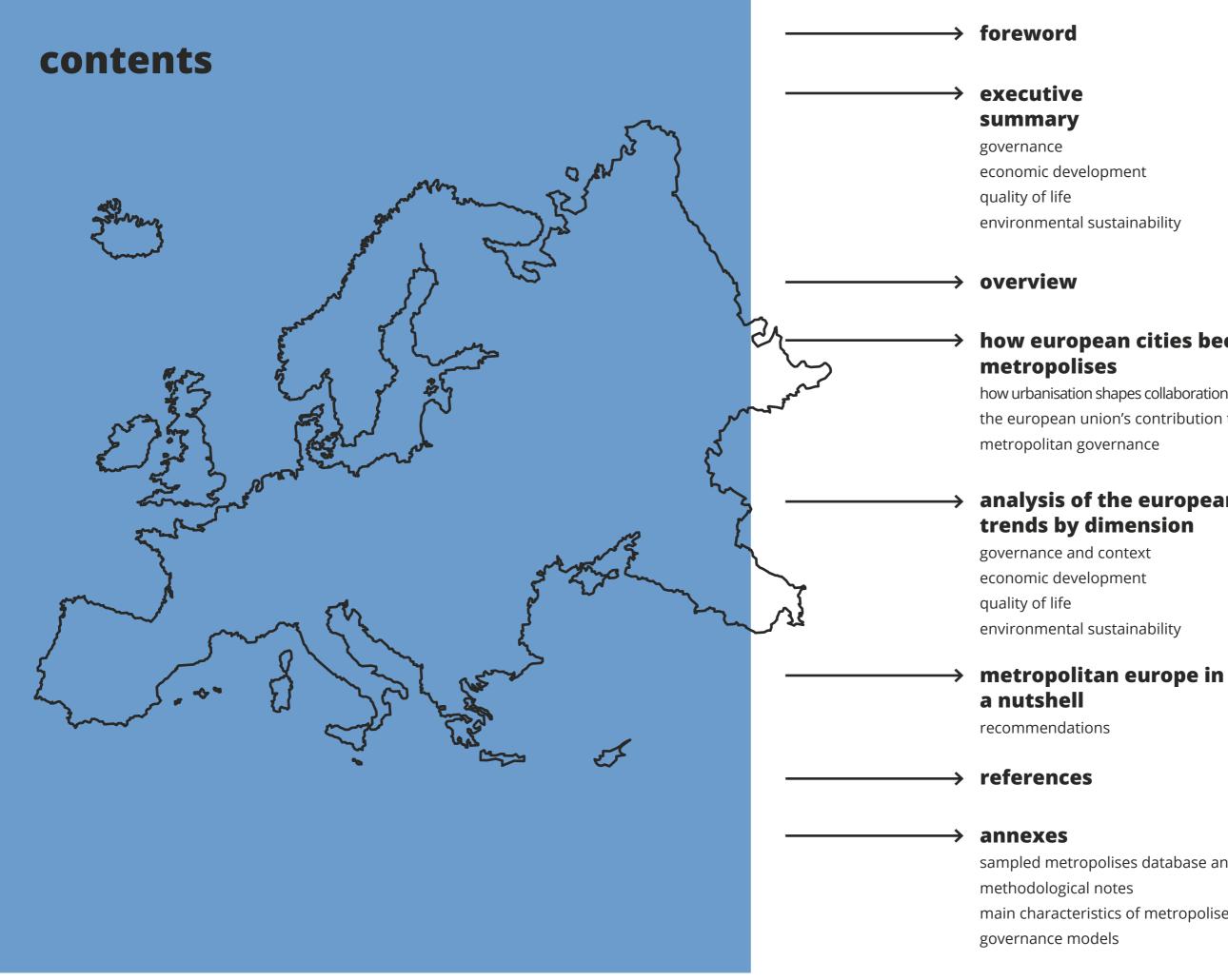


# metropolitan report







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## how european cities became

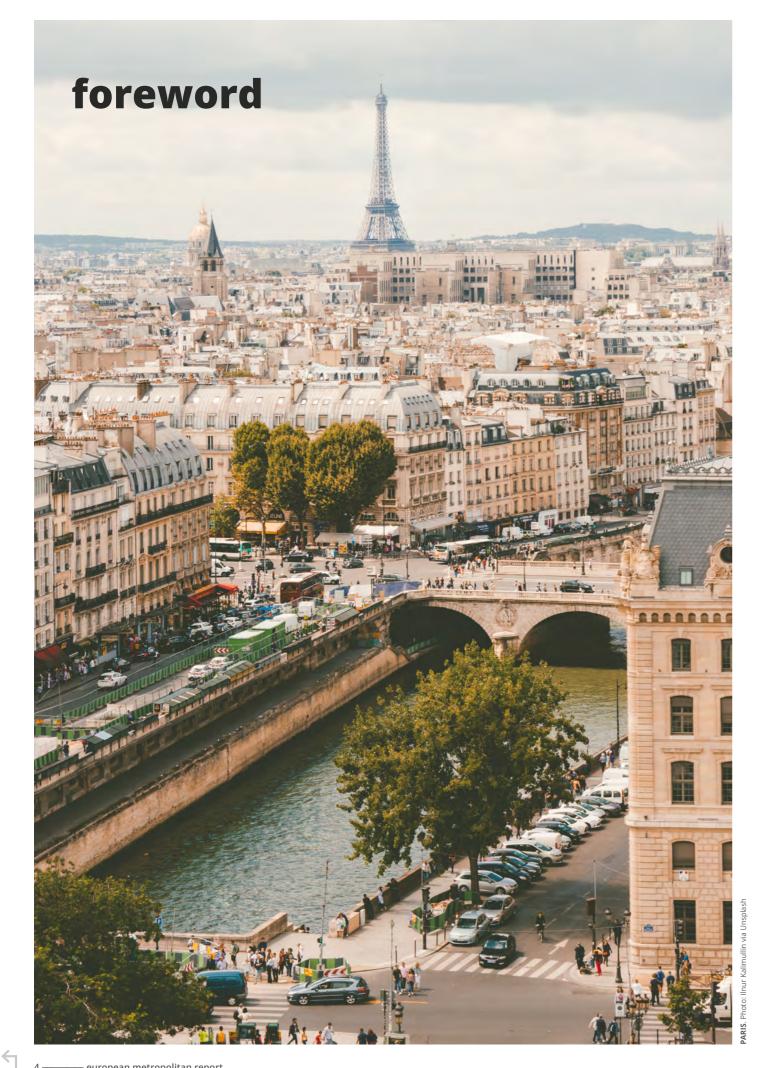
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Jordi Vaquer

September 2023

Metropolis Secretary General

other administrative boundaries.

In Europe, like other parts of the world, millions of people enjoy the advantages of this type of urban living, mostly in terms of opportunity to work, study, innovate, create buinesses, enjoy culture, and more. But they must also endure challenges such as pollution, traffic congestion, noise, unsafety, to name but a few. Nowadays, new pressures such as the climate crisis exacerbate these challenges and create new risks and responsibilities for local authorities. For instance, metropolitan territories generate over two-thirds of Europe's CO<sub>2</sub> emissions. Therefore, while metropolises suffer through climate pressures, they also have an obligation to reduce their environmental damage.

Today's trend to metropolisation is reshaping Europe, and many metropolitan spaces already have institutional agreements in place to govern these territories effectively. However, these efforts are hampered as metropolitan governance has yet to find a solid anchor in European Union institutions, policies or even statistics. This report sets out the metropolitan realities that the European Union does not yet fully acknowledge.

At Metropolis, we want to improve metropolitan quality of life. Even in a longstanding urbanised space like Europe, metropolitan areas continue to be magnets—especially for young people in search of culture, innovation, jobs, education, diversity and leisure. However, despite having the world's highest quality of living standards, Europe's metropolises still present challenges to their inhabitants. These challenges are not equally distributed across demographics, including between women and men; young and old; or nationals and international migrants.

The indicators in this report offer comparative and big-picture insights, which frame and contextualise the metropolitan realities of Europe. We hope they will equip leaders to find solutions to metropolitan challenges within Europe and beyond.

— european metropolitan report

### "United in Diversity" is the motto of the European Union—we can use the same motto to define good metropolitan governance.

Metropolitan areas are complicated patchworks of interlinked, contrasting spaces. In a metropolis, we see the juxtaposition of natural and built environments; urban and rural land; as well as agricultural and industrial areas. All these spaces are connected by links that transcend municipal and

# executive summary



— european metropolitan report

Europe is home to 231 metropolises. This means that Europe accounts for 12% of the global total of 1 934 metropolises (UN-Habitat, 2020). The metropolises covered in this report account for 7% of European metropolises and 12% of the European Union's population (Eurostat, 2023d). Unlike other regions, such as Latin America and Asia, most European metropolises have populations between 300,000 and 1 million people. This reflects the high degree of territorial fragmentation in Europe, which is also evident in the number of local and regional governments (CEMR, 2021a). This fragmentation poses governance challenges that Europe needs to address in the context of urbanisation.

Despite the territorial fragmentation of Europe, the region enjoys a high level of economic prosperity and quality of life. The metropolises analysed in this report show remarkable performance in indicators such as GDP per capita, transportation accessibility, employment opportunities and educational attainment. However, these metropolises also face significant challenges that affect their liveability. Some of these challenges are the relatively high risk of poverty and social exclusion, the ageing population and the rising problem of housing affordability. Moreover, as urbanisation progresses, first-tier metropolises become more dependent on other regions for resources, which makes them more vulnerable to supply chain disruptions. This can lead to higher costs of products, living expenses and negative environmental impacts. Tackling these challenges is essential to ensure the sustainable development and well-being of these metropolises and their inhabitants.

Europe's urban development is marked by clear territorial imbalances among different subregions. The largest or capital cities, known as first-tier metropolises, often overshadow the second and third-tier metropolises, which are less prominent but more numerous and influential in shaping the future of urbanisation. These lower-tier metropolises may face more governance challenges due to their limited administrative capacity (OECD, 2015). Providing comprehensive and targeted support for all European metropolises requires substantial contributions from the European Union institutions, such as developing dedicated metropolitan policies and allocating specific funds for cohesive territorial development. Moreover, it is important to establish a collective consensus on the true nature and role of European metropolises, rather than relying on vague definitions and proxy concepts. This will help to recognise their unique contribution to sustainable and inclusive development in Europe. However, providing comprehensive and targeted support for all tiers of European metropolises is not enough. It is also necessary to acknowledge the role of the wider regional and global community in supporting and collaborating with them.

Europe has ambitious targets and commitments for sustainable development and climate action by 2030 and 2050, as set by regional and global agendas. To achieve them, metropolises need to provide high-quality services, transportation and housing in a sustainable way. This requires more economic resources, local capacities and governance efficiency. Moreover, European cities and metropolises should cooperate to tackle these challenges effectively. By adopting a metropolitan perspective, they can advance towards their sustainability and climate goals while improving the quality of life.

### Europe is one of the most urbanised regions in the world, with nearly 75% of its population living in core urban areas (UN-DESA, 2018a). This trend is expected to continue, reaching around 85% by 2050 (UN-DESA, 2018a).

#### governance

This report compares 16 European metropolises that belong to the first-tier category, meaning they are either national capitals (11) or large urban areas with more than 2 million inhabitants (5). Madrid and Greater Paris are the most populous, with over 7 million people each, while the Brussels Capital Region and Helsinki Metropolitan Region are the smallest, with 1 to 2 million people each. The sample also shows the high level of territorial fragmentation in Europe, with at least 1266 subnational governments involved in metropolitan governance; a sign of the complexity and diversity of the challenges they face.

Most of the metropolises in the sample have a high degree of institutionalisation, with 44% having a formal metropolitan authority and 31% being governed by regional-level entities. The rest have various forms of cooperation agreements but lack formal metropolitan or regional structures. The diversity of governance arrangements suggests that they are adapted to the specific needs and contexts of each metropolis, rather than following a common model. However, this could also indicate a lack of legal frameworks or political relevance for some metropolises. The most common competencies among the sample are education, transport, planning and development, followed by social, environmental and cultural policies.

#### economic development

The metropolises in the sample have an average GDP per capita of 42 581 EUR (2021), which is almost twice as high as the EU average of 27 910 EUR in 2021. This shows the economic strength and importance of these first-tier metropolises in their national contexts, especially for those that are also capital cities. However, some metropolises have lower GDP per capita than others, indicating a concentration of economic activity and wealth within certain regions. The average unemployment rate in the sampled metropolises was 7.5% in 2021, slightly higher than the EU average of 7.1%. The data from 2020-2021 suggest that unemployment affects men and women similarly in most cases, but there is still a gender pay gap of 10% in favour of men in the countries where these metropolises are located (European Institute of Equality, 2022a).

High GDP growth or performance does not necessarily ensure positive outcomes in other areas related to overall health and well-being. Focusing only on growth could lead to more territorial disparities and inequalities across different European subregions.

The sampled European metropolises enjoy a high life expectancy, with an average of 81.3 years. This surpasses the European Union's average of 80 years (Eurostat, 2023g) and the global average of 72 years by a significant margin. However, this also implies challenges for social security systems that need to be addressed to ensure the well-being of elderly populations in Europe.

The average risk rate of poverty and social exclusion of 18.5% in the sampled metropolises. This is 3.2% lower than the European Union's average. The economic strength of the metropolises partly explains this difference. They have a high GDP per capita compared to national averages. However, even with this relatively lower rate, the risk of poverty and social exclusion affects nearly 20% of the population. This means that almost 1 in 5 people in the sample faces this risk. Social benefits and transfers from national, regional and local governments help to alleviate disparities and contribute to a more equitable society (Eurostat, 2023a). Therefore, emphasising the allocation of these funds to metropolises is a highly effective approach to address these socioeconomic challenges, especially since combating pover-

### environmental sustainability



ty and discrimination torial Investment.

