmaps" that provide a breakdown approach by theme and cross-disciplinary focus to the Good Move plan. These plans are being updated to reflect the new vision, objectives and directives of the Good Move plan. The roadmaps are: the bicycle plan, the pedestrian plan, the road safety action plan, the plan for transport of goods, the parking plan, the taxi plan and the lighting plan.[32]

Table 2.5. The Good Move Operational Action Plan

Area	Focus	Description	Example of key actions
Territory	Good Neighbourhood	Includes actions that refer to the organisation of mobility within neighbourhoods to improve quality of life.	• Install a speed limit of 30 km/h across the region • Work towards calmer neighbourhoods • Support the establishment of Living Labs to reclaim public space • Enhance off-road parking • Optimise deliveries by developing local logistics real estate and smarter urban distribution • Renew emblematic public spaces
	Good Network	Refers to actions that organise the transport network into efficient and high-quality services and routes.	• Redevelop major urban axes in a multimodal manner • Create a master plan for pedestrian areas to encourage people to walk more • Create a network of preferred cycle routes • Improve the performance of surface public transport • Facilitate the access of heavy goods vehicles to the logistics zones in the region • Ensure a preventative maintenance plan for infrastructure, networks and equipment (all modes) • Strengthen the management system of traffic dynamics
Behaviour	Good Service	Refers to actions that offer integrated mobility services.	• Support the development of mobility as a service • Set up information points and integrated services related to mobility • Develop services related to cycling and other light transport means

			• Develop parking as a service • Classify the public transport network according to a service-centred logic • Develop remunerated passenger transport services as an alternative to owning and using a private vehicle • Develop stations and interchange hubs • Implement the regional part of the metropolitan Park and Ride (P+R) strategy • Reinforce shared mobility services
	Good Choice	Refers to actions that guide individual and collective mobility choices without hindering freedom of choice.	• Articulate urban development and the mobility offer • Modulate travel pricing based on use • Adopt instruments to disincentivise the ownership and use of private vehicles • Encourage businesses to streamline their orders and delivery • Change the logistics linked to the construction sector
Governance	Good Partner	Includes actions that concern governance, to ensure the implementation of the plan in partnership with other actors.	• Reinforce the role of the Region as Mobility Organising Authority • Establish a constructive partnership with the 19 municipalities • Collaborate with the federal and regional authorities • Frame the governance of mobility, infrastructure and road development projects, diversify financing possibilities and standardise design practices for projects in the public space • Reinforce the mechanisms that allow the co-construction of mobility and public space projects with citizens and the social and economic sectors
	Good Knowledge	Groups actions that concern the knowledge and transparency of mobility data to ensure an effective evaluation of the mobility policy.	• Evaluate the regional mobility policy • Obtain, analyse and share mobility data • Conduct qualitative and quantitative surveys among users • Foresee the automatisation of vehicles • Communicate and train on the mobility policy

Source: Bruxelles Mobilité (2020[114]), *Plan régional de mobilité 2020-2030. Plan stratégique et opérationnel*, https://mobilite-mobiliteit.brussels/sites/default/files/2021-04/goodmove_FR_20210420.pdfhttps://mobilite-mobiliteit.brussels/sites/default/files/2021-04/goodmove_FR_20210420.pdf.

A remaining weakness in the implementation of the Good Move plan is that it is not conceived at a metropolitan level. The Metropolitan Community of Brussels (*Communauté métropolitaine de Bruxelles/Hoofdstedelijke gemeenschap van Brussel*) was created in 2012 to manage issues of transregional importance such as mobility, road safety and road works in and around the region. All municipalities and towns in the Brussels-Capital Region, Flemish and Walloon Regions, are legally part of this metropolitan community. Nevertheless, despite being enshrined in legislation since the sixth state reform, the necessary co-operation agreement for the metropolitan community to exist and undertake its missions has not been signed yet (see Box 3.4). That said, important aspects of mobility are absent from the scope of action of the Metropolitan Community of Brussels, such as environment and regional planning (Gailly, 2022[115]). The fact that these two issues are not part of the community's competencies complicates mobility planning at the metropolitan level.

Municipalities may produce their own mobility plan

At the municipal level, mobility planning can take three possible routes: i) a municipal mobility plan (MMP); ii) the selection of some elements of the regional mobility plan to be implemented at the municipal level; and iii) focus on mobility at the neighbourhood level.

First, each municipality has the possibility of preparing an MMP. MMPs are strategic plans presenting a forward-looking vision of mobility in the municipality. Their objective is to improve accessibility and quality of life for residents through a more rational use of cars. MMPs must be in line with the Good Move plan and are reviewed and renewed every 12 years after the approval of the new regional mobility plan, as they must translate regional policy into local policy.

MMPs aim to: organise a multimodal, hierarchical system of travel for people and goods; ensure accessibility to goods and services for all, in particular for people with reduced mobility; promote intermodal travel (walking, cycling and public transport) and more sensible use of private vehicles; and encourage a mix of functions. For example, the MMP of Uccle aims to ensure a good performance of networks for all modes of travel, promote multimodality, develop an overarching parking strategy and improve quality of life in neighbourhoods by reducing traffic nuisance and quality of the public space (Commune de Uccle, 2021[119]). Similarly, the MMP of Molenbeek-Saint-Jean seeks to improve traffic management through pedestrianisation projects such as the Chaussée de Gand, improve connectivity to the metro and develop walking and cycling infrastructure (Commune de Molenbeek-Saint-Jean/Transitec, 2013[120]). Other objectives that municipal mobility plans seek are to reduce the number of car accidents as well as the negative environmental impacts of mobility (e.g. noise, air pollution). MMPs can also serve as an instrument to improve the use of and conviviality of public spaces.

The region co-finances the elaboration and implementation of MMPs. The regional government must approve the MMP, ensuring its alignment with regional priorities. MMPs have been adopted since 2003 but the approval of the Good Move plan has triggered a need to revise them.

Second, municipalities can select only the actions from the regional plan they consider most relevant and implement them at the municipal level. Changes are being made to the legal framework so that municipalities are able to implement the action strategy of the Good Move plan in their own territory. In the past, municipalities spent two-three years using their limited resources in plan making and then being unable to implement them.

The third option is for municipalities to focus on mobility at the neighbourhood level. In this option, municipalities can adopt a local mobility contract (*contrat local de mobilité*/*lokaal mobiliteitscontract*, CLM/LMC), a scheme introduced by the regional mobility plan. The CLM/LMC aims to ensure calmer neighbourhoods by easing traffic (i.e. reducing the volume of traffic and introducing speed limits to a maximum of 30 km/h). Implementing a CLM/LMC requires a closer collaboration between the region and the municipality. In total, within the Brussels-Capital Region, 50 neighbourhoods are eligible to be "peaceful neighbourhoods" (*quartiers apaisés*/*autoluwe wijken*) through a CLM/LMC and 11 CLMs have already been launched.

