### Horizon 2030



2023 May

## METROPOLITAN SOLUTIONS TO GLOBAL CHALLENGES



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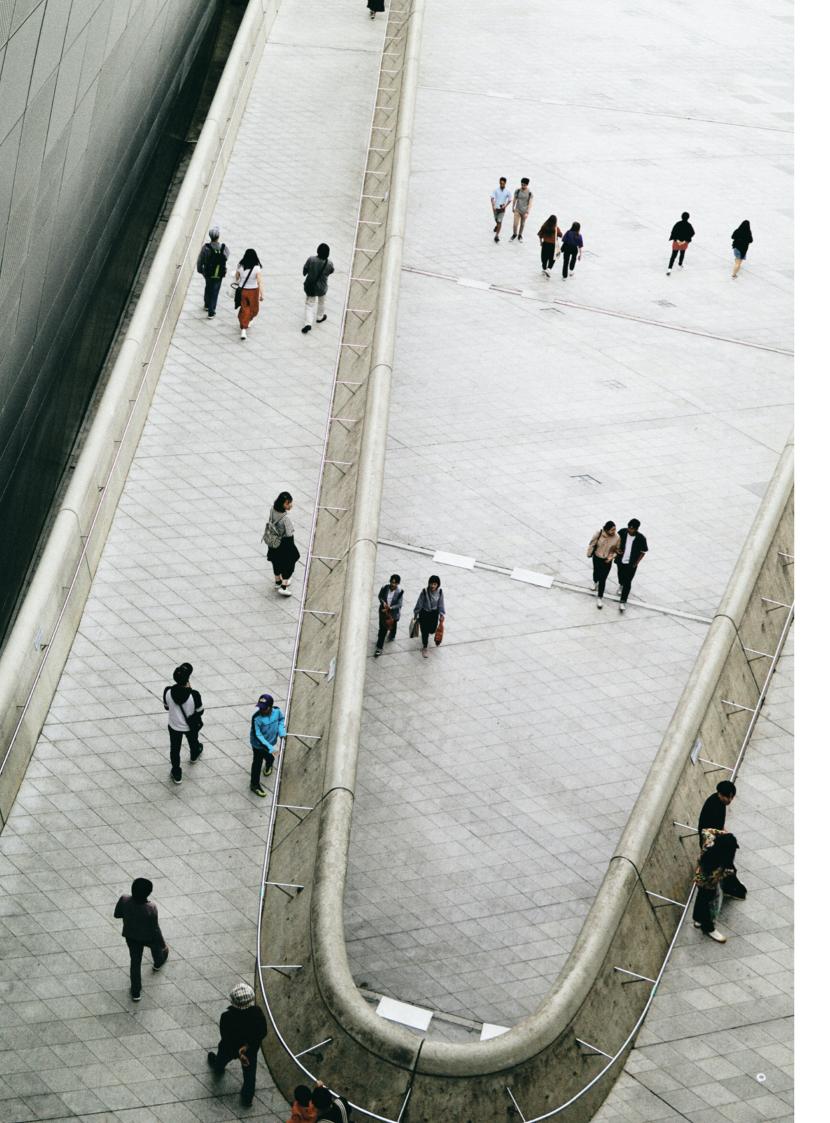
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# 1. Metropolitan areas in the context of global agendas

There are two interrelated and closely linked megatrends in the world today:

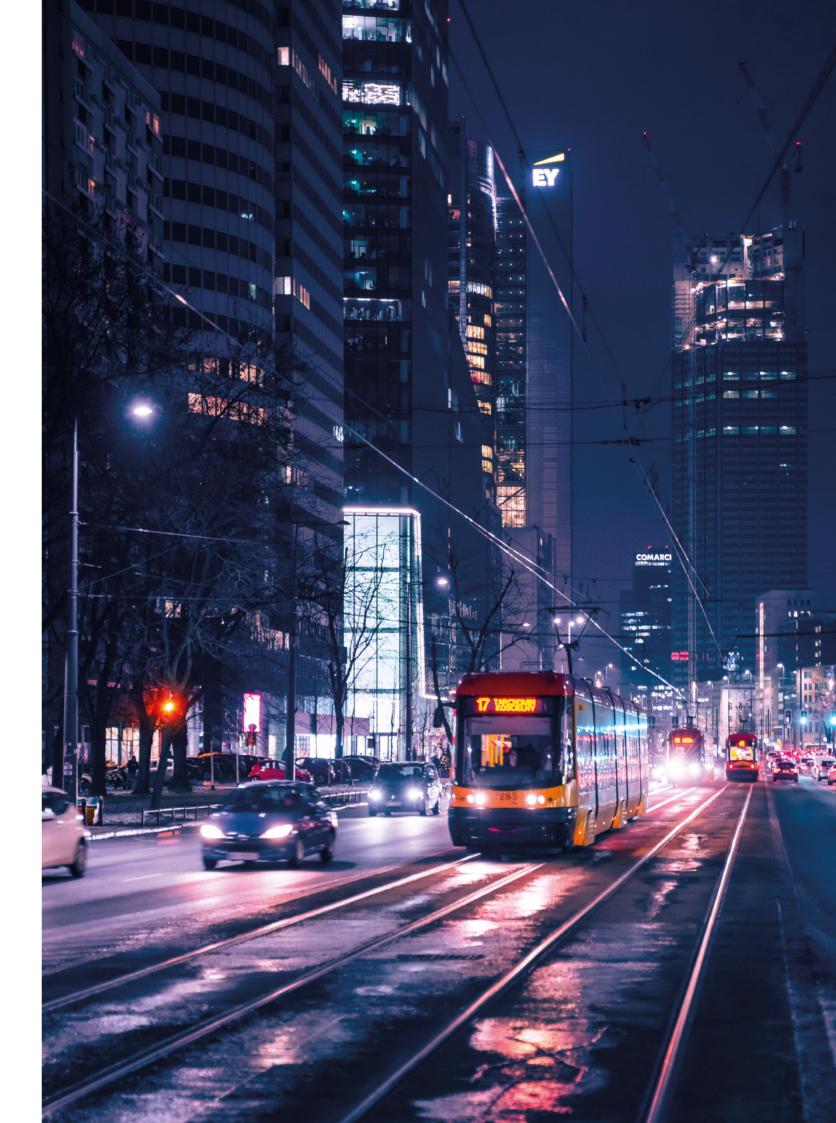
- urbanisation, which means that more and more people are living in cities.
- **metropolitanisation,** arising from the growth of cities, which makes them come together and form metropolises that go beyond the administrative boundaries of the city.