This report also covered other important aspects related to the quality of life in metropolises, such as transport and housing. The sampled metropolises have extensive public transport coverage, with 95% of residents having access to a public transport stop within a 500-metre walk (European Commission, 2020). However, there are still issues such as traffic congestion, air pollution, high CO<sub>2</sub> emissions and safety issues (Urban Transport Roadmaps, 2023) that need to be addressed to achieve the 2030 sustainability goals. Housing affordability is another crucial factor in the quality of life in Europe influenced by factors like population density, external economic factors and the positioning of global cities. However, further analysis should include data beyond the core cities of these metropolises to gain a comprehensive understanding.

The data from the sampled metropolises indicate a high per capita carbon footprint, which calls for urgent action on climate change. The average emissions in the sample reached 7 metric tons in 2018, exceeding both the global average of 4.79 metric tons and the European Union's average of 6.4 metric tons for the same year (World Bank, 2019).

The air quality in the sampled metropolises is generally rated as 'moderate' by the European Environment Agency (2023). However, some metropolises with higher pollution levels also have the highest car ownership rates. This implies a strong preference for driving and raises questions about the attractiveness and availability of other transport options.

Working together across local jurisdictions is a key strategy to tackle climate change effectively. The European Union has enacted policies and provided funding to support the climate transition at all levels, enabling European metropolises to become leaders in environmental sustainability.

quality of life

¢

ty and discrimination is a priority of the European Union's Integrated Terri-

# overview

Metropolises are not merely physical spaces. They encompass a complex web of social, economic, cultural and environmental relationships among a diverse array of actors.

These relationships create intricate dynamics and interdependencies beyond administrative borders and may require coordinated management. Metropolises are often referred to as 'urban agglomerations', 'functional urban areas' or 'metropolitan areas'. While metropolises represent the functional reality of an urban-rural continuum, metropolitan areas correspond to metropolises with a locally adapted institutionalised network of coordination and collaboration that addresses the specificities of the functional reality.

This report presents a comprehensive analysis of a sample of 16 European metropolises based on the Metropolis Observatory's methodological framework, which was established in 2017. The report covers four main aspects of the metropolises: their participation in the European Union, their spatial distribution, their political systems and their diversity. The metropolises are spread across the four European subregions, with a higher concentration in Western Europe (44%) and Southern Europe (31%) than in Northern Europe (12.5%) and Eastern Europe (12.5%). Most of the metropolises belong to unitary states (12 out of 16). The sample shows a high level of diversity, with differences in factors such as the number of local authorities in each metropolis, their coordination mechanisms and their governance models.

The report is organised as follows: The first section discusses how global and European goals, policies and actors have shaped the role of European metropolises. It also describes the environment in which European metropolises operate, their trends and patterns. The second section presents the analysis results for the selected metropolises across five dimensions. The third section draws the main conclusions and recommendations to address the challenges of European metropolises.

- **1. Greater Manchester Combined Authority** (United Kingdom)
- 2. Barcelona Metropolitan Area (Spain)
- **3. City of Berlin** (Germany)
- 4. Brussels Capital Region (Belgium)
- 5. City of Bucharest (Romania)
- 6. Amsterdam Metropolitan Area (Netherlands)

- 7. Greater Paris (France)
- 8. Lisbon Metropolitan Area (Portugal)
- 9. Region of Madrid (Spain) 10. Stockholm Metropolitan
- Area (Sweden)
- 11. Metropolitan City of Turin (Italy)
- 12. Rome Metropolitan Area (Italy)

- 13. Planning Association East -Vienna (Austria)
- 14. Helsinki Metropolitan **Region** (Finland)
- 15. Upper Silesian-Zagłębie **Metropolis - Katowice** (Poland)
- 16. Great Stuttgart Region (Germany)

Figure 1



# how european cities became metropolises

Europe has a high level of urbanisation, with nearly 75% of its population living in urban areas. This is much higher than the global average, which was 56% in 2020 (<u>UN-DESA, 2018a</u>). Since 1950, Europe has experienced a significant urbanisation process, changing from a mainly rural and industrial continent to a modern and urbanised region (European Investment Bank, 2018). However, the pace and extent of urbanisation have varied across the four main European subregions: However, the four main European subregions. Northern and Western Europe became predominantly urban by 1950, while Southern and Eastern Europe had lower urbanisation rates of 46% and 39%, respectively. By 1960, all four subregions had more than half of their population living

#### Figure 2

changes in urban population growth across European subregions from 1950 to 2050 Source: Own elaboration based on data from UN-DESA, 2018



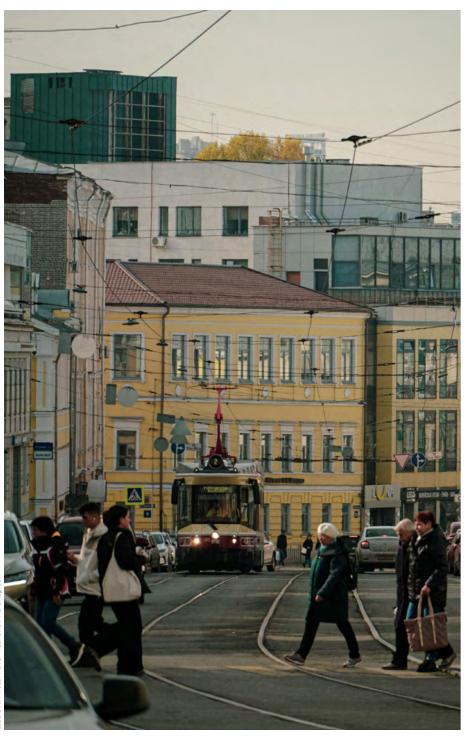


in urban areas. Figure 2 illustrates the evolution of urbanisation in Europe and its subregional differences.

**European urbanisation patterns** are dynamic and changing. They will influence the development of Europe's urban systems, which consist of cities and their surrounding suburban, peri-urban and rural zones that have economic and social links with these cities. Managing these urban systems will demand long-term planning, innovative governance, enhanced local capacities and resource management at the subnational levels. With urbanisation expected to continue in Europe and reach 84% by 2050 (UN-DESA, 2018a), metropolises will play a crucial role in addressing those challenges.

### how urbanisation shapes collaboration in europe

The European urban system consists of various types of cities. There are more than 800 cities in the European Union with a population of at least 50 000 and most of them (700) are small or medium-sized, with 50 000 to 250 000 inhabitants (Nabielek et al., 2016). Among the larger cities, there are 28 capitals that represent their countries, such as London and Paris, which are also global hubs and



engines of economic growth. Other major urban centres, such as Berlin, Madrid and Barcelona, have around 4 million residents each and are also considered global cities. However, the size and capital status of a city does not always reflect its regional significance. For example, Manchester is a key actor in the United Kingdom (European Investment Bank, 2012), even though it is not the biggest or capital city in England.

European cities and metropolises cooperate with each other, creating networks and overcoming obstacles within and across national boundaries. European cities and metropolises have a long tradition of dialogue and partnership, which has become more important over time (Lincoln Institute of Public Policy, 2007). This cross-collaboration in Europe manifests in various ways. Some metropolises across national borders join forces to pursue common goals, such as the green megaregion formed by Oslo, Gothenburg, Helsinki, Malmö, Copenhagen, Kiel, Hamburg and their surrounding regions, which aims to accelerate the green transition. Another example is the European diagonal, a cluster of cities and metropolises in Southern Europe, including Lisbon, Madrid, Barcelona, Marseille and Milan, that connects urban and rural areas, coastal zones and natural ecosystems from a spatial planning perspective. Moreover, European cities and metropolises engage in regional networks such as Eurocities, global sectorial networks like C40 Cities and global crosscutting networks such as Metropolis and United Cities and Local Governments to exchange knowledge and promote urban and metropolitan agendas at the global level.

Europe is also experiencing a rise in intra-national collaboration. This collaboration - and the challenge of urbanisation - is leading to the emergence of more metropolises across

### the European Union's contribution to metropolitan governance

the region. By 2020, UN-Habitat identified 231 European metropolises (UN-Habitat, 2020). These 231 metropolises represent around 12% of the total metropolises worldwide and host 12% of the European Union population. However, most of them have populations between 300,000 and 1 million inhabitants, which requires effective governance to address significant territorial fragmentation. Collaboration under this context may take the form of new and formal tiers of government (such as metropolitan areas), flexible agreements using ex-

The role of metropolises in the table milestones should be highlightglobal sustainability agenda is to which European cities have rebanisation by fostering collaboration. This agenda has called upon the need for further coordination across subnational levels of government to achieve sustainable and equitable development. In this context, three no-



isting tiers of government (regions) or even political alliances.

Cooperation networks among cities and metropolises in Europe are essential in promoting innovation, forging economic and political alliances and effectively addressing challenges such as climate change. While these challenges are similar to those faced by their counterparts worldwide, Europe's distinguishing factor is the influential role of the European Union, which has fostered a culture of collaboration and holds the potential to positively shape metropolises in the region.

ed: The 2030 Agenda for Sustainable key to understanding the extent Development launched in 2015 with 17 Sustainable Development Goals sponded to the challenges of ur- (SDGs), the New Urban Agenda and the Paris Agreement.

> The 2030 Agenda and the SDGs have emphasised the role of cities and local and regional governments in promoting and monitoring progress. In fact, around 65% of the 169 targets of the

17 SDGs will only be reached with the engagement of local and regional governments (<u>OECD, n.d.</u>). The New Urban Agenda acknowledges the critical role of metropolises in developing sustainable spatial plans, transport and mobility solutions and infrastructure to mitigate climate change and disaster risks (United Nations, 2017). Lastly, the Paris Agreement and its subsequent conferences recognised the importance of horizontal coordination across governments and city-regions, although with an initially limited emphasis on the role of metropolises.

Within this global context, the European Commission (2020a) has put sustainability at the forefront of its agenda and emphasises the role of 'partnerships' among different levels of government to achieve this goal. However, the European Union has not explicitly addressed the specific challenges and opportunities of metropolises in the region. Rather, it has adopted a more general approach to subnational cooperation and multilevel governance, using Functional Urban Areas<sup>1</sup> and Nomenclature of Territorial Units for Statistics (NUTS)<sup>2</sup> as analytical and statistical tools to capture territorial dynamics.

The concept of 'city-region' emerged in the late 90s as a way to promote regional and territorial development in the European Union. In 2009, the 'metropolitan typology' was introduced in a paper on territorial cohesion (The European Commission). This led to the establishment of an Urban Agenda in 2014, which provided financial and institutional support for sustainable urban development based on a 'supra-municipal' perspective. For the 2014-2020 period, this perspective focused on Functional Urban Areas, recognising the 'spatial mismatch' between core cities and their surrounding areas and the need for policy interventions that fostered multilevel collaboration (ESPON, 2019). More recently, the European Union adopted a hierarchical statistical system called the Nomenclature of Territorial Units for Statistics, which aimed to produce standardised data and analysis for the region that could inform European Union policies. However, in most cases, the Nomenclature of Territorial Units for Statistics levels do not correspond to existing metropolises. By relying only on associative terms for metropolises rather than explicitly addressing them, there is a risk of undermining the actual impact and benefits of the analysis brought by existing metropolises in Europe.

Despite this limitation, the European Union has promoted policies and objectives that have an impact on the urban and metropolitan dynamics of the region, even if they are not legally binding. • The Cohesion Policy - the main investment policy of the European Union – aims to reduce the gaps between subregions in the European Union (European Commission) by supporting job creation, business competitiveness, economic growth, sustainable development and quality of life<sup>3</sup>. Since 2014, the Cohesion Policy has increased the involvement of local authorities in its delivery. Furthermore, for the 2021-2027 period, the European Union has intentionally created incentives for supra-municipal cooperation to achieve some of its policy objectives. This is the case of the policy objective called 'Europe closer to citizens by fostering the sustainable and integrated development of all types of territories', which requires the use of territorial integration tools such as Integrat-

<sup>1</sup> Functional urban areas are defined as densely populated urban centres (cities) and adjacent municipalities with high levels of commuting to densely populated urban centres (European Commission)

<sup>2</sup> NUTS are defined as a hierarchical system for di-

the UK (Eurostat, 2021) <sup>3</sup> The European Regional Development Fund

(ERDF), to invest in the social and economic development of all EU regions and cities. The Cohesion Fund (CF), to invest in environment and

viding up the economic territory of the EU and

transport in the less prosperous EU countries The European Social Fund Plus (ESF+), to support jobs and create a fair and socially inclusive society in EU countries. The Just Transition Fund (JTF) to support the regions most affected by the transition towards climate neutrality

munity-led local development.

**ment Fund** is especially important in this regard. It supports integrated development and recognises the role of urban authorities in implementing sustainable urban strategies. The European Regional Development Fund does not specifically target metropolises or metropolitan areas but rather Functional Urban Areas, which are defined by functional criteria rather than administrative boundaries. However, metropolises or metropolitan areas can benefit from the fund by ap-



ed Territorial Investment and Com-

· The European Regional Developplying the Integrated Territorial Investment Tool, which allows them to cooperate across different levels of governance, in accordance with the New Urban Agenda (European Commission, 2019).

These agendas and policies have prompted European metropolises to develop strategic visions and plans that tackle cross-municipal issues such as housing, mobility, planning, employment and economic development. However, the crucial role of metropolises is still not fully recognised and formalised. Existing European metropolitan areas have also urged the European Union to consider them as essential partners (ME-TREX, 2020).

# analysis of european trends



The governance of metropolises is established at the national level. This intricately influenced by factors such section analyses the accomplishments as the number of municipalities in- and persisting challenges concerning volved, the tailor-made mechanisms of metropolitan governance in Europe, inter-municipal coordination and col- focusing on the selected metropolises laboration and the legislative schemes featured in this report.