The Brussels-Capital Region has a wide network of urban mobility services

Good Move emphasises the need to disincentivise the use of private vehicles and free up public space currently used for parking, and one way of doing this is to offer residents different mobility alternatives to cars through a wide network of public transport. In the Brussels-Capital Region, mobility services operated by the public sector or under a contract with the public sector include public transport (i.e. metro, tram, buses), rail and station-based bike sharing (ITF, 2021[121]). In 2022, the available rolling stock was 83 metro trains, 395 trams and 860 buses (STIB-MIVB, 2023[116]). The number of users has increased slowly since the pandemic. In 2022, the total number of travellers was 337.8 million (273.8 million in 2021), of which 129.2 million travelled by metro (96.3 million in 2021), 106.6 million by tram (91.1 million in 2021) and 101.8 million by bus (87.2 million in 2021) (STIB-MIVB, 2023[116]). Other mobility services include docked and dockless e-bikes and cargo bikes, e-scooter sharing, car sharing, carpooling and ride-sourcing. The availability of several mobility services is allowing the Brussels-Capital Region and STIB-MIVB to encourage intermodality to provide alternatives to private cars through collaboration with other mobility providers. An important step has been the ticketing and pricing integration as well as co-ordination among different transport providers. For example, the Brupass XL zone is a travel document that allows a single fare while travelling via the four transport operators throughout the region and the surrounding municipalities. The public transport infrastructure network includes 2 200 bus and tram stops, 69 metro stations and 32 suburban train stations, which allows residents to be within walking distance of a public transport stop in the Brussels-Capital Region (Brussels Mobility, n.d.[122]).

Mobility options in the Brussels-Capital Region also include a concession service of public bike-sharing named Villo. This service is operated twenty-four hours a day, seven days a week and is partially financed through user fees. The number of cyclists in the Brussels-Capital Region has been increasing even before the COVID-19 pandemic. Since 2019, 40 km of additional cycling lanes have been built across the region and the entire inner ring road is being lined with separate cycling lanes.

In addition, car-share operators operate in the Brussels-Capital Region after obtaining a license from Brussels Mobility. The licence conditions stipulate that costs must be proportionate to trip distance and duration. The Brussels-Capital Region government works to ensure that station-based services (i.e. the specific location where shared vehicles can be picked up or roped off) cover the entire region, especially where public transport coverage is not optimal, through a scoring procedure that is reviewed when the licence is renewed (ITF, 2021[121]). The coverage of station-based services has been growing since their introduction in 2003 to reach 646 stations in 2020. However, the distribution of station-based services across the region has not been even, as the City of Brussels and the municipalities of Etterbeek, Ixelles and Schaerbeek host more than half of the available offer with 352 stations (parking.brussels, 2020[123]). Taxis, collective taxis and car rental services with a driver are other transport options available in the region. However, the main users of car-sharing services tend to be from high-income groups, young (26-39 years old), university graduates (69.4% of users) and male (77% of users) (Wiegmann, Keserü and Macharis, 2020[124]).

Brussels-Capital Region authorities acknowledge that the region's public transport system needs to be further developed. One goal, for example, is to increase bus capacity by 30% by 2030. Developing an efficient transport network is a central part of the Good Move plan. The renewal and expansion of the infrastructure and the rolling stock to improve the performance of the public transport network are essential to the fluidity of the traffic. A master plan for the development of eight additional tramlines over the next decade has been prepared. However, even if the network of buses and trams is further developed, it is essential to manage the circulation of company cars and private cars. As mentioned above, traffic congestion reduces public transport performance and lengthens public transport trips by 25% at rush hour (Lebrun, 2018[125]).

The resources available to the Brussels-Capital Region for investment in the public transport sector amount to EUR 1.5 billion out of the EUR 7.4 billion of the total budget. However, alternative sources of revenue are needed to finance the significant investment needs of the Brussels-Capital Region due to its specificities as an international capital (see Chapter 4). Thus, in 2002, the Brussels-Capital Region obtained a loan of EUR 475 million from the European Investment Bank to modernise the urban transport fleet and make it more sustainable (e.g. 43 metro trains, 94 electric buses, 90 trams).[33]

The Brussels-Capital Region is developing an integrated transport network based on a MaaS ecosystem

Good Move has set the objective of developing an integrated transport network with public and private operators and providers that responds to the specific needs of each user (Bruxelles Mobilité, 2020[114]). The Brussels-Capital Region aims to develop a MaaS market for the entire region to improve accessibility and expand sustainable transport options across the territory. MaaS builds on the idea of accessing, via a single medium such as a smartphone, a large variety of mobility services, including public transport and shared mobility services (Crozet, 2020[126]). The Brussels-Capital Region MaaS ecosystem is expected to integrate transport services and ensure non-discriminatory access to the data management platform for operators and long-term financial sustainability for the services provided.

The International Transport Forum (ITF) of the OECD conducted a study on the actions taken by the Brussels-Capital Region government to develop and introduce the MaaS ecosystem in 2021 (ITF, 2021[121]). It provided an assessment of the conditions that need to be met to successfully introduce a MaaS in the region. Among the key points, the ITF report has emphasised the need for viable business

models that support a large-scale MaaS ecosystem and the imperative of avoiding overly restricted or inflexible regulation for a new evolving market, as it would undermine the ability of market actors to find sustainable business models (ITF, 2021[121]). A critical point is to provide clarity on data governance to assist the MaaS market and support the development of a competitive, open-entry MaaS ecosystem. Having a diversified and efficient public transport network is the basis for a MaaS ecosystem. For the Brussels-Capital Region, this is even more critical if public transport is to reinforce the objectives of Good Move.

At the same time, a key warning from the ITF assessment was that MaaS is not a remedy for achieving all sustainable mobility outcomes and that the Brussels-Capital Region government should pursue sustainable mobility objectives through other actions contained in the Good Move plan (ITF, 2021[121]). Seeking sustainable mobility outcomes through regulations specific to MaaS can certainly help but would represent a rather limited approach to achieving the objectives of the Good Move. The ITF has formulated 11 recommendations to enable the creation of a MaaS ecosystem, develop an efficient and equitable market and define how MaaS should contribute to broader mobility outcomes (Box 2.13).

Box 2.13. ITF recommendations for the development of MaaS in the Brussels-Capital Region

To enable the creation of a MaaS ecosystem:

- Regulate mobility operators and MaaS providers separately.
- Adopt an explicitly pro-competitive approach to MaaS in policy and legislation.
- Clearly establish the status of MaaS providers via a licensing scheme.
- Review conditions for mobility operator licences to ensure they do not include barriers to developing MaaS.
- Add mandatory minimum data-sharing requirements relating to informational and operational data to licences for mobility operators.

To enable the emergence of an efficient and equitable market:

- Build mandatory consumer data portability, subject to user consent, into the conditions of all mobility operator and MaaS provider licences.
- Adopt competition safeguards as part of the MaaS provider licensing framework.
- Ensure public transport operators have the freedom to negotiate the terms of public transport ticket resale with MaaS providers, which, in turn, should be free to determine the pricing of services to consumers.
- Apply OECD and EU best practice principles on regulatory policy and governance to inform approaches to regulating MaaS.
- Make data reporting requirements to public authorities specific and directly related to regulatory tasks.

