01.

METROPOLITAN AREAS
THE COMPLEXITY OF THE METROPOLITAN AGE

1.

INTRODUCTION

The reality of the 21st century shows that the world has not yet adequately prepared nor adapted to meet the challenges of the 'metropolitan age'. An ever more integrated global system of cities, megacities, urban regions and corridors is reshaping the urban landscape and the future of our societies. Certain trends present critical questions for metropolitan areas worldwide. These include urbanization, globalization, regional conflicts, increasing inequalities, as well as the threat to environmental sustainability, the impact of new technologies and rising citizen demands for democracy. The most urgent of these questions is: 'How can metropolitan cities contribute to prosperity, equality, safety and a higher quality of life in an increasingly urbanized world, without jeopardizing our planet's natural resources?'

The pace and pattern of urban growth have triggered the rise of a 'metropolitan scale'. As a result, most growing cities now span several municipal territories and other political boundaries. At the same time, urbanized areas are converging into integrated or functional labour markets and communities of shared assets and potential common interests. Now more than ever, residents of metropolitan areas adopt an 'urban mindset'.[1] Yet higher tiers of government have been slow to revise and upgrade the boundaries in response to this rapid settlement growth and population movement and change. It is essential for governments to foster leadership, strategies and governance that – in line with the principles enshrined in the global development agendas adopted by the international community – can manage this growth in an inclusive, equitable and effective way.

Metropolitan areas are where many of the world's most pressing problems can be resolved. As this chapter illustrates, these areas account for the majority of global economic output and offer real opportunities to address poverty, and socio-economic vulnerabilities and imbalances.[2] Their capacity for density, connectivity and efficiency also raises the prospect of de-coupling growth from wasteful energy use, land consumption and environmental damage. Meanwhile their spatial forms can enable a more integrated systems-led approach to smarter and fairer

BOX 1.1 METROPOLITAN AREAS SINCE HABITAT I: KEY FIGURES[3]

- There were 503 metropolitan areas with more than one million inhabitants in 2015: this number is growing, in absolute terms, by approximately ten metropolitan areas per year. In 1995, the year before Habitat II took place, there were 305; 20 years earlier in 1975, at the time of Habitat I, there were just 162.
- The 500 most populous metropolitan areas today are home to over 1.6 billion people. Just nine of them have lost population since Habitat I. Glasgow and Budapest have lost the biggest share, while the planned cities of Nay Phi Taw and Shenzhen are among the fastest growers.
- There were just five megacities of more than ten million inhabitants at the time of Habitat I – Tokyo, Osaka, Mexico City, New York and São Paulo. Today there are over 30, three quarters of them in the Global South.[4] Nearly half of these had populations of fewer than five million inhabitants 40 years ago.

BOX 1.2 DEFINING METROPOLITAN AREAS

The definition of 'metropolitan areas' is complex and much debated, because such areas are still evolving and encompass diverse forms and processes. Two general definitions prevail. The first describes an area that is being continuously built-up and reaches a certain level of density outside the political boundary of the city. The second defines the wider urban settlement system, including those towns and villages that are highly dependent on the main urban centre or group of centres. According to the OECD, an area outside the core city is part of a metropolitan area if more than 15% of its employed residents commute into the city.[8] This chapter uses the term 'metropolitan area' to encompass both concepts: the physical contiguous urban area and the actual pattern (i.e. the functional geography) of its labour market. Accordingly, it defines metropolitan areas as 'functional urban agglomerations', so as to take into account the movement and relations of people in their daily lives.[9] However, Metropolis - the World Association of the Major Metropolises and UCLG consider metropolitan agglomerations with a demographic threshold of one million inhabitants (although in Europe, cities of more than 500,000 inhabitants could also be considered metropolises).

The range of terms used to describe metropolitan processes often conflate different factors of function, scale, spatial form and level of development:

- **megacities** are widely understood to include cities with a population of over ten million;
- **meta-cities** and **megaregions** have both been used to describe regions with more than 20 million people.[10]

Some terms insist on a more functional dimension:

- **city region** often signifies a regional tier of authority;
- **metropolis** implies a single metropolitan area which is a major centre of economic activity.

Care needs to be taken when selecting and using these terms. Failure to consider the nuances has meant many international benchmarks of cities' size and development lack the internal coherence needed for both scientific comparison and policy-making. In this chapter, 'metropolitan area' is the preferred terminology, while 'region' generally denotes a continent or sub-national level of government (federated state, province or department).

development.[5] One of the main contributions of this chapter is to illustrate how governments can better engage metropolitan areas through a more integrated approach, in order to maximize synergies within and between them, as well as with other cities and territories.

This chapter reviews existing evidence of metropolitan development to date, in terms of governance, economic development, sustainability and quality of life. This review emphasizes the rapid pace of change experienced in most metropolitan areas, and aims to offer clarity about the different geographies, definitions and drivers of metropolitan growth, as well as its opportunities and threats. Throughout, it showcases examples of positive and less positive reforms and experiments from around the world. Finally, the chapter concludes with 11 key messages.
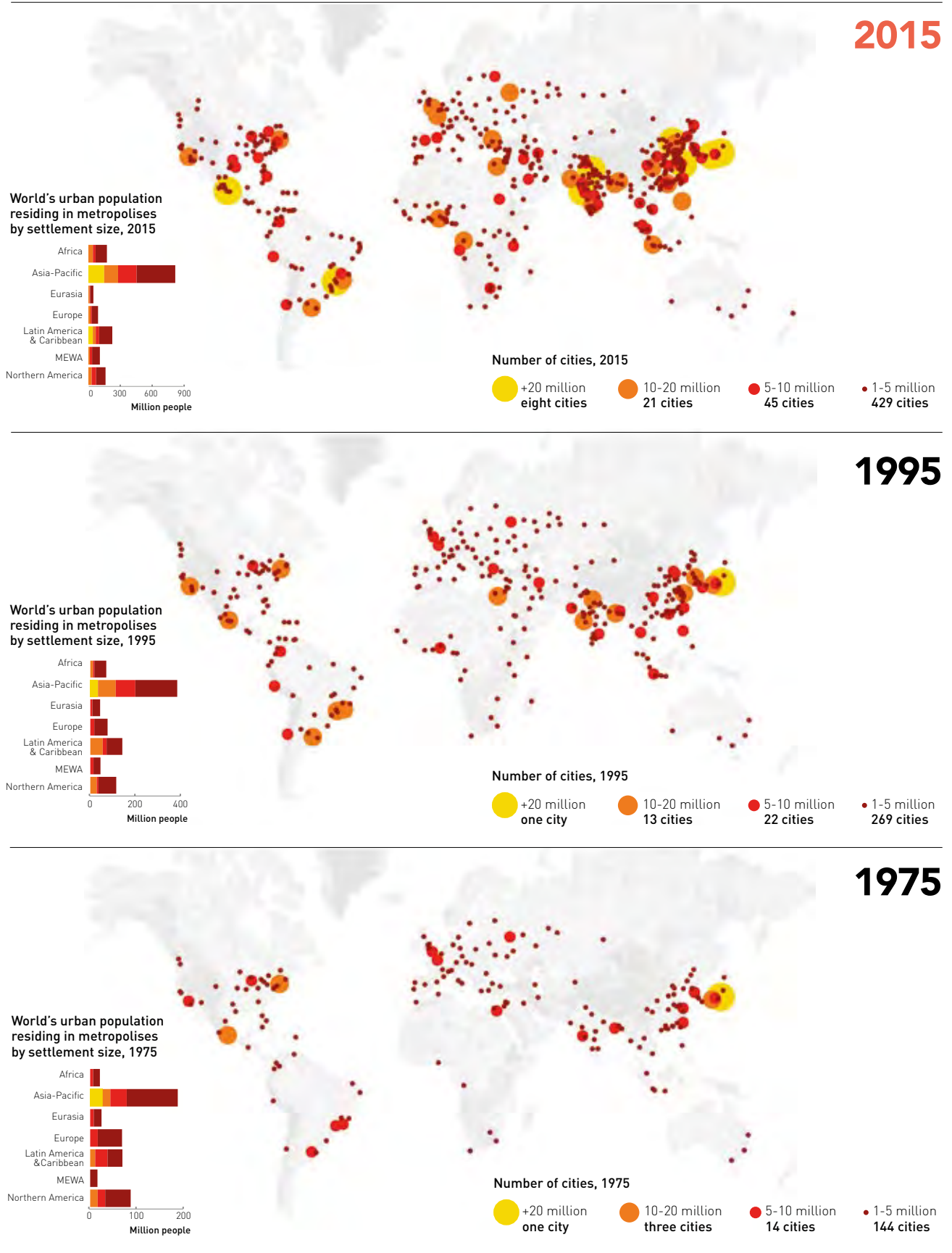
1.1
GROWTH AND CHANGE IN METROPOLITAN AREAS

Metropolitan areas are still growing very fast. In the 200 largest areas, average population growth was 46% between 2000 and 2014, and the population of the fastest-growing metropolitan areas such as Xiamen (China) and Abuja (Nigeria) nearly tripled. Forecasts indicate similarly strong growth for the future (around 2.5% per year), with Asian and African metropolitan areas growing most quickly.[6] These trends are the result of both 'push' factors, such as growing agricultural productivity, land-tenure pressure, conflict and natural disasters in rural areas, and 'pull' factors, such as job opportunities, investment, institutions and services located in urban areas.

Many types of metropolitan areas now co-exist in the global system of cities. There are the globalized, 'established' metropolises, which host the densest concentrations of firms, capital and educated labour, such as Hong Kong, London, New York, Paris and Tokyo. There is also a recognizable group of 'emerging' world cities, business and political capitals of large fast-growing economies such as Istanbul, Mexico City, São Paulo and Shanghai. Furthermore, a growing cluster of 'new' medium-sized cities, such as Singapore, Boston, Cape Town and Melbourne, have become metropolitan in scale and deliberately specialize in a small number of international markets.[7]

Figure 1.1 **Evolution of metropolitan areas 1975 -2015**
Source: UCLG and UN-DESA

2015

World's urban population residing in metropolises by settlement size, 2015

Africa
Asia-Pacific
Eurasia
Europe
Latin America & Caribbean
MEWA
Northern America

0   300   600   900
Million people

Number of cities, 2015

● +20 million **eight cities**   ● 10-20 million **21 cities**   ● 5-10 million **45 cities**   • 1-5 million **429 cities**

1995

World's urban population residing in metropolises by settlement size, 1995

Africa
Asia-Pacific
Eurasia
Europe
Latin America & Caribbean
MEWA
Northern America

0   200   400
Million people

Number of cities, 1995

● +20 million **one city**   ● 10-20 million **13 cities**   ● 5-10 million **22 cities**   • 1-5 million **269 cities**

1975

World's urban population residing in metropolises by settlement size, 1975

Africa
Asia-Pacific
Eurasia
Europe
Latin America &Caribbean
MEWA
Northern America

0   100   200
Million people

Number of cities, 1975

● +20 million **one city**   ● 10-20 million **three cities**   ● 5-10 million **14 cities**   • 1-5 million **144 cities**

BOX 1.3 **METROPOLITAN PERIPHERIES**[13]

The different conceptions of metropolitan areas have given rise to different versions and definitions of **periphery.** This is illustrated by the variety of words that are used in several languages to describe 'peripheral' development, e.g. *banlieue, suburb, extraradio, periferia, sobborgo, jiaoqu*. The term also encompasses very different social and spatial realities (e.g. rich and poor residential areas). The growth of metropolitan areas has given rise to at least four dimensions of 'peripheral' development, which may appear in different combinations:

- geographical: many cities, municipalities and settlements are 'geographically' situated in the outer ring or far reaches of a metropolitan area. The degree to which they are spatially peripheral often changes over time. As metropolitan areas expand, those at the periphery may become part of the inner ring, and vice versa.
- political: cities and municipalities may be 'institutionally constrained', because of a lack of involvement, decision-making and political influence in metropolitan governance processes.
- socio-economic: in many cases, cities and municipalities that are peripheral in a metropolitan area can be economically disadvantaged, lack access to jobs and prosperity, and/or be 'underserved' by public services and amenities. These marginalized settlements can be located in distant suburbs or even in more central parts of metropolitan areas, including those that are central but in decline and de facto become 'peripheral' for development purposes. This 'peripheral' or 'splintered' urbanism (a concept further developed in Section 3) relates to urban spatial fragmentation and social segmentation.
- these three dimensions add up to a fourth – a 'subjective perception' of periphery by local residents who 'perceive' themselves as living in marginalized neighbourhoods and often look to other areas as part of the core. In this case, the periphery is an experience that is endured rather than desired.

As this chapter illustrates, the extent to which areas are central or peripheral may change and evolve as a result of economic trends, planning decisions and political choices. It is thus important for metropolitan areas to develop a much more sustainable and inclusive strategy for their peripheries.

1.2
MEETING THE DEMANDS OF THE METROPOLITAN AGE

The planning and leadership of metropolitan areas present major political challenges that require immediate action and focus. Most critical is the inclusion and integration of areas that are, or have become, peripheral to the urban economy, spatial form or institutional processes (see Box 1.3). In developing countries, a rapid urbanization process has often been characterized by weak planning and institutional development, as well as by the rise of informal settlements in which many people live with limited or no access to basic services.[11] It is worth remembering that over 880 million people currently live in slums, most of them within metropolitan areas. Meanwhile in more advanced industrialized regions, the physical footprint of metropolitan areas is also growing. This is often as people flee land-value inflation and seek suburban lifestyles, and as more cities become part of new industrial value chains. In both developed and developing countries, metropolitan areas experience sprawl, social fragmentation, economic challenges and environmental threats. As recent surveys of city leaders highlight, these phenomena are both a cause and effect of congestion, inadequate public transport and low productivity, and are exacerbated by limited options to finance new infrastructure.[12]

The growing political and economic importance of metropolitan areas is not matched by public policies and reforms. Weak political cooperation, government fragmentation and inconsistent bureaucratic authority discourage joint efforts in tackling externalities in metropolitan areas.[14] **As the process of reform and adjustment has not kept pace with growth, local governments, mayors, councils and other appointed city-level authorities have found themselves under-powered to deal with the intensified demands made upon them**.[15] The rise of urban social movements in past years in various cities – including Paris, São Paulo, Istanbul, and several cities in the United States – reflects the growing demand of citizens for a new 'Right to the City' and a rejection of the unevenness in the way metropolitan areas are managed.

Cities are a common good that should be protected in order to guarantee equal access to opportunities and the respect of human rights. The principles developed in the Global Charter-Agenda for Human Rights in the City, presented in the introduction of this GOLD Report, can become a global standard for participatory policies, and socially inclusive and environmentally sustainable actions in metropolitan areas. They should be a reference for the renewal of the social contract between local authorities and their citizens, strengthening local democracy and supporting a vibrant and engaged civil society.

The problems currently facing metropolitan areas raise six key questions about how they can grow smartly, inclusively and sustainably in the future:

• What type of governance should metropolises of the 21st century promote?
• What strategies should metropolitan areas implement to manage their growth and mobilize necessary resources?

• How should metropolitan areas plan and adjust to reduce inequalities and social and spatial fragmentation?
• How can the development and resource needs of metropolitan areas be made compatible with the imperative to reduce their ecological footprint?
• How can metropolitan areas ensure universal access to infrastructure, housing, public services and social amenities?
• How can metropolitan areas work together with other cities and their hinterlands to promote inter-territorial cohesiveness instead of destructive competition?
• Can metropolitan areas incorporate the principles that inform the Global Charter-Agenda for Human Rights in the City, and protect and promote rights to culture?

The first of these questions is addressed in Section 2 of this chapter on governance. Section 3 on economic development provides a response to the second and third questions. Section 4 on sustainability and quality of life addresses the third question in more detail

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In more advanced industrialized regions, the physical footprint of metropolitan areas is also growing

Photo: Andrea Ciambra-Toronto (Canada).

and provides further insight to respond to the final questions. The conclusions return to the 'Right to the City' in metropolitan areas, before highlighting the key messages for the 'Global Agenda of Local and Regional Governments'.

This work also builds on the valuable efforts and engagements of Metropolis. Created in 1985, Metropolis is a network of more than 140 cities and metropolitan regions with more than one million inhabitants, advocating and fostering cooperation and knowledge-sharing among its members.[16] Through the PrepCity process leading to Habitat III, Metropolis defined a set of Basic Principles for Better Cities, consistent with the priorities of the New Urban Agenda and based on the belief that cultural and political issues are as important

as economic and environmental ones.[17] This chapter is also based on the work of UCLG's Peripheral Cities Committee, a platform for peripheral local authorities, closely linked with the World Forum of Peripheral Local Authorities (FALP). The FALP network brings together nearly 230 local authorities from 32 countries, working with academics and social movements (see Box 2.4bis). The chapter also encapsulates many of the policy messages from the Habitat III process, and particularly from the Montréal Thematic Meeting on Metropolitan Areas (see Box 1.4).

As this report suggests, although the world is only a little way into the new 'metropolitan' century, it has already reached a crossroads. It is in metropolitan areas that the battle for many of the principles enshrined in the Global Charter-Agenda for Human Rights in the City is being fought. These includes combating inequalities and marginalization, the fight for universal access to decent housing and basic services, and the protection of human rights, gender equality and equal opportunities for all. There is little time left to avoid the irreversible damage of climate change, and metropolitan areas are at the forefront in building and scaling viable alternatives to fossil-fuel production and consumption. Metropolitan areas are also key to building more collaborative and sustainable relationships between cities and wider regional and national territories.

Despite their limits and constraints, metropolitan areas are a source of great promise. Well-organized, endowed and empowered they can be prosperous, inclusive, safe and sustainable. Through analyses and examples, this chapter aims to contribute to a 'metropolitan narrative' for a 'Global Agenda of Local and Regional Governments'. It reports on the progress achieved in metropolitan areas so far, and seeks to identify the key challenges and policy priorities for realizing their potential.

BOX 1.4 THE MONTRÉAL DECLARATION ON METROPOLITAN AREAS[18]

In October 2015, the Thematic Meeting on Metropolitan Areas was held in Montréal, as part of preparations for Habitat III. The Declaration that came out of that meeting defined the main challenges and transformations necessary for building more inclusive and interdependent metropolitan areas, as well as mechanisms for their implementation.

More specifically, the Declaration emphasized the need to provide a clear legal and institutional framework for metropolitan governance based on the principles of democracy, local autonomy and subsidiarity; promote a new partnership with other levels of government to strengthen metropolitan governance mechanisms and implement financing mechanisms adapted to metropolitan challenges; develop integrated participatory planning to promote compact and mixed use, ensure sustainable mobility and environmental sustainability to fight climate change, ensure resilience; and promote inclusive policies for housing, social services, gender equality and cultural heritage, with the aim of creating a healthy environment for all.

Participants at the thematic meeting also reaffirmed the need to place the 'Right to the City' at the heart of metropolitan policies, and ensure cohesion and solidarity between the territories which make up metropolitan areas. This is in order to promote equalization mechanisms and civil society participation in the decision-making process.

2.

GOVERNANCE: ESTABLISHED AND EMERGING MODELS FOR METROPOLITAN AREAS

Governance of metropolitan areas is one of the main levers to guiding and facilitating the transformation needed to fulfil the promise of a 'metropolitan age'. Sustainable metropolitan development depends upon strong political will, a lucid grasp of urban complexity, clear legal and institutional frameworks, adequate powers and resources, and the support of an active and involved civil society - all key components of effective governance. Instead, most metropolitan areas endure significant governance challenges and face an ongoing imperative - still unrealized - to adjust and reform.

In effect, most metropolitan areas are 'accidental' outcomes of many cycles of development. As cities have grown beyond their historic political and electoral boundaries, their governance has become more complex and fragmented, comprising a series of local governments, authorities, agencies and interests that were not originally designed to address questions at the metropolitan scale. This means that they are usually governed by a form of 'power-sharing', and ad hoc and temporary coalitions with varying levels of legitimacy and transparency.

In 2016, only a few cities have most or all of their metropolitan population governed within a single administrative territory (see Figure 2.1). For many, such as Sydney and Zurich, the original core city is dwarfed by the wider metropolitan area.[19] The legacy of metropolitan growth is often one of infrastructural shortfalls, competition and inequality across different parts of the metropolitan area.

Most metropolitan areas endure significant governance challenges and face an ongoing imperative - still unrealized - to adjust and reform
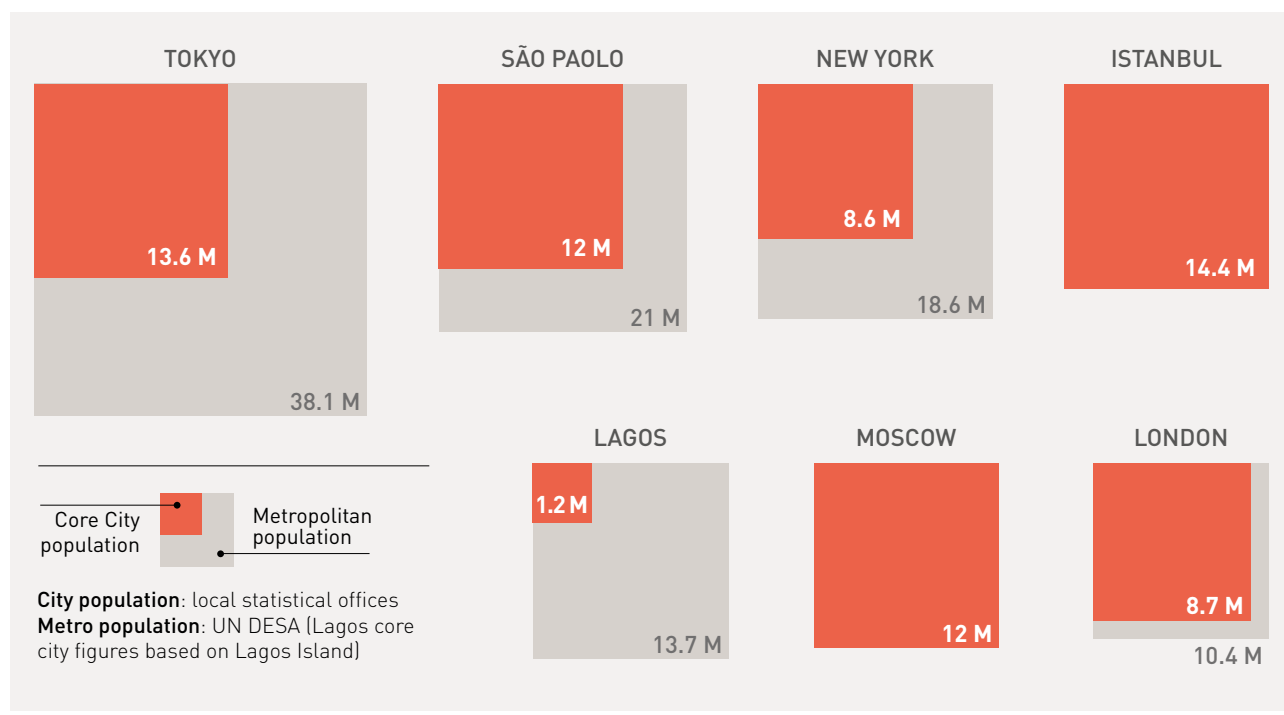

Photo: Mike Linksvayer - Buenos Aires (Argentina).

Figure 2.1 **Population size of administrative 'core' city and metropolitan area in the largest metropolitan area in each of UCLG's seven regional sections**

Source: United Nations Population Division (2014). 'World Urbanization Prospects: The 2014 Revision', 2014; Thomas Brinkhoff, 'Metro Lagos', 2016

VISUAL MODEL DEVELOPED BY LSE CITIES

TOKYO — 13.6 M / 38.1 M
SÃO PAOLO — 12 M / 21 M
NEW YORK — 8.6 M / 18.6 M
ISTANBUL — 14.4 M
LAGOS — 1.2 M / 13.7 M
MOSCOW — 12 M
LONDON — 8.7 M / 10.4 M

Core City population — Metropolitan population

City population: local statistical offices
Metro population: UN DESA (Lagos core city figures based on Lagos Island)

BOX 2.1 METROPOLITAN AREAS' BATTLE FOR RECOGNITION

The ability of metropolises to emerge as collective and coherent actors often depends on the appetite of national governments to recognize and support metropolitan challenges and governance needs. In many countries, metropolises are struggling with this. It is common for progress to be slow and incremental, but several countries have in fact taken important steps in recent years, for example in the regions of Latin America and Europe.[20]

In Brazil, a 2015 federal law has established the requirements for the institutionalization of metropolitan areas as well as guidelines for planning and multilevel governance.[21] Observing the rules and the deadlines of the *Estatuto da Metropole*, the 39 municipalities that constitute the Metropolitan Region of São Paulo (*Região Metropolitana de São Paulo* - RMSP) and the State Government are together developing a Plan for Integrated Urban De-velopment. This defines, among other goals, a suitable structure of metropolitan intergovernmental governance for the Plan's execution.

In Chile, metropolitan areas have now been recognized for the first time and, in Colombia, a 2013 law improves the legal framework for coordinating and financing its six metropolitan areas.[22] In Mexico, a comprehensive regulatory process is getting to grips with the country's growing 'metropolization' issues and, under this fledgling framework, multi-municipal conurbations of over half a million people will have metropolitan status. Meanwhile in Italy, 14 'metropolitan cities' were established by the *Delrio* law in 2014, with authority to oversee transport and planning. In France, metropolitan areas have been granted enhanced status, allowing for the creation of a dozen more metropolitan cities in 2015.

The increasingly complex landscape of urban metropolitan areas – megacities, metropolises, urban regions and corridors – requires new governance systems that address whole urban functional areas in order to overcome institutional, social and spatial fragmentation. Weak metropolitan governance undermines the potential of metropolitan areas to function as cornerstones of national development.

Leaders in metropolitan areas work within governance parameters that often leave them with insufficient formal authority to meet the challenges their city faces. The most serious gaps often include limited resources to invest in required infrastructures; failures of coordination with other levels of government and among neighbouring local governments; compartmentalized sectoral polices that do not respond to metropolitan needs; and inadequate national support for urban agendas. In particular, the big development challenges faced by metropolitan areas require sustained action through several cycles of development and investment that generally transcend the short-term perspectives of political terms and electoral mandates.

Although the global momentum to recognize metropolitan areas and grant them legal status is growing (see Box 2.1), many reforms have lacked incentives and cooperative mechanisms to support or finance their integration.

For metropolitan areas to acquire and retain a governance structure that supports sustainable development, many have had to innovate through new flexible models and new kinds of reforms. Importantly, there is increasing awareness that metropolitan governance must address not only local governmental arrangements, but also the role of higher tiers of government and civil society. Drawing on international evidence and examples, this section firstly reviews the different types of government arrangements and processes of reform that metropolitan areas have undertaken. It then examines the roles of higher tiers of government and civic leadership organizations. Finally, it evaluates the potential for strategic planning to foster more integrated and participatory metropolitan governance and development.
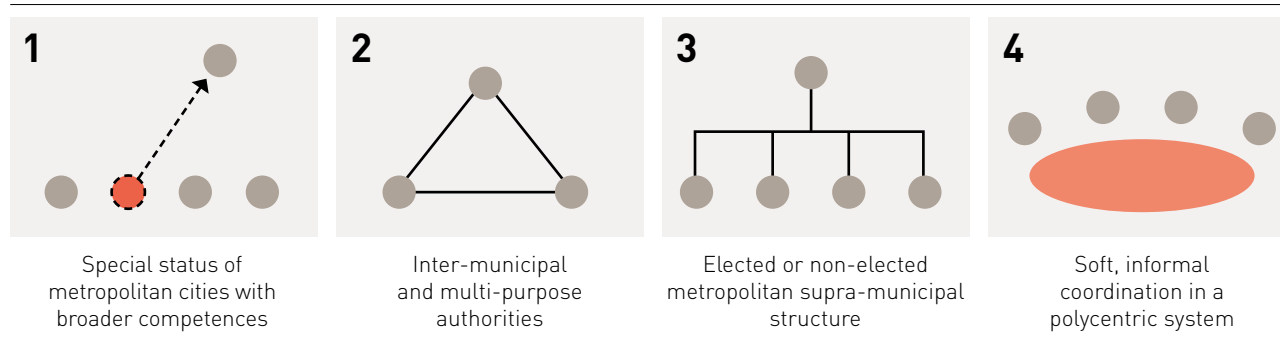
2.1
DIFFERENT MODELS OF METROPOLITAN MANAGEMENT

A metropolitan authority and representation system can now be found in most parts of the world. A 2015 review found that 68% of metropolitan areas in OECD countries have a metropolitan governance body working on regional development, transport and planning. Only a quarter of these bodies, however, has actual substantive regulatory powers.[23]

Metropolitan governance has taken many forms to achieve its goals, often reflecting deep-rooted national, political and cultural traditions. Scholars and analysts have often sought to compare and categorize models of metropolitan governance and management. While these do not cover the full spectrum of possible arrangements and to some extent neglect the impact of both higher-tier governments and non-institutionalized organizations (see Sections 2.2 and 2.3 for more details), four main models (see Figure 2.2) have been commonly distinguished in the literature.

Figure 2.2 **Four models identified by the OECD**[24]

Source: OECD (2015)

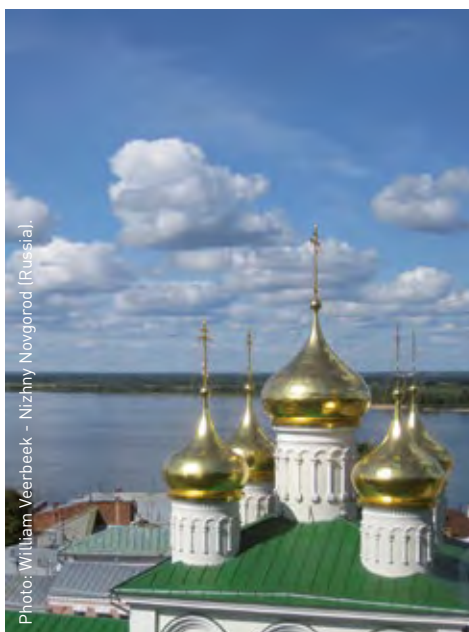| 1	2	3	4
Special status of metropolitan cities with broader competences	Inter-municipal and multi-purpose authorities	Elected or non-elected metropolitan supra-municipal structure	Soft, informal coordination in a polycentric system

The **single-tier metropolitan government model (1)** sees one government authority providing services to most or all of the metropolitan area. This model is often the result of either a merger of local governments, or designation by a higher tier of government as a special 'metropolitan city' (e.g. Moscow, Shanghai).[25] Sometimes these areas are 'over-bounded' well beyond the built-up area (e.g. Chongqing, Istanbul) or, more frequently, they are 'under-bounded' and have spilled over their administrative boundaries (e.g. Toronto).

⊙

The diversity of governance models shows that there is no 'one-size-fits-all' solution

Single-tier models are intended to create financial efficiency and economies of scale in service provision. They draw a larger tax base and are generally conducive to the creation of an identity and vision for residents and business to rally behind. Some examples of this model, however, have been criticized for their lack of efficiency, accountability or political legitimacy and limited channels for democratic engagement.[26] This has been visible in Toronto, in Canada. The merger of local governments in Toronto in 1998 only integrated the central core of the wider functional region, rendering it too small to address regional transport and development issues. Although wages, salaries and service provision were all harmonized, the anticipated economies of scale did not materialize as costs unexpectedly increased.[27]

The **inter-municipal partnership model (2)** sees local governments voluntarily partner within a formal or informal purpose-driven framework. This mode has become increasingly popular globally, as it offers economies of scale without undermining the autonomy of local authorities to tax and spend. Municipalities may create metropolitan agencies to coordinate public assets (e.g. 'special districts' in the United States provide shared services across municipal or county boundaries) and support redevelopment in complex ownership situations, and even to act as mediators with central governments, private and non-profit sectors.[28]

The inter-municipal system works well when all cooperating municipalities share similar objectives, but has proven challenging whenever inter-municipal conflict emerges. A deep-rooted ethos of consensus politics, found in many metropolitan areas in Switzerland, the Netherlands and Sweden and, in some cases, in Canada and Australia, can make this voluntary approach highly effective, although these are exceptions rather than the rule.[29] Inter-municipal cooperation can, however, fill the vacuum in the management of services or other development projects and create the impetus for wider reform. This has occurred in Paris where, after a decade of joint efforts among over 100 municipalities, a new metropolitan government (*Métropole du Grand Paris*) came into force in 2016.[30] The *Métropole's* new governance framework maintains strong respect for the principle of subsidiarity, but its multi-layered complexity and the fact that it only encompasses 60% of the metropolitan population have cast doubt on its ability to effectively address Paris' development challenges.[31]

Photo: Carlos ZGZ – Shanghay (China).

Photo: William Veerbeek – Nizhny Novgorod (Russia).

Photo: Bert Kaufmann – Rome (Italy).

The **two-tier government model (3)** features an upper-tier citywide or metropolitan authority above a system of smaller local authorities. The upper tier usually manages spatial planning, development and delivers certain services, while responsibility for education, housing, healthcare and welfare is often retained at the local level. The balance of power between the two tiers may vary: some have a so-called 'strong mayor, weak boroughs' equilibrium whilst others have one that is 'weak mayor, strong boroughs'. At both ends of the spectrum, this model aims to combine the benefits of consolidated government while maintaining local accountability and responsiveness.[32]

There are many examples of successful two-tier systems, but the model is often incomplete and may require ongoing adjustments or reform. In some cases, the two-tier model is seen to operate effectively at the city level, while other regional or local governments preside over the wider urbanized areas into which development has spilled (e.g. London, Seoul and Tokyo). Elsewhere, a two-tier model even operates at different spatial scales, with a city government surrounded by a regional government (e.g. Madrid).[33] Meanwhile, in other metropolitan areas, a two-tier model is thwarted by fiscal imbalances between the two levels. In Dar es Salaam, one of the world's fastest-growing cities, a metropolitan coordinating body was established in 2000, but the municipal councils receive much higher fiscal transfers than the metropolitan authority and have stronger working relationships with central government than with the metropolitan tier.[34]

Finally, the **informal and fragmented one-tier model (4)** has numerous separate local governments delivering services within the metropolitan area, without any overarching authority or body to encourage cooperation. The large number of local governments limits opportunities for coordination oriented towards economies of scale. Los Angeles is one prominent example, a region of 13 million people governed by 200 city governments and five county governments, with Los Angeles County at the centre. High fiscal and economic imbalances among different municipalities have been common in this kind of governance system.[35]

There are a number of exceptions that do not fit neatly into any of these models. Among the most notable are Singapore, Hong Kong and Dubai, three highly empowered cities that have much greater autonomy than most cities, and whose wider built-up areas beyond their borders have weakly defined parameters.