#### Table 1

### european metropolises sampled for this report

| METROPOLISES  | LOCAL<br>GOVERNMENTS<br>COMPRISED | COORDINATION<br>MECHANISM                                       | NATIONAL POLITICAI<br>SYSTEM⁴  |
|---|-----------------------------------|---|--------------------------------|
| Amsterdam Metropolitan Area (The<br>Netherlands)          | 30                                | Collaboration agreement   | Decentralised Unitary<br>State |
| Barcelona Metropolitan Area (Spain)                       | 36                                | Metropolitan authority  | Unitary State                  |
| City of Berlin (Germany)                                  | 1                                 | Collaboration agreement   | Federal State                  |
| Brussels Capital Region (Belgium)                         | 19                                | Regional Authority  | Federal State                  |
| City of Bucharest (Romania)                               | 2                                 | Collaboration agreement   | Unitary State                  |
| Greater Manchester Combined Authority<br>(United Kingdom) | 10                                | Metropolitan authority  | Federal State                  |
| Greater Paris (France)                                    | 131                               | Metropolitan authority  | Unitary State                  |
| Helsinki Metropolitan Region (Finland)                    | 26                                | Regional Authority (Regional council acting as joint authority) | Unitary State                  |
| Upper Silesian-Zagłębie Metropolis -<br>Katowice (Poland) | 41                                | Metropolitan authority  | Unitary State                  |
| Lisbon Metropolitan Area<br>(Portugal)                    | 18                                | Metropolitan authority  | Unitary State                  |
| Region of Madrid (Spain)                                  | 23                                | Collaboration agreement   | Unitary State                  |
| Metropolitan City of Turin (Italy)                        | 312                               | Metropolitan authority  | Unitary State                  |
| Rome Metropolitan Area (Italy)                            | 121                               | Metropolitan authority  | Unitary State                  |
| Stockholm Metropolitan Area (Sweden)                      | 26                                | Regional Authority  | Unitary State                  |
| Great Stuttgart Region (Germany)                          | 179                               | Regional Authority  | Unitary State                  |
| Planning Association East - Vienna<br>(Austria)           | 291                               | Regional Authority  | Federal State                  |

<sup>4</sup>Based on European Union country profiles



#### Fragmentation

Europe faces significant governance challenges due to its high level of territorial fragmentation. Comprising 6.8% of the world's land area, the region is divided into over 88 400 subnational governments in the European Union member states alone (OECD & European Commission, 2018) and almost 115 000 in all of Europe (CEMR, 2021). This fragmentation is exacerbated by the region's prevalence of small to mid-size cities, primarily consisting of municipalities (please refer to section 2).

When considering the territorial dynamics of European cities beyond administrative boundaries, Europe has 1514 cities with at least 250 000 inhabitants (Eurostat, 2021c). Although fragmentation in Europe is not inherently problematic – and as a matter of fact

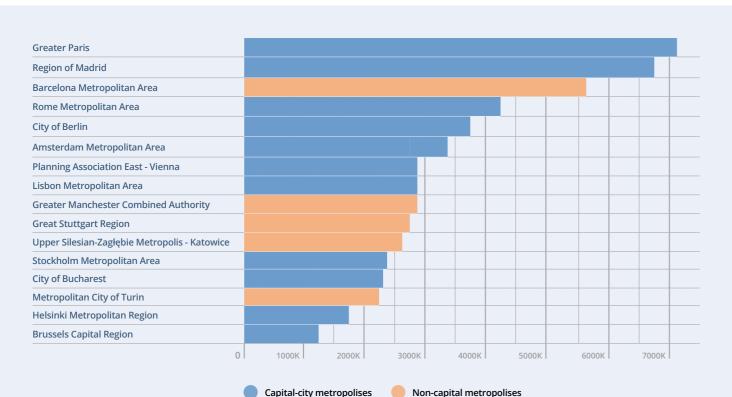
can indicate a higher level of accountability and democracy (Swianiewicz, 2010) - it raises questions about local capacities and urban governance. The intricate interconnectivity among local jurisdictions necessitates the adoption of innovative governance structures to effectively address the multifaceted economic, social, spatial and environmental implications.

This report analyses data from 16 metropolises, consisting of at least 1240 subnational governments (OECD & European Commission, 2018). The sample accounts for 12% of the European Union's total population and only 3% of its total land area. Over 54.7 million people live in the sampled metropolitan areas, with slightly more women (52%) than men (48%). On average, the metropolises of the sample represent 14% of their nations' population.



Figure 3

Source: Own elaboration based on Eurostat data 2021, except for the cases of City of Berlin, Greater Paris and Brussels, where more scale-suitable data was gathered.



#### Typology of European metropolises

Europe's metropolises can be classified into three main tiers.<sup>5</sup> First-tier metropolises are home to over 2 million people. Capital-city metropolises can also be considered firsttier. Second-tier metropolises have populations between 1 and 2 million people and include some of the largest urban areas of the region but not the capital cities, whilst third-tier metropolises correspond to a smaller agglomeration of territories with less than 1 million people.

First-tier metropolises tend to be highly influential at the national, regional and global levels. They tend to be centres of economic growth, innovation and high standards of quality of life. First-tier metropolises also face complex challenges stemming from territorial and socio-economic disparities closely linked to their elevated cost of living. They also encompass the complexity of aligning shared policies and goals across a wide spectrum of stakeholders operating at different levels of influence, amongst others. Europe has 18 second-tier metropolises, featuring cities with economic and social performance highly relevant to their national economies despite not being city capitals (Clark et al., 2020). Second-tier metropolises may also face additional challenges related to the imbalances of the urban system. The imbalance arises due to the over-concentration in capital-city metropolises, both in terms of investment and attention from national gov-

ernments (Parkinson et al., 2012).

Lastly, Europe has 231 metropolises; the majority of which are third-tier metropolises ranging from 300,000 to 1 million people (UN-Habitat, 2020). This means that the smallest local governments likely face additional challenges in terms of capacity to manage

<sup>5</sup> Adapted based on Eurostat 2013: Clark., et al 2020; Hanxleden & Wedemeier, 2019

#### urbanisation dynamics.

All metropolises in the sample are first-tier metropolises, with 11 being capital-city metropolises. The remaining five are non-capital metropolises but with populations exceeding 2 million people. Notably, Madrid and Greater Paris have particularly high populations, close to and over 7 million, respectively. The Brussels Capital Region and Helsinki Metropolitan Region, although with the lower populations from the sample (1 to 2 million people), also serve as capital-city metropolises (first-tier).

First-tier metropolises of the sample, unsurprisingly, exhibit higher population density than the average of the European Union member states, with 606 inhabitants per square kilometre (km<sup>2</sup>) compared to the average of 112 people/km<sup>2</sup> in the European Union (World Bank, 2020). However, there is a significant drop when contrasting the average density of core cities from the sample. For example, Brussels has a density of 7527 people per km<sup>2</sup> at the city level, while the Brussels Capital Region has a density of 683 people per km<sup>2</sup>. This emphasises the relative importance of core, often capital cities, within the European region.

Moreover, seven core cities are included in the top 30 Global Cities Index (2022) from the sampled metropolises. Amongst these, six are part of capital-city metropolises, while Barcelona represents the only non-capital city in the top 30 of the ranking. The heightened global prominence of these cities can be attributed to their robust economic growth and innovation. This, in turn, enhances their national influence and stimulates further economic growth for their respective metropolises (Hanxleden & Wedemeier, 2019).

Two key issues emerge from this discussion. Firstly, the European urban system exhibits imbalances and disparities across different tiers of me-

### tropolises, potentially resulting in social, economic and environmental

**inequalities.** It is crucial to recognise that beyond mere growth gaps, a comprehensive analysis should delve into underlying factors, including historical and cultural influences. These aspects play a significant role and may necessitate further examination. Moreover, it is important to acknowledge that such imbalances can impact European subregions in distinct and varying ways. A holistic understanding of these influences is vital to developing targeted and effective solutions for addressing disparities within the European urban system.

Secondly, the high level of territorial fragmentation and the increasing number of third-tier metropolises may come with poor governance and insufficient administrative capacities, often leading to low productivity levels (OECD, 2015). The significance of this cannot be overstated, as local governments are now faced with the daunting task of addressing complex global challenges such as climate change, which extend far beyond their traditional scope of responsibilities. In the absence of consolidated governance systems, European metropolises play a pivotal role in effectively tackling these challenges. The quality and models of their governance are of paramount importance in achieving this goal.

### Models of governance and competencies

By 2015, 51% of European metropolises had some form of metropolitan scheme without regulatory powers, while 18% had metropolitan authorities with delegated powers (OECD, 2015). This reflects a medium degree of institutionalisation in metropolitan governance (Metropolis, 2020).

The surveyed metropolises demonstrate a degree of metropolitan institutionalisation that surpasses the European average. Within the sample, 44% have metropolitan authorities, 31% operate under regional-level governments and the remaining 25% have diverse collaboration agreements without formal metropolitan or regional authorities. The level of institutionalisation in first-tier metropolises may be shaped by national decentralisation reforms, which foster greater autonomy and decision-making power at the metropolitan level. The exclusive focus on first-tier metropolises in the sample suggests that these cities are likely at the forefront of institutional consolidation within their respective regions. In many metropolitan authorities, decisions are commonly entrusted to representatives from local governments or city mayors, leading to varying levels of accountability and democratic involvement. However, a few instances stand out for their adoption of enhanced democratic processes. An example is the Greater Manchester Metropolitan Area, where the metropolitan Mayor is elected through a general election, providing residents with a more direct role in the governance of their metropolitan region (Centre for Cities, 2022).

The spectrum of metropolitan competencies in Europe is also closely related to the level of fragmentation, which is indicative of the dispersion of powers and the degree of institutionalisation. To analyse the competencies across the sample, national-level data was collected using the Country Comparison tool (CEMR, 2021). Italy and the United Kingdom are the only countries that recognise the metropolitan level with specific competencies as 'metropolitan cities' and 'metropolitan district councils', respectively. In the remaining cases, competencies primarily lie within municipal responsibilities, which could be devolved to metropolitan coordination but are not strictly delegated or assigned to them.

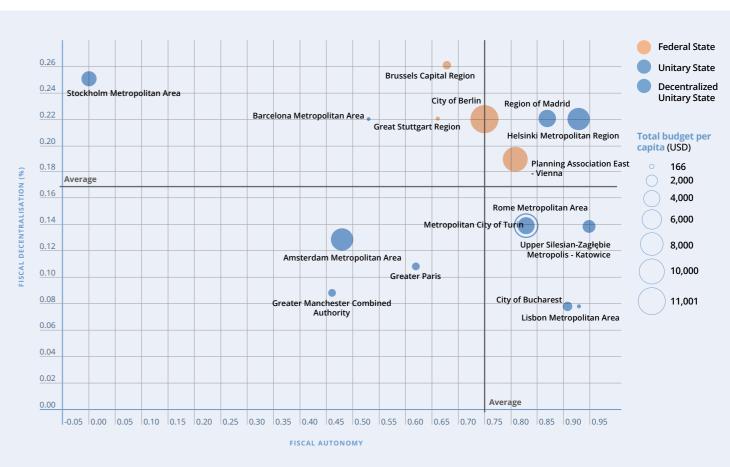
There are, however, common areas of focus amongst the sample for the metropolitan scale. These include education, transport, planning and development. These are followed by addressing social, environmental and cultural issues. Additionally, less frequently but still importantly, metropolises also handle the following: waste management, health services, care, employment and housing; they also deal with infrastructure matters, such as roads, sewage systems, water provision, police and fire services.

#### Finances

The sampled metropolises exhibit significant diversity in decentralisation, autonomy levels, budget per capita and other factors. However, it is essential to note that analysing this diversity poses a challenge due to the lack of comparable data and standardised measurement across different languages and

#### Figure 4

fiscal decentralisation, fiscal autonomy and budget per capita



methodological approaches. Particularly, there is a lack of comparable data or research on the municipal finances of individual metropolitan governments, making it difficult to draw precise comparisons (Slack, 2017).

Germany, Belgium, Sweden and Spain have shown greater economic importance at the subnational level (OECD, 2019). This is reflected in the sampled metropolises of Berlin, the Great Stuttgart Region, the Brussels Capital Region, the Stockholm Metropolitan Area, Madrid and the Barcelona Metropolitan Area, with the highest levels of fiscal decentralisation from the sample. Furthermore, increasing responsibilities at the local level (e.g. crisis management and climate change) could also explain the extent to which national governments are increasing subnational expenditure (OECD, 2019).

Source: Own elaboration based on the World Observatory on Subnational Government Finance and Finance and Investment (OECD and UCLG, 2019).

The sample suggests that the national political system may influence the level of fiscal decentralisation: the four metropolises part of the federal systems of the sample have above-average levels. However, further analysis is required as the sample does not have a representative number of metropolises for each political system to reach this conclusion.

Metropolises in the sample have varied levels of autonomy, with an average budget decision-making power of 75%. The Greater Manchester Combined Authority carries the lowest level of autonomy at 46%. However, a deal for 'levelling up' was secured (UK Parliament, 2023) with the national government. Through the deal, direct financial allocations will be set by equivalent government departments, with greater autonomy over its expenditure. Within this context, the Greater Manchester Combined Authority will receive new leverage in housing and climate change areas. It is important to note that tax-raising powers were not included in the deal (UK Parliament, 2023). This means that although it will have greater autonomy, the extent of the resources is still highly dependent on



national government and intergovernmental transfers. Despite the example of Greater Paris having tax-raising powers, it still demonstrates limited fiscal autonomy and decentralisation within the sample. This complexity highlights the challenges in using the available data as a definitive representation of metropolises' finances. Consequently, further research is necessary to gain a comprehensive understanding of the financial dynamics at the metropolitan level.