To contribute to mobility outcomes:

- The Good Move policy package should remain the key vehicle for implementing sustainable urban mobility policies.

Source: ITF (2021[121]), "Developing Innovative Mobility Solutions in the Brussels-Capital Region", https://www.itf-oecd.org/sites/default/files/docs/innovative-mobility-brussels-captial-region.pdf.

Using fiscal instruments to improve mobility

Given the growing number of trips made via private cars in the Brussels-Capital Region, traffic jams are a constant in residents' lives. Despite the existence of several alternatives for travelling or commuting, people's top choice remains the private car, which is most of the time occupied by a single passenger. Currently, car lanes or parking spaces occupy 70% of public space in the region. In the Brussels-Capital Region, 45% of households own at least 1 car and have an average rate of 0.57 cars per household, which is still below the national average of 1.06 in 2021.[34]

Changing commuters' behaviour and influencing their choices of transport means is an objective of the Good Move plan. To that end, since 2020, the Brussels-Capital Region government has been exploring the introduction of measures to reduce traffic congestion, improve air quality, support the local economy and enhance quality of life in the region as part of the SmartMove plan currently in discussion. The aim is for SmartMove to introduce a road user charging scheme across the entire territory. Such a scheme is not new as it has been introduced in other cities such as London (United Kingdom) but the difference is that other plans have been restricted to smaller areas while the Brussels-Capital Region's scheme aspires to be the first regionwide smart road user charging system in the world. SmartMove would have three pillars of action currently under consideration:

- **Shift from possession-based to use-based vehicle taxation**. The aim is to introduce an intelligent kilometre tax that would partially replace traffic taxes. It is based on the distance travelled, time of the day (off-peak or peak hours) and the power of the vehicle. A driver would pay more for an internal combustion vehicle than for an electric one. Driving to the central areas during rush hour would cost more than to other zones.
- **Multimodality** by which the region offers a wide range of quality mobility alternatives and good connections between them. This requires investments in infrastructure and public transport.
- **Raising awareness of the impact of mobility choices** on the environment, health, economy and the duration of the trips.

SmartMove seeks to incentivise residents to make more economical and sustainable mobility choices in the long term. Moving drivers from single occupancy cars to more sustainable options such as carpooling, public transport, cycling and walking is at the core of the initiative.

Digital technologies are used to implement SmartMove. The SmartMove application provides a full range of transport options available in the Brussels-Capital Region and shows different alternatives to reach the destination. Users register and set up automatic payment of the intelligent kilometre tax. The application allows for buying tickets for public transport and provides access to networks of shared bikes, cars, electric and non-electric scooters; it keeps track of the kilometres travelled and helps check the environmental impact of the travel choices.

The Brussels-Capital Region government expects that the introduction of SmartMove will decrease the use of cars for short distances but not essential trips, while cycling and using public transport will increase. The target by 2030 is to cut single-occupant car trips by 30%, time wasted in traffic by 30%, kilometres driven by car during rush hour by 18% and CO_2 emissions from cars by 10% while increasing bus capacity by 30% and kilometres on foot or by bike by 10%.[35]

A favourable tax system for company cars contributes to traffic congestion in the region

In the Brussels-Capital Region, company cars – vehicles made available to a worker by the employer and which can be used for private purposes – are considered to have a significant negative impact on mobility across the region (May, Ermans and Hooftman, 2019[127]; Gailly, 2022[115]). According to estimates, in 2016, there were 650 000 company cars in Belgium and approximately 100 000 of them entered, left or circulated in the Brussels-Capital Region every day (Gailly, 2022[115]). According to estimates, at national level, 13.5%

of workers benefit from a company car (which represent 11.5% of the total number of cars); 92% of people with a company car use it for home-work journeys compared to 81% of people with a private car, and are more likely to have longer commutes than those who use a private car (May, Ermans and Hooftman, 2019[127]).

Company cars are sometimes used as a method of remuneration. In Belgium, employers can use company cars as a means to alleviate the income tax paid by their employees (on average one third of the revenue of the Brussels-Capital Region comes from personal income tax); they constitute a tax arrangement that helps reduce the taxes and other charges related to workers' pay (May, Ermans and Hooftman, 2019[127]). Employees benefiting from a company car receive a financial advantage as they partially avoid paying social security contributions, the benefit in kind is underestimated in the calculation of personal income tax and, if they receive a fuel card this is a tax-free salary supplement. The result is a reduction in the amount of the salaries subject to personal income tax (May, Ermans and Hooftman, 2019[127]). Employers pay 32% of social security contribution of the gross salary of the worker. For company cars they pay a flat rate (between EUR 300 and EUR 1 100) regardless of salary level and kilometres travelled, and amount which is much lower than the social security contribution. Employers can recover part of the VAT related to company cars through different mechanisms such as the employer's social contribution, the CO_2 contribution, and the cost of leasing and fuel (May, Ermans and Hooftman, 2019[127]). The deduction rate for fuel costs is 75%.

The company car tax system is under the federal government's purview; the regional government is only responsible for the circulation tax and the taxes levied when the vehicle is first put on the road. In 2019, the federal government tried to introduce a mobility budget to encourage employees to switch to modes of travel other than the company car.[36] In 2021, the federal government passed a reform to make company cars greener with the aim of making company cars CO_2-neutral by 2026 but without ending the favourable tax regime.[37]

In addition, a specific group of the population tends to benefit more from company cars. According to research, 64% of employees in the upper decile, particularly males, tend to use company cars, while employees with the lowest salaries do not have access to this benefit and use more public transport (May, Ermans and Hooftman, 2019[127]). The tax system is made in a way that the company car system is not necessarily advantageous for employees with the lowest or average income. Generally, their income is too low for a company to buy a car for them; their personal tax income rates are thus lower and it could affect their pensions or unemployment benefits.

Multiple actors take part in the governance and management of transport in the Brussels-Capital Region

In Belgium, public transport is the responsibility of subnational governments. However, as research suggests, the role of the different actors in charge of mobility in the Brussels-Capital Region is complex and, in many cases, unknown to the general public (Gailly, 2022[115]). In the Brussels-Capital Region, the regional government through Brussels Mobility (*Bruxelles Mobilité/Brussel Mobiliteit*) and parking.brussels, in co-ordination with the 19 municipalities of the region, govern and manage transport. The Brussels Office of Planning (perspective.brussels), the Brussels office for urban planning and heritage (urban.brussels), the Brussels Institute for the Management of the Environment (Bruxelles Environnement), the Society for the Development of the Brussels-Capital Region (citydev.brussels) and the Urban Planning Corporation (sau-msi.brussels) also have a role to play in mobility policy as they have responsibility over the way public space is structured. The federal government has no mobility plan but is in charge of railways, airports and ports.