Most metropolitan areas are in fact 'hybrids' of more than one model, because of their complex geographies, the status of different delivery agencies, and the fact that they are nested within governance structures both above and below them. This diversity of governance models shows that there is no 'one-size-fits-all' solution. Constant transformations and the changing forms of large agglomerations will require the elaboration of newly evolving forms of governance – relying on stronger multilevel governance and multi-stakeholder dialogue – to respond to their new challenges.

All choices about metropolitan governance have trade-offs between scale, efficiency, access and accountability. Nevertheless, international evidence does suggest that mechanisms for metropolitan coordination can help unlock progress on integrated infrastructure, balanced de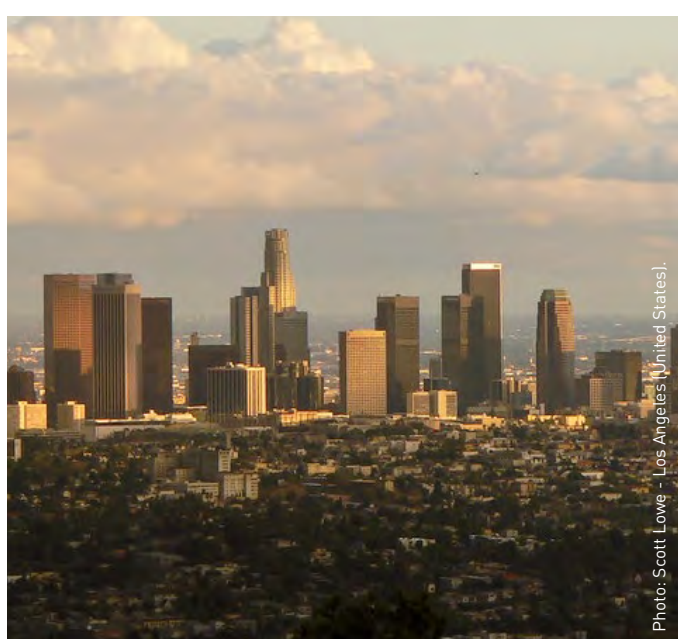velopment, increased rates of investment and shared identity. The subsidiarity principle remains essential as local governments are key decision-makers in the delivery of basic services. But substantive metropolitan coordination can ensure intergovernmental and multilevel coherence, align strategic decision-making, facilitate cost-sharing and cost-saving, improve the redistribution of resources within the metropolitan area, and offer an overarching goal for common development. A high coordination equilibrium

Photo: Scott Lowe - Los Angeles (United States).

International evidence does suggest that mechanisms for metropolitan coordination can help unlock progress on integrated infrastructure, balanced development, increased rates of investment and shared identity

can contribute to eliminating perverse incentives and competition, promote social cohesion, develop more evidence-based policy, and improve land and development management. The impact of metropolitan coordination is particularly important to strengthen regulation and oversee the delivery of public services, for example, to reduce transport deficits and the social and economic marginalization they perpetuate.

In practice, metropolitan coordination is rarely, if ever, absolute and seamless. It is usually partial, overlapping and not fully sequenced to match goals. Metropolitan areas must determine what their long-term development strategy is and define their coordination targets accordingly.

BOX 2.2 BUILDING A METROPOLITAN VISION FROM THE GROUND UP: GRAND MONTRÉAL

Historically, leaders in metropolitan Grand Montréal have struggled to collaborate on collective projects. After a provincial government's attempt to merge all 28 municipalities on the island of Montréal was rejected in 2006, a broader metropolitan organization grew into a regional management approach that balanced the needs and interests of the centre and periphery.[39] The Montréal Metropolitan Community (CMM) has since been governed by a council of 28 mayors.

The first-ever Metropolitan Land Use and Development Plan was devised and adopted in 2011, setting ambitious long-term targets for the economy, environment and transport. The CMM's sizeable budget for social and affordable housing has been important in establishing the right to housing and housing assistance at the metropolitan rather than municipal level.[40]

High-quality communications, public education and relationship-building have helped sustain momentum for the metropolitan process. A day-long metropolitan *agora* is organized every two years to bring elected officials, city workers, planners and civil society groups together from the 82 municipalities to discuss the future. This dialogue has deliberately focused on developing a strong sense of regional identity and allowed Montréal to showcase its cultural assets and good quality of life to an international audience.[41]

The cooperation achieved in this framework has even prompted the Quebec provincial government to grant more municipal autonomy on spending and governance to local governments via a new fiscal pact.[42]

2.2
DEMOCRATIC METROPOLITAN AREAS AND THE ROLE OF LOCAL GOVERNMENTS AS CONVENERS

It is a key challenge for metropolitan governance to deliver services and strategy effectively and accountably, via transparent governance mechanisms, supported by strong citizen participation. This can be particularly difficult when fragmented governance arrangements, political parochialism and competition prevail, with increased inequalities between metropolitan districts an all-too-common outcome. **Empowered local governments with stronger democratic legitimacy are a precondition to achieving many of the behavioural changes necessary for inclusive and sustainable metropolitan development, and to creating a strong metropolitan citizenship and sense of belonging**. The role of local and regional governments in building successful democratically legitimate metropolitan areas has yet to receive sufficient focus.

Metropolitan areas with a limited history of partnership among local administrations are beginning to create more opportunities for dialogue and joint coordination. Their success depends on the availability of adequate legal tools and related incentives to achieve 'buy-in' from all levels of government – particularly from core and peripheral cities. Reforms, moreover, need to be tailored to different national and regional contexts.[36] This is important as peripheral jurisdictions often find it difficult to advance their interests over the interests of central cities, whose bargaining power with investors and higher levels of government can be superior.[37] Examples indicate that the democratic legitimacy of local government-led metropolitan partnerships is critical to building effective policies for larger regional issues (see Box 2.2).[38]

There are also many examples, however, where the forced merger of local governments or top-down imposition of metropolitan governments have been both unsuccessful and unpopular (see Box 2.3).[43] By contrast, bottom-up processes involving influential and charismatic local and city leaders are often at the heart of a longer-term consensus-building

process for metropolitan collaboration and collective action.

In many cases, local governments have been able to build voluntary bottom-up metropolitan partnerships despite a national context that largely favoured top-down arrangements. Greater Manchester in the United Kingdom is one example where a longstanding practice of voluntary partnership emerged over 25 years under the stewardship of committed and charismatic local politicians. This resulted in a Combined Authority being established to bring together ten local authorities and provide a stronger and more democratically legitimate model of metropolitan governance. This is the first statutory combined system of its type in the United Kingdom, and different from the two-tier system of government established in London. From this platform, Greater Manchester has been able to negotiate successfully with central government to achieve public sector reform, create new investment models, and gain control over key items of spending.

Within metropolitan areas, peripheral cities tend to have different perspectives on the methods and objectives of governance (see Box 2.4). This diversity and the need to involve all voices underline the importance of a polycentric and inclusive approach to

metropolitan issues. The imperative for peripheral cities and territories is to create governance arrangements that reflect both their importance to metropolitan areas and their distinctiveness within them.

BOX 2.3 ABIDJAN, AN INCOMPLETE 'TOP-DOWN' METROPOLITAN APPROACH

Abidjan (Côte d'Ivoire) is an example of where metropolitan governance has been strongly shaped by central government in a context of political instability.[44] A 2001 reform gave the city government special status and the city council was replaced by an expanded metropolitan government operating at a higher tier. The new government is now led by a district governor appointed by the President of Côte d'Ivoire. As a result, the metropolitan government manages development and planning for the ten municipalities and three adjacent sub-prefectures. Serious political conflict in 2010-11, however, hampered further progress towards cooperation and, more recently, there are signs of a lack of inter-jurisdictional coordination over urban transport developments.[45] Finally, in September 2012 (after a presidential election), the District of Abidjan was dissolved by a presidential ordinance and replaced by a governorate (an executive body) under the direct control of the national government.

BOX 2.4 POLYCENTRIC METROPOLITAN GOVERNANCE: DEMOCRATIC CHALLENGES AS VIEWED BY PERIPHERAL CITIES [46]

The legitimacy of metropolitan authorities is still widely debated. They are often accused of being technocratic and unrepresentative of the diverse interests and local contexts they are tasked with leading. The main challenge is ultimately to design metropolitan institutions in a way that does not deprive local territories, their representatives and their citizens of their voice in the decision-making process.

Viable metropolitan institutions, from the perspective of the periphery rather than the core, need to promote a 'collaborative and cohesive' metropolis in which each district or territory enjoys an actual power of 'co-decision' and 'co-production'.[47] The often neglected 'software' of shared coordination rules rather than the 'creation of a new governmental institution (the 'hardware'),

so often favoured today, needs to be prioritized.[48]

Given the democratic deficits and substantial costs of hierarchically integrated metropolitan areas, many local governments and, in particular, those of 'peripheral cities' now support a model of polycentric or multipolar metropolises. This is based on a confederated or federated system in which a metropolitan authority co-exists with sub-metropolitan local governments, sharing their competences according to the principle of subsidiarity. This model encapsulates the challenges that territories face at the metropolitan level and promotes a democratic structure that neither marginalizes nor neglects those communities that are regarded as peripheral (see, Box 2.4 bis on the UCLG Committee on Peripheral Cities).[49]

A democratic and collaborative **metropolitan governance system** should observe several key principles: **local democracy**, with elected metropolitan authorities that are **accountable** to an active civil society; **subsidiarity,** with a clear definition of roles and powers between different levels of governments and among local governments; and **adequate resources and financial instruments** to encourage local governments' cooperation (see Section 2.3.1). A fair and sustainable metropolitan governance system, ultimately, is one that both incentivizes polycentric and balanced development, and is capable of ongoing adjustments to avoid lock-in to unproductive and unjust patterns of growth.

BOX 2.4 BIS UCLG'S PERIPHERAL CITIES COMMISSION AND THE CANOAS DECLARATION (2013)

As mentioned above, UCLG's Peripheral Cities Committee is a reflection and exchange platform for peripheral local authorities which aims to respond to the challenges of metropolitan development across the world. The Committee is based on the work of the World Forum for Peripheral Local Authorities (FALP),[50] a network created to develop a single voice for peripheral areas while promoting the exchange of experiences. During one of its congresses in 2013, the network adopted the Canoas Declaration[51], which states: 'Our commitment to solidarity and polycentric metropolis, is the refusal of an urban civilization of 'ghettos', of all institutional and economic tutelage. It is the affirmation of the role of citizens, of the recognition and visibility of the periphery in the debate and metropolitan construction, so that each and every one lives in a territory that counts and contributes to the common project. To achieve this, there is no standard model or design. The paths to inclusive, solidary, sustainable and democratic metropolises, are to be invented for its citizens'.

When it comes to governance, the Declaration states: 'We represent a diversity of realities, subjectivities, sensibilities that are named urban agglomeration, metropolitan area or region, or simply metropolis. But, whatever is the word used to qualify this reality, we all refuse to be invisible, we are convinced that our voices must be heard to overcome the challenges of our urban world'.

2.3 REFORMING METROPOLITAN GOVERNANCE

Whichever metropolitan governance arrangements cities inherit, adapting to economic and social change is a challenge that awaits each and every one of them. Cities are less and less self-contained and their governance boundaries increasingly overlap. A flexible geometry is therefore essential.

Governance systems are increasingly being reformed and upgraded, as national and city leaders lead substantive processes of invention and innovation. The reforms are often motivated by concerns about economic competitiveness, spatial growth patterns, investment deficits and regional coordination failures, and are designed to adjust and update the governance structure to 'catch up' with constant spatial expansion (see Box 2.5 on Ahmedabad).

Some metropolitan areas adapt their governance structures incrementally with administrative boundaries being gradually superseded, or alliances expanded, to adjust to new spatial realities (e.g. Amsterdam since the 1990s). Alternatively, an initial reform may be supported by periodic adjustments that add to or alter the powers held by city or metropolitan governments (e.g. London since 2000).

Other metropolitan areas are the subject of deliberate one-off reforms to solve institutional fragmentation. This may include a merger of local councils under a new executive mayor (e.g. Auckland in 2010), or a land extension to the metropolitan government (e.g. Moscow in 2012). Their successful implementation often depends upon a well-directed transition to allow a comprehensive strategy to be built; collaboration with authorities 'outside' the new metropolitan boundaries, as well as financial or institutional support in future political cycles. Agreement about the appropriate size and scale of the metropolitan authority is usually critical.

2.3.1 The financing of metropolitan areas: the backbone of every reform

Financing and funding are two key pillars of metropolitan governance and reforms. Current estimates indicate that global infrastructure investment is USD 2.7 trillion a

year, well below the USD 3.7 trillion needed.[53] Many metropolitan areas operate within a 'low-investment, low-return' equilibrium, and their local governments lack the fiscal resources to invest in the infrastructure required for long-term growth. As a result of central governments' lack of capacity or willingness to invest in metropolitan areas, **fiscal decentralization has become a key agenda to promote sustainable development, equity and liveability**.[54]

Fiscal decentralization has been shown to be strongly correlated with increased prosperity and productivity, so that doubling the sub-national share of spending is associated with an average 3% increase in gross domestic product (GDP) per capita.[55] In many countries, however, fiscal decentralization is still pending. National legislation on metropolitan policy is not always accompanied by mechanisms to finance a metropolitan agenda, and many governments have effectively abdicated responsibility for investment, despite the returns that can accrue to a whole nation when agglomerations are economically and socially successful.[56]

Metropolitan fiscal challenges

The main fiscal challenge for metropolitan areas across the world is to elicit enough economic growth to be able to finance their increasing expenditures while, at the same time, organizing a cost-efficient governance of service delivery and inclusive policies. In this regard, many such areas are faced with

BOX 2.5 **AHMEDABAD, A DISTINCTIVE CASE IN INDIA**

Ahmedabad is one of the few cities in India to have a single authority, the Ahmedabad Municipal Corporation (AMC), which takes on all the responsibilities usually assigned to urban local bodies for the area's approximately 5.5 million residents.

Ahmedabad's success has been enabled by strong local governments and fiscal reform which allowed the AMC to become the first municipal body in India to enter the financial markets and issue municipal bonds. The AMC has maintained a strong credit rating, and has sought to eradicate cash losses. It has also reformed the property taxation system, in order to improve efficiency, accountability and transparency. Citizen participation in decisions to invest in transport and slum upgrades has been core to this metropolitan development.

Although challenges still remain, Ahmedabad's experience has shown the ability of a consolidated government, in tandem with civil organizations, to extend access to public utilities and integrate residents into the wider urban community.[52]

inadequate revenue tools and a low retention of raised taxation revenue, which results in excessive reliance on intergovernmental transfers and equalization measures. When these are unpredictable, metropolitan areas cannot plan (e.g. for large infrastructure) adequately or reliably for the long term.

Table 2.1 **Metropolitan governance reforms can take a wide variety of formats**
Source: Clark and Moonen.

Rearrangements to government authority	1	Creation of metropolitan entity that represents municipalities.	Barcelona, Milan
	2	Supra-municipal elected government and parliament.	Stuttgart
	3	Metropolitan authority and directly elected Mayor.	Seoul
	4	Metropolitan Combined Authority.	Greater Manchester
	5	Shift from two-tier to single-tier.	Johannesburg
Boundary changes	6	Expansion of the boundaries of the metropolitan municipality.	Istanbul
	7	New city to absorb expansion.	Mumbai
Metropolitan partnership agreements	8	Regional alliance for international promotion.	Stockholm
	9	A voluntary metropolitan planning body for economic development.	Seattle
Reforms to local government	10	Reduction in number of municipalities.	Berlin
	11	Amalgamation of municipalities.	Toronto

Many commonly available taxes, moreover, are inelastic property taxes that are not proportionate to the increased spending demands in domains such as social welfare or housing.[57] To be sustainable, metropolitan financing systems should allow a return on investment to be able to mobilize a sufficient part of the local wealth. Furthermore, **lack of clarity in the assignment of expenditure and delivery responsibilities** among different tiers of government means that metropolitan areas are often allocated revenue and spending tasks before functional competences are defined, and vice versa.[58]

Metropolitan areas often also have to contend with **net fiscal outflows** whereby the sums reinvested in them through government allocations are disproportionately low compared with the total tax revenue their activity generates. This phenomenon has been widely cited in capital cities such as London and Warsaw. Evidence from countries such as Italy suggests that increasing redistribution from successful urban areas often fails to activate a process of convergence between different regions.[59]

In developing countries, government-imposed **handicaps on the ability to borrow capital** have disincentivized innovation and delayed important infrastructure development.[60] However, given the urgency to invest, pre-financing tools are crucially needed. The most recent study found that only 4% of the 500 largest cities in developing countries could access international financial markets, rising to 20% in national markets.[61] Finally, an endemic **lack of local finance information** can erode accountability, participation and creditworthiness of metropolitan governments.

Although metropolitan areas must continue to advocate for fair and predictable intergovernmental transfers, it is now a key priority for them to capture as much value as possible from the economic growth they generate (see Box 2.6). The development and optimization of value capture mechanisms, the strategic use of public land, local general taxation measures, development levies, planning approval fees, and negotiated investment pools, will be essential to sustainably finance metropolitan projects and services, while ensuring that fiscal decisions remain transparent and inclusive.[63]

BOX 2.6 THE REFORM OF LOCAL FINANCES IN LAGOS

Since Nigeria returned to civilian rule in 1999, Lagos has developed a much more effective model of metropolitan governance. The Lagos State government has seized the opportunity of stability and managed to raise its tax revenues and use them to restore basic infrastructure and expand public services and law enforcement. The government undertook to increase its own fiscal capacity to meet public demands. Improvements in compliance and accountability have seen annual income and property tax revenues grow from USD 190 million in 1999 to over USD 1.2 billion in 2014. These additional funds have been used to build and maintain roads, clean up the city, improve security and introduce new public transport options such as high-capacity bus corridor systems. Annual capital expenditures nearly trebled in the five years from 2006 to 2011 to around USD 1.7 billion. Access to tax revenue has also given the government a strong financial incentive to promote economic growth. The last two political cycles have seen a more efficient state administration emerge, with high-calibre employees, implementation of tax reforms relying on partnerships with private contractors, and public outreach endorsing a social contract between taxpayers and the state. Lagos's experience highlights the importance of gaining societal buy-in by drawing attention to visible early achievements and by being committed to wide service coverage.[62]

The path to metropolitan revenue self-sufficiency

Revenue self-sufficiency in metropolitan areas largely depends on the local tax base, which should constitute the primary source of revenue. Taxes on business activities can generate significant revenues for metropolitan areas (local business taxes, for instance, account for more than 30% of city revenues in China),[64] and are more responsive to economic growth. Property taxes are a key revenue source that, especially in developing countries, is often untapped due to various constraints (e.g. unrecognized settlements such as slums). The efficient implementation of tax instruments to preserve incentives and attractiveness; the shared coordination of tax collection; as well as the elaboration of fiscal responsibility laws to induce fiscally responsible behaviour and clarify local responsibilities, should all be taken into account as potential tools and innovations in this sector.[65]

Alongside more 'traditional' revenue sources (intergovernmental transfers, user charges, property and income taxes, sales and business taxes), metropolitan governments have been developing new mechanisms to capture future value and enhance the efficiency and accountability of private sector partnerships.

In order to address the gap between cores and peripheries in metropolitan areas, mechanisms of **horizontal fiscal equalization** have been used to support tax revenue-sharing throughout a metropolitan area to deliver combined services or economic development programmes (see Box 2.7).[66] This model of redistribution helps improve equity, reduce competition, and provides a collective fund for investments that can facilitate metropolitan growth.[67]

Value capture finance is another type of mechanism for fast-growing cities to retain and reinvest the wealth generated by public investments, supported by strategic public land management and finely-tuned instruments and regulations. Land value capture mechanisms can provide up-front capital that significantly reduces reliance on debt. They require, however, adequate legal regulations to prevent them from distorting social and environmental objectives or deepening spatial and social segregation. Participatory and compensation mechanisms, in particular, are crucial to distribute the enhanced value fairly and resist an excessive financialization of the urban economy.[71] Similarly, many metropolitan areas are finding ways to generate additional savings and **revenues from their publicly-owned land and infrastructure**, adopting a more entrepreneurial approach to their property portfolios,[72] and managing strategic assets through full inventorying, life-cycle costing, and de-risking of sites.

Municipal borrowing and bonds allow some local governments to access the capital market, catalyze investment and direct loans, or finance infrastructure up-front. This strategy has a long-standing tradition in metropolitan areas in many developed countries (e.g. the United States). Over the last decade, bonds have been used by metropolitan areas in transitioning and developing countries, such as Bogotá (Colombia), Moscow (Russia) and Johannesburg (South Africa), among others. Diversified bond and borrowing strategies – either municipal or from other sources – are a viable option if local credit markets are deep and private investors perceive the local

authorities' risk profile to be sufficiently low.

Robust Public Private Partnerships (PPPs), such as build-operate transfers, concessions and joint ventures, can play an important role in improving the efficiency of service delivery in metropolitan areas. Although some PPP contracts have been unsuccessful or had negative consequences, the risks of failure are reduced when local governments design clear policy frameworks and are fully informed about the sector in question. While PPPs can improve the operational efficiency and economic stability of public services, it should also be noted that they are not devoid of pitfalls and should not be seen as a silver bullet that will solve the lack of financial resources and unmet infrastructure needs.[74] Currently, private investments in basic services are very limited

BOX 2.7 FINANCIAL REDISTRIBUTION IN METROPOLITAN AREAS

Copenhagen is widely considered to have one of the most equitable and efficient metropolitan fiscal equalization systems in the world. Within the Greater Copenhagen area, fiscal equalization is entirely dependent on the municipalities, with no direct grants coming from central government. Wealthier municipalities contribute to poorer ones, resulting in increased equity in investment and service delivery across the metropole.[68] In 2014, 17 municipalities contributed around EUR 250 million to 17 other beneficiary municipalities.

Tokyo has also successfully implemented a fiscal equalization programme on a much larger scale. Its metropolitan government levies taxation and redistributes funds between its 23 wards. While it retains 48% of funds to provide collective metropolitan services, the remaining revenue is distributed between wards based on need. Meanwhile, in the United States, **Minneapolis-St. Paul** has also been running a successful metropolitan equalization programme for over 40 years. This has fostered balanced development while preserving local government autonomy. Its success helped inspire other metropolitan areas such as **Seoul** to adopt a similar scheme.[69]

A different example of a redistributive taxation system can be found in **Johannesburg**, where 'pro-poor' national objectives are enshrined in the actual structure of local tax systems, since poorer groups are exempted from land-revenue taxes.[70] The city is also developing a pool fund among municipalities to invest in common projects.

(representing only 5% of global investments), and cover only a limited number of sectors (telecoms, energy, transport and, to a lesser extent, water).[75] Other alternatives, such as Public-Private-People Partnership (PPPPs) (see Section 4.2.3), involving public authorities, private actors and communities, should likewise be considered.

Increasingly, local governments are working together with banks, private partners and local communities to build bespoke funding instruments for policy and service delivery. The co-management of services, pooling of resources, developing complementary local currencies, and the establishment of savings groups to safeguard public goods, are worthy of more attention.[76]

Currently, investment lags well behind the pace and scale of urbanization. The sustainability of metropolitan areas around the world will greatly depend on the acceleration of investment and the rapid construction of alternatives to traditional financial mechanisms and debt-based approaches.[77] A failure to prioritize investment in metropolitan areas will have severe and potentially permanent economic, social and environmental consequences.

2.3.2 The impact of reforms

Achieving substantive metropolitan governance and reform is not an easy task. Cultural resistance to institutional amalgamation is widespread, as residents tend to have a deeper sense of belonging and allegiance to localities than to larger conurbations. In addition, local political hostilities; disparities in municipalities' tax and institutional structure; fiscal emergencies at higher tiers of government; and legal disputes around spending and policy powers, are common in derailing or circumscribing processes of reform. Furthermore, evidence from Canada and Australia shows that by no means do all metropolitan consolidations manage to achieve greater public sector efficiency or economic growth.[78]

Metropolitan governance reforms clearly vary in their ambition and scope. Many have only tackled limited issues rather than wider metropolitan challenges. Reforms are rarely perfect and often involve trade-offs. However, although longer-term evaluation of reforms is necessary, it is clear that many reforms have already had positive effects. These include strengthening metropolitan leadership, engaging local governments, improving spatial management, building trust and coordination among municipalities, and creating a culture of innovation and inclusion.

An inventory of good practices for the effective implementation of metropolitan governance should include:

- **broader consultations**, including all actors, to build a credible case for change, supported by robust background research;
- **strong leadership and advocacy**, both through personalities and institutions, to sustain momentum for reform;
- a long-term process of **cooperation and incentive-building by central government;**
- **collaboration and buy-in** from local governments, fostered via concrete projects and initiatives;
- **financial solutions that match the new governance structures** with corresponding investment resources and the promotion of equalization mechanisms within metropolitan areas;

BOX 2.8 INNOVATIVE FINANCING STRATEGIES IN SHANGHAI

In the late 1990s, Shanghai developed an effective approach to urban financing that allowed it to better respond to increasing pressures for new mass infrastructure. In 1997, the merger of all municipal, local and industrial fundraising mechanisms into a single municipal agency, the *Chengtou*, created a one-stop shop for urban infrastructure. The new authority acted as a public real-estate developer, raising enough capital to finance nearly half the city's total infrastructure upgrades during the 1990s and 2000s.

As part of this process, state-owned enterprises (SOEs) acquired land from municipalities cheaply. After a first round of development, the SOEs sold the land or opened up shares at market prices, thereby preserving liquidity and funding the next stages of development. More recently, the centralization and simplification of transport asset ownership has helped the municipality coordinate and integrate the transport network.

Shanghai's model is incomplete, however, and may need a future cycle of reform. Land sales provide only diminishing returns in the long term, due to the declining availability of land and the rising costs of development operations. A structural lack of transparency and information-sharing has also nurtured opposition among peripheral neighbourhoods and districts trying to preserve their tax base and autonomy in service delivery.[73]

- more integrated and **long-term strategic planning approaches, to include the whole functional metropolitan area** (see also Section 2.6);
- analyses of **the impact on infrastructures and services, to improve economies of scale and access for all metropolitan inhabitants**;
- the development of efficient tools and policies to **support metropolitan economic development, innovation and diffused prosperity within the metropolitan area and its hinterland** (especially by strengthening rural-urban linkages);
- **data openness and data-sharing** to inform and speed up decision-making;
- a system of **incentives and compensations for those that oppose reform or are likely to lose out in the process of resource reallocation**;
- reaching out to citizens, to **foster a shared sense of 'metropolitan belonging'** through cultural and other collective events.

All reform processes should be supported by capacity-building for metropolitan and local governments. This involves establishing new institutional settings (e.g. a metropolitan planning department, metropolitan transport authorities, a land management office, economic development agencies, social housing offices, crisis-management and coordination offices). It also necessitates developing appropriate knowledge and tools to manage and monitor metropolitan development, creating integrated cross-sector policies to protect common goods (e.g. natural resources, public space) and collaborating with other actors inside and outside government.

2.4
THE CONTRIBUTION OF OTHER TIERS OF GOVERNMENT TO METROPOLITAN DEVELOPMENT

National and sub-national governments (e.g. states, regions, provinces) are critical partners in the development of metropolitan areas, but there are many tensions that underlie these vertical relationships. The role of higher tiers of government in supporting metropolitan areas and delivering reform has often been equivocal, not least because in some cases metropolitan authorities are viewed as potential competitors. A new deal between metropolitan areas and higher tiers of government, which prioritizes longer-term national policies to support metropolitan governance and investment reforms, and attends to the needs and aspirations of smaller and intermediary cities, is now urgently required.

As metropolitan areas grow, they experience side-effects and negative externalities for which national support and adjustments are essential. Some are generated by the metropolitan areas themselves (e.g. transport congestion, stretched housing and labour markets, public services, environmental vulnerabilities and social divisions); others by the siloed nature of national sectoral policies (land-use, economic development, infrastructure, health and education); and some by larger

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A new deal between metropolitan areas and higher tiers of government, which prioritizes the needs and aspirations of smaller and intermediary cities, is now urgently required

Photo: Mehmet Aktugan - Izmir (Turkey).

regions and the global context as a whole (growing disparities in productivity and prosperity, attraction of investments and international companies, immigration and cultural influence).

Despite these externalities, higher tiers of government are often slow to react to changes in the profile of their cities and to adjust city boundaries or powers to take account of growth. Such practices are politically unpopular and involve substantial adjustment costs and/or political capital. But metropolitan areas rely on central or state government to endorse processes of devolution, decentralization, and metropolitan thinking.

There are several interventions that higher tiers of government can make, and reform processes they can support, in order to improve metropolitan governance, fiscal arrangements and regulatory frameworks. These include:

- Recognition of metropolitan areas: Many **national governments still do not fully acknowledge the role of cities and especially metropolitan areas**, as the primary engines of prosperity in the 21st century. To support the attractiveness of larger urban areas, national governments need to adapt policies to metropolitan challenges. As mentioned above, some countries (e.g. Argentina, Brazil, Colombia, Ecuador and Mexico) have begun to revise the status of their capital cities and/or have started to adopt a less 'spatially blind' approach to metropolitan areas.
- Reform of metropolitan governance: National or state governments are usually the actors with the financial and legislative capacity to promote metropolitan reform. **Adequate legal tools and institutional frameworks are required to foster metropolitan governance that addresses evolving functional agglomerations** and related incentives to promote voluntary inter-municipal cooperation. National standards (such as population thresholds) could be established for identifying areas where metropolitan governance is required – taking into account the specific economic, social, environmental and cultural characteristics of different places.[79] National legislation is also needed to support transparent and accountable local governments and citizens' participation in local decision-making (audit and procurement systems,

access to public information, open data, etc.).
- Update and adapt planning and regulatory frameworks: National governments can 'champion' and promote metropolitan areas and certain locations within them.[80] France, Japan and Korea are among those who have adjusted their national planning regimes to shape land-use decisions in their leading metropolitan areas, through subsidies, exemptions or special zones. Updated **regulations can empower local governments to improve land management and control real-estate and land-market speculation in order to tackle social exclusion and spatial fragmentation.**
- Support adequate levels of investment and partnership for services and infrastructure delivery: Many countries have implemented reforms to facilitate the participation of private and community sectors in service provision in recent years. But in some cases (e.g. Latin America), local governments consider legal frameworks relating to tendering, contracts and oversight to be insufficient or unimplemented. Cities need stronger fiscal and regulatory tools and capacity-building support from national governments to engage effectively in complex PPP projects, in order to ensure affordable universal access to public services and the protection of public goods.
- National urban policies (NUPs) that have a clear perspective of metropolitan areas and the interactions among them and with intermediary cities and their hinterlands can foster a stronger, more polycentric system of cities. National departments can also facilitate networks and collaboration between metropolitan areas that are helpful in preventing binary and zero-sum perspectives.

In the future, higher tiers of government should recognize the distinct role of metropolitan areas, and the imperative to create policies and incentive frameworks that are calibrated to tackle metropolitan challenges, and which avoid perpetuating negative or unsustainable growth patterns.

2.5
THE ROLE OF CIVIC AND NON-GOVERNMENTAL ORGANIZATIONS IN THE GOVERNANCE OF METROPOLITAN AREAS

The active engagement and participation of actors outside formal government is essential for metropolitan governance to be effective and legitimate. **There is increasing demand for a democratization of metropolitan governance** that gives a bigger role to local organizations and citizens. Within this, more distributed governance and gender-inclusiveness are also being prioritized to stop the forms of discrimination to which women are still exposed, and to foster their involvement in local decision-making. However, the degree of public participation and inclusion in how decisions are made in metropolitan areas varies greatly. Much is influenced by historical tradition, political culture, social networks, local capacity, and the objectives and activities of metropolitan authorities themselves.

In general, the role of civic, gender and non-governmental organizations in governance structures has been increasing in many parts of the world. Legislative frameworks such as the National Reconstruction Development Programmes in South Africa, or the city statutes in Brazil, have shaped subsequent inclusive urban reforms in metropolitan areas such as São Paulo or Johannesburg. In Europe, many metropolises have adopted regulations to promote participation and transparency (e.g. neighbourhood assemblies in Barcelona, detailed in Box 2.9, and the debates on the *Grand Paris Express* or *Paris Metropole* meetings, among others). There is a strong and growing imperative to ensure that local and metropolitan governments fulfil democratic aspirations, recognize bottom-up initiatives, develop a real shared sense of belonging to the metropolis, and avoid the risks of technocratic metropolitan governance.[81] However, these practices have also raised criticism about the actual room for manoeuvre granted to autonomous bottom-up initiatives. Civil society organizations (CSOs) are thus requesting greater recognition of their rights in line with so-called 'participatory democracy'.[82]

2.5.1 Institutionalized forms of 'participatory' democracy: light and shade[84]

In many metropolitan areas, institutions have invited more direct input from citizens.[85] The Voice of the Mayors, published by the afore-mentioned Metropolis to disseminate the vision of metropolitan leaders, and the International Observatory on Democratic Participation (OIDP),[86] gather past experiences and lessons learned from participatory initiatives in metropolitan areas and cities.