When examining the budget per capita, metropolises have an average budget of 1800 EUR per capita. This is similar to the budget per capita at the city level estimated for 162 European cities, recently at 1500 EUR (LSE Cities, 2023). However, it is important to clarify that budgetary data available was commonly for the city level rather than at the metropolitan level. Among the sampled metropolises, Berlin stands out as having a correlation between metropolis size and budget per capita. It possesses the largest area and the highest budget per capita compared to the other metropolises in the sample.

Overall, metropolises' autonomy, decentralisation levels and finances across Europe are complex and difficult to compare, mainly due to the lack of standardised available data. Moreover, they are highly contextual and constantly evolving. For instance, in Poland, despite having greater autonomy a decade ago and data from the sample backing up this, recently, "authoritarian national administrations have cut city budgets and centralised power" (LSE Cities, 2023). The complexity of data gathering might also be related to the level of fragmentation and the constant evolution of the number of subnational governments. However, this data is crucial to demonstrate why metropolises are relevant and how local governments are better off through consolidation and cooperation at the metropolitan scale.

#### Women in metropolitan governments

The Gender Equality Index (European Institute for Gender Equality, 2022) and the Percentage of Women Elected to the city council Legislative branch (<u>PWE</u>) are useful indicators to describe the gender perspective within governance. However, they might not necessarily be representative at the metropolitan scale. The Gender Equality Index primarily focuses on national-level data, while the PWE operates at various levels, making it challenging to formulate specific policies for women's representation in metropolises. Nevertheless, these measures offer a general insight into gender mainstreaming across the sampled regions.

The average Gender Equality Index

score for the European Union is 68.6, indicating that Italy, Portugal, Poland and Romania have scores below the average, suggesting significant challenges in terms of gender mainstreaming within these countries. Conversely,

#### Figure 5

shared of elected women in local government

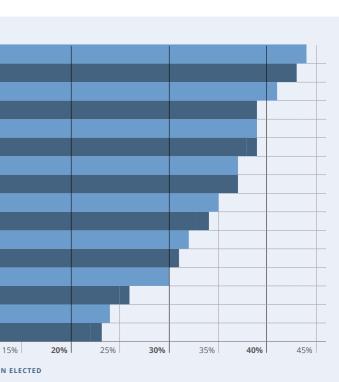
Source: Own elaboration based on data from Metropolis Observatory.

| Region of Madrid                              |          |  |
|---|----------|--|
| Stockholm Metropolitan Area                   |          |  |
| Greater Paris                                 |          |  |
| Helsinki Metropolitan Region                  |          |  |
| City of Berlin                                |          |  |
| Brussels Capital Region                       |          |  |
| Barcelona Metropolitan Area                   |          |  |
| Lisbon Metropolitan Area                      |          |  |
| Greater Manchester Combined Authority         |          |  |
| Metropolitan City of Turin                    |          |  |
| Rome Metropolitan Area                        |          |  |
| Amsterdam Metropolitan Area                   |          |  |
| Upper Silesian-Zagłębie Metropolis - Katowice |          |  |
| Planning Association East - Vienna            |          |  |
| City of Bucharest                             |          |  |
| Great Stuttgart Region                        |          |  |
|   | <br>100/ |  |

% OF WOMEN ELECTED

the remaining eight EU countries perform at or above the average. However, even with an average score of 68.6 out of 100, it is evident that the EU and its member Ssates still have a considerable way to go before achieving genuine gender equality for all. Progress toward gender equality has been slow and uneven, with only a modest increase of 0.6 points since the last assessment.

Regarding PWE in the sampled metropolises, the average representation currently stands at 36%. However, none of the revised case studies accurately reflects the population's diversity in terms of representation percentage. This disparity highlights a significant challenge in achieving adequate political representation for women. The data suggests that there is still a considerable journey ahead to close the gender gap in political representation within these metropolises. It underscores the importance of addressing barriers and implementing measures that promote women's participation in political decision-making processes.



## economic development

The economic dimension plays a crucial role in analysing the development of European metropolises. It provides insights into economic activity, productivity and competitiveness, which are essential for decision-makers and foreign investors. This section will explore indicators such as Gross Domestic Product (GDP) per capita, employment share by sector, economic prominence and the unemployment rate. These indicators measure the level of economic development, labour market structure, economic specialisation and job market performance across the sampled metropolises. This chapter will offer a comprehensive overview while identifying key challenges and opportunities for the future of first-tier European metropolises.

To start, GDP per capita portrays a metropolis' economic performance

Metropolitan GDP per capita using Eurostat data 2020/2021 except for Greater Manchester, Greater Paris and Stuttgart Region, where more sca-

and wealth. The data on metropolises' economic performance, most recently available for 2020-2021, needs to be viewed in the context of the global impact of the COVID-19 pandemic (Emergency Governance Initiative Policy Brief #03, 2021). The average GDP per capita among the sampled metropolises is 42 581 EUR (2020/2021), almost double the European Union's average (27 910 EUR, 2021). The Stockholm Metropolitan Area (71 700 EUR, 2021) and Greater Paris (60 100 EUR, 2021) are the two dominant metropolises with the highest GDP per capita within the sample. Also, sampled metropolises with a lower GDP per capita exceed their respective national averages, such as Upper Silesian-Zagłębie Metropolisa Katowice (18 200 EUR, 2020; Poland: 12 810 EUR, 2020). These findings underscore the significant eco-

nomic activity concentrated within first-tier metropolises, further highlighting their economic importance within their respective coun**tries.** This observation aligns with the previously described role of global cities and their impact on metropolitan economies.

In addition to GDP per capita, economic prominence indicates metropolises' relative importance in economic productivity within their respective countries. Among the sampled metropolises, capital-city metropolises demonstrate higher levels of economic prominence. For instance, the Helsinki Metropolitan Region (39.6%), Lisbon Metropolitan Area (35.7%), Stockholm Metropolitan Area (32%), Greater Paris (25%) and Bucharest Metropolitan Area (27.7%) stand out as the metropolises with

#### Figure 7

#### metropolitan economic prominence

lis and Helsinki, where more scale-suitable data was gathered. Please refer to Annex 1 for further details.

|   |        |        |        |        |        |        |        |        |       | Helsinki Metropolitan Region    |
|---|--------|--------|--------|--------|--------|--------|--------|--------|-------|---------------------------------|
| Stockholm Metropolitan Area                   |        |        |        |        |        |        |        |        | -     | Lisbon Metropolitan Area        |
| Greater Paris                                 |        |        |        |        |        |        |        |        | _     | Stockholm Metropolitan Area     |
| Helsinki Metropolitan Region                  |        |        |        |        |        |        |        |        | <br>_ | City of Bucharest               |
| Amsterdam Metropolitan Area                   |        |        |        |        |        |        |        |        | _     | Planning Association East - Vie |
| Brussels Capital Region                       |        |        |        |        |        |        |        |        |       |                                 |
| Planning Association East - Vienna            |        |        |        |        |        |        |        |        |       | Greater Paris                   |
| Great Stuttgart Region                        |        |        |        |        |        |        |        |        | -     | Amsterdam Metropolitan Area     |
| City of Berlin                                |        |        |        |        |        |        |        |        | _     | Region of Madrid                |
| Rome Metropolitan Area                        |        |        |        |        |        |        |        |        | _     | Brussels Capital Region         |
| Region of Madrid                              |        |        |        |        |        |        |        |        | -     | Barcelona Metropolitan Area     |
| Greater Manchester Combined Authority         |        |        |        |        |        |        |        |        | -     | Rome Metropolitan Area          |
| Metropolitan City of Turin                    |        |        |        |        |        |        |        |        | _     | Upper Silesian-Zagłębie Metro   |
| Barcelona Metropolitan Area                   |        |        |        |        |        |        |        |        | -     | Greater Manchester Combined     |
| City of Bucharest                             |        |        |        |        |        |        |        |        | -     | City of Berlin                  |
| Lisbon Metropolitan Area                      |        |        |        |        |        |        |        |        |       | Metropolitan City of Turin      |
| Upper Silesian-Zagłębie Metropolis - Katowice |        |        |        |        |        |        |        |        | _     | Stuttgart                       |
|   | 10.000 | 20.000 | 30.000 | 40.000 | 50.000 | 60.000 | 70.000 | 80.000 |       |                                 |

GPD PER CAPITA (EUR/HAB)

## etropolitan Area rest ciation Fast - Vienna letropolitan Area drid al Region tropolitan Area olitan Area -Zagłębie Metropolis - Katowice hester Combined Authority City of Turin

% OF COUNTRY GDP PRODUCED BY THE METROPOLIS

5%

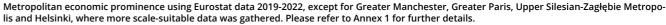
10%

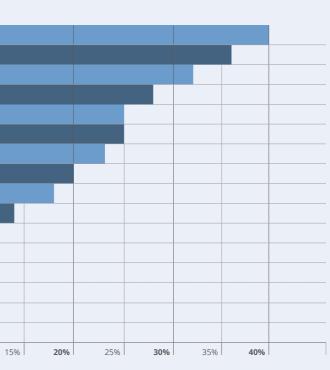
Figure 6

metropolitan GDP per capita

le-suitable data was gathered. For further details, please refer to Annex 1.

the highest economic prominence within the sample. This highlights the agglomeration advantages of capital cities, their economic power and national political and administrative significance. As part of these advantages, capital cities tend to attract more talent and investment (ESPON, 2012). Outliers among the capital cities are Berlin and Rome, with relatively low economic prominence (4.6%; and 9.2%, respectively). Their low economic prominence can be explained by the presence of multiple economic nodes in each country. Their historically decentralised economic structure has led to the dispersion of several growth poles. Additionally, in some contexts, such national prominence has strained relationships between powerful and well-positioned urban centres and national governments.





### The limitations of GDP in reflecting a city's overall welfare

There's a growing resistance to relying solely on GDP-related measures as primary indicators of economic performance and well-being. Kate Raworth, a prominent critic of this approach, underscores its significant bate surrounding GDP-related indicalimitations. Assessing a country's or city's progress solely based on its total economic output, she argues, falls short in comprehensively gaug-

ing overall societal well-being. This GDP-related approach overlooks critical factors such as income inequality, resource depletion, environmental degradation, and social well-being, all vital for a more holistic evaluation of a country's or city's development (Raworth, K., 2017). The ongoing detors emphasizes their limited explanatory capacity when understanding diverse realities. It becomes evident that achieving high GDP growth or performance doesn't automatically guarantee positive outcomes in other crucial areas related to overall health and well-being.

This report highlights how pressing challenges in social cohesion, environmental sustainability and quality of life coexist in European metropolises despite their strong economic development performances. By shedding light on these aspects, the report encourages a broader perspective on measuring progress and guiding policy decisions to create more inclusive and sustainable societies.

#### Employment

The average unemployment rate in the sampled European metropolises was 7.5%, slightly higher than the European Union average of 7.1% in 2021 (Eurostat, 2023e). The data in the sample ranges from 2.8% in Upper Silesian-Zagłębie Metropolisa (Katowice) to 12.4% in the Brussels Capital Region. Unemployment affects men and women relatively evenly in most analysed cases based on data from 2020-2021; however, the disruptive impact of the COVID-19 pandemic has led to a marked increase in unemployment rates, revealing localised deviations like Madrid, Barcelona Metropolitan area and the Metropolitan City of Turin, where women have experienced disproportionately high levels of joblessness.

Data on gender-specific unemployment may overlook the added burden of care work on women. They typically handle about 12% more care and domestic responsibilities than men, which can significantly impact their employment opportunities and overall economic participation in society (European Institute of Gender Equality, 2022). Additionally, men earn 10% more than women on average in the **countries** where the metropolises of the sample are located. Gender pay disparities persist in Europe due to structural causes. These include men dominating decision-making roles, women often occupying lower-paid the secondary sector, specifically autopositions, family responsibilities leading to career breaks for women, part-

#### Figure 8

#### metropolitan unemployment by sex

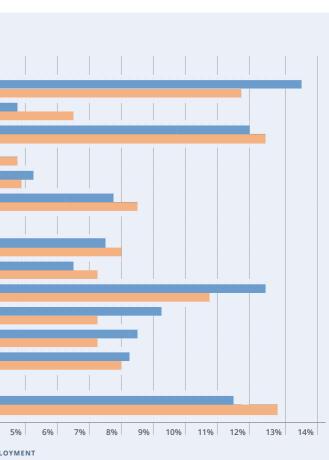
Metropolitan unemployment rate using Eurostat data 2019-2021, except for the Barcelona Metropolitan Area and Stuttgart Region cases, where more scale-suitable data was gathered (Refer to Annex for further details).

| Barcelona Metropolitan Area                   |    |    |    |    |  |
|---|----|----|----|----|--|
| City of Berlin                                | _  |    |    |    |  |
| Brussels Capital Region                       |    |    |    |    |  |
| City of Bucharest                             |    |    |    |    |  |
| Greater Manchester Combined Authority         |    |    |    |    |  |
| Greater Paris                                 |    |    |    |    |  |
| Upper Silesian-Zagłębie Metropolis - Katowice |    |    |    |    |  |
| Helsinki Metropolitan Region                  |    |    |    |    |  |
| Lisbon Metropolitan Area                      |    |    |    |    |  |
| Region of Madrid                              |    |    |    |    |  |
| Metropolitan City of Turin                    |    |    |    |    |  |
| Rome Metropolitan Area                        |    |    |    |    |  |
| Stockholm Metropolitan Area                   |    |    |    |    |  |
| Great Stuttgart Region                        |    |    |    |    |  |
| Planning Association East - Vienna            |    |    |    |    |  |
|   | 1% | 2% | 3% | 4% |  |



time work and flexible arrangements undervaluing women's roles and organisational practices in certain sectors valuing long hours (European Institute for Gender Equality, 2019).