The rapid growth of urban areas leads to an expansion towards peri-urban areas that are connected to adjacent cities and towns, forming urban agglomerations with interdependent flows that require a new form of governance and planning on a metropolitan scale in order to respond to citizens' needs. According to the UN-Habitat Strategic Plan 2020-2023, two-thirds of the population will be living in urban areas within thirty years and 90% of urban growth will be in less developed regions, such as East Asia, South Asia and sub-Saharan Africa.

If these urbanisation processes are to take place in a sustainable manner and with the minimum environmental and social impact, it is essential to achieve the global development goals set out in the New Urban Agenda and the 2030 Agenda. Cities and metropolises are facing challenges including climate change, development and achieving better living conditions for the most disadvantaged groups, in a context of rapid growth that is often accompanied by a lack of planning, management and resources to address them in an orderly manner, which leads to the emergence of informal settlements and an increase in inequalities between territories, with the risk of this situation weakening social cohesion. Major metropolises around the world therefore face challenges linked to social exclusion, poverty and inequalities in their territories.

The continuous metropolis, which often contain different municipalities or even transnational territories, makes the implementation of shared and sustainable solutions even more complex, but is also able to respond to global challenges by creating and modelling local solutions for intervention. The growth of metropolises can act as a catalyst and provide an opportunity to foster wide-ranging changes, taking into account that cities contribute 80% of the world's gross domestic product (GDP) and are therefore hubs of knowledge, innovation and investment by nature. They are also meeting points for diverse communities and actors, enabling new forms of cooperation and the creation of transformative and prolific partnerships. These advantages mean that the dynamics of metropolises and the links between the people who live in them can be reshaped in order to enhance their progress and increase their well-being. As a result, the metropolitan level is the ideal arena for enabling and formulating solutions to today's major global challenges, such as inequality and poverty, shared prosperity, climate action and crisis prevention and response, in order to move towards achieving the objectives of the global agendas.

In this context, metropolitan solutions are useful and essential instruments for achieving the objectives set, within the established time frame and in the appropriate manner. They are innovative, evidence-based urban solutions, which must be normative, operational, systematised, adapted to local conditions and which must contribute to the respect for and exercise of human rights, especially for the most disadvantaged groups, women, young people and marginalised groups. This has been apparent in and shaped by the global development agendas.



### 2015

The United Nations Conference of the Parties (COP 21) on climate change adopts the **Paris Agreement** to combat climate change and drive action and investment for a low-carbon, resilient and sustainable future.

The United Nations General Assembly adopts the **2030 Agenda** for sustainable development, which recognises the eradication of poverty as the main challenge for achieving sustainable development, and establishes 17 economic, social and environmental goals.

<u>UN-Habitat</u> adopts the **Montreal Declaration** on Metropolitan Areas, which contributes to sustainable urban development as set out in the **2030 Agenda**, and recognises the importance of metropolitan areas in achieving it. It lists the transformations that have to take place in order to build solidarity-based, inclusive metropolises that respect biodiversity and the natural, cultural and landscape heritage. It also addresses demands such as the right to the city, metropolitan governance, fair funding and the recognition of diversity.

### 2016

The United Nations Habitat III conference in Quito adopts the **New Urban Agenda**, which calls for a paradigm shift based on the science of cities, and establishes standards and principles for the planning, construction, development, management and improvement of urban areas, in accordance with political, social, economic and environmental challenges.

### 2018

Àrea Metropolitana de Barcelona (AMB) adopts the institutional, moral and ethical mandate of the New Urban Agenda, and hosts the **Post-Habitat III international congress** in Barcelona, focusing on the future challenges facing metropolises.