Instruments of participatory democracy can create 'virtuous circles' of engagement between citizens and institutions through different mechanisms and channels (e.g. neighbourhood committees and assemblies, open town council meetings, councils for the elderly and youth, referenda, e-democracy, participatory budgets and planning, among others).[87]

Good metropolitan governance should also create mechanisms to promote women and girls' participation and decision-making in metropolitan institutions. This means women's leadership at every level of urban governance and active policies to end discrimination. Enhanced women's

BOX 2.9 THE BARCELONA METROPOLITAN AREA'S TRANSPARENCY AGENCY

The Transparency Agency of the *Area Metropolitana de Barcelona* (AMB) was created in December 2015 to monitor and deliver services related to the administrative transparency of the metropolitan institution. The Agency promotes effective regulations on transparency, right of access and good governance, coordinates metropolitan initiatives, and supports research and training. It also guarantees the availability of information and data on an AMB transparency website portal. The Agency has a consultative and collaborative role in the preparation of protocols and reports for the development of regulations, while reserving the right of access to information, and ensuring the fulfilment of obligations established by the regulations on transparency regarding interest groups. It has also promoted the creation of an Advisory Council on metropolitan transparency, the approval of codes of conduct among senior positions within the AMB, and the establishment of indicators of transparency and good governance in processes of monitoring and evaluation.[83]

representation could guarantee better access to resources under more equal conditions and ensure that public policies address existing gender inequalities. Metropolitan areas making the biggest steps in this area have invested in improving women's safety and security in public spaces, reducing violence against women, and training women to participate in and influence policy. They have also enacted laws and guidelines to make new governance institutions more inclusive.[88]

E-democracy is also changing forms of participation. The concept of e-government, introduced in the late 1990s, fosters the idea of serving citizens by improving their access to public services using new technologies. Over the past two decades, this has become a viable instrument to promote effective, transparent, accountable and democratic institutions.[89] The participation of citizens through digital instruments is a more recent development, but the concepts of 'Civic Media'[90], 'Smart Citizen'[91] and 'Digital Civics'[92] are already gaining ground.

The notion of participation, however, is not a panacea. Some initiatives have been criticized for favouring already privileged social groups, rather than those most excluded from public discourse. In Mumbai, for example, those with class and caste privileges have benefited most from the opportunities offered by participatory democracy (see Box 2.11).[105] In many cities, in fact, participation has gone through a 'gentrification' process, or has been used to strengthen 'clientelism' networks (cronyism).[106] Metropolitan participatory democracy and its instruments should instead involve and engage citizens from the bottom up and throughout the whole decision-making process, as part of its aim to redistribute and reallocate resources.[107]

Participatory budgets: recent evolutions

Participatory budgets are often cited as a democratizing instrument that has revolutionized the ability of citizens to become involved in metropolitan governance. This is by making budgetary issues, normally the domain of elected officials, open to everybody. This tool is widely employed around the world today with about 3,000 known initiatives of its kind.[109] The example of Porto Alegre (Brazil), where it was implemented for the first time in 1989, provides compelling evidence of its effectiveness, but also reveals some of its limitations.[110]

Participatory budgets have been criticized for limiting the sphere of engagement of citizens, weakening popular organizations and risking political manipulation.[111] To address these issues and create other channels of engagement, new practices have been developed.

For example, in Canoas, a city on the periphery of Porto Alegre, 13 dedicated instruments have been put in place in the past eight years to support citizens' participation (with more than 185,000 inhabitants involved). These are to gather information about collective demands (participatory budgets, neighbourhood committees, assemblies on commercial areas and public services); to gather information about individual

BOX 2.10 CITYLABS AND INNOVATION MASSACHUSETTS INSTITUTE OF TECHNOLOGY'S (MIT) SENSEABLE CITY LAB

Many metropolitan areas around the world have invested in CityLabs as a means of making city innovation and 'smart' agendas more inclusive. Some labs (such as the Massachusetts Institute of Technology 's (MIT) Senseable City Lab)[93] have focused on projects that leverage big data for urban solutions. Others (such as Cornellà's CitiLab[94] and Barcelona's 22@),[95] have become flagships for smart city or economic innovation programmes. Living laboratories have also been established to foster the involvement of communities in innovation and development measures.

In South Africa, the African Centre for Cities is promoting CityLab projects in the greater Cape Town metropolitan area.[96] This is dedicated to the creation, measurement and preservation of a healthier urban environment;[97] control and reduction of urban violence and the strengthening of public safety;[98] as well as innovative approaches to housing policy and the delivery of housing services in otherwise marginalized areas.[99] In Mexico City, the municipality has established *Laboratorio para la Ciudad* (Laboratory for the City)[100] as an open-government,[101] technology-driven platform that involves citizenship, especially young people and those engaged in the informal economy. In spite and because of the city's huge size and population, Mexico City is a quintessential living laboratory for civic innovation, creativity-driven policies, social and urban experiments, and so-called 'provocations'[102] to bridge grassroots demand with government action.[103] UN-Habitat's recent initiative, Digital Civics, engages children in City Builder Labs to build public space by playing with the well-known Minecraft game, youth in City Changer Labs to solve urban issues with mobile technology, and citizens of all ages in City Maker Labs to improve quality of life with digital fabrication.[104]

demands (public hearings and engagement programmes such as *Mayor in the Street* and *Mayor in the Metro*); collaboration tools (such as the *Agora Network*); coordination (e.g. the *Social and Economic Development Council* or the *Council House*); and strategic development (City Congress, multi-year participatory and sectoral plans).

Already recognized at the international level by the International Observatory on Democratic Participation (OIDP), these tools mix online and offline channels for social dialogue, expanding citizens' engagement in both expenditure planning and revenue discussion.[112]

The integration of multiple channels of participation can be seen as a way of diversifying engagement, accommodating different interests and increasing the number of participants, as seen in cities such as New York, Johannesburg and even some cities in China.[113] In Seoul, for example, the metropolitan government has recently promoted a Citizens' City Hall Programme that combines an open-door policy for ideas and opinions with on-site visits, allowing the public administration to discover solutions not from behind a desk but, rather, through direct community engagement.[114]

In complex metropolitan areas, however, there are specific challenges. These include: the growing distance of such institutions from the daily life of citizens; the scale and differentiation of the problems to be solved; and the need to harmonize decisions coming from different local or intermediate governments. These are all factors that risk 'diluting' or 'polluting' citizens' perceptions of processes of social dialogue as real spaces for direct participation with guaranteed outcomes. But numerous experiments are contributing to 'scale-up' citizen participation beyond the municipal level.[115]

The concept of participation is changing, moving beyond simple consultation, to create a space that will **eventually rebalance the distribution of decision-making powers in society**. This requires local governments to respect some basic conditions, such as the empowerment and autonomy of social movements and local stakeholders. 'Enablers' of citizen engagement need to be simple, reciprocal, representative, inclusive and people-oriented. They need to take privacy rights and citizens' feelings seriously, encompass transparent and shared rules, and endow citizens with real decision-making powers. Furthermore, local governments

BOX 2.11 NEIGHBOURHOOD ASSOCIATIONS' PARTICIPATION IN METROPOLITAN GOVERNANCE: THE EXAMPLE OF INDIA'S METROPOLISES[108]

In the past few years, a number of Indian metropolitan areas have launched participatory programmes to engage citizens, NGOs and community bodies in a quest to improve city infrastructure and economic development (Bangalore, Delhi and Hyderabad, for example, underwent a number of forms of 'e-governance'). Their experience of neighbourhood associations highlights the ambiguities of participatory democracy and its processes. In the last 20 years, these associations have become a legitimate interlocutor in urban governance and helped renew and enhance India's local democracy. Despite concerns of democratic deficit and elitism, they have made public authorities in metropolitan areas more transparent, accountable and responsible, and have allowed the middle classes to mobilize politically. However, the effectiveness of neighbourhood associations as a representative 'voice' is in question. They have largely favoured the privileged against the poor and the needs of the most disadvantaged have rarely been defended. It is essential, therefore, that mobilization and inclusion of individuals and collectives reflect the high degree of social diversity of metropolises, so that all interests and voices are considered in the decision-making process.

must develop an increasing number of participatory processes, online and offline, which are balanced and implemented with regularity and continuity.[116]

2.5.2 Civil society initiatives[117]

Besides these instruments, other forms of democratization, initiated by civil society in its broadest sense, play an increasingly important role in metropolitan governance. Many local governments have decided to work with existing rather than create new citizens' movements, as a more sustainable way of engaging communities directly (e.g. 'neighbourhood tables' in Montréal).[118] Thus, the role of citizens' associations committed to the improvement of living conditions and housing policies, and the promotion of the 'Right to the City', is now more visible than ever in many metropolises. This is happening both in highly urbanized and more recently urbanizing countries.

There is plenty of evidence of the power and dynamism of such movements. For

example, an informal grassroots 'shadow ministry' of housing has been created in Egypt to produce critical information for housing policies. [119] *Un Centre Ville pour Tous* ('A City Centre for All') in Marseille (France), has supported neighbourhood renovation without any population displacement. The NGO SPARC (Society for the Promotion of Area Resource Centers) has in the past led various initiatives in Mumbai's slums to avoid evictions. Cooperatives of architects and neighbourhood committees have joined forces in Caracas (Venezuela) to regularize urban plots. [120] Johannesburg has promoted the 'Josi@work' initiative for 'co-production' and delivery of services by the municipality and grassroots associations. [121]

These empowerment processes are catalyzed by local associations, with or without the help of NGOs, whose room for manoeuvre and negotiating power improves whenever they build on national coordination. They tend to rely extensively on community leaders who defend an approach to collective action that is not 'clientelistic'. Slum Dwellers International (SDI), with a presence in 33 countries, has been able to develop a strategic alliance with an Indian national women's organization active on microfinance (*Mahila Milan* – 'Women Together') and SPARC.

This has included women and pavement dwellers at the core of its governance, leading to a number of initiatives that range from resistance to eviction to savings groups, the building of new social housing units and self-management of planned displacements (as in the case of slums sprawled along railways). One example of its success is that it has managed to expand its savings group network to 65 Indian cities. [122]

2.5.3 Migration, integration and welcoming metropolitan areas

There is growing consensus that the diversity and skills brought by immigrants are a driving force for social, cultural and economic development in metropolitan areas. The governance of migration is an increasingly complex and pressing task for those areas that absorb domestic and international populations. While national governments decide on the overall framework for immigration, responsibility for attracting, retaining and integrating immigrants is usually shared by municipalities and metropolitan governments. Non-governmental actors are increasingly active in supporting this process, especially where interventions are needed to reduce social division and discrimination.

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There is growing consensus that the diversity and skills brought by immigrants are a driving force for social, cultural and economic development in metropolitan areas

Collaborative governance between CSOs and local governments to integrate immigrants has proven effective in many metropolitan areas. In Vancouver, for example, the Multicultural Advisory Committee has provided a bridge between civil society and municipal governments, enabling community capital. [123] Municipal administrations and community services have also partnered in Stuttgart as part of the city's Pact for Integration that has focused on equal opportunities and the role of cultural diversity as a community and economic asset. Since 2000, the Greater London Authority (GLA) has had an equality policy to fight cultural, social, and economic exclusion affecting London's immigrants, minorities and women, with a strong inter-sectional perspective. [124] Many cities are developing proactive policies to facilitate the integration of immigrants. [125]

A network of metropolitan cities in Europe, including Barcelona, Madrid, Paris and others, have mobilized to become 'Cities of Refugees' in answer to the humanitarian crisis of refugees and migrants coming from Syria and other regions. [126] As regards internal migrants, the municipality of Chengdu, China, adopted a pioneering migrant inclusion policy allowing them to express their concerns at the community level, including about public resource allocation. Other cities are following suit.

2.6
STRATEGIC PLANNING: A GOVERNANCE TOOL FOR PARTICIPATION AND INTEGRATED METROPOLITAN MANAGEMENT

An important stimulus to positive reforms and cultural change in metropolitan governance comes in the form of strategic planning. This is within the overall objective of promoting integrated development by combining urban policies with economic development and management strategies. In many larger metropolitan areas, strategic plans have become important tools to achieve a longer-term framework for managing their development.

This is predicated on a shared assumption that housing, transport and sustainability policies cannot be adequately addressed in a short-term four to six year electoral or investment cycle. It also

seeks to analyze and develop the metropolitan area as a whole as a living system, rather than just the sum of its individual jurisdictions. In principle, the strategic process allows cities to build a vision and an overarching framework, promoting the integration of mutually reinforcing initiatives and actions.[127]

The preparation process engages many actors, promotes dialogue, and puts metropolitan issues on the agenda of key decision-makers, which can contribute to the strengthening of metropolitan governance. It offers an opportunity to plan collaboratively across the many territories that share a functional metropolitan geography, preserving a participatory approach that includes local stakeholders and civil society. Its impetus should go beyond official political mandates and synchronize activity between local governments, as well as with the private sector, civil society and key regional institutions.[128]

Different metropolitan areas, ranging from advanced and high-income metropolitan areas to large megacity agglomerations, to medium-sized metropolitan areas (see Table 2.2), implement strategic planning to address their particular local constraints.

Leaders need to move away from fragmented sector-specific decision-making to a more strategic approach that takes into account the systemic tensions between inclusion and sustainability and the necessity for growth. Those with a shared, overarching vision, undertaken in an inclusive way, underpinned by strong urban governance,

Table 2.2 **Examples of strategic planning approaches at the metropolitan level.**
Source: Clark and Moonen.

City	Strategic plan	Year last updated	Target date	Areas of focus
Auckland	Auckland Plan	2010	2040	Transport, housing, liveability, young people.
Barcelona	Barcelona Vision 2020	2010	2020	Entrepreneurship, research, transport.
Dar es Salaam	Master Plan	Approval process	2032	Spatial structure, transport, density.
Lima	PLAM 2035: Metropolitan Urban Development Plan for Lima and Callao	2015	2035	Budget planning, project structuring, legal tools, single transport authority.
London	London Plan	2015	2031	Regeneration areas, town centres, transport.
Melbourne	Plan Melbourne	2014	2050	Jobs and investment, housing choice, governance, water, liveability, transport.
Nairobi	NIUPLAN: Nairobi Integrated Urban Development Master Plan	2014	2030	Decentralized CBD; railway development; water distribution network; storm water drainage system.
New York	Fourth Regional Plan	1996 (2017)	2040	Parks, waterfronts, open spaces, transport projects.
Paris/Île-de France	Île-de-France Regional Master Scheme	2013	2030	Planning, density; economic development; housing; environment; mobility/transport; energy; equipment; services; natural and technological risks; heritage.
Rio de Janeiro	Strategic Development Plan of Integrated Urban Metropolitan Area	2015	2030	Universal sanitation transport integration and electronic card; information system between local governments to avoid natural disasters; broadband access; tax incentives.
Riyadh	MEDSTAR: Metropolitan Development Strategy for Arriyadh Region	2003	2023	Road network traffic management plan; King Abdullah Financial District suburbs; new sub-centres.
Seoul	Seoul 2030	2009	2030	Citizen participation, equal opportunity, jobs, culture, sustainability.
Shanghai	Shanghai 2040	tbc	2040	Human-oriented, green and innovation-led development.
Tokyo	Creating the Future: The Long-Term Vision for Tokyo	2014	2020	Ageing society, disaster resilience, economic zones.

institutional coordination and broad coalitions that support and ensure continuity of execution and implementation, are better positioned for success. A long-term blueprint is needed that can be turned into granular, short-term actionable plans and responds well to local economic and social change. When these factors are in place, there is the potential to achieve otherwise difficult tasks: preventing peripheral areas or population groups from becoming permanently excluded from access to jobs, prosperity and social capital; integrating land policy and infrastructure provision; promoting mixed-use neighbourhoods; preserving cultural heritage

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BOX 2.12 TWO EXPERIENCES OF STRATEGIC PLANNING

Johannesburg's strategy for 2040

Since 1999, Johannesburg has sought to create a strategy in order to build its institutional foundation, rethink the nature of local governance and create a successful city that meets the needs of its citizens and other stakeholders. The Joburg 2040: Growth and Development Strategy (GDS) was developed in 2011 and the new political leadership breathed new life into the strategic process. Joburg 2040 GDS is both an aspirational document that defines the type of society Johannesburg seeks to become by 2040, and a long-term planning instrument with a set of strategic choices to guide the city's development trajectory. It lays the foundation for multilevel, multi-scalar and integrated responses to the city's urban challenges and encapsulates the long-term perspective on urban development into succinct outcomes and outputs aimed specifically at achieving smart and inclusive growth by 2040.[131]

Local democracy and planning in São Paulo, Brazil

The city of São Paulo has a new master plan, approved on 30 June 2014 and enacted as a new law on 31 July the same year.[132] This provides a number of guidelines for the development of the city in the next 16 years. Together with public hearings, meetings and workshops that were part of a comprehensive participatory process, the Municipal Department of Urban Development (SMDU) launched the digital platform Gestão Urbana ('Urban Management'). This allowed greater access to data, and provided innovative participatory tools, such as an online proposal form, shared map and collaborative draft bill for citizens to post specific comments and suggestions for each article. This process was agreed, from the outset, with civil society and the Municipal Council of Urban Policy (CMPU). In total, 114 public hearings were carried out, with the participation of 25,692 people. In addition, 5,684 proposals were made in meetings and workshops and another 4,463 suggestions were sent using digital tools.[133]

and identity; enhancing energy efficiency; and promoting compact and polycentric urban spaces.[130]

Nevertheless, not all strategic plans are successful, in their formulation and implementation. Development priorities in their each metropolitan area are often contested and there is often the risk of certain government and investment interests having a negative effect on and jeopardizing meaningful citizen participation. Certain public authorities have, in fact, tended to prioritize plans that are primarily driven by economic development objectives, so as to position metropolitan areas favourably in terms of global competition, ignoring social and environmental dimensions. Similarly, citizens' participation in the elaboration, management and monitoring of urban strategies will often be limited to a consultative role (public surveys, workshops, forums and polls) as the decision-making process is mostly controlled by political and administrative authorities.[134]

Many cities – Singapore, London, Mumbai, Cairo,[135] Algiers[136] and Brussels[137] – have developed urban strategic planning documents, often with the support of external groups of experts, aimed at engaging the business community to support the metropolitan economy and building new alliances to respond to global competition.[138] But some of these strategies have elicited criticism from civil society and other social actors due to the limited extent of consultation.

However, in entities as institutionally crowded and socially imbalanced as metropolitan areas, the strategic planning process is still one way to engage and enrol all governments, institutions, businesses, community bodies and citizens in a common project of governing the metropolitan space.

In the future, strategic planning can contribute to the improvement of governance, legal and social mechanisms that lead to effective urban policies and their enforcement in metropolitan areas. The potential dividends include: **simple, effective legislative and regulatory frameworks** that are consistent from the top down, from central governments to the most proximate local authorities; strategic visions cascading into feasible and actual implementation plans; **inter-agency cooperation and cross-level policy consistency; and knowledge-sharing tools to guide and inspire**, rather than prescribe and limit the potential of strategic urbanism for metropolitan areas.[139] Strategic plans present a policy opportunity whose potential, in most metropolitan areas around the world, can be unlocked by ambitious and inclusive local governments.

3.
ECONOMIC DEVELOPMENT IN METROPOLITAN AREAS

Metropolitan areas concentrate an unprecedented share of the world's wealth, business activity and innovation.[140] The GDP of certain metropolises is higher than some nation states. Tokyo, New York City, Los Angeles, Seoul, London and Paris, for example, would all rank among the world's 30 largest national economies.[141] Larger metropolitan areas, in particular, have the potential to help national economies become more globally connected and productive, and in principle they are able to diffuse multiple benefits across national urban systems through enhanced connectivity, economic specialization and cooperation. To realize this, metropolises are increasingly tempted by global competition to attract business and investors through the promotion of prestigious investments or global events. At the same time, however, these strategies expose the urban fabric and citizenship to significant tensions, creating substantive negative externalities, with often overlooked social and spatial effects (e.g. exclusion and gentrification) and dramatic environmental impacts.[142]

This section reviews some of the key economic dynamics at play in metropolitan areas, and the need for economic development strategies that both harness the positive externalities and address the negative externalities of their inputs. It also critically assesses the consequences of growing competition between cities in the current cycle of globalization, and examines the potential for alternative approaches oriented around 'attractiveness', to reconcile the need for prosperity with the wider goals of justice, inclusion, environmental protection and territorial cohesion. The environmental dimension will then be addressed specifically in Section 4 of this chapter.

3.1
METROPOLITAN ECONOMIES, AGGLOMERATION AND POSITIVE EXTERNALITIES

Metropolitan expansion is, to a certain extent, the spatial and sub-national expression of globalization processes.[143] Economic development has become more complex with increased globalization, economic liberalization, population mobility and technological evolution. Jobs, workers and capital have become highly mobile and increasingly concentrated in metropolitan areas. Global foreign investment has more than trebled since 1996, when Habitat II was convened, from USD 350 billion to well over USD 1 trillion, and the share of inflows to developing countries has increased from a third to more than half of this amount.[144] Numerous economic sectors are becoming globally traded, from established sectors such as financial and professional services, to newly internationalized sectors such as creative industries, clean technology, higher education, engineering and architecture.[145]

The close links between metropolitan growth and globalization have given rise to a whole literature that attempts to analyze these phenomena and describes, at the same

Economic development has become more complex with increased globalization, economic liberalization, population mobility and technological evolution

time, the development of large cities that, while well interconnected at the global level, seem increasingly disconnected from their own hinterlands.[146]

However, metropolitan areas are also acknowledged as 'engines of growth', as they provide critical advantages and externalities to their national economies. Worldwide, approximately 60% of metropolitan areas outperformed their national economies in terms of job creation in 2014, in line with previous figures.[147] Metropolitan areas are especially important drivers of national growth in the Asia-Pacific region and in Northern and South America, but the trend holds in every region. Global evidence indicates that where urbanization has been welcomed and planned for, rather than resisted and unplanned, it has been central to the economic transformation of many countries in recent decades. The BRICS nations are an example of where the concentration of population in large cities

has tended to improve prosperity and living standards, notwithstanding ongoing imbalances and inequalities.

Graph 3.1 highlights the varied pace of economic and employment growth in metropolitan areas since 2000. It emphasizes the exceptionally fast growth of many Chinese metropolitan areas, including secondary cities such as Shenzhen, Chengdu and Chongqing, as well as several in India and South-eastern Asia. By contrast, many high-income metropolitan areas have been stuck in a low-growth phase, including Osaka, Paris and Los Angeles. Yet the variations in performance and outcomes both within and between nations and regions highlight the important role that local economic assets and approaches play in the global economy.

Metropolitan areas appear to offer many *prima facie* advantages to national development. The higher tax yields they obtain from higher value-added industries (e.g. finance, trade,

Graph 3.1 **Average annual GDP per capita and employment growth of the 30 most populous metropolitan areas, 2000-2014.**
Source: Brookings Institution and Oxford Economics.
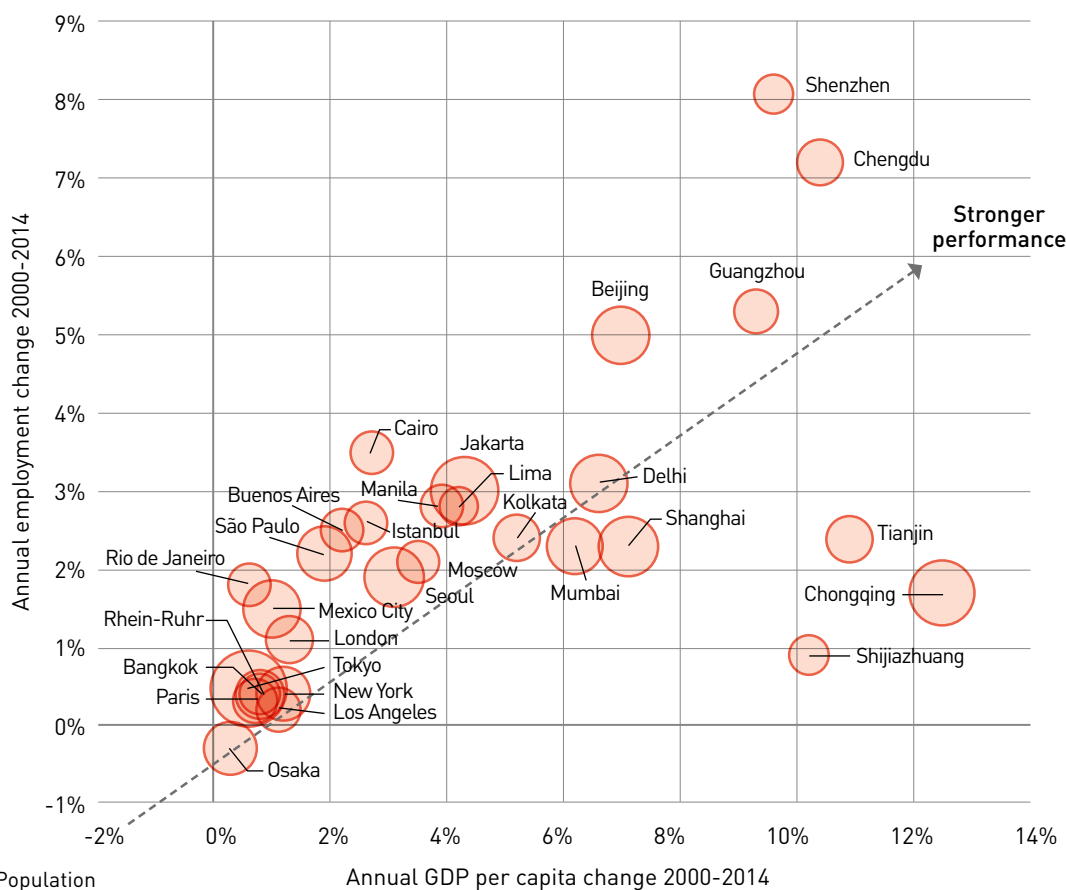
ICT, etc.) can help the whole country regulate potential imbalances in other lagging regions. Their activities often stimulate the expansion of supply chains throughout the region and national territory. The international firms they host engage in direct and indirect knowledge exchange with local firms, and often increase access to new investment opportunities. Metropolitan areas also function as transport and infrastructure hubs, and therefore as gateways for tourism, communication, and commerce. Moreover, as part of what is known as the 'escalator effect', the services and industries in which they specialize provide diverse work and training opportunities that foster the upskilling of a workforce that may, eventually, transfer their acquired expertise to intermediary cities and/or rural areas. Finally, especially in the case of 'global' cities, that often grow into world-renowned financial and cultural centres, their social and cultural assets can improve a whole nation's 'brand' by association with the reputation of their largest and more dynamic metropolitan areas (e.g. New York, London, Paris, Tokyo, Shanghai, Sydney and Toronto).[148]

The spatial patterns of economic activity within metropolitan areas tend to change during successive economic cycles. There is often concern that economic demand is focused exclusively in the central core. But in other cycles, many metropolitan areas experience demand around airports, station termini, hospitals, university campuses, science parks, conference centres, and many other lower-cost and higher-yield sites further out from the centre.[153] The result of these different processes is that metropolitan areas have become more economically interdependent, and collective policy solutions have become more important.

Because metropolitan areas tend to concentrate higher-level economic and productive functions, however, **a pattern of winners and losers tends to emerge within them**. Core areas of central cities, for instance, usually remain attractive for certain activities, but many other parts of the wider metropolitan area are unable to attract public or private investment and lack connectivity with the main job locations. Income inequality is higher within big urban areas than elsewhere.[154] Preferences among younger adults for urban living, and the decline of manufacturing and distribution, particularly in developed countries, mean that the industrial make-up of new jobs is shifting in favour of economic activities that are already disproportionately located in central

BOX 3.1 THE EFFECTS OF AGGLOMERATION [149]

The ability of firms and households in metropolitan areas to draw on a common pool of resources, to match up with jobs, and to learn from regular face-to-face contact, is a well-established feature of 'agglomeration economies'.[150] Although existing models to explain agglomeration remain far from complete, it is widely accepted that agglomeration enables efficient logistics, advanced clustering, access to diversity, and entrepreneurial creativity. Agglomeration effects have been widely measured in high-income metropolitan areas, but are now also being observed in the BRICS and other emerging countries. They are seen as being especially significant in metropolitan areas with a high share of knowledge-intensive jobs.[151] There is also increasing evidence that metropolitan areas located near to each other generate significant benefits from this proximity. Cities that belong to a network or 'system' of nearby cities are able to 'borrow size' and acquire higher-level metropolitan functions such as firms, international institutions and science. Yet there is no simple law of agglomeration or critical mass which guarantees that metropolitan areas become economically successful. 'Diseconomies' of agglomeration can and do occur when urbanization is poorly managed, when there is a lack of continuity and coherence in the way metropolitan institutions implement policies, and in particular when infrastructure is not financed or delivered to match growth demand.[152]

cities.[155] The resulting polarization is one of the principal negative externalities that arise from increasingly international demand for metropolitan areas.

3.2
NEGATIVE EXTERNALITIES AND THE CONSEQUENCES OF 'COMPETITIVENESS'

Over time, the imperative to compete in nationally and globally traded sectors has visible (and often unintended) consequences for labour markets, spatial development and social bonds in metropolitan areas. The financialization of urban economies has intensified the competitiveness agenda,

increasing inequalities between and within metropolitan areas.[156] The deregulation of financial markets, institutional investment (by insurance firms, pension funds, private equity, etc.) into fixed assets; the privatization of public spaces and services; and the securitization of mortgages and municipal bonds, have substantially reshaped metropolitan economies, creating new and entrenched challenges.[157] Foreign investments in urban properties are expanding exponentially (from USD 600 billion in 2013 and 2014, to USD 1 trillion in 2014 and 2015) in metropolitan areas in all regions (London, New York, Shanghai, Shenzhen, Tokyo, Sydney, etc.).[158] Since the financial crisis of 2008 and its aftermath, the financing of cities has evolved in many Western metropolises, moving away from traditional forms towards investments in highly profitable areas and via financially-leveraged strategies. This has promoted an increased level of overall debt, particularly in real-estate, and associated financial instability and economic asymmetries in urban economies.[159]

Despite the importance of economic development and competitiveness in metropolitan areas today, these imperatives can – and often do – generate significant negative externalities with adverse effects on sustainable urban development.

These challenges exist even for highly globalized metropolitan areas – such as London, New York and Paris - which have been very successful at increasing their productivity, attracting international firms and appealing to highly-educated workers, but with important social and spatial consequences. One common symptom in these cases is monocentric economic development that struggles to create new centres of economic activity. Thus, jobs based in the periphery are often dominated by low-paid industries or local services for residential commuter populations, and spatial fragmentation leads to a failure to efficiently connect people to jobs.[160] As a result, in many developed metropolitan areas, there is an increased social segmentation, with different forms of gentrification and 'ghettoization'.

For metropolitan economies in emerging or developing countries, the externalities are different in type and scale. GDP per capita growth has averaged 6% per annum since 2000, compared to 1% in developed economies.[161] But this strong performance often belies profound challenges of unemployment and under-employment, poorly integrated migrants, and increased residential and labour market segregation, that result in extensive expansion of informal economy and settlements.

Globally, income inequalities tend to be higher within large urban areas than elsewhere (including in developed countries), aggravated by a slowdown in job creation.[162] Employment in developed metropolitan economies has grown at well below 1% a year since 2000[163] and, in 2012, 45% of OECD metropolitan areas had an unemployment rate above the national average.[164] In developing metropolitan areas the average job creation rate has fallen to below 3% per year.[165] Loss of jobs in key traditional industries, and widening income disparities are all driving a paradigm shift towards shared and coordinated approaches to metropolitan economic development.

3.2.1 Polarizing effects within metropolitan areas[166]

A primary objection to the competitiveness agenda within metropolitan economic development policies is its link with increased socio-spatial inequalities. Financial reasoning and objectives may differ from purely urbanistic ones, such as social diversity, the fight against urban sprawl, or the quest for a consistent blend of accommodation development, economic activities and infrastructure.[167] Territorial policies to attract investment in metropolitan areas are often accompanied by planning and 'flagship' regeneration projects that directly and indirectly accelerate gentrification and marginalization of socially fragile communities. This can be compounded by a lack of financial resources and weak planning and public policy tools to manage the process of redevelopment in an inclusive way. An imbalance in capacity and resource between public and private sectors can result in projects being selected for short-term profitability rather than long-term value creation.[168]

The rise of privately financed 'mega-projects' – office buildings, shopping malls, stadia, casinos – has also stimulated a fragmentation of technical and infrastructural systems and large gaps in network quality and coverage. **This phenomenon – sometimes called 'splintering urbanism'[169] – makes it very difficult to organize metropolitan areas around the provision of coherent, equitable and standardized services**, such as water, energy, transport and communication

The financialization of urban economies has intensified the competitiveness agenda, increasing inequalities between and within metropolitan areas

infrastructures. One acute manifestation of splintering urbanism is the rise of gated communities and private enclaves, which has spread within different metropolises in both developed and developing countries. Linked to the polarizing effect of economic globalization, these privatized spaces threaten aspirations for collective transit, health and education systems, and universal access to cultural resources.

Phenomena of 'urban polarization' result in more inequality between economically prosperous areas. This is characterized by a demand for a highly qualified workforce in certain usually centric zones whilst populations in other zones, despite their qualifications, are disadvantaged by the progressive removal of available jobs from their areas of residence – accompanied by growing unemployment and poverty. These evolutions are exacerbating 'spatial mismatches' between jobs and houses.[170] Inflation in land and property markets adjacent to these areas of intense economic activity causes workers to relocate further away from workplaces, creating dislocation for established industries that are less productive or which have high space demands – particularly for SMEs. This can also have negative effects on the fragile sectors of the informal economy, for example through the expulsion of street vendors from redeveloped areas. This logic, for instance, has led to the dismantling of the textile sector in the centric zones of Mumbai that had become unaffordably expensive. **Such imbalances can foment a number of social risks: alienation, social violence, deteriorating living conditions, sprawl, insecurity and environmental vulnerability**.