To explore employment rates in more detail, the majority of the workforce is concentrated in the tertiary sector, averaging 85% for the sampled metropolises. Leading this trend is the Brussels Capital Region with 96% of its employment in the tertiary sector, followed by the Amsterdam Metropolitan Area, Berlin and Stockholm. In contrast, the Stuttgart Region has a lower share (61.3%) due to its focus on mobile manufacturing (Region Stuttgart, 2023). Employment in the primary



sector, which relies on natural resources, is minimal, usually below 1% in the sampled metropolises.

The data presented above indicate the ability of the sampled European metropolises to provide fertile ground and enabling framework conditions for the continuously growing demand for service-based industries, including the knowledge sector related to technology, research and development. Prominent reasons for a high share of the tertiary sector are the increased demand for services in dense urban

areas and other benefits of agglomeration in the economy (OECD, 2020a). Potential disadvantages include the higher reliance - and vulnerability - on other regions for goods, with higher costs and environmental impact. Additional employment losses might arise from the outsourcing of manufacturing products. European metropolises would benefit from a comprehensive analytical framework to assess the interplay of these multiple factors and the policies and governance arrangements required to address them.

#### Figure 9

#### metropolitan employment share by economic sector

Metropolitan employment share by economic sector using Eurostat data 2021 for half of the cases<sup>6</sup>. Different sources were used for Amsterdam Metropolitan Area, Barcelona Metropolitan Area, City of Berlin, Brussels Capital Region, Rome Metropolitan Area, and Greater Manchester, where more scale-suitable data was gathered. For further details, please refer to Annex 1.

|  | Primary secto | or 🔵 Secondary sector 🔵 | Tertiary sector |  |  |  |  |  |
|--|---------------|-------------------------|-----------------|--|--|--|--|--|
| Amsterdam<br>Metropolitan Area           | 9%            |                         | 90%             |  |  |  |  |  |
| Barcelona<br>Metropolitan Area           | 14%           |                         | 86%             |  |  |  |  |  |
| City of Berlin                           | 10%           |                         | 89%             |  |  |  |  |  |
| Brussels Capital<br>Region               | 4%            |                         | 96%             |  |  |  |  |  |
| City of Bucharest                        | 17%           |                         | 82%             |  |  |  |  |  |
| Greater Manchester<br>Combined Authority | 12%           |                         | 87%             |  |  |  |  |  |
| Helsinki Metropolitan<br>Region          | 16%           |                         | 83%             |  |  |  |  |  |
| Lisbon Metropolitan<br>Area              | 14%           |                         | 85%             |  |  |  |  |  |
| Region of Madrid                         | 14%           |                         | 85%             |  |  |  |  |  |
| Rome Metropolitan<br>Area                | 12%           |                         | 87%             |  |  |  |  |  |
| Stockholm<br>Metropolitan Area           | 11%           |                         | 89%             |  |  |  |  |  |
| Great Stuttgart Region                   |               | 38%                     | 61%             |  |  |  |  |  |
| Planning Association<br>East - Vienna    | 16%           |                         | 84%             |  |  |  |  |  |

% PER ECONOMIC SECTOR

<sup>6</sup> Data for Greater Paris, Upper Silesian-Zagłębie Metropolis - Katowice and the Metropolitan City of Turin was unavailable

ropolitan dynamics, the pursuit of an improved quality of life is intricately linked to the concept of **social cohesion**. Inclusive and effec- ently exhibit a high quality of life, as tive governance plays a pivotal role in maintaining this delicate balance, cy, robust educational attainment and recognising the interconnectivity of individual and collective well-being. A heightened standard of living extends beyond mere material comforts and encompasses the idea that societal harmony and progress are interdependent. This mutual dependence rests upon the understanding that





Within the intricate web of met- reducing inequalities is crucial for achieving tangible enhancements in the standard of living.

> The sampled metropolises consistevidenced by prolonged life expectanaccessible transportation. However, amid these positive aspects, challenges persist and a prominent concern in the region revolves around housing, particularly in major urban centres across Europe.

> In Europe, life expectancy has shown a remarkable and steady increase since 2002, primarily attributed to advancements in healthcare, improved living standards and overall societal progress. This trend was only disrupted by the advent of the COVID-19 pandemic (Eurostat, 2023f). Across European Union member states, the average life expectancy has reached 80 years (surpassing the global average of 72 years), with Madrid boasting the highest life expectancy at 85.4 years (Eurostat, 2023g). It's important to note the presence of sub-regional disparities across Europe; notably, Eastern Europe exhibits the lowest life expectancy levels within the European Union, with Sofia at 72.2 years (Eurostat, 2023g).

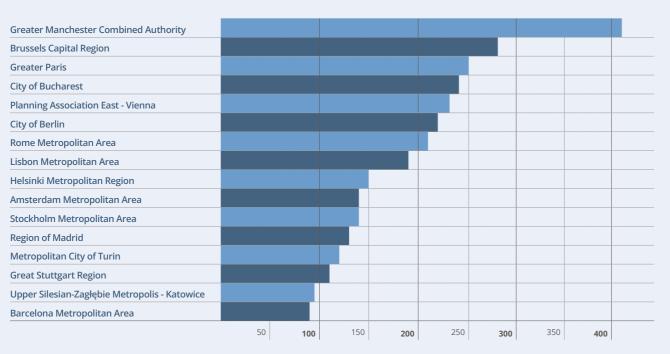
> In alignment with the regional trend, the majority of metropolises in the sample demonstrate notably high life expectancy, averaging around 81.3 years, while the lowest values within the sample originate from Eastern European metropolises: Upper Silesian-Zagłębie Metropolis (Katowice) and Bucharest. Although the increasing life expectancy in Europe is a positive trend, it may also pose challenges to social security systems due to declining birth rates; the lowest figure was recorded in 2020, the lowest since 1960 (Eurostat, 2023h).

> Life expectancy is also closely intertwined with the level of education. Scrutinising enrolment in higher edu-

#### Figure 10

#### higher education enrolment

Source: Own elaboration based on Eurostat NUTS 2 regions except for the Amsterdam Metropolitan Area and Greater Manchester Combined Authority



RATIO OF POPULATION ENROLLED IN TERTIARY EDUCATION

cation sheds light on a region's innovation, economic development and individual well-being. Furthermore, it positively impacts employment prospects, productivity and the efficiency of public administrations within a region (World Bank, 2021). When examining the sampled metropolises, Greater Manchester stands out with the highest ratio of the metropolitan population enrolled in tertiary education, indicating a concentration of esteemed educational institutions in the UK. Closely following are the Brussels Capital Region, Greater Paris and Bucharest, which also boast significant ratios. Conversely, Upper Silesian-Zagłębie Metropolisa (Katowice) and the Barcelona Metropolitan Area have the lowest ratios of total population enrolled in this segment of education. These findings cast light on the distribution of educational opportunities across the European metropolises.

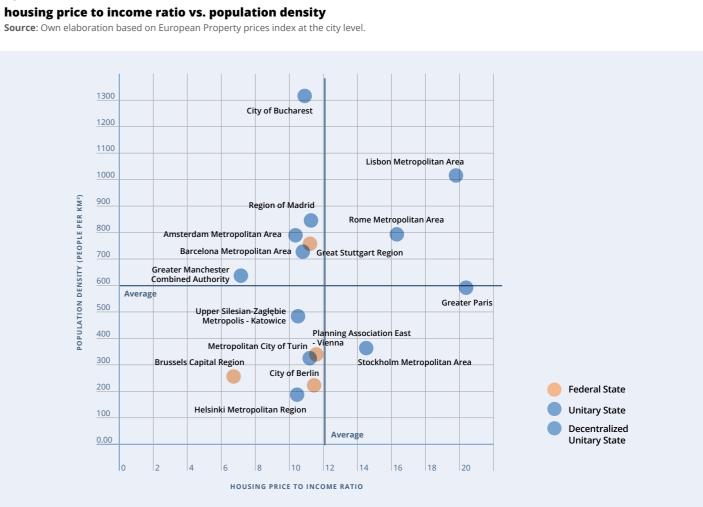
#### Transport and housing

Transportation standards and accessibility have a significant impact on the quality of life. The European Union benefits from well-connected cross-national transport systems, largely facilitated by the European Union's collaborative network and regulations (Urban Transport Roadmaps, 2023). Main urban centres across Europe acknowledge the importance of the transport sector for economic activity, innovation and employment, making it a priority. Many metropolises boast attractive and well-established public transport systems, a strong cycling culture and a high degree of walkability (LSECities, 2023). In terms of the former, the sampled European metropolises generally demonstrate extensive public transport coverage, with 95% of individuals having access to a public transport

stop within a 500-metre walking distance (European Commission, 2020b). Simultaneously, European metropolises continue to grapple with challenges such as traffic congestion, air pollution, high CO<sub>2</sub> emissions and safety concerns (Urban Transport Roadmaps, 2023). These challenges are particularly pronounced as the 2030/50 sustainability goals draw near. They are also closely linked to levels of car ownership, with certain metropolises from the sample still displaying remarkably high car usage despite having alternative transport options (European Commission, 2023b). The prevalence of car dependency indicates potential hurdles in achieving a comprehensive, high-quality, accessible and cost-effective public transportation system that encompasses not only production-oriented aspects but also integrates care-related activities.

#### Figure 11

#### housing price to income ratio vs. population density



Another pivotal aspect of quality of life is housing affordability. In Europe, the success of core cities and their metropolises has led to a surge in demand for urban land, resulting in escalating housing prices and rental rates (LSECities, 2023). The prevailing 'cost-of-living crisis', characterised by steep inflation rates and increasing energy costs, has exacerbated this predicament. In 2022, Europe witnessed record-breaking energy prices (European Council, 2023) and the highest inflation rate in the past decade (Eurostat, 2023i). These economic factors have made it increasingly challenging for individuals and families to secure affordable housing in urban centres, particularly during the post-COVID-19 recovery phase.

Approximately 10.4% of the urban population in the European Union grapples with housing costs that exceed 40% of their disposable income. Over the last decade, housing prices in the European Union have surged by 37%, while rent prices have risen at a relatively lower rate of 16% (Eurostat, 2021e). Moreover, around 45% of the region's population are tenants (European Development Bank, 2020).

When evaluating housing affordability across the sampled metropolises, the outcomes vary. The Lisbon Metropolitan Area and Rome Metropolitan Area, both characterised by higher population densities, grapple with less affordable housing in their primary core cities, ranking behind Greater Paris in this regard. However, despite having below-average population density, the Stockholm Metropolitan Area ranks as the second-worst in terms of housing affordability at the 1.3% in 2021, whereas the global city level.

Characterised by the highest population density, Bucharest, in contrast, demonstrates a more favourable housing price-to-income ratio in its urban core. Conversely, the Brussels Capital Region, despite offering affordable housing in its core city and boasting one of the highest GDP per capita among the sampled metropolises, also faces the challenge of a higher number of people at risk of poverty and social exclusion. These findings highlight the complexities present across the sampled European metropolises when it comes to housing, which appears to be a multifaceted phenomenon influenced by various factors, such as population density and external economic conditions.

#### Inequality

Social cohesion is a critical dimension to consider when assessing the quality of life in any urban environment, particularly at the metropolitan scale where socio-economic disparities can be even more profound. Social cohesion embodies the principles of equality, inclusion and solidarity. It seeks to reduce inequalities and promote integration across multiple dimensions, including income, education, employment, healthcare and access to social services.

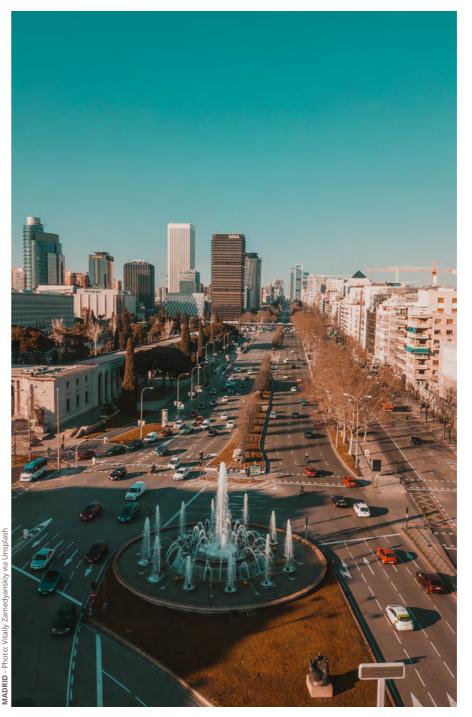
In this context, Europe and the metropolises in the sample perform admirably across key indicators such as literacy rate, internet access and personal safety. However, addressing the prevailing challenges of poverty, social exclusion and income inequality is vital and requires closer scrutiny. This section focuses on two crucial indicators to address the latter in the sampled metropolises: the risk of poverty and social exclusion, and income inequality.

Europe boasts one of the world's lowest poverty rates, standing at average was 5.5% (Metropolis, 2022). Moreover, the European population living in poverty is half that of Latin America and the Caribbean and over three times lower than Asia's poverty rate. While the overall poverty rate is a valuable indicator for understanding the region's general poverty landscape, it may not fully capture the complexities within Europe. Other key metrics, such as the percentage of the population at risk of poverty or social exclusion, can provide more nuanced insights into the dynamics and challenges within the region. This indicator encompasses three conditions: individuals with incomes earning 60% less than the national average, those unable to acquire at least 7 of the 13 predetermined deprivation items (including essentials like an internet connection or having two pairs of properly fitting shoes) and individuals in households with minimal adult work (20% or less) in the past year.

In 2020, 21.7% of the population across the European Union faced this risk (Eurostat, 2021a). However, this significant percentage may have been influenced by the COVID-19

pandemic in 2020, particularly as the unemployment rate increased during that period. Nevertheless, when examining the risk-of-poverty rate at the country level across the European Union, most countries remained stable compared to pre-pandemic rates (Eurostat, 2022a).