### 2020

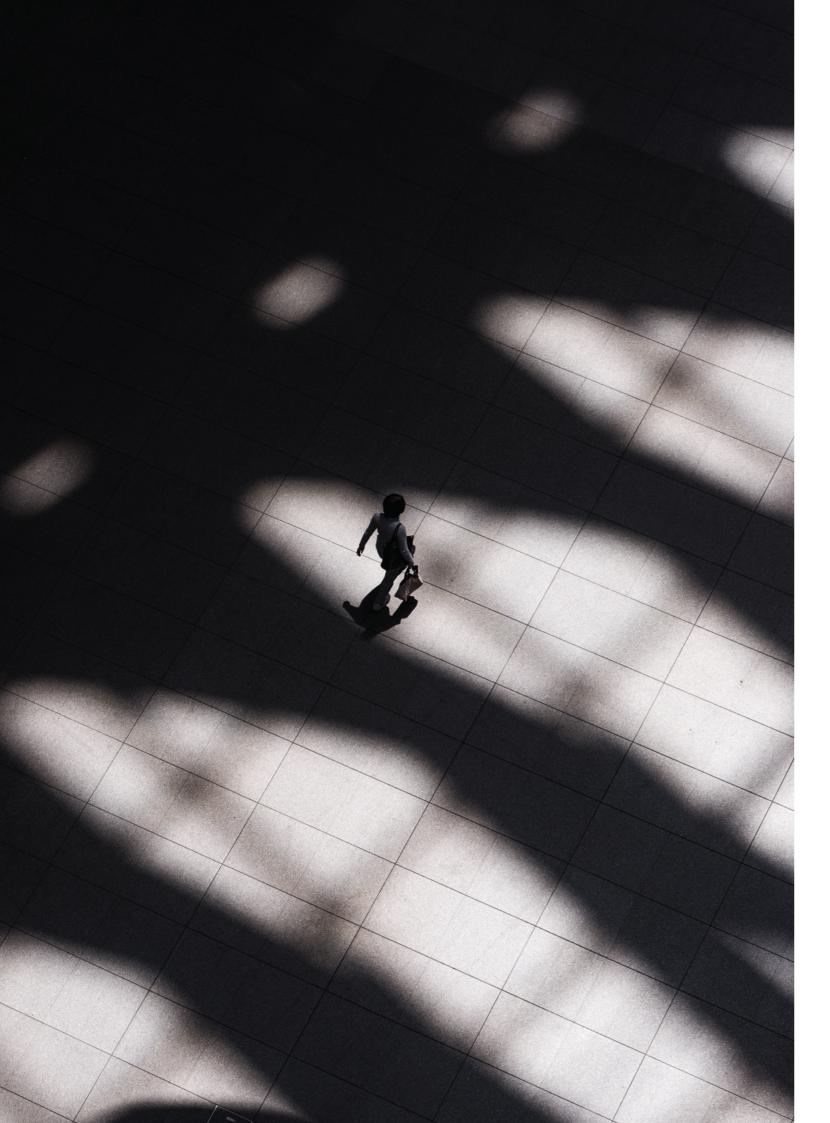
The World Urban Forum XII, a biannual conference on sustainable urbanisation organised by the United Nations Human Settlements Programme (UN-Habitat), takes place in Abu Dhabi. A joint strategy between AMB and UN-Habitat is defined during the conference, leading to the Memorandum of Understanding signed between the UN agency and AMB.

### 2022

AMB organises the **MetroSolutions international congress**, which presents and discusses possible solutions that various metropolises around the world are using to address the major threats and challenges they face. The congress is the beginning of a new, more ambitious horizon, in which metropolitan areas must be able to construct the necessary partnerships and define joint strategies and metropolitan policies that bring us closer to the objectives of the global agendas. By doing so, they can become political actors working in their citizens' interest in order to achieve the objectives of the New Urban Agenda.

### **Horizon 2030**

With only a few years to go before the **Horizon 2030**, the AMB Area for International Relations and Cooperation continues to work on the debate, definition, characterisation, identification and transfer of metropolitan management and action solutions that will bring us closer to the objectives of the global agendas, in order to make the world more economically fair, socially equitable and environmentally sustainable.



# 2. The time for metropolitan solutions: essential tools for sustainable urban transformation and development

Metropolises are faced with uncertain scenarios, new needs and complex and changing issues, to which answers and solutions must be found. The health crisis arising from the COVID-19 pandemic, the effects of war, social inequalities and the climate emergency are symptoms that show that new priorities, such as food sovereignty and energy sovereignty, must be taken into account.

Metropolitan solutions are joint strategies and comprehensive and integrating metropolitan policies that shape innovative responses aimed at addressing major metropolitan challenges and citizens' needs related to the objectives of the global development agendas. They address challenges including governance and democratic legitimacy; efficient management and good governance; the use of technologies; climate action; social, gender and diversity inclusion; informal sectors (in the economy, labour, housing); city planning; urbanism; resilience and innovation; data and indicators; communication; the future of metropolises, and the transfer of knowledge and best practices between metropolises.

### Type of metropolitan solutions

From the perspective of their impact on the territory and the governance mechanisms operating in it, metropolitan solutions can be either **management** or **action solutions**.

### **MANAGEMENT SOLUTIONS**

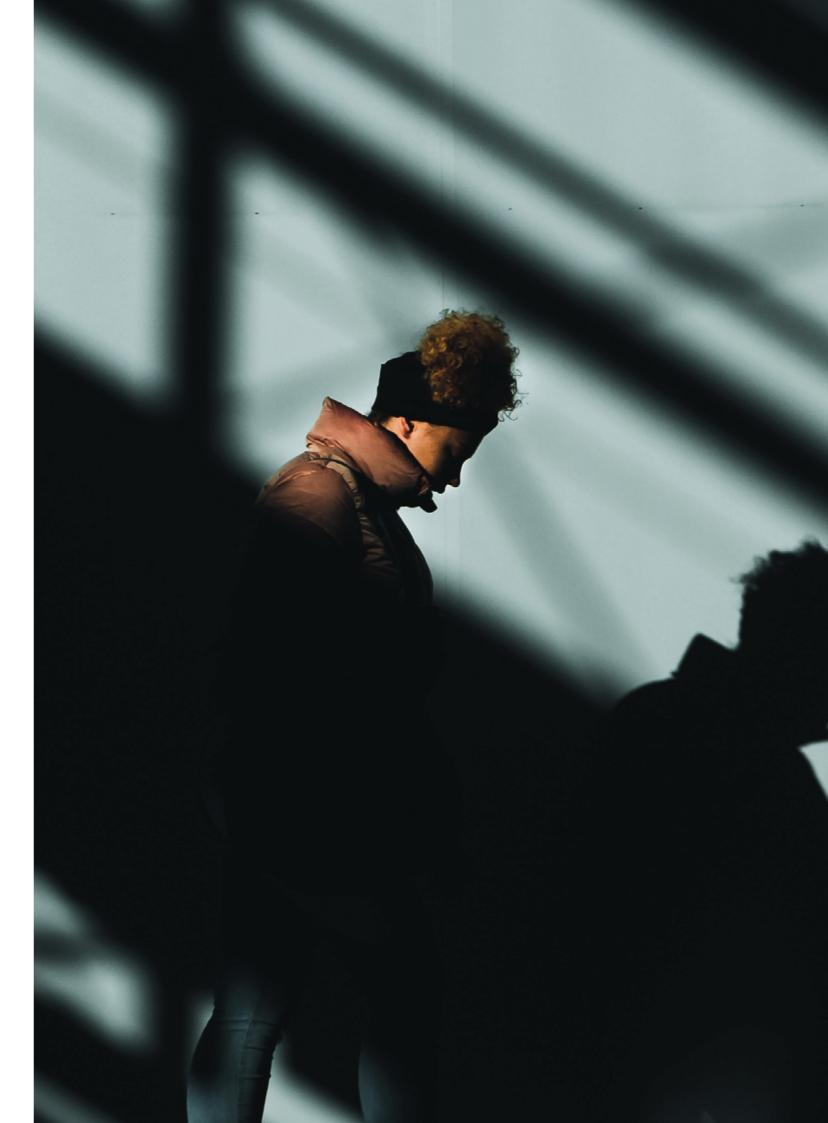
Are aimed at improving the tools that make management possible and make it more transparent, more effective and more efficient.