Brussels Mobility is the regional body responsible for equipment, infrastructure and mobility issues. Its main function is to satisfy the growing need for mobility solutions in the Brussels-Capital Region while improving the quality of life of residents and enhancing sustainable development. To that end, Brussels

Mobility defines mobility strategies and renews and maintains public transport infrastructure, public spaces and roads.[38] Parking.brussels is the regional agency in charge of harmonising parking rules in the Brussels-Capital Region in collaboration with the 19 municipalities to improve mobility by seeking maximum vehicle rotation in parking spaces. It also issues the allocation of parking space for licensed car-sharing operators. Although parking is a municipal competency, some municipalities (such as Anderlecht, Berchem-Sainte-Agathe, Evere, Forest, Ganshoren, Ixelles, Jette, Koekelberg, Molenbeek-Saint-Jean, Schaerbeek and Watermael-Boitsfort) have delegated the management of parking to the regional agency.[39] The Brussels-Capital Region government and the municipalities are responsible for roads.

The Brussels Intercommunal Transport Company (STIB-MIVB) is a public corporation responsible for the operation of public transport in the region and contributing to the region's objectives of quality-of-life improvement and sustainability. It grants licenses for bike-sharing operators, taxis, collective taxis, car-sharing and car-hire services with a driver in the region. The Flemish government transport company De Lijn, the Walloon regional bus company (TEC) and the national railway company (SNCB/NMBS) are the other three transport companies that operate in the Brussels-Capital Region.

A key action set in the Good Move plan refers to the need to establish constructive partnerships with the 19 municipalities to co-ordinate and manage public transport as well as negotiate and collaborate among the regional authorities and municipalities. For example, the regional and municipal governments are responsible for a network of streets and roads (municipal and regional streets and roads). There are 20 road managers or authorities (*gestionnaires de voirie/wegbeheerders*) across the region. That has a significant impact on the implementation of the mobility plan. When the regional government builds a tramline that crosses the territory of two or more municipalities, they must all agree to changes in the circulation as they have competencies for some sections of the roads, if the tramline passes through a municipal road. If a local mayor argues that changes to the circulation may have a negative impact on safety, the project could be compromised even if all other stakeholders agree.

Metropolitan transport planning in the Brussels-Capital Region is largely compromised by diverging visions of the impact of public transport in the area. For some years, the Brussels-Capital Region has been trying to improve the Regional Express Railway (RER), which is considered instrumental in improving connectivity and accessibility between the central districts and the suburbs. However, regional governments have different views on its role and possible impact. While Flemish municipalities adjacent to the region tend to fear that the integration into the Brussels-Capital Region may bring a higher inflow of low-income people, particularly French-speaking immigrants, the Brussels-Capital Region government regards the RER as a driver of urban sprawl and may facilitate the exodus of wealthy residents to Flemish communities, thereby reducing its tax base and impoverishing neighbourhoods in the Brussels-Capital Region (Romańczyk, 2015[30]).

Strategies for metropolitan-wide transport and accessibility in the Brussels-Capital Region

The Brussels-Capital Region is working to deliver a shift in urban transport and accessibility prompted by technological innovation, a changing socio-demographic context, economic conditions that demand greater efficiency in the use of resources and the climate change emergency.

The PRDD and Good Move follow three general pathways to promote urban accessibility: i) a reduction of travel intensity through greater physical proximity and mixed land use to facilitate different urban functions in the same geographic space; ii) a shift from spatially inefficient and energy-intensive private motorised vehicles to public, shared and non-motorised transport modes; and iii) improvements in the efficiency of road-based vehicles in terms of energy and space consumption. All three pathways are expected to deliver a paradigm shift for the Brussels-Capital Region in urban transport and mobility. However, some barriers remain and may hinder the region's progress towards that paradigm shift, such as:

- Strong preferences of residents for car usage, despite having viable alternatives and suburban lifestyle prompted by housing prices.
- Policy integration required for urban accessibility that may be compromised by sector and disciplinary silos.
- Complex and fragmented governance and the need for greater co-ordination across levels of government for urban form and transport.
- Lack of clarity on how density regulation is co-ordinated with new infrastructure financing schemes.
- Unclear sequencing, co-ordination and integration of infrastructure investments with land use development, which are necessary to determine the Brussels-Capital Region's energy efficiency and competitiveness in the long term and improve social inclusion by prioritising housing, mostly for low-income households.
- Financial constraints may prevent or slow down the implementation of different urban projects conducive to urban accessibility.
- Short-term political priorities, a lack of information on the part of citizens and negative perception of urban mobility projects that could act to the detriment of progress in the implementation of the Good Move plan.
- Municipalities with limited financial and human resources for transport planning and implementation. A municipality may have 100 000 inhabitants but only 2 or 3 people may be working on mobility planning in the local administration.
- Urban planning processes that could be made faster and more efficient in granting construction permits. Keeping the permit application and granting process simple is regarded as an initiator of greater efficiency. There does not seem to be any arbitrage in contentious cases. The legal instability in courts due to the lack of clarity in the legal framework (e.g. who co-ordinates what and who has the final say) and the complexity of governance due to the existence of different rules and frameworks that impact mobility make mobility planning and implementation complicated.

To improve urban accessibility and in line with the objective of transforming the Brussels-Capital Region into a compact, connected and sustainable city, policy makers in the region could pay particular attention to: linking housing, land use and transport policies, promoting hyper-localisation, exploring new financing models that support metropolitan-wide transport and linking digital connectivity with the mobility strategy.

Strengthening the link between housing, land use and transport policies

Accessibility planning is more than just the provision of public transport. The Brussels-Capital Region must ensure that by renewing neighbourhoods, improving infrastructure and providing access to public transport options, the rises in land value and housing prices do not force many low- and middle-income households to move out of central areas. The combination of housing, land use and transport policies should ensure that households of different income levels can afford to live in the region. At least two policy tools could be used:

- Introduce low-income housing tax credits (LIHTCs). For example, the experience of the United States shows that LIHTCs are more effective at producing affordable housing as part of transport-oriented developments than other tools such as inclusionary zoning. The reason is that inclusionary zoning tends to target moderate-income households and only an average of 5% of housing units are affordable. Moreover, inclusionary zoning may lead to a smaller number of affordable housing units because, in many instances, housing developers have the possibility of paying a fee instead of providing affordable housing.
- Issue regulation requiring affordable (social) housing along transport corridors and as part of urban regeneration projects. This could be around the 12 priority development poles established in the

PRDD. This regulation should include incentives for private sector developers to build social housing along transport corridors.