Notably, the risk of poverty significantly rises (from 21.7% to 33.9%) for households headed by a single woman (European Institute for Gender Equality, 2022). This heightened



risk for women might be driven by persistent gender inequalities in the labour market, unequal distribution of unpaid care work, limited social policies catering to their needs and cultural norms perpetuating discrimination.

The average rate of the risk of poverty and social exclusion for the sampled metropolises is 18.5%, which is 3.2% lower than the European Union's average. This variance can be attributed to the economic strength of the metropolises, evidenced by their high GDP per capita compared to national averages. However, even with this relatively lower rate, the risk of poverty and social exclusion remains significant, with one in five individuals from the sample metropolises at risk. This elevated rate could be influenced by the fact that the sample includes first-tier metropolises known for their high cost of living, contributing to the challenges faced by vulnerable populations in these areas.

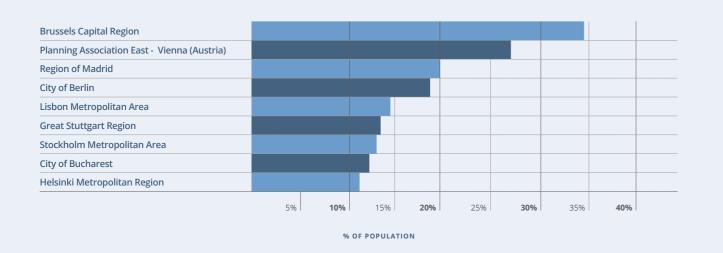
The Brussels Capital Region and Vienna exhibit the highest levels of poverty or social exclusion risk. with rates of 34.3% and 27.5%, respectively. In contrast, the Helsinki Metropolitan Region boasts the lowest risk, with a rate of 12%. It's important to note that the increase in the proportion of the population at risk of poverty or social exclusion in the Brussels Capital Region can be partially attributed to the impact of the COVID-19 pandemic, which led to income losses for individuals (Belgian Statistical Office, 2022). Additionally, the Helsinki Metropolitan Region stands out with a moderate unemplovment rate of 7.7% and lower income inequality measured by the Gini coefficient, compared to the sample's average.

Both the sampled European metropolises and the European Union's overall average demonstrate relatively low income inequality. The

#### Figure 12

#### metropolitan population share at risk of poverty and social exclusion

Source: Own elaboration based on Eurostat data 2018-2020. Data for the Amsterdam Metropolitan Area, Barcelona Metropolitan Area, Greater Manchester, Greater Paris, Upper Silesian-Zagłębie Metropolisa Katowice, Metropolitan City of Turin and Rome Metropolitan Area was unavailable



#### Figure 13

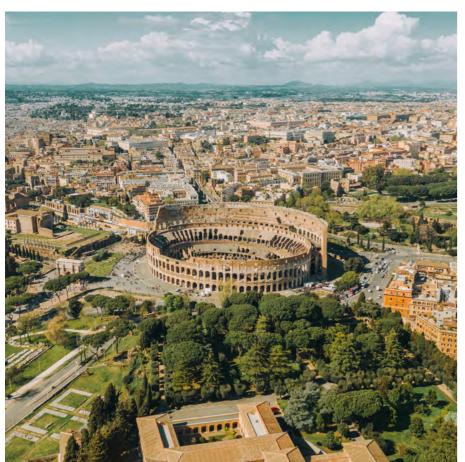
#### metropolitan income inequality

Source: Various local and national statistics offices, OECD and the Metropolis Observatory data 2016-2021. Data for the Amsterdam Metropolitan Area, Barcelona Metropolitan Area, Greater Manchester, Greater Paris, Upper Silesian-Zagłębie Metropolisa Katowice, Metropolitan City of Turin and Rome Metropolitan Area was unavailable. For further details, please refer to Annex 1.

| Metropolitan City of Turin   |     |  |
|------------------------------|-----|--|
| City of Bucharest            |     |  |
| Amsterdam Metropolitan Area  |     |  |
| Barcelona Metropolitan Area  |     |  |
| Rome Metropolitan Area       |     |  |
| City of Berlin               |     |  |
| Region of Madrid             |     |  |
| Great Stuttgart Region       |     |  |
| Helsinki Metropolitan Region |     |  |
|                              | 0.1 |  |

INCOME INEQUALITY INDEX

average Gini coefficient for the core cities of the sampled metropolises is 0.33, while the European Union's Gini coefficient was 0.30 in 2021 (Eurostat,

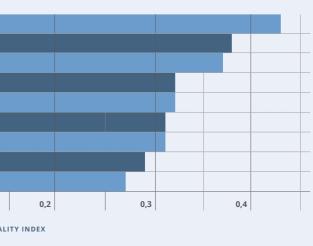


2023b). These findings underscore Europe's regional prominence, as it boasts the world's lowest inequality levels (Chancel, L. et al., 2022).

This balanced income inequality can be attributed to the impact of social benefits and transfers provided by national, regional and local governments to individuals. These benefits encompass various forms of support, including pensions, unemployment benefits, sickness and invalidity benefits, housing allowances, social assistance and tax rebates. In 2021, these social transfers played a critical role in mitigating income inequality among the EU population. Prior to factoring in social transfers (including pensions), the Gini coefficient for income stood at 52.2%. However, after accounting for these transfers, the Gini coefficient significantly decreased to 30.1% (Eurostat, 2023b).

As previously mentioned, the He-Isinki Metropolitan Region demonstrates a low level of income inequality, boasting the lowest Gini coefficient within the sample at 0.27. This outcome aligns with the trend observed in Northern Europe, which stands inequality across Europe (Eurostat, 2023b). The success of the Helsinki Metropolitan Region in this regard can be attributed to effective income redistribution facilitated by a robust social welfare system (Helsinki Metropolitan Region, 2022), a highly educated and skilled population and substantial investment in innovation (European Innovation Scoreboard, 2021).

In contrast, the Metropolitan City of Turin experiences the highest inequality levels within the sample, presenting a Gini coefficient of 0.43. To a certain extent, external factors such as highly centralised unitary political systems, education levels and a benefit-based tax system can offer further context for cases with elevated inequality (Ciani et al., 2019). The Metropolitan City of Turin also exhibits a relatively low enrolment ratio in higher education (125.3) and a low housing affordability ratio (11.2), potentially contributing to the overall inequality. Within this analysis, it's important to



account for the complexity of the territory encompassing the metropoas the subregion with the lowest litan area of Turin, which comprises more than 320 municipalities ranging from small mountain villages to highly industrialised urban centres.

> Despite the relatively low-income inequality among the sampled metropolises, nearly one in five individuals still face the risk of poverty and social exclusion. To address this issue and in pursuit of cohesion policy, the European Union extends support through the European Social Fund. Additionally, 'Social inclusion & combatting poverty and discrimination' stands as one of the 11 priorities within the European Union's Integrated Territorial Investment, fostering collaboration among local governments through a functional territory perspective. Prioritising access to these funds for metropolises is paramount in effectively addressing these socioeconomic challenges. This becomes especially relevant considering the close connection between these issues and the dynamics of agglomeration and urbanisation.

## environmental sustainability

The European Union has steadfastly committed to tackling climate change by aiming for a 50% reduction in greenhouse gas emissions by 2030 and achieving climate neutrality by 2050. Metropolises play a pivotal role in achieving these ambitious objectives. While initiatives like the European Green Deal and the New European Bauhaus might not explicitly mention metropolises, several financial mechanisms explicitly embrace a regional approach and actively involve Local and Regional Authorities as recipients or beneficiaries of financial support. This recognition underscores the significant impact that metropolises, with their scale, territorial dynamics

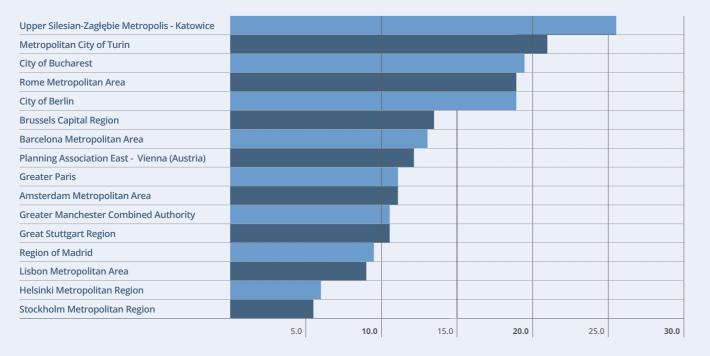
and economic influence, can have in addressing and mitigating the effects of climate change and it acknowledges the ongoing metropolitan efforts to contribute to these goals.

This section assesses the environmental sustainability performance of the sample based on pertinent indicators.<sup>7</sup> Carbon emissions serve as a crucial indicator, as emission inventories are essential for supporting the European Union's decarbonisation objectives. The sampled metropolises exhibit a notable per capita rate of carbon emissions, making it a paramount concern in tackling climate change. This influence drives local, national and global policy actions across the

region. Overall, the sample's average in 2018 was 7 metric tons, significantly surpassing the world average for the same year (4.8 metric tons) and exceeding the European Union's average of 6.4 metric tons.

Air quality also functions as an indicator to gauge the impact of various climate and environmental measures. In this report, air quality is assessed as the level of air pollution measured in terms of 'the average level of particulate matter 2.5 in the air'. In 2020, the average air pollution across the sampled metropolises stood at 12.9 µg/m<sup>3</sup> for PM2.5, with some metropolises experiencing higher levels of exposure. In comparison,

Figure 14 air pollution in PM2.5 in 2020 Source: Own elaboration based on OECD Atlas Viewer



AVERAGE LEVEL µG/M<sup>3</sup>

Figure 15

share of Green Areas (%) in 2021

Source: Own elaboration based on OECD Stats (n.d.)

| Stockholm Metropolitan Region                 |   |    |    |    |
|---|---|----|----|----|
| Upper Silesian-Zagłębie Metropolis - Katowice |   |    |    |    |
| City of Berlin                                |   |    |    |    |
| Greater Manchester Combined Authority         |   |    |    |    |
| Helsinki Metropolitan Region                  |   |    |    |    |
| Great Stuttgart Region                        |   |    |    |    |
| Lisbon Metropolitan Area                      |   |    |    |    |
| Brussels Capital Region                       |   |    |    |    |
| Greater Paris                                 |   |    |    |    |
| Amsterdam Metropolitan Area                   |   |    |    |    |
| Rome Metropolitan Area                        |   |    |    |    |
| Barcelona Metropolitan Area                   |   |    |    |    |
| Planning Association East - Vienna (Austria)  |   |    |    |    |
| Region of Madrid                              |   |    |    |    |
| Metropolitan City of Turin                    |   |    |    |    |
| City of Bucharest                             |   |    |    |    |
|   | 5 | 10 | 15 | 20 |

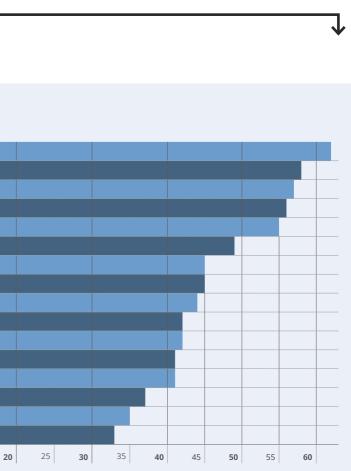
% OF GREEN AREAS

<sup>7</sup> The environmental sustainability dimension is made of eight indicators: air quality, carbon emissions (CO, per capita), car ownership, green space (sq. meter per capita), waste generated

per capita (kg per capita), wastewater collection coverage (% of population), renewable energy use and days of strong and very strong heat stress.

the European Union has established a limit of 25 µg/m<sup>3</sup> as the annual value for particulate matter. According to the European City Air Quality Viewer Classification, a value of 12.9 would be categorised as 'moderate'. However, it is essential to highlight the cases of Upper Silesian-Zagłębie Metropolis (Katowice) and the Metropolitan City of Turin. Both metropolises approach the pollution limit set by the European Union and maintain the highest car ownership rates—700 and 640 cars per 1000 inhabitants, respectively.

Car ownership provides insights into the number of private vehicles per capita and can serve as a proxy for understanding transport patterns



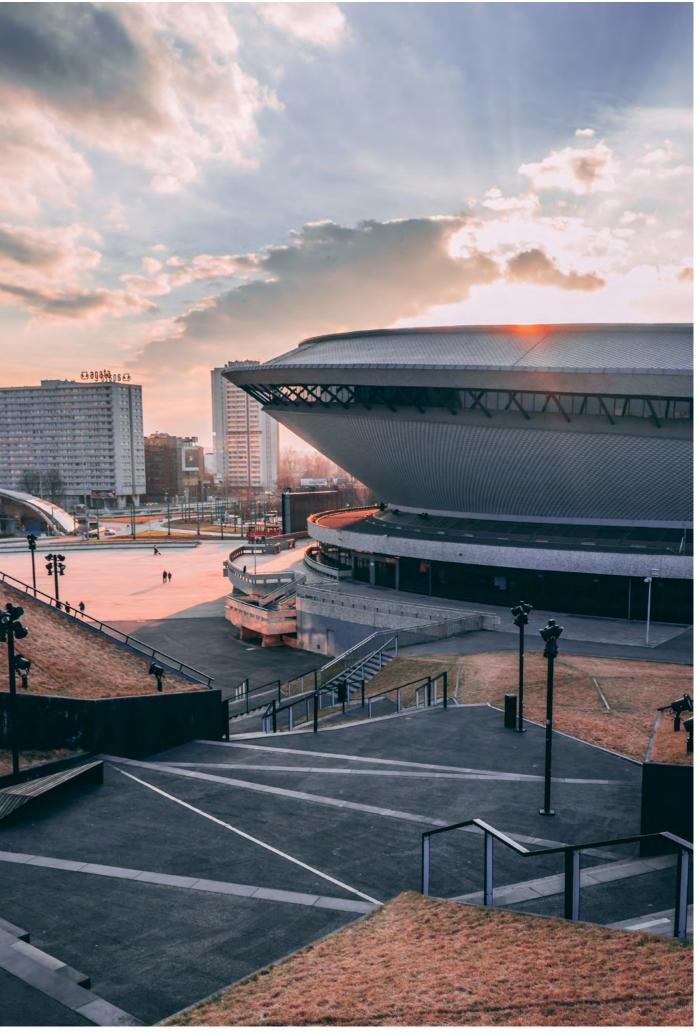
the selected metropolises, the average car ownership stands at 435 cars per 1000 inhabitants, notably lower than the European Union average of 560 vehicles per 1000 inhabitants. This discrepancy might offer insights into the quality of the public transportation systems in the sampled metropolises. Only three metropolises—Upper Silesian-Zagłębie Metropolis (Katowice), Rome Metropolitan Area and the Metropolitan City of Turin—surpass the regional average in terms of the impact of cars on air quality and carbon emissions.

to achieving decarbonisation objectives and are also closely tied to improved quality of life and well-being. Among the sampled metropolises, five boast green areas that comprise at least 50% of their total land area. On average, these metropolises have a green space share of 46%, slightly surpassing the European

and their environmental impact. In average of 42% (European Environment Agency, 2022).