### **ACTION SOLUTIONS**

**Involve the development of sectoral public policies** and enable the sustainability objectives of the New Urban Agenda and the 2030 Agenda to be achieved.

### **MIXED SOLUTIONS**

**Provide action and management solutions** within a single solution, because they involve action in the territory whilst compelling the creation of consortia between various partners from the public and private sectors.



### Metropolitan solutions have the following characteristics:

### CONNECTED.

They are connected to metropolitan policy and plans (including governmental, i.e. mandated plans, and sectoral plans, e.g. climate action plans, urban plans or social programmes).

### **MULTIDIMENSIONAL.**

They are multidimensional and address complex situations, which simultaneously include social, economic, community, sustainability or digital aspects, among other issues.

### MULTISTAKEHOLDER.

They are multi-stakeholder, i.e. they include the various public, private and non-profit actors in the territory.

### **MULTILEVEL.**

They are multilevel, i.e. they involve different levels of government.

### INNOVATIVE.

They are innovative.

### SUSTAINABLE.

They are inspired by and respond to the challenges of global development agendas.

### TRANSFORMATIVE.

They contribute to urban construction.

### HYBRID.

They combine types of actions that are the result of the combination of infrastructures and programmes.

### **MESURABLE.**

They are measurable by the entire population and all the territories (they are inclusive for people and cities).

### PARTICIPATORY.

They are ideally constructed with the participation of citizens and key stakeholders.

### TRANSFERABLE.

They are adaptable and transferable to other metropolises.

### **Management solutions**

Management solutions are linked to improving instruments for metropolitan management. They enhance the effectiveness and efficiency of public resources, make them more transparent and improve their sustainability.

They have an indirect impact on public well-being, and are related to improving governance, democratic legitimacy, efficient management, good governance, institutionalisation, legal frameworks, transparency, accountability, planning, participation, communication and the future of metropolises.

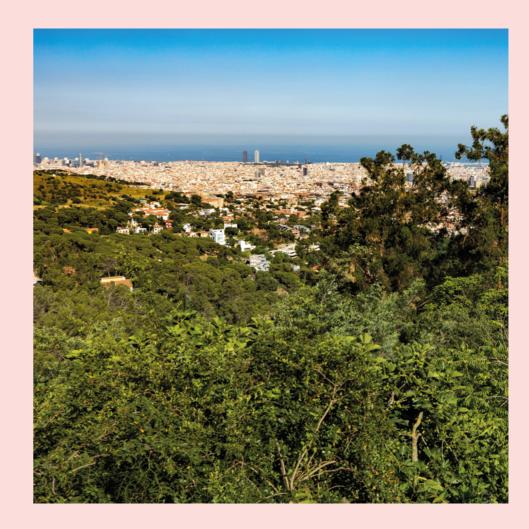
Improving metropolitan management makes it possible to reduce local dispersion and promote collaboration or integration between different local authorities, creating a new way of promoting and activating initiatives and public policies that achieve the objective they pursue. These solutions involve organisational and operational change that fosters participation by promoting bottom-up strategies and administrative reorganisation, involving collaboration and cooperation between different profiles, departments and municipalities, the creation of multidisciplinary teams and the provision of solutions that give citizens a central role.

They also improve metropolitan data and indicators, enabling monitoring a comparison of different metropolises, and facilitate the formulation of public policies and metropolitan services that respond to the needs of the population as a whole.

### + BOGOTÁ'S DISTRICT CARE SYSTEM

This is a system of social innovation in Bogotá that provides services for families so that they learn to reduce and redistribute unpaid domestic and care work between men and women, preventing children from reproducing stereotypes. It consists of 11 centres located in different areas of the city which are mainly inhabited by vulnerable population groups. The centres provide women with free services and training, leisure and sports activities, including special programmes for completing primary and secondary education, as well as occupational training. At the same time, they also provide professional care for children under five years of age, people with disabilities and the elderly, so that women can access education and employment opportunities and resume their life projects. The Colombian capital has shared this experience with the governments of Monterrey (Mexico), the Dominican Republic, Chile and Argentina, among others.

Location: Bogotá, Colombia.



### + SPECIAL PLAN FOR THE PROTECTION OF THE NATURAL ENVIRONMENT AND LANDSCAPE OF THE SERRA DE COLLSEROLA NATURAL PARK

The Special plan for the protection of the natural environment and landscape of the Serra de Collserola Natural Park (PEPNat) aims to ensure the maximum degree of protection and conservation for a very important natural area. It was drafted and enacted in a framework of governance and very broad consensus, involving all the institutions in the region (Generalitat de Catalunya, Àrea Metropolitana de Barcelona, Barcelona Provincial Council, Serra de Collserola Natural Park Consortium and the nine municipal councils with territory in the park), and was approved by the Government of the Generalitat de Catalunya in 2021. This plan organises and regulates uses and activities in the park, based on objectives related to protection, conservation and improvement of the natural heritage and the geological, biological, ecological, landscape, ethnological, agricultural and cultural assets of this natural area under special protection, and its central feature is an ecological strategy based on improving biodiversity and enhancing ecosystem services.

