Barcelona Metropolitan Area

Urban Agenda

AMB Metropolis Barcelona

The preparation of the *Barcelona Metropolitan Area Urban Agenda* has been coordinated by the Area for Urban Planning Policies and Natural Areas and the Area for International Relations and Digital Metropolis.

The Catalan version of the present text was approved by Presidential Decree of the Barcelona Metropolitan Area on 13 February 2025.

Barcelona, July 2025

DL: B 18483-2025

The Barcelona Metropolitan Area (AMB) has been firmly and consciously committed to the 2030 Agenda since 2015. The competences of the metropolitan government, linked to basic services such as mobility and public transport, the management of the water cycle and waste treatment, as well as to policies such as housing, the management of public space, and urban planning, make it a key institution for achieving sustainable development objectives in the Barcelona metropolis. In this sense, the AMB's various government plans, along with other sector-oriented plans, take the Sustainable Development Goals (SDGs) and the New Urban Agenda (NUA) as a clear reference.

Since the adoption of the 2030 Agenda and the NUA, the AMB has been attending international UN-Habitat forums and has participated in international city networks and several meetings to raise awareness and promote this commitment to the SDGs from a metropolitan perspective.

The AMB Urban Agenda presented in this document is solid proof of this. This Agenda – metropolitan in scope, participatory and flexible in terms of the 2050 horizon – is a living document, as it is part of an ongoing process of reflection that began in 2023 with the approval of the Metropolitan Urban Master Plan. It is an Agenda that highlights the elements that make the metropolitan area of Barcelona unique and includes sectoral plans within the competences that Law 31/2010 attributes to this metropolitan institution. The 15 years of existence of the third most important government body in Catalonia have shown that urban agendas must take into account the metropolitan dimension as an essential territorial sphere to achieve the objectives of the 2030 Agenda and the New Urban Agenda.

The world is changing fast, and we are already seeing how the technological revolution, data management and artificial intelligence are changing the way we plan and manage cities and metropolises.

With this document, the AMB wants to establish a roadmap for the coming years and contribute to the urban agendas of some of the 36 metropolitan councils that already have one.

Metropolitan areas and cities must be prepared for this great challenge to renew the global commitment to a shared, equitable, socially fairer and economically sustainable development agenda. And the AMB expresses this commitment in the metropolitan Urban Agenda.

Antonio Balmón

Executive Vice-President
Barcelona Metropolitan Area

Contents

1 Nature of the Barcelona Metropolitan Area Urban Agenda

The metropolitan Urban Agenda is the reference document for the coherent, integrated implementation of the future actions of the Barcelona Metropolitan Area (AMB) up to 2050. The actions are linked to all AMB responsibilities and competencies in the metropolitan territory and also to existing plans and programmes.

The nature of the Agenda is determined by a number of particularities: the metropolitan character, the Agenda as a process, participation, and balance between determination and flexibility

The metropolitan character

The Agenda stresses its metropolitan character, as the reality it addresses goes beyond the territorial limits of what may be considered urban.

It also aims to promote a vision of and approach to the functional and social realities in which most of the European population now lives. In most cases, this does not correspond to administrative, but to metropolitan boundaries.

This approach promotes a substantial shift in the way all governments address issues related to their territorial realities. But it also poses a challenge in drawing up the Agenda itself, as it raises metropolitan questions requiring metropolitan solutions.

The Agenda as a process

The Metropolitan Urban Master Plan (PDUM), initially approved in 2023, which, by its nature, meets most of the requirements for a document similar to the Spanish Urban Agenda, marked the start of the process of drawing up the Agenda. It also includes other AMB territorial and urban planning instruments and sectoral plans, approved by the institution's competent bodies: Metropolitan Action Plan; Metropolitan Strategic Reflection; Climate and Energy Plan 2030; Environment Sustainability Plan (PSA); Metropolitan Urban Mobility Plan (PMMU) 2019-2024 and 2025-2030; Water Cycle Strategic Plan (PECIA); AMB Internationalisation Plan 2021-2025; Metropolitan Programme for the Prevention

2003

PEMB
Barcelona Metropolitan Strategic Plan

2010

PEMB
Strategic Plan Vision 2020

2018

Energy and Climate Plan 2030

2020

PMRH
Metropolitan Housing Rehabilitation Plan

PREMET25
Metropolitan Programme for the Prevention and Management of Municipal Resources and Waste

PMMU
Metropolitan Urban Mobility Plan

2021

Internationalisation Plan

2022

PECIA
Water Cycle Strategic Plan

BARRIS
Neighbourhood Programme to Improve Incomes 2025-2027

2023

PDUM
Metropolitan Urban Master Plan

PEMB
Commitment 2030

and Management of Municipal Resources and Waste (PREMET); Metropolitan Housing Rehabilitation Plan (PMRH); Territorial Cohesion Actions Programme (PACTE) 2025-2028; Barcelona Metropolitan Strategic Plan – Metropolitan Commitment 2030; Metropolitan Social Plan 2024-2027; Collserola Special Protection Plan (PEPNat); and the modification of the Metropolitan General Plan (MPGM). All this provides a broad, global vision of the future objectives and challenges for the metropolitan area.

The experience with the PDUM helped to provide a diagnosis of the metropolitan area, identify its challenges through debates and participatory processes with a broad representation of the different stakeholders in the territory, set objectives and propose the urban planning actions later approved by the AMB Metropolitan Council.

The Agenda therefore includes all the metropolitan sectoral plans which, aligned and consistent with the PDUM, strengthen its strategy and aim to improve it in the future as part of a process whose approaches and objectives develop and mature.

It is based on urban planning proposals and incorporates lines of action from all the departments of the institution. The result is a comprehensive document covering all AMB actions.

Participation

Preparation of the AMB Urban Agenda is based through internal and external participation.

Internal participation involves the different AMB departments. The department heads participated in the respective lines of action and the joint definition of the Agenda's general characteristics and lines.

External participation arises out of the metropolitan nature of the AMB. In this regard, beyond their representation in the various bodies (described in section 1.4), the 36 municipal councils of the metropolitan municipalities participate directly in drafting the AMB's strategic documents.

Moreover, its nature as a local authority brings the AMB closer to the public, enabling it to understand their needs and requirements first-hand. Therefore, as also described in chapter 5, both the PDUM and the AMB Urban Agenda place special emphasis on citizen participation, both individually and through civil society organisations and associations.

Balance between determination and flexibility

An urban agenda guiding the development of metropolitan policies up to 2050 must be able to adapt to the continuous territorial, social and technological transformations that will occur over the next quarter of a century. But it must also be able to transcend ideological positions. The AMB Urban Agenda seeks maximum precision in its guidelines to best inform its actions. However, it also provides a degree of flexibility, so actions can be adapted to prevailing criteria at any given time.

2 Territorial diagnosis

To ensure that the various lines of action proposed by the AMB Urban Agenda are suited to the metropolitan territory, it is essential to understand the dynamics affecting its population and activity and, above all, the spatial elements affected by these dynamics, as this is where urban policy has an influence. This section provides a concise diagnosis of the metropolitan area of Barcelona, with references to other documents for a more extensive and detailed description.

2.1. THE METROPOLITAN AREA OF BARCELONA

The metropolitan area of Barcelona, as defined by Law 31/2010 of 3 August, covers 63,478 hectares and 36 municipalities.

The area occupies the rugged terrain around the Collserola hills, in the middle of the coastal mountain range. It includes the narrow gap on the coastal plain between the Llobregat and Besòs rivers, the lower course of these two rivers, the small part of the Vallès plain to the north of the Collserola massif and the eastern slopes of the Garraf massif and the Ordal hills.

This situation and its location in relation to key elements in the terrain have provided natural access to the metropolitan area, allowing it to connect with the much larger surrounding territory. It has also shaped its development, both in terms of urban settlements and the main communication infrastructures. The relatively low proportion of land with moderate slopes (only 38.4% of the land in the metropolitan area has a gradient of less than 20%) has made dense occupation the available space a necessity, combining residential, economic and infrastructure uses, sometimes responding more to urgent needs in each new stage of development than to a well-ordered planning process.

This difficulty has, firstly, required much higher urban densities than most European metropolitan areas to accommodate its current 3,353,348 inhabitants (52.8 inhabitants per hectare). It has also led to a process of steady expansion, occupying ever larger territories, leading to demographic and economic dynamics arising from functional areas that increasingly extend beyond the strict limits of the metropolitan area.

2.2. SITUATION AND TERRITORIAL RELATIONSHIP

The social, economic and territorial dynamics affecting the metropolitan area of Barcelona and determining its development most often follow the logic of a higher territorial scale: the world system of cities, the European and Mediterranean context, the main areas for relations with Spain, nodal Catalonia and, finally, the rest of the Barcelona metropolitan region.

2.2.1. The role of the metropolitan area in the world system of cities

Since Spain's integration into the European Union (1986), the metropolitan area of Barcelona has undergone a process of increasing openness, in the form of the movement of people, and goods and monetary flows. This internationalisation has been even more marked over the last two decades. Thus, between 1999 and 2019, imports in the province of Barcelona rose by 157 %, and exports by 174 %. Much of this movement of goods was through the port of Barcelona, whose total traffic of goods in the same period rose by 237 %, especially through container transport, which tripled. At the same time, international flows of people saw even more significant increases, both in the port itself, where passenger numbers increased by 465 %, and the airport, where there was a 5.5-fold increase. Thus, flows with the outside world are increasing in the metropolitan area of Barcelona, as its area of interchange spreads to cover the entire planet.

Despite this internationalisation, Barcelona's importance as an international city is moderate, in terms of both population and activity. Thus, while in 1950 Barcelona ranked 30th among the world's major metropolitan agglomerations (with more than 300,000 inhabitants), by 2015 it had fallen to 69th place.

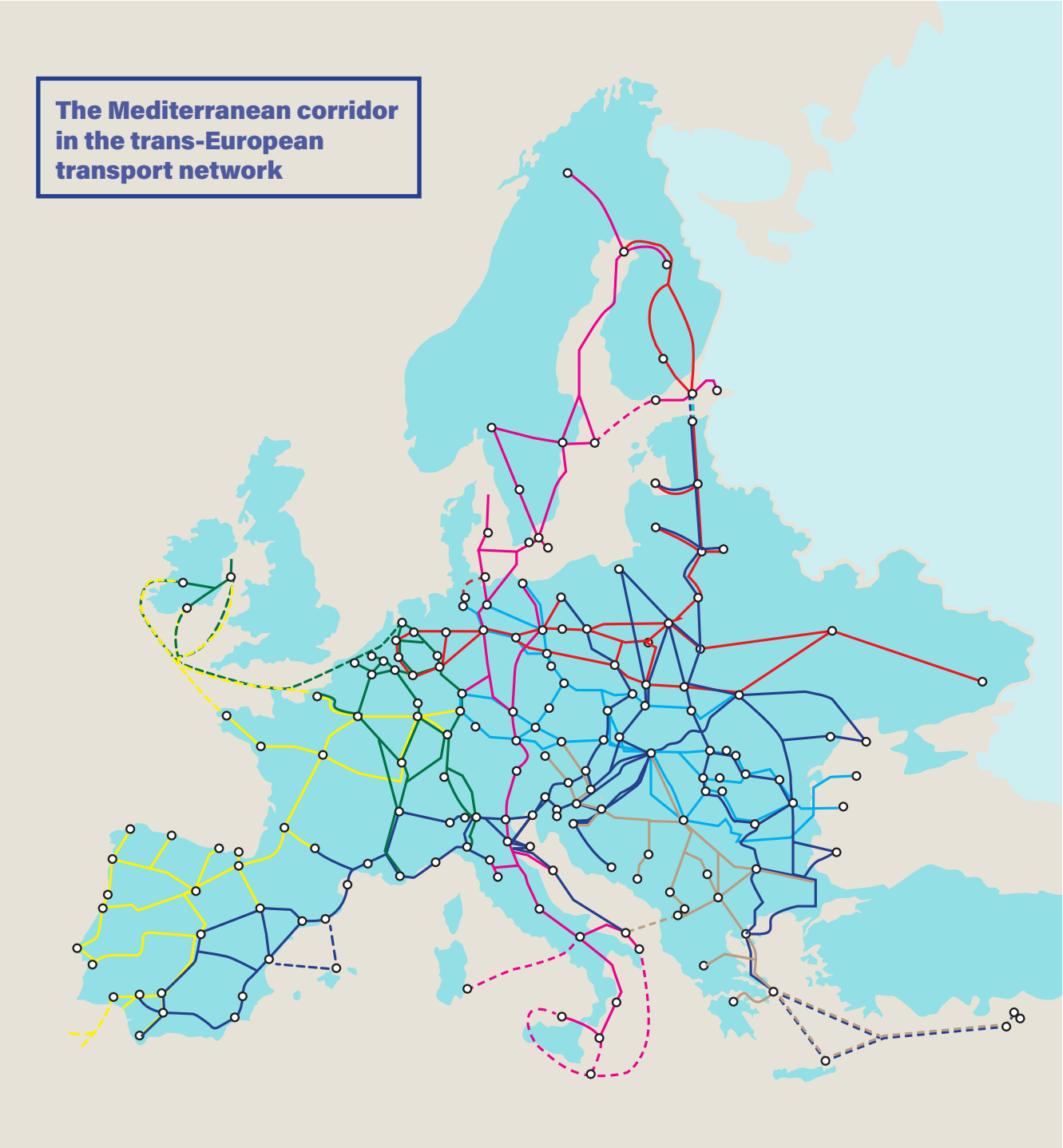
The urbanisation process on a world scale, changing from a largely rural population (70.4 % in 1950) to a largely urban one since the start of the 21st century, has largely been due to the spectacular growth of Chinese and South-East Asian cities. Such growth is forecast to continue in the coming decades, thus adding a good number of African metropolises. By 2035, there will be almost 50 conurbations in the world with more than 10 million inhabitants and some, such as Delhi, Tokyo, Shanghai, Dhaka, Cairo and Mumbai, will have well over 25 million inhabitants.

This shift in the urban centre of gravity is logically due to shifts in the population and economic activities. The greater concentration of population, headquarters of major corporations, air and port traffic and monetary flows in global metropolises means that Barcelona has slipped down the rankings of what has been called the *international system of cities* or *network of global cities*. Nevertheless, far from being a cause for concern, this more moderate position is in many respects an asset for Barcelona.

First, this is because the volumes of population and activity required to become a leading world capital are often excessive in terms of guaranteeing high levels of habitability and environmental quality. The sacrifices required to become one of the leading cities in the international system are therefore balanced by the economic and business benefits this entails. Second, the model that has characterised Barcelona as a Mediterranean city for many centuries involves urban characteristics of moderation, proportion and integration with its environment that will be difficult to reconcile with the parameters guiding the development processes of large global concentrations. Third, these same characteristics and particularities have led Barcelona to play other roles globally, which are not based on accumulation and competition with other urban areas, this endowing it with its own specific value. This is evidenced by the fact that apart from purely quantitative indicators, and as shown by the numerous international indices that rate the qualitative aspects of city life, Barcelona always occupies one of the highest positions in the rankings of attractiveness.

2.2.2. The European and Mediterranean contexts

The European system of cities has been widely studied, not just from the academic point of view, but also in European Union policy formulation. Nevertheless, the European Union does not define a specific urban system, and to an even lesser extent, does not define specific functions for each urban area. The



Source: European Commission.

various reference documents, such as the European Territorial Agenda, call for integrated, polycentric and balanced territorial development, based on the criteria of a healthy environment, the circular economy and sustainable mobility, in which urban areas must logically play a leading role. However, guidelines in this area are sufficiently vague to leave much room for manoeuvre. In fact, the European Union's treatment of urban areas is most directly determined by two specific policies: regional policy and transport policy.

Thus, the European Commission's Directorate-General for Regional and Urban Policy has developed a complex and ambitious system of initiatives, programmes and reference documents which, besides the funding lines they offer, provide significant insights into the urban development model and the role of cities in the European Union's general objectives of competitiveness, cohesion and sustainability. In an attempt to unify and simplify the numerous instruments and regulations at the European Union level and thus make management more efficient, the EU Urban Agenda summarises the current focus of these policies, and highlights 14 key areas in urban issues for the 2021-2027 period.

The approach to these issues will form the basis of European regional policy and therefore largely determine the distribution of European structural funds.

In addition to the projects implemented by individual states and regional and local authorities within the urban policy framework, the role of each city on the European stage is clearly determined by land transport policy. In this sense, the basic scheme for structuring the network defines nine areas covering the entire European territory, one of which is the Mediterranean corridor. This corridor, which takes in the metropolitan area of Barcelona, has three starting points, Algeciras, Seville and Madrid, and crosses the south of the continent up to the Ukrainian border. It thus connects Barcelona with major urban areas such as Madrid, Valencia, Marseilles, Lyon, Turin, Milan, Zagreb and Budapest. This basic structure is extended in the railway sector by proposals such as the one promoted by FERRMED, which branches the Mediterranean corridor out to connect it with northern and central Europe and extends it to the Asian continent. Whatever the case, in the metropolitan area of Barcelona, the potential of the Mediterranean corridor lies in the volume of economic activity in the area it connects and its gateways for the interchange of goods, such as the port and, to a lesser extent, the airport.

The European context therefore provides the metropolitan area of Barcelona with some guiding principles for its urban policies and projects consistent with the other European urban areas, and gives it a structural role in relations in southern Europe.

2.2.3. The main areas of relations with Spain

Unlike the situation in the heart of the European continent, interrelations between metropolitan areas in the Iberian Peninsula provide intense cover for most of the territory. The relationships between Spain's major main urban agglomerations take place in a series of areas that alternate with extensive areas with low or very low levels of occupancy. Besides the radial structure centred on Madrid, the Spanish urban network is basically structured around the Mediterranean area mentioned above (from Algeciras and Malaga to Girona, through the Andalusian provincial capitals, the urban archipelago of Murcia, the east coast, Tarragona and Barcelona), the Ebro axis (from Barcelona and Tarragona to the Basque Country via Lleida, Zaragoza and La Rioja) and the Cantabrian coast (from the Basque Country to Vigo, via Santander and Asturias).

This linear configuration has traditionally structured immigration movements to Catalonia from the other autonomous communities. But, above all, it helps establish relations and synergies, while offering enormous potential for the distribution of metropolitan functions, based on each region's characteristics and capabilities. Thus, together with the Mediterranean area, the Ebro axis is also a highly significant sphere of opportunity for the metropolitan area of Barcelona.

On the Mediterranean axis, the infrastructure associated with the Mediterranean corridor must be used to promote the movement of goods produced by the important industry and agriculture on the Spanish coast. In this sense, connecting production with the road and rail infrastructure, especially freight interchange stations, is a priority. A relatively short part of the main stretch of these routes runs through the metropolitan area of Barcelona. However, as one of the most important production and consumption centres with major port facilities, it needs access to this infrastructure and, in particular, to the freight interchanges between the three forms of transport: road-rail, sea-road and sea-rail. The following sub-section examines this aspect in more detail.

In the case of the Ebro axis, the main interest lies in facilitating the movement of goods with the centre and north of the peninsula and promoting functional complementarity with the Aragon area. For years, the Aragone authorities have used Zaragoza's strategic location between Spain's four most dynamic regions (Madrid, the Basque Country, the eastern Iberian Peninsula and Catalonia) to make the city Spain's strategic centre for logistics and distribution. Projects such as the Zaragoza Logistics Platform (PLAZA) and the major investment in infrastructure around it are explained by the easy access and availability of land. In this regard, the connection with the Ebro axis must allow the metropolitan area of

Barcelona to distribute economic activity according to its needs and spatial capabilities and provide a reference territory that transcends not only its own sphere, but also that of Catalonia. Thus, for example, logistics activity that requires extensive land use and easy access to road and rail transport could be located in these other areas.

2.2.4. The relationship with nodal Catalonia

The metropolitan area of Barcelona has excellent access to the rest of Catalonia. The 635 km^2 around the Collserola hills comprise the central part of a complex orographic system that has not only influenced urban development, but has also led to the configuration of a metropolis capable of structuring a much larger territory.

The position of the metropolitan area of Barcelona in relation to the main structuring elements of the Catalan terrain has given it an enormous natural potential for development as a metropolis. The communication channels that currently make up the transport networks linking the metropolitan area of Barcelona with the rest of Catalonia have been extended over the years, following the natural corridors provided the rugged Catalan terrain. Only by digging underground tunnels in the most heavily populated areas was this constraint overcome in the last century.

Thus, with regard to the high-capacity road network, the AP-2 and A-2 motorways start in the Barcelona plain and follow the Llobregat corridor to the pre-coastal depression, where they meet up with the AP-7, which runs along the whole depression to connect with the Girona regions in the north and the Tarragona regions in the south.