Addressing climate change is an urgent imperative that requires a comprehensive framework to assess its impacts on European metropolises. Considerations span from heatwaves to flooding and droughts. Metropolises, due to their scale and economic dynamics, wield significant influence in both exacerbating and mitigating climate change. Collaborative efforts that transcend local administrative boundaries are pivotal. While the European Union has implemented policies and allocated resources for Green spaces are fundamental climate transition at all levels, the magnitude and urgency of this challenge necessitate governance models that enable the European metropolitan ecosystem to strategise and synchronise impactful measures. These initiatives encompass actions like renaturalising public spaces and alleviating tensions between rural and urban domains.





# metropolitan europe in a nutshell



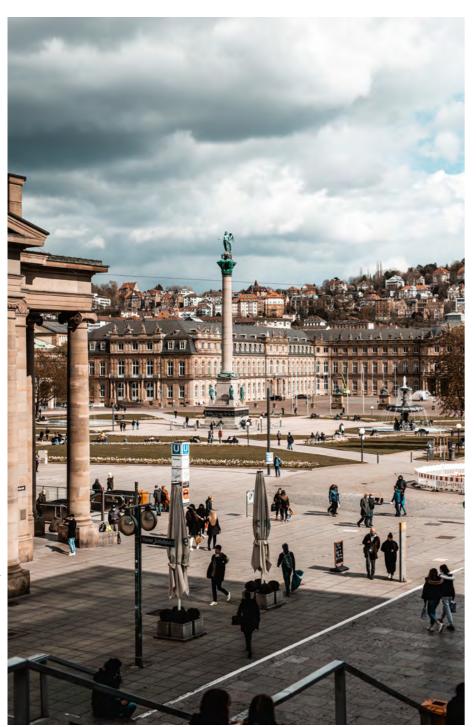
This European Report on metropolises, based on a sample of 16 metropolises, draws a complex and nuanced picture of the economic, ecological its affiliated bodies, which possess and social challenges and opportunities facing metropolises in Europe. ordinate and endorse urban policies The report also highlights the importance of two fundamental elements ranging from local to national and to build a common metropolitan ap-



This report complements the three proach to urban challenges at the European level. Firstly, the historical administrative fragmentation of the region poses specific challenges, par-Africa (2019), Asia (2021) and Pan- ticularly regarding data gathering and the efficiency of public policies. Secobservations in each region, a com- ondly, rapid urban growth, especially in third-tier cities, has transformed urgent need to adopt a metropolitan the scale of urban challenges, which now transcend the local level and its jurisdictional boundaries and take on to meet the goals of global agendas, a supramunicipal scope.

The absence of a metropolitan vision at the European level is noteworable local authorities to address the thy in its own right, but it becomes even more pronounced when compared to other regions. Europe stands out due to the presence of a distinctive institution compared to the other regions: the European Union and the ability to advocate, finance, coacross different issues and scales, regional. However, despite the potential benefits that an institution like the European Union could offer, upon analysing the facets of this report, the metropolitan vision appears to be of anecdotal significance.

The lack of comparable data at the metropolitan scale is one of the most evident consequences of the scarcity of a metropolitan perspective at the European level. Currently, data collection occurs at various scales that often do not align with existing me-



inconsistencies. One example of this is that two widely used data sources by established institutions with high influence in the policy-making process, such as the European Union and the OECD, use different definitions of what could be a metropolis. The European Union employs the Nomenclature of Territorial Units for Statistics (NUTS) (Eurostat, 2021b), while the OECD employs Functional Urban Areas (FUAs) to identify agglomerations and gather supra-municipal data (OECD, 2019a). Only a handful of European metropolises, including primary and capital ones, generate their own data. It is difficult to compare or identify trends across European cities due to their use of different methodologies and indicators, which hinders the development of a unified European approach to policy-making.

tropolises, leading to methodological

However, the opportunities and challenges have not been left unanswered by governments, which have created locally tailored structures to address these challenges within their legal and administrative capacities. This has resulted in a wide variety of governance structures, ranging from formal metropolitan and regional authorities to voluntary collaboration agreements between municipalities. This diversity has enabled tailoring responses to the unique challenges in each region. This aligns with conclusions drawn in prior metropolitan reports, which suggest that a one-fits-all metropolitan model is not applicable. The diversity and the utilisation of effective locally adapted solutions also bring about certain disadvantages to building a robust, flexible and coherent policy framework at a European scale.

The sampled metropolises showed impressive progress in reducing poverty, narrowing income gaps, increasing life expectancy and improving transportation access. In spite of that, one-fifth of the population faces poverty or social exclusion. A particularly striking manifestation of this vulnerability is the rising unaffordability of housing in these cities. Escalating housing costs not only impacts well-being but also exacerbates social disparities and increases land consumption as a consequence of inhabitants having to move their residences far from their working location.

The need to mainstream the gender perspective in all metropolitan policies is crucial. In the case of the sampled metropolises accessing consistent data that incorporates this vision in its gathering, processing and analysis proved to be a paramount challenge. In most cases, the primary references that could be accessed were at the national level. This situation is compounded by a dearth of gender-sensitive knowledge at the metropolitan level, which impedes the formulation of effective public policies that adequately tackle gender-related issues at this scale. All together showcase worrying trends. One of them is the under-representation of women in elected positions within local councils. Another evidence of this imbalance is that households led by women in the sampled metropolises are facing an elevated risk of poverty and social exclusion despite the high quality of life standards that characterise the region.

The sampled metropolises shine as hubs of economic prosperity and opportunity. Their average GDP per capita is nearly double the European Union average and surpasses national averages. However, fixating solely on GDP-related indicators could result in overlooking other dimensions of quality of life, such as income inequality or environmental impact. Therefore, new approaches to measuring economic performance that incorporate the complexity of overlapping networks of information, goods and services characteristic of the metro-

politan scale are needed. These new approaches should aid in constructing a coherent and flexible framework that assists policy-makers in designing improved and more inclusive metropolitan policies.

The dramatic impacts of climate change are already a reality in cities worldwide. To mitigate these impacts, the European Union has established goals aimed at achieving carbon neutrality and enhancing adaptive strategies in response to climate change and its effects on people's quality of life. In the sampled metropolises, certain indicators such as car ownership, air quality and access to a public transport stop within 500 metres align with efforts to mitigate these effects. However, given the complexity and scale of this challenge, the relatively high performance of those indicators seems to be insufficient. Similar to other complex policies, the collaborative development of comparable datasets across the European region is of paramount importance in addressing this challenge.

Examining different aspects of European metropolitan realities underscores the significance of promoting strategies that foster data comparability. This approach could provide a robust framework for clearly examining various metropolitan dimensions such as urban growth, the climate crisis, gender inclusivity or economic trends. In addition, comprehensive and inclusive data offer insights that can support the coordination of European metropolitan policies, fostering cooperation and facilitating peer-topeer learning across the entire region. The shift towards data comparability has the potential to improve decision-making and evidence-based policy design. The strategic use of inclusive and standardised data emerges as a critical tool in crafting impactful and inclusive policies at local and European scales that resonate globally.

### recommendations

Enhance data availability to improve monitoring and comparability. The absence of standardised data across metropolises creates a substantial challenge when seeking to establish robust comparisons and peer-to-peer learnings. Despite commendable efforts by, among other institutions, Eurostat and the OECD, collecting and managing data at the metropolitan scale remains a difficult task. It becomes imperative for metropolitan, municipal, regional and national governments to prioritise this as a key concern. Urban-focused networks and supranational institutions should also take the lead and allocate resources to bolster this goal, enabling the measurement of metropolitan-scale issues and tracking their evolution.

Update the current legal and policy frameworks on both national and European scales that acknowledge the importance of the metropolitan scale as a legitimate territorial entity with substantial capabilities. This political, legal and economic recognition within the context of urban planning is crucial for achieving sustainable and inclusive development goals outlined by global and national agendas. Creating these new frameworks is pivotal, as it effectively helps mitigate the negative impacts stemming from neglecting the fact that urban challenges often transcend current administrative boundaries and require tackling on a larger territorial scale. These frameworks must, in all cases, encourage coordination, cooperation and funding of public policies that can effectively address these metropolitan-scale challenges. Another goal of these frameworks should be their coordination with existing frameworks, both territorial and sectoral, to avoid duplicated efforts and, conversely, gaps in responsibility. Crafting these frameworks is a complex process that demands political will to acknowledge that many urban challenges are increasingly metropolitan in nature.

Innovate in the formulation of multi-sectoral policies to comprehensively address metropolitan realities. Metropolitan policies, given their intricacy and complexity, demand a more ambitious viewpoint that extends beyond a narrow range of indicators. This is particularly relevant when considering the inherent diversity of dynamics within the metropolitan scale and their interdependence with other territorial scales. To do so, is necessary to advance in fresh approaches in the design of policies addressed to tackle issues such as housing affordability, climate crisis or economic analyses beyond concepts the GDP. One starting point to achieve that goal is by leveraging the opportunities provided by technology to generate quantitative and qualitative data directly from the city and its inhabitants, always ensuring the privacy, comparability and anonymity of these datasets. In the innovative formulation of policies, another important element is to promote civic engagement, not only in terms of the diversity of actors involved but also, and particularly, in terms of monitoring and incorporating their contributions, ideas and solutions made through these engagement actions.

## 4 Take

Take immediate action to prioritize the integration of a gender perspective into all policies. Metropolitan leaders should confront the critical challenge of obtaining consistent data and instituting participatory processes that incorporate this perspective into the design and decision-making of metropolitan policies. This is an ambitious goal that transcends the policy frameworks that influences urban policies that is characterised by a lack of gender-sensitive knowledge at the city, metropolitan, and regional levels. To advance on this, capacity-building initiatives must be a core component of this strategy, equipping local governments with the tools and expertise needed to effectively mainstream metropolitan gender perspective.

5 Add er n mar

Address multilevel governance gaps and support smaller metropolises. In light of Europe's urbanization dynamics marked by significant territorial fragmentation, it's imperative to shine a spotlight on second and third-tier metropolises. These smaller cities are emerging as crucial players in the region's economic and social landscape. Failing to directly address this reality from a broader perspective and tackle their unique challenges could have far-reaching consequences, for instance, suboptimal governance or limited administrative capacities to manage their growing populations. Consequently, this could result in the exacerbation of existing social and economic disparities within and between regions. To effectively bridge these governance gaps and empower smaller metropolises, a comprehensive approach is essential. Policymakers should consider not only the design and implementation of appropriate policies but also the allocation of adequate financial resources.

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# Annex

#### annex 1

sampled metropolises database and methodological notes

The European Metropolitan Report is area, polycentricity index, global cities grounded in the methodological framework established by the Metropolis Observatory in 2017. Initially composed of 38 indicators spanning six dimen- of poverty and social exclusion and sions —namely, governance, economic development, social cohesion, gender internet download speed. equality, environmental sustainability and quality of life— this observatory the 16 metropolises within the sample. laid the foundation for analysis.