There are also many examples in developing economies where competitiveness policies have not led to increased economic attractiveness. In Cairo the expected multiplier effect after the transformation of the urban stock to promote the local productive fabric has not paid off, and policy instruments designed to monitor progress are still lacking. Land-use and property deregulation to attract local and foreign investors since the mid-2000s has not created a more competitive or productive economy.[171] Elsewhere, competitiveness initiatives in cities such as Lagos, Nairobi and Mumbai have been beset by leadership, coordination and infrastructure delivery failures. For these and other reasons, some observers argue that competitiveness objectives are incompatible with metropolitan development goals, such as social diversity, compact development, housing affordability and mixed-use living environments.[172]

3.2.2 Externalities in the wider nation

In many countries where metropolitan areas have expanded, analysts also observe a number of costs to the nation as a whole that may offset the positive externalities they bring. Successful and attractive metropolitan areas, for example, can drain other regions of their talent, intensifying the disparities in skills within a nation. Enhanced transport links to metropolitan areas appear to funnel demand towards them, damaging the growth potential of other areas. This can be compounded by the fact that metropolitan authorities have larger balance sheets and so are able to attract a disproportionate share of bankable investment projects, including with national governments.

There are also risks that monetary and regulatory policies can (sometimes inadvertently) lean towards the needs of metropolitan areas, at the expense of the rest of the country.[173] In some cases, the government policies and laws are weighted towards addressing rapid urbanization in metropolitan areas, leaving limited public resources for regional and rural areas. This is visible in the effects of housing policy in some countries, for example, where the unequal structure of the housing market is viewed to be a deterrent to labour migration between different regions. Finally, although metropolitan areas usually generate a higher proportion of national tax revenue and are net donors to national government treasuries, fiscal redistribution may not be viewed as enough to tackle the ever-growing welfare needs in other regions. This debate is prominent in cities such as London, Moscow, São Paulo, Tokyo and Warsaw.[174]

The extent to which all these negative externalities are real or perceived, however, is widely debated. What is clear is that metropolitan areas often need to take account of some of the perceived biases, and collaborate in order to amend them through integrated metropolitan governance, with policies and interventions that strengthen the collaboration with their hinterlands and support a more balanced urban development throughout the country.

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Metropolitan areas often need to take account of some of the perceived biases, and collaborate in order to amend them through integrated metropolitan governance

3.3
IMPLEMENTING URBAN STRATEGIES FOR METROPOLITAN ECONOMIC DEVELOPMENT

Given the externalities that arise both within and beyond metropolitan areas, local and metropolitan governments are having to take a comprehensive and cross-cutting approach to their economic strategies to create jobs and support private sector investment while ensuring sustainability and quality of life for local residents.

When designing their economic development strategies, most metropolitan areas face similar challenges: a need for more coherent systems, rules and practices; capacity to attract employers and investors; citywide mechanisms for inclusive spatial planning; transport regulation and the promotion of quality of life; additional capital spending to sustain and improve key infrastructures; reduced competition and duplication among neighbouring municipalities and districts; the development of a skilled workforce that allows businesses to expand; and additional support from higher tiers of government. These tasks are **not conventional service delivery activities**. They involve strategic intervention to support non-governmental institutions and the wider labour market, and **often require new arrangements and organizational innovation across a metropolitan area.**

Metropolitan approaches to economic development not only aim to improve productivity, deliver hard infrastructure projects, and attract and retain a highly educated workforce.[175] They also adopt tactics to facilitate corporate investment, correct market inefficiencies (e.g. skills, finance deficits), become efficient and differentiated in their dealings with firms, and build capacity to foster entrepreneurship.[176] These local climate factors can yield widely divergent outcomes for metropolitan areas. For example, San Francisco and Los Angeles metropolitan areas had approximately equal economic performance in 1970, but today San Francisco has a 30% more income per capita advantage.[177]

Leaders in metropolitan areas observe the limitations of previous approaches, including in Canada, South Africa and the United Kingdom, among many others.[179] Despite financial and institutional constraints, there is increasing recognition that economic development is **a partnership rather than a top-down activity** and that the outcomes become apparent over business cycles (12 to 15 years) rather than electoral cycles (three to six years) of governments.[180] Economic development is more effectively orchestrated through the **combined efforts of local governments, chambers of commerce, development agencies, infrastructure and utilities providers, financial institutions, and other tiers of government, all in tandem with citizens**. Without this partnership, there are clear risks that growth-oriented projects will not deliver inclusion (e.g. through increased social housing or decent job creation) and, conversely, that initiatives to foster social development may not address barriers

BOX 3.2 THE VISION OF THE WORLD ECONOMIC FORUM: LESSONS ON CITY COMPETITIVENESS[178]

Based on case studies of 33 cities from all regions and levels of development, a 2014 report by the World Economic Forum elicited four general lessons on city competitiveness, which cities themselves should grasp and then experiment with new rules and reforms:

- **Institutions**: The governance of cities requires leadership, long-term vision and empowered, well-coordinated municipalities.
- **National and local policies**: Cities rely on robust and fair macroeconomic policies, national openness to trade and foreign direct investment (FDI), flexible labour markets, efficient taxation, transparent domestic business regulation and tools to protect the most vulnerable, but cities should also develop their own policies on for example, FDI, trade, tourism and attractiveness.
- **Hard connectivity**: Cities must find a good balance between 'under-planning' and 'over-planning', plugging hard infrastructure gaps and making intelligent infrastructure choices that favour urban density and efficiency.
- **Soft connectivity**: Cities must promote social capital through investment in education, digital infrastructure, cultural and recreational facilities, and quality of life.

Table 3.1 **Metropolitan economic development versus local economic development.**

	Local economic development	Metropolitan economic development
Skills	Single sector approach.	Integrated approach to education, housing, public health, business framework.
Assets	Local stand-alone companies and institutions.	Recognition and promotion of all assets in all municipalities; internal and external mobility.
Complementarities	Weak internal collaboration within metropolitan area. Risk of zero-sum substitution or displacement.	Strengthened cooperation within metropolitan areas and complementarities within national economies and with international actors.
Target sectors	Local sector approach. Potential for unintended spill-overs.	Diversified set of sectors that span the metropolitan area.

to economic growth. Table 3.1 provides a simplified schema of a joined-up perspective for economic development.

Not all metropolitan areas have the same economic development priorities. For established and high-performing metropolitan areas, the focus is often to retain competitiveness and support new innovations and technologies. For those that are de-industrializing or modernizing their economy, attention is paid to participating in new niche markets and investing in not only physical but also human capital development (see Box 3.3 on the Global Cities Initiative). For a majority of metropolitan areas, there is a priority to develop networks between stakeholders and improve relationships and opportunities for SMEs.

Metropolitan economic development initiatives are more difficult to execute in many developing countries because of weak framework conditions, uncompetitive local industries, and other demands on limited resources. Where they have been attempted (for example in Curitiba, Durban and Shanghai), there are signs that suggest they can build capacity and support smaller domestically focused enterprises in emerging industries with better outcomes than top-down national approaches. Technology transfer, firm performance, local networks, training organizations, and interactive learning between institutions and industries are often the most urgent foci in these contexts.[181]

Metropolitan strategies tend to go through different phases. The first phase of a long-term economic strategy tends to be on delivering fast visible results that create further momentum for change. 'Quick wins' in the first five years in terms of investment, infrastructure and institution-building are often seen as a necessary catalyst for a second and third phase of broader partnership and development. Pilot projects are an important mechanism for testing the opportunities of clusters and technology over a 12 to 24-month period, as cities such as Hyderabad and Chennai have shown in the field of electronic manufacturing, and Brisbane with professional services.[182]

Not all economic strategies have proven either actionable or effective, but many metropolitan areas have had success. This section reviews evidence of metropolitan attempts to internationalize their economies, develop new spatial strategies, create knowledge-sharing and networking platforms, and provide support to SMEs. It also reviews alternative approaches that focus on the social and collaborative economy, and the fundamental role of the informal sector in the metropolitan areas of developing countries.

Supporting internationalization

Achieving better reach into global markets is a strong component of metropolitan strategies. The broadening and scaling of innovation is a key tactic to boost metropolitan productivity and grow the jobs base. Evidence from places such as San Diego and Copenhagen suggests that firms operating in international markets and in receipt of foreign investment are significantly more likely to

innovate than firms that are domestically oriented.[183]

In the United States, 'metropolitan export plans' have been proposed as a way to boost the impact of exports on the national economy (see Box 3.3). The idea behind this is that local companies in large cities enjoy a specific advantage in seizing opportunities for exports. Backing metropolitan-led exports is seen as a bottom-up policy to counter-balance macro policies designed specifically to improve export performance – via trade agreements, export credit and exchange-rate management.[184] A coordinated framework to expose SMEs to international practice and innovation is part of the internationalization process.

An international strategy for trade and investment therefore offers some metropolitan areas a route to longer-term attractiveness, rather than simply a short-term boost to employment. Research from United States cities such as Portland and San Antonio suggests that outcomes tend to be more visible when intentional and committed efforts to enter global markets last more than one political cycle and become a priority for all governments and authorities in the metropolitan area.[187]

BOX 3.3 THE GLOBAL CITIES INITIATIVE

In Northern America, the impact of the financial crisis triggered a new set of approaches to address urban problems that did not just rely on the action of the federal government. This 'metropolitan revolution' has seen local governments, civil society, business leaders and urban planners start to work together to find new paths to job creation and long-term economic growth.[185] The results of this in some cities include expansion of public transport systems, improvements to the supply chain in advanced manufacturing, and metropolitan initiatives to integrate immigrants more effectively. More than 25 United States metropolitan areas have also begun to create trade and investment plans as part of the public-private sector Global Cities Initiative[186] whose goal has been to change metropolitan economic development practice to be more focused on international competition and higher-quality jobs. Reviews of this ongoing scheme highlight the fact that metropolitan export strategies need a long-term horizon, and that basic inputs – namely skilled labour force and transport infrastructure – are critically important, though effective actions in this direction have been few and far between.

Spatial strategy for a changing metropolitan economy

Cluster specializations are essential in providing metropolitan areas with the ability to drive exports and attract investment. Many identify an urgent need to rationalize locations of different actors and clusters and, if need be, shift the centre of gravity of economic growth away from traditional and established centres to new business districts, or new gateway cities, close to airports and ports, for example. Several patterns, on the other hand, seem to guide the location and shaping of clusters: the Randstad region in the Netherlands, which includes Amsterdam, Rotterdam, The Hague and Utrecht, is a classic example of a polycentric cluster structurally different from those of Paris or London, whose activities and functions have historically been far more concentrated.[188] This debate is prominent in metropolitan areas such as Sydney, Seoul, other Asian cities, and Birmingham (United Kingdom).[189]

For fast-growing metropolitan areas, especially in developing countries, this process often involves large-scale expansion of subway systems, higher-capacity transport corridors, and the creation of alternative city centres or second Central Business Districts (CBDs) as part of a polycentric approach. In smaller and more developed metropolitan areas, more targeted approaches to cluster scientific and technology SMEs around leading universities have become visible in the past decade, for example in Boston, Hamburg and Manchester.

A key challenge to incentivize people and firms to relocate to new metropolitan centres is the sequencing of a critical mass of infrastructure and amenities. Integrated planning that provides education, infrastructure, quality of life and culture in new districts is usually needed to make this rebalancing work.[190]

Regeneration is sometimes an opportunity to experiment with more collaborative planning. Seoul's Cheonggyecheon district, which has been redeveloped to support the city's transition towards creative and services industries, is one prominent example. A citizens' committee composed of the general public and experts helped achieve a greater degree of participation. Furthermore, a joined-up approach across sectors – economic development, road management, civil engineering, urban planning and welfare – was coordinated by a dedicated vice-mayor of the Seoul Metropolitan Government. When collaboration is not sought, however,

regeneration programmes can cause inflation and exclusion and reduce access to public space.[191]

Knowledge-sharing and networking platforms

Many metropolitan areas look to improve cooperation between companies by providing forums for dialogue and cross-fertilization between previously siloed sectors. Some choose to set up a 'growth forum' platform that includes municipalities, companies and research institutions in order to improve the framework conditions for innovation and business development. When organized collaboratively, these can incubate long-term plans for sector growth and agree on targets for projects that need investment from national or supranational institutions.[192] An example of this collaboration is metropolitan planning organizations (MPOs) in the United States. Seattle is one example where civic, business and community members lead collectively on the regional economic vision, creating alignment between the players that influence economic and labour force development, and public investment in education and infrastructure.[193]

Collaboration in school education and training is also important in improving the metropolitan skills system. School education performance and employability in some metropolitan areas have improved more quickly than in the rest of the country as a result of active collaboration and sharing of best-practice among teachers. **International evidence increasingly highlights the value of school autonomy, data-driven leadership and well-motivated teachers.**

Evidence from the United States shows that higher skills attainment does not only benefit individual workers, but also leads to greater prosperity at the metropolitan level, given the large number of alumni from colleges and universities who remain in the local area.[194] Meanwhile in China, Suzhou is an example of a city whose strategy to become a knowledge-intensive economy has relied on higher education to diversify sources of entrepreneurship, beyond reliance on overseas expatriates. Universities' role in creating a new generation of entrepreneurs has enabled Suzhou to become a highly specialized nano-technology and bio-medicine cluster.[195]

Catalysts: 'branding' and international events

Some metropolitan areas have sought to use international events to raise their profile for international attractiveness and bring forward infrastructure development. From high-profile global events such as the Olympic Games and World Cups, to political assemblies, sporting championships and cultural exhibitions, well-

◉ **Regeneration is sometimes an opportunity to experiment with more collaborative planning**

Photo: xiquinhosilva - Kathmandu (Nepal).

managed events in certain cases can accelerate public and private investment, creating new capacity in a metropolitan area, and increasing international visibility of its economy. Successful and sustainable event hosting may leave a substantial physical, social and institutional legacy that can improve the future ability and appetite to deliver major projects collaboratively and coherently.

International events, however, also fuel global competition between metropolitan cities, and need to be considered carefully.[196] Host cities may witness some infrastructure and tourism benefits, but with lower figures than expected (e.g. Cape Town in the 2010 World Cup).[197] Many events may also involve considerable community displacement and securitization of low-income districts (e.g. Rio de Janeiro for the 2014 World Cup and 2016 Olympics).[198] Not all events are appropriate or successful and so require close cooperation between governments to ensure the major projects are completed on time, technical standards are met, benefits are distributed and visitor experiences are positive.

For metropolitan areas in developing countries, there are also important opportunity costs when choosing to host an event, and these should be factored in to future decision-making.

Financial and capacity support for small and medium-sized enterprises and the promise of social and collaborative economies

Small and medium-sized companies that are already located in the region are sensible targets of metropolitan areas' policy focus. A higher rate of business creation and successful scaling of these businesses is key to metropolitan economic development, but there are common challenges for smaller firms such as high costs, a lack of suitable real estate, and a shallow financing pool.

Integrated policies can help incentivize smaller firms to upgrade their business processes, whether through equipment, training or new forums for exchange – cities such as Hamburg, Lyon, Oslo and Shenzhen have made steps forward in this respect.[199] A single metropolitan body to centralize all SME assistance functions is one option favoured by well-organized metropolitan areas. Research foundations, infrastructure authorities and development agencies are all key partners for capacity-building with SMEs and entrepreneurs, and for ensuring the region has the right amount and kinds of business space. As the local agency of Barcelona's City Council for 30 years, *Barcelona Activa* is an

example of a successful business incubator whose infrastructure and advisory support has achieved a low mortality rate for new firms. The agency works as a mediator between the public and private sector, and has created large investment forums to encourage the participation of investment funds to support early stage growth SMEs. Several Portuguese municipalities have also successfully supported the internationalization of their local firms and, in particular, SMEs.[200] Other tools include equity co-investment funds to leverage private sector equity investments into early-stage growth SMEs, as they emerge from private accelerators and support programmes, an approach tried in London.[201]

Metropolitan areas' multi-cycle approach

Sustainable economic development takes place over not one cycle but many. Singapore is one of the clearest example of a deliberate cyclical approach developed over the last 30 years, while Barcelona, Munich and Seoul have also seen their economies develop in 10 to 15-year cycles. Cycles of growth within a metropolitan area, if well-managed, give rise to new or enhanced opportunities in subsequent cycles. Successful economic development usually involves adjusting between one cycle and another, for example to 'move up' the value chain of the industries a metropolitan area hosts.

For metropolitan areas to adjust in this way they need to be able modify their economic development arrangements so that they can deal with the opportunities and changes of the new cycle, and not be oriented towards the preoccupations of the previous cycle. Low-value industry and advanced science and manufacturing need different framework conditions, tools and strategies. Others that initially promote tourism as a growth industry may need to move on to boosting creativity and other type of enterprises, as Barcelona is doing. **Each adjustment requires sustained collaboration between actors in the public, private and civic sectors**.

The reasons why some metropolitan areas experience prolonged economic decline are always complex in nature. Agglomeration economies alone will not solve all growth challenges, not least because some metropolitan areas inherit unfavourable industrial structures from previous economic cycles.[202] In general, however, top-down imposition of pre-packaged sectors and models do not tend to be effective.[203]

⊚
Cycles of growth within a metropolitan area, if well-managed, give rise to new or enhanced opportunities in subsequent cycles

3.4
THE PROMISE OF ALTERNATIVE APPROACHES TO ECONOMIC DEVELOPMENT

Social and collaborative economies

The **sharing or collaborative economy** is already having a disruptive impact on metropolitan areas, which function as laboratories for the experimentation of new technologies and business models. Although it is most synonymous with large multinational firms such as Airbnb, Lyft and Uber (which many do not consider collaborative initiatives), the sharing economy also encompasses smaller-scale, low-profit or non-profit social entrepreneurship.[204] The impact of recent recessions and growing income inequality has accelerated the spread of sharing innovations across many cities and sectors – such as mobility (e.g. bike and car-sharing), accommodation (e.g. couch-surfing), skills (e.g. TaskRabbit), agriculture, collaborative financing (e.g. crowdfunding), collaborative production (e.g. DIY, Fablabs, maker spaces), free-access cultural products, and many more.[205] Sharing activities and initiatives have been particularly embraced in the United States, South Korea, and Europe (see Box 3.4). Collaborative consumption is nurturing the demand for more efficient services and on-demand information, resulting in higher levels of entrepreneurship in this domain in many metropolitan areas.

Many metropolitan areas, however, have so far adopted a rather piecemeal and reactive approach to the sharing economy that risks absorbing scarce resources rather than strategically advancing urban sustainability. In spite of its association with innovation and efficiency, **local governments should maintain a certain regulatory caution to ensure new disruptors do not turn previously stable, skilled long-term employment into precarious activities**. Addressing the regulatory challenges that stem from this friction is one of the key responsibilities of local and regional governments.[208]

The informal economy

Informal employment in metropolitan areas continues to grow and emerge in new forms and places. According to Women

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BOX 3.4 SHARING: A NEW TYPE OF ECONOMY?

The sharing economy is a disruptor to nearly every sector of the economy and is challenging many established business and organizational models. One city that has embraced its promise is the Seoul metropolitan government (SMG) through its Seoul Sharing City initiative.[206] The SMG is working in partnership with NGOs and private companies to connect people to sharing services, and together recover a sense of trust and community, reduce waste and over-consumption, and activate the local economy. It combines grassroots citizen-driven sharing (e.g. lending libraries), with official support for tech start-ups. To reform the outdated regulation that used to hamper sharing initiatives (e.g. car insurance and home-sharing policies), the Sharing City initiative is working with insurance providers and regulators to develop alternative solutions. Others cities in Korea, like Busan and Gwangju, are following this example.

In Northern America, Vancouver is an early adopter of a strategic approach to the sharing economy in many sectors (car-sharing, tool-sharing, space for community-sharing, leveraging under-used assets, creating social connections, and reducing waste and consumption). Other cities such as Toronto, Montréal, Houston and Philadelphia, have long supported co-working initiatives, car-sharing companies, Fix-it Clinics to repair goods, bike-sharing systems, shared spaces for start-ups, businesses, charities and social enterprises, and data-sharing. A few municipalities are leading the way through legislation, policy and programmes that facilitate sharing of municipal equipment and services for public safety, transportation, recreational and social services among different local institutions (between New York City and the state of New York, for instance) and with citizenship (parks, transit stations, schools, community centres, hospitals, libraries and post offices). Finally, some community-shared energy projects are being launched by municipally-owned utilities, or with government-operated utilities as key partners.[207]

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in Informal Employment: Globalizing and Organizing (WIEGO),[214] the 'informal economy' – which is not exclusive to developing countries – concentrates more than half of non-agricultural employment across most of the developing world. At the city scale, it constitutes, for example, around 80% in Abidjan, Dakar, Niamey and Bamako, 59% in Lima, 54% in Ho Chi Minh City and 45% in Buenos Aires.[215] Informal activities cover a broad range of economic sectors. Women are disproportionately represented in the

informal economy, and in its lowest paying and most precarious jobs, especially in Sub-Saharan Africa and Latin America.[216] In Liberia, for example, 72% of women are informally employed, compared to 47.4% of men.[217]

The vulnerability of informal workers lies, above all, in their lack of legal rights

BOX 3.5 THE SOCIAL ECONOMY

The last few decades have also witnessed an increase in the activities of the 'social economy' – often defined as the 'third sector'. The social economy encompasses a range of voluntary activities that provide certain sections of the population with services that are often either neglected by public providers or unprofitable for private actors. These initiatives are promoted by a diverse landscape of groups, associations, charity organizations and cooperatives.[209] Their impact is particularly critical in metropolitan areas, characterized by high inequality, unemployment and lack of inclusive service provision.

The social economy has become consolidated and institutionalized within national and supranational frameworks. In Europe, the social economy is officially recognized and defined by the European Commission. In France, for example, in 2011, the *économie sociale et solidaire* ('social and solidarity economy') included over 2.3 million jobs and 166,442 enterprises (10.3% of employment).[210] In Spain, the *Confederación Empresarial Española de la Economía Social* (CEPES), the national consortium of third sector enterprises, today encompasses 28 associations and local organizations and accounts for around 10% of national GDP and about 2.2 million jobs.

Latin America, Southern Asia and Africa cooperatives and associations have played a massive role in the expansion of the social economy, supported by microcredit activities.[211] For example in India, the cooperative movement brings together 600,000 cooperatives and 250 million members in urban and rural areas, making it the largest cooperative movement in the world.

Ongoing financial constraints on the public service performance of local and national governments and increased social polarization means that the social economy is more relevant than ever (in France, for instance, between 2008 and 2011, employment in the social economy grew by 1% relative to a -0.5% decline in the private sector).[212] In many metropolitan areas around the world, the social economy will be an essential ally in achieving inclusive and sustainable growth, poverty reduction, job creation and the institutionalization of informal activities.[213]

and social protection. Metropolitan areas have not always adopted a positive stance towards the informal economy, although many recognize that it is linked and contributes to the overall economy, Moreover, supporting and ultimately formalizing informal workers and activities is key to inclusive growth and a crucial step towards the reduction of poverty and inequality (see Box 3.6). The challenges impeding informal workers in their ability to generate decent revenues are many and varied. Examples include – but are not limited to – home-based workers (e.g. shoemakers, craft producers, etc.) who often lack access to expensive basic services and infrastructures (this subject is developed in the next section). Others include high transport costs; street vendors who are evicted, fined and whose stocks are confiscated; and waste pickers who lack permission to access waste as well as space for sorting and storage.

Some cities, however, have made important progress in the recognition of informal workers. In Belo Horizonte (Brazil), the municipality has long had a formal partnership with waste pickers' organizations, 63% of whom said they have experienced support from the city.[218] In eThekwini (Durban) in 2012, informal employment accounted for over 270,000 workers - 24% of all those employed. The municipality has pushed for institutionalizing and formalizing their economic activity, with dedicated urban spaces and training programmes.[219] The social economy (see Box 3.5), especially in metropolitan contexts, has helped the informal sector significantly by offering a more reliable organization of its activities as well as representation through associations and cooperative collaboration.

The imperative to reorganize metropolitan economic development

Metropolitan economic development operates over longer timeframes and broader geographies, and relies on wider institutional collaboration than is usual for local government services or regulatory roles.[221] Uncoordinated strategies waste resources and may fail to achieve desired outcomes.

Many of the economic stakeholders in a metropolitan economy do not exercise a vote in elections. These include businesses, commuters, investors, immigrants, students, infrastructure and logistics providers. Engaging with these stakeholders in economic strategies and reconciling their interests with those of citizens through visioning and

agenda-building are some of the key tasks of city and metropolitan leaders. This task is rarely straightforward, due to perceived and real trade-offs and tensions between economic growth and quality of life in most metropolitan areas.

Local governments, business leadership groups, chambers of commerce, universities, business schools, cooperatives, associations of informal workers, CSOs, informal economy representatives, and even the local media can all be proactive partners in economic leadership and development. Overcoming competition between different governments, ministries and sectors is essential to making metropolitan areas more productive, attractive, inclusive and flexible to economic and population change.[222] International evidence indicates that fragmented metropolitan areas especially stand to benefit from a partnership approach that limits destructive competition.[223]

Building a more collaborative economic approach within metropolitan areas

Metropolitan areas around the world have been working to make this distributed system of leadership more coherent through common strategies, partnerships and coordination and coalition-building. Sometimes these processes are led by the national or state government but more usually they are driven internally by actors within metropolises. Metropolitan areas can reorganize their economic development functions in several different ways:

- **Integrated economic development functions**. Recent institutional mergers across parts or all of some metropolitan areas can result in a more robust set of agencies for supporting domestic and foreign companies, and for longer-term economic goals. Integration is often a solution when economic development and cluster actions are piecemeal and disconnected, allowing the metropolitan area to pool all its expertise. A strengthened metropolitan agency tends to take more strategic decisions to try and attract firms that fit in with the region's future economic direction. In Paris, the new *Paris Region Entreprises* is one such example.[224] Implementation-oriented agencies often have a lean staffing and financing structure, and may be supported by working groups convened around sectoral or issue-based areas (see also Box 3.7 on Cape Town).

BOX 3.6 SUPPORTING THE INFORMAL ECONOMY

At an annual meeting of the International Labour Organization (104th session) on 12 June 2015, the international community adopted Recommendation 204. This supports the transition, from an informal to a formal economy (while warning against destruction and forced eviction in the formalization process), the creation of decent jobs and enterprises in the formal economy, and emphasizes the need to prevent the informalization of jobs.

According to WIEGO, to address informality and maximize the potential of informal workers, cities should make the most of their available resources and focus on creating jobs through labour-intensive growth, as well as registering and taxing informal enterprises and jobs. The latter requires a simplification of registration procedures; the provision of benefits and incentives in return for taxes paid; and adequate regulations to discourage employers from hiring workers informally, encouraging them instead to give employer contributions for health and pensions, for example.

It is also important to provide low-income housing, promoting mixed residential and business use areas, to recognize the role urban infrastructure plays in supporting livelihoods at the base of the economic pyramid, and to ensure the participation of informal workers in urban planning and policy-making. In addition, it is recommended that social and legal protection is extended to informal workers by, for example, adapting social and private insurance, providing fiscal incentives and adapting existing legal regimes. Cities should also develop supportive measures to increase the productivity of informal enterprises and the income of informal workers, through for example financial and infrastructure services, enterprise support, and technical and business training.[220]

- Many metropolitan economies seek to combine leadership and management functions in a **dedicated development agency**. This is to ensure efficiency and public accountability. Some agencies help oversee major redevelopment when they benefit from political support and access to finance, for example from public land sales. Others have become efficient in helping cities manage multi-party ventures. Bilbao Ría 2000 is one example where a not-for-profit agency has successfully managed large-scale revitalization and expanded its remit to other municipalities in the

BOX 3.7 METROPOLITAN ECONOMIC LEADERSHIP: WESTERN CAPE'S ECONOMIC DEVELOPMENT PARTNERSHIP

Cape Town's system for solving structural development and employment challenges across the whole functional economy has been strengthened since 2012. The Economic Development Partnership (EDP) is a new kind of collaborative, cross-sector and private oriented organization that acts as intermediary in order to build a unifying narrative around Cape Town's economy.

With a small core staff, and steered by a 14-member board, the EDP uses partnerships with municipalities, companies and non-governmental bodies to distribute knowledge through the metropolitan economic development system and incentivize job creation. Having been endorsed by the provincial government and the city of Cape Town, the EDP has acted on its mandate to develop much stronger market intelligence and pursue the shared vision of OneCape 2040.[225]

metropolitan area, resulting in tangible outputs in the form of new parks, public spaces, roads and cycle paths. Other successful examples, such as HafenCity Hamburg GmbH, illustrate the importance of strong working relationships, a high degree of public control and shared agendas with local governments.[226]

- **Delivery-focused boards.** Some metropolitan areas look to create advisory bodies with a streamlined focus on delivery, rather than pursuing larger institutional change. By specifically focusing on financing the delivery priorities that will maximize job creation, this helps metropolitan areas set clear targets for all public and private stakeholders and is effective in allocating resources to deliver core priorities. Recent examples include the London Enterprise Panel and Hong Kong's Economic Development Commission.

- **Cross-border cooperation** for specific economic development activities among different local authorities has become more common. There are many examples of inter-municipal leadership alliances overcoming siloes. In Denver, a metropolitan Economic Development Corporation has a code of ethics that is binding upon local governments to promote regional rather than self-interested economic

development. Transparent information-sharing about site selection has also helped build trust and buy-in among municipalities. In metropolitan areas without established leadership, alliances can become the main driver of municipal cooperation, especially if they have cross-party representation. Other examples involve business agencies from the central city and other local and regional governments working together on international promotion, marketing and real-estate (e.g. Vienna, or Zurich in Box 3.8).

The role of business leadership organizations

Businesses are also important stakeholders in the success of metropolitan development. Mechanisms to ensure their voices are heard and understood are necessary for effective and sustainable metropolitan management. In some cases, a well-regulated private sector can also bring an ethos of efficiency and innovation to dialogue between a wider group of stakeholders within the metropolitan development system. This can in turn contribute to stronger corporate social responsibilities, ethical standards, and the respect of both national and international norms, particularly as regards decent work (see, for example, regulation ISO 26000, which provides guidelines on social responsibility, and the UN Global Compact).[228]

Business leaders have a long history of engaging in cities' development, but there is new evidence that leadership and membership groups are now contributing to metropolitan development in a more proactive way. Managed accountably and with transparency, this can contribute to stronger urban governance.

The membership size and composition of business leadership and membership groups in metropolitan areas varies widely. The newly established ProBogotá Región was set up by 32 members. On the other hand, the Paris-Île de France Chamber of Commerce and Industry represents over 800,000 firms. Some organizations, such as London First, have small concentrated memberships that consist mostly of high status firms. Others such as Hong Kong's General Chamber of Commerce draw significant membership from SMEs. It is common for these organizations to invite civic institutions and NGOs to participate, and nearly all of them share a metropolitan outlook, even in cases when they were originally established to

support the central city (e.g. the Cape Town Partnership).

Because they are often organizationally lean, business organizations can overcome constraints faced by local and metropolitan governments. They are able to think beyond electoral cycles and look further than political boundaries in the interests of the whole metropolitan area. **Their members' experience in activities such as branding, sales and agenda-setting are important in helping metropolitan areas raise awareness about housing supply, airport capacity or immigration, for example.**

The participation of business networks can, however, have mixed effects on democracy in metropolitan areas. In some cases, they help revitalize local democracy by fostering a more plural and inclusive approach to policy-making. But business networks may also concentrate political power in a narrow business elite at the expense of civil society and local governments.[229] However, the most successful business leadership organizations form horizontal relationships with local governments and work together to build shared approaches to a metropolitan area's most urgent development challenges.

3.5
COMBINING ATTRACTIVENESS WITH INCLUSIVENESS: ARE THERE ALTERNATIVES FOR MORE SOLIDARITY WITHIN AND BETWEEN METROPOLITAN AREAS?

The analysis above highlights the positive and negative externalities of globalization for metropolitan areas, and the risks of socio-spatial fragmentation and polarization within and beyond them. Metropolitan leaders need to innovate and explore alternative pathways in order for major cities to take the lead in fostering a new socio-economic logic for more inclusiveness (and sustainability, which is discussed in the next section).

The agenda of inclusion is neither optional nor secondary to the pursuit of economic growth and efficiency. Indeed, there is growing international evidence of a relationship between high levels of metropolitan inequality and

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BOX 3.8 THE ZURICH METROPOLITAN REGION

The eight cantons and 120 cities and municipalities of the **Zurich** metropolitan region have been cooperating much more fully on economic development in the last decade. The Zurich Metropolitan Conference is a new strategic body designed to present the region's needs more coherently and to a wider audience. It meets twice a year in an event open to the public and led by the President of Zurich City. The Conference is a platform for networking and information exchange, and promotes a large-scale integrated development perspective. The voting power of individual members reflects their population size, and the Canton Chamber and Municipalities Chamber share an equal number of votes.

Subsequently the Zurich Metropolitan Area Association was founded in 2009, with responsibilities for the economy, traffic and social cohesion. Its main aims are to improve access to know-how and new technologies for high-skilled workers, while ensuring the region is green and sustainable. It has played an active role in bringing forward important rail projects, such as the Brüttenertunnel and the Zimmerberg Base Tunnel II, and exploring new financing mechanisms such as user fees.

Social cohesion and cultural diversity are also part of Zurich's drive to be competitive. In 2015, the Conference initiated a large public relations campaign about the domestic supply of skilled workers, to address shortages in technical, healthcare and mathematics skills. Its 'Immigration and Population Growth 2030' project also highlighted a growing recognition of social imbalances and the need for cooperation and preparation in order to address some of the less conspicuous outcomes of growth. This will be developed later on in this section.[227]

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lower growth, because of the effects on social cohesion, insecurity and the metropolitan area's ability to absorb investment and withstand shocks. Large disparities between cities and suburbs are also associated with shorter spells of growth during economic booms.[230]

In this context, **growing inequality should not be viewed as an unfortunate and inevitable by-product of a competitive metropolitan economy.**[232] Policy interventions, at national, metropolitan and local levels to reduce inequalities and increase solidarity are possible and desirable. Indeed, they

can harness the dynamism of metropolitan economies much more productively to reshape the territorial relationship within and beyond metropolitan areas.