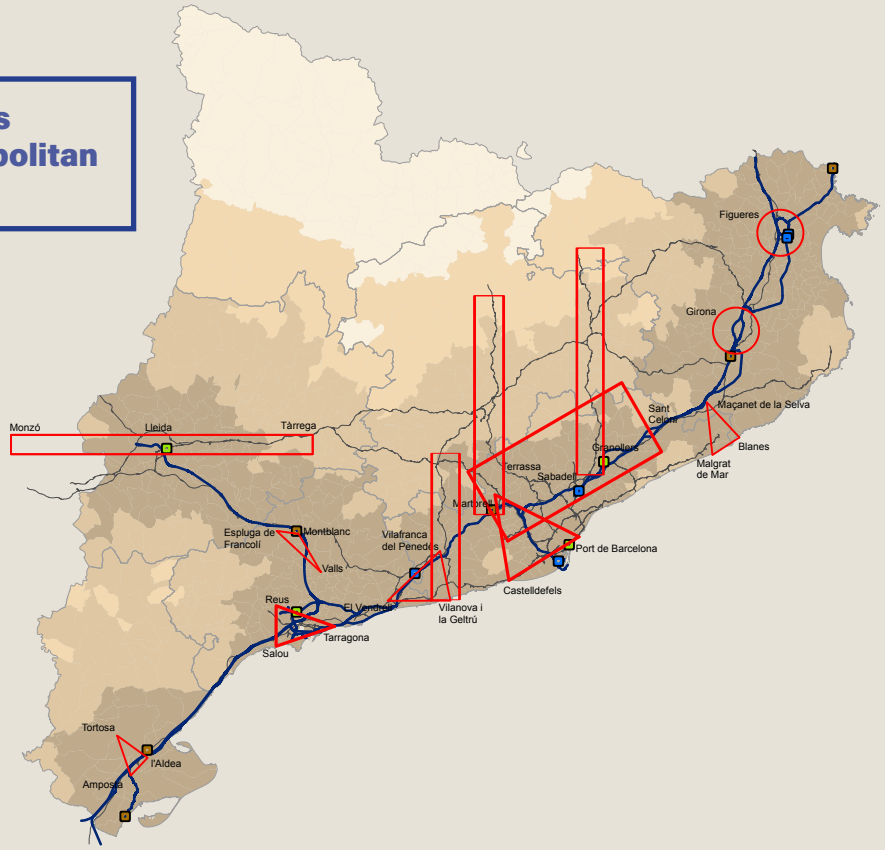
The AP-2 and the A-2 go on to Lleida, following the same pre-coastal depression, and through El Montmell, following the Llobregat river itself in the case of the former and over the Bruc pass in the case of the latter. Connections from Barcelona to the Girona and Tarragona regions are completed along the coast with the C-31 and C-32. Connections with the inland territory are mainly provided by the C-16, which crosses the Collserola hills to connect with the course of the River Llobregat in Bages, and by the C-17, which connects with Osona via the Besòs-Congost corridor. Both roads are a fundamental part of the vertical structuring scheme in Catalonia and are supported by the C-59 to the Eix Transversal (C-25) and, outside the metropolitan area, by the C-15 between Vilanova i la Geltrú and Vilafranca del Penedès, and the C-37 between Igualada and Manresa.

As for the railway system, this uses the location of the Barcelona plain to structure a markedly radial system. Thus, the R1 Rodalies suburban line runs north along the coastal depression to Maçanet-Massanes, while the northern sections of the R2, R3 and R4 lines use the Besòs pass to El Vallès to go on to Maçanet-Massanes (and then Girona and Portbou) along the pre-coastal depression, to Vic (and on to Puigcerdà) via El Congost, and to Manresa (and on to Lleida) via Sabadell and Terrassa, respectively. The southern sections of the same R2 and R4 lines cross the River Llobregat and go on to Sant Vicenç de Calders along the coast and pre-coastal depressions, respectively. The two lines ending in Maçanet-Massanes and Sant Vicenç de Calders form what is known as the "Catalan railway figure of eight", centred in the Barcelona plain and completed by the cross-section between Granollers and Martorell, along which the R8 line runs. Other suburban lines (R2 Airport, R7 to Cerdanyola-Universitat), the terminals of the aforementioned lines and even the Ferrocarrils de la Generalitat de Catalunya railway lines (FGC) to Terrassa, Manresa and Igualada bolster this radial structure.

The metropolitan area of Barcelona receives special attention, as the capital and hub of the surrounding region. However, this influence extends to the whole of Catalonia and, in particular, to the most closely connected areas through the main natural corridors, where relations are not only more intense, but also more complementary.

Among the numerous sectoral relations and unique features in the western Ponent regions, one area is particularly notable due to its position, economic weight and capacity to structure the surrounding

Areas and nodal axes related to the metropolitan area of Barcelona



Source: Institute of Territorial Studies.

territory on the basis of regional and local axes: the A-2 motorway corridor. Currently, this A-2 corridor serves industrial zones covering a surface area of more than 1,400 ha, a large figure when compared to the 1,900 ha of land for activities in the metropolitan area of Barcelona in the infrastructure corridors. Yet in terms of activity, the corridor has remained a territory in waiting, with a large number of vacant industrial estates. However, this situation is an opportunity to rethink the relationship with the metropolitan area of Barcelona as an opportunity to improve goods transport to the Mediterranean corridor and Catalan ports, although, in this respect, the proposal would require substantial improvements to the current rail infrastructure.

Connectivity with the urban areas of Tarragona and Girona has generated a new map of territorial relations to the point of extending the daily life of both areas to the metropolitan area of Barcelona. The two areas reflect two very different economic and geographical situations. The flow of relations between the two urban areas and Barcelona has increased considerably over the last decade, requiring the consideration of measures to rationalise the routes. Such rationalisation should be based on transferring regional services to the high-speed line, which would make better use of the route while reducing intensity in sections shared with the suburban rail services, However, it would also require appropriate measures to reduce private mobility to the stations at source.

2.2.5. The metropolitan region of Barcelona: the central area and urban systems in the region

Decades ago, the urban development process and territorial dynamics spread beyond the scope of what may strictly be described as the modern metropolitan area, in terms of everyday functional relations, residential mobility and locating economic activity. The identification more than half a century ago of a region of over 3,000 km^2 as the real territorial scope of reference for the metropolitan functions of Barcelona was finally acknowledged with the approval of the Metropolitan Territorial Plan in 2010. This area, while suitable for territorial planning, is too widespread for urban planning; however, precisely because of this territorial relationship, it contains certain elements that the PDUM must take into consideration.

This level of connection between the two areas is so intense that the dynamics of residential and economic activity and the resulting functional relationships cannot be understood solely at the level of the metropolitan area, and should be considered together with the rest of the metropolitan region. In addition to this functional relationship, the proximity of the areas requires the detailed analysis of three specific aspects: the system of open spaces, settlements and transport infrastructures. This section addresses the key issues regarding these three topics.

In terms of the open space system, the relationship between the metropolitan area and the rest of the region has seven particularly relevant elements. Four concern the metropolitan area's river courses upstream of its boundaries to ensure the continuity of their ecosystem and social functions:

— The recovery, preservation and management of the River Llobregat park beyond the Martorell gorge, improving agroforestry mosaic environments, river and ecosystem connectivity, and other heritage elements that guarantee its civic continuity.

— The recovery and development of the Rubí riverbed within the agroforestry matrix.

— The continuity of the River Ripoll park as the backbone of urban edges and different urban areas, up to the confluence with the River Besòs.

— The recovery, consolidation and preservation of the riverbeds, connectors and river courses along the B-30/AP-7 corridor.

In addition to river courses, primary activities in the agroforestry mosaic, especially in the El Vallès plain and the El Maresme region, require special consideration. These activities are directly related to the El Vallès wetlands and their continuity beyond the metropolitan area must enable the design of actions that enhance, maintain and restore the spaces needed to ensure environmental functionality (ecological and river connectors).

In the case of El Maresme, the coastal section is clearly vulnerable to residential urban transformation and the passage of infrastructures. These areas combine ecosystemic functions (the riverbed system) with agricultural production, consisting of drylands and vineyards at intermediate altitudes and orchards next to the coast. These spaces therefore require preservation as advanced agriculture producers and also due to their function as separators in the urban coastal continuum.

The sixth element related to open spaces is the natural continuity of the Marina, Sant Mateu and Céllecs mountain ranges and the Ordal and Garraf mountains, with an assessment of the agricultural spaces within them, considering their productive and environmental value.

Finally, interventions that modify coastal dynamics are particularly significant, given the progressive erosion of the coastline. In the case of El Maresme, these interventions are associated with growing land occupation, cuts caused by the passage of infrastructures and the location of recreational ports. Given these aspects, ecological connectivity with the sea needs to be increased.

Furthermore, the urban fabric has multiple points of contact on both sides of the metropolitan area boundaries, although some are particularly significant due to their strategic importance. Firstly, in the Martorell area, the new centrality of the railway station will have a major impact on its surroundings, integrating its different levels with other forms of transport. At the same time, the urban continuum of activity on the N-2a road will also require specific treatment.

Secondly, two areas of economic activity can be identified as requiring consolidation and upgrading: the area above the Caldes riverbed and the area around the south C-17 road, in line with strategies for the activity fabric in the metropolitan area. The intense relationship between the municipalities in El Vallès region and the surroundings is not only functional, but also has a physical expression. Thus, the urban fabric of the El Vallès region has numerous examples of continuity beyond the limits of the

metropolitan area, such as Barberà del Vallès and Sabadell, where, in addition, the area allocated for the interpolar road, due to its junction with the N-150, creates a particularly relevant area of opportunity.

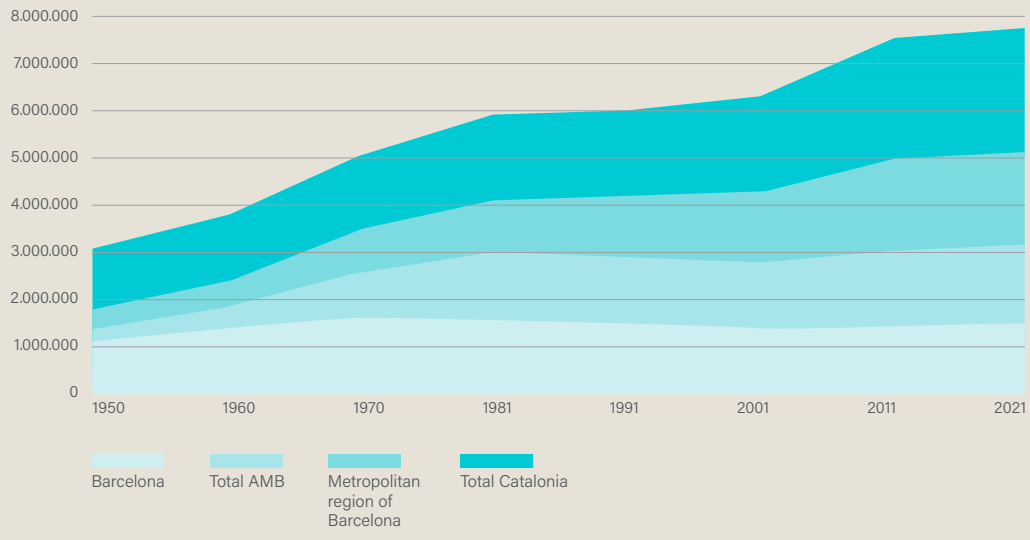
Consideration should also be given to the different urban systems that make up El Maresme, influenced by geography, the different degree of communication with the metropolitan area and other "territorial gateways", such as the Tordera and, more recently, the Parpers tunnel towards the heart of El Vallès Oriental. These systems are in the lower Maresme area, as a continuance of the municipalities of Tiana and Montgat, Mataró and the Argentona riverbed, the Arenys area and, finally, the upper Maresme. In the area of Mataró, the areas of economic activity, mainly located in south Mataró and on the Argentona riverbed (C-60/Parpers tunnel/AP-7) play an important role.

Lastly, due to their nature, the structural elements are those with the most points of connection with the territory extending beyond the boundaries of the metropolitan area. Thus, with regard to the road system, several roads require definition as structural urban axes for public transport: the N-2a to Martorell; the C-1413a; the BP-1503 to Rubí; the BV-5001 to La Roca del Vallès and the old N-150 to Barberà del Vallès and on to Sabadell. Others need to be approached in terms of their integration and ability to connect with other roads: the continuity of the B-24 and the structural reconsideration of the N-340 from Cervelló to Vallirana; the interpolar structural road from Bellaterra to Sabadell; the Santa Perpetua de Mogoda road; the C-17 from La Llagosta to Lliçà d'Amunt, taking into account the possible transformation of uses along their roadsides, the sides of the B-30 and the seafront in relation to the possible freeing of the N-II.

On the other hand, some structural roads need actions to increase their functionality, especially to improve light public transport to the central metropolitan area. Such roads include the C-32 in the southern Maresme up to Mataró, linking up with the C-60 (Mataró-Granollers section) and the C-59-Riera de Caldes. Finally, the resulting mobility flows must be assessed in relation to extending infrastructures towards the region's gateways, such as the C-32 to Lloret de Mar. This case requires special consideration due to its position in relation to the Girona area (described above) and its character as a major centre for tourism.

In terms of the rail network, two aspects outside the metropolitan area are particularly relevant: the splitting of the R3 suburban line and the improvements to the existing interchanges between different rail networks (regional, suburban and the Ferrocarrils de la Generalitat de Catalunya (FGC) railway lines). Both have a direct impact on flows into the central metropolitan area and would require both the introduction of new interchanges and dissuasive strategic high-capacity park-and-ride (P&R) facilities. The railway interchange between the FGC and suburban train stations at Hospital General-Rubí is a clear example of this need.

Evolution of the population in the metropolitan area and the rest of Catalonia



Source: Master Plan Drafting Service.

With regard to the coastal area and, more specifically, the passage of line R1 through El Maresme, the considerations in the Barcelona Metropolitan Territorial Plan (PTMB) for improving the Barcelona-Mataró and Arenys de Mar-Maçanet de la Selva routes (modification and splitting) should be studied in terms of their implications for the metropolitan area. These implications, as in the case of Badalona, translate into changes to mobility flows, land release and opportunities, new centralities and permeability in the line with regard to the urban fabric.

As well as passenger transport, goods transport warrants particular attention, as the integration of the road and rail networks, the port and the airport can substantially minimise both economic costs and environmental impacts. As a result, the construction of two road-rail goods interchange platforms at La Llagosta and Sant Esteve de Sesrovires would free up the space occupied by the current Morrot interchange and enable goods to leave the port directly, improving its position in the Mediterranean corridor.

Finally, it is important to consider that other planned measures or effects around the metropolitan area may alter the overall mobility scheme. Thus, establishing new areas of centrality between Sabadell and Granollers, linked to the train stations and improvements to the public transport system on existing road infrastructures, could polarise and diversify the uses of these new centres in relation to the existing fabric and, consequently, affect the overall mobility demands of the central metropolitan area. Likewise, an urban area of nodal, polycentric development such as Granollers-La Roca-Canovelles could affect the public transport mobility scheme. Finally, the centrality node around the Vilafranca del Penedès station, the growth of Vilanova i la Geltrú as a nodal development area and axes such as the Ordal road, which structure the nuclei adjoining the El Penedès plain and various scattered housing developments, are also points of interest for possible recovery.

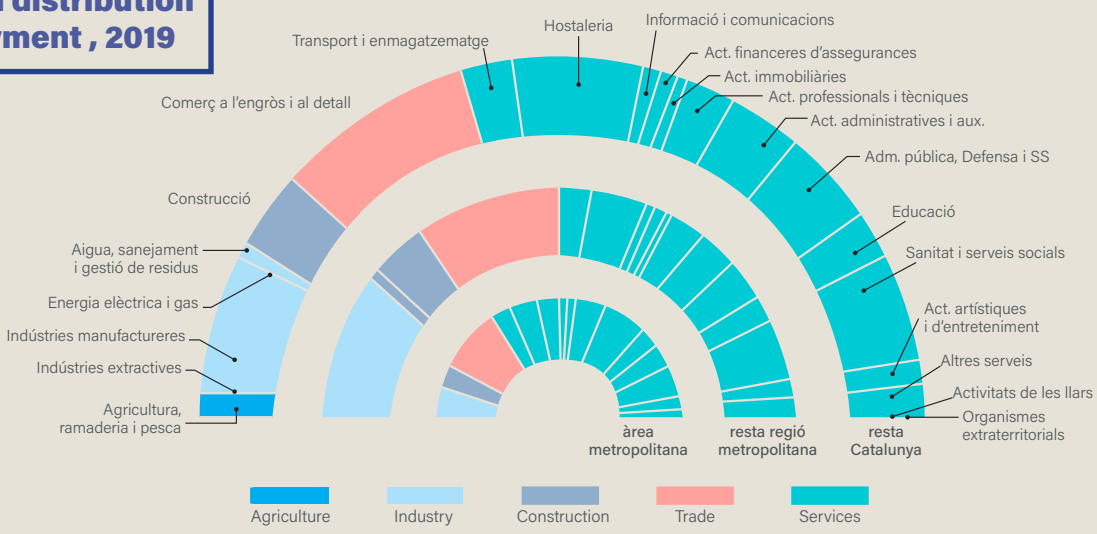
These main spheres of reference, which include the Barcelona area, represent opportunities, but also demands, which the AMB analyses to the necessary depth in each case, both in terms of relations with the different spheres and the impact at the local scale of dynamics caused by higher scales.

2.3. METROPOLITAN DYNAMICS AND THEIR TERRITORIAL EFFECTS

2.3.1. Metropolitan dynamics and their evolution

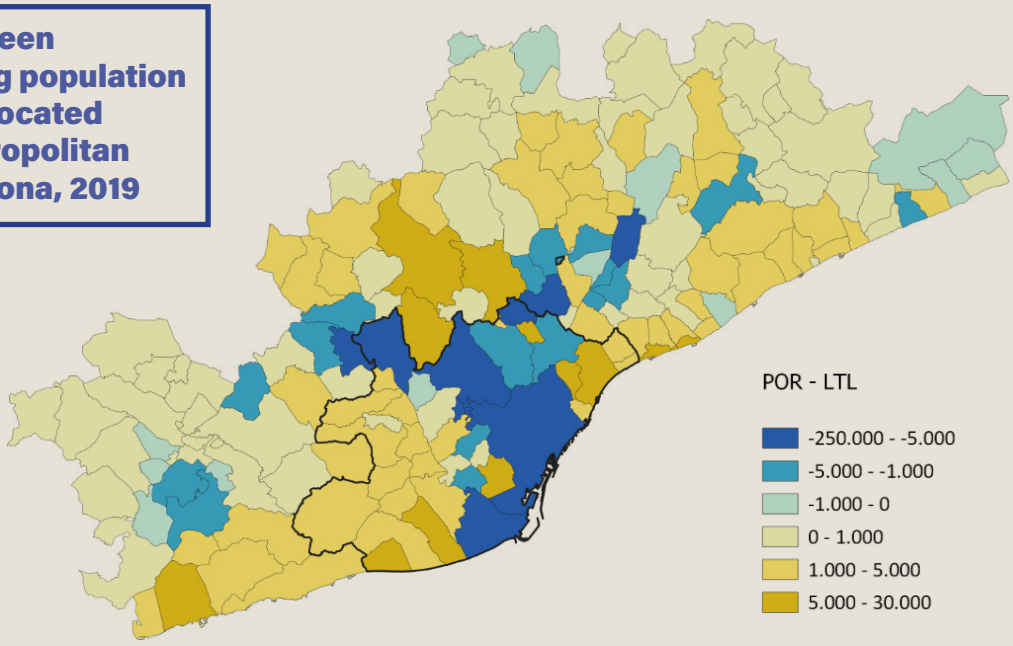
The dynamics of the metropolitan population and activities stem from diverse causes that vary over time. All such dynamics must be analysed on the basis of the main agents that create them, their evolution, their current characteristics and their predicted future behaviour. Consideration must also be given

Territorial distribution of employment , 2019



Source: Master Plan Drafting Service

Difference between resident working population (POR) and jobs located (LTL) in the metropolitan region of Barcelona, 2019



Source: Master Plan Drafting Service.

to the mobility and metabolic flows created by the interaction of these agents in the territory, in order to assess the impact of these dynamics on the metropolitan territory through the transformed land and, finally, to bring their possible evolution forward in the scenario of global change in the metropolitan area.

In terms of population, 3,353,348 people were living in the metropolitan area of Barcelona in 2023. This figure is the result of a complex evolution of natural and migratory factors in which the arrival of large contingents of population from the rest of Catalonia, Spain and, especially recently, abroad has always been the variable with the greatest impact. As a result of this evolution, the current socio-demographic structure of the metropolitan population has two main characteristics: the tendency towards ageing and the increase in the foreign population, especially from outside the European Union. These two trends differ in spatial terms, which means the territorial distribution of the population is subject to significant variations.