Promoting hyper-localisation as part of the "20-minute city" policy

As mentioned above, the Brussels-Capital Region government's goal is to help all residents meet most of their daily needs within a short walk or bike ride from home. This means that Brussels-Capital Region authorities should ensure that all urban services and opportunities are available across the region. The COVID-19 pandemic has led to a contraction in the office buildings market as the new ways of working (e.g. remote working) require less office space per employee (perspective.brussels, 2022[52]). Those empty office spaces could be repurposed into residential buildings and some of them, due to their architectural design, into schools or used for other activities. This trend may lead to the emergence of local hubs and satellite "serviced" office spaces in more traditionally residential neighbourhoods. It may also create new economic opportunities in neighbourhoods that were mainly residential, giving a boost to local businesses and helping revitalise smaller commercial areas. To be successful, the "20-minute city" policy will require rethinking public and active transport planning. The dominant model in the Brussels-Capital Region, as in many other OECD cities, is the "hub and spoke" transport and cycling networks connecting residential areas to the urban core where jobs are clustered. This model often ignores the transport needs of other groups, such as women, people with disabilities and the elderly, who must go to medical appointments. It should also be noted that a large component of the Brussels population (79 000 workers and students) commute to work or study outside the region to areas that are not well serviced by public transport (Emans et al., 2019[128]). Thus, based on the Good Move plan, the Brussels-Capital Region should put emphasis on creating better connections both within and between neighbourhoods to improve accessibility. While daily needs may largely be met locally, enabling individuals from all income groups to access a diversity of opportunities across the region should be a priority. This should also be a consideration in transit-oriented development, which will remain an important complementary strategy to connect neighbourhoods regardless of the municipality where they are. Certainly, this local reconfiguration should not come at the expense of the integrated metropolitan transport system to ensure accessibility for residents living in the broader FUA of the region. To facilitate hyper-localisation and the realisation of a 20-minute city, authorities in the Brussels-Capital Region may wish to consider the following actions:

- Building on the municipal transport plans, invest more in orbital transport systems that connect neighbourhoods rather than just the urban core and, in co-operation with the neighbouring regions, invest in connectivity between the outer neighbourhoods of the Brussels-Capital Region and those in the close periphery of the region.

- Provide support for housing affordability to mitigate increases in house prices due to improved accessibility and attractiveness. In particular, provide support for low-income residents and invest in public and co-operative housing to ensure that improved public transport in certain neighbourhoods does not lead to outward migration.

- If the implementation of the scheme to price road use goes ahead, use it in combination with other traffic reduction strategies such as low-emission zones, parking maximums, limited traffic zones, traffic bans and on- and off-street parking pricing, among others, to maximise impact.

- Continue the implementation of traffic calming, traffic speed reduction programmes and vehicle restrictions in neighbourhoods and the reallocation of road space from cars to more active forms of mobility as part of the pedestrianisation efforts.

- Invest in shared mobility hubs through the different sustainable transport modes available in the region to facilitate accessibility.

- Foster data collection to support analysis of the distribution of neighbourhood-level amenities, businesses and services, in line with the actions set in the Good Move plan.

Enhancing metropolitan transport planning and exploring new financing models for transport provision

The Brussels-Capital Region authorities seem to clearly understand that supporting public transport is not just a cost but rather an investment that yields social, economic and environmental returns. The Good Move plan provides the vision to improve mobility and make the Brussels-Capital Region more accessible. However, the Brussels-Capital Region should not operate in isolation from the Walloon and Flemish Regions; as Chapter 1 shows, there is a constant inflow of residents from those regions to the Brussels-Capital Region commuting for work or to access services. Therefore, planning and financing transport with a metropolitan-wide approach would contribute to mitigating the negative effects of urban sprawl by ensuring high-quality transport provision both within and between peripheral neighbourhoods and improving connectivity to areas where employment opportunities are clustered. The Good Move plan refers to the need to build partnerships between the region and the 19 municipalities to co-ordinate mobility strategies but it is also essential to include the neighbouring regions and their municipalities within the FUA for a more efficient and effective public transport service. There are at least three actions that authorities in the Brussels-Capital Region may wish to consider in this respect.

Promoting the creation of a metropolitan-wide transport authority

This should facilitate the planning and integration of all urban modes available in the FUA. The creation of a metropolitan transport authority responsible for the organisation and provision of transport services in multiple jurisdictions in a metropolitan area is increasingly common across OECD countries. A metropolitan transport body would help the Brussels-Capital Region institutionalise consultation and co-operation for public transport planning and financing with other regional governments and stakeholders, and would assist in shaping a metropolitan community that facilitates financing and investments.

In the Brussels-Capital Region, the creation of a metropolitan transport authority will require clear buy-in from all levels of government as well as private transport operators. A feature that would support the proper operation of a metropolitan transport authority is a clear definition of responsibilities to avoid overlaps with other existing institutions, such as Brussels Mobility. According to research, ensuring the sustainability and suitability of a lead transport institution across a metropolitan area will require to:

- Demonstrate public value to advance societal good.
- Possess the internal technical and financial capacity to perform its tasks.
- Have external and political support from the highest political levels to ensure resources are made available to build organisational capacity (Kumar and Agarwal, 2013[129]).

Although there is no common blueprint that defines the responsibilities of a transport authority, some are direct providers of transport services (e.g. Transport for London and TransLink in Metro Vancouver), while others co-ordinate the work of different service providers (Consorcio Regional de Transportes de Madrid [CRTM], Spain, Île-de-France Mobilités [Paris, France] and, in Czechia, the Regional Organiser of Prague Integrated Transport [ROPID]). Irrespective of the focus of a metropolitan transport authority for the Brussels-Capital Region, some of the responsibilities it may have, following the typical responsibilities of transport authorities across OECD countries, include the following:

- Planning the transport system by ensuring the provision of services across the metropolitan area and discouraging the use of private vehicles (e.g. Transport for London, TransLink in Vancouver).
- Setting fees and tariffs for transport services across the metropolitan area (e.g. ROPID).
- Contributing to the achievement of regional development objectives (i.e. housing, environmental, economic) through transport provision (e.g. TransLink in Vancouver).
- Managing the operation or co-ordinating the operation of transport services (e.g. Île-de-France Mobilités).

- Defining investment projects on mobile and fixed infrastructure (e.g. New York City Department of Transportation).

- Co-ordinating the planning of transport service provision across municipalities in the metropolitan area (e.g. Transport for London, TransLink in Vancouver, ROPID, Rhine/Main Regional Transport Association in Germany).

- Ensuring intermodality to facilitate the movement of people and goods and make the most of existing infrastructure (e.g. CRTM) (OECD, 2020[130]).

A clear example the Brussels-Capital Region can use to create its metropolitan transport authority is the Rotterdam-The Hague Metropolitan Area (MRDH) in the Netherlands. The experience of the MRDH suggests that it is not necessary to merge different territorial units into a single metropolitan area to manage transport. In fact, transport is a policy domain that has contributed greatly to regional integration by connecting the cities of Rotterdam and The Hague, forming a regional transport network and contributing to its functional integration. The provision of public transport is enhancing territorial cohesion not only by supporting a better provision of transport but also by integrating the management and provision of public transport services into one single body for the entire region (Box 2.14). Moreover, the case of the metropolitan area of Prague (Czechia) suggests that a mobility plan jointly designed and adopted by municipalities located in different but neighbouring regions could assist in integrating a fragmented metropolitan area (Box 2.14).

Inter-regional co-operation and co-ordination have been key in developing a transport strategy in the Brussels-Capital Region. The Good Move plan was built in consultation with the Flemish regional government to co-ordinate priorities and investments. Moreover, one of the actions of the Good Move plan calls for stronger collaboration with the federal and other regional authorities on mobility projects. Although co-operation depends on the political will of the moment, the regional governments now have a focal point within their administrations to follow up on mobility projects that have an impact on each region. Dialogue between the Brussels-Capital Region and the neighbouring regions has improved, allowing for mobility projects with a metropolitan impact. A clear example is the integration of tariffs. There are four transport operators in the Brussels-Capital Region, one from the region itself and the others from the private sector or from other regions. Before 2021, commuters had to purchase different tickets to use different transport modes depending on the transport operator. Nowadays, it is possible to use different transport modes within 2 km around the Brussels-Capital Region with a single ticket. The goal is to expand this to 20 km around the Brussels-Capital Region, although each region currently has its own pricing policy, which complicates tariff integration. Transport infrastructure is financed based on agreements; each region finances the infrastructure section that crosses its territory.