Local governments need to leverage some of the benefits of on-going disruption to production and consumption models, and their impact on metropolitan job markets and socio-economic dynamics, through an integrated management of metropolitan assets and economic strategies. These include innovation, open technologies and economic models that are more locally based. Increasingly, supply chains are adapted to the demands of consumers and based on innovation and new technologies. The rise of consumer services has also stimulated the integration of various stages of the product cycle (e.g. production, consumption and maintenance) and created new market opportunities for certain functions that were traditionally performed in a household environment (e.g. elderly care).[233]

These transformations have, at the same time, promoted a 'two-speed' labour market in developed economies – between demand for high-skill jobs and the progressive de-qualification of the traditional workforce. There is growing exclusion of younger and older workers from labour markets and increased demand for alternative forms of economic activity (social and collaborative initiatives, but also underground or illegal economies). In developing countries, informality continues to expand as a huge structural (and survival) alternative to the conventional, limited expansion of formal labour markets.

The future of metropolises is not just about performing 'advanced' or 'strategic' functions. To ensure cohesion within society, and counterbalance the threat of fragmentation, metropolitan areas have to anticipate and take part in waves of innovation and support locally-based alternative economic activities. New urban management skills, in both the public and private sector, are widely needed to both integrate and regulate these different urban economies, capture their added value for public policies, and manage the spatial repercussions and social tensions that arise.[234]

Local and metropolitan governments should also take account of local demands and explore alternatives to the competitiveness imperative that globalization stimulates, in dialogue with business representatives and civil society (see Box 3.9). Citizen pressure can likewise affect political and planning decisions and shape them according to broader societal interests.[235] Today this can be seen in movements such as those that ignited the 'Arab Spring' in Northern African and Middle Eastern cities; the *indignados* in Spain; massive demonstrations about transport in Brazilian cities or in Istanbul (Turkey) in 2013; recurrent urban disturbances in France; and race riots in American (2015-2016) and in Indian and English cities (2011).[236]

At the same time, these developments necessitate a **rethink of national urban policies (NUPs) and a more comprehensive approach that locates metropolitan dynamics firmly within the whole national urban system**. Metropolitan prosperity generally

BOX 3.9 TOWARDS INCLUSIVE ECONOMIC GROWTH (WORLD ECONOMIC FORUM) [231]

The issue of inclusive growth was addressed by the World Economic Forum in a 2015 report. It argues that while there is no inherent incompatibility between economic growth and social inclusion, the extent to which economic growth leads to greater inclusion and prosperity for all depends upon a number of institutional and structural requirements. These include, but are not limited to:

- an enabling environment that provides quality, accessible and inclusive educational opportunities for all, including the most vulnerable and marginalized;
- strong job creation and a good balance between productivity and the compensation of workers to make sure that the benefits of economic growth are evenly shared;
- accessible and affordable credit for the poor and marginalized, as a key to providing economic opportunities for all;
- strong anti-corruption policies to avoid undue concentration of wealth, promote fair competition and encourage individual initiatives and entrepreneurship;
- wide availability and quality of basic services and infrastructure as a prerequisite for poorer communities to engage in economic activities, enhancing quality of life and standards of living;
- well-balanced tax systems that minimize loopholes, prevent market inequalities and make sure the tax burden is fairly spread, levying taxes on those most likely able to pay.

has a positive effect on national development and other settlements and territories, but without proper policies its impact can be negative. Through different mechanisms (e.g. public expenditure, collaborative policies), metropolises can weave a stronger fabric of solidarity between territories – and especially between cities – at the national level as well as on a continental and even global scale. **Metropolitan growth is essential to a fundamental reshaping of the relationship between the different components of an urban system, based on criteria that are not exclusively competitive or economic**. Some of these insights are developed further in Chapter 2 on Intermediary Cities and Chapter 3 on Territories.

The interests and power relations at play, however, are extremely diverse. Many metropolitan areas are learning from the experience of a first cycle of projects which failed to achieve social inclusion or sustainability targets. In others, large infrastructure projects have intensified segregation and long-term environmental risks. But there are promising signs that, in the right institutional and political contexts, **policies less conducive to spatial polarization and more consistent with the principles of human rights and the 'Right to the City' are having a positive effect**.[239]

BOX 3.10 POLITICAL REGULATION OF 'COMPETITIVENESS' IN THE CITY OF LYON [237]

The city of Lyon stands out as an example because of the way in which the metropolitan government (*Grand Lyon*) and the business community have shared a narrative about the implementation of competitiveness measures.

However, delegation of responsibility to the private sector has been limited, in spite of the fact that competitiveness was introduced into the public agenda with the active participation of organized economic interests, e.g. the Chamber of Commerce and employers' associations.

At a strategic level, *Grand Lyon* maintains firm control over the political initiatives of its institutional economic partners through strong regulation, as was the case with the city re-branding project, 'ONLY LYON', for example.

However, this does not mean that larger enterprises, especially those located within the agglomeration, have not been allowed to participate in the development of urban policies. They enjoy more direct and exclusive relationships with relevant actors and local authorities such as *Grand Lyon* and the region.

This is greatly influenced by the political leadership of these institutions and the direct participation of the Presidents of both the Rhône-Alps Region and Lyon's Metropolitan Authority.[238]

Photo: Frédéric Chateaux - Lyon (France).

3.5.1 Policies and solidarity within metropolitan areas[240]

One of the main questions for local authorities, practitioners and civil society is whether there are alternative ways to create metropolitan areas that enhance attractiveness and inclusiveness, and at the same time respect the 'Right to the City' for all, fostering cooperation and solidarity between territories. The evidence from this chapter suggests that policies intended to combine prosperity with inclusion should take the following into consideration:

🎯

Urban policies should be designed to maximize the positive economic effects of critical mass and diverse resources that metropolises are able to mobilize

- characteristics of metropolitan growth that directly or indirectly engage all territories in a dynamic of inter-dependence;
- the ongoing transformation of the global economy into a model of open innovation and, with this, the need to strengthen locally-based economic activities (this in turn demands stronger mobilization of metropolitan resources);
- the enabling role played by higher tiers of government in promoting and integrating such changes.

In line with these criteria, urban policies could be more consistent with the needs of the population and the core principles of spatial equity. When they are not dismissed as being simply 'surrogate' policies, they do actually address issues of social exclusion and growing territorial inequalities. Three levels of public action are relevant in this regard: policies that shape urban systems (be it at the regional, national or continental level); policies that shape systems at the metropolitan level; and urban policies at the project level.

At the level of the urban system

The interconnectedness of urban systems seems to contradict the notion that metropolitan areas are becoming detached from their surrounding territories and settlements. Growing metropolitan areas are able, through diffusion effects, to drive growth in the entire national system. This calls into question the validity of 'anti-metropolitan' or de-concentration policies to reduce the relative socio-economic strength of metropolises in favour of smaller cities and rural areas.

Similarly, given that the competitive advantage of metropolises rests on their economic diversity, it can be counter-productive to obey a strict logic of economic specialization within the urban system, and pursue excessive 'complementarity' among metropolises and other cities.[241]

Instead, urban policies should be designed to maximize the positive economic effects of critical mass and diverse resources that metropolises are able to mobilize. This is only possible through integrated metropolitan policies. This strategy would also be coherent with the New Urban Agenda and SDG 11.a (to 'support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning').

At the metropolitan level

At the metropolitan level the main priority has to be allowing as many citizens as possible to access the economic resources of the urban region, while preserving economic efficiency, social equity and environmental sustainability. Policies towards the realization of this should consider:

- **Facilitating urban mobility**
  This can be achieved by means of infrastructures that ensure metropolitan connectivity at different levels (local, regional and extra-metropolitan). While airports, international railway stations, and high-speed transport networks are clear examples, they are by no means enough. Short-range circulation within the metropolitan core should be a priority not only for reasons of spatial justice (e.g. making the city accessible to the largest number of users possible), but also to ensure economic efficiency. This is critical to the achievement of SDG 11.2 ('By 2030, provide access to safe affordable, accessible and sustainable transport system for all…'). Worldwide connectivity should not be limited exclusively to 'strategic' economic functions, as is the case with global cities. The cross-level connections and movements – of goods, people, ideas, capitals and cultures – triggered and channelled through metropolises demand specific policies to guarantee fluid interconnectedness, maximizing the diverse resources available at the metropolitan scale.

- **Building an 'open' and inclusive urbanism**
  Metropolitan actors in their efforts to mobilize a range of diverse urban economic resources need also to rethink

'open urbanism' and reaffirm the collective nature of the public space (in accordance with SDGs 11.3 and 11.7). This counters urban forms that are based on enclosures (e.g. the disruptive urbanism of gated communities described earlier in this section). It is driven by two complementary goals. On the one hand, there is a need to help sustain economic activities which, in spite of being economically viable, cannot withstand the centrifugal pressures of property and land competition in the metropolitan environment. On the other hand, it is vital to lay the groundwork for a metropolitan economy whose future builds on association, sharing and individual resources (in accordance with SDG 8, to 'promote sustained, inclusive and sustainable economic growth'). Two policy areas are extremely valuable in the pursuit of these goals: those aimed at the reduction of socio-economic negative externalities of planning and, in particular, urban renovation projects; and those that aim to limit the social consequences of land and property competition.

- **Reducing the negative externalities of urban regeneration programmes**
The reliance on stand-alone catalytic regeneration projects should be reduced and a more sequenced metropolitan approach pursued. Although access to private and institutional capital will remain important given local financing limitations and diminished national transfers, a robust metropolitan approach would prioritize improved safety nets for affected communities, firm regulation of speculative investment capital, and accountable and professionalized urban governments.[242]

- **Reducing competition in the property market**
Limiting the effects of competition in the property market enhances the mobility of citizens, especially those 'locked' into badly serviced settlements because of spatial mismatches. These measures are also necessary to promote social and functional diversity by preserving the proximity between residence and work places (see Box 3.11).

These goals cannot be attained without the political will to promote land value capture and reinvestment in social/subsidized housing programmes in accessible and well-connected areas. Several initiatives in this direction have been implemented:

- Following the failure of competitiveness policies to support cities in demographic and economic decay, the city of Cleveland put into practice a strategy of 'planned de-growth'. This included, among other measures, the creation of a **land-tenure bank** to exclude certain properties (especially the lots and buildings that had remained vacant following the sub-prime crisis of 2008) from capital accumulation mechanisms;[244]
- Rosario's (Argentina) **municipal urban regulation** allows the municipality to retain the added value created by private property investments, especially in coastal areas, and to select areas for social housing;

BOX 3.11 **FACTORS THAT HAVE ENHANCED SOCIAL DIVERSITY IN LIMA**[243]

The analysis of socio-spatial divisions in Lima (Peru) shows that certain 'buffer zones' - for example planned zoning for middle-income households - are necessary to reduce such divisions whilst also promoting the development of shared public spaces. Middle-income zoning, for example, usually features land 'parcels' that are too small to include a private front or backyard, thereby forcing the population to look for available public spaces such as gardens, plazas and playgrounds.

At the same time, while most middle-income households may have a private car or other transportation, alternative planning strategies could make these unnecessary by providing adequate proximate spaces or connectedness to other areas.

In Molina, a peripheral neighbourhood of Lima, middle-income residential neighbourhoods are very well connected by a number of transit lines, as well as having many small well-maintained green spaces. These benefits have allowed many households of this area, despite their average income, to afford the costs of education in local schools, which are largely private institutions. It is worth noting, however, that in spite of the 'planned' social diversification and the shared public space provided, there has not been a proportionate increase in cross-class relations between middle and low-income residents. Socially diverse planning, therefore, does not automatically imply overcoming social divisions and splits.

- São Paulo (Brazil) has doubled the area dedicated to social interest, especially in the city centre, where 55,000 new houses were built in renovated former industrial areas, following a **revision of the planning master plan;**
- In an unusual intervention, Johannesburg (South Africa) has established a development bank together with a private actor, the Affordable Housing Company (AFHCO), rather than with other public authorities, for **projects of rental housing** – the reconversion of abandoned commercial facilities – aimed at marginalized low-income populations who are not able to access national subsides. Planning these areas closer to existing job pockets should enhance the economic dynamism of the area, raise revenues and improve work accessibility.
- In France the 'solidarity and urban renewal' law (2000) made it obligatory for each municipality of over 3,500 inhabitants to reach a 25% quota of social housing in their building stock; if municipalities fail to comply they must pay a fine.

Questions related to housing policies are critical for the achievement of SDG 11.1 ('access to adequate, safe and affordable housing...'), and will be analyzed in more depth in Section 4.

Photo: McKay Savage - Lima (Peru).

4.

SUSTAINABILITY AND QUALITY OF LIFE IN METROPOLITAN AREAS

It is now universally agreed that our current patterns of production and consumption are unsustainable. In a rapidly urbanizing world, cities – and metropolitan agglomerations in particular – have an unprecedented responsibility to adopt more sustainable patterns of development to prevent resource depletion, environmental degradation and uncontrollable disruption of the planet's climate.[245] These measures include steps the global community has already taken and institutionalized to increase urban resilience to disasters – the 2015 Sendai Framework for Disaster Risk Reduction deployed by the UN Office for Disaster Risk Reduction (UNISDR) – and the collective commitments adopted at the 2015 Paris COP 21 meeting, to 'keep the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels'. Given that metropolitan areas are some of the greatest contributors to GHG emissions and, at the same time, extremely vulnerable to the increasing intensity and frequency of natural disasters, they will have a prominent role to play in meeting the goals of sustainable development, environmental preservation and social inclusion.

For these reasons, **sustainability has become a central reference point for urban policies**. However, by overlooking the social dimension of sustainability, the concept has gradually moved away from its original meaning, which integrated the three (subsequently four) pillars of sustainable development – social, environmental and economic[246] – to which culture was added by

UCLG. **This is why there is an urgent need to treat sustainable prosperity, social inclusion, environmental protection and cultural dynamism as mutually re-enforcing goals in the development of public policies**. The focus of this section will be on initiatives developed by metropolitan areas for environmental sustainability, linking them to social and environmental justice and to the cultural dimension of sustainability, as well as to the concept of the 'Right to the City'.

4.1

METROPOLITAN AREAS AND ENVIRONMENTAL ACTIONS

The institutional framework of the United Nations Environment Programme (UNEP) has pushed the specific agenda of an enhanced role for urban settlements in economic de-coupling – cities, in other words, can do much to achieve economic growth without proportionally increasing pressure on resources and the environment.[247] While de-coupling is a key principle underpinning the 'green economy', cities and in particular metropolitan areas have a whole array of instruments available to them to design, manage and maintain their urban infrastructure. The way key urban infrastructure (e.g. water, sanitation, waste management, processing and disposal, electricity and energy, mobility for people and goods) is designed, constructed and managed has a direct impact

In a rapidly urbanizing world, cities have an unprecedented responsibility to adopt more sustainable patterns of development

on how efficiently resources are extracted, introduced into the urban production system and disposed of.[248] Efficient networks and connections lower emissions, pollution, by-products, inefficiencies and bottle-necks, contributing to positive social, economic and environmental impacts. All cities in both developing and developed economies can incentivize and foster effective de-coupling measures. Intelligent and consistent infrastructure design and performance is essential if sustainable cities are to reduce inefficiency and fight the impacts of climate change.

Numerous action models have been, and are being, developed in metropolises in order to face environmental challenges and encourage sustainable development. For example, C40, a network bringing together metropolitan areas, reports that the number of members developing climate actions has

doubled from 36 metropolitan cites in 2011 to 66 in 2015.[249] Exchange between metropolitan areas is being promoted by Metropolis through the Climate-Metropole+ project, a cooperation and knowledge exchange platform that promotes an integrated and participatory approach to environmental action in cities, linking Barcelona, Berlin, Liverpool and Lyon, as well as several city networks.[250]

As demonstrated in the COP 21 preparation process, cities and their networks are strongly committed to fighting climate change and reducing GHG emissions, as illustrated by the Global Covenant of Mayors for Climate and Energy, a global coalition of city leaders mobilizing hundreds of cities (see Box 4.1).

Local governments can earn revenue from the sale of reductions in GHG emissions (so-called 'carbon credits') on the national or international carbon markets.[251] However, despite the use of these mechanisms and the scale of the challenge – according to the Cities Climate Finance Leadership Alliance 'global demand for low-emission, climate-resilient urban infrastructure will be in the order of USD 4.5 trillion to USD 5.4 trillion annually from 2015 to 2030'[252] – cities' climate finances remain insufficient, and how to maximize them is the subject of open debate.

Environmental sustainability requires a radical revision of our production and consumption patterns, one that affects the way we think and manage our housing, energy, transportation and waste policies, amongst others. Because of their impact on the global effort to increase the sustainability of urban life, certain policy areas have tended to elicit positive change and drive innovation in proactive metropolises. The following sections look at some of these policy areas in more detail, focusing in particular on climate plans and urban infrastructure, mobility, energy, public and green spaces, waste management, the circular economy, and urban agriculture.

4.1.1 Ongoing initiatives

The integration of the principle of environmental sustainability in metropolitan agendas has given rise to a myriad of initiatives – some of which were presented at the Climate Summit of Local Leaders in Paris, during the proceedings of the COP 21 on December 4, 2015. While environmental actions have certainly resulted in significant progress in terms of metropolitan sustainability, some of the effects of their implementation call for a more in-depth evaluation.[253]

BOX 4.1 GLOBAL COVENANT OF MAYORS FOR CLIMATE AND ENERGY

With the ambition to establish a common platform to assess the impact of cities' climate actions through standardized measurement of emissions and climate risks, as well as consistent public reporting of the progress made, C40, International Council for Local Environmental Initiatives (ICLEI) and UCLG – with the support of UN-Habitat and UN Special Envoy Mike Bloomberg – launched the **Compact of Mayors** at the 2014 UN Climate Summit. To date, 447 cities - representing more than 390 million people worldwide - have committed to the Compact of Mayors. It is now the world's largest coalition of city leaders tackling climate change by committing to reduce GHG emissions and tracking their progress in mitigating and adapting to climate change. One of its main tools is the 'Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)' which many cities now use for their strategic planning. Every year it releases a report that allows cities to adapt their strategies using information on different implemented measures and their outcomes. Similarly, the **Covenant of Mayors** for Climate and Energy, supported by the European Commission, is a European coalition of local and regional authorities working together to fight climate change. More than 6000 signatories have pledged to reduce CO_2 emissions by at least 40% by 2030.

To raise awareness further and to gain visibility and access to the agenda-building process (and challenges) in the years to come, both institutions decided to join forces in 2016 and merge into the **Global Covenant of Mayors for Climate and Energy**.

Advocacy for – and interest in – a 'green economy' has perhaps never been stronger than today. The quest for a greener production and consumption system has emphasized the economic aspects of this 'greening' approach. The de-politicization of the issue – or 'greenwashing'[254] – has focused attention (and resources) on the competitiveness and affordability of the 'green' paradigm, neglecting the social and spatial issues that this may engender at the metropolitan scale.[255]

For a comprehensive global sustainability agenda to be effective, **environmental and 'green' provisions should never be decoupled from social inclusion and equality, territorial cohesion and interconnectedness and thriving diversity, all of which define a resilient and sustainable metropolitan area.**[256] Provisions that promote an approach where the environmental, the economic and the social are equally important are valuable examples of the way in which metropolitan areas can achieve several relevant SDGs, such as Goal 11 on cities, Goal 6 on clean water and sanitation, Goal 7 on affordable and clean energy, Goal 12 on responsible consumption and production, and Goal 13 on climate change.

Climate plans and urban infrastructure

Cities' climate plans can greatly contribute to reducing emissions and building resilience by creating new developments and shaping existing ones in a systematic, coordinated and delivery-focused way. As well as integrated approaches developed by cities such as Paris ('*Plan Climat*') and New York ('A stronger, more resilient New York' or #ONENYC), Box 4.2 illustrates other examples from the Global North (Tokyo, Copenhagen). Metropolitan climate plans for sustainability and resilience are not, however, limited to cities in developed countries; cities such as Dakar, Phnom Penh and Quito have also developed such initiatives.

Dakar's integrated territorial climate plan includes a vulnerability diagnosis to develop territorially adapted actions.[257] Quito is experiencing a rise in the frequency of landslides, floods and droughts and increasing problems with water resources, and so developed a climate strategy that focused both on adaptation and mitigation, including sustainable infrastructure, power production, drinking water supplies, ecosystems, biodiversity and public health amongst others. As a result, a first Climate Change Strategy was approved in October

2009, after which the city began developing its Climate Action Plan (2012-2016).[258]

At the same time, cities such as Cairo are developing plans for the climate adaptation of informal areas. Plans to control climatic risks such as flooding or storms are many and varied and place a particular emphasis on the most vulnerable populations.[259]

An integrated approach has allowed cities (e.g. Hong Kong, Stockholm and Copenhagen) to combine economic growth with a drastic reduction in their GHG emissions through efficient land use and sustained investment in public transport. For example, Stockholm's economy grew by 41% between 1993 and 2010, while its emissions dropped by 35% in the same time period. Since 1990, Copenhagen has reduced its carbon emissions by more than 40%, while its economy has grown by 50%.[260] Others cities have adopted different sectorial approaches (e.g. eco-mobile cities, low-carbon cities, green cities, energy efficient cities, etc.).[261]

BOX 4.2 CLIMATE PLANS IN TOKYO AND COPENHAGEN [262]

Within the framework of the Tokyo Metropolitan Environmental Masterplan, the city of Tokyo has implemented a specific project (the Tokyo Cap-and-Trade Program) to reduce CO_2 emissions through improving the energy efficiency of its buildings. Owners of the buildings included in the project must measure their annual emissions and commit to lowering them. Since its implementation in 2010, the project has resulted in a 13% reduction in GHG emissions in 2010, and a 22% cumulative reduction in 2011.[263]

The city of Copenhagen is implementing an ambitious policy (including the promotion of renewable energy and cycling as a transportation mode) to become neutral in terms of CO_2 emissions through a series of innovations and a climate plan.[264] The city has already reduced its emissions by 21% between 2005 and 2011. The first 'bicycle highway', for example, was launched in 2012 and allows commuters to link the central district with the periphery by bike. Three quarters of future reductions in CO_2 emissions must come from the transition to new means of heat and electricity production, notably through the use of biomass, wind (wind power produces 30% of the electricity used in Denmark), geothermal and solar energy.

Sustainable mobility

Models of sustainable mobility[265] have long promoted 'multi-modality', 'interconnectivity', and 'soft mobility' to improve public transport, reduce congestion and air pollution, and encourage alternative transport by limiting reliance on private vehicles.[266] Access to mobility – and to the beneficial effects on health and quality of life – has long been a litmus test for equity in today's cities and metropolises.

Basic sustainable mobility centres on public transportation systems. The Bus Rapid Transit (BRT) was initially implemented in Curitiba (Brazil) in the 1970s, before the idea was successfully exported to cities such as Bogotá and Johannesburg[267] and more recently to Teheran and Amman,[268] amongst others. Sustainable mobility relies on efficient light rail systems (Addis Ababa is the first of its kind in Sub-Saharan Africa),[269] tramways or similar technologies in cities of the Global North,[270] or cable car lines adapted to specific geographies to foster inclusion and development of neighbourhoods that would otherwise remain isolated and disconnected from the rest of the urban area, as in Medellín. Cities such as Guangzhou (China) have developed BRT, new metro lines and greenways for bicycles (2,000 km of cycling lanes) as part of a multi-modal urban transport system. Lima (Peru) is working on the 'NAMA' project to reduce reliance on car transportation through the expansion of the metro, cycling routes and a unified fare system.[271] Electric vehicles play an important part in this transition: today Oslo has three times as many electric private cars as it did in 2005.[272]

At the same time, traffic-free zones,[273] 'car-free days',[274] and shared-mobility platforms are successfully tackling urban pollution concerns whilst raising awareness of sustainable mobility goals. The backdrop to many of these achievements is **an extensive use of technology in the urban fabric**: sensors to measure air quality,[275] traffic, and urban behaviour; GPS and mobile communication; real-time crowd-sourced information; and bike and car-sharing[276] – all of which are increasing the awareness and connectedness of urban citizens both in the Global South and North. **Sustainable mobility policies all over the world rely increasingly on strong citizen engagement and participation**.[277] Sustainable mobility has also been a key lever in the promotion of dense, **multi-polar cities** – where services, amenities, homes and workplaces are located in greater proximity to reduce motorized transport, create a walkable public space and curb the overall environmental footprint of urban life. **Global cooperation frameworks among cities** have also helped, such as ICLEI's Eco-Mobility Alliance and Cities for Mobility. Sustainable mobility has proven to be one of the areas where metropolitan cities are most likely to exchange best practices, knowledge, and expertise. Guangzhou, Shanghai (China), Jakarta (Indonesia), Rio de Janeiro (Brazil), and Shiraz (Iran) took part in an Urban Transportation Policy training programme, organized in Seoul by Metropolis' International Training Institute (MITI)[278] in March 2016 to share best practices and lessons learned from different urban policies and laboratories from around the world.[279]

Photos: Mariordo59 - BRT Curitiba (Brazil).

Efficiency and energy transition

Cities, and metropolitan areas in particular, are the core of wealth production, innovation and opportunity. The resources necessary to feed the economic, social and cultural engine of large cities is perhaps the price to be paid for their enhanced role in today's world and economy. Following the recommendations of the last report of the International Panel on Climate Change (IPCC), and the agreements endorsed at the COP 21, cities are increasingly mobilized to reduce energy consumption and increase the use of renewable energies - in other words, to do more with less.[280] Cities, in their daily functioning, are currently consuming energy at unsustainable rates. Accordingly, many actions undertaken so far have involved the reduction of energy consumption in public buildings and the construction of 'low energy' or 'positive energy' buildings. Pune (India) and Shanghai (China), for instance, have already implemented strict limits and criteria for public buildings built in the future. San Francisco (United States) committed to a near-zero carbon electricity supply by 2030. The building sector has a significant impact on energy efficiency: it accounts for an average 20-30% of global CO_2 emissions[281] and has long been a central part of the European Union's policy regulatory framework in this field.[282] Whilst being key to sustainable energy policies, energy-inefficient housing also raises concerns about social equity and energy poverty,[283] a challenge that cities must be ready to face.

In Cape Town, smart electricity meters (Automated Meter Reading or AMRs) have been installed in 26% of the city's large municipal buildings. Real-time data, combined with a behavioural change programme have resulted in significant energy savings.[284] The city of Paris is implementing a thermal renovation plan for schools and social housing (saving 500 gigawatt/hour) and has installed several energy management systems in municipal buildings and facilities as part of its plan (2004-2020) to reduce GHG emissions and energy consumption by 25%.[285] Tshwane (formerly Pretoria, South Africa) launched a 20-year project with a 2 million tCO_2 emission reduction target through the use of renewable energy generators. Changwon (South Korea) was selected to trial a new smart grid project for small and medium-sized enterprises, promoting energy efficiency while also integrating renewable energy resources.[286]

Efficient urban refurbishment also includes **street lighting**. Technologies (e.g. LEDs or CFLs) applied on a massive scale in a metropolis can yield significant results. The city of Melbourne (Australia) deployed a city-wide lighting renovation scheme, reducing CO_2 emissions by about 8,000 tCO_2 per year.[287] Los Angeles and Paris have adopted similar strategies. Amsterdam's Smart City Programme has adopted a smart switching technology to adapt lighting to weather or even traffic conditions. **Efficient water management** – for example upgraded infrastructure, leakage prevention, etc. – has been another key policy field with a strong environmental impact. The challenges faced by Mexico City are a good example of the importance of this sector in the struggle for a more sustainable city.[288]

Other initiatives in this field, for example eco-cities and eco-neighbourhoods, have placed a strong emphasis on energy efficiency and the development of renewable energies. However, these schemes are still nascent and somewhat controversial in terms of their impact on social inclusion (see Box 4.3).[289]

BOX 4.3 ECO-NEIGHBOURHOODS: SOCIAL AND ENVIRONMENTAL IMPACT[290]

Eco-neighbourhoods and eco-cities are designed as spaces that allow for the experimentation of diverse solutions in terms of urban density, energy, biodiversity, soft mobility and citizen participation. They are new urban forms that directly respond to the demands of sustainability, promoting a new way of living.[291] However, their development is not free from pitfalls; designed as technical tools to preserve the environment, eco-neighbourhoods tend to overlook the need for social sustainability and are used in a quest for competitiveness and 'world-class status'.

For example, in the **Kreuzberg** eco-neighbourhood in Berlin, green roofs tend to suffer subsidence and leaks due to an oversized green layer and the incorrect installation of isolation membranes by construction companies.

In the 'car-free' eco-neighbourhood of **GWL-Terrein** in Amsterdam, parking was reduced to one space for every five homes, creating problems of illegal parking and conflicts between neighbours as people started to park in surrounding neighbourhoods.

Public and green spaces

Public spaces are all around us, they are our 'open-air living room'.[292] Sustainable Development Goal 11.7 aims to 'provide universal access to safe, inclusive and accessible, green and public spaces (...) by 2030', as urban public and green spaces play a key role in improving the quality and liveability of urban agglomerations (see Box 4.5 on the Habitat III Thematic Meeting on Public Spaces). Public squares, streets and gardens, while being part of the urban design, mostly have explicit social, cultural and citizenship functions. They enhance inhabitants' wellbeing and health, foster social cohesion, increase recreational space, and provide neighbourhoods with an identity. Public space in a neighbourhood acts as an *agora*, a space for citizenship development where a local market can be a driver of economic vibrancy. Public spaces also bring considerable environmental benefits through reduced energy consumption for cooling, air pollution and the urban heat-island effect. They also protect biodiversity, intercept rainwater and prevent flooding. Today, however, **urban growth, privatization and the invasion of sectorial interests are putting unprecedented pressure on the provision of public spaces**. Limited access to former public spaces, once these are privately acquired, has become a common occurrence in many countries.

Various types of green spaces and green infrastructures are being promoted for sustainable objectives in many cities. Berlin has devised a Biotope Area Factor to monitor the ecological effectiveness of its public green spaces. In the United States, the iTree system operationalizes the value of trees in terms of energy savings, atmospheric CO_2 reduction, improved air quality, storm water run-off and aesthetic considerations: New York's 600,000 street trees provide an annual benefit of USD 122 million - over five times their maintenance cost. Durban has initiated a large scale Community Reforestation Programme to pair environmental benefits with job creation, improved food security and educational opportunities.

BOX 4.4 A METROPOLITAN APPROACH TO THE CREATION OF GREEN SPACES

Green Works **Philadelphia** is adding 500 acres (202 hectares) of accessible green space as city government and neighbourhood residents transform empty or underused land into parks. The **New York** High Line linear park contributed to the regeneration of many areas and the engagement of communities along its course. In **London**, the construction of the Queen Elizabeth Olympic Park includes provision to support biodiversity: and London's government has also committed to building 100 new small (pocket) parks. **Madrid**'s Rio project created a linear green park along the Manzanares River (most of it on top of a large road tunnel) with provision for sport, leisure and cultural facilities. The Post Office Park in **Boston** was created from the conversion of a 4.6 hectare car park into a park with underground parking, whose revenues fund the park's maintenance. In **Montréal**, a huge limestone quarry was converted into a 1.9 km² park, including a waste sorting centre and a power station that transforms biogas into electricity.

In order to mitigate hazards such as landslides or floods and their economic and social costs, the city of **Bogotá** has been planting trees and building green spaces as part of a programme that identifies high risk zones and establishes land use restrictions. In **Melbourne**, one project aims to plant 3,000 trees per year to double the city's tree canopy by 2040. In **Kampala**, a city where urbanization is out of control and where green spaces can only be found outside the city, plans are being implemented to restore some urban wetlands in order to create city parks.

Waste management and circular economy: from pollution to zero waste

Waste management is an essential part of the reduction of urban environmental impacts, as acknowledged in the key targets of SDG 11.6. More than 11 billion tonnes of solid waste are collected annually across the globe, and latest statistics indicate that waste management contributes to 3.3% of global GHG emissions.[293] An increasing number of cities are turning to zero-waste, 'cradle-to-cradle' strategies for solid waste management and waste-to-energy schemes (see Box 4.6). Ambitious recycling and material recovery programmes have been successful at increasing the amount of waste diverted from landfill. While contributing to greener management, the innovation-driven development of technologies and tools for recycling has created new qualified employment – around 12 million people in Brazil, China and the United States alone in 2011.[294] In many developing countries, on the other hand, waste management is still problematic for many municipal administrations: its challenges are

inextricably linked with issues of equality, social inclusion, education and awareness, health and socio-economic informality.

An alternative approach to waste management can be found in the **circular economy**, or the search for production models based on recycling as a systemic mechanism to mitigate climate change and reduce resource depletion.[297] Today's urban settlements live and produce off a 'linear metabolism' that extracts resources from beyond its boundaries, uses and transforms them within its core, and emits waste in a number of forms, including landfilled waste, emissions, pollutions, and heat – again outside its limits. Cities whose productive infrastructure is conceived along this linearity are net wasters, and would need infinite resources and infinite waste allocation capacities to survive.[298] A circular economy approach can tackle the unsustainability of this linear metabolism. San Francisco, for instance, has achieved selective waste sorting for 80% of its

BOX 4.5 THE 2016 HABITAT III THEMATIC MEETING ON PUBLIC SPACES, BARCELONA

In preparation for Habitat III in October 2016, a thematic conference on public spaces took place in Barcelona on April 4-5, 2016 to advocate a central role for public spaces in the New Urban Agenda as key to achieving sustainable development. The declaration that emerged emphasized – amongst other things – the need for a human-scale and people-centred approach to planning to ensure that public spaces are sustainable and inclusive; the importance of a citywide network of connected public spaces and streets; the need to foster formal and informal economic activities in public spaces to improve the livelihoods of local producers and workers; the necessity for public space and surrounding buildings to be economically, socially and environmentally sustainable; and the need for public space to be sufficiently flexible to local geography, climate and culture, allowing for cultural and artistic activity.