Current demographic trends will also continue over the next few years, leading to specific demands for housing and facilities. Thus, projected trends in the Barcelona metropolitan region as a whole show the population reaching 5,871,725 inhabitants in 2050, i.e. 595,136 more people than in 2023, an increase of 11.3%. Due to trends in demographics and household structures, this population will reside in 2,534,586 primary dwellings, 475,117 more than at present, an increase of 23%. This need for primary housing is essential to ensure urban planning can scale the proposal in the metropolitan area of Barcelona to maximise the reception of the population. This should always be based on criteria of sustainability, functionality and habitability, and guarantee that, together with the housing potential in the second metropolitan belt, the total demand can be satisfied.

For its part, economic activity in the metropolitan area must also be framed in the context of the Barcelona metropolitan region, or even Catalonia, as a whole to understand how it functions. Considering this extended area is particularly important both in the dynamics of spreading activities away the central area and in the complementarity between the activities in different areas and the location of certain spaces and infrastructures to support economic activity that cannot be located in the central area.

The metropolitan area provides almost half (46.6%) of all employment in Catalonia and 50.7% of gross added value. However, it is relatively specialised in certain sectors, basically those that require territorial centrality, whether for reasons of density, accessibility, proximity to certain infrastructures or simply influence. Such activity is basically tertiary, especially non-commercial, although the lower presence of manufacturing industry and agricultural activities does not lessen their strategic importance.

Whatever the case, the concentration of activity, together with the distribution of the population, causes a functional imbalance reflected both at the municipal level and in the metropolitan area as a whole.

Consequently, that the relative specialisation in activity ends up compensating for the residential specialisation of the rest of the region. This divergence between where people live and where they work is the cause of much of daily commuting, but is also the result of a long process of territorial configuration that has tended to favour a particular mobility pattern.

In this model, there is a predomination of motorised transport, including private vehicles, especially in the most peripheral parts of the metropolitan area, and even more so in relations with the outside world. Active mobility, such as walking and cycling, faces competition from other modes of transport and often has to navigate its way through urban unsuitable environments.

Besides these mobility flows, the life and organisation of the city is based on constant, multiple inputs of food, energy, water, raw materials and information, and outputs of manufactured goods, emissions, waste and processed information, among others. These inputs, outputs and internal transformation processes create the urban metabolism, which relates consumer elements (anthropic uses) with natural elements that generate resources and ecosystem services (biophysical matrix) through a channel of use (service networks and infrastructures). AMB urban policy puts special emphasis on supply and demand related to the territorial distribution of the intensity of anthropic use and ecosystem resources and services, as they are considered essential to improving the metabolic functioning of cities.

2.3.2. The territorial and urban planning basis

The dynamics of metropolitan population and economic activity, as well as the flows they generate, have had numerous effects on the metropolitan territory, and will continue to do so in the coming years. Such spatial effects are precisely the subject of AMB territorial policy and actions in areas such as urban development, diversity and social inclusion, quality of life, innovation, sustainability, etc. and therefore determine the content and orientation of this Agenda. Thus, variations in population have an impact on the demand for housing, services or facilities; economic activity affects the large specialised areas or large infrastructures that support them; and the territorial distribution of both affects the delicate balances in the biophysical matrix, the need for mobility services and infrastructures and the networks needed to serve metabolic flows.

Despite high levels of land consumption due to powerful anthropic pressure, the metropolitan area of Barcelona still maintains a high degree of biodiversity, based on multiple types of spaces combined in its limited territory, occupying almost 68% of its surface area. These include natural and agricultural areas, public green spaces and edge and interstitial areas bordering large infrastructures that infiltrate urban settlements, providing urban quality and biodiversity and operating within them.

However, today, various threats and alterations affect the metropolitan biophysical matrix: the processes of afforestation, deforestation and abandonment of arable land; fragmentation of the landscape, particularly in areas in contact with urban land; signs of abandonment in many of these points of contact, which have become borders between two differentiated systems and are now spaces with undecided, fragile and circumstantial uses, accumulating urban fractures and degradation; the lack of a metropolitan vision in the planning and execution of urban greenery; and the shortcomings in the existing protection system and the agroforestry management. Accompanying these threats are others arising from climate change, which make the metropolitan area increasingly vulnerable to key aspects such as water supply, flooding, coastal conservation, maintenance of the agroforestry space and rising temperatures.

In this same territory, the development of the residential fabric is based on a wide variety of morphologies and urban situations arising from their function, relative location and their metropolitan role, depending on their territorial context. Thus, different ways of living have been configured, giving rise to three main types of residential area: continuous cities on the plain, interlinked nodal towns and low-density landscapes. These have different characteristics and needs, but in all three aspects such as physical integration, completion to overcome discontinuities, structuring, transformation, rehabilitation, environmental quality, the condition of the public space, social segregation, low proportion of affordable

housing, dysfunctions in the housing stock, and high demand leading to exclusion from housing need addressing. However, a common approach to solutions will be needed to accommodate the diversity of the three realities when it comes to proposals for improvement.

For its part, economic activity places a wide variety of demands on the space it requires, although activity with very specific characteristics, requiring solutions that are difficult to apply to other parts of the metropolis, are those that affect specialised areas of activity. These areas need to protect their industrial activity, but also make potential uses more flexible, facilitate the location of logistic activity, provide public transport and elements for sustainable mobility, redefine standards to adapt them to companies' needs and improve their physical, environmental, functional and personal safety conditions. At the same time, it must be remembered that most economic activity, in terms of both production and land occupancy, occurs in mixed spaces, in the form of services and production activities that are located in the residential fabric. In these areas, a mix of uses should be promoted while regulating activities that may compete with the needs of the residential population, both in the public space and in access to housing.

With regard to facilities, the efforts made by the Metropolitan General Plan and the rest of the urban planning instruments for the metropolitan area of Barcelona over the last few years have provided sufficient land to meet the population's needs. However, territorial distribution of facilities varies, and their supply does not always meet the needs of the population and business. With regard to open spaces, beyond compliance with the quantity standards determined by urban planning legislation, their territorial distribution often fails to meet criteria of equity, proximity, health and inclusion.

For its part, the configuration of the current transport infrastructure system has enabled the development and economic growth of the metropolitan area of Barcelona, while impacting on the territory in various ways. The emergence of a mobility model based on private transport to the detriment of public transport, especially walking and cycling, is responsible for high fuel consumption, increased emissions and air and noise pollution, with the high internal and external costs this entails. Its territorial impact involves both direct consumption of land caused by road and rail infrastructures and the territorial fragmentation of open spaces and the urban fabric caused by their linear structure.

Lastly, the networks of services that channel and regulate the main metabolic flows of the metropolis add to the complexity of their deployment and operation in a densely occupied territory, together with the uncertainty caused by the foreseeable changes in the coming years. This uncertainty stems from both the availability of the elements they serve (water, energy, materials and information) and the need to consume and treat them more sustainably. Regarding the necessary AMB urban policies, complexity and uncertainty mean space must be allocated for technical services that matches the reality of existing infrastructures and their planned growth or transformation, while increasing these allocations when necessary. But they also demand actions as diverse as improving and expanding water regulation systems for episodes of heavy rainfall, increasing the use of alternative water sources, planning the power provided by renewable energies, responding to increasing demand for electricity, integrating electrical infrastructures that have an impact on space and waste management, and organising and regulating activities related to the food system based on agro-ecological criteria.

The AMB Urban Agenda aims not only to guide decision-making at each organisational level, but do so in an integrated way that guarantees the vertical (organisational) and horizontal (thematic) coherence of all AMB policies.

To achieve this, a modular structure is used, based on four thematic areas, which are implemented in a dozen specific objectives. Each of these objectives involves specific actions based on the instruments available to the AMB through its competencies and resources.

In all cases, these are areas, objectives, instruments and actions defined within the scope of its own competencies, requiring coordination with the competencies of other government authorities, as those

of the AMB do not include all the aspects that affect the metropolitan area and its inhabitants. Similarly, the clear territorial nature of the Urban Agenda means it requires focussing on issues that can be addressed through spatial planning and territorial management. This omits sectoral policies and actions that, equally or more importantly, are implemented through other instruments and which are addressed in the Metropolitan Strategic Reflection and the Barcelona Metropolitan Strategic Plan.

This classification of the final actions based on the instruments used to implement them and their objectives is not incompatible with their cross-cutting nature; indeed, most actions serve more than one objective. However, linking each action to a single instrument and objective highlights orientation of its priorities and, above all, assigns clear responsibility to the organisational level responsible for implementing that instrument.

Finally, there are a series of general principles that are not set out in any specific objective because they are applicable to all areas and objectives, such as the gender perspective and concern for people's health. In these cases, the related policies included in the AMB Urban Agenda can be identified by instrument and action.

2.4. THE INSTRUMENTS FOR GUIDING METROPOLITAN POLICIES IN THE SHORT AND LONG TERM

2.4.1. Sectoral instruments

The AMB structures its policies into six functional areas: territory, urban planning, housing, mobility and transport, environment, and social and economic development. The sectoral instruments and actions of the AMB Urban Agenda are explained in this section on the basis of these six groups of competencies.

Territory

Territorial policy has five main areas of action: the public space, river spaces, forest spaces, ring roads and unique projects. The main sectoral instruments are identified below, by the functional areas responsible for these documents.

With regard to **the public space**, firstly, the actions refer to projects and works, such as those related to transforming urban centres, intervention in urban parks, rehabilitation and construction of facilities, actions related to structuring the territory and the promotion of sustainable mobility. Secondly, they refer to the management of parks, with actions related to improving facilities and services in parks, projects and works for overall improvement, the Biodiversity Improvement Plan and the various studies

to identify new needs in this field. Thirdly, they refer to the management and maintenance of beaches, with actions for quality control, protection, maintenance and improvement of dune areas, and the drafting of strategies to halt the regression of beaches or strategic documents, such as the Biodiversity Improvement Plan. Finally, all these policies and actions are disseminated and promoted among the general public, through participatory projects, learning programmes in parks and beaches and other facilitating actions.

With regard to **river spaces,** actions are structured into three main fields: strategic planning, projects and works in specific areas of the hydrographic network and, as above, dissemination of these actions. Of particular note are the guidelines on AMB actions in the metropolitan section and environment of the River Llobregat, as well as the in-depth studies on the ecological, social and landscape values of the river (mainly studies on connectivity, biodiversity, vegetation and frequency).

With regard to **forest areas**, the most important actions involve improving forest management to increase the resilience of the territory, raising the value of forest products through the green economy, preserving and improving biodiversity to guarantee ecosystem services, and supporting and financing municipalities through programmes and projects (the Metropolitan Forest Action Management Programme has earmarked investment of €400,000/year).

The AMB is also responsible for Managing the **ring roads** to redistribute traffic coming from the high-capacity roads in the Barcelona conurbation. In this regard, the authority carries out conservation tasks and continuous improvement on this infrastructure.

Besides these fields of action, the AMB's territorial policies and actions also include **unique projects**, depending on needs and demands arising at specific points of the metropolitan area. The latest projects of this type carried out by the AMB include turning the C-245 from a road into an avenue, integrating the B-23 and the Avinguda Diagonal as far as the River Llobregat, converting the old national road N-150 into the new Avinguda del Vallès and the metropolitan strategy in the area of El Besòs.

Urban planning

In the field of urban planning, the AMB's actions fall into three main lines of work: integrated spatial planning, territorial studies and basic cartographic production.

With regard to **integrated territorial planning**, the AMB drafts important documents such as the PDUM, the Metropolitan Urban Development Plan (POUMet), projects and studies linked to these instruments and other current planning instruments, and their associated planning documents. It also provides technical and legal advice and cooperation on urban planning to the metropolitan municipalities.

In terms of **territorial studies**, its actions involve analysing the territory using thematic mapping, evaluating the territory through modelling and updating the consolidated planning map and urban planning regulations for the 36 metropolitan municipalities.

Finally, actions in **basic cartographic production** cover subjects as diverse as updating the metropolitan 1:1000 scale topographic map, monitoring the coastline, consolidating 3D cartographic production and using artificial intelligence as a support tool for cartographic production.

Housing

In the field of housing, the AMB has two main lines of action: the construction of new housing and the rehabilitation of the existing housing stock.

With regard to the **construction** of new housing, the AMB, through the Metropolitan Institute of Land Development and Asset Management, promotes the construction of subsidised housing, recognising it as a public good that individuals use and which benefits society as a whole. Over the last few years, it has built more than 6,000 dwellings in 127 developments in 33 metropolitan municipalities, under the threefold criterion of subsidised, decent, quality, sustainable and innovative housing; adaptable and

flexible housing and community; inclusive housing, designed with a gender perspective. In addition, the AMB has set up the company Habitatge Metròpolis Barcelona, with the aim of building affordable rental housing in the metropolitan area.

With regard to **rehabilitation**, the Metropolitan Housing Consortium, a public associative body made up of the AMB and the Generalitat de Catalunya, is the vehicle for actions in this field. To this end, the Metropolitan Housing Rehabilitation Plan 2020-2030 sets out the guidelines for increasing rehabilitation rates, including improvements in energy use and accessibility, boosting the economy and creating jobs at times of social and economic crisis, and helping to reduce urban segregation dynamics in the metropolitan territory.

Mobility and transport

Mobility and transport policies and actions are structured into six main areas: collective passenger transport, the taxi service, active mobility, mobility sustainability, parking management and mobility planning.

In terms of **public passenger transport**, policies and actions affect the bus and metro networks. The former includes both the lines operated by Transports Metropolitans de Barcelona (TMB), directly managed by the AMB, and those managed indirectly through various operators. In the latter case, the AMB is gradually assuming ownership and management of the services in its area of reference. In the case of

the metro, the service is managed by TMB. The AMB is also responsible for public transport subsidised tickets and passes in its area of reference (the T-Rosa pass and the Companion pass) and authorises certain types of discretionary services.

In the case of **taxis**, the AMB manages the urban taxi and private hire licence service in the metropolitan area of Barcelona, through the Metropolitan Taxi Institute (IMET), by establishing the regulations for providing these transport services. It also determines the disciplinary system applicable to this service. In this regard, its policies and actions are aimed at guaranteeing the service and quality of the fleet, establishing bus-stops and granting licences in order to achieve a balance between the interests of professionals, users and the public as a whole.

In the promotion of **active mobility**, the AMB mainly directs its efforts at the daily use of bicycles, from different perspectives. One of the most striking actions is the extension of the Bicivia metropolitan network,

designed to facilitate the use of this means of transport and make it safer and more friendly; this network, whose eventual length will be 550 km, is currently 67% complete. Safe on-street bicycle parking spaces are also promoted through the Bicibox service, present in 31 municipalities and providing almost 3,000 parking spaces. Finally, the AMBici public bike-sharing service, launched in 2023, covers 15 municipalities and provides 2,600 e-bikes for public use. In addition, work is also being carried out in the field of training, regulation and the visibility of promotional activities, among other actions.

There are two lines of actions to ensure **sustainability** in the mobility of traditional motor vehicles: reduction in the use of polluting and emission-generating vehicles, balanced by the promotion of mobility solutions enabling them to be replaced by more sustainable ones. Of particular note in the first of these lines is the implementation of the Barcelona ring roads low emissions zone (LEZ) in the central area of the metropolitan conurbation. In operation since 2020, it restricts vehicles within its boundaries based on their environmental sticker. Work is also being carried out on implementing local LEZs in different metropolitan municipalities. In the second of these lines, the AMB is making great efforts to install electric charging stations throughout the metropolitan area, with the aim of having more than one hundred in place by 2025. In addition, in 2024, it approved the metropolitan regulation for motorbike sharing, leading to the gradual introduction of this solution in eight municipalities.

With regard to the management of **parking**, park and ride car parks have been promoted at public transport access points throughout the metropolitan area. In addition, municipalities receive assistance in regulating and managing parking through the AMB Metropolitan Parking service, which provides digital apps to facilitate management. In addition, urban efficiency and coexistence is facilitated through the management of loading and unloading zones, with tools such as the SPRO app.

With regard to **mobility planning**, the PMMU 2019-2024, approved in 2020, establishes a mobility model and strategic objectives for the territory as a whole and defines sustainable mobility actions for the metropolitan area, which the AMB has to promote or execute. Specifically, the PMMU seeks to build a future mobility model based on four strategic pillars: minimising the effects of the transport system on public health; reducing the environmental impact and contribution to climate change of the transport system; improving the efficiency of the transport system to ensure economic and social progress; and promoting a fair mobility system that ensures access to public transport and social cohesion. The proposals in the plan are structured into six areas: urban model and metropolitan mobility networks; safe, healthy and equitable streets; inclusive, efficient and quality public transport; efficient and flexible governance of metropolitan mobility; smart mobility management; and promoting change in mobility behaviour. The AMB is already working on a draft of the new PMMU for the period 2025-2030.

Environment

In the field of environment, AMB policies and actions can be classified into four main categories: those related to the infrastructures and services needed to channel and address metabolic flows (water, waste and energy), and those related to climate.

With regard to the **water cycle**, the AMB plans its actions based on the PECIA, whose main objective is to analyse the complete water cycle in the metropolitan territory based on the criteria of quality, sustainability, resilience and efficiency. It aims to establish the strategic lines that guarantee the quantity and quality of water up to 2050, meticulously detailing the challenges it faces and the programmes to address them every four years.

In the case of **waste**, the Metropolitan Programme for the Prevention and Management of Municipal Resources and Waste 2019-2025 (PREMET25) defines the actions needed to guarantee compliance with the objectives of the circular economy in the field of waste in the metropolitan territory. The programme establishes a number of objectives related to prevention, selective collection, preparation for reuse, recycling, energy recovery and final treatment, aligned with the UN Sustainable Development Goals (SDGs). The results to date are: an average of 3,000 objects repaired each year; 175 kg of waste

recycled per inhabitant per year; 86 fixed and 38 mobile recycling points; three triage plants; and 11% of materials recovered at the four existing eco-parks.

In the field of **energy**, in addition to investing in electric charging stations, the AMB is actively working on the use of the roofs of public buildings to install photovoltaic panels for sustainable electricity generation as part of the energy transition.

The actions in the field of energy are part of the **climate action policy**, whose reference document is the Climate and Energy Plan 2030. Thus, in the field of the combating climate change, and following the EU's Climate Declaration and Covenant of Mayors for Climate and Energy, approved by the Metropolitan Council on 24 November 2015 and 26 April 2016, respectively, the AMB approved the above plan on 25 September 2018. It is conceived as a "plan of plans", incorporating three strategies with which the AMB has been fighting climate change for years: the Carbon Management Strategy, the Energy Transition Roadmap and the Climate Change Adaptation Plan. Actions include management strategies to minimise carbon emissions in companies and facilities, the creation of biosolar roofs, the establishment of climate shelters and public training and dissemination actions.

Social and economic development

In the field of social and economic development, AMB policy is structured along four main lines: talent management; support for companies and their reindustrialisation, innovation; and social cohesion.

With regard to **talent management**, the AMB seeks to ensure the metropolitan environment is prepared to attract and retain talent in metropolitan cities and their production sector, facilitate the development and improvement of professional profiles and changes in jobs, and empower people through professional and continuous training.

In terms of **support for companies** and their reindustrialisation, the aim is to promote a socially committed economy, from the perspective of so-called "inclusive capitalism", which is more environmentally and socially sustainable, as well as consolidating the business fabric, and promoting decarbonisation and knowledge transfer to industries and services.

In the field of **innovation**, the aim is to identify the role of artificial intelligence and its contribution to socio-economic revitalisation, to improve the level of digitisation throughout the territory beyond just technological tools, seeking a better understanding of the needs of the public, and improve the supply of public services aimed at reducing digital inequalities.

With regard to AMB actions to promote **social cohesion**, whose main tool is the Metropolitan Social Plan 2024-2027, the aim is to support the municipalities in coordinating mechanisms to address and tackle inequalities from a socio-economic dimension.

2.4.2. Land-use and urban planning instruments

As shown above, all of the AMB's sectoral policies and actions are accompanied by their reference territorial planning documents. However, territorial implementation of these actions requires urban planning that not only identifies the ideal location for each action, but also guarantees the coherence of all the actions while multiplying their impact.

Law 31/2010, of the Barcelona Metropolitan Area, establishes in Section III that "the integrated urban planning of the metropolitan territory is implemented through the Metropolitan Urban Master Plan and the Metropolitan Urban Development Plan". These are two general planning instruments that will replace current planning for the metropolitan municipalities, which dates back to 1976 for 27 of these municipalities and is only slightly more recent for the other nine municipalities.

As has been mentioned throughout this document, the PDUM is the basic document in terms of the contents of the AMB Urban Agenda, because it sets out the urban objectives and actions for the AMB, provides

the territorial basis on which to implement them and establishes a time frame. It has also been drawn up using the participatory methodology and the monitoring system that Agenda seeks to make widespread.