Location: Barcelona metropolitan area.

### + METROPOLITAN GOVERNANCE IN THE STUTTGART REGION

The Verband Region Stuttgart consists of 179 municipalities, including the city of Stuttgart. It was established in 1994 following legislation passed by the state of Baden-Württemberg. Political leadership rests with the regional assembly, a directly elected regional parliament, which is unique in Baden-Württemberg and considered a role model for metropolitan governance. Its members, numbering between 80 and 96, have a strong democratic mandate and substantial policy objectives for metropolitan development. It is responsible for mobility, transport, integrated spatial planning, and economic development. It operates several co-financing programmes to undertake sustainable development in close cooperation with local authorities. It also supports municipalities on spatial planning issues and provides a wide range of data, analysis and strategic forecasting. It cooperates closely with universities and research institutes, carrying out research and pilot projects in the areas of mobility, sustainable development, climate change and climate change adaptation, and also works closely with local businesses and civil society.

Location: Stuttgart metropolitan area, Germany.

### + INTERNATIONAL HYDROGEN HUB OF THE AMSTERDAM METROPOLITAN REGION

This is a commitment to green hydrogen (carbon-free hydrogen production) by the Amsterdam Metropolitan Region and the North Sea Canal Area aimed at meeting the carbon-neutral and circular climate targets set for 2030 and 2050, by building new sustainable value chains such as carbon-free steel and clean fuels for aviation and shipping. It involves the creation of a green hydrogen hub based on increasing its production with sustainable energy from offshore wind farms, and connecting it to the national hydrogen grid, with the aim of becoming an international hydrogen centre in the coming decades.

The project has been driven by partnerships between public and private stakeholders related to industry, ports and international transport, as well as the circular economy, electrochemistry and electrolysis, grid operators for underground energy infrastructure, and scientific institutions.

Location: Amsterdam Metropolitan Region, The Netherlands.



### + HABITATGE METRÒPOLIS BARCELONA

Habitatge Metròpolis Barcelona (HMB) is Barcelona's metropolitan affordable rental housing operator, which is jointly owned by AMB, Barcelona City Council and a private partner. It is a pioneering public-private partnership for the production of affordable rental housing, in which the private partner works in a below-market profit environment, and shares profits on an equal basis with the public partners. It is an institutional public-private partnership, involving the private real estate sector with social impact investments that meet its public interest objectives and fulfil the social function of housing. At least 4,500 subsidised housing units will be built at below-market rents over the next few years. Half of them will be in the city of Barcelona and the other half in the other municipalities of the metropolitan area, involving a share capital contribution of more than 103 million euros. The operator must guarantee the environmental quality and sustainability of the projects energy saving criteria, and undertake processes related to innovation and industrial production. The projects will have to foster architectural quality, universal accessibility and flexibility in housing uses, and provide high quality outdoor and communal spaces.

Location: Barcelona metropolitan area.

### **Action solutions**

Action solutions are linked to the development of sectoral public policies and their sustainability, because this has a direct impact on citizens and allows the objectives of the New Urban Agenda and the 2030 Agenda related to environmental sustainability, social sustainability and economic sustainability to be achieved. They are solutions related to social innovation; digital transformation by the use of technologies and the development of the smart city; green transformation; social, gender and diversity inclusion; informality; city planning; urbanism, and resilience.

**Social innovation** enables solutions to be offered that produce better results than the existing solutions or the status quo in terms of their efficiency and effectiveness. The potential for social innovation is further increased by the digital transformation and the increasing range of innovative solutions based on information and communication technologies. Innovation and digitisation facilitate the improvement of accessibility, impact, adaptability to the needs of the territory, and achievement of the objectives of public policies and international agendas.

Meanwhile, the **green transformation** of metropolises involves solutions that improve the quality of life of their citizens while respecting the environment, by means of strategies for green infrastructure, energy efficiency, waste emission and treatment, water consumption and the promotion of air quality.

**Social inclusion** solutions make it possible to address challenges related to inequality, respect for human rights and respect for the diverse interests and needs of citizens, as well as challenges arising from the informal economies, housing, labour and mobility, which is very often related to the violation of rights and the poverty of the people it affects.

**Urban planning** solutions take the form of solutions related to land use, construction and social activities in municipalities and communities, and the restoration and regeneration of urban space by adapting construction criteria, building classifications and obsolete infrastructures to new social needs.

Finally, **urban resilience** solutions are focused on enabling urban ecosocial systems to recover from the crises they are faced with – emergencies due to climate change (droughts, storms, floods, hurricanes, etc.), war or other types of social emergencies, by maintaining and enhancing their functions: meeting citizens' essential basic needs (access to quality air, availability of food, access to housing and access to energy), providing opportunities for progress, and sharing those opportunities equitably to foster social cohesion.



### + MOBILITY AND GENDER: AN APPROACH TO SECURING WOMEN'S AND GIRLS' RIGHTS

This is a project involving analysis, reflection and action on mobility policies and strategies from a gender and diversity perspective, which contributes to guaranteeing the right to mobility of women and people who experience the most discrimination in the metropolitan area of Maputo. It is organised by Maputo City Council, the Maputo Metropolitan Transport Agency, Architecture without Borders and AMB. After an in-depth diagnosis of women's mobility, an awareness-raising campaign was carried out against sexual harassment on public transport and at bus stops, which was designed with the various institutions and organisations involved in the project. The priorities to be worked on were identified, and training on mobility and gender was organised for public transport driving and fare collection personnel.