Photo: Francesc - Barcelona (Spain).

total waste production, through the tax system and financial incentives to lower waste production. A compulsory and well-established organic waste recycling system produces compost for the region's farmers.[299] In Geneva, where the concept of circular has already been included in the Canton's constitution, a collaborative platform was developed to allow enterprises to exchange methods and resources.[300] The city's linear metabolism is unsustainable to the extent that it forcibly extracts resources from outside its territory and economy that are then consumed within the urban economy and production cycle, eliciting a structural imbalance. Extending these practices requires strengthening mutual collaboration and learning (e.g. supporting recycling and reuse clauses in public procurement).

Food security and urban agriculture

Urban agriculture is another theme that deserves attention in that it too simultaneously generates socio-economic and environmental benefits in metropolitan areas. This activity – referred to by some as 'ruralizing' urban settlements – has been under increasing scrutiny in recent years. Estimates suggest that around 1 billion people undertake farming and fishing activities in cities, meaning that 15 to 20% of the world's food supply comes from urban agglomerations.[301] In Detroit, where the population has shrunk significantly (1,850,000 inhabitants in 1950 compared to 680,000 in 2014) – mainly due to the automotive industry crisis – a number of urban wastelands have been revitalized and transformed into individual or communal vegetable gardens. A similar initiative took place in Rosario, Argentina (see Box 4.7).

BOX 4.6 INNOVATIVE WASTE MANAGEMENT IN DURBAN, BELO HORIZONTE AND VANCOUVER

In 2004, the city of **Durban** developed innovative solutions to improve waste management and use it to produce electricity, transforming methane from waste fermentation into clean electricity while reducing the environmental impact of urban landfill sites.[295] Since then, it has built 103 collection wells connected to a power plant that burns the methane to produce electricity. This project has created employment in sorting and recycling centres, reduced the city's annual CO_2 emissions by 54,000 tons, and converted some old landfill sites into green public spaces.

Belo Horizonte in Brazil implemented a social policy to improve the structure of informal employment and raise the standard of living of the urban poor, which at the same time led to the development of an integrated solid waste management strategy (ISWM). In the 1990s, local legislation was changed to promote the collection of recyclables by cooperatives of informal waste-pickers. Seeing that a partnership with the city would further improve their productivity and help meet both environmental and socio-economic goals, the city decided to further integrate the informal sector into municipal waste management. This helped achieve the four main objectives of the ISWM; namely, to increase recycling waste, social inclusion, job creation and income generation. Since the introduction of this policy, the waste sector has substantially improved. In 2008, around 95% of the urban population and 70% of the population in informal settlements (*favelas*) received a collection service. In 2013, around 600 waste-pickers worked for these cooperatives, with a total of 80 sorting warehouses.[296]

Canada's National Zero Waste Council is an initiative led by Metro Vancouver, with support from the Federation of Canadian Municipalities and other groups. It seeks to reduce the generation of waste and increase recycling rates in Canada's third largest metropolitan area (2.3 million residents). The Council focuses on designing using a 'cradle-to-cradle' approach that will result in less material and energy being used and eventually discarded. The approach will reduce or eliminate the use of toxic chemicals and will lead to the manufacture of products that can more easily be disassembled into reusable and recyclable components. Metro Vancouver's Integrated Solid Waste and Resource Management Plan (ISWRMP) has set aggressive waste reduction and diversion targets. At this point in time, most of its work falls within the jurisdiction of Metro Vancouver and its member municipalities. The National Zero Waste Council reaches beyond the local jurisdiction, influencing the design of products in favour of cradle-to-cradle approaches, and creating greater public awareness of the need to reduce and prevent waste.

4.1.2 Densification[304]

As mentioned previously, one of the steps towards sustainable metropolises is to promote functional mixing and density. Due to the fast pace of urbanization, the lack of urban planning in many metropolitan areas, as well as the liberalization of the land market, cities have tended to expand, with the appearance of new districts on their fringes. Old 'extensive' models of urbanization were a result of an increasing reliance on cars and a preference for individual houses, with a quality of life associated with low-density spaces. In Mexico, since the 1990s, gigantic individual housing lots have increasingly been favoured (more than 500,000 housing units have been built, with some developments containing up to 20,000 units, many of them unoccupied).[305] Cairo is likewise a paradigmatic case of urban expansion: between 1996 and 2006, Cairo's population increased by 3 million, but the surface built or under construction doubled, spreading to the desert hinterland.[306] Urban development in desert areas for the middle and upper classes attracted a third of overall investment while only one tenth of the 'new' inhabitants eventually settled there.[307] In Tunis, the whole built environment (both formal and informal) follows a horizontal settlement pattern, consuming a lot of space. Urban sprawl leads to higher CO_2 emissions, as suggested by Table 4.1 below which shows two metropolises with similar wealth levels and population, but very different areas, densities and CO_2 emissions.

Besides excessive land consumption, urban sprawl also creates accessibility problems, particularly for the working classes, leading to congestion, air pollution and public health issues.

BOX 4.7 ROSARIO: URBAN AGRICULTURE AS A GLOBAL SOLUTION [302]

In 2001, in response to the severe economic crisis, the city of Rosario (Argentina) developed an alternative ecological solution - the use and revitalization of agricultural gardens and park gardens. The aim was to improve the food supply for inhabitants, who could develop their own seeds and were supported in the commercialization process. 2,500 families now contribute to the production and commercialization process. The municipality works with households to promote exchange using a circular economy model - for example recycling in return for organic vegetables. Other initiatives have followed: productive gardens on private properties, production of medicinal plants, the signing of a cooperation agreement with other cities such as Guarulhos in Brazil.[303]

The urban density model can potentially solve some of these problems (see Box 4.8). According to a report by the New Climate Economy (2014), '[m]ore compact, connected urban development could reduce global urban infrastructure requirements by more than USD 3 trillion over the next 15 years (2015–2030)'.[308] The compact city and the 'Smart Growth' concept are often seen as models of sustainability because of the way in which they reduce land consumption and transit needs (and thus reduce CO_2 emissions and reliance on cars), while encouraging the use of public transportation, cycling and walking, as well as limiting socio-spatial segregation.[309]

Table 4.1 **Comparison in CO_2 emissions between dense and sprawling metropolises.**
Source: Demographia World Urban Areas 2015, Global Commission on the Economy and Climate (2014).

	Atlanta, United States (2015)	Barcelona, Spain (2015)
Population	5,015,000	4,693,000
Urban area	6,851 km²	1,075 km²
Density	700 inhab./km²	4,400 inhab./km²
Tons of CO_2/inhabitant	7.5	0.7

BOX 4.8 HONG KONG'S MODEL: AN EXCEPTION?

When it comes to dense urban development, Hong Kong is a frequently cited example. It has built efficient public transport systems and achieved very low transport-related CO_2 emissions and car ownership through high densities of residencies, workplaces and public transport nodes. The city has – among other things – strictly defined where development can take place and prioritized the regeneration of existing urban areas rather than expansion into non-urbanized areas. As a result, 43% of Hong Kong's population (3 million people) live within 500m of a Mass Transit Railway (MTR) station, and the majority lives within 1km of an MTR. Partly due to the high level of density (average of 21,900/km², 45% of trips are on foot, and the estimated CO_2 emissions from passenger transport/person is 378kg, compared to, for example, 5,000kg in Houston, United States.[310] Accommodation, on the other hand, is some of the smallest in the world, highlighting the disadvantages (in terms of poor quality of life) of over-densification and high land and property prices.

Metropolitan cities are generally more exposed to catastrophic natural disasters than they were in the past

In cities of the Global South, densification is increasingly taking place, although its implementation has not always been optimal. Densification has been facilitated by a decline in internal migration and urban growth, along with a decline in the saturation of the land market. Many residents have begun to settle in the city centre, leading to the revitalization of central and peri-central districts – a phenomenon which can be seen in Latin America. In São Paulo, for example**, urban growth largely takes place in existing neighbourhoods (both informal and formal) through the densification of the built environment.**[311] In Lima, old two-storey housing units, which were characteristic of the city centre 50 years ago, are being replaced by 10, 15 or 20-storey buildings.[312] This kind of densification has highlighted both its advantages and its potential shortcomings.[313] Densification prioritizes environmental and economic dimensions, often at the expense of a more social dimension. Denser, more active, more attractive neighbourhoods tend to elicit higher property prices, often marginalizing those low-income communities that had previously lived in these areas for decades. The link between densification and exacerbated congestion problems and lower quality of life is likewise proven.[314]

Densification policies (see also Box 4.9), particularly in cities of the Global South, all too often consist of the creation of housing units for middle and upper classes, or the most advantaged lower classes (as in the case of the MIVIVIENDA SA fund in Peru), at the expense of the least privileged. Especially in central and peri-central districts, these plans stimulate gentrifying dynamics, land and property speculation, and the relegation of the most vulnerable populations to peripheral, under-served areas,[315] making it more difficult to address issues related to inadequate housing, sanitation and access to basic services for all. Density, conversely, has been problematic in the case of informal settlements. People living in crowded environments are exposed to complex social, environmental and health challenges. These scenarios highlight the challenge of promoting the densification of middle-class areas, with an ambition to foster greater social integration, while at the same time supporting the de-densification of crowded, under-served informal areas.

The inadequacy of some densification policies – particularly in terms of their social impact – by no means invalidates the need to counter urban sprawl, a trend which has led to an over-consumption of agricultural land and to social, economic and environmental costs that our planet can no longer afford.

4.1.3 Metropolitan areas in the face of risk: resilience, actions taken and prospects[316]

As a result of urban growth and climate change, metropolitan cities are generally more exposed to catastrophic natural disasters than they were in the past. As rising sea levels from global warming and man-made climate change are increasingly a worldwide threat, coastal metropolises are now facing unprecedented risk of flooding. **Climate change has also weakened the natural, technical and financial resources that societies have at their disposal to react to such impacts** – a dynamic which is all the more serious in developing economies. Larger metropolitan areas are even more vulnerable to such events, given the ongoing expansion of urban agglomerations in risk-prone areas. These risks are hydro-climatic (storms, heat waves, heavy rains) as much as they are geological (tsunamis, earthquakes, volcanic eruptions) and are often cumulative. Metropolitan areas such as Phnom Penh, Bangkok and Manila are built

on river floodplains. Some national and local governments have been more receptive to risk reduction plans to increase city resilience. For example in Manila (Philippines), a resettlement plan was introduced in 2010 to remove informal settlers living in vulnerable areas along the city's waterways.[317] Even though some of the more worrying examples are located in the Global South, wealthier metropolises such as New York, London and Amsterdam, amongst others, are not exempt from possible danger.[318]

In light of this, resilience has become a core policy principle on which to build sustainable metropolises (one of the targets of SDG 11.5), and it is a principle that goes well beyond adaptation capacities.[319] Resilience is generally defined as a city's ability to react and adapt to natural catastrophes in an attempt to bring back normal life,[320] or restore the equilibrium and preserve the system's qualitative structure.[321]

The degree of urban resilience is not just affected by geography. Metropolitan contexts, and large agglomerations in particular, have to take into account a plurality of factors (technical, socio-economic, psychological, etc.). Historically, precarious and marginal

Figure 4.1 **Impact of sea-level rise over the next 100 years on the Nile Delta area (above) and the city of Shanghai (below).**

Source: Climate Central (www.climatecentral.com), data of the United States' Department of Commerce's National Oceanic and Atmospheric Administration (NOAA, www.noaa.gov/)
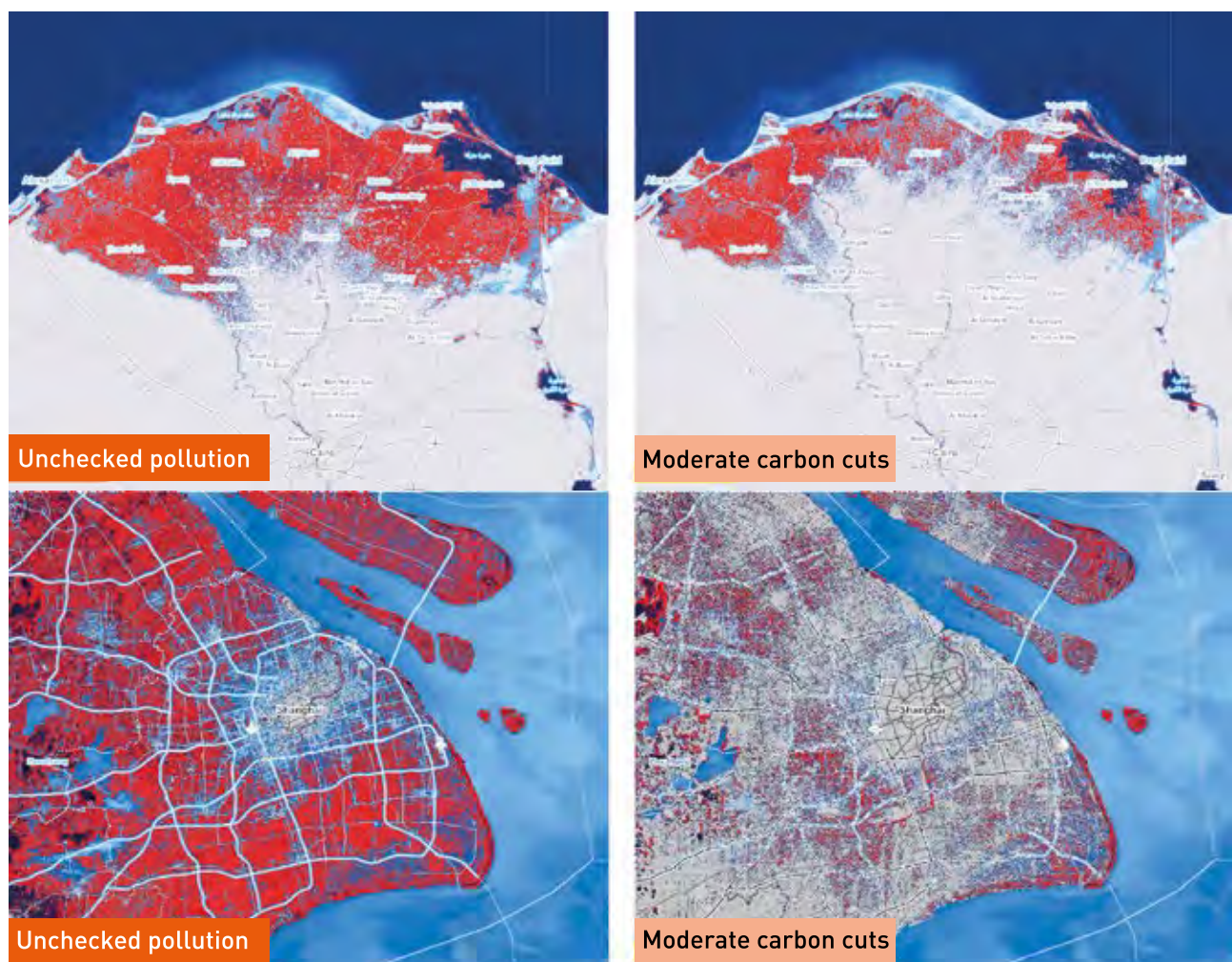
Prospective flooded areas are visualized in shades of red.

settlements have tended to concentrate in the most risk-exposed areas, more often than not the only land available, accessible or affordable by the most disadvantaged groups and communities.[322] This is why resilience can only be developed collectively and systematically with citizens, seeking viable solutions even when financial and coordination capacities are lacking.[323]

At the same time, **urban resilience cannot be thought of exclusively in relation to natural disasters or climate events. It is also linked to factors such as peace, security, basic services provision, social inequality, youth unemployment, and disease outbreaks**, amongst others. Outbreaks, for example, are particularly acute in metropolises, where higher density makes epidemic spread and contagion faster and less controllable. Cities such as Monrovia (Liberia) and Freetown (Sierra Leone) were significant breeding

grounds for the 2014 Ebola virus outbreak, which led to the death of 8,761 people across Liberia and Sierra Leone, according to the World Health Organization.[324] According to UN-Habitat's chief technical adviser, the outbreak would not have reached such a scale had the city of Monrovia, for example, been more organized and had more accurate information on its demographics been available to authorities and operators.[325]

Accordingly, resilience has also been developed as a toolkit to react to the fragility as well as the structural and inherent challenges that arise in the daily functioning of any large urban settlement. Social exclusion, inadequate transit, health and education, crime and insecurity[326] and a poor quality of life all increase the fragility of urban settlements and, in particular, of those communities most exposed to risk – the poor, the disabled, the elderly, women, children and minorities. Since they impoverish and debilitate a city's social and human capital, these chronic ailments threaten and weaken the ability of cities – both in developed and developing countries – to respond to the challenge of long-term sustainability – either socially, administratively, or financially.

Interventions at different levels of government, however, seem to have been unable to foster dialogue and interaction as part of a more systemic approach. Lack of inclusion and transparency for marginalized populations and vulnerable neighbourhoods have affected large capital cities like Jakarta (Indonesia), where top-down responses have been limited to crisis management, with no consistent involvement of local actors and interlocutors.[327]

Africa, in particular, has witnessed both harsher climatic events and the proliferation of informal settlements in areas exposed to flooding and soil erosion. Ouagadougou (Burkina Faso), Niamey (Niger), Dakar (Senegal) and Accra (Ghana) have all experienced multiple deadly events in areas where more than 60% of inhabitants have neither stable household income nor access to basic services and infrastructure.

Cities that have invested more heavily in sustainable development tend to have competent, empowered local governments.[328] Given the number of economic and financial issues which cities face, citizen involvement is an essential precondition for the establishment of efficient local resilience systems. A study by the United Nations International Strategy for Disaster Reduction

BOX 4.9 SURAT PREVENTION STRATEGIES [330]

In Surat (India), two disasters – a plague epidemic in 1994 and a very serious flood in 2006 – contributed to reshaping the city government's social and environmental policies.

In response to the plague, the city government considerably increased the priority given to the provision of cleaner water and the management of excreta and solid waste. In 1995, a new Commissioner committed to transforming the quality and coverage of solid waste collection and management, the cleaning of streets and the municipality's public health care system. By 2010, 95% of the municipality's population had access to the piped water system and 86% had access to sewers. Many 'slums' were upgraded, with provision of water, sanitation and solid waste collection much improved. Surat is now considered one of the cleanest cities in India.

Since 1979 there have been five major floods in Surat. In response to this, the municipality has improved delivery of essential services. During the monsoon in particular, the municipality clears its drainage and sewer systems to increase the capacity of the system to manage flood waters. Evacuation procedures have been enforced and some of the residents most at risk from flooding have been relocated. Water levels are also monitored from the reservoir behind the Ukai dam, in order to give more time to issue flood warnings. The warning system has also been improved, including warnings now being sent via SMS to mobile phones.

(UNISDR) and the Centre for Urban Disaster Risk Reduction Resilience (CUDRR+R) found variations in the ability of local government authorities to undertake resilience actions, particularly in relation to societal capacity and stakeholder participation – indicating a regional capacity gap in this area.[329]

Adopting measures to boost resilience is becoming more and more common in local government management systems across the world.[331] Improvement of infrastructure, more accountability and transparent decision-making, involvement of all actors and stakeholders, education and awareness-raising have been key components of resilience policies in many urban areas.[332]

Cooperation frameworks for knowledge exchange and prevention schemes have also grown significantly. Networks and consortia such as the UNISDR, the ICLEI– Local Governments for Sustainability group, the Making Cities Resilient campaign, or the 100 Resilient Cities network (promoted by the Rockefeller Foundation)[333] are just some examples. As recently as March 2015, the UNISDR led the third UN World Conference on Disaster Risk Reduction in Sendai, Japan. The conference gathered representatives from 185 UN member states, including a strong delegation of local authorities. It produced a framework document that highlighted the goals needed for the next few decades to foster resilience in the face of disaster. These priorities include understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction and enhancing disaster preparedness for effective response.[334]

To foster resilient, environmentally sustainable metropolitan areas, alternative trajectories must be developed that transform production and consumption patterns to simultaneously promote green, low carbon, socially integrated and resource-efficient urban areas. To increase resilience to natural or man-made disasters, the identification of the most vulnerable areas and population groups (e.g. slums) should be supported by the development of preventive infrastructures (against flooding and similar phenomena, for example), adequate housing and resilience mechanisms integrated across all urban policies.

4.2
SOCIAL SUSTAINABILITY AND QUALITY OF LIFE IN METROPOLISES

The analysis conducted so far shows that the key dimensions of environmental sustainability and social inclusion should be addressed within a comprehensive, holistic framework of action. To promote cities that are sustainable, accessible and inclusive – as mentioned in the introduction of this chapter – both dimensions should be linked to the 'Right to the City' in order to guarantee that 'citizenship rights' are an integral part of metropolitan policies.[335]

Four of these rights are examined in the following sub-sections: the right to land, the right to housing, the right to universal access to basic services and the right to culture. Current available data illustrates the pressing demand for decent housing: '[t]he expected urban global population increase of 1,023 billion by 2030, combined with the existing housing deficit (currently around 880 million people live in inadequate housing in cities and this number could well be an underestimate)[336] implies that approximately two billion people will require housing by 2030'.[337] The figures on access to water and sanitation are similarly worrying (see Section 4.2.3 below). If these issues are not adequately addressed, two out of five urban dwellers will not have access to decent housing and will have to resort to informal settlements by 2030 – mostly in metropolitan areas. Access to decent and affordable housing, as well as to water and sanitation and an adequate standard of living are recognized as human and social rights.[338]

4.2.1 Access to land: the first step towards decent housing[339]

The concept of right to land focuses on issues of social exclusion and discrimination (notably gender-related) which are linked to land use. Access to land and its regulation – cornerstones of housing and of the 'Right to the City' – implies better control of land use, easier access for the most vulnerable communities, and the regulation of those market forces which can lead to excessive housing costs, restrict the supply of affordable housing, and thus penalize millions of underprivileged city dwellers.

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Alternative trajectories must be developed that transform production and consumption patterns to simultaneously promote green, low carbon, socially integrated and resource-efficient urban areas

In the 1960s and 1970s, in the first phases of urbanization of the most dynamic metropolises, access to land was relatively easy. However, in the past 20-30 years, and particularly in developing countries, access has become more complex, with a general shortage of affordable housing. Some fast-growing metropolitan areas have seen the spread of informal settlements alongside a process of liberalization and commodification of the land market. In cities such as Abidjan (Côte d'Ivoire) and Cairo (Egypt), customary land rules or practices have been replaced by land grabbing and commodification, resulting in rising land costs and increasingly difficult access for the least advantaged citizens.[340]

Security of tenure is a major issue in most metropolitan areas of the developing world. According to UN-Habitat, two thirds of slum dwellers do not hold legal titles. In many countries, women are particularly subject to discrimination (no legal right to inheritance, high vulnerability in the event of divorce or widowhood, etc.). Additionally, the illegality of slums means limited social safety nets and family protection, particularly in the face of violence.[341] In some countries, the universal norm of individual property rights goes against the customs of indigenous communities, which are founded on collective or communal tenure rights.[342]

Effective legalization of property tenure for the most disadvantaged comes up against different barriers in different metropolises (e.g. institutional blockage in Cairo and interest groups or 'mafias' in Ouagadougou, Bamako and Mumbai). Strategies to introduce tenure security have focused on two different approaches: property rights recognition and usufruct rights. Those who support the latter argue that property rights recognition tends to lead to rising prices and more marginalization, especially for those households that are not able to benefit from legalization processes and remain in the 'grey' areas of property management.[343]

Some countries have chosen to distribute property titles to facilitate access to mortgages and investments in housing improvements. For example, Peru and Brazil have developed a large-scale securitization process, with more than one million titles distributed (however there are backlogs in each, e.g. difficulty accessing cadastral registers in Peru and building-permit systems and weak management of vacant public land in Brazil).[344]

Recognition of land tenure is often considered more efficient and fairer than legalization. Some programmes have adopted a 'hybrid approach', for example using tax payment records, recognition by neighbours or by peers of 'real tenure', or traditional modalities (e.g. contracts based on oral agreements or *Hujja* in Amman).[345] Access to land for the more vulnerable could be facilitated by using public land and better regulation of the land market.

4.2.2 The right to housing[346]

Along with the right to land, **the right to housing is an essential dimension of social sustainability, given the importance of the home and residential attachment for wellbeing**.[347] Nevertheless, the global sums dedicated to social housing is currently insufficient to achieve SDG Goal 11.1 ('ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums').

Throughout the 2000s housing has become a global and often opaque financial instrument – as seen in the United States sub-prime crisis – often at the expense of middle and low-income households. As mentioned above, in recent years, institutional investment in properties has increased dramatically (see Section 3.2).[348]

Whereas in developing countries an increasing number of people have resorted to living in slums (55.9% of Sub-Saharan Africa's urban population in 2014),[349] in developed countries property inflation has pushed middle and low-income households towards the peripheries. In almost all cities, this trend has been aggravated by the reduction of available social housing. In fact, 'over 100 million people in the Global North suffer a housing cost overburden, spending 40% or more of their household income on housing'.[350] The percentage of available social housing has been declining in the last few decades due to the disappearance of regulated tenancies (35,000 state-sponsored social housing units have been 'lost' in New York since the 1990s) or to privatization policies (in England but also in China, social housing stock reduced by 90% over the past 15 years).[351] In England, more than 1.8 million households were on social housing waiting lists in 2014 and the United States is currently short of 5.3 million affordable housing units.[352]

The right to housing involves recognizing the right to a decent and healthy place to live

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The right to housing involves recognizing the right to a decent and healthy place to live for everybody

for everybody, as acknowledged in the UN's Habitat II Summit and at the heart of the debate for Habitat III (see Box 4.10).

Although countries such as France and South Africa have included this right in their legislation, its implementation has hardly ever been straightforward. France's 'solidarity and urban renewal' law (2000) made it obligatory for each municipality to have a 25% quota of social housing in their building stock: many municipalities have failed to comply.[354] Furthermore, certain renewal policies of urban social housing in Northern America and Europe, which led to the demolition of old social buildings as an alternative to spatial segregation and discrimination, have been criticized because of the lack of adequate social criteria.[355]

In emergent or developing countries, while housing policies can successfully address the lack of adequate and affordable housing, some of them have led to the transfer of populations to isolated areas and to a spatial concentration of the poor. In Brazil and Morocco, programmes such as *Minha Casa* or 'cities without slums' offer alternatives to the *favelas* (slums) but often in areas remote from jobs and services.[356] At the same time, private real estate companies (e.g. in Mexico, Turkey, Morocco and Egypt) have developed affordable housing projects but in many cases on the peripheries, thereby encouraging urban sprawl.[357]

On the other hand, many countries have also supported in-situ municipal and national slum upgrading programmes, even if there is still strong resistance to the recognition of informal settlements. Rehabilitation policies frequently focus on improving basic services, sometimes coupled with land redistribution (e.g. through 'developed plots') and urban standardization through a grid street plan to 'normalize' the urban frame.[358] The concept of self-construction is often disregarded, while relocation in new urban areas, in association with developers, is increasingly relied upon. However, success stories based on the strong involvement of community organizations should also be highlighted. In Recife, slums have been included in 'economic areas of special interest' (ZEIS). In Lima, the '*Barrio Mío*' programme subsidised basic infrastructure and services for residents of upgraded areas. In Medellín, the parks department improved the linkages of self-built neighbourhoods with the rest of the urban fabric. In Mexico City, the neighbourhood improvement programme (PMB) has supported the development of

BOX 4.10 HABITAT III THEMATIC MEETING ON INFORMAL SETTLEMENTS

In April 2016, a Habitat III thematic meeting on informal settlements took place in Pretoria, South Africa. The declaration that emerged from this reiterated 'the right to an adequate standard of living, including the right to adequate housing [...]' and emphasized the dual characteristic of slums as both a cause and a consequence of poverty, social exclusion and environmental degradation. It stressed the need for a New Urban Agenda that – among other things – 'strengthens local government and improves urban governance and management [...]' to 'foster a collaborative, participatory process to improve living conditions in informal settlements, incrementally upgrading existing and preventing new slums', and 'adequately equips national, sub-national and local authorities, as well as slum dwellers, with strategic partnerships for sustained and affordable financing strategies for participatory incremental sustainable slum upgrading and prevention'.[353]

Photo: UCLG - Maputo (Mozambique).

local infrastructure and basic services. Alliances between organized citizenship and local government have been essential for successful rehabilitation initiatives in Thailand, the Philippines, India and several other countries.[359]

Civil society initiatives can also contribute to the production of affordable housing (e.g. community land trusts and housing cooperatives - see Box 4.11). Numerous housing cooperative initiatives have emerged – as varied in number as in name[360] – and some have been, or are being, institutionalized.[361]

The generic term 'slums' trivializes the diversity of human settlements.[368] In metropolitan areas characterized by extended slums, these informal settlements should be recognized as legitimate and historical means of urban production, and their

BOX 4.11 COMMUNITY LAND TRUSTS (CLT) – NEW YORK AND BRUSSELS [362]

CLTs are instruments of protection against gentrification and the displacement of local residents. They give power to communities that have historically been powerless, prioritizing use value over exchange value,[363] and looking at housing as a human right more than a market commodity. CLTs are non-profit community organizations that own pieces of land reserved for affordable social housing. They collaborate with non-profit housing associations that let housing units according to specific profiles. Widely developed in the United States, this model has proved the efficiency and relevance of land used as social heritage, promoting wider access to housing.[364]

In New York, for example,[365] a CLT has been set up using expertise gathered from an organization combatting homelessness (Picture the Homeless), academics (Columbia University), a community organization (New Economy Project) and inhabitants of East Harlem.

In Brussels[366] the 'Brussels Community Land Trust Platform' was created in 2009. In 2012, the City of Brussels decided to develop a CLT (incorporating, for example, affordable housing production, loans for low-income households and prevention of unoccupied housing) which is financially supported and legally protected by public authorities (integrated into the housing code under the Regional Land Alliance) and is recognized as an efficient instrument for the production of affordable housing.[367]

formalization and integration into municipal management systems should be supported. Metropolitan areas should adopt measures other than demolition (still frequently used) to tackle slums. Globally, between 1998 and 2008, at least 18.6 million people had been affected by forced evictions.[369] In New Delhi, between 1990 and 2008, 221 precarious neighbourhoods were destroyed in order to clean up the city[370] – a process sped up by the approaching Commonwealth Games.

In light of this, it is important to have **strong public policies for affordable housing and adequate support for civil society initiatives concerned with the production and management of housing, particularly in collective and communal developments, preserving tenants' status,**[371] preventing vacant housing and promoting fair and equitable access to housing as well as their proximity to basic services.

The right to housing means including citizens in governance bodies that plan and build social housing, as well as avoiding 'electoralization' or politicization in housing allocation. Metropolitan areas that successfully manage their housing policy can be replicated at other levels of government, thus fostering integration and ensuring efficiency.

4.2.3 Access to public services

Severe deficiencies in service provision (e.g. fresh water and sanitation, energy, transportation, waste management, healthcare and ICT connectivity) affect the urban fabric and infrastructure in many countries and economies around the world. This prevents a large number of people from living with dignity and perpetuates large-scale and systematic inequality. **Across developing countries, there are still 2.4 billion people lacking access to improved sanitation facilities and 1.9 billion people using unimproved or potentially contaminated water sources**. Global figures indicate a decline in access to such services in urban areas of Sub-Saharan Africa.[372] In the Global North, the issue of affordability creates unequal access to basic services, often leading to energy poverty (e.g. 10.8% of the European Union population – about 54 million people – were unable to adequately heat their homes in 2012).[373] These numbers are all the more alarming as local governments will have to expand service provision in the face of rapid urban growth: estimates suggest that 667 million more people will be living in the world's metropolises by 2030.[374]

Inclusive metropolises that respect the human rights and basic needs of their population – and especially those of women of all ages – need to re-asses their governance systems and explore adequate models for the management and financing of the services they deliver to their citizens. Women in particular have different patterns of use of basic public services. With respect to public transport, for example, gender-aware mobility policies should consider not only the specific safety needs of the female population, but also the impact of the persistent gender pay gap, which significantly affects the spending capacity of female service users and customers.

In most decentralized countries, the responsibility for basic service provision has been devolved to local governments or special purpose authorities (e.g. the Metropolitan Transit Agency of New York or water districts in the United States). In many countries, however, service provision and its management have been dominated by public or private utilities (generally structured as joint ventures) often controlled directly by central government (e.g. Buenos Aires in Argentina or in large agglomerations of Northern and Western Africa) or by regional governments (e.g. Brazil). Utilities are normally organized on a sectorial basis at corporate level, with limited accountability at the local level. Provided that most urban services cross municipal boundaries, **a unique metropolitan structure to coordinate provision would, in most cases, be ideal so that loss-making and profitable services are progressively equalized**. In fact, some countries have successfully implemented a model of local multi-service enterprises, owned by local authorities (e.g. Germany's *Stadtwerke* or the *Empresas Públicas de Medellín* consortium of public utilities in Medellín, Colombia).[375]

The concentration of tasks and responsibilities into one large metropolitan authority, however, can also reduce efficiency incentives, limit the attention paid to local needs and demands, and hinder the ability to adapt to variable economic conditions. Moreover, this potential drop in efficiency of basic service provision tends to translate into higher service costs, lower quality and poor accessibility for the least favoured citizens.[376]

While a combination of tariffs, taxes and transfers[377] can, under certain circumstances, sustain maintenance, in most developing countries the revenues they generate have been insufficient to finance service expansion to unserved areas. This has excluded many urban areas from service provision altogether. Cost effectiveness has also not been properly balanced across the services that are provided: some have been consistently loss-making (e.g. transport and sanitation), whilst others have been profitable (e.g. electricity and communication). Even if central governments remain a major source of financing for basic services, local governments are expected to provide an increasing proportion of it, mostly in high and middle-income countries.