Thus, a description of the proposals in the PDUM will provide a much better understanding of the approach.

The PDUM territorial model

To guide the specific regulations in its proposals, the PDUM is based on a city model that integrates the needs and potential of the metropolitan territory with the expectations and objectives of the main stakeholders, taking into account how this matches and relates to the rest of the metropolitan region and Catalonia as a whole.

There are four **main areas that guide the proposals** in the PDUM to achieve this model of city:

— Preservation of functions and services in the metropolitan ecosystem to establish green infrastructure as the main determinant for urban development.

— The recovery of urban structures and continuities to shape a metropolitan city based on proximity and a human scale, providing greater balance and integration with open spaces while also cementing its role on the regional scale.

— The transformation of settlements in synergy with the urban structure, aimed at fostering resilience, redistribution of resources, citizen access and better quality of life.

— The ecological, social and technological transition of the coming decades in the metropolitan area to reduce environmental impacts, improve adaptation to climate change, increase reuse of resources and build a more sustainable economy.

The definition of these four areas stems from the five **premises** arising out of both the objectives of the PDUM and the conditioning factors established in the diagnosis:

Capacity: the PDUM is a supply plan. As we have seen, increases in population and jobs bring new demands on housing and space for activities. The PDUM aims to address this demand as far as possible through its proposals for urban settlements. However, it also proposes a limit to the urban growth such settlements might cause, given the aforementioned level of territorial saturation and the need to consider the environment, sustainability and territorial balance in its proposals. For this reason, without abandoning the objective of providing as many new dwellings and new areas for economic activity as possible, the PDUM is conceived as a supply plan: all development proposals will seek to meet existing

demand as far as possible, until this starts to hinder achievement of the plan's objectives of liveability and sustainability. This approach also benefits the municipalities in the rest of the metropolitan region, insofar as it allows them to increase their relative weight.

Re-use: development proposals should be based on land re-use. Setting a limit to the growth of the metropolitan area is not incompatible with efforts to satisfy, as far as possible, the potential demand for housing and space for activity over the coming decades. Given the limited possibilities of new development that does not affect environmental quality, most urban development operations must therefore involve intensifying and transforming the existing urban fabric. Therefore, the PDUM proposes an urban development model based not on growth and spread, but on the completion, intensification and transformation of the existing urban fabric and the development sectors set out in current urban planning.

Reprogramming uses and functions: land use must match the function of each space. To ensure a mixed and balanced territory, the PDUM identifies a number of metropolitan functions based on the uses that it foresees for each part of the territory and, consequently, the uses that should be protected, guaranteed or prohibited. The PDUM draws up a catalogue of uses and adapts the definitions and activities it includes, to establish a common framework that the future POUMet can specify through urban land classifications.

Functional areas: the functional areas of the metropolitan area need to be recognised and balanced. Overall, the proposals in the PDUM are designed to meet the needs and requirements of each location, from the building or land plot to the metropolitan area as a whole and, beyond that, its fit within the metropolitan region and Catalonia as a whole. This multi-scale approach has a particularly significant territorial scope of reference: functional areas. These are six groups of municipalities that serve as reference units for establishing supra-municipal day-to-day relations, due to their proximity, relief, accessibility and even similarity in their urban planning processes. The PDUM outlines six such groups: Llobregat Continu, Llobregat Delta, Vall Baixa i Ordal, Vallès, Nord and Barcelona. These are basic reference units that can be grouped according to specific needs, especially with regard to the area formed by the three areas of the urban continuum of the Barcelona plain.

Metropolitan region: the metropolitan region is an essential reference area for establishing relations and complementarities. The proposals in the PDUM are aimed at the 636 km^2 occupied by the 36 municipalities of the metropolitan area of Barcelona, but, logically, neither the causes leading to their formulation nor their impact are limited to this territorial area. This interrelation can be seen as a dialogue, but also as a form of complementarity. It is a means of guaranteeing that proposals for the metropolitan area are consistent with the existing or planned territory beyond its boundaries (e.g. delimitation of open spaces, dimensioning of settlements, continuity of road and rail networks), while also allocating uses and intensities based on the capacity and hierarchy of each site.

The proposals based on these premises and following the aforementioned areas represent the best alternatives among the approaches considered. Thus, three alternatives are provided, framed within the nodal model established by the PTMB and which match the general objectives of the PDUM. All three take into account the socio-demographic and economic aspects examined in the diagnosis, while offering several options for the location and intensity of urban developments. The main characteristics of the three alternatives are:

Alternative 1. Consolidation of urban continuities. This is the growth model that would involve transforming a large number of the industrial estates in the urban fabric into new residential neighbourhoods, to provide continuity for the most accessible areas of the metropolis and thereby consolidate the continuous residential city.

Alternative 2. Distributed intensification. This involves a distributive model of growth. Such growth would be distributed in proportion to the current situation of the urban fabric in each municipality and its role in the metropolis, enhancing its density while maintaining the main current uses.

Alternative 3. Focussed growth. This is based on a network of metropolitan centralities, through both the intensification of existing ones and the creation of new ones, located on both urban and non-developable land. This network, supplemented and reinforced by traditional local centres, would relocate a large proportion of the metropolitan activity and residential functions. In this regard, targeted growth makes it possible to locate points of urban intensification that facilitate better distribution of services throughout the metropolitan area.

Before the three alternatives, two **0 alternatives** are included, which consider both the current situation (0*a*) and the evolution of the main variables if current planning were to be maintained (0*b*).

Having assessed the alternatives for the settlement model, alternative 3, focused growth, is considered the most appropriate, as it most closely matches the objectives of the PDUM. Not only is it consistent with the aims of the PTMB, the alternative enables the establishment of functional, connected green infrastructure – being the option most conducive to meeting environmental goals – and it reinforces a diverse, balanced, polycentric model that eliminates the centre-periphery duality of the metropolitan region. It is also the option that offers the more positive land occupancy model to implement the proposed balance and centrality strategies for the functional areas of the metropolitan area.

Green infrastructure

Occupation of the metropolitan territory has led to the transformation of large tracts of land previously used for agricultural and forestry activities that also provided the habitat for numerous species. The degree and manner in which the urbanisation process has taken place has not only led to a drastic reduction in agricultural activity, also caused by the same dynamics affecting open spaces on non-developable land, but also to the loss of biodiversity, alterations to river courses, runoff areas and spaces for aquifer recharge, and particular degradation of the areas of contact between the agroforestry mosaic and urban areas. All these alterations have ultimately resulted in a loss of ecosystem services.

To reverse this situation, the PDUM proposes the development of green infrastructure as the structural basis for urban development, considering four main types of action: preservation of open spaces; recovery of agricultural activity; improving the complete water cycle; and establishing a network of urban greenery interconnected with its surroundings.

The approach to urban development in these aspects is strategic, aiming to create a system of natural and semi-natural spaces that are resilient to the effects of climate change, avoid risks and guarantee the provision of ecosystem services and improvements to the environmental conditions of the urban fabric and the quality of life of the metropolitan population. For this reason, the PDUM proposes a network that guarantees the preservation and improvement of the forest areas, the agricultural plain, the agroforestry mosaic and its connectors, and a number of river courses and spaces which, together with the coastal strip, make up the blue structure of the metropolitan area. In addition, the PDUM makes this green infrastructure more accessible to the general public through the network of paths, which is completed on urban land with metropolitan parks and green corridors.

This proposal is structured around the metropolitan green infrastructure, made up of elements with a variety of characteristics and urban planning treatment.

Open spaces. These are the areas of land of natural and agricultural interest that the PDUM preserves due to their key role in maintaining biodiversity, regulating the water cycle, mitigating and adapting to the effects of climate change, preventing natural hazards and providing locally-produced food. The PDUM classifies open spaces by function, into four main areas:

— **Core areas:** predominantly forest areas with high biodiversity and connectivity. They are detected by aggregating areas with the steepest slopes, the most inaccessible areas and those in which the habitats of greatest interest are concentrated, throughout the territory. The metropolitan core areas include the wetlands of the Llobregat Delta, El Garraf, Collserola and the Marina mountain range, Els Xaragalls del Vallès and the El Baix Mountains. They occupy a total of 21,234 ha, which the PDUM classifies as a zone.

— **Corridor connectors:** areas within highly fragmented environments that act as habitat corridors that foster ecological connectivity. As they are located in environments that are either urbanised or have significant amount of infrastructure, they require additional protection from disturbance to ensure functions such as pollination or seed dispersal between the core areas. The PDUM identifies four such corridors: the Montcada hill (Montcada i Reixac), the Pedrós de l'Obac hill (Sant Cugat del Vallès), the Gatxarella hill (Castellbisbal) and the open spaces between Can Fatjó dels Aurons and the Ferrussons stream (Cerdanyola del Vallès – Sant Cugat del Vallès), which occupy 332 ha and are classified as a system.

— **Agroforestry mosaic:** upland areas or areas outside floodplains with the greatest potential for agriculture in terms of slopes and accessibility, and their proximity to water. They occupy an area of 4,466 ha and the PDUM classifies them as zones.

— **Agricultural plain:** areas of alluvial and deltaic plains with the greatest potential for agriculture in relation to water availability. The PDUM promotes these areas with the aim of maintaining agricultural activity. This despite its relative limited weight in overall production, has become an asset of strategic importance for the metropolitan area and for achieving a model that moves towards food sovereignty. They are identified as areas on slopes of less than 3%, close to irrigation canals and WWTPs which do not affect areas with habitats of special interest. They occupy an area of 3,004 ha and the PDUM classifies them as zones.

The total area of open spaces (including transversal systems) thus covers 32,430 ha, 50.8% of the total surface area of the metropolitan area, and 4.21% more than the area classified as non-developable land in current planning. Through this approach, the PDUM is committed to counteracting negative dynamics in the territory (fragmentation, loss of agricultural land, degradation of edge areas) as a guarantee of a high-quality, diverse and resilient landscape.

The blue structure. This is the main structuring element in the metropolitan biophysical matrix. It is made up of systems such as river courses and the coastline that cross open spaces and urban land, as well as spaces involved in regulating the natural water cycle and the preserving ecological connectivity. Thus, the blue structure is one of the main pillars of the metropolitan green infrastructure, as adequate water management and regulation are essential for increasing adaptation to the already noticeable impacts of climate change and to enhance ecosystem services in the metropolitan territory. The proposed Plan defines seven elements for the blue structure:

— **Fluvial connectors:** consisting of the beds of the main river courses (the rivers Besòs, Llobregat and Ripoll) and their associated riverbanks, and the streams, torrents and natural springs that play a fundamental role in the correct functioning of the natural water cycle, the metropolitan landscape and minimising the danger of flooding. They provide a key contribution in the maintenance of biodiversity. Their boundaries are strictly determined by sectoral legislation. Fluvial connectors occupy a total of 1,383 ha and are classified as a system.

— **Coastal system:** this is made up of the metropolitan coastline, a fundamental element in shaping the morphodynamics of the coast and protection against erosion, as well as counteracting the effects of climate change. The PDUM defines the coastal system as comprising beaches, the coastline, and, more generally, all land included within the maritime-terrestrial public domain in accordance with current legislation and sectoral planning.

— **Urban blue areas:** these encompass the buried courses of the main streams and torrents that have been assimilated into the urban fabric. These areas, the surrounding land classified as road and open space and their subsoil play an important role in minimising urban flooding and in the infiltration of water into aquifers. The PDUM identifies their courses and adds an additional regulation to the surrounding road and open spaces which limits occupation of the subsoil, in order to guarantee its permeability and the feasibility of implementing rainwater regulation systems in urban areas.

— **Metropolitan canals:** these serve as the main channels for irrigation and drainage. They also have significant heritage value. Regulation of these areas aims to protect their water-based functions and enhance their heritage value.

— **Flood regulation areas of interest:** these are high drainage zones and areas where severe damage to people and property may occur. This is the area to which the main restrictions on urban and building use apply. The conditions of use established by sectoral legislation for preferential flow are applicable here.

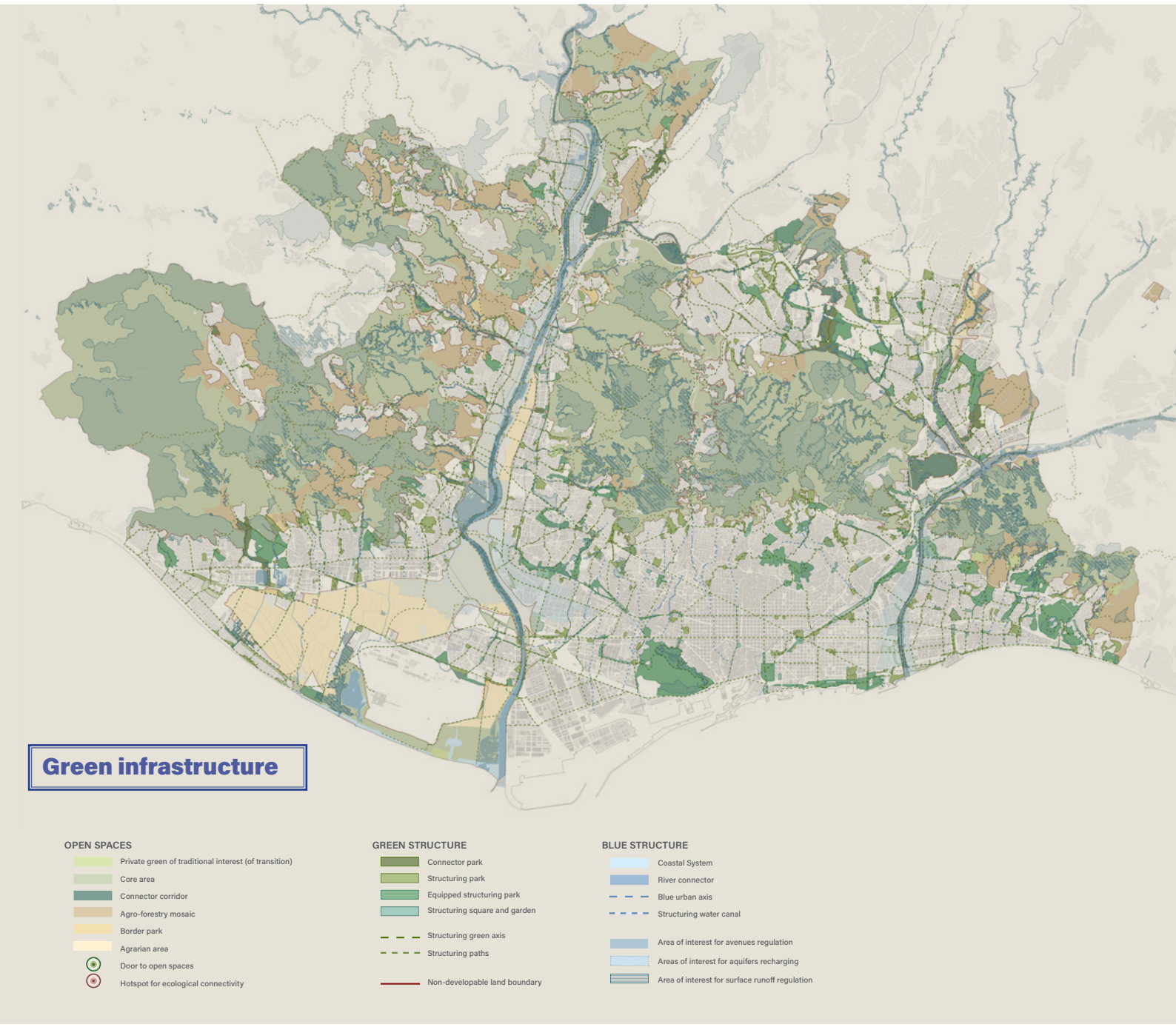
— **Aquifer recharge areas of interest:** low-lying catchment areas that can provide additional water to groundwater aquifers. These areas are covered by additional regulations on existing conditions of use, to ensure permitted uses, actions and buildings do not affect the permeability of the land.

— **Spaces of interest for surface runoff regulation:** upper areas of basins and riparian forests that reduce runoff speeds and minimise flood risk. The aim in these areas is to preserve forests and forest habitats that regulate runoff and prevent soil sealing or compaction. In these areas, additional regulations seek to ensure that the permitted uses, actions and buildings do not speed up rainwater surface runoff.

The green structure. This is the element of the metropolitan biophysical matrix provided for social use. It is made up of major metropolitan elements on urban land and open spaces such as green corridors, paths and open spaces, all of which form a network that structures the relationship between urban settlements and nature with both social and ecological functions. The main mission of the green structure, therefore, is to provide the necessary links between city and nature to make urban spaces healthier and more resilient to the effects of climate change. It also provides urban edges with environmental quality in the transition between the urban fabric and the undeveloped environment. To this end, the PDUM classifies open spaces that go beyond the municipal sphere and indicates the green routes formed by structuring green corridors and metropolitan paths. These elements are grouped into:

— **Structuring green corridors:** routes that link urban centres, parks and gateways to open spaces which, together with the structuring paths, form a network for active mobility in contact with nature. The green corridors are sequences of open spaces that link urban centres, structuring parks, facilities, interchange hubs and gateways to large natural parks of territorial interest with social and ecological value. They sometimes cover old surface runoff courses and may coexist with the road network or form part of routes within structuring parks. The PDUM identifies 869 km of green corridors in the metropolitan area and establishes planning conditions based on three structural elements for increasing environmental quality: soil permeability, the presence of vegetation and water regulation.

— **Pathways:** routes based on heritage paths that link the open spaces and connect to the green corridors of the urban settlements through the access gateways. The function of the metropolitan pathways is to facilitate and regulate leisure activities in the natural environment. The PDUM esta-



blishes the minimum conditions to ensure their proper functionality to support active mobility and accessibility.

— **Structuring free spaces:** spaces for public leisure and socialising that, due to their characteristics and position in contact with elements such as the blue structure and green corridors or metropolitan roads, develop ecosystemic functions and services that go beyond the municipal sphere. They occupy a total of 4,319 ha. At present, almost 65% of this surface area is already in public ownership, while 31% consists of land designated for public use within transformation sectors and areas that will contribute to completing the green structure and giving it continuity. With regard to urban planning standards, the PDUM identifies a total of 2,370 ha of structuring open spaces as general system spaces, which, added to the 775 ha of open spaces in current planning also considered general systems, fulfil the ratio of 20 m^2 of land per 100 m^2 of buildable land not included in planning sectors required by article 58.1.f of the Catalan Urban Planning Law.

In urban settlements, the PDUM defines four types of structuring open spaces: **structuring parks; structuring squares and gardens; structuring equipped parks; and connecting parks**. The open spaces system on urban land is integrated, on non-developable land, with **edge parks**.

Gateways to open spaces and ecological connectivity hotspots. In order to organise the transition between urban centres and open spaces while guaranteeing ecological connectivity and preserving the most sensitive environments of the urban edges, the PDUM proposes two specific elements:

— **Gateways to open spaces:** connection points between the green structure and open spaces. These are often areas of connection between green corridors and metropolitan roads or edge parks. The aim is to concentrate public use in the most accessible areas in a planned manner to free up the most sensitive spaces from disturbances associated with overcrowding. The gateways also provide an opportunity to manage and restore degraded edge areas, increase cultural ecosystem services and bring the public closer to open spaces.

— **Ecological connectivity hotspots:** areas where ecological connectors and urban or infrastructure barriers to this connectivity coincide. These are mainly the confluence of river connectors and roads or segregated high-capacity roads. The aim purpose of these hotspots is to preserve their environments from peri-urban uses that could exacerbate their fragmentation, and to serve as a guide for the progressive restoration of ecological connectivity through specific actions.

The PDUM determines uses allowed in open spaces to the gateways and hotspots, and establishes a minimum distance for from the gateways certain uses and a maximum distance from the hotspots to meet the objective of concentrating and freeing metropolitan edges from use, based on public use planning and the preservation of environmental values and connectivity.

2.4.3. Metropolitan Action Plan (PAM)

The Metropolitan Action Plan (PAM) is the document that guides the action of the metropolitan government. It sets out the strategic objectives that will guide actions in each four-year term of office and is drawn up on the basis of the Government Agreement established between the different political forces in the Metropolitan Government. The current PAM covers the 2024-2027 period after approval by the Metropolitan Council on 23 July 2024.

The lines of intervention and goals in the PAM 2024–2027 are aligned with the guiding principles and planned objectives for government action defined in the Government Agreement for the Barcelona Metropolitan Area signed on 25 July 2023. In addition, the specific actions included in each course of action are aligned with the United Nations SDGs.

The PAM sets out seven guiding principles for government action:

— Consolidating the construction of a territorially structured and socially cohesive metropolis within a framework of coexistence and security in which economic activity is the driving force for employment and well-being.