Location: Greater Maputo, Mozambique.



### + URBAN REGENERATION OF THE CHEONGGYECHEON STREAM AREA

The project involves the urban intervention and redevelopment of the area around the Cheonggyecheon Stream, which runs through the centre of Seoul and over which a heavily congested motorway was built, leading to poor air quality. This urban regeneration project has brought economic, social and environmental benefits to the city and its inhabitants. It involves the demolition of the motorway, the clearing of the watercourse, the construction of a 400-hectare linear park and the construction of networks of pedestrian walkways connecting both banks of the stream with nearby cultural facilities. The Seoul Metropolitan Government has established various organisations with defined missions and responsibilities to implement the project: the Cheonggyecheon Restoration Headquarters, responsible for the project's overall management and coordination; the Cheonggyecheon Research Group handling research activies and the preparation of the urban renewal plan; and the Cheonggyecheon Restoration Citizens' Committee, an official channel for gathering citizens' opinions and concerns about the project and for resolving conflicts between the Seoul Metropolitan Government and local business associations, which engaged in issues arising from the displacement of small businesses.

Location: Seoul, South Korea.

### + GREEN URBAN PLANNING IN RIYADH

This is a project to create green infrastructure in Riyadh, which has one of the lowest percentages of green spaces per capita in the region and urban planning defined by an absence of walkability, aggravated by the local climate. It aims to mitigate the lack of climate-friendly public space by providing footpaths and redeveloping streets according to pedestrians' needs. It involves planting more than 7.5 million trees in 3,330 neighbourhood gardens, 43 parks, 9,000 mosques, 6,000 schools, 64 universities, 390 health centres and 1,670 public facilities in Riyadh. Trees will also be planted on 16,400 kilometres of streets and roads, 2,000 car parks, 1,100 kilometres of green belts, 175,000 vacant lots and 272 kilometres of ditches. The project contributes to the Saudi Green Initiative, which aims to establish more than 541 square kilometres of green space by 2030.

Location: Riyadh, Saudi Arabia.

### + STRENGTHENING SOCIAL STABILITY AND RESILIENCE TO FLASH FLOODS AMONG VULNERABLE JORDANIAN COMMUNITIES AND SYRIAN REFUGEES

This is an integrated approach to addressing urgent needs arising from flash floods and other climate-related hazards, spearheaded by UN-Habitat Jordan and the Greater Amman Municipality. It starts with the production of a flood risk assessment and flood risk maps for central Amman, which identifies 120 flood hazard points requiring emergency measures. Communities and institutions are engaged by means of innovative tools such as the city resilience action planning tool, capacity-building, vocational training and awareness-raising initiatives. This establishes a shared responsibility among all stakeholders to proactively adapt to and mitigate the impact of risks and disasters. Pilot projects for sustainable urban drainage systems are implemented based on these studies and the stakeholders' participation. These include the Al-Zohour green triangle, water harvesting systems and domestic rain gardens, which are sustainable, replicable and scalable green solutions to reduce the impact of flash floods, while addressing water scarcity needs as a long-term investment.

Location: Greater Amman, Jordan.



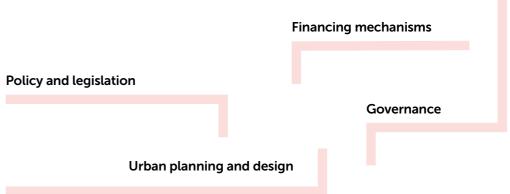
### + NANOSEN-AQM AIR QUALITY MONITORING

This is an air quality monitoring project undertaking initiatives to improve air quality or protect health, if necessary. It is organised by the Spanish National Research Council and the Physical and Information Technologies Institute, with the participation of AMB and various universities, regional governments and research centres. It develops and deploys low-cost gas nanosensors that provide massive, reliable, real-time data in Southern Europe. The data is integrated into a transnational platform that is implemented at regional, sub-regional and local levels, thereby contributing to the development of joint action plans, policy commitments and funding strategies, as well as networking between public and private stakeholders.

Location: Spain, France, Portugal.

### **Drivers of change**

UN-Habitat identifies four **drivers of change** related to the New Urban Agenda and solutions to achieve it. They work together and are interrelated, providing services and implementing metropolitan solutions that lead to change and the achievement of the desired outcomes. They are:



### **Policy and legislation**

Strong urban policies are needed to achieve sustainable and integrated urban development, which are at the centre of sectoral economic, social and spatial policy-making. These policies become significant instruments for allocating resources to cities and metropolises, redressing social inequalities and discrimination, and fostering synergies between development and urbanisation dynamics.

A clear, transparent and forward-looking legal framework for urban development is needed, which establishes rules and regulation systems that respond to real needs with real resources and capacities; in this case, between the challenges set out in the global agendas and the design and implementation of metropolitan solutions. It therefore needs to include equity considerations between territories, genders and social groups in order to reduce poverty and enhance shared prosperity. It needs to strengthen climate action and improve the urban environment in order to prevent and respond to potential urban crises.

The development of a metropolitan solution is a living roadmap that highlights the operational and legal constraints that arise in the administrative and political management of metropolises made up of several cities, or cross-border territories with formal or non-existent institutions and diverse administrative bodies. One of the milestones they face is related to identifying these legal or operational gaps that determine their potential success. For this reason, apart from identifying challenges

and resources, it is important to establish the opportunities and limitations of the regulatory and legal frameworks that operate in a territory, and to assess the need to create agreements or modify public policies to make solutions possible or to confer continuity on them.

### **Urban planning and design**

Urban planning and design are participatory tools for addressing and reconciling diverse interests related to the urbanisation, form and functionality of cities. As a driver of change for sustainable development, they must work for the public good and adopt a human rights-based approach, which optimises the urban dimension with the achievement of sustainable development goals and improving people's lives. Urban planning and design must be part of urban governance, which promotes local democracy, participation, inclusion and transparency, to ensure sustainable urbanisation.