> **Box 2.14. Transport as a metropolitan integrator: The cases of the Prague Metropolitan Area (Czechia) and the Rotterdam-The Hague Metropolitan Area (Netherlands)**
>
> **Planning mobility in a fragmented metropolitan area, Prague**
>
> The Regional Organiser of Prague Integrated Transport (ROPID), created in 1993, acts as the transport authority of the city of Prague. One of its critical tasks is to develop and operate Prague Integrated Transport (PID) further, applicable in the city of Prague and certain municipalities in the Central Bohemian Region. Other tasks include organising and designing transport, co-ordinating the operations of multiple providers, setting quality standards, discussing traffic solutions and their funding with subsidy providers and transport operators, negotiating contracts and supervising operators' performance, organising financial flows of revenues and subsidies within the PID system, setting tariffs and fares within the system and checking and marketing the system. ROPID serves the entire area of Prague and two-thirds of the Central Bohemian Region that surrounds Prague, although there are plans to expand it to cover the entire Central Bohemian Region. In 2019, the city of Prague and the Central Bohemian Region approved the Sustainable Mobility Plan for Prague and its Suburbs (SMP).
>
> **Regional integration through transport, Rotterdam-The Hague Metropolitan Area**
>
> The Rotterdam-The Hague Metropolitan Area (*Metropoolregio Rotterdam Den Haag*, MRDH) was created in 2015 following the abolition of the eight Dutch city-regions. The MRDH was constituted by the 23 municipalities that used to form the 2 separate city-regions of Rotterdam and The Hague. The work of the MRDH is organised into two pillars: top-down collaboration on transport and bottom-up collaboration on economic development. The MRDH body has created two governing committees: one directing the formally transferred responsibility from the central government for public transport and the other voluntary inter-municipal co-operation for economic development.
>
> The MRDH has two important advantages. The first is its authority over a wide range of issues on mobility policy. The MRDH has retained competencies in all matters of planning and management of public transport (except railways), such as new investments, maintenance and network development. It also manages highways, traffic management, bicycle lanes, park and ride facilities and traffic safety. The second advantage is that the MRDH transport authority forecasts mobility needs that will be generated by future metropolitan growth. Since commuting flows across the whole area are still concentrated in the two former city-regions, the MRDH has the potential to develop a mobility strategy and a transport network that can accompany more effectively the population and employment dynamics.
>
> Source: Huerta Melchor, O and J. Gars (2020[131]), "Planning mobility in a fragmented metropolitan area. The case of Prague and its suburbs", https://doi.org/10.1787/4cdf2d31-en; OECD (2016[132]), *OECD Territorial Reviews: The Metropolitan Region of Rotterdam-The Hague, Netherlands*, https://dx.doi.org/10.1787/9789264249387-en.

Exploring new sustainable funding streams

Investing in public transport calls for diversified sources of funding. To strengthen public transport investment, the Brussels-Capital Region needs new financing models, including how the region might cross-subsidise public transport through the use of road pricing and other taxes, such as land value capture instruments. In some cases, this will require reforms at the national level to empower the Brussels-Capital Region to create sustainable funding streams to support the expansion of public transport. In that context, national government support for the establishment of a metropolitan transport authority will be important to help reduce competition between different transport modes and facilitate much closer collaboration within and between the public sector and private franchise holders and operators. The Good Move plan does not make any explicit reference to funding schemes for public transport investments. As mentioned

above, the SmartMove plan introduces use-based vehicle taxation in a quest to disincentivise private car use. However, the Brussels-Capital Region can complement the SmartMove initiative through other policy interventions that would not only provide additional financial resources for investment but also promote a more compact, clean and connected city-region. Some policy interventions that could be explored are:

- **Land value capture (LVC) instruments**. As part of a PRAS update or CoBAT reform, they would enable governments to raise revenue from increases in property values and/or business income owing to public investment (e.g. metro or tram line expansion) and use it to finance public transport infrastructure. The federal government should support regional governments in institutionalising LVC mechanisms, ensuring that this revenue stream can facilitate large-scale public investment in new infrastructure.

- **Tax breaks for automobiles**. The regional government could request the federal government to eliminate any tax breaks that incentivise the purchase of new personal or company vehicles or subsidise the cost of driving. The final goal should be to make car ownership less attractive.

- **New vehicle registration**. This could help limit the registration of new vehicles, either through a fixed ceiling with lottery or via licence plate auctioning. The benefit would be a reduction of the number of cars added to roadways to match infrastructure capacity. But this policy intervention should be co-ordinated among the three regions to avoid contradictions.

- **Property tax revenue**. A part of the tax revenue could be dedicated to funding the implementation of the Good Move plan and it could also help form a fund for anti-displacement investments. The city of Austin in the United States provides a good example of how to use tax property revenue to fund public transport (Box 2.15).

Box 2.15. Funding public transport in the Austin metropolitan area (United States)

In 2020, the city of Austin, Texas (United States) approved the expansion of 2 light rail lines and transport-oriented development of 21 stations as part of Project Connect, a 20-year plan for the expansion of the region's public transit system. To fund the programme, voters approved an increase in the city's property tax rate to fund a portion of the initial investment. USD 0.87 of every dollar of the city's property tax rate revenue is dedicated to the implementation of a portion of Project Connect. The funds are managed by the Austin Transit Partnership formed by the city of Austin and the Capital Metropolitan Transportation Authority (CapMetro), the public transport provider. Federal funding is anticipated to provide approximately 45% of the estimated USD 7.1 billion capital cost.

Project Connect includes the introduction of an equity tool intended to guide the use of anti-displacement funding to benefit people most at risk of displacement from public transport investments. The tool is expected to help community members and decision makers look at how transit investments may impact people at risk of displacement and direct nearly USD 300 million to programmes and projects that help vulnerable people most impacted by displacement living close to transit lines.

Source: Project Connect (n.d.[133]), *Homepage*, https://www.projectconnect.com/; Austin Transit Partnership (n.d.[134]), *Homepage*, https://www.atptx.org/about.