— Implementing a public housing policy based on land development, urban renewal and neighbourhood investment to expand the stock of affordable, quality housing.

— Preserving natural resources and metropolitan open spaces as part of a strategy to improve the ecological balance in the metropolitan area and meet the challenges arising from the climate emergency.

— Promoting sustainable and low-emission mobility.

— Developing new policies that favour citizens by consolidating the structure of the institution.

— Working to achieve a stable and sufficient funding system to provide metropolitan services, implementing the instruments established in Law 31/2010 and exploring and promoting new formulas. Completing the services and competencies set out in metropolitan law, especially those corresponding to urban planning, transport and mobility.

— Cooperating and coordinating with other territories and institutions on issues of common interest. Strengthening international presence and commitment to development cooperation.

The PAM sets out 38 programme objectives based on these guiding principles:

— Promoting a modern digital metropolis.
— Provisional approval of the PDUM
— Structuring the territory by implementing metropolitan-wide projects with a markedly municipal functionality.
— Implementing the Metropolitan Strategy in the Besòs area.
— Continuing and expanding actions that guarantee social development appropriate to the metropolis.
— Promoting the metropolitan social policy board.
— Developing investment plans and programmes in the institution's different areas.
— Consolidating the roll out and expansion of the Urban Planning Legality Protection Service.
— Refining the methodology for analysing actions.
— Incorporating the integrated security system.
— Strengthening the Metropolitan Economic Development Agency.
— Participating in implementing the new digitisation and artificial intelligence economy.
— Demanding a boost in the construction of large metropolitan infrastructures.
— Improving AMB representation in State management bodies that affect the metropolitan area.
— Facilitating access to housing to ensure decent housing for all.
— Complementing the metropolitan housing strategy.
— Continuing to boost policies for rental housing rehabilitation and development.
— Preserving, managing and completing metropolitan green infrastructure.
— Promoting a plan for coastline stabilisation and consolidating the metropolitan seafront promenade.
— Continuing strategies for the environmental and ecological recovery and renaturalisation of the River Besòs.
— Working to reduce the risk of forest fires through active land management.
— Consolidating the metropolitan healthy and sustainable food policy.
— Supporting energy transition policies.
— Developing the Metropolitan Waste Prevention Plan.
— Reviewing economic aspects of waste treatment.
— Studying the drinking water supply management model.
— Maintaining policies to increase the use of reclaimed water and groundwater and returning water to the natural environment.
— Making urgently needed investments in the maintenance, improvement and renewal of the water sanitation system.
— Drafting the new Metropolitan Plan for Urban Mobility (PMMU) 2025-2030.
— Reducing air and noise pollution caused by metropolitan mobility.
— Within the scope of the Metropolitan Transport Authority (ATM) and in line with the Government of Catalonia, promoting measures for the definitive implementation of the T-mobilitat system.
— Continuing to promote the AMB Mobility Council.
— Strengthening good governance and open government in accordance with the institution's service charters.
— Ensuring the economic sustainability of metropolitan services.
— Completing the transfer of the services and competences that the AMB Act grants this authority.
— Promoting cooperation and agreement.

— Promoting international cooperation projects.

— Promoting the metropolitan identity within the Barcelona brand and the internationalisation of the economy.

The PAM is structured thematically into the eight areas that make up the AMB: Territory and Administration; Water Cycle and Analysis of Metropolitan Policies; Mobility, Transport and Sustainability; Urban Planning Policies and Natural Areas; Climate Action and Metropolitan Strategic Agenda; Social and Economic Development; International Relations and Digital Metropolis; and Presidency. In each areas, a variable number of lines of intervention are identified and implemented, based on specific objectives. The 31 lines of intervention match several of the guiding principles and programme objectives described above.

As mentioned above, the PAM is a short-term, four-year strategic document, coinciding with the term of office. In this regard, it is essential to have an urban agenda that frames actions for a long-term strategy, to ensure coherence and maximise expected results.

2.4.4. Metropolitan Strategic Reflection

In 2015, the AMB Strategic Planning Area published the document *Metropolitan Strategic Reflection. Constructing Metropolitan Barcelona. Strengthening the Local World*. The aim of the document was to establish guidelines on metropolitan territorial development oriented towards the achieving six main objectives:

— Analysing and reflecting on the scenarios and strategies the AMB should promote in the medium and long terms (10-20 years).

— Promoting a metropolitan narrative appropriate to the new challenges in all aspects of the social, economic, political, environmental and institutional reality of the territory.

— Providing knowledge, methodologies and approaches from an innovative perspective aiming towards a model of citizen intelligence.

— Promoting measures for coordination, cooperation and interaction between the AMB's different sectoral plans arising from deployment of the AMB Law and the commitments established in the PAM.

— Providing support for research into the new governance models needed for the current and future institutional framework.

— Collaborating and cooperating with the public-private association Barcelona Metropolitan Strategic Plan, and with other initiatives of cross-cutting collaboration to help define and implement policies and actions of metropolitan interest.

To achieve these objectives, the Metropolitan Strategic Reflection established a number of areas and identified strategic priorities for each:

— **Area of social inclusion and the fight against poverty:**
  - Social inclusion, combating inequality and coexistence
  - Housing, neighbourhoods and the public space

— **Area of sustainable economic development:**
  - Productivity, reindustrialisation and the knowledge society
  - Increasing employment and human capital
  - Barcelona, capital status, attracting investment and international visibility
  - Economy, territory, governance and process improvement

— **Area of environmental sustainability:**
  - Combating climate change
  - Efficient resource use

— **Area of efficient mobility:**
  - Change in governance and improved funding
  - Global transport management
  - Network planning in a new framework of social and economic dynamics

— Area of cohesive territory:
  - Innovation in territorial intervention strategies
  - Renewal and adaptation of the legal structure
  - Redefining and adapting land uses

— Area of capital status and governance:
  - Capital leadership and innovation in governance

These areas and priorities give rise to 150 objectives and over 400 initiatives and projects for the AMB.

2.4.5. Metropolitan Urban Master Plan (PDUM)

The PDUM, together with the POUMet, are the planning tools established by Law 31/2010, of 3 August, of the Barcelona Metropolitan Area, to implement "the integrated urban development planning of the metropolitan territory". From 1953, when the first metropolitan-wide plan was approved, to 2010, when the Barcelona Metropolitan Territorial Plan was approved, with the Provincial Plan of 1959, the Master Plan of the Barcelona Metropolitan Area of 1966 and the Metropolitan General Plan of 1976 between them, the different plans vary in how they distinguish between urban planning and territorial planning, in their spatial areas of reference. Although their legal and even physical significance has varied, they have all had a major theoretical and conceptual influence. However, these plans fall short of meeting today's environmental, social and open space challenges.

The PDUM aims to depict a metropolitan urban development model spatially, with the initial premise of meeting the needs of the metropolitan population based on the capacities of the territory. This model is specified in 10 objectives that guide the regulatory determinations of the PDUM:

1. Reinforce metropolitan solidarity.
2. Enhance the metropolitan capital status.
3. Naturalise the territory by fostering the values of the biophysical matrix.
4. Improve the efficiency of the urban metabolism and minimise environmental impacts.
5. Articulate the territory based on a polycentric structure.
6. Promote active and sustainable mobility by rethinking metropolitan infrastructures.
7. Promote social cohesion through housing, the public space, facilities and public transport.
8. Restore and recycle the urban fabric.
9. Increase urban complexity and habitability.
10. Promote the competitiveness and sustainability of the metropolitan economy.

By implementing a new model of urban and territorial cohesion, the PDUM will guarantee clearly defined rules and priorities in urban and territorial development so that the wishes and demands of the various stakeholders involved are compatible. During the drafting phase, the PDUM will include a citizen participation process as a commitment to improving and envisaging different scenarios and challenges that the metropolis is likely to face in the medium and long terms. Promoting a framework in which the common territorial model and criteria for achieving quality neighbourhood environments can be jointly reconceived is key to improving nearby urban environments and preparing for situations such as pandemics.

In order to achieve its objectives, the PDUM, using urban planning regulations and planning maps, will establish: the classification of non-developable, developable and urban land; the classification of zones and systems on non-developable land; the allocation or layout of structuring urban systems of metropolitan interest; urban transformation actions of metropolitan interest, urban strategies, land functions and uses; the environmental guidelines and terrain recommendations, the common building standards and the general and specific instruments for implementing the Plan.

The PDUM coexists and is related to multiple regional, state and European sectoral planning tools that also affect the metropolitan area of Barcelona. These cover aspects related to housing, mobility, ports and airports, energy, sustainability and climate change, natural spaces, rural and agricultural development, waste management, the water cycle, and commercial, sporting and cultural facilities. Finally, it is also linked to other metropolitan area master urban development plans which, despite the difficulty of determining the exact degree of interrelation between them, will influence its provisions.

The Metropolitan Council initially approved this Plan on 21 March 2023.

2.4.6. Climate plan

The Climate and Energy Plan 2030, approved by the Metropolitan Council in 2018, includes three strategies: the Carbon Management Strategy, the Energy Transition Roadmap and the Climate Change Adaptation Plan.

The most important climate hazards that could affect the metropolitan area of Barcelona are: rising temperatures; lower average yearly precipitation; more extreme weather events; less water availability; more fires; rising sea levels; and greater impacts due to heat island effects and heat waves. If action is not taken soon, the average temperature in the metropolitan area of Barcelona could increase by 1.5 to 4 ºC and precipitation could decrease by 20% by the end of the 21st century, (compared to 1971-2000), depending on the scenario considered.

To meet these challenges, the Climate and Energy Plan has four main objectives:

1. Renaturalising to enhance resilience
2. Renewable energy
3. Climate justice
4. Metropolitan governance

To achieve these objectives, the Plan aims to increase green infrastructure by promoting green spaces, improve soil permeability, implement ecological regulation of the water cycle and intervene in areas vulnerable to heat island effects, among other strategies. The inclusion of comfort and energy efficiency criteria in building rehabilitation is also essential to ensure quality of life in indoor spaces. Beyond the strict boundaries of the city, the preservation of certain spaces such as the coastline, edge or interstitial areas, agricultural areas and even roofs and subsoil provide the territory with ecologically classified areas and environmental service providers.

The Plan also envisages the energy transition. This is a process of progressively replacing fossil energy with local, renewable energy, and changing the ways in which energy is produced, distributed, managed and consumed. Government authorities have a key role to play in fostering this transition. The AMB is moving towards a more decarbonised management of facilities and companies under its jurisdiction, with a total of 57 organisations that define their emission reduction targets. In terms of optimal resource use, considering the water-energy combination is fundamental, requiring an overview of the complete water cycle, greater resilience and promoting the use of local water resources, matching the source and treatment to the required quality and reducing dependence on other territories.

Without the strength of the general public, actions may prove to be ineffective or completely fail. Hence, the crux of the matter lies in engaging citizens in climate action. Training and education, together with the principles of climate justice, emerging issues such as the need for adaptation, providing energy management training and new forms of organisation, can all help to turn citizens into active agents for change.

Climate governance is often a forgotten aspect. From a metropolitan perspective, fostering and improving coordination with municipalities and other government authorities helps to optimise resources, share knowledge and increase reaction speeds by joining forces in the commitment to the climate.

The new challenges posed by climate change require new, fast-adapting governance if they are to be successfully tackled.

Bearing in mind the importance of tackling climate change, the AMB has also developed the Environment Sustainability Plan (PSA), which aims to promote joint development projects between local councils and the AMB. This will strengthen sustainable urban mobility policies and adapt them to new needs arising from COVID-19, as well as promote the transition and management of resources – such as water and energy – and municipal waste.

In designing this Environment Sustainability Plan, the AMB paid special attention to measures that contribute to achieving the UN SDGs and take into account the current climate emergency. This Plan has been earmarked a total €110 million, coming from loans arranged with various financial institutions. It is being rolled out through two programmes:

1. **PSA investment programme:** €100 million, incorporating AMB investments for municipalities, either directly or in cooperation with local councils. This programme will be implemented in 35 AMB municipalities, excluding Barcelona.

2. **The PSA projects and technical assistance programme:** €10 million to complement the AMB's direct work on projects with external technical tasks linked to PSA investments.

Thus, both the Climate and Energy Plan 2030 and the Environmental Sustainability Plan are highly significant for defining climate action and the AMB's Strategic Agenda in order to align it with the legislative changes the European Union is considering to tackle the following challenges: reducing greenhouse gas emissions; increasing renewable energy consumption and energy efficiency; tightening air quality thresholds; restoring biodiversity; and increasing separate collection.

2.4.7. Metropolitan Urban Mobility Plan (PMMU) 2019-2024

The PMMU 2019-2024 document sets out the strategy for the sustainable mobility of people and goods in the territory covering the 36 AMB municipalities. It is a new instrument arising from implementing Law 31/2010, of the Barcelona Metropolitan Area, and also from Law 9/2003, on mobility, regarding su-

pramunicipal urban mobility plans. However, the PMMU 2019-2024 is aligned with upper and lower-level planning and with environmental transport policies, i.e. the ATM Mobility Master Plan (pdM) and urban mobility plans for AMB municipalities.

The PMMU 2019-2024 provides a realistic outline for a metropolitan model of healthy, sustainable, efficient and equitable mobility, in line with the strategic principles that define socio-economic progress and habitability in today's metropolises. In this regard, the PMMU is based on four general assessment objectives and a set of socio-environmental assessment indicators. As well as reflecting the PMMU's integrative vision, these are in line with the objectives of the Strategic Environmental Assessment (SEA) and consistent with the main air quality and CO_2 emission targets in the UN SDGs.

The general objectives of the PMMU are:

1. **Health:** minimise the effects of mobility on public health.
2. **Sustainability:** reduce environmental impacts and mobility's contribution to climate change.
3. **Efficiency:** improve the efficiency of the transport system, while guaranteeing economic and social process progress.
4. **Equity:** promote a fair metropolitan mobility system that guarantees access to public transport and fosters social cohesion.

To ensure the objectives are implemented and fulfilled, the PMMU establishes 23 assessment indicators (calculated every three years) and 32 annual monitoring indicators. The latter show how the Plan is progressing, the effectiveness of the proposed measures and the effect of their application on the environment. The Plan proposes an annual monitoring report analysing the extent of implementation of the measures, providing details of the work and actions carried out and, as far as possible, making a qualitative and quantitative assessment. Active, systemic participation of stakeholders and government authorities with a degree of responsibility or involvement in the Plan was requested in drafting the plan, to provide a balanced assessment of the necessary information.

The PMMU was approved in 2020 by the Metropolitan Council.

2.4.8. Metropolitan Urban Mobility Plan (PMMU) 2025-2030

The Plan will establish the AMB's transport and sustainable mobility strategy and policies for this period. The PMMU is a planning instrument that aims to promote much-needed changes in urban mobility, based on criteria of sustainability, thereby improving the quality of life of citizens in the metropolis.

During the 2019-2024 period, the PMMU achieved a future model for mobility based on four strategic pillars:

1. **Health:** minimising the effects of the transport system on public health.
2. **Sustainability:** reducing environmental impacts and the contribution of the transport system to climate change.
3. **Efficiency and ICT:** improving the efficiency of the transport system, while guaranteeing economic and social progress.
4. **Equity, citizenship and governance:** promoting a fair metropolitan mobility system that guarantees access to public transport and fosters social cohesion.

The PMMU 2025-2030 will consolidate and present new proposals to solve the old and new challenges facing the metropolis: sustainability, health, equity and efficiency. It will provide the reference framework for a revision of the sustainable urban mobility plans produced by the 36 metropolitan municipalities.

The drafting of the PMMU 2025-2030 is accompanied by a process of citizen participation, dissemination and communication. This will inform all citizens of the metropolis and allow them to give their opi-

nion on the mobility model and strategy for the metropolitan territory for the coming years. The citizen participation process was launched in 2024.

2.4.9. Water Cycle Strategic Plan (PECIA)

The main objective of the PECIA is to analyse the complete water cycle in the metropolitan area in terms of quality, sustainability, resilience and efficiency. This will establish the strategic lines to guarantee the quantity and quality of water throughout the territory by 2050. The Plan was approved by the Metropolitan Council on 12 May 2022.

The Plan provides an overview of how the complete water cycle functions in the metropolitan area and analyses its current sources of supply, the various types of water demand, how the different systems relate to each other and how they are managed. It identifies interrelationships between these three branches, the constraints of each and synergies that could be established for the sustainability, resilience and efficiency throughout the cycle.

In this regard, the Plan is committed to actions that increase the reliability of the supply, improve governance and management, optimise available resources, promote the use of local resources, reduce environmental impact and improve the quality of water bodies.

The five challenges set by the Plan are: increasing supply security and enhancing system efficiency; improving the resilience of the water cycle; contributing to improving the quality of water bodies; adapting current systems to future needs; improving governance, management, knowledge and transparency. To meet these challenges, a total of 18 programmes have been defined, each setting out a total of 44 measures and 30 cross-cutting proposals.

2.4.10. AMB Internationalisation Plan 2021-2025

This plan aims to establish the international strategy for the institution as a whole and promote the metropolitan dimension, improve fund-raising for strategic projects and facilitate cooperation, innovation and knowledge transfer.

This is one of the first internationalisation plans implemented by a metropolitan authority. The Plan was approved by the Metropolitan Council on 27 July 2021, the drafting process having started in 2020 through a participatory process that gathered input from various metropolitan stakeholders: municipalities; the main economic and social stakeholders in the territory; and other strategic AMB partners.

Internationalisation helps promote more efficient and innovative public policies, creating more prosperous, cohesive and attractive urban territories, with high standards of quality of life and social well-being.

The main objectives of this Plan are to enhance the sustainability, competitiveness, innovation, quality and efficiency of the AMB policy and highlight its assets. To achieve these objectives, the Plan sets out to:

1. Influence the European and international political agendas to promote the interests, needs and aspirations of the AMB and its metropolis.
2. Contribute to transforming the production model and the social and territorial cohesion of the Barcelona metropolis.
3. Present the AMB as innovative, knowledge-oriented, value-based and open to the world.

2.4.11. Metropolitan Programme for the Prevention and Management of Municipal Resources and Waste (PREMET)

The Metropolitan Programme for the Prevention and Management of Municipal Resources and Waste 2019-2025 (PREMET25), approved by the Metropolitan Council on 31 July 2020, aims to create an action

strategy based on a governance model committed to reducing municipal waste, obtaining a recycling rate of 55% by 2025. This would achieve carbon neutrality of the metropolitan waste treatment system.

One of the notable elements of the initially approved Programme was the inclusion of environmental education services in the changes to the metropolitan waste collection and treatment system in order to meet European targets. In this regard, the knowledge acquired in recent years through the metropolitan programme of education for sustainability, Compartim un Futur (Let's Share the Future), is particularly important, providing educational material in different formats, adapted to different types of public.

2.4.12. Metropolitan Housing Rehabilitation Plan (PMRH)

The Plan, approved by the Metropolitan Council on 22 December 2020, aims to increase rehabilitation rates (including energy and accessibility improvements), boost the economy, create jobs in times of social and economic crisis and contribute to reducing the dynamics of urban segregation in the metropolitan territory. The Plan has a territorial scope of application covering the municipalities of the metropolitan area except Barcelona and, as a management instrument, the Metropolitan Housing Consortium (CMH).

The Plan is necessary because, within its territorial scope of application, there are 408,646 dwellings in buildings built before 1980. This makes the Barcelona metropolitan belt the territorial area with the third highest number of dwellings of this age in the country, exceeded only by the municipalities of Madrid and Barcelona. For this reason, although some of the instruments in the Plan will be available for much more recent buildings (built up to 2007), the Plan's diagnosis and strategies for more intensive public action prioritise buildings built before 1980.

The objective of the Plan is to guarantee an optimal level of homes' rehabilitation in the short and medium terms, thereby improving residents' living conditions. Improvements in safety, thermal insulation and accessibility.

To achieve its objectives, the Plan sets out a series of public support instruments for homeowners' associations to promote rehabilitation. However, the diagnosis in the Plan reveals the need to adapt these support instruments to economic conditions where they are applied. Thus, the Plan's four programmes (CMH1, CMH2, CMH3 and CMH4) are based on the combination of various homeowners' associations support mechanisms, and are implemented territorially according to their self-management capabilities.

They all include instruments to provide communication support, accompaniment, subsidies and funding for communities. However, the type of instrument varies: The lower a community's self-management capability, the more support mechanisms with greater public involvement are planned, on a gradient that aims to compensate for the initial territorial dysfunctions detected in the diagnosis. A fifth programme (CMH5) is specifically oriented towards single-family houses and a sixth (CMH6) includes mechanisms to support interior home renovation.

Some of these support mechanisms are thanks to the initiative of other government authorities, with which the CMH has established a fruitful dialogue. In the context of the metropolitan area of Barcelona, the dialogue has led to a set of initiatives, presented as integrated programmes to the homeowners' associations, which would otherwise have been independent strategies.