Planning must be flexible and agile, and consider the potential opportunities or obstacles that may arise during the process. In many contexts there will be a need to rethink or establish new working and relationship processes with planning that manages metropolitan solutions based on citizens' interests and considers the challenge from a broadbased and metropolitan perspective.

### Governance

As Lefevre established, the concept of governance is closely linked to the process of opening up public action to collective action. Within the decision-making process, new stakeholders are joining the debates, negotiations and finally, the decisions to be taken regarding public policy. Governance encompasses the different ways in which public and private institutions and citizens participate in decision-making. Metropolitan governance involves the connection and participation of stakeholders in the planning, design and management of the affairs of cities and metropolises, and in the processes taking us towards sustainable urban development which is environmentally friendly, participatory, accountable, transparent, effective, equitable and inclusive.

Given the complexity of metropolitan solutions, it is important to establish comprehensive governance models that facilitate and promote new ways of leading and implementing public policies and other associated tools and strategies. Agile, flexible and democratic models of governance enable progress in the design and management of metropolitan solutions, with the aim of responding to the challenges identified by the global agendas.

Improved governance requires a coordinated and transparent institutional framework that enables stakeholders to participate, and establishes mechanisms for monitoring and accountability that facilitate the achievement of sustainable development objectives. However, there is a global gap in metropolitan management: 85% of the world's metropolitan regions do not have a plan or an institution to manage and administer their territorial reality and facilitate cooperation and collaboration between municipalities (World Cities Report 2022, UN-Habitat). As a result, in many territories, governance has a major challenge, which involves creating structures and institutions that enable projects and management and financing mechanisms to be put in place that make the implementation of metropolitan solutions possible.

### Financing mechanisms

Financing mechanisms are an important driver of change for metropolitan solutions, as they represent the mobilisation, sequencing and effective, innovative and sustainable use of instruments and sources of financing to achieve their objectives.

Cities and metropolises are increasingly choosing to use a diverse set of financing frameworks and instruments, including blended finance, impact investment, public-private partnerships and others. New systems are emerging, such as city-focused financing mechanisms and international funds, which must be used according to criteria of city ownership, multistakeholder partnership and enhanced accountability. These systems facilitate fundraising at regional and transnational level and enable funds resources to be raised in order to develop innovative solutions involving a partnership between sectors, territories and institutions.

This interlocking of different actors multiplies the potential of economic, knowledge-based and human resources, while fostering a more coherent, transparent and efficient management or allocation of resources. As a result, it has direct effects on the economic and social growth of the metropolises involved in the process of designing, implementing and managing metropolitan solutions, and makes new connections possible which encourage the added value of these solutions.

### 3. Higlights

Place people-centred approaches at the forefront of urban development and infrastructure delivery.

Maintain the agility and speed of metropolises when adapting and responding to global challenges such as environmental crises, pandemics, conflict and technological changes.

Acknowledge the metropolitan scale in the promotion and adoption of management and action solutions that take us towards the achievement of the objectives of the global agendas. Social, economic and environmental sustainability must involve recognition and reinforcement of metropolitan governance, planning, financing, policy and legislation.

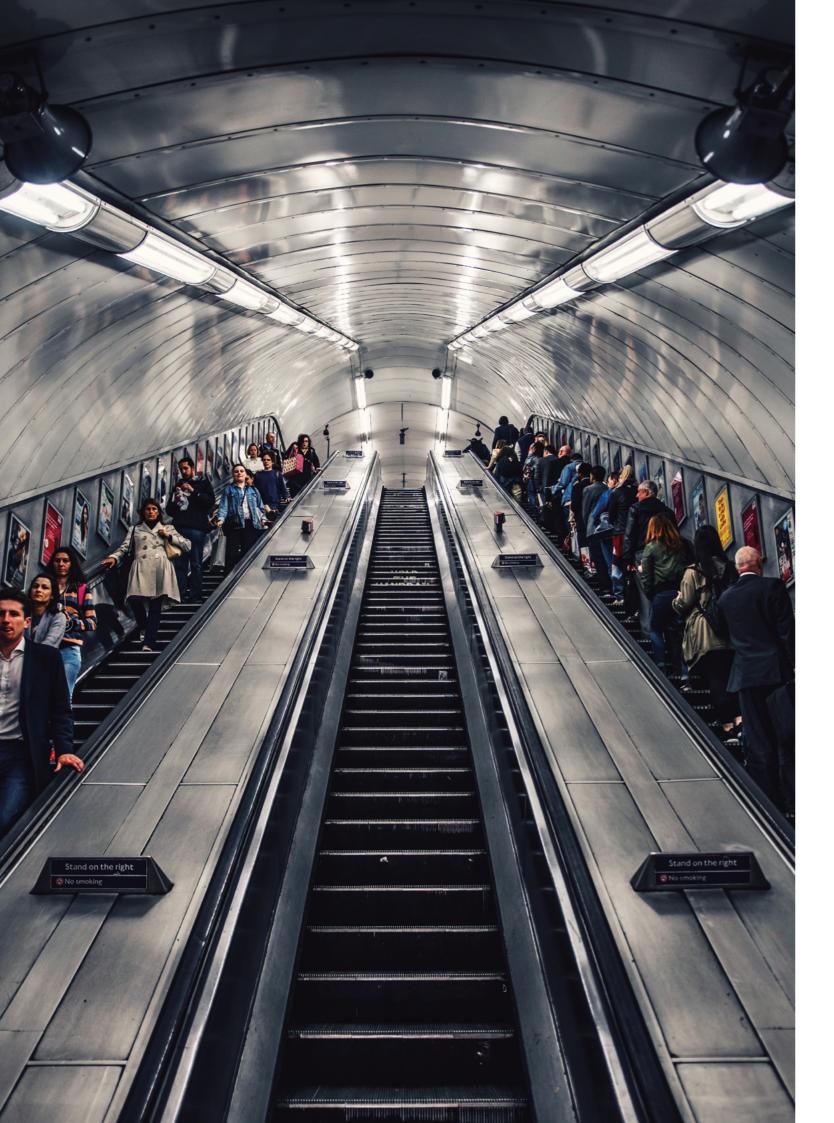
Support metropolitan solutions within the opportunities offered by urban areas in terms of knowledge, capacity building and innovation, exploiting and fostering synergies between the various stakeholders involved.