Service provision and the issue of affordability

Finding a balance between affordability and financial sustainability is a central challenge for public services,[378] although the two goals are not mutually exclusive. Affordability is particularly critical in low and middle-income countries, with a large presence of informal settlements. The affordability debate is usually considered from two different perspectives: a) a market approach, assessing household incomes and setting tariffs that poorer groups can afford; or b) a human rights approach, especially for water provision, implying that access to a minimum level of consumption should be free and guaranteed.[379] In South Africa, for instance, the poor are guaranteed minimum levels of free access to water, electricity and solid waste collection,[380] a strategy that has substantially increased access over the past 15 years, though it has not yet provided universal access to drinking water. In the European Union, the treaties recognize affordability as an important value in the provision of all services. The law protects poorer households and warrants minimum access to essential services. Newly-adopted rules on 'energy poverty', for instance, have gone as far as to prohibit service disconnection in critical circumstances.[381]

Price differentiation, however, has generally been more common. It tends to be implemented through cross-subsidization, to support low-income households.[382] Alternative options include direct subsidies, through targeted income support or cash transfers, as in Chile and Colombia. However, policies that keep tariffs low for all users are not necessarily increasing inclusiveness, failing sometimes to either involve poorer recipients or ensure the system's financial sustainability, or both. In Africa, for instance, about 90% of the recipients of subsidies for piped water or electricity services belong

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Affordability is particularly critical in low and middle-income countries, with a large presence of informal settlements

to the richest 60% of the population.[383] Affordability is even more of a critical issue for those underserved households that rely on informal vendors and providers. They are often charged more than they would be if they could access the network, with a dramatic impact on their household incomes. It is up to local governments to monitor this situation and its effect on the overall system performance.

Basic services management: the role of bottom-up participation

No ideal one-size-fits-all model for the management and financing of basic services is yet available. The optimal choice between outsourcing and direct management can only be made on a case-by-case assessment by public authorities, who need the freedom to adopt their management model of choice to increase flexibility and adaptation to local contexts.[384] In any case, an effective, well-enforced regulatory framework is essential to empower local governments to guarantee universal access to quality basic services and protect the commons.

As a response to the increasing challenges of service provision over the last two decades,

many countries and international institutions have promoted reforms that sought to outsource provision to private operators. As a result, an increasing participation of the private sector in basic service provision, through Public-Private Partnerships (PPPs) has become popular in the last few decades, as they have often been able to reduce costs (see also Section 2.3.1). As stressed by the United Nations Department for Economic and Social Affairs (UN-DESA), however, the hope that private sector participation and concession schemes would bring new investments in and broaden access, particularly in low-income countries, has not always been fulfilled.[385] A trend towards the re-municipalization of basic services, on the other hand, has been reintroduced by some European cities in the last decade,[386] while new PPP models based on knowledge-sharing have also emerged, showing interesting results in terms of improving access to public services (e.g. a PPP between the public water company in Algiers and an international company in order to strengthen management and professional capacities).[387]

Other partnership systems are also being used to strengthen public services delivery, such as Public-Public Partnerships (PUPs), involving decentralized cooperation between different public bodies, or Public-Private-People Partnerships (PPPPs), including citizens and civil society in a bottom-up participative approach to infrastructure planning and policy making. User participation in monitoring and evaluation also helps improve the quality of public services (e.g. community score cards in many cities in Malawi and Sri Lanka or an eco-solidarity observatory in Dunkerque, France, created to evaluate the affordability of access to water).[388]

Small private enterprises in both the formal and informal sectors play an important role where the quality and extent of provision by official service providers is lacking, providing a high proportion of the urban population with basic services.[389] Small providers can be a 'second-best solution', for example with public standpipes or dry sanitation, or the use of environmentally safe methods for processing wastewater, or street lighting and solar lanterns (e.g. in Kenya). There are many examples in African countries, resulting in a 'hybrid' model of provision, especially in peripheral urban areas where small autonomous systems (with well pumps, storage and piping systems) ensure distribution of water to a

group of houses or neighbourhoods.[390] The share of the population with water provided by such operators in major urban centres in Africa ranges from 21% in Dakar to 80% in Khartoum. Levels of informal provision of electricity in the region are similar.[391] Municipal authorities have also partnered with small private entrepreneurs to provide toilets or sanitation (in Suzhou, China, and in Mumbai, in partnership with a federation of women slum-dwellers). Such initiatives have produced better quality, cheaper, and better managed solutions.[392]

In most cities of Africa, Asia and Latin America, small-scaled informal transit modes (e.g. minibuses, scooters, tricycles or shared taxis) are central to the efficiency of transport systems. In Latin America, up to 30% of journeys are made using informal transport, with a much higher proportion used by low-income groups. The lack of formal solid-waste management services, similarly, has also often led to the emergence of cooperatives, micro-enterprises, NGOs and informal workers catering to households and businesses. In Latin America, these providers represent an estimated 3.3% of activity in the sector, rising to 7.8% in larger cities, being especially active in slums and informal settlements.[393] In many cities of Asia and Africa, tens of thousands of people make a living through waste collection,[394] sometimes competing with formal systems and challenging the capacities of weaker municipalities.

In many low and middle-income countries, there is also a long tradition of local communities playing a role in basic service provision, often with support from NGOs and community organizations. Infrastructure for basic services takes a long time to reach these areas, and many inhabitants will continue to depend on community provision for the foreseeable future.

Although these alternatives to the conventional service network often go unrecorded and untaxed, and may be more vulnerable, they have the advantage of being easier to implement, more flexible and responsive. They can more easily adapt to low incomes, rapid urban growth, changing economic activities and land-use changes, and – particularly in the Global South – represent a way to promote access without the costly deployment of conventional networks that are unaffordable for many local governments and often ill-adapted to the rapid growth and changing dynamics of cities.

In the same vein, other types of decentralized production of services, sometimes called 'off-grid' or 'post-network' formulas – mostly found in industrialized countries, and particularly in Europe – are made possible through renewable and accessible techniques and affordable prices (solar panels, small wind turbines, small sewerage treatment plants, etc.). Although 'off-grid' formulas are not new (there are millions of diesel and gasoline generators in use across the world),[395] those based on renewable energy can create a 'prosumer' trend that transforms users' reliance on providers and turns the provider/user relationship into a user/co-producer one in which the user is a potential supplier, thus disrupting the economic model of universal networked infrastructure.

The role of local governments in regulating and overseeing these different alternatives is crucial because of the potential consequences for human and environmental safety. Given the complexity of the task at hand, the 'conventional' debate on the best model for the management of basic services in metropolitan areas is arguably obsolete, particularly when applied to low-income countries and even more so to informal settlements, where there are diverse issues related to the lack or absence of public services (health, water, sanitation, waste management, transport, electricity, public lighting, etc.) and where universal provision is often not foreseeable – at least through conventional infrastructure and financing and management methods. In this context the failures of, and unequal dynamics generated by, most conventional, centralized means of services provision (as well as the absence of basic services or the inability of residents to access them) have led to the search for alternative, more sustainable means of structurally differentiated provision. These measures – still nascent and subject to debate – involve a diversity of socio-technical systems of accessibility, actors, institutional structures and range of services – many of which are informal.[396] Although not without risks (e.g. fragmentation, social polarization), with further study and a careful examination of local contexts and their socio-spatial dynamics, **such measures could represent a significant step towards achieving sustainable and universal access to basic services in metropolitan areas around the world.**[397]

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There is a long tradition of local communities playing a role in basic service provision, often with support from NGOs and community organizations

4.3
AN EMERGING FIELD: THE CULTURAL DIMENSION OF METROPOLISES

In the last few years, increasing attention has been paid to the cultural dimension of sustainable development. While the connections between culture and sustainable development are visible at different levels, specific effects can be observed at the local level, for example the impact of rapid urbanization on the preservation of cultural heritage sites and the erosion and loss of traditional knowledge; the need for metropolitan areas to reflect on access to cultural venues; the attention paid to an increasingly diverse population; the increasing role played by the cultural and creative economy in generating employment and in contributing to broader economic development; and the planning of decentralised systems of cultural infrastructure, etc.

In this context, new reflections and standards have been adopted by intergovernmental institutions and forums,[398] as well as by local governments, including metropolitan cities. Since the adoption of the Agenda 21 for Culture in 2004,[399] UCLG has adopted the Policy Statement on 'Culture as a Fourth Pillar of Sustainable Development'[400] in 2010, and a toolkit entitled 'Culture 21 Actions' in 2015.[401]

The affirmation of cultural policies

The strengthening of the cultural dimension in approaches to sustainability in metropolises relies on an understanding of the specific meaning and policy implications of its core components. These include the protection and promotion of tangible and intangible heritage; the recognition, protection and promotion of cultural diversity as an essential component of co-existence and a positive factor in urban dynamism; and the acknowledgement and promotion of creativity as an aspect of human experience and a source of progress.

These values lie at the core of cultural policies designed by metropolitan governments. Measures adopted at the metropolitan level include the establishment of governmental departments and participative councils in charge of the design, implementation and evaluation of cultural policies; the adoption of cultural strategies and

policies which take inspiration from cultural rights, including the right of all citizens to take part in cultural life; the mapping of elements of tangible and intangible cultural heritage as a basis for adopting safeguarding and promotion measures; and the organization of cultural events, including festivals, fairs and exhibitions.

A commitment to ensure the exercise of cultural rights by as many citizens as possible – including those in peripheral or disadvantaged areas who are often not able to access city-centre cultural venues – has led many cities around the world to establish decentralized cultural facilities. New cultural venues at the neighbourhood level can either be part of broad, extensive networks (e.g. community centres, libraries, theatres, auditoria, etc.) or be specialized institutions that respond to specific local needs or emerging challenges at the metropolitan level. Among the good practices identified are the four Factories of Arts and Jobs (FAROS) set up by Mexico City to encourage creativity and the reconstitution of the social fabric in four peripheral neighbourhoods.[402] Similarly, the City of Bogotá has established an extensive network of local arts centres for children and young people (CLAN) as part of its ambition to integrate artistic, cultural and sports education within the educational system, in close cooperation with local cultural actors.[403] Finally, with the aim of giving a new use to former industrial sites and unique venues and providing artists and creative professionals with opportunities to develop creative work and foster innovation, the City of Barcelona established the Art Factories programme, with venues spread across different city districts.[404]

The transversality of culture

The integrated nature of sustainable development is visible in the synergies that exist between cultural aspects and the economic, social and environmental pillars of sustainability. Policies adopted by metropolitan areas around the world include integration in curricula of cultural skills and knowledge related to intercultural dialogue and diversity; facilitation of citizen initiatives for the sustainable use of public spaces; consideration of the cultural economy in local economic development strategies; involvement of cultural institutions that receive public support in their work with disadvantaged groups and neighbourhoods; integration of culture in programmes for

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The recognition of culture as a space of diversity and the affirmation of the right to take part in cultural life have inspired some metropolises to establish models for cultural governance

the renovation of historic urban centres; and recognition of public spaces as key resources for cultural interaction and participation. Among the challenges faced by metropolitan areas in this field are the lack of appropriate cross-departmental or 'joined-up' policy structures, limited understanding of the meaning and policy implications of cultural aspects in other policy areas and scarcity of appropriate tools for analysis (cf. Culture 21 Actions toolkit).

The governance of culture

The recognition of culture as a space of diversity and the affirmation of the right to take part in cultural life, including the right to contribute to priority-setting and policy design and management, have inspired some metropolises to establish models for cultural governance that integrate the voices of public, private and civil society stakeholders and seek to foster dialogue and collaboration.

Several cities and metropolitan areas are increasingly establishing mechanisms for a wider range of stakeholders to contribute to the public discussion, design and evaluation of policies in the field of culture. This includes the broader analysis of local cultural dynamics and the interaction between cultural aspects and other spheres of metropolitan life. These mechanisms may be either specific to the cultural field or integrated within broader schemes fostering participative governance. Among the examples identified in this area is the use of participatory budgeting in Belo Horizonte, which enabled citizens in several of the city's districts to identify the establishment of local cultural centres as a priority. As a result, an extensive network of community cultural centres now exists across the city.[405] Beyond decision-making, initiatives that enable cooperation throughout the implementation of programmes and contribute to the emergence of a dense network of public, private and civil society agents across the city are also necessary. The city of Lyon has defined its approach to cultural development as 'a culturally cooperative community', which recognises citizen mobilization and engagement as one of the engines behind local cultural development. Through the adoption of tools such as the Cultural Cooperation Charter, it has fostered collaboration between small and large civil society and cultural institutions in the city centre and its neighbourhoods.[406]

The cultural dimension is also relevant in terms of spatial development, through the construction of cultural facilities and the creation of public spaces. These should be seen as essential meeting spaces to encourage cultural activities and diversity. Many metropolitan areas are experimenting with territorial and peri-urban planning by developing projects based on cultural, architectural, urban and natural heritage. In this way, culture and heritage become catalysts of territorial unity and shape economic, social and environmental policies. The natural parks of the Île-de-France region illustrate how the peripheral spaces of metropolises build themselves using heritage as a dynamic development tool.

Photo: Fezile Njokweni - Durban (South Africa).

5.

CONCLUSIONS: SHAPING THE AGENDA FOR METROPOLITAN AREAS

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The 'Right to the City' as a cornerstone for urban policies

As outlined in the introduction to this chapter, our world is moving towards the peak of a 'metropolitan age', characterized by large, growing urban agglomerations with unprecedented complexity and diversity. As metropolises today encompass 41% of the world's urban population and contribute significantly to the wealth of nations, a transformative approach has become necessary to ensure the prosperity, inclusiveness and sustainability of the metropolises of the future. This will take place in the context of significant uncertainties – possible extensive economic stagnation, large-scale regional conflicts and violence, environmental risks, and socio-political polarization – that will require decisive and firm action.

Through a comprehensive analysis of the literature and contributions from different metropolitan leaders, this chapter highlights some of the stark contradictions of the 'metropolitan age'. **Metropolises play a central role in our societies yet have not resolved key issues relating to governance and democratic management**. Many metropolitan areas host massive concentrations of wealth and offer promising opportunities for growth whilst, at the same time, facing critical difficulties in delivering decent housing and access to quality basic services. Many cities are competing for growth and investment in a globalized world but, at the same time, are experiencing inequality, which exacerbates social segmentation and territorial polarization. Areas that have the

promise of an improved quality of life risk jeopardizing this through the irreversible depletion of their natural resources and life-support systems.

This chapter, however, also shows how metropolitan actors, through different policies and initiatives, can successfully tackle many of these challenges and actively support sustainable growth, social inclusion and environmental protection as mutually re-enforcing goals – respectful of the principles that inform the Sustainable Development Goals (SDGs), the COP 21 agreements, and the New Urban Agenda. These experiences reaffirm the critical role of metropolitan areas in the fulfilment of these international agendas, beyond the goals of SDG 11. Based on these lessons and examples, and with reference to the 'Right to the City' as a cornerstone for urban policies, this section puts forward a set of key policy recommendations.

5.1

TRACKS FOR RESHAPING METROPOLITAN GOVERNANCE

However pressing the need to strengthen the governance of many metropolitan areas and megacities, the experiences of metropolitan governance presented in Section 2 demonstrate that there is no 'one-size-fits-all' solution. All

existing models need, to a certain extent, to be adapted and re-invented.

Many metropolitan governance systems are, in fact, being reformed and upgraded around the world. Reforms, however, are rarely flawless and often involve trade-offs on different issues; in general, they seem to have a higher chance of success when they are based on collaborative processes, with the involvement of different levels of government, than when they are top-down. Some basic principles that tend to bolster **democratic and collaborative metropolitan governance systems include local democracy, accountability, subsidiarity, effectiveness, adequate resources and financing instruments to foster a polycentric and balanced development**, together with 'equalizing' financial mechanisms for more cohesive, harmonized metropolitan areas.

A thorough reform of financing systems is urgently required in many metropolitan areas, in both developed and developing countries. As mentioned above, many metropolitan areas operate in a 'low-investment, low-return' equilibrium, and lack fiscal resources to be able to invest in the infrastructure required for long-term growth. Although metropolitan areas must advocate strenuously for sustained and enhanced intergovernmental transfers, this report suggests that metropolitan sustainability will increasingly rest on the ability of local and metropolitan governments to become more **revenue self-sufficient**. This goal, however, will require a critical, comprehensive revision of fiscal frameworks and the deployment of innovative financial tools – so as to broaden the ability of metropolitan areas to capture the value of the economic growth they generate, while also improving access to responsible borrowing. These ambitions are very challenging in developing economies, where the financial options available to cities are limited, in the face of a growing urban population with soaring needs and demands for quality services**. At both the national and global level, therefore, a deep rethinking of traditional financing approaches is needed to empower metropolitan authorities in the context of widespread financialization and privatization of urban public goods and property markets.** This would make it possible for metropolitan areas to reconcile financial constraints with long-term sustainable development, and counterbalance the growing wealth inequalities both between and within cities.[407]

The success of metropolitan areas has a fundamental impact on national development in most countries. As such, metropolitan governance should be defined by a **collaborative and effective multilevel governance framework**. This report calls for a new deal between metropolitan areas and other tiers of government, to ensure a clear recognition of the role of cities and, in particular, of metropolitan areas. It recommends strengthening national policies to support reform processes in metropolitan governance and enhancing the linkages between metropolises and other cities, settlements and territories.

As regards governance within the metropolitan area and its relations with civil society, the report insists on **the democratization of metropolitan governance** and a larger role for both local organizations and citizens, well beyond formal electoral channels. A buoyant local democracy is a pre-condition for the emergence of a new form of metropolitan governance, able to recognize and mitigate the tensions and contradictions inherent in complex urban societies. It should be supported by clear participatory mechanisms that facilitate the active engagement of civil society, especially excluded and disenfranchised groups, including immigrants. The gender perspective must also be integrated into the design, execution and evaluation of public policies **through the systematic application of the principle of equal treatment and opportunities for women and men in all public policies**.

New technologies facilitate access to data and create opportunities for new forms of participation. The ability of information to flow freely is key to the transparency and openness of the new systems and methods that metropolises can establish within their own institutional arrangements.

Empowered and well-organized local communities, able to develop their own initiatives, can and should participate in the co-production and implementation of city policies (e.g. planning, slum upgrading and service delivery) through responsible partnerships.

As part of the transformative shift in metropolitan governance, Section 2 calls for a change in the mindset of city governments in the form of a metropolitan leadership that embraces experimental alternatives and seeks new management and cooperation paradigms; and leaders that move from

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As metropolises today encompass 41% of the world's urban population and contribute significantly to the wealth of nations, a transformative approach has become necessary to ensure the prosperity, inclusiveness and sustainability of the metropolises of the future

fragmented sector-specific decision making to a strategic approach that takes into account the systemic tensions between inclusion, environmental policies and the need for sustained growth. Although not entirely new or risk free, the strategic planning approach presented here is a promising model on which to build such an integrated vision for the whole metropolitan area, joining together the different dimensions of urban sustainable development. It offers an opportunity to plan and decide collaboratively across the many territories that are involved, preserving a participatory approach that includes local stakeholders and civil society. Citizens and their effective participation can ultimately help overcome the asymmetric distribution of power that is inherent in the policy-making arena and the productive ecosystem of metropolitan areas.

5.2
THE PARADOX OF THE METROPOLITAN STRUGGLE FOR COMPETITIVENESS

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A pattern of winners and losers tends to emerge within metropolitan areas

Whether they are recognized as 'engines of growth', 'expressions of globalization processes', or 'archipelago economies', most metropolitan areas will continue to function as drivers of national and even international economies. Section 3 analyzes the positive and negative externalities of metropolitan areas – involved as many are in a global competition to attract business and investors – and highlights the tensions that this competitive framework creates.

On the positive side, metropolitan areas provide critical advantages and externalities to the local and national economies in which they are embedded. Their role has been central to the economic transformation of many emerging and developing countries in recent decades. The report introduces several of the strategies that metropolitan areas have developed to boost their economic development and also highlights how these strategies would not be feasible without a distributed system of leadership and power-sharing, partnership and coalition-building. This often leads to new institutional arrangements (development agencies, advisory bodies, and diverse alliances) able to marshal economic sectors, levels of

government and also civil society behind the same shared goals.

The question the report raises is how to ensure and regulate the participation of private and financial sectors, in a transparent and accountable manner, to strengthen metropolitan governance without weakening democratic institutions. Section 3, specifically, argues in this regard that strong and visionary local leaders can manage this delicate equilibrium and improve cities' room for manoeuvre. In any case local democracy should be at the centre of any metropolitan development policies.

With regard to those negative externalities linked to the 'imperative of competitiveness' and fuelled by the financialization of urban economies, the report highlights the risks and realities of increasing inequalities, the fragmentation of urban space, and social exclusion. A pattern of winners and losers tends to emerge within metropolitan areas, due to phenomena of gentrification and marginalization that affect the most socially fragile communities. This could lead to the emergence of a 'two-speed' city that excludes whole portions of the urbanized space, with on the one hand prosperous areas, characterized by a demand for a highly-qualified workforce, and on the other hand areas with disadvantaged population badly affected by increasing unemployment and poverty.

Similarly, in the metropolises of the Global South, informal neighbourhoods and economic activities struggle to cope with the devastating effects of competition for land use. Certain negative externalities can even counterbalance the positive effects mentioned above, consuming resources and intensifying imbalances between territories at the expense of the rest of the country.

One of the biggest challenges for metropolitan areas, as argued at the end of Section 3, is how to **combine 'attractiveness' strategies with an agenda that preserves inclusiveness and sustainability**. It is argued that inclusion and sustainability are neither optional nor secondary to the pursuit of economic growth and efficiency. There is growing international evidence of a relation between high levels of metropolitan inequality, congestion and pollution and lower economic growth rates because of their effects on social cohesion, insecurity, health and the environment, and the ability to attract investment and withstand external shocks.

Accordingly, a combination of strategies to engage metropolitan areas in a territorial

dynamic of solidarity and in an inclusive and sustainable pattern of development should comprise: i) urban policies that shape urban systems as a whole (be it at the national or the regional level); and ii) metropolitan policies and actions supported by more localized, targeted urban projects adapted to the needs of local communities.

As regards the first dimension, in particular, national governments need **to redefine national urban policies (NUPs)** to shape inclusive and collaborative urban systems. They should strengthen the interconnections between metropolitan areas, intermediary cities and territories, as well as foster a more balanced **polycentric development approach**. This would maximize positive economic effects and diffuse the advantages of metropolitan growth throughout the territory. Metropolitan areas should not develop in competition with, or detached from, their surrounding territories. On the contrary, their development should be in solidarity with them, both at the national and the regional level – with clear channels of cross-border cooperation.

At the metropolitan level, policies should facilitate the access of citizens to the urban region's economic resources, while preserving economic efficiency, social equity and environmental sustainability. This can be made possible by:

- **taking advantage of the ongoing transformations of the global economy, in order to support a model of open innovation and place-based factors and foster improved job creation and economic opportunities**. Local governments need to participate in the development and regulation of such socio-economic dynamics through an integrated management of metropolitan economic strategies and assets, fostering its human capacities, and supporting the collaborative and social economy as well as informal activities;
- **imagining an 'open' and inclusive urbanism**, as opposed to a fragmented or 'splintered' one characterized by the privatization of urban spaces and gated communities. An open urbanism should aim to reduce the socio-economic negative externalities of 'urbanism by projects' (the approach based on urban renovation projects with exclusionary purposes) and promote a 'multipolar' or 'polycentric city', limiting the social consequences of land and property competition;

- **facilitating universal access to basic services and urban mobility**, to ensure equitable access and interconnectedness for all metropolitan inhabitants, including its peripheral zones, and to develop housing policies and market regulations that can ensure access to land and decent housing;
- **promoting effective financing models to counterbalance the financialization and commodification of urban economies, as well as the volatility of the land market**. This should be accompanied by a **well-balanced tax system**, which ensures that the fiscal burden is fairly distributed, and **metropolitan equalization funds**, to ensure a just distribution of investments and resources within the whole metropolitan area.

These strategies should be complemented by environmentally sustainable policies as integral parts of metropolitan strategies, to promote cities that are sustainable, accessible and inclusive.

Photo: UCLG - Jeepnee Taxi, Manila (Philippines).

5.3

SUSTAINABLE AND RESILIENT METROPOLITAN AREAS CAN LEAD THE TRANSITION TOWARDS LOW-CARBON CITIES

Sustainability has become a cornerstone of metropolitan policies. Section 4 of this chapter shows how metropolitan cities – both individually and through their participation in global networks (e.g. the Global Covenant of Mayors for Climate and Energy) – are leading climate change mitigation and adaptation initiatives, without waiting for, or depending on, the initiative and agendas of national governments. From 'climate plans' to a diversity of sectoral policies, cities all around the world are contributing, at different scales, to the achievement of these goals. Cities have also been active in advocating a sustainable lifestyle for their citizens and reducing their own urban GHG emissions. **Some metropolises** – such as Stockholm or Copenhagen – **have shown that it is possible to make economic growth and de-carbonization policies compatible**.

With regard to sectoral policies, Section 4 advances a number of examples in different areas: urban mobility, energy, public and green spaces, waste management and the circular economy, food security and urban agriculture. Although the mainstreaming of these actions is still generally limited, their potential has been demonstrated. However, committed local governments are still confronted with a number of obstacles: funding, institutional settings, regulations and legislation, technology, information, knowledge, and political commitment have all, to a certain degree, represented a constraint to these kind of initiatives. These challenges, ultimately, cannot be addressed unilaterally by cities. Evidence highlights that all levels of governments, the private sector and civil society need a stronger collaboration framework for these goals to be feasibly achieved.

In line with the principles of compact cities and 'smart growth' to reduce urban sprawl and prioritize the environment, the report questions the adequacy of certain densification policies – particularly in terms of their social impact. The report recognizes the advantages of compact cities

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Some metropolises have shown that it is possible to make economic growth and de-carbonization policies compatible

but acknowledges that, without adequately defining its goals and features, densification policies could lead to gentrification processes, land and property speculation, and the relegation of the most vulnerable groups and communities to peripheral, under-served areas.

Moreover, in light of the increasing exposure of metropolitan areas to catastrophic natural disasters – and other compelling factors such as security and safety, urban violence, and disease outbreaks – resilience has become a key policy principle for building sustainable metropolises. Although a number of networks have been developed over the last few years to engage local authorities, the report stresses the need for a more proactive role from local governments to catalyze those innovations that are essential for effective resilience policies at the metropolitan level. The underlying risks of not having resilience frameworks are particularly acute and visible in Sub-Saharan Africa and Southern and Eastern Asia, regions which will host a large share of the expected urban population growth in the near future.

Finally, Section 4 proposes a conceptual shift towards the idea of sustainable development being inextricably linked to both social and environmental justice as well as to the concept of 'Right to the City', to ensure that social sustainability, human rights and democracy lie at the heart of the urban development debate.

5.4

A PARADIGM SHIFT IN OUR UNDERSTANDING OF SUSTAINABILITY: TOWARDS THE 'RIGHT TO THE CITY'

Social sustainability should be central to any public policies and linked to a rights-centred approach. Section 4 examines four key rights: to land, to housing, to basic services, and to culture. These rights are recognized and codified in several documents endorsed by the international community (see footnote 338).

The report highlights the critical situation that metropolitan areas and cities in general will face in the provision of housing and basic services, if current trends and growth figures

continue. Without a strong policy shift, by 2030 around 2 billion people - two out of five of them urban dwellers - could be living in slums or other informal settlements with limited or no access to basic services. This does not include figures of those likely to be living in deprived or marginalized neighbourhoods in developed countries.

As this report has highlighted, there is evidence of this problem in the form of land and housing policies implemented in most contexts over the last few decades. These have led to a structural shortage of affordable land and housing. The report's analysis also underlines that, while the global funds dedicated to sustainable housing have been insufficient (making the achievement of Goal 11.1 of the SDGs unlikely), throughout the 2000s housing has become a global and often opaque financial instrument (as the subprime crisis in the United States has eloquently shown) at the expense of middle and low-income households, and the number of people living in informal settlements in developing countries has risen steadily.

Section 4 also gives examples of pro-poor housing policies that have produced positive outcomes, mostly through the strong involvement of beneficiary communities in both their definition and co-production – as well as other examples which have had mixed results, often due to biased approaches that have made integration more difficult (insufficiently equipped housing isolated from jobs or services, systematic spatial concentration of poorer groups, etc.).

The report highlights how robust policies to facilitate access to land and housing – the cornerstones of the 'Right to the City' – must include more control over land use and real estate regulation by local governments. This can help reduce speculation and contain market forces. For land use, especially in developing countries, this implies the recognition of different forms of tenure and fighting discrimination, in particular towards women, indigenous communities, and other minorities. For slums and informal settlements, policy control involves the avoidance of forced eviction policies and the recognition of informal settlements as a legitimate urban form – acknowledging the potential of self-built housing, promoting their formalization and integration into the urban fabric, and gaining the support of municipal management systems. For housing, the implementation of strong public policies, social housing programmes and innovative

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By 2030 around 2 billion people could be living in slums or other informal settlements with limited or no access to basic services

Photo: Tuana Neves - Porto Alegre (Brazil).

civil society initiatives for the co-production of housing should become a priority. All urban projects (both renovation and urban extensions) should include a percentage of social housing in their plans to support social mixing.

As regards access to basic services, the report proposes the re-evaluation of governance systems, as well as both current and potential new models of management and financing of services. The report suggests promoting a metropolitan structure or mechanism to ensure that both the management and delivery of public services is performed in a coordinated manner. This mechanism should also support the progressive equalization or balancing out of both loss-making and profitable services – without resorting necessarily to a unified service provision, which could reduce efficiency and the focus on local needs. The report also looks for ways to strike a balance between service inclusion and financial sustainability, in particular in low and middle-income countries. It recommends, besides traditional solutions of price differentiation and cross-subsidization, a minimum level of free and guaranteed consumption for poorer households (a measure that has substantially increased access to services in South Africa over the past fifteen years), or at least some protection against total service disconnection for vulnerable groups. Other options, such as direct subsidies to the poorest households or support for network access, should also be systematically taken into consideration.

The report also analyzes the trend, over the last few decades, of outsourcing service provision to improve delivery. It highlights the fact that the bulk of private sector investment has been concentrated in developed and emerging countries and, in particular, in the most profitable sectors (e.g. communication, transport), but that its impact in low-income countries has been limited at best. In this regard, local governments should be empowered to develop different types of partnerships for the provision of basic services, including recent, ground-breaking approaches such as Public-Private-People Partnerships (PPPPs). Local governments have an opportunity to empower small private enterprises, the informal sector and

Photo: Lars Plougmann - Dubai (United Arab Emirates).

community initiatives in the delivery of basic services, even more so where official service providers are ineffective or lacking altogether.

Even though these alternatives to conventional service provision are, more often than not, either unreported or untaxed, they are generally easier to implement, more flexible and more responsive to the communities' needs. **The role of local governments in regulating and overseeing alternative service provision is crucial, since they have a significant impact on human and environmental safety**. A similar approach should be taken to support new forms of decentralized service production (i.e. 'off-grid' activities) in certain fields, for example renewable energy. Although mostly available in developed countries, this can disrupt the conventional economic model of universally networked infrastructures.

When calling for the revision of the management model for basic service provision in metropolitan areas – especially in low-income countries, and even more so in informal urban settlements – the report highlights the need for viable alternatives to include a range of socio-technical accessibility systems and to involve all actors in both institutional and informal structures. Many of these key elements are still informal in their functioning and development, and this should be taken into account when planning their integration into economic strategies and more institutionalized schemes of service provision.

Finally, Section 4 stresses the inherent connection between the role of culture and other dimensions of urban and metropolitan sustainability, recognising it as an integral part of citizens' rights. Metropolitan policies should facilitate access to cultural assets, promote and democratize the different cultural practices and traditions that nourish the diversity of a metropolitan area, and protect tangible and intangible heritage and the involvement of citizens in the definition and governance of cultural policies.

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Cumulative tensions built up in the race for competitiveness, environmental challenges and increased inequality experienced by metropolitan areas have all prompted the search for alternative approaches to, and models of, production and consumption. This has prompted a search for a set of alternative socio-economic priorities and a more inclusive relationship among local governments, between local governments and their communities, between metropolitan areas and other cities, as well as between cities and their surrounding environment. At the heart of the challenge is the need for people, and a respect for fundamental human rights, to be central to the agenda, together with the valorization of solidarity rather than competitiveness.

In the context of growing difficulties for central governments to preserve their welfare systems, the notion of local governments – and metropolitan governments in particular – as key actors in the 'regulation' of an urbanized society is attractive, given their growing responsibilities for the social, economic, environmental and cultural dimensions of urban life.

In a short space of time, a number of different, co-existing approaches have developed: people-centred positions in the development agendas (e.g. the SDGs at the global level); a stronger focus on rights and quality of life at the city level (for example the Charter of Medellín);[408] the adoption of the 'Right to the City' principles in many Brazilian cities or in the Constitution of Mexico City; and the development of 'principles for better cities' embodied in Metropolis' 'Prepcity' initiatives.[409]

These approaches have fed the demand for a 'Right to the City',[410] a claim for a collective space where residents can directly participate in the co-creation of the city they aspire to be part of. The term has become a touchstone for social movements, NGOs and government officials to articulate numerous demands and hopes for urban settlements to be more inclusive, harmonious and united. The 'Right to the City' approach offers a comprehensive framework to integrate recognized social rights for all urban inhabitants with the different expectations and goals set by the SDGs and the New Urban Agenda. Supported by a deeper local democracy and a stronger involvement of citizens in the co-production of the city, the 'Right to the City' can become the foundation for a 'new social contract' for more sustainable, inclusive and safer cities.