2.4.13. Territorial Cohesion Action Programme (PACTE) 2025-2028

On 30 April 2024 the Barcelona Metropolitan Area (AMB) Metropolitan Council approved the Metropolitan Action Plan (PAM) 2024-2027. The PAM sets out the priorities and actions for the current term of office and includes various investment plans and programmes favouring social and territorial cohesion for the metropolitan councils. During this term of office, the AMB will make an unprecedented effort involving a major rise in funding, providing a total of 423.15 million euros for municipal councils. This is €83 million more than in the 2019-2023 term of office, representing an increase of 25%.

The current context and the commitment to energy and digital transition require new, on-going policies for social and territorial cohesion, leaving no one behind, and taking corrective measures to adapt to social, economic and financial instability.

The main objectives of the PACTE are: sustainable urban development based on intervention in urban spaces; providing necessary public facilities; intervening in architectural heritage; promoting sustainable mobility; and improving urban services.

The types of project include:

— Transforming urban centres to make them more liveable.
— Rehabilitating or transforming facilities to improve their energy efficiency, digitisation, accessibility, habitability and conservation.
— Recovering, rehabilitating and digitising unused buildings for new public facilities.
— Heritage interventions to enhance the value of historical and cultural legacy.
— Constructing new public facilities to guarantee social cohesion in the territory.
— Promoting sustainable mobility and energy transition to help reduce emissions.
— Intervention in natural, coastal and forest areas to enhance their ecosystem services.
— Metropolitan territorial structuring by integrating major infrastructures.

The AMB executes these projects (studies, project drafting, tendering and works) directly and hands them over to the local councils.

The PACTE represents an overall average allocation of €88.59 per metropolitan inhabitant (excluding Barcelona).

2.4.14. Barcelona Metropolitan Strategic Plan (PEMB)

The PEMB is an instrument for identifying the needs and potential of the territory in the medium term, foreseeing trends and threats and making proposals to face the future in the best possible circumstances. The objectives of the PEMB are reflected in the approval of the metropolitan strategic plans. This is one of the oldest plans, approved by the Metropolitan Council in 2003.

It is currently promoting *Barcelona Demà*. *Compromís Metropolità 2030* (Barcelona Tomorrow. 2030 Metropolitan Commitment), the new strategic plan for the metropolis with 5 million inhabitants. The document marks a step forward in the strategies set out with respect to the trends identified in 2018 and identifies a number to key issues to discuss in drawing up the final document: a further slowdown in expected economic growth; new changes in the patterns of economic globalisation; an industrial and technological revolution that will lead to rapid digitisation; a turning point in the fight against climate change; a double demographic challenge linked to an ageing population and migratory movements; and a reflection on the 2020 and 2021 process.

2.4.15. Metropolitan Social Plan 2024-2027

Approved by the Metropolitan Council in 2024, the Metropolitan Social Plan marks the continuation of plans approved in previous terms of office and aims to leverage the economic, technical and material resources the AMB provides for local councils.

With this Plan, the AMB seeks to continue accompanying local councils in managing policies through two funding programmes with a strong social focus, which complement the Metropolitan Investment Plan:

— **The Metropolitan Plan to Support Municipal Social Policy 2024-2027,** which aims to help develop a more competitive, inclusive, cohesive, innovative and sustainable metropolitan territory, based on solidarity, cooperation and municipal impetus.

— **The Comprehensive Neighbourhood Programme to Improve Incomes 2025-2027,** which aims to improve social cohesion and incomes in the most vulnerable metropolitan neighbourhoods.

2.4.16. Collserola Range Protection Plan (PEPNat)

The AMB drafted and processed this Plan up to its provisional approval on 30 April 2019, within a broad governance and consensus framework. The Plan aims to guarantee the maximum protection and conservation of a natural space of great importance. Its main structural and transversal component is an ecological strategy, based on improving biodiversity and enhancing ecosystem services, which defines a park model in six areas:

— **Preservation and enhancement of environmental values**. It is committed to ensuring maximum protection of the entire park with proposals based on four strategic ideas: improving connectivity, conserving ecologically valuable features, controlling disturbance and promoting the green economy.

— **Raising the value of natural resources.** With the aim of promoting the agroforestry mosaic and the green economy, the PEPNat is based on co-responsibility and co-management as elements of active conservation of the natural space and involves landowners in its management. Currently, 60% of the land is privately owned.

— **Infrastructure and services**. The aim is to minimise the occupation and fragmentation of open spaces in Collserola. The barrier effect caused by infrastructures such as roads, railway lines and energy transport facilities is reduced by strengthening and adapting wildlife crossings at strategic points, such as the Vallvidrera river bed and the Batzacs stream.

— **Functional space**. A transitional space is created between natural and urban areas, which regulates the dynamics of the natural space: activities and uses are concentrated in these "edge spaces". The aim is to move the range of activities on offer, such as leisure areas, to outside the park. The new plan also aims to improve the integration of the Collserola hills into the metropolitan green infrastructure, seeking synergy between natural spaces and urban areas and making recreational uses compatible with the preservation of natural values.

— **Public use**. A basic network for public use is defined on the basis of the existing infrastructure with the aim of promoting the park as a space for health, well-being and knowledge. This network concentrates activities in certain spaces and paths, preferably located at the edges of the Park, thereby preventing the dispersal of visitors.

— **Architectural heritage**. No new buildings are allowed and the project is committed to the maintenance and improvement of the existing architectural, historical and cultural heritage, through the catalogue of farmhouses and cultural heritage inventory. Demolition of illegally erected buildings is planned.

2.4.17. Metropolitan General Plan (PGM)

The PGM is an urban planning tool that regulates lands uses and spatial organisation across the metropolitan territory formerly pertaining to the Barcelona Metropolitan Municipal Corporation (EMMB), which included a total of 27 municipalities. Adopted in 1976, it has been used the political powers, economic stakeholders and civil society to modernise the metropolis and its complex territorial system, facilitating the construction of today's city, a metropolis of cities with major relevance in Europe.

The PGM, with all its modifications, is a plan that, even today, focuses on the occupation of new spaces for urban growth and providing infrastructures and services. Throughout its implementation, it has shaped an urban culture that has brought untold benefits to the territory and its citizens. Nevertheless, it needs to be redefined to adapt it to current urban, environmental, social and economic needs, and new technological demands.

3 Action plan

3.1. LINES OF ACTION AND OBJECTIVES

The AMB Urban Agenda identifies four main lines of action for the planning and development of its objectives:

Line of action 1 - Social and economic

Line of action 2 - Environmental

Line of action 3 - Territorial

Line of action 4 - Strategic

3.1.1. Line of action 1 - Social and economic. Objectives

L.1.1. Improving the living conditions of the population

The last economic recession interrupted and even reversed a lengthy period of improvement in the living conditions of the population. The scale of global economic trends has had such profound effects on the metropolitan population that public authorities have been forced to seek actions to restore employment and income levels, as well as improving the quality of the environment and ensuring territorial equity and equal opportunities in access to metropolitan public services.

The actions of the AMB must focus on improving the living conditions of the population through more socially and economically committed development. This involves actions aimed at mitigating and reducing the impact of situations of vulnerability, while promoting economic activity and fostering employment and training opportunities, ensuring adequate provision of facilities and improvements to the public space.

L.1.2. Strengthening social cohesion and assisting groups with specific needs

In addition to the deterioration in living conditions for a large part of the population, the economic recession and subsequent recovery have tended to widen inequalities between different social groups. Thus, the counterpart to the progressive concentration of wealth in smaller and smaller segments of

society is the loss of purchasing power and even impoverishment of the least well-off. More significantly, this financial inequality is mirrored in other elements that are crucial to ensuring equity throughout the population, such as origin, gender and age.

Apart from policies specifically aimed at housing problems, the AMB must help combat vulnerability and social exclusion and develop and build a territorially structured and socially cohesive metropolis based on coexistence and security, in which economic activity is the driving force for employment and well-being. It must therefore essential to implement actions to reduce segregation and social inequalities by providing services and facilities aimed at specific groups and, above all, by incorporating perspectives that take into account the diversity of social needs into all its policies and actions. Income inequality will be central to defining these policies, but it cannot be the only variable in assisting a population often disadvantaged by other causes of injustice and discrimination.

L.1.3. Ensuring housing access and stability

In recent years, increasingly large swathes of the metropolitan population have been affected by their inability to access housing and, even for those who managed to do so in the past, by the inability to remain in it. This is a problem with a diverse and complex nature, involving factors ranging from the arrival of large numbers of migrants with little income to the loss of part of the housing supply and the resulting rise in prices caused by competition with other actors and even other non-permanent residential uses.

Addressing the lack of affordable housing involves complementary, multidisciplinary policies requiring coordination between urban and sectoral planning with actions capable of delivering concrete assistance to the population. In this regard, the AMB has a variety of powers and proximity to everyday reality thanks to its status as a local authority. This means it is ideally positioned to implement housing policies that meet the current challenges affecting increasingly large segments of the population.

3.1.2. Line of action 2 - Environmental. Objectives

L.2.1. Naturalising the territory and fostering the values of the biophysical matrix

Land transformation has often led to the abandonment of values related to the environment and terrain. Territorial and urban planning has tended to compensate for the progressive denaturalisation of the places where we live by creating green areas distributed throughout the territory, as permitted by existing possibilities and resources. But it has often lacked a systemic approach that considers the role these spaces should play in our cities, along with their own needs, to maintain and enhance the values of the biophysical matrix.

The AMB must promote the naturalisation and restoration of its territory, based on the protection of the large agricultural and forest areas in the metropolitan area. It also requires a conception of urban open

L.2.3. Mitigating and adapting to climate change

What until recently were predictions – but are now evidence – of the effects of climate change in the Mediterranean in general, and in the metropolitan area of Barcelona in particular, show drastic alterations to temperature and rainfall patterns that will have a significant direct impact on the environment and people's health and wellbeing. In this new scenario, not only is the average temperature increasing, but also extreme heat events are becoming more frequent. At the same time, annual rainfall is decreasing, concentrated in fewer episodes with high volumes, interspersed with long periods of drought.

The AMB must address the effects of climate change through measures that favour the agroforestry mosaic, management of natural areas and preservation of natural heritage. This must involve preventing the occupation of areas vulnerable to natural and technological hazards, promoting adaptation of buildings to new climate conditions, creating cooler urban environments and ensuring long-term preservation of the coastline.

3.1.3. Line of action 3 - Territorial. Objectives

L.3.1. Organising the territory through a polycentric structure that facilitates sustainable mobility

Metropolitan urban development has been determined by numerous pressures and demands, in which the urban fabric and network of infrastructure have not always suited the criteria for metropolitan-scale organisation. This has not only resulted in notable functional and morphological deficiencies in some urban areas, but also a mobility model based on the proliferation of individual motorised transport to overcome these difficulties. This has had a major physical, functional and environmental impact on the territory and the metropolitan population.

The AMB must continue to combine mobility and spatial planning policies aimed at providing the metropolitan area with a polycentric structure (or enhancing the existing one). Such a structure should be based on nodes of varying scope and intensity, close to the surrounding urban fabric and structured through a network of metropolitan roads and green corridors, matching its hierarchy. This should ensure the proximity and efficiency of services and facilities that facilitate the organisation of territorial flows based on a clear prioritisation of public transport and active mobility.

L.3.2. Increasing urban complexity and habitability

The separation of uses in much of the urban fabric in the metropolitan area is sometimes the result of excessively rigid planning, producing a city model that does not match the population's way of living and working. Many of the population's daily journeys are a result of this functional specialisation and imbalances between residential uses and activities. The infrastructure needed to sustain such mobility, most particularly private vehicles, has thus occupied an increasing amount of space, reducing the habitability of cities to the detriment of collective uses, green spaces and active mobility.

The PDUM must guarantee the functional complexity and habitability of the urban fabric to balance the ratio between residential and activity uses by regulating the distribution and proportion of uses. This would allow the population to satisfy their needs locally, rather than at a distance. To the hybridisation of residential uses and activities must be added facilities, urban greenery, energy production and other functions that increase functionality and urban habitability.

L.3.3. Restoring and recycling the urban fabric

In the last 50 years, urban land in the metropolitan area of Barcelona has tripled in size, often following an occupation model based on dispersion and low density. This model not only jeopardises the safeguarding of the ecological functions of open spaces and environmental sustainability, but also threatens the functionality of metropolitan relations.

AMB policies and actions must consider land as a scarce and precious asset and work on the existing urban fabric to increase its quality and efficiency, through rehabilitation and recycling, and to raise the value of the urban heritage. In the same spirit, it must also seek to regenerate obsolete areas, recover areas occupied by inappropriate uses, foster permanent residential use, take advantage of disused areas and structure the urban fabric to create environments that encourage walking, active mobility, social relationships, social interaction and access to green spaces.

3.1.4. Line of action 4 - Strategic. Objectives

L.4.1. Enhancing the metropolitan capital status

Historically, the strategic location of the Barcelona area has given it a leading role in relation to Catalonia as a whole, making it the centre not only of the metropolitan region, but also of the country. Recently, the dynamics of globalisation have added new links to this capital status on a local scale, representing a re-dimensioning of the reference territory of the metropolitan area of Barcelona.

The AMB must bolster this metropolitan capital status by reinforcing the Barcelona area's historical role as the backbone of the metropolitan region and the capital of Catalonia, and extending this into the international system of cities based on its characteristics and values as a Mediterranean metropolis.

L.4.2. Reinforcing metropolitan solidarity

Insofar as many of the problems and needs of the municipalities spread beyond their territorial scope, it is essential to tackle them through a metropolitan perspective capable of satisfying individual interests while looking after global ones.

Along with specific actions and instruments to ensure the equitable distribution of resources, the AMB must promote an urban and spatial planning policy that also incorporates the socio-economic dimension, to address the risk of exclusion. This would favour the generation of opportunities for social and economic development and reduce differences between the different parts of its territory.

L.4.3. Promoting the competitiveness and sustainability of the metropolitan economy

The constant process of internationalisation and the increasingly rapid nature of processes for exchanging information have increased the demand and its variability, and have forced production and services activities to engage in restructuring and become more flexible in order to be competitive. At the same time, specific local characteristics are increasingly important in this scenario of internationalisation, which tends to make places uniform.

The AMB's urban actions must ensure the physical conditions and infrastructure necessary for diverse economic activities capable of adapting over time, and also urban and social environments that can take advantage of synergies, the personality of local products, the strength of local networks and the benefits provided by neighbourhood ties. This not only favours local communities and reduces the environmental externalities of production, but also gives the metropolis an element of qualitative competitiveness, which is essential in a globalised context.

4 Challenges

The challenges in the AMB Urban Agenda are described under the eight headingsbelow:

—The biophysical matrix
—Residential fabric and housing
—Areas of economic activity
—Facilities
—Mobility spaces and infrastructures
—Metabolic flows
—Social and economic development
—Management and governance.

These are also linked to the Agenda's areas and objectives (as stated in chapter 3) and to the AMB strategic documents (described in section 2.4) and are related to the strategic objectives of the Spanish Urban Agenda.

LINES OF ACTION AND OBJECTIVES OF THE AMB URBAN AGENDA

LINES OF ACTION	OBJECTIVES	
1. SOCIAL AND ECONOMIC	L.1.1.	Improving the living conditions of the population
	L.1.2.	Strengthening social cohesion and assisting groups with specific needs
	L.1.3.	Ensuring housing access and stability
2. ENVIRONMENTAL	L.2.1.	Naturalising the territory by fostering the values of the biophysical matrix
	L.2.2.	Improve the efficiency of the urban metabolism and minimise environmental impacts
	L.2.3.	Mitigating and adapting to climate change
3. TERRITORIAL	L.3.1.	Organising the territory through a polycentric structure that facilitates sustainable mobility
	L.3.2.	Increase urban complexity and habitability
	L.3.3.	Restore and recycle urban fabrics
4. STRATEGIC	L.4.1.	Enhance the metropolitan capital status
	L.4.2.	Reinforce metropolitan solidarity
	L.4.3.	Promote the competitiveness and sustainability of the metropolitan economy

AMB STRATEGIC DOCUMENTS

PAM	Metropolitan Action Plan
REM	Metropolitan Strategic Reflection
PDUM	Metropolitan Urban Master Plan
PCLIMA	Climate Plan
PMMU	Metropolitan Urban Mobility Plan 2019-2024 and 2025-2030
PECIA	Water Cycle Strategic Plan
PINTL	AMB Internationalisation Plan 2021-2025
PREMET	Metropolitan Programme for the Prevention and Management of Municipal Resources and Waste
PMRH	Metropolitan Housing Rehabilitation Plan
PACTE	Territorial Cohesion Actions Programme
PEMB	Barcelona Metropolitan Strategic Plan
PSM	Metropolitan Social Plan 2024-2027
PEPNat	Collserola Special Protection Plan (PEPNat)
PGM	Metropolitan General Plan

STRATEGIC OBJECTIVES OF THE SPANISH URBAN AGENDA

SO 1	Implementation of planning tools to make a rational use of land, keeping and protecting natural resources
SO 2	Avoiding urban sprawl and revitalising the existing city
SO 3	Prevention and reduction of climate change impacts and improvement of resilience in towns and cities
SO 4	Sustainable management of resources and promotion of the circular economy
SO 5	Fostering the proximity and sustainable mobility
SO 6	Enhancing social cohesion and looking for equity
SO 7	Promoting and encouraging the urban economy
SO 8	Ensuring access to housing
SO 9	Leading and promoting digital innovation
SO10	Improving intervention instruments and governance

4.1. THE BIOPHYSICAL MATRIX

4.1.1. Ensuring the natural water cycle by preserving key sites

Description of the challenge

Ensuring the natural water cycle enables key areas such as surface runoff, infiltration areas, wetlands and aquifer recharge areas to be preserved.