Promoting transit-oriented housing development

Achieving the goals of the PRDD and municipal plans, as well as those of the Good Move plan, requires alignment of land use and public transport strategies. Accessible and sustainable public transport options should be supported by strategies for a compact urban area, with transit-oriented development patterns

that focus on growth in urban centres, major transit growth corridors and Frequent Transit Development Areas (FTDAs). FTDAs could be understood as priority locations along the frequent transit corridors to accommodate concentrated growth in higher-density forms. Adopting a transit-oriented pattern of growth could help the Brussels-Capital Region reduce vehicle use, traffic congestion, energy consumption and GHG emissions from on-road sources while fostering transit ridership and active transportation. Aligning land use and public transport in this way would enable the Brussels-Capital Region to provide a diversity of transit-oriented affordable housing, shorter trips and greater access to opportunities (i.e. public services, jobs). Careful and co-ordinated planning efforts among administrative departments at the regional level and across levels of government will ensure that new mobility options, including micro-mobility and automated vehicles, are integrated into the region's public transport system in an equitable way, reducing GHG emissions and traffic congestion. Transit-oriented housing development should be applied at the metropolitan level and, in this respect, co-operation and co-ordination with the neighbouring regions and municipalities is essential. In fact, due to the low levels of connectivity in the neighbouring areas of the region, the adoption of transit-oriented development would benefit the other regions more than the Brussels-Capital Region, which already enjoys relatively good connections in most places.

Over time, co-ordination of land use and public transport could help create a regional growth pattern where destinations are closer together and more accessible for all, with less need to drive. Potential benefits include reduced GHG emissions, the formation of more compact neighbourhoods, lower public transport costs, diverse and affordable housing and a more resilient economy with better access to job opportunities. Perspective.brussels and Brussels Mobility could jointly lead land use policies contained in the PRDD to guide development – especially FTDAs – and to support the efficient provision of transport, regional infrastructure and community services, as well as to protect air quality and reduce GHG emissions. Promoting transit-oriented housing development in the Brussels-Capital Region requires perspective.brussels and Brussels Mobility to work in co-ordination and complement each other. Table 2.6 provides a set of recommendations that both organisations could follow to co-ordinate land use and public transport.

Table 2.6. Actions to co-ordinate land use and public transport policies to promote transit-oriented growth

perspective.brussels	Brussels Mobility
Continue providing advice and input into Brussels Mobility Good Move plan, planning demand management strategies through the provision of land use, growth management and air quality information. This could include identifying vacant land or buildings near transport hubs that can be used to build housing.	Prepare and implement public transport strategic plans that support focused growth in urban centres and FTDAs that encourage the use of multiple occupancy vehicles and active mobility.
Work with Brussels Mobility and the 19 municipalities to increase transport services between neighbourhoods across the different transport networks in the region (major, frequent and local) but always aiming to preserve affordable housing.	Provide perspective.brussels with adequate opportunities to provide input on the different public transport strategies, decisions and actions in the implementation of the Good Move plan that would affect the achievement of the PRDD.
In collaboration with Brussels Mobility and parking.brussels, develop a regional parking strategy that provides guidance to inform municipal parking requirements, considers local needs through tailored guidance for different land use and transport contexts and seeks to right-size the parking supply in the Brussels-Capital Region, making more efficient use of limited land supply.	Establish and monitor performance measures and/or targets that support an increased share of trips made by public transport, shared mobility, zero-emission vehicles, cycling and walking.
Evaluate and develop measures to mitigate the potential negative impacts on the region's industrial, commercial, conservation and recreation lands when planning public transport infrastructure, including roadways, tramways, metro and bus lanes.	Support the continuous development of safe and comfortable cycling networks across the region, including along FTDAs and other areas of high potential for utility and/or recreational cycling.

perspective.brussels	Brussels Mobility
Co-ordinate with the Walloon and Flemish Regions' public transport planning and infrastructure projects and efforts to provide sustainable sources of funding for expanding, upgrading and operating the metropolitan transport system.	Explore methods to support affordable housing by seeking partnership opportunities between the regional government and other stakeholders to support delivering affordable housing, seeking commitments on the development of affordable housing policies and targets in partnership agreements required for major public transport projects, and considering the impacts of proposed public transport projects on affordable housing when evaluating future transit investments.
In co-ordination with Brussels Mobility, formulate suggestions to streamline the regulatory process for building new housing.	Continue developing active transportation, micro-mobility and transport networks to reduce car use and promote low-emission travel options.
	In co-ordination with perspective.brussels and the finance authority, consider the development and introduction of an equity tool to support residents at risk of displacement due to increases in property taxes and rents in light of public transport investments.

Introducing a mobility budget to limit or replace the use of company cars

The federal and regional governments could work together with private sector stakeholders to explore the feasibility and means of introducing a mobility budget. The aim would be to replace company cars as much as possible by offering employees a mobility budget they can use to pay for their mobility expenses: taxi, public transport, etc. This has the possibility of helping companies attract and retain talent and improve cost efficiency by reducing fleet costs. However, it must be mentioned that the introduction and success of a mobility budget in the Brussels-Capital Region may be compromised by the characteristics of the employees entitled to this benefit and the companies that provide it. Most of the employees with company cars tend to live far away from the job centres (the higher the salary, the longer the commute) in places with poor transport connections, so it may be hard for them to give up those cars. At the very least, reforms should be designed to limit or withdraw any other support. To make it attractive, a mobility budget should integrate various transport modes in mobility offerings, in particular public transport, and enhance it with other customised employee benefits such as food vouchers.

Including digital connectivity as part of the mobility strategy

By reducing the need to travel, digital technologies may help reduce GHG emissions from transport and enhance quality of life in cities and beyond. According to estimates, digital technologies could help reduce emissions by 5% by 2050 in the mobility sector through improvements in route optimisation through the use of sensing technologies to collect real-time data to drive system decision-making (WEF, 2022[135]). During the COVID-19 pandemic in particular, digital technologies have played a key role in helping citizens access services and goods across the city-region. However, the Brussels-Capital Region has not yet fully exploited the advantages of digitalisation in the mobility sector. It may wish to revisit its mobility agenda to treat digital connectivity on par with physical transport access. This requires establishing digital access as an alternative to physical mobility as one of the tools to achieve the 20-minute city goal the regional government sets.

To this end, the Brussels-Capital Region could build on its high level of adoption of digital technologies by its enterprises and digitally savvy human capital. According to estimates, 61% of Brussels-Capital Region residents between 16 and 74 years old had basic digital competencies, while 35% had advanced digital competencies in 2019; and 75% of small and medium-sized enterprises in the region had at least a basic level of digitalisation in the same year (IBSA/perspective.brussels, 2023[136]). A strong point for the Brussels-Capital Region is the high level of digitalisation of public services: for example, 68% of online administrative forms are pre-filled with residents' personal data from different sources. However, the Brussels-Capital Region still needs to improve its digital infrastructure. For example, although the Brussels-Capital Region has good coverage for fixed broadband connections, there are delays in the deployment of fifth-generation technology standard for cellular networks (5G) (IBSA/perspective.brussels, 2023[136]).

Moreover, the Brussels-Capital Region needs to improve digital connectivity in transport systems (e.g. on-board streaming of real-time transport traffic and services) and digitally optimise transport services, routing, pricing and ticketing, which is in line with the installation of a MaaS system considered in the Good Move plan, and conduct governance reforms to either join up departments or improve co-ordination for building and maintaining infrastructure. Critically, the Brussels-Capital Region needs to ensure that digital infrastructure is equitably distributed across its territory, as is the case with public transport infrastructure, to close the gap between the wealthier and poorer neighbourhoods in the region. Discussions on which transport means to promote and how digital connectivity could be leveraged should be part of urban regeneration and mobility projects.