exploration, testing and discovery of innovative means of intervention that involve citizens and other stakeholders in the territory, whenever possible and appropriate. Community, associative and private initiatives must be integrated with those by government bodies in order to enhance the transparency and legitimacy of solutions, and to make sustainable urban development profitable and feasible.

Promote bottom-up strategies for the

Facilitate a change of culture in local governments in relation to work processes and the creation of teams capable of leading, implementing and communicating the impact of metropolitan solutions. Effective responses to emerging needs or crises in urban areas often come about through co-leadership, and management nurtured by the visions of different stakeholders and collective solidarity. This creates operational frameworks that transcend the traditional administrative and management spheres, leading to an understanding of the complexity of the metropolis that goes beyond institutions, agents and territorial constraints.

Create evidence and indicators to assess the relevance and efficiency of metropolitan solutions, while facilitating the transfer of knowledge and good practices between metropolises. The collection and analysis of data for strategic purposes is becoming crucial in implementing new solutions in the context of increasingly smart cities, enabling prioritisation, the segmentation of information and the production of analyses and assessments that contribute to the development of public policies. It is important to establish a framework of relevant, quality and sustainable indicators that are aligned with sustainable development objectives, and with the monitoring and ranking of metropolitan solutions.



### 4. List of experts

This document has been prepared based on contributions from the following experts:

### **ELECTED REPRESENTATIVES**

- Elisenda Alamany. Councillor for Àrea Metropolitana de Barcelona and Councillor, Barcelona City Council
- Denis Coderre. Former Mayor of Montreal and former President of Metropolis (Canada)
- **Hélène Dromain.** Deputy Vice-president of the Metropolis of Lyon (France)
- Nicolás García. Governor of Cundinamarca (Colombia)
- Giuseppe Grezzi. Deputy Mayor and Councillor for Sustainable Mobility and Public Space, Valencia City Council, and President of the Valencia Municipal Transport Company (EMT)
- Claudia López. Mayor of Bogotá (Colombia)
- **Ernest Maragall.** Vice-president of the Area for International Relations and Cooperation, AMB
- Rosa Suriñach. Barcelona City Councillor and former Coordinator of Partnerships and Global Advocacy at UN-Habitat's Urban Resilience Hub

### **AMB AND LOCAL EXPERTS**

- Oriol Barba. Director of MedCities
- **Corina Basnou.** Researcher at the Ecological and Forestry Applications Research Centre at the Autonomous University of Barcelona (UAB)
- Lia Brum. Research and Policy expert at Metropolis
- Joan Caba. Senior urban planner in the Area for the Development of Urban Planning Policies, AMB
- **Josep Canals.** General Secretary of MedCities
- Laia Carbonell. Head of programmes at the Mataró Municipal Council's Opportunities Office
- **Toni Codina.** Director and co-founder of the iSocial Foundation for innovation in social action

- Clelia Colombo. Head of the Foresight and Strategy Service, AMB Area for International Relations and Cooperation
- Carles Conill. Director of Sustainable Mobility Services, AMB
- Elena Costas. Economist and founder of KSNET
- Cynthia Echave. Urban planner and coordinator of strategic projects
- Oriol Estela. General Coordinator of the Barcelona Metropolitan Strategic Plan
- Agustí F. de Losada. Senior researcher and Director of the CIDOB Global Cities Programme
- Ricard Gomà. Director of the Barcelona Institute of Regional and Metropolitan Studies (IERMB)
- Vicente Guallart. Architect
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- Oriol Illa. Director of the AMB Area for International Relations and Cooperation
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- Marc Martí. Head of the Governance and Public Policy Area of the Barcelona Institute of Regional and Metropolitan Studies
- Oriol Nel·lo. Lecturer in Geography at the UAB, specialist in urban studies and territorial planning
- Josep Maria Pascual. Director at Estratègies de Qualitat Urbana
- Aytor Naranjo. Business Director at Lobelia Earth
- Maria Peix. Head of Cooperation in the AMB Area for International Relations and Cooperation
- Ana Romero. Head of Climate Emergency and Environmental Education in the AMB Ecology Area
- Carlota Rosés. Expert in international projects in the AMB Area for International Relations and Cooperation
- Xavier Tiana. Head of International Relations in the AMB Area for International Relations and Cooperation
- Mariona Tomàs. Lecturer in Political Science at the University of Barcelona, member of the Advisory Council of the CIDOB Global Cities Programme, and curator of the Multilevel Metropolis Series of the Barcelona Metropolitan Strategic Plan (Barcelona Tomorrow)
- Ramon M. Torra. General Manager of AMB
- Lluís Torrens. Director of Social Innovation in the Department of Social Rights, Global Justice, Feminisms and LGBTQI of Barcelona City Council

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- Alice Abreu. Physician and councillor for Health and Social Action in Maputo City Council (Mozambique)
- Yaser Abunnasr. Associate Lecturer in Landscape Design and Ecosystem Management, American University of Beirut (AUB) (Lebanon)

- María José Avendaño. Environmental Director, Guatemala City, Guatemala
- Geoff Bickford. Director, founder and Lead Consultant, Lively (South Africa)
- Henk Bouwman. Secretary General, METREX (the Netherlands)
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