Preservation of these areas and their functionality guarantees both the quality and the continuity of the habitats and, therefore, the associated biodiversity. In this regard, river systems and streams need to be considered benchmark elements when detecting areas for preservation or restoration. In addition, actions related to risks stemming from climate change, such as flooding of watercourses and erosion of coastal areas, need to be included in this strategy.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆		◆							◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆		◆	◆						

4.1.2. Preserving the least transformed natural areas

Description of the challenge

Besides sectoral protection based on different environmental protection instruments (PEIN, XN2000, LIC, ZEPA, RNP, etc.), the network of areas of natural interest need to be specified and extended in terms of urban planning, and the actions for restoring degraded areas that currently threaten their functionality need to be specified.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆		◆	◆	◆								◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆	◆							

4.1.3. Promoting agricultural areas and their activities

Description of the challenge

The metropolitan area still maintains strategic professional agricultural activity for the production of local food and the preservation of metropolitan ecosystems. Quality agricultural production in these areas must be maintained and promoted, to preserve the values of the territorial matrix, guarantee the sustainable development of the activity and complement it in line with the possibilities of the territory.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆	◆		◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆		◆		◆								◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆	◆	◆						

4.1.4. Raising the value of the agroforestry mosaic

Description of the challenge

Maintaining the complexity of the Mediterranean landscape – which contains areas of high biodiversity and internal connectivity and others characterised by primary activities that interact with the environment – requires combining agricultural practices with forestry. This favours the biodiversity of the biophysical matrix as a whole, the resilience of the territory to natural risks and the effects of climate change, and food production.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆	◆			◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
			◆									◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆		◆	◆						

4.1.5. Enhancing the significance of metropolitan natural and agricultural areas in terms of identity

Description of the challenge

The 42 km of metropolitan beaches, the Llobregat and Besòs River Parks, the Collserola Natural Park and El Baix Llobregat Agricultural Park are different areas of the biophysical matrix which are not only covered by supra-municipal management and coordination instruments, but are also socially recognised and have a significance for the population in terms of identity. This value must be protected, in both these areas and others with the same potential and whose identity is greater due to their proximity to the population.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆	◆						

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
		◆	◆									◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆	◆							

4.1.6. Enhancing the unifying role of the coastline, rivers, streams and historic roads

Description of the challenge

The coastline, rivers, streams and historic roads are the key elements for preserving the ecological functions of the biophysical matrix and linking the different parts of the territory socially, in accordance with their geographical characteristics and their heritage values. For this reason, their structuring function should be strengthened in areas where it has been severely damaged.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆			◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆		◆							◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆		◆	◆						

4.1.7. Planning and regenerating urban areas

Description of the challenge

To overcome fragmentation and thus improve the ecological functionality of the biophysical matrix and reconnect urban settlements with natural and agricultural spaces, special attention needs to be paid to the regulation of peri-urban uses, concentrating activities where they are most accessible and freeing up the most ecologically fragile spaces. Ecological and social continuity need to be restored by allocating space for both functions and anticipating specific actions that strategically resolve fragmentation caused by physical barriers.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆			◆	◆			◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
		◆	◆						◆			◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆			◆					

4.1.8. Reconnecting urban settlements with natural and agricultural areas

Description of the challenge

The evolution of settlements has often neglected the relationship with nature. In this sense, high-quality green spaces must be integrated into the urban fabric, paying special attention to metropolitan parks that socially and ecologically unite cities with their natural environment. At the same time, it is essential to redefine the relationship of settlements with the environment, paying special attention to green connections between urban centres and large open spaces, rivers and the coast.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆			◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆									◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆	◆	◆						

4.1.9. Structuring urban public spaces, parks and quality civic spaces

Description of the challenge

These areas, which are the result of a long tradition of planning, design and management, can form chains of green and civic spaces that reach into neighbourhoods from the most central and representative areas of the cities to provide habitability and urban quality. It is essential to link the green structure to the main facilities and intermodal junctions, so that open green spaces, besides the benefits associated with regulating the urban environment, also provide the basis for active mobility and social cohesion in healthy environments.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆						◆	◆		◆	◆

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
	◆		◆		◆				

4.1.10. Responding to social demands in terms of the quality of green spaces and habitability

Description of the challenge

Urban open spaces need to be reconsidered as a continuous system, interconnected with nature, to maximise its ecosystem services for urban settlements. A regulation that prioritises green spaces, permeability and sustainable water management must be addressed at every scale and in every urban element as the basis for the naturalisation of urban settlements.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆						◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆	◆	◆						

4.2. RESIDENTIAL FABRIC AND HOUSING

4.2.1. Reducing functional specialisation at the local and metropolitan levels

Description of the challenge

The distribution of residential uses and activities has not always followed the same pattern, leading to frequent functional specialisation of the urban fabric. This specialisation not only impoverishes life in areas that are exclusively residential for a large part of the day, but also forces people to travel long distances to work, study and meet their daily needs. Therefore, although the central environment of the metropolitan area should maintain a specialised character that concentrates high-hierarchy activities that require high accessibility, excessive imbalance between residential uses and activities must be tackled, guaranteeing the presence of local commerce in order to avoid food deserts, both in residential areas and in the municipalities and the metropolitan area as a whole.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆					◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆				◆			◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.2. Maintaining and enhancing the density and compactness of the residential fabric

Description of the challenge

The process of land occupation in the metropolitan area, determined by the structural characteristics of the terrain, has resulted in a relatively high population density (51 inhabitants per gross hectare and 219 inhabitants per residential hectare). This density, in addition to entailing lower land consumption, makes it possible in most cases to obtain a sufficient critical mass to efficiently meet the demands of public transport and facilities. However, the fact that almost a fifth of metropolitan housing is located in excessively dense environments while 41.2% of the residential surface area is occupied by isolated buildings means the physical intensity of much urban fabric needs correcting, promoting decongestion in some cases and intensity in others, to obtain a balance between habitability and efficiency.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆	◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆			◆		◆		◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.3. Promoting dense urban fabric in locations with good access to public transport

Description of the challenge

Low usage levels of public transport may be caused by insufficient critical mass of potential users – making its supply infeasible or inefficient – but also by low take-up of the supply, as it is located in sparsely populated areas. For this reason, planning should consider points of confluence between existing and planned public transport infrastructure and services to promote higher residential densities and thus maximise coverage of as much of the potential public transport-using population as possible.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
		◆			◆	◆	◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆		◆		◆		◆	◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.4. Improving physical integration

Description of the challenge

The sometimes uncoordinated development of urban settlements and the duplication of numerous infrastructures have often led to fragmentation, affecting not only the residential fabric but also open spaces. In this sense, planning needs to overcome disruptions caused by mobility infrastructures, interactions in urban fabric with very different functions and the friction zones of isolated fabric in contact with open spaces.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆	◆					

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.5. Complementing the urban fabric to bridge discontinuities

Description of the challenge

Another type of fragmentation to the urban fabric is caused by discontinuities, i.e. spaces that have not been integrated into the development processes of their surroundings and have been left as urban voids. Such gaps need to be filled, taking into account the double benefit of their potential to satisfy future demand for housing and facilities and the capacity to repair currently fragmented fabric.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆					◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆						◆	◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆			◆	◆		◆		

4.2.6. Promoting transformation of the urban fabric

Description of the challenge

Much residential fabric, as well as many areas of activity, have an excess or deficit in physical intensity or a degree of obsolescence in the uses for which they were originally intended. Such inadequacy in some of the urban fabric and the scarcity of remaining land in the metropolitan area of Barcelona call for an urban settlement development model based on transformation of the existing fabric and limiting new growth in areas, with the aim of completing the fabric. This transformation does not seek convert industrial land into residential land, but involves implementing a model based on a mix of uses. Moreover, this complexity should guarantee the maintenance of the pre-existing production fabric in the city.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆					◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆						◆	◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆		◆		◆		◆		

4.2.7. Structuring scattered and low-density urban fabric through micro-centralities

Description of the challenge

The more than 5,000 ha of residential areas made up of detached buildings (41.2% of residential land) in the metropolitan area offer residents much better proximity to large open spaces and availability of private space than the denser areas of urban centres. However, dispersal and low density make it difficult to locate accessible basic services and facilities. For this reason, these areas need to be provided with spaces of centrality that concentrate public and private facilities and services and serve as structuring junctions for public transport and modal interchange, while allowing greater residential intensity than in the surroundings.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆				◆	◆				◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.8. Improving the environmental quality of the urban fabric

Description of the challenge

Fifteen percent of dwellings in the metropolitan area of Barcelona are exposed to very high levels of noise and air pollution due to their proximity to busy roads. In addition, much of the fabric suffers from the harmful heat island effect, exacerbated by the effects of climate change. Added to these factors is the obsolescence of a significant portion of the housing stock, due to shortcomings in rehabilitation, both in terms of structural problems and deficiencies in the building envelope. Therefore, these areas need to be redeveloped to improve the bioclimatic conditions and energy efficiency of the residential fabric and to increase their energy self-sufficiency and reuse of water and materials.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆	◆	◆	◆			◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.9. Improving the conditions of the public space

Description of the challenge

In addition to the deficiencies in the residential fabric as a whole, there are further deficiencies in the public space and road system. Problems in such spaces include the condition of urbanised areas, the provision of urban services and supply infrastructures and competition between pedestrians and motor vehicles. For this reason, planning is required to resolve functional aspects that hinder use and enjoyment of the public space, improve accessibility to services and facilities, guarantee pedestrian safety and implement calming measures for coexistence with private vehicles.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.10. Combating social segregation

Description of the challenge

Despite efforts made by the various governments in recent years, poverty, difficulties in accessing stable housing and many other manifestations of social inequalities have worsened over the last few years due to economic crises, the liberalisation of markets for basic goods and services and the arrival of large numbers of migrants in search of a better life. To prevent differences in people's income levels from being reflected in the territory in the form of social segregation, planning must establish comprehensive action programmes with measures to meet essential needs in areas with the largest concentrations of disadvantaged population. At the same time, it should aim to prevent such concentrations, which are often the indirect result of gentrification or intangible processes in more affluent areas.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.11. Adapting facilities to the needs of local residents

Description of the challenge

Social cohesion requires overcoming differences in facilities, open space and housing. Although nowadays most of the metropolitan population has local access to all basic facilities, especially in the continuous city, it is not always coherently structured or synergic with supramunicipal public spaces. Furthermore, low density does not and cannot meet proximity criteria, so services need to be shared between sub-systems or municipalities. However, such measures must be accompanied by a digital network to complement services and facilities. Whatever the case, urban planning must guarantee that basic services for the resident and working population promote the cohesion of the neighbourhood, in keeping with the main function of its urban fabric. In this sense, in addition to structuring a network of public facilities and spaces that provide basic physical and digital services in proximity or jointly, a supply of housing must be guaranteed whose type and system adapts to the demands and needs of the population and the characteristics of the territory.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
			◆	◆	◆			◆	◆

4.2.12. Meeting housing needs based on future population demands

Description of the challenge

Projected trends in population and households show that, between 2021 and 2050, the metropolitan area of Barcelona will have the capacity to create a net balance of 217,000 new households. Moreover, these households will be significantly different from current ones, in terms of both the number and characteristics of their members. Meeting this demand and ensuring the population can access the housing meant to accommodate it requires urban planning that quantifies and identifies potential locations for new housing based on the capacities of the municipalities and functional logics.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.13. Addressing the deficit in affordable and social housing

Description of the challenge

Lack of social housing in a period of rental and purchase prices completely unaffordable to most the population has removed large sections of the population from the housing market, including young people unable set up their own home, adults and elderly people whose family and personal situations have changed and entire families with only one source of income.

Despite various housing policies implemented by different governments, the lack of affordable housing in the metropolitan area of Barcelona is historic. It is estimated that only 7.1% of main dwellings are affordable and are spread very unevenly over the territory. In addition, much of this housing will cease to be affordable when it loses its free subsidised home status or when it is put back on the market, as in the case of housing transferred to the private sector. In addition, the number of social housing units is estimated at around 1.5%, posing an obstacle to policies to tackle the housing emergency.

For this reason, a joint vision of the metropolitan territory is required to make the right to housing effective, in agreement with the different municipalities, taking into account their territorial and functional particularities and capacity. Meeting these needs requires planning that goes further than just allocating land to social housing in development sectors, by introducing additional measures to provide affordable housing, especially on urban land.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆					◆	◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.14. Protecting residential use from competition with other uses

Description of the challenge

The competition between residential uses and other activities in a limited space has often led to the displacement of the former due to activities that can afford higher prices. In such cases, the combination of uses desirable for the residential fabric leads to the expulsion of residents. Besides offices occupying the upper floors of buildings, there are other less obvious forms of displacement of residents, such as the general spread of tourist housing or the specialisation of ground floors in activities aimed at meeting a very specific demand, thereby depriving residential areas of the diversity of services and activities they require. For this reason, mechanisms must be put in place to protect the residential function of such fabric.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆					◆				◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.15. Rehabilitating the housing stock

Description of the challenge

The age of a large part of the metropolitan housing stock and the need to respond quickly to the housing emergency has led to the physical obsolescence of many dwellings or have revealed structural deficiencies and shortcomings. This situation calls for the identification of residential areas that urgently require rehabilitation efforts and the replacement of part of the housing stock whose compact nature means their volume needs to be reconsidered.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆						◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.2.16. Placing particular attention on areas of accumulated problems and deficiencies

Description of the challenge

Accumulation of problems with integration and habitability in certain areas has an exponential effect on their situation, so that areas with a large concentration of poor quality housing, facilities or environment end up becoming run-down centres with declining living conditions. To prevent this accumulation from multiplying its effects on a metropolitan scale, planning must provide the conditions to implement integrated neighbourhood treatment programmes, as recently started by the AMB.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆	◆	◆	◆		◆	◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
	◆	◆	◆		◆	◆	◆		◆

4.3. AREAS OF ECONOMIC ACTIVITY

4.3.1. Protecting industrial activity and making uses in economic activity estates more flexible

Description of the challenge

Stakeholders in the metropolitan economic fabric often have differing and sometimes contradictory needs and interests with regard to the activities needed in specialised areas of activity. In some cases, these areas are intended exclusively for industrial activities that not only require spaces with specific street widths or access to the transport network, but also often present incompatibilities with other urban uses. In others, more relaxed regulations are called for, so they can house new activities that are not always strictly industrial. To meet this dual and to some extent antagonistic demand, urban planning must be a sufficiently flexible instrument to allow for such diversity.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
											◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
	◆	◆							◆	◆			

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.2. Promoting the mix of uses in urban environments

Description of the challenge

The Mediterranean city model, in which the population's daily needs can be met locally is based on a combination of uses and activities. In this model, residential uses are mixed with service activities and industrial or repair activities aimed at the population. This facilitates walking and cycling and reduces motorised mobility. For this reason, urban planning needs to promote a mix of uses, mainly in residential areas or industrial estates already integrated into the urban fabric, with a higher degree of functional specialisation.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
	◆					◆	◆			◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆	◆	◆			

4.3.3. Facilitating the localisation of logistic activity

Description of the challenge

Lack of available space in the metropolitan area of Barcelona, together with the high number of stakeholders competing for it, means activities requiring large areas of space close to urban centres are often displaced to other locations. This is the case of logistics, especially at the intermediate scale, which coordinates the large movements of goods at the regional scale (mainly by air, sea and rail transport) with the local scale: urban goods distribution. This leads to inefficient functioning of the logistics system as a whole. To improve efficiency, urban planning should ensure the availability of space for medium-scale logistics in areas of activity next to urban areas with easy access to the high-capacity transport network, to allow for transhipment between large lorries and urban distribution vehicles.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
	◆	◆		◆					

4.3.4. Providing economic activity estates with public transport and elements for sustainable mobility

Description of the challenge

Economic activity estates often attract large amounts of labour. The remoteness of some of these estates means there are much fewer public transport infrastructures and services than in urban centres, forcing many workers to use private vehicles for their daily commute. Thus, the public transport network and sustainable mobility (walking and cycling) must be extended to cover existing and future activity spaces with poor access.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆				◆	◆		◆		◆	

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆	◆				◆

4.3.5. Promoting employment-intensive activities in locations with good access to public transport

Description of the challenge

The generation of a high volume of daily commutes in private vehicles is not only a consequence of a lack of public transport, but also of locations that are not always optimal for the most employment-intensive activities or those that attract large numbers of people. In this regard, planning is required to encourage such activities to locate at points of high confluence of existing and planned infrastructures and public transport services.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆	◆	◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.6. Redefining the standards of economic activity estates and adapting them to the needs of companies

Description of the challenge

Although current urban planning legislation establishes the obligation for new development sectors destined for economic activity to allocating 5% of their surface area to facilities, it is often the case that the planned facilities are not developed or, if they are, they fail to meet the needs of the activity. To correct this situation, urban planning should define not only a minimum standard of facilities in areas of economic activity, but also a specific provision strategy based on their characteristics, to meet both the needs of companies in the economic activity estates and larger territorial needs.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.7. Adopting sustainability criteria in economic activity estates

Description of the challenge

In addition to its environmental aspect, sustainable and efficient management of water, energy and materials contributes to business competitiveness. It includes activities involved in the supply and treatment of resources used by the urban and anthropic systems in the territory, including economic activity. It should therefore be possible for land classified as land for facilities or technical services, which in many cases has not been developed at all or for a use that does not meet the business needs, to house environmental services that improve efficiency and sustainability.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆			◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
	◆	◆	◆		◆								

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.8. Improving the physical, environmental, functional and personal safety conditions of economic activity estates

Description of the challenge

Although many of the economic activity estates in the metropolitan area have excellent conditions of urbanisation, functionality and relations with their surroundings, others have significant deficiencies caused by obsolescence due to physical ageing and unsuitability to the new spatial demands of production. In this sense, urban planning must identify areas of activity that require public intervention to regenerate their fabric and establish mechanisms that guarantee their involvement in industrial revitalisation. This revitalisation should consider such aspects as establishing minimum quality levels for the public space and urbanisation. This would guarantee accessibility and safety for pedestrians, favour the smooth flowing traffic, regulate parking needs and occupancy of the public highway and ensure the easy flow of heavy traffic on wider roads, providing adequate turning radii and reducing gradients wherever possible. It should also include recommendations for implementing improvements in the landscaping and urban and environmental quality of industrial facilities, and for transferring open spaces and facilities close to green axes.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
			◆			◆		◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.9. Making the zoning of economic activity estates more flexible

Description of the challenge

Rigid planning for fixed elements such as land often clashes with the dynamic nature of change in demand regarding the size of plots for economic activity. The diversity of industrial activities, their permanent development and continuous location and relocation due to market conditions are mainly responsible for this dynamism. For this reason, diversity in the typology and use of spaces for economic activity should be promoted. This would involve road alignment, with special emphasis on the size of the plots and the possibility of merging them.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
											◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.10. Creating a public pool of industrial land

Description of the challenge

Apart from the large areas of the port and the airport, which have very specific characteristics, activities and regulatory requirements, publicly owned land for activity is currently a very small proportion of total land. This scarcity often impedes the presence of activities in these areas which, as they are not economically profitable, have either to be located at other sites where demand is lower or simply fail to materialise. For this reason, urban planning should allocate part of the land government authorities receive to publicly protected activity in all economic sectors.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
							◆	◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.11. Regulating tourism to protect the use of public space and residents' access to housing

Description of the challenge

The economic benefit from growing tourism in the metropolitan area of Barcelona has had various impacts on the territory and the population as a whole. The demand on transport infrastructures, the territorial concentration of the supply of hotels and tourist accommodation in the centre of the metropolitan area, the competition this supply of tourist accommodation creates with traditional hotel activity and, above all, with residents through the resulting distortion in the housing market, and the alterations to the urban environment where tourism is concentrated require specific solutions.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆	◆				◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.3.12. Promoting agricultural activity

Description of the challenge

The contribution of agricultural activity to overall production and employment in the metropolitan area of Barcelona is statistically insignificant. However, besides its environmental and landscape function, the primary sector is also the first step in a significant agrifood industry and represents an opportunity to consolidate a new proximity-based food supply model. Guaranteeing and promoting this activity requires planning that preserves the space it occupies while favouring the introduction of uses that guarantee its economic viability, such as forestry, agrotourism and the leveraging heritage elements, without harming environmental values.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
			◆	◆	◆			◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4. FACILITIES

4.4.1. Adjusting the supply of facilities to projected trends to maximise their efficiency

Description of the challenge

The analysis of urban planning shows that there is sufficient land in the metropolitan area of Barcelona for facilities. However, it also shows that there are still undeveloped allocations or land for facilities given over to other uses. In this regard, the supply of facilities needs to be adapted to projected trends in urban planning to guarantee coverage and maximum efficiency in operation. This alignment should go both ways: reclassifying as land for facilities existing elements which, although not currently assigned the appropriate land-use category, serve the intended objectives without undermining others; and identifying, protecting and developing allocated plots that are still undeveloped in areas which currently have deficits. In both cases, it is also important to consider the importance of roof space, especially in the compact fabric, in order to locate basic facilities in highly consolidated areas where land is scarce.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆										

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.2. Locate basic facilities at points of maximum accessibility

Description of the challenge

In addition to quantitative assessment in terms of numbers and the degree of coverage of the population, the efficiency of the facilities is determined by their accessibility for the population. In this regard, as it is impossible to guarantee physical proximity for the whole population, points of maximum accessibility to public transport and active mobility channels should be used to locate facilities.

Low-density residential fabric offers good proximity to open space and greater availability of private space than denser, more compact areas. Reversing this situation requires structuring a network of basic facilities through the housing development system. These systems, made up of scattered housing developments connected by road and path networks, need to pool services and jointly provide facilities.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.3. Creating a network of facilities to reinforce the population's living spaces

Description of the challenge

Beyond their strategic location to guarantee maximum accessibility to each facility, it is necessary to consider the overall offer as a network that adapts to, accompanies and reinforces the spaces for the population's daily life. This not only multiplies the scope of coverage, but also enhances its use. In addition, linking this network to elements such as green spaces, metropolitan routes and existing local centralities favours the emergence of urban synergies.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.4. Introducing flexibility criteria in providing facilities to adapt them to future needs and people's life cycle

Description of the challenge

The diagnostic sections show that the many changes in metropolitan society and economic activity over the last few decades will continue to be just as dramatic in the coming years, if not more so. The age structure, new ways of life and relationships among the population, leisure, sport and consumption habits, training needs, and health and care in the coming decades will differ substantially from those of today. However, the difficulty of establishing specific requirements for facilities entailed in these social transformations means planning must be sensitive enough to adapt to new demands with relative ease.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.5. Territorially rescaling the criteria for providing facilities in areas of economic activity

Description of the challenge

The diagnosis shows that, although there is land in areas of activity classified for facilities, only a small part (13.1%) is allocated to basic facilities for business. In addition, constant changes and transformations affecting economic activity complicated an understanding of business needs in terms of facilities. This has led to the prioritising facilities that do not generate added value to areas where they are located. In this regard, planning needs to leverage this potential for interrelation to provide complementary facilities and thus multiply the services provided to improve business competitiveness. It should also assess real land needs in economic activity areas, redefine and adapt the standards for facilities and study the possibility of incorporating new services that meet the needs of these areas, based on the allocation of development rights.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
	◆			◆	◆		◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.6. Ensuring proximity of the population to public open spaces

Description of the challenge

The distribution of public open spaces should ensure proximity for residents and the working population, taking into account the need for daily contact with greenery and outdoor activities. However, assessing this proximity must take into account the needs of various groups with different mobility characteristics, such as the elderly, children and people with reduced mobility. This distinction should involve considering different needs in terms of the characteristics and size of open spaces, as well as the distance from the target population. It must also address the basic urban planning regulations of public open spaces to maximise the ecosystem services they provide.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆						

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.7. Structuring public urban open spaces, parks and civic spaces

Description of the challenge

The ecosystem services provided and the opportunities for contact with nature and outdoor activities provided by these services mean they should be distributed in such a way as to guarantee their proximity to the population as a whole. However, the metropolitan approach allows this value to be multiplied on a local scale by rescaling and interconnecting spaces. Hence urban open spaces must be reconsidered as a continuous and interconnected system. This integrated vision can be based on metropolitan routes and links to the network of everyday relations. This enhances the values and diversity of plant and animal life to ensure the sustainability of the system.