In this respect, the Brussels-Capital Region government would need to have a full overview of the regulatory framework of digital connectivity together with a comprehensive understanding of the resources that would need to be deployed to the sector. Working with the national government and the Walloon and Flemish regional government authorities would be essential as digital connectivity for accessibility should be ensured throughout the country.

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Notes

[1] For further information, see: https://statbel.fgov.be/en/themes/population/structure-population.

[2] A "20-minute city" is a place where residents have easy and convenient access to jobs, services they use daily (e.g. grocery stores, restaurants, schools, parks, banks) and other urban opportunities without relying heavily on a car.

[3] Research has pointed out that the high density of the Belgian population together with the liberal system of land acquisition, a low proportion of social housing and the lack of a co-ordinated spatial planning with a metropolitan approach have caused urban sprawl in the country (ESPON, 2018[6]).

[4] De-densification can be understood as the redistribution of people and remaking of places trying to optimise urban densities in a way that creates more value for the city, identify the places most appropriate for inhabitants and activities, and ensure an equitable access to services and public amenities. For further information, see https://www.researchgate.net/publication/350385284_Regulating_urban_densification_what_factors_should_be_used. For further information on Brussels-Capital Region densification purposes, see https://www.galivel.com/en/14-0-4919/press-releases/brussels-capital-region-presents-its-method-for-smart-densification-at-mipim.

[5] For further information, see https://perspective.brussels/nl/plandocumenten-reglementen-en-handleidingen/historique-des-modifications-du-pras-nl.

[6] Information provided by Brussels-Capital Region officials during the interviews for this review.

[7] The term "distressed area" refers to the area of a unit of local government that has a lower per capita income than the regional average or has higher an unemployment rate than the national average. However, the problem of distressed urban areas is not poverty as such, but an interlocking mix of environmental, social and economic circumstances, sometimes exacerbated by public policies, that discourages investment and job creation and encourages alienation and exclusion. These areas are can be located in the centre or in the periphery of a city and reduce a city's capacity to pursue area-wide goals regarding sustainability and competitiveness.

For a more in-depth discussion see: OECD (1998) *Integrating distressed urban areas*, Territorial Development, at: https://www.oecd-ilibrary.org/docserver/9789264162884-en.pdf?expires=1704809229&id=id&accname=ocid84004878&checksum=32070C274635C3E0682A86E7B30D507F

[8] See https://quartiers.brussels/1/.

[9] For further information, see https://www.brussels.be/cinquantenaire-2030.

[10] For further information, see https://www.code-de-la-route.be/fr.

[11] For further information, see https://www.vub.be/en/news/vub-study-reveals-airbnb-market-in-brussels.

[12] For further information, see https://urbanisme.irisnet.be/lesreglesdujeu/les-plans-daffectation-du-sol/le-plan-regional-daffectation-du-sol-pras/prescriptions/j.-programmes-des-zones-dinteret-regional?set_language=fr.

[13] For further information, see https://www.revenue.pa.gov/Tax%20Rates/Pages/default.aspx.

[14] For further information, see https://www.ecologie.gouv.fr/demarche-et-outils-elaborer-plan-local-durbanisme-plu-et-plui#scroll-nav__3.

[15] See http://www.ejustice.just.fgov.be/eli/decreet/2021/12/23/2021043623/justel and https://www.vlaanderen.be/belastingen-en-begroting/vlaamse-belastingen/registratiebelasting/wijzigingen-verkooprecht-vanaf-1-januari-2022.

[16] See https://www.expatica.com/be/housing/renting/renting-in-brussels-445862/#social-housing.

[17] For further information, see https://slrb-bghm.brussels/fr/societes-immobilieres-de-service-public/toutes-les-sisp.

[18] See *Arrêté du Gouvernement de la Région de Bruxelles-Capitale relatif aux permis d'urbanisme à durée limitée*, 29 January 2004, http://www.ejustice.just.fgov.be/mopdf/2004/03/24_3.pdf#Page30.

[19] The Urban Planning College is formed by experts responsible for issuing an opinion in the context of the procedure for the suspension and cancellation of permits (supervisory power of the region over the municipalities) and in the context of appeals to the government against the decisions (or lack thereof) of the board of mayor and aldermen or the delegated official. See https://urbanisme.irisnet.be/mots-cles-1/mots-cles#section-9.

[20] See MyPermit.Brussels, https://mypermit.brussels/fr/.

[21] For further information, see https://www.lexology.com/library/detail.aspx?g=edb73ea3-4e0b-4fd2-bc90-4836d2ca5f8b.

[22] For example, Toyota's move from California to Texas in the United States was at least in part due to high housing costs (Hirsch, 2014[137]).

[23] For further information, see https://www.brusselstimes.com/260349/municipality-of-molenbeek-accused-of-faking-opposition-to-housing-project.

[24] For further information, see http://www.febul.be/.

[25] For further information, see https://logement.brussels/ccl/.

[26] For further information, see https://www.citydev.brussels/fr.

[27] See https://slrb-bghm.brussels/fr/societe-du-logement-de-la-region-de-bruxelles-capitale/nos-missions/construction.

[28] For further information, see https://www.service-public.fr/particuliers/vosdroits/F31601?lang=en.

29 For further information, see https://www.rijksoverheid.nl/onderwerpen/woning-huren/vraag-en-antwoord/wat-is-de-maximale-huurverhoging-in-2020.

30 For further information, see https://www.gov.uk/government/publications/right-to-move-statutory-guidance-on-social-housing-allocations-for-local-housing-authorities-in-england.

31 These are the targets suggested by research as the ideal levels that would allow a household to cover housing and transport expenses and meet other needs such as food, education, leisurem etc. (Litman, 2017[138]; OECD, 2020[130]).

32 For further information on the different roadmaps, see https://mobilite-mobiliteit.brussels/en/good-move/les-declinaisons-good-move.

33 For further information, see https://www.railwaypro.com/wp/eib-funding-for-brussels-public-transport-modernisation/ and https://www.globalconstructionreview.com/eu-lends-brussels-e475m-for-sustainable-public-transport/.

34 For further information, see https://statbel.fgov.be/en/themes/mobility/traffic/vehicles-household.

35 See: https://smartmove.brussels/content/smartmove/be/en/policy-overview/brussels-regional-government.html.

36 For further information, see https://lebudgetmobilite.be/fr.

37 For further information, see https://www.ey.com/en_be/tax/tax-alerts/new-tax-law-on-the-greening-of-mobility-reform-of-the-mobility-budget and https://www.fidelium.eu/en/tax-news/the-mobility-budget-new-features.

38 For further information, see https://mobilite-mobiliteit.brussels/en/about-brussels-mobility.

39 For further information, see https://parking.brussels/lagence.
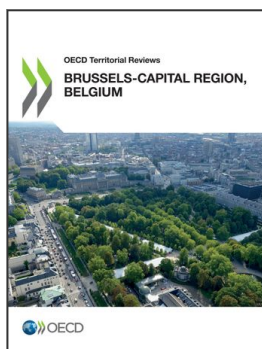
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