In this study, 30 observatory indicators were examined and an additional seven indicators and indexes were introduced to facilitate a more detailed analysis. These additions include the and notably, the scale at which meastotal built-up area by functional urban urements were taken.

| METROPOLISES                                   | LOCAL<br>GOVERNMENTS<br>COMPRISED | COORDINATION<br>MECHANISM  | NO. OF<br>AGGLOMERATIONS <sup>8</sup><br>COMPRISED | COUNTRY            | NATIONAL<br>POLITICAL SYSTEM <sup>9</sup> | TYPE AND NUMBER OF<br>SUBNATIONAL GOVERNMENTS <sup>10</sup>   |
|--|-----------------------------------|----------------------------|--|--------------------|---|---|
| Amsterdam<br>Metropolitan<br>Area              | 30                                | Collaboration<br>agreement | 8  | The<br>Netherlands | Decentralised<br>Unitary State            | Municipalities (352),<br>regional provinces (12)  |
| Barcelona<br>Metropolitan<br>Area              | 36                                | Metropolitan<br>authority  | 1  | Spain              | Unitary State                             | Municipalities (8.131),<br>county councils (52),<br>autonomous cities (2),<br>autonomous communities<br>(17)  |
| City of Berlin                                 | 111                               | Collaboration<br>agreement | 1  | Germany            | Federal State                             | Municipalities (10.799)<br>including cities (2.055),<br>counties/ intermediary<br>governments (294),<br>regions (16)  |
| Brussels Capital<br>Region                     | 19                                | Regional<br>Authority      | 7  | Belgium            | Federal State                             | Municipalities (581),<br>intermediary level/<br>provinces (10), regions (3),<br>communities (3)   |
| City of Bucharest                              | 2                                 | Collaboration<br>agreement | 2  | Romania            | Unitary State                             | Municipalities (2.861),<br>towns (217), cities (103),<br>counties (41)  |
| Greater<br>Manchester<br>Combined<br>Authority | 10                                | Metropolitan<br>authority  | 7  | United<br>Kingdom  | Federal State                             | Local authorities (398);<br>England: county councils<br>(24), metropolitan<br>district councils (36),<br>non-metropolitan district<br>councils /local authorities<br>outside of big cities (181),<br>and unitary authorities (a<br>single tier local authority<br>(59). |

<sup>8</sup> Since 2010, Eurostat has identified several agglomerations with at least 250,000 inhabitants across the European Union. These agglomerations are determined using the Functional Urban Areas methodology. An agglomeration is represented by at least one NUTS 3 region; if more than 50% of the population resides in adjacent NUTS 3 regions, it is designated as

a 'metropolitan region'. The number of listed agglomerations corresponds to those functional urban areas that collectively account for more than 50% of the population and are linked to the metropolises in the sample. This number can provide insights into the polycentric or monocentric nature of each metropolis.



index, European quality of government, gender equality index, days of strong heat stress, population at risk deviation of the national average of

These indicators were computed for However, it is important to note that data availability varies in terms of the most recent year for which information is accessible, sources used, methodologies applied, languages utilised

- <sup>9</sup> Based on European Union country profiles
- <sup>10</sup> Based on Council of European Municipalities and Regions (CEMR)

<sup>11</sup> Data for Berlin refers to the city-state of Berlin, rather than to Hauptstadtregion Berlin-Brandenburg that encompasses two federal states.

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| METROPOLISES  | LOCAL<br>GOVERNMENTS<br>COMPRISED | COORDINATION<br>MECHANISM   | NO. OF<br>AGGLOMERATIONS <sup>®</sup><br>COMPRISED | COUNTRY  | NATIONAL<br>POLITICAL SYSTEM <sup>®</sup> | TYPE AND NUMBER OF<br>SUBNATIONAL GOVERNMENTS <sup>10</sup>  |
|---|-----------------------------------|---|--|----------|---|--|
| Greater Paris   | 131                               | Metropolitan<br>authority   | 8  | France   | Unitary State                             | Municipalities (34.965),<br>departments (96),<br>overseas departments (5),<br>regional authorities (18)                  |
| Helsinki<br>Metropolitan<br>Region                      | 26                                | Regional<br>Authority<br>(Regional council<br>acting as joint<br>authority) | 1  | Finland  | Unitary State                             | Municipalities (309),<br>regional councils (18),<br>autonomous province (1)  |
| Upper Silesian-<br>Zagłębie<br>Metropolis<br>(Katowice) | 41                                | Metropolitan<br>authority   | 5  | Poland   | Unitary State                             | Municipalities (2.477),<br>counties (314).<br>municipalities with special<br>status (66), regions (16)                   |
| Lisbon<br>Metropolitan<br>Area                          | 18                                | Metropolitan<br>authority   | 1  | Portugal | Unitary State                             | Parishes (3.092),<br>municipalities (308)<br>and autonomous regions<br>(2)   |
| Region of Madrid  | 23                                | Collaboration<br>agreement  | 1  | Spain    | Unitary State                             | Municipalities (8.131),<br>county councils (52),<br>autonomous cities (2),<br>autonomous communities<br>(17)             |
| Metropolitan City<br>of Turin                           | 312                               | Metropolitan<br>authority   | 1  | ltaly    | Unitary State                             | Municipalities (7.904),<br>provinces/intermediary<br>level (107), including<br>metropolitan cities (14),<br>regions (20) |
| Rome<br>Metropolitan<br>Area                            | 121                               | Metropolitan<br>authority   | 1  | Italy    | Unitary State                             | Municipalities (7.904),<br>provinces/intermediary<br>level (107), including<br>metropolitan cities (14),<br>regions (20) |
| Stockholm<br>Metropolitan<br>Area                       | 26                                | Regional<br>Authority   | 1  | Sweden   | Unitary State                             | Municipalities (290),<br>county councils (11),<br>regions (20)   |
| Great Stuttgart<br>Region                               | 179                               | Regional<br>Authority   | 6  | Germany  | Unitary State                             | Municipalities (10.799)<br>including cities (2.055),<br>counties/ intermediary<br>governments (294),<br>regions (16)     |
| Planning<br>Association East<br>- Vienna                | 291                               | Regional<br>Authority   | 5  | Austria  | Federal State                             | Municipalities (2.095),<br>regions (9)   |

The data utilised in this report is based on information acquired at the most relevant level corresponding to the metropolitan scale. To ensure uniformity and comparability of the data, priority was given to key databases such as Eurostat and the OECD, with a focus on the most up-to-date avail-

able data. Supplementary sources of information from national and local statistics offices were also incorporated. For Greater Manchester Combined Authority, the only non-European Union metropolitan area in the sample, its population was added to total of the european population.

Regarding the fiscal decentralisaropean context is complex. The varition data was sourced from the World ation in information about European Observatory on Subnational Governmetropolises can be attributed to varment Finance and Investment (OECD ious factors: and UCLG, 2019). However, consolidated information on fiscal autonomy was not available and data from different sources were used as indicators. Budget data at the metropolitan level was generally not available, so city-level data and population estimates were used to estimate the budget per capita. It should be noted that the available fiscal autonomy and budget per capita data may be from different years, cross-national comparisons. making direct comparisons difficult. Lack of Direct Recognition: Euro-

Housing affordability rely on city-level data as a proxy for the metropolitan level due to data collection challenges at the municipal level. While this approach provides a useful approximation, it may not fully capture the nuances and disparities within the metropolitan area. Therefore, it's important to consider that metropolitan realities may differ from city-level data alone.

At the national level, additional data was collected for the 14 countries within the sample. This data encompasses factors such as population, number and types of subnational governments, allocated competencies across different government tiers, political system, national GDP and subregional distribution. Only results from the most relevant indicators have been included in this report. For further reference, the complete dataset along with information on sources and years can be accessed through this link.

The lack of standardised data across metropolises poses a challenge when establishing robust comparisons. Instances where comparability was uncertain have been highlighted throughout the report. Despite commendable efforts by Eurostat and the OECD, acquiring and handling data at the metropolitan scale within the Eu-

- Diverse Nature of European Metropolises: Due to significant territorial and administrative fragmentation, metropolises often consist of multiple subregional governments. Their size falls between that of core cities, greater cities and federal or state regions. Some metropolises even span across multiple countries, further complicating
- pean metropolises often lack direct recognition and importance at both the national and European Union levels. This lack of explicit mention in subnational competency frameworks or European Union policies and funds can lead to insufficient prioritisation for data collection and decision-making at the metropolitan scale.
- **Changing Statistical Methodolo**gies: Shifting from the urban-versus-rural dichotomy to a more inclusive approach that considers the urban-to-rural continuum has led to a focus on Functional Urban Areas (FUAs) and NUTS 3 regions. While these methods explain agglomerations and align relatively closely with the metropolitan level, they might overlook the specific roles of existing metropolises and the need for dedicated data collection.

The OECD and the Joint Research Centre of the European Commission collaborated to harmonize the methodology for identifying metropolises in Europe. While Eurostat uses the term 'metropolitan regions', the OECD refers to them as 'metropolitan areas'. Nonetheless, they concur on the methodology for delineating metropolises.

The methodology involves considering NUTS 3 regions or combinations of NUTS 3 regions that represent ag-

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glomerations with at least 250 000 inhabitants. These agglomerations are identified using the Functional Urban Area (FUAs) method: 'Each agglomeration is represented by at least one NUTS 3 region and if more than 50% of the population in an adjacent NUTS 3 region also resides within the agglomeration, it is included in the metropolitan region' (Eurostat, 2021).

On the other hand, the OECD clarifies that their 'metropolitan areas' are aggregations of grid cells and their boundaries do not align with local administrative units or statistical enumeration areas. While representing urbanisation functionalities across territories, they do not correspond to existing metropolises or their metropolitan/regional authorities. It is worth noting that the data available for 'metropolitan areas' in the OECD. stat portal corresponds to the previous version of the Functional Urban Areas and this dataset is no longer updated. Instead, the OECD.stat now

uses the 'City Statistics dataset', which provides the most current version of FUA and city indicators but does not refer to metropolitan areas.

In Eurostat's regions and cities overview, different classifications and typologies, including 'metropolitan regions', 'cities' and greater cities', are included. European metropolises can fit within both typologies, at least based on the sample considered for this report.

To sum up, the data available for European metropolises can potentially be misleading. Moreover, the usage of different concepts -- even when referring to the same methodology— can lead to further confusion and blur the distinction between existing metropolises within the diverse spectrum of governance structures. Consequently, the complexities of European metropolises' governance, the evolving statistical methodologies and the need for direct recognition all contribute to the information disparity surrounding them.

#### annex 2

### main characteristics of metropolises governance models

#### COLLABORATION AGREEMENT

This concerns both vertical coordination and voluntary cooperation models among local governments. Attributes of vertical coordination within collaboration agreements:

- Metropolitan policies are implemented within existing tiers of government, primarily municipalities.
- The allocation of funds, representation and jurisdictional authority depends on the subnational-territorial structure of the country.
- The execution of metropolitan policies relies on self-sustained funding and direct representation.
- There is no explicit acknowledgement of the metropolitan reality, which might diffuse the scope into distinct policies and institutions.

#### Attributes of voluntary cooperation:

- This model possesses a lower level of institutionalisation.
- Different local representatives organize themselves on an independent basis.
- It represents the most adaptable manner of functioning, employing consultative mechanisms and areas of consensus for reaching agreements.
- This can manifest as associations of municipalities or strategic planning associations.
- Due to a non-binding framework, they could be susceptible to political volatility and may not achieve predefined objectives.
- Owing to their voluntary nature, the accountability of their decisions and proposals can be intricate. Similarly, the legitimacy of these decisions might be called into question.

#### This refers to institutionalised metropolitan bodies:

Metropolitan authorities

- · Encompass the highest echelons of political acknowledgement.
- Due to the broad and diverse legitimate interests of metropolitan stakeholders, its establishment entails an intricately woven procedure.
- Mitigates institutional fragmentation through a configuration that addresses metropolitan complexities cohesively.
- Despite its efficacy, it incurs substantial economic outlays and exhibits rigidity towards evolving urban dynamics.

Manifests in two potential modes: a unitary metropolitan municipality or an indirectly elected secondary governing body that upholds the municipal framework.

#### Sector-based metropolitan agencies:

- Plan and manage a single service with a technical rather than a political nature.
- Indirect model of representation with mixed funding from fees and transfers.
- Effective for the provision of specific services but has a risk of loose insight into metropolitan reality and a lack of cooperation with other sectorbased agencies that operate in the same territory.

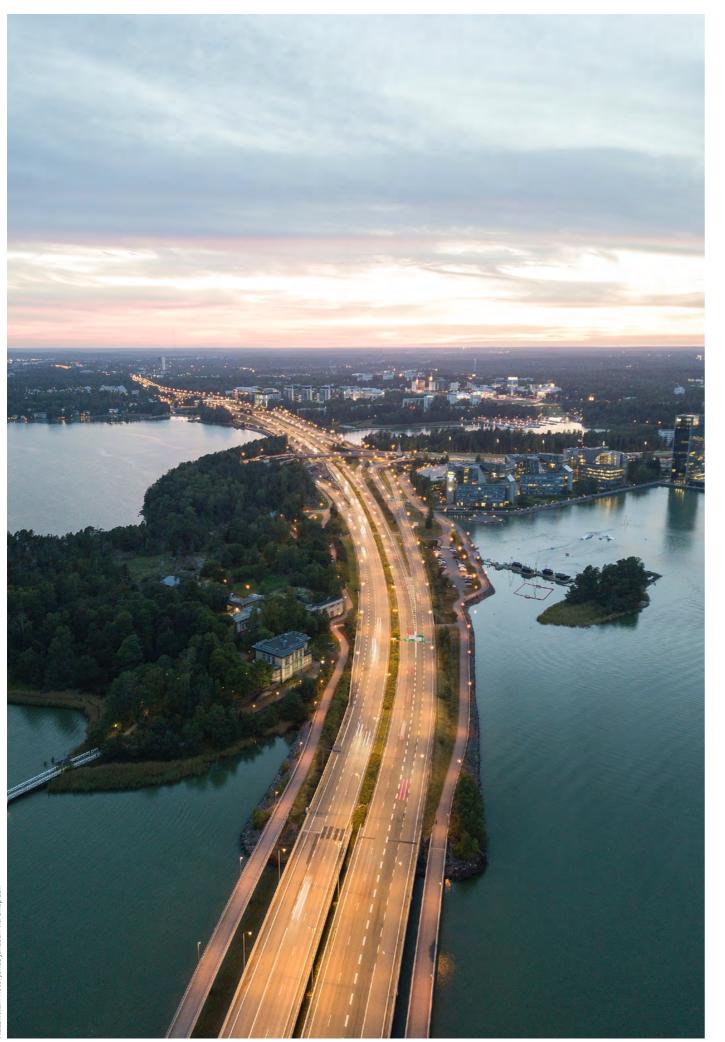
## METROPOLITAN BODIES: AUTHORITIES AND AGENCIES

#### **REGIONAL AUTHORITY**

This relates to established regional tiers that would collectively bear responsibilities spanning the core cities, their metropolitan areas and other clusters located within the regional boundaries.

#### Some of their features are:

- A greater number of territories included compared to metropolitan authorities.
- Often necessitate dedicated governance bodies, particularly when integrated into a unitary national political context or involving regional authorities in federal contexts.



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