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The role of local governments in regulating and overseeing alternative service provision is crucial, since they have a significant impact on human and environmental safety

5.5
KEY MESSAGES

ESTABLISH NEW GOVERNANCE MODELS TO DEAL WITH THE INCREASING COMPLEXITY OF METROPOLITAN AREAS. Expanding metropolitan forms – megacities, urban regions and urban corridors – require new governance systems that address the whole urban functional area. This is essential to overcome institutional, social and spatial fragmentation and support prosperous, inclusive, polycentric, balanced and sustainable metropolitan areas. In many cases this will require incremental steps, tackling the most critical deficits first (e.g. transportation systems) on the path to more systematic institutional and collaborative arrangements.

BASE METROPOLITAN GOVERNANCE ON DEMOCRACY, TRANSPARENCY AND COLLABORATION. Although there is no 'one-size-fits-all' governance model, experience suggests that legal reforms should build on the involvement and commitment of all cities forming part of a metropolitan area, on close collaboration across levels of government and the strong involvement of civil society in decision-making. A fair metropolitan governance system should encourage polycentric and balanced development, based on the following principles: local democracy, with elected local and metropolitan authorities that are accountable and transparent to an active and demanding civil society that enjoys recognized spaces in which to participate regularly; subsidiarity and effectiveness, with a clear definition of roles and powers across different levels of government and between different local governments; and efficiency, to ensure the rational and sustainable management of resources.

GIVE METROPOLITAN AREAS ADEQUATE POWERS AND RESOURCES. Metropolitan and local governments need the powers and capabilities to mobilize local resources more effectively, including a fair and well-balanced tax system to capture more of the wealth created, including economic and property added values. They should also benefit from transfers from other levels of government to deal with externalities. Such reforms will improve local governments' creditworthiness to access national and international financing, both public and private, and promote investment in major infrastructure and services development (including funds for climate-change action) – cornerstones of their attractiveness. Specific metropolitan funds for equalization, fed by local taxes and transfers from municipalities and other levels of government, could serve as levers to mobilize investments and boost solidarity between the different parts of metropolitan areas.

DEVELOP COMPREHENSIVE ECONOMIC STRATEGIES IN METROPOLITAN AREAS TO DRIVE THE NATIONAL ECONOMY AND CREATE OPPORTUNITIES FOR ALL. Prosperous and attractive metropolitan areas depend on a strong cooperation framework with other levels of government, the business sector and civil society. This allows local governments to benefit from the ongoing transformation of the global economy, to innovate and promote metropolitan economic development while ensuring social inclusion. A deeper rethink of financing strategies is also needed to reconcile financial imperatives with sustainable development, and to ensure that the management of public goods and public assets is conducive to long-term investment and reduces speculation and socio-spatial segregation. When designing a socially responsible framework for economic development, metropolitan areas should incorporate the concept of 'civic economy', support the collaborative, social and circular economies, create decent jobs – and more opportunities for women and younger people – and, in developing countries, support the transition from informal to formal economy.

USE VISION-LED STRATEGIC PLANNING TO SUPPORT INCLUSIVE URBANISM. Metropolitan areas should strengthen their capacity to develop integrated and participatory strategic plans that link the different dimensions of urban sustainable development (spatial, economic, social, environmental, and cultural) together. Long-term strategic plans should be accompanied by flexible and dynamic urban planning that better adapts to an ever-changing socio-economic environment. This can help metropolitan areas manage sprawl and avoid further socio-spatial inequalities. This also requires strengthened capacities to manage land use and regulate real-estate markets in order to tackle speculation. Inclusive urban planning should pursue compactness, multi-functionality and socially-mixed neighbourhoods with a good quality of life, the idea of togetherness or 'living together', closer distances and improved public transport, accessible and safer public spaces, fairer access to basic services and infrastructures, and cultural amenities for all. In developing countries, informal settlements must be recognized and integrated into the urban fabric, with adequate policies for land tenure recognition and slum upgrading.

ENSURE QUALITY INFRASTRUCTURE AND SERVICES THAT ARE RESILIENT AND ACCESSIBLE TO ALL. Universal access to quality public transportation and to basic services (water, sanitation, energy, solid waste management, telecommunications, etc.), in addition to policies for housing improvement and the eradication of sub-standard housing (avoiding forced eviction), is not just an issue of urban efficiency but also one of equity and human rights protection. Inclusive and supportive housing policies should consider the public supply of affordable land for housing across the whole territory (to avoid social segmentation), massive public financing for social housing, the promotion of a wide range of alternative housing options (including rental, cooperatives such as community land trusts and coproduction). To better meet local needs and priorities, metropolitan and local governments must develop the skills to choose transparently the best-suited service management models (public, PPP, PPPP, etc.) in consultation with their citizens and guaranteeing universal access. They must improve the efficiency and effectiveness of services (both when managed by the public sector or when entrusted to private providers), strengthening their monitoring and evaluation capacities and establishing regulating or organizing authorities for urban services. In less developed countries, joint basic service provision with communities, together with support and regulation of smaller providers – particularly in the informal sector – should foster coordination between official operators in order to limit gaps in provision.

LEAD THE TRANSITION TO SUSTAINABLE AND MORE RESILIENT SOCIETIES WITH GREENER AND SMARTER METROPOLITAN AREAS. To reduce their environmental footprint, local authorities should promote low-carbon urban infrastructures and services, green areas, and invest in resilient infrastructures and smart technologies. They should be active parties in energy transition as well as in climate change mitigation and adaptation. They should foster progress in the reduction of pollutants (air, soil and water), the use of alternative sources of energy and the management of natural resources – e.g. by promoting public transport, efficient public buildings, better wastewater and waste management and recycling. At the same time, they should adopt plans and adapt infrastructures to cope with the increasing impact of natural disasters, taking into account the fact that poor communities are inevitably the most exposed to natural catastrophes.

PROMOTE 'TERRITORIAL SOLIDARITY' BETWEEN METROPOLITAN AREAS, INTERMEDIARY CITIES AND THEIR HINTERLANDS. A strengthened collaboration between metropolitan areas, intermediary cities and rural areas located in their hinterlands can encourage stronger developmental synergies, relieve urbanization pressures and reduce environmental impacts. An integrated regional approach should foster access to services and facilities for peri-urban and rural zones. It should also improve local economic opportunities (e.g. food security, shorter economic circuits to strengthen local economies) and protect the area's natural resources, contributing significantly to metropolitan resilience.

PUT THE 'RIGHT TO THE CITY FOR ALL' AT THE HEART OF URBAN POLICIES IN ORDER TO RENEW THE SOCIAL CONTRACT AND STRENGTHEN METROPOLITAN CITIZENSHIP. The 'Right to the City' approach combines the need for an advanced metropolitan democracy (participatory democracy and civil society's right to self-organize) with the recognition of essential rights – such as the right to water and sanitation, safe and nutritious food, adequate shelter and secure tenure for all, gender equality, child protection, accessible public services, adequate social protection, respect for immigrants and refugees, safe communities and freedom of conscience and religion. This approach emphasizes the preservation of the cultural and natural legacies of current and future generations. It provides an integrated model that promotes stronger partnerships for the co-production of the city, building a new 'metropolitan citizenship' (see the Global Charter-Agenda for Human Rights in the City).

RECOGNIZE CULTURE (INCLUDING HERITAGE, DIVERSITY AND CREATIVITY) AS A PILLAR OF FLOURISHING METROPOLITAN AREAS. Local governments should acknowledge and promote citizens' creativity while respecting the diversity of their identities. Agenda 21 for Culture demonstrates how local culture is key to promoting sustainable development and creating a common cause within metropolises, which are often characterized by high levels of diversity, including minorities and immigrants. Cultural diversity must be at the heart of metropolitan strategies for social cohesion and local development. Cultural heritage must be preserved in urban planning by benefitting from, and partnering with, local communities. All citizens have the right to culture (see the Culture 21 Actions toolkit).

ACTIVELY ENGAGE ON THE GLOBAL STAGE, AND COOPERATE AND PROMOTE KNOWLEDGE-SHARING AMONG METROPOLITAN GOVERNMENTS. To reinforce innovation, improve management capacities and facilitate the exchange of new technologies, metropolitan and local authorities must develop appropriate knowledge-sharing and peer-to-peer learning capacities, cooperating to build programmes and tools to manage urban development. To face global challenges and participate in the preservation of the global commons, metropolitan and peripheral cities' networks are critical for building international advocacy for cities and facilitating the implementation and monitoring of the New Urban Agenda, the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction, the COP agreements on climate change and the Addis Ababa Action Agenda on Financing for Development.

NOTES

1   Clos, *Towards a New Urban Agenda,* 5; Burdett, Rode, and Shankar, *Governing Urban Futures.*
2   Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*
3   UN-DESA, *World Urbanization Prospects: The 2014 Revision.* UN-DESA most recent statistics for 2016 calculate 512 metropolises.
4   UN-DESA (Ibid.) counts 29 megacities, or 30 if Seoul and Incheon are considered together. The count rises to 35 megacities when including metropolitan areas that have probably surpassed the ten million threshold over the last year: Lima (Peru), Chennai (India), Bogotá (Colombia), Johannesburg (South Africa), and Bangkok (Thailand). City Population, on the other hand, counts 34 megacities.
5   Sustainable Development Solutions Network, *Why the World Needs an Urban Sustainable Development Goal*; Cochrane, McGee, and Zandi, *Global Metropolitan Areas; UNEP-IRP, Options for Decoupling Economic Growth from Water Use and Water Pollution.*
6   UN-DESA, *World Urbanization Prospects: The 2014 Revision.*
7   Clark, Couturier, and Moonen, *Globalisation and Competition.*
8   OECD, *The Metropolitan Century.*
9   Gamper, Ahrend, and Schumann, *The OECD Metropolitan Governance Survey.*
10 UN-Habitat, S*tate of the World's Cities 2012-2013.*
11 Linden and Verbeek, *The Challenge of Metropolitan Governance in the Face of Rapid Urbanization.*
12 LSE Cities, UN-Habitat, and UCLG, *How Cities Are Governed - Building a Global Database for Current Models of Urban Governance.*
13 Clark and Moonen, *The Role of Metropolitan Areas in the Global Agenda of Local and Regional Governments in the 21st Century.*
14 Kantor and Nelles, *Global City Region Governance and Multicentered Development.*
15 Clark, Moir, and Moonen, *Underpowered Cities.*
16 All information about the Metropolis network is available at this address: http://www.metropolis.org/.
17 More information on the latest PrepCity meeting is available online: http://www.metropolis.org/news/2016/05/05/2758 and particularly the *Final Prepcity Report*
18 Habitat III Thematic Meeting, 'Fostering Metropolitan Cooperation for Sustainable Urban Development' – *The Montréal Declaration on Metropolitan Areas*, 7 October 2015, http*s*://www.habitat3.org/file/511152/view/557811.
19 OECD, *Cities for Citizens.*
20 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
21 Federal Law 13.089, known as *Metropolis Statute,* establishes requirements for the formalization of metropolitan regions – including the obligation to formulate an integrated urban development plan (PDUI) - without clearly defining the functional criteria for the identification of metropolitan areas. All metropolitan areas have to approve their PDUIs within three years of the enactment of the Federal Law. See also Campanaro, Klink, and Freire, *Metropolitan Governance in Brazil : Inputs for an Agenda and Strategy;* Compans, *Metropolitan Ungovernability.*
22 OECD, *Revitalizing Chile's Urban Governance Architecture.*
23 OECD, *The Metropolitan Century.*
24 The OECD Metropolitan Governance Survey covers 263 OECD metropolitan areas above 0.5 million inhabitants. There are four main types: informal/soft coordination (52%); inter-municipal authorities (24%); supra-municipal authorities (16%); special status of 'metropolitan cities' (8%). A 2015 UN-Habitat and GIZ GmbH Discussion Paper (*Unpacking Metropolitan Governance for Sustainable Development*) also refers to four models: metropolitan/regional government; bottom-up metropolitan/regional authority; consolidated/amalgamated government; and fragmented governance with some local government coordination.
25 As a caveat, it should be pointed out that some cities, while belonging to this model of organization, are not formally designated as 'special' metropolitan or federal cities. They remain conventional citywide governments that encompass, nonetheless, the functions of the whole metropolitan area.
26 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
27 Poiret, *La gouvernance métropolitaine écartelée entre adaptation économique et spatiale à la globalisation et respect de la démocratie locale, l'exemple de la fusion de Toronto (Canada)*, 509; Fox and Gurley, *Will Consolidation Improve Sub-National Governments?*
28 Slack and Côté, *Comparative Urban Governance*; Town, *Project Auckland.* One variant of this pattern is the model of 'special-purpose agencies'. Some metropolitan areas rely on 'special-purpose vehicles' to manage key infrastructure functions, regeneration and reinvestment more effectively (e.g. 'special districts' in the United States provide shared services across municipal or county boundaries).
29 Abbott, *Collaborative Governance and Metropolitan Planning in South-East Queensland 1990-2010.*
30 Kirkland, *Paris's Future Governance – An Interview with Pierre Mansat.* It incorporates the three neighbouring departments and a total of 126 municipalities, covering the core of the Île-de-France metropolitan region's central agglomeration.
31 Métropole Du Grand Paris; Île de France, Schéma Directeur de La Région.
32 Slack and Côté, *Comparative Urban Governance.*
33 This model offers strong and efficient capacity to coordinate the management of spatial and economic growth, but limits the capacity and budgetary resources of local governments. Leal Maldonado, *Metropolitan Government and Development Strategies in Madrid.*
34 Andersson, *Metropolitan Governance and Finance;* African Development Bank Group, *AfDB Approves USD 141.71 Million for the Dar Es Salaam Bus Rapid Transit System Project.*
35 Slack and Côté, *Comparative Urban Governance.*
36 OECD, *Governing the City.*
37 Salet and Savini, *The Political Governance of Urban Peripheries.*
38 Gjertsen, *Legitimacy in Interlocal Partnerships.*
39 Trent, Th*e Merger Delusion.*
40 Centre for Human Settlements, Mo*ntréal: Amalgamation to Consortiation.*
41 Boudreau, *Penser La Ville-Région.*
42 Halais, *In the Montréal Area, 82 Municipalities Begin to Think and Act as One.*
43 UCLG and Global Taskforce of Local and Regional Governments, *Financing Urban and Local Development: The Missing Link in Sustainable Development Finance, 3;* Dollery, Kortt, and Grant, *A Normative Model for Local Government De-Amalgamation in Australia';* François Vaillancourt, *Public Finance in Montréal.*
44 Pfeiffer and Krakau, *Urban Development and Metropolitan Governance;* UN-Habitat, *State of the World's Cities 2008/2009 – Harmonious Cities.*
45 Meite, *Gouvernance du transport urbain et mobilité durable dans le district d'Abidjan (Côte d'Ivoire).*
46 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
47 Sylvie Ritmanic, *A la recherche de la métropole solidaire. Contribution pour Habitat III*, intervention recollected *Ibid.*
48 Vanier, *La Métropolisation Ou La Fin Annoncée Des Territoires?*

49   More information at these addresses: https://www.uclg.org/en/organisation/structure/committees-working-groups/pe ripheral-cities and http://falp.nanterre.net/.
50   For more information, visit http://www.reseaufalp.com.
51   The declaration is available at the following address: http://www.uclg-cisdp.org/sites/default/files/Carta%20Canoas%20ENG.pdf.
52   Bhatkal, Avis, and Nicolai, *Towards a Better Life?*
53   UN-Habitat, *Financing Sustainable Urban Development.*
54   Muwonge and Ebel, *Intergovernmental Finances in a Decentralised World;* Farvacque-Vitković, and Kopanyi, *Municipal Finances, 1.*
55   Égert and Blöchliger, *Decentralisation and Economic Growth - Part 2.*
56   Bahl, Linn, and Wetzel, *Governing and Financing Metropolitan Areas in the Developing World, 6.*
57   In India, for example, the states of Rajasthan and Haryana abolished property taxes without consultation with local governments and without providing alternative revenue sources. See Rao and Bird, *Urban Governance and Finance in India.*
58   Muwonge and Ebel, *Intergovernmental Finances in a Decentralised World, 5;* Farvacque-Vitković and Kopanyi, *Municipal Finances.*
59   Zimmermann, *Net Fiscal Flows and the Size of Cities;* City of London Corporation, *Economic Development Research Programme. Review of 2014'.*
60   Wong and Jiang, *Billion-Dollar Dividend Plan to Help Pay for Third Runway at Hong Kong Airport.*
61   For more information, see: http://www.worldbank.org/en/news/feature/2013/10/24/financing-sustainable-cities-africa-creditworthy (acceded 31 May 2016).
62   See on this topic Paice, 'Lagos Proves Africa's Property Tax Potential'; de Gramont, 'Governing Lagos'.
63   Bahl, Linn, and Wetzel, *Governing and Financing Metropolitan Areas in the Developing World.*
64   Ibid., 15.
65   Bahl, Linn, and Wetzel, *Financing Metropolitan Governments in Developing Countries.*
66   Note that this is, however, hardly applicable in contexts of low political and fiscal autonomy where equalization mechanisms are generally implemented by the state through additional transfers to less endowed municipalities.
67   Hamilton, *Governing Metropolitan Areas.*
68   OECD, *OECD Urban Policy Reviews, Poland 2011.*
69   Kwon, *The Impact of the Shared Property Tax System on the Localities' Fiscal Capacity.*
70   Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.* Extract from an interview with Trevor Fowler, CEO of the City of Johannesburg, conducted by Cyprien Butin.
71   'In the past sound land value capture mechanisms in developed countries have been largely distorted by the explosive capacity of the banking system to create money in search of speculative profits driven by restrictions in land availability or poor land regulatory decisions. (...) An acceleration of the financialization of urban economic development underpinned by land value capture processes introduces – in the last instance – a serious threat to sustainable development by misallocating scarce productive factors and resources'. Eugenio Leanza, in Gorelick, *Funding Capital-Intensive Urban Projects.*
72   Allen, *Development Securities Lands TfL Housing Deal.*
73   Lorrain, *Governing Shangai: Modernising a Local State.*
74   Jomo et al., *Public-Private Partnerships and the 2030 Agenda for Sustainable Development: Fit for Purpose?*
75   Ibid.; UCLG, *Basic Services for All in an Urbanizing World.*
76   FMDV, *Resolutions Europe. Local Innovations to Finance Cities and Regions.*
77   Gorelick, *Funding Capital-Intensive Urban Projects.*
78   Compans, *Metropolitan Ungovernability;* Aulich, Sansom, and McKinlay, *A Fresh Look at Municipal Consolidation in Australia.*
79   Slack and Côté, *Comparative Urban Governance, 17.*
80   Savini, Majoor, and Salet, *Urban Peripheries'.*
81   Métro, 'Avant-Propos : Paris 2013, Manifeste Rétroactif Pour La Construction Métropolitaine'.
82   Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
83   For more information, see: http://transparencia.amb.cat/home.
84   Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
85   Rui, 'Démocratie Participative'.
86   More information available online at this address: http://www.oidp.net/.
87   Bacqué, Rey, and Sintomer, *Gestion de Proximité et Démocratie Participative;* Blondiaux, *La délibération, norme de l'action publique contemporaine?*
88   UN-Habitat, *Gender Responsive Urban Legislation, Land and Governance.*
89   UN-Habitat, *E-Governance and Urban Policy Design in Developing Countries.*
90   MIT Center for Civic Media, available online at this address: https://civic.mit.edu.
91   Frost & Sullivan, 'Strategic Opportunity Analysis of the Global Smart City Market'.
92   Govela, *City Changer Labs and Digital Civics.*
93   More information available on the website of the Programme: http://senseable.mit.edu.
94   More information available on the website of the initiative: http://citilab.eu/citilab/que-es.
95   More information available on the company's website: http://www.22barcelona.com/content/view/698/897/lang,en/.
96   General information on the programme is available on their website: http://www.africancentreforcities.net/programme/m istra-urban-futures/citylab/.
97   Healthy Cities CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/citylab/healthy-cities-2/.
98   Urban Violence, Safety and Governance CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/citylab/urban-violence-safety-governance/.
99   Sustainable Human Settlements CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/cityl ab/sustainable-human-settlements/.
100 The platform English portal is available at this address: http://labcd.mx/labforthecity/.
101 The open-government platform is available at this address: http://www.gobabiertocdmx.org/. Buenos Aires has developed a similar programme, *Gobierno Abierto,* to foster participation, data collection and use in inclusive, bottom-up policy planning: http://www.buenosaires.gob.ar/innovacion/gobiernoabierto.
102 More information on this specific type of action is available at this address: http://labcd.mx/provocaciones/.
103 Bacqué, Rey, and Sintomer, *Gestion de Proximité et Démocratie Participative.*
104 More information available in http://www.facebook.com/digitalcivix/.
105 Zérah, *Participatory Governance in Urban Management and the Shifting Geometry of Power in Mumbai.*
106 Ghertner, *Gentrifying the State, Gentrifying Participation.*

107 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

108 Ibid.; Lama-Rewal, *La démocratie locale dans les métropoles indiennes*.

109 Cabannes, *Les budgets participatifs en Amérique latine*.

110 Nez, *Le budget participatif: un outil de justice sociale?*. Participatory budgets have typically helped redistribute public resources to those sectors in most urgent need (e.g. schools, sewage treatment, road paving), or into investments that governments had not initially considered a priority.

111 Langelier, *Que reste-t-il de l'expérience pionnière de Porto Alegre?*

112 Information facilitated by Deise Martins, Secretary of International Relations and Cooperation of the City of Canoas. See also Allegretti et al., *More Inclusive Cities and Territories*.

113 Ibid. The Gabinete Digital in Rio Grande do Sul, for instance, engaged more than one million people every year between 2011-2014. The New York City participatory budgeting activities have organized multiple district meetings.

114 More information on the Voice of the Mayors programme, the Seoul case, and the activities of Metropolis are available online: http://www. metropolis.org/voice-mayors.

115 Allegretti et al., *More Inclusive Cities and Territories*. Ethekwini (Durban) and Johannesburg, for instance, apply the experience of many other cities to their citizen consultations for integrated development plans. See also Cabannes, *Les budgets participatifs en Amérique latine*; Stoeber, *Une Révolution Douce*.

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331 Developed in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines* from the following sources: Agence Française de Développement, *Question de Développement n°18 | Adaptation Au Changement Climatique Dans Les Villes*; Taylor, Cartwright, and Sutherland, *Institutional Pathways for Local Climate Adaptation;* Launay and O'Riordan, *Sistematización de Experiencias Sobre Mitigación Y Adaptación Al Cambio Climático En Once Ciudades de Colombia*; Dodman et al., *Understanding the Assessment and Reduction of Vulnerability to Climate Change in African Cities*. For the Global North, see also Beucher, *La gestion des inondations en Angleterre*.

332 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

333 An initiative such as 100 Resilient Cities, funded by the Rockefeller Foundation with the help of the Arup consultancy, has developed a framework of action for urban resilience which builds on twelve social, economic, and structural indicators of resilience and vulnerability that go beyond the natural effects of climate change. The action aims to identify the inherent and systemic strengths and weaknesses that shape a city's response to long-term sustainability challenges. The framework document on the indicators is available online at this address: http://publications.arup.com/publications/c/cit y_resilience_framework. The 100 Resilient Cities comprises, to date, 66 partner cities and an established cooperation platform of 60 partners from the public, private and non-profit sector. The organisation has concluded another round of discussion and initiative design that will lead to the inclusion of a third group of cities in 2016.

334 Participants at the conference emphasised 'the importance of taking a people-centred approach to urban development' and addressing socio-economic inequality as a key driver of vulnerability and exposure to risk. Several of the 83 voluntary commitments signed up to in the aftermath of the Conference by international stakeholders revolve around capacity-building for cities and urban settlements when facing risk and sustainability challenges. UN Sendai Framework for Disaster Risk Reduction 2015-2030, available online at: http://www.unisdr.org/we/coordinate/sen dai-framework, p. 54.

335 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

336 Lucci, Bhatkal, and Khan, *Are We Underestimating Urban Poverty?*

337 UN-Habitat, *Issue Paper on Housing*, 2.

338 See the Universal Declaration of Human Rights, art. 25(1), and the International Covenant on Economic, Social and Cultural Rights (UNGA A/Res/21/2200), adopted in 1966 and which entered into force in 1976. Both documents recognize the right to an adequate standard of living (including food, housing, and clothing) and access to health, education, social security, and participation in cultural life (Articles 9, 11, 12, 13, and 15 respectively). For Housing, see also UN-Habitat's Istanbul Agreement and Habitat Agenda (paragraph 61). For the right to water and sanitation, see UN Resolution A/Res/64/292, 28 July 2010.

339 Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

340 Yapi-Diahou, Brou-Koffi, and Koffi-Didia, *La production du sol à Abidjan: du monopole d'Etat au règne du privé*.

341 Datta, Hopkins, and Pain, *The Illegal City.*

342 With regard to the exclusion of Bedouin population in Benin and Jordan, see Lavigne Delville, *La reforme fonciere rurale au Benin;* American University Beirut. *Dr. Omar Razzaz: Why and how property matters to planning*.

343 Ministère des Affaires Étrangères et Européennes DgCID Direction de la Coopération Internationale et du Développement, Agence Française de Développement, and GRET Comité Technique 'Foncier et Développement' (Paris), *Gouvernance foncière et sécurisation des droits dans les pays du Sud*.

344 Fernandes, *Regularization of Informal Settlements in Latin America*.

345 Ababsa, *Public Policies towards Informal Settlements in Jordan*.

346 Most of this sub-section (except UN Data and declarations) is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

347 Mathivet, *La Terre Est À Nous! Pour La Fonction Sociale Du Logement et Du Foncier, Résistances et Alternatives*.

348 Sassen, *Who Owns Our Cities – and Why This Urban Takeover Should Concern Us All;* UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda;* Cushman and Wakefield, *Winning in Growth in Cities 2015-2016*.

349 UN-Habitat, *Urbanization and Development*.

350 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda,* 17.

351 Dodge, *Right To The City-NYC's Policy Platform and Condo Conversion Campaign : Grassroots Visioning and Policies for the Future of New York City;* Houard, *Le Logement Social En Europe: La Fin D'une Époque?;* Wang et al., *The Maturation of the Neo-Liberal Housing Market in Urban China*.

352 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*.

353 UN-Habitat, *The Pretoria Declaration*.

354 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*.

355 Deboulet and Lelévrier, *Rénovations urbaines en Europe;* Goetz, *Where Have All the Towers Gone?*

356 In Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*, Le Guirriec, *Habitat, Inégalités et Dignité*. Similar issues have been raised in the context of Rio de Janeiro, see for instance the video, *JO 2016: quel impact sur la physionomie de la ville de Rio de Janeiro?,* published by French newspaper Le Monde and available online at this address: http://www.lemonde.fr/jeux-olympiques-rio-2016/video/2016/05/05/jo-2016-quel-impact-sur-la-physionomie-de-la-ville-de-rio-de-janeiro_4914257_4910444.html. See also Toutain and Rachmuhl, *Evaluation et Impact Du Programme D'appui À La Réabsorption de L'habitat Insalubre et Des Bidonvilles Au Maroc*.

357 Prévôt-Schapira, *Les villes du sud dans la mondialisation. Des villes du tiers-monde aux métropoles en émergence?*

358 Deboulet, *Secure Land Tenure?*

359 See Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*. Sources: Braathen, *Settlement Stories II. Communities Responses*; AFP, *Une Décharge Transformée En Jardin*; Goulet, *Programme 'PMB'*; Boonyabancha, *Baan Mankong*.

360 Carriou, Ratouis, and Sander, *Effervescences de L'habitat Alternatif*.

361 For example, in Quebec, France or Uruguay. See for instance Folléas, *Les Coopératives de Logements En Uruguay*; Bouchard, *L'habitation communautaire au Québec, un bilan des trente dernières années*; Devaux, *De L'expérimentation À L'institutionnalisation*.

362 Deboulet, Butin, and Demoulin, L*e Rôle des Aires Métropolitaines.*

363 Angotti, *La lutte pour le foncier et les promesses des fiducies foncières communautaires.*

364 Attard, *Un logement foncièrement solidaire.*

365 Krinsky, *Dix problèmes à résoudre pour un futur différent.*

366 Dawance and Louey, *Le 'Community Land Trust' de Bruxelles.*

367 For more information, see the *Voice of Mayors,* www.metropolis.org.

368 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines;* Gilbert, *The Return of the Slum.*

369 UN-Habitat, *Issue Paper on Housing,* 12.

370 Dupont, 'The Dream of Delhi as a Global City', quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

371 Cazenave and Porier, *Propriétaires à tout prix*; Schijman, *Usages, pactes et 'passes du droit'*; ibid.

372 More information available online at this address: http://www.unwater.org/topics/water-and-urbanization/en/ (last accessed on May 25, 2016).

373 Pye and Dobbins, *Energy Poverty and Vulnerable Consumers in the Energy Sector across the EU.*

374 UN-DESA, *World Urbanization Prospects: The 2014 Revision.*

375 UCLG, *Basic Services for All in an Urbanizing World*, 208–9.

376 Ibid., 243.

377 'Tariffs' are fees paid by service users, 'taxes' refer to funds channelled to basic services by central, regional and local governments, and 'transfers' refer to funds from international donors and charitable foundations. Transfers include grants and concessional loans, such as those given by the World Bank, which include a grant element in the form of a subsidized interest rate or a grace period.

378 According to UNDP, to guarantee the right to water, tariffs should not exceed 3% of household income. In Europe in 2011, tariffs were a small share of average household incomes (1.7% for water and 4.4% for electricity). These averages, however, tend to hide substantial variation between cities.

379 A Directive of the European Commission also prohibits disconnection of electricity to 'vulnerable customers' in critical times. Some protections exist for water. See the 'Europe' chapter in UCLG, *Basic Services for All in an Urbanizing World.*

380 See also the 'Africa' chapter, Ibid.: every poor household receives the first 200 litres of water per day and around 50-100 kWh per month for free. In 2012, the programme reached 86% of all households.

381 See the 'Europe' chapter, in Ibid.

382 Some international institutions are critical of subsidies, arguing that they 'undermine efficient management'. See also Komives and World Bank, *Water, Electricity, and the Poor.*

383 Foster and Briceño-Garmendia, *Africa's Infrastructure*, 11. This policy is also criticized in Eurasia and in some countries in Latin America.

384 UCLG, *Basic Services for All in an Urbanizing World*, 209.

385 Jomo et al., *Public-Private Partnerships and the 2030 Agenda for Sustainable Development: Fit for Purpose?*

386 The Municipality of Paris and forty other French municipalities have decided to re-municipalize part of the water services, as did Budapest, Napoli and several cities in Germany before them. Some other examples include Kuala Lumpur (Malaysia) and Manila (Philippines). In Africa, cases of terminated contracts were recorded in Gambia, Mali, Chad, and cities such as Nkonkobe (South Africa) and Dar-es-Salaam (Tanzania). Most recently, in Morocco, popular demands against private operators in the water sector increased, mostly due to increasing end-user prices. On the principles that guide some of the debate on 're-municipalization', see also Wollmann*, Public Services in European Countries Between Public/Municipal and Private Sector Provision – and Reverse?*

387 More information available online at this address: https://client.lydec.ma/site/inmae.

388 See for example Suez, *The First Environmentally-Friendly and Socially Inclusive Water Pricing Scheme in France.* Also, OECD, *Stakeholder Engagement for Inclusive Water Governance;* Allegretti et al., *More Inclusive Cities and Territories.*

389 Ostrom, *Crossing the Great Divide;* OECD, *Private Sector Participation in Water Infrastructure.*

390 Paulais, *Financing Africa's Cities.*

391 Queiroz and Izaguirre, *Worldwide Trends in Private Participation in Roads;* McGranahan and Water, *How Small Water Enterprises Can Contribute to the Millennium Development Goals.*

392 Burra, Patel, and Kerr, *Community-Designed, Built and Managed Toilet Blocks in Indian Cities.*

393 Fergutz, Dias, and Mitlin, *Developing Urban Waste Management in Brazil with Waste Picker Organizations.*

394 Keita, *Building Partnerships for Urban Waste Management in Bamako.*

395 Kempener et al., *Off-Grid Renewable Energy Systems: Status and Methodological Issues.*

396 See Appendix II of UCLG, *Basic Services for All in an Urbanizing World.*

397 Ibid.

398 See, for instance, UN General Assembly (2013), *Culture and sustainable development*, Resolution A/C.2/68/L.69, 5 December 2013.

399 UCLG Committee on Culture, *Agenda 21 for Culture.* See also the UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions, and the focus on cultural liberty in UNDP, *Human Development Report 2004.*

400 The document was discussed and approved during UCLG's 3rd World Congress, held in Mexico City in November 2010. A policy statement – *Culture: Fourth Pillar of Sustainable Development* – is available online at this address: http://agenda21culture.net/images/a21c/4th-pilar/zz_Culture4pillarSD_e ng.pdf.

401 UCLG, *Culture 21: Actions. Commitments on the role of culture in sustainable cities, 2015,* available at http://agenda21culture.net/images/a21c/nueva-A21C/C21A/C21_015_en.pdf. The toolkit provides practical guidance to local governments aiming to integrate cultural aspects in their approaches to sustainability, through self-assessment, policy innovation and peer-learning.

402 Estrada Ortiz, *Factories of Arts and Jobs in Mexico City.*

403 Toledo Orozco, *Arts, Culture and Sport.*

404 Caramés, *Barcelona Art Factories.*

405 de Oliveira, Avelar, and Oliveira Jr., *Belo Horizonte: Network of Regional Cultural Centres.*

406 Villarubias, *Making Lyon a Sustainable City.*

407 Leanza and Carbonaro, *Socially Inclusive Urban Transformation after the Great Recession.*

408 Carlos Alberto Zarate Yepes et al., *La Charte de Medellín.*

409 Metropolis, Berlin, *PrepCity III, Cities as Actor* (unpublished report, May 2016). The reflection is based on the 'Circles of Social Life' approach, developed by Paul James, and organized around four principles: Economic, Ecology, Politics and Culture.

410 The *Global Charter-Agenda for Human Rights in the City* was formally adopted by UCLG in 2011 during its World Council in Florence – which was attended by over 400 mayors from all over the world.