In addition to places of residence, work or study, these spaces include facilities, especially those with more sensitive functions and a higher social component, such as schools, sports centres, hospitals and care homes.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆	◆	◆	◆	◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.4.8. Adapting the provision of public open spaces to different city models

Description of the challenge

The diagnosis of the residential fabric of the metropolitan area reveals the existence of three main city models: continuous cities on the plain, interlinked nodal towns and low-density landscapes. The morphological particularities and proximity to large open spaces of each of these models means that local populations have very different relationships with greenery. For this reason, the distribution and characteristics of urban open spaces must take into account their function in each of the three city models.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5. MOBILITY SPACES AND INFRASTRUCTURES

4.5.1. Recovering metropolitan continuities on a human scale

Description of the challenge

In addition to direct occupation of land, major road and rail transport infrastructures also have significant impacts due to the characteristics of their layout and cross-section. In the central city, some of the high-capacity infrastructures, especially railways, run underground, but this is not the case in the rest of the metropolis. Thus they often fragment the urban fabric, neighbourhoods and open spaces and create isolated places of poor social and environmental quality lacking in safe and convenient connections. In this regard, mobility networks, especially segregated ones, need to be integrated into both open spaces and the urban fabric, thereby creating a mesh structuring streets that provides these continuities.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
			◆	◆	◆	◆		◆		◆	

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.2. Prioritising everyday mobility for all on public roads

Description of the challenge

In addition to posing a physical barrier, many roads cause discontinuity to the existing urban fabric, as they are primarily designed as channels for motorised transport. The primacy of this function often complicates the habitability of the fabric, by creating breaks in the location of activities and impeding the population from using the public space. Therefore roads and public space should be reconsidered as elements in the configuration of urban life that support daily mobility, proximity and health while taking into account the gender perspective, children and the ageing population.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆				◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.3. Enhancing public space and green infrastructure to ensure quality of life and adaptation to climate change

Description of the challenge

More than one fifth of urban land in the metropolitan area is given over to road surface, most of which is occupied by private mobility. The area covered by private and public car parks should also be added to this amount. Reducing mobility in private vehicles, thus promoting public transport, should therefore make it possible to minimise the public space assigned to these mobility infrastructures and provide more space for active mobility, the recovery of green and permeable land and greater use of public space by the population. Green infrastructure needs to permeate the urban fabric to provide better environmental quality, ensure ecological connectivity and other ecosystem services, thus making them a key element in climate resilience.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆		◆	◆		◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.4. Promoting active, metropolitan-wide mobility

Description of the challenge

Active mobility should not be limited to short or very short distances, but should be extended to metropolitan-wide travel. Therefore, this mobility needs enhancing, based on the model of dense and compact urban settlements, the combination of uses in the urban fabric and the reconsideration of road space beyond its function as an integral part of public space. This reconsideration should be used to encourage local travel, i.e. trips people can make on foot or by bicycle. At the same time, the cycle lane network is still at a very early stage of development and therefore offers considerable room for improvement. The characteristics of cycling and other types of mobility using this network place its range of service in the middle ground between walking and motorised travel. The continuity of cycle networks that go beyond the current local concept and ensure metropolitan-wide continuity would enable them to replace some of the journeys that currently use private vehicles.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
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> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.5. Recovering historic roads and paths

Description of the challenge

Active mobility is the main sustainable mobility asset in the cities of the metropolitan area, with a much higher potential than in other European cities. Much of this potential is provided by the network of historic roads and paths in the metropolitan area. Although this network has been transforming and structuring settlements for centuries, today some roads have been prioritised for car use or disrupted by superimposing new segregated mobility structures.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆			◆			◆		

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.6. Achieving a target of two out of every three motorised journeys being made by public transport

Description of the challenge

The current prioritisation of mobility space in favour of road transport determines the possibilities of a new, efficient mobility system that makes the best use of existing resources and space. When the mobility system aims to facilitate a greater flow of vehicles rather than people, the modal distribution will necessarily tend to favour private transport. Therefore, rethinking this system should be a priority, in order to maximise the flow of people by investing in high-performance public transport services, both above and below ground, to serve and make the most of dense and compact urban developments. This system should be able to absorb 50% of the journeys currently made by private vehicle. By 2050, collective public transport should account for two out of every three trips on motorised transport.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆	◆	◆				

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆	◆	◆					◆				

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆					

4.5.7. Strengthening the Rodalies suburban rail system to make it the backbone of regional mobility

Description of the challenge

In the public transport system, the metro system carries the highest number of passengers in Catalonia. It is the backbone of metropolitan mobility in the area it serves. However, this is not the case for the suburban rail network, which has failed to become the standard transport for metropolitan and regional connections. The network grew significantly in the 1990s and 2000s, but lack of investment and the obstacles posed by work on the high-speed rail lines affected it considerably. With the Rodalies Suburban Railway Plan 2021-2030, investment has been revitalised. However, it needs to go beyond this objective and achieve a consensus on new the rail infrastructures essential for the transition towards sustainable mobility. The PDUM also faces the challenge of rebalancing and enhancing the intensity of the metropolitan city in relation to this present and future network.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
										◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆		◆		◆			◆				

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.5.8. Integrating the dual-carriageway network into a metropolitan multimodal system

Description of the challenge

Promoting public transport will not end journeys in private transport, especially those to and from places far from the metropolitan centre. The dual-carriageway network represents a major infrastructural asset that can also include large flows of collective public transport. Therefore, the efficiency of networks and mobility systems should be improved through interconnection. With the principle of favouring collective transport, this would facilitate interchange between modes of transport depending on the supply of existing infrastructures and services. The junctions in this network are key elements because they not only structure the different transport modes and services, but also generate activities and synergies around them.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
						◆	◆	◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆					◆

4.5.9. Promoting urban settlements that enable and enhance sustainable mobility

Description of the challenge

A new model of sustainable mobility requires a territory that can accommodate future transformations and growth in a way that makes each of its parts more self-sufficient and balanced and able to take full advantage of public transport networks. A functionally balanced, dense and compact fabric best meets this demand. It should be noted that, although some of the urban fabric requires actions to increase its mix, density and compactness, the metropolis does not and should not constitute a homogeneous fabric. In this regard, the provision of mobility must take into account this diversity and solve the problems of lack of services and infrastructures in relation to the specific needs and intensities of urban settlements, treating each fabric according to its particularities.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆				◆	◆	◆	◆	◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆					◆

4.5.10. Decarbonising freight transport

Description of the challenge

The search for efficient transport infrastructures should not be limited to the mobility of people, but should also adapt the goods transport and distribution network. The minimal use of rail for goods distribution in Catalonia has not only limited setting up and developing certain export activities, but has also tended to overload the high-capacity road network with heavy vehicles. Several large-scale projects (the Mediterranean Corridor, the La Llagosta intermodal station, the ZAL-Port of Barcelona rail triangle) are currently seeking to correct this situation. It is essential for urban planning to take these projects into account, promote them and set out the guidelines needed to guarantee both their economic efficiency and territorial integration.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆				◆	◆	◆					◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆		◆					◆				

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆	◆	◆					

4.5.11. Activating the city and metropolitan infrastructures around the major port and airport hubs

Description of the challenge

Despite physical limitations to the expansion of the port of Barcelona, the growth potential of the new quays, especially in the south dock, and the proximity to the logistics activities area and the Zona Franca call for improvements in rail and high-capacity road access in the form of dedicated lanes. At the same time, the part closest to the urban fabric should be planned for integration into the city. Similarly to the port, the physical growth of the airport is limited by the sea, the Llobregat Delta and the El Baix Llobregat Agricultural Park. However, the current AENA Master Plan will leverage the latest development options around the airport and its area of influence. This is a great opportunity for the development of the metropolitan city, since, as an increasing number of airports and cities are doing, it incorporates new uses near these infrastructures due to their ability to attract very large amounts of economic activity and people. It is therefore essential for planning to take these developments into account and establish synergies around this major infrastructure while respecting the sensitive areas of the delta and considering restrictions on the impact of air traffic.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
					◆	◆		◆	◆		◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆		◆		◆			

4.5.12. Optimising logistics infrastructure

Description of the challenge

Large goods transport infrastructures (high-capacity road network, rail network, port and airport) are the first step in logistics activity, for the regional movement of goods. This scale is linked to urban centres via an intermediate step, and to the end recipients via the urban distribution of goods. New demand, driven by both the increase in global transactions and the growth of e-commerce and home delivery mean planning is required to allocate the necessary space to meet the needs of transport and goods distribution at different scales. It must also consider the modes of transport used in each case, the specific needs of each of mode and the associated transhipment activities.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
					◆				◆		◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆		◆		◆			◆

4.6. METABOLIC FLOWS

4.6.1. Matching technical services allocations to the reality of existing infrastructures and their planned growth or transformation

Description of the challenge

In many cases, the allocation for technical services as established in current urban planning in the metropolitan area does not match current reality. Nor does it match forecasts for the growth or transformation of some of these infrastructures. Therefore these allocations need to be modified (removed, extended or redrawn) to meet both current and future demand.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆		◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.2. Improving and augmenting systems that regulate water during heavy rainfall events

Description of the challenge

The projected trends discussed in the diagnosis show an increase in precipitation per day of rain in the coming years. To address this, the network will need to be upgraded with new stormwater retention basins and CSO tanks in priority areas for stormwater separation or retention, to prevent treatment plants becoming overwhelmed and avoid uncontrolled release of wastewater into the environment. It will also be necessary to coordinate the update of the Stormwater Master Plan, approved in 2005, with current guidelines and provisions.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
			◆		◆						

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
		◆							

4.6.3. Increasing the use of alternative water sources

Description of the challenge

The availability of water is expected to decrease over the years, while the demand for water is expected to increase. For this reason, it is essential to ensure new urban developments or major transformations also consider implementing networks for the use of alternative water sources (reclaimed and groundwater) to cover non-potable water demands.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆		◆				

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆		◆	◆						

4.6.4. Improving the efficiency of water distribution networks

Description of the challenge

The availability of water is expected to decrease over the years, while the demand for water is expected to increase. For this reason, the efficiency of distribution networks will have to be improved to minimise unused water.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆		◆				

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.5. Generating new land allocations for technical services in strategic areas for the water cycle

Description of the challenge

The metropolitan territory is highly consolidated, while also coming under pressure for new land uses. Therefore, in strategic areas for the water cycle, it is essential to ensure the placement of infrastructures that guarantee current supply and sanitation, while providing capacity for forecast future needs.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆		◆				

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.6. Planning the renewable energy potential in the metropolitan area

Description of the challenge

Promoting renewable energies involves space requirements that must be properly planned to avoid indiscriminate land consumption. In this respect, an analysis of the residential fabric and areas of economic activity that can incorporate renewable energy harvesting systems is of paramount importance. It is also essential to analyse all areas with the potential and compatibility for incorporating this type of facility, such as interstitial spaces in large mobility infrastructures and peri-urban areas. With regard to the open space system, it is equally important to analyse the potential for renewable energy generation and regulate the implementation of these facilities, ensuring the ecosystem in natural spaces functions properly and that facilities are integrated into the landscape.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆		◆				

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
	◆		◆										

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.7. Responding to the electrification of demand

Description of the challenge

The electrification of energy demand in significant areas such as mobility and home air conditioning, together with the upward trend in population growth, will lead to an increase in the demand for electricity. Meeting this increase will require a transformation and an increase in the number of electricity substations needed to support it. In this regard, an analyse will be needed of the power currently generated by existing substations with potential for conversion or expansion, defining the areas they could serve and the surplus they would generate. Also needed is an analysis of the number and location of the new substations, ensuring the increase in demand is covered throughout the metropolitan territory.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
					◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.8. Integrating electrical infrastructures with an impact on urban or open spaces

Description of the challenge

Some conventional electricity substations and conversion points from the overhead to underground grid – considered significant impact infrastructures – are currently located in urban areas. In some cases, arrangements are already in place for their relocation, with varying obstacles to implementation. However, for those not yet covered by an integration project, a study of the different possible scenarios will be required, together with the necessary land allocations.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
	◆			◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆					◆				

4.6.9. Generating new allocations for technical services in strategic areas for the energy cycle

Description of the challenge

The new electrical substations that are required, the integration of existing ones, and areas with potential for renewable energy will require land allocation to ensure their deployment. The territory will need to be analysed to identify the right place for land allocations, taking into account the requirements for each infrastructure and service coverage throughout the territory.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
				◆	◆		◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆		◆							

4.6.10. Locating and integrating waste treatment and management infrastructures

Description of the challenge

The projected trends in waste generation and treatment detailed in the diagnosis show there is a need for new infrastructures. Planning should incorporate the necessary land allocation to locate these infrastructures, thereby minimising possible impacts and integrating them appropriately into both the urban fabric and open spaces. These new sites should also ensure a balanced distribution of infrastructures and service coverage throughout the metropolitan territory, while guaranteeing good connections to the transport network.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
	◆			◆	◆	◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.6.11. Organising and regulating activities related to the agro-ecological food system

Description of the challenge

The creation of an agro-geological food system for the metropolitan area of Barcelona requires an integrated vision of the multiple elements involved, so as to favour: proximity in production, processing, distribution and marketing; social and territorial cohesion to protect peri-urban production areas and neighbourhood commerce by promoting diversified and prosperous local economies that distribute the benefits fairly; efficiency in closing the food cycle, in terms of the use of reclaimed water and organic matter as nutrients; strengthening urban agriculture for its social, educational and complementary role in the consumption of fresh, local food and in maintaining agroforestry ecosystems.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆		◆		◆			◆			◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
◆	◆			◆	◆				

4.7. SOCIAL AND ECONOMIC DEVELOPMENT

4.7.1 Coordinating mechanisms to foster social and community cohesion

Description of the challenge

With the Metropolitan Social Plan as a priority action, the aim is to tackle inequalities and promote social and territorial cohesion. From a socioeconomic perspective regarding unemployment, the aim is to continue empowering individuals and enhancing their skills by supporting municipalities in active employment policies and using training as a tool to transform the urban labour environment. This approach should take into account the evolution of professional profiles, generational change and the transition of knowledge.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆									◆	

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
					◆				◆

4.7.2 Addressing the risk of citizens' social, economic or digital exclusion in relation to the post-pandemic context

Description of the challenge

The current situation regarding access to basic goods and resources has had a negative impact on the poverty rates in the metropolitan territory, which is now slightly higher than in the rest of the national territory. The focus should be on issues of food security, energy poverty and homelessness, which is on the rise.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆									◆	

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
			◆		◆				

4.7.3 Facilitating the transition to a new socially committed economic model

Description of the challenge

Based on the new paradigm of inclusive capitalism, the aim is to promote the equity economy. This will require providing the metropolitan business fabric with governance formulas that incorporate diversity and the gender perspective to reflect realities among the population. Furthermore, new leadership from social and economic action must be promoted and new ways of organising work hours encouraged, while coordinating tools for co-creation to ensure the competitive growth of the territory in terms of balance and social cohesion. Policies are aimed at building a new economic and social model that respects the environment, seeks to reduce inequality and poverty in the territory and thus moves towards sustainable development.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆									◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
					◆				◆

4.7.4 Accompanying economic stakeholders in addressing the climate emergency and sustainability

Description of the challenge

As metropolitan cities set out on the road towards promoting the green economy and adopting more environmentally sustainable practices, a roadmap towards decarbonisation that impacts on service provision in the public and private spheres needs to be established. A further priority is promoting projects for the regenerative economy projects, involving the circular and agrifood economies and intensive use of renewable energies with the capacity to establish local value chains.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆									◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆										◆		

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
			◆			◆			

4.7.5 Reducing the digital divide and increasing the degree of digitisation

Description of the challenge

The commitment to increase citizens' digitisation, together with the appearance of new disruptive technologies – such as the boom in artificial intelligence – means the ability to manage and promote reducing the digital divide related to age, gender, territory or company size has become a necessity, so that no one is left behind.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆	◆									◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
								◆	◆

4.8. MANAGEMENT AND GOVERNANCE

4.8.1. Renewing and unifying the language of urban planning

Current urban planning is subject to a regulatory framework containing a degree of imbalance. This is especially so in areas affected by external changes linked to increasingly complex dynamics, such as the climate emergency, the energy transition, the planning approach to issues of urban metabolism and flexibility, and also territorial and urban planning, as required by new social demands and economic activity.

Furthermore, in the metropolitan area, the fragmentation and age of the existing planning instruments (a Metropolitan General Plan dating from 1976 for 27 municipalities and 9 different management plans for the remaining municipalities) requires a common language to unify them and facilitate a continuous reading of the territory. The PDUM and the future POUMet represent the first two steps in this direction. However, some of the above challenges will still persist in the period leading up to full implementation of both instruments.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
						◆	◆	◆			

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆	◆	◆		◆					◆				

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.8.2. Periodically reviewing urban planning

The speed of today's social and economic dynamics and their increasing complexity call for a renewal of urban planning language and the constant review and adaptation of planning instruments to incorporate relevant modifications, based on new demands. Although the effects of urban planning must be considered in the long term and urban planning practice itself requires long periods of time to reach a broad consensus and define a common timeframe, mechanisms must also be anticipated to quickly review and periodically adjust the hypothetical forecasts on which it works, based on new needs. An ongoing review of planning is thus required to assess the implementation of proposals, measure their impact and establish measures to redress possible deviations. This review should also be associated with a public body responsible for its monitoring. Technology and the management of large volumes of data should make it possible to implement active systems to monitor the Plan quickly and accurately. At the same time, there is a need to simplify planning modification mechanisms, especially in cases where they do not affect structural elements or have profound implications for other elements.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
							◆				◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.8.3. Coordinating urban and sectoral planning with public investment

The public investment needed to implement urban transformations proposed by planning and actions stemming from sectoral policies requires government authorities to guarantee maximum effectiveness and efficiency in their implementation. Therefore, when such actions are related to other authorities, it is essential to ensure that metropolitan plans and projects are drafted in direct coordination with the sectoral plans and programmes for implementing them.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
						◆	◆	◆		◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.8.4. Creating mechanisms to facilitate resource redistribution

The multi-municipal nature of the territory administered by the AMB calls for resource management that goes beyond the limitations imposed by the scope of action of local councils. In this regard, formulas must be found for the distribution of revenue (tax, transfers, urban development, etc.), expenditure and investment that go beyond the rigidity of municipal finances and promote genuinely metropolitan management.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
										◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
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> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.8.5. Strengthening governance in the construction of the metropolitan city

The social, technical and economic complexity involved in intervening in such a consolidated fabric as the metropolitan area calls for a multi-faceted perspective to resolve conflicts of interest. The integration of governance structures that facilitate agreement and decision-making in the face of changing and competing challenges is essential. It must also function on an ongoing basis and include the political, technical and civic spheres. In this regard, the organic restructuring and completion of the AMB is essential in order to facilitate efficient implementation of metropolitan policies.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
◆									◆	◆	◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆		◆							◆				

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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4.8.6. Raising the international visibility of Barcelona's metropolitan reality

Greater accessibility and improved communications in recent decades have reshaped international relations worldwide. In this new system of relations, cities have to rely on their metropolitan and regional levels to perform the new global functions required of them. Having its own governing body gives the metropolitan area of Barcelona a comparative advantage when it comes to its international position. The AMB Internationalisation Plan needs to be implemented, while also designing a consensus strategy in collaboration with all metropolitan stakeholders and the rest of the institutions.

> LINES OF ACTION AND OBJECTIVES

1 Social and Economic			2 Environmental			3 Territorial			4 Strategic		
L1.1	L1.2	L1.3	L2.1	L2.2	L2.3	L3.1	L3.2	L3.3	L4.1	L4.2	L4.3
									◆		◆

> RELATED STRATEGIC DOCUMENTS

PAM	REM	PDUM	PCLIMA	PMMU	PECIA	PINTL	PREMET	PMRH	PACTE	PEMB	PSM	PEPNat	PGM
◆						◆							

> CONTRIBUTION TO THE SPANISH URBAN AGENDA

SO1	SO2	SO3	SO4	SO5	SO6	SO7	SO8	SO9	SO10
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5 Participation

The PDUM provides a starting point for participation in the AMB Urban Agenda building process as it provides structure to drafting the Agenda itself, to which are added the participatory processes for the sectoral plans on which the Agenda is based.

5.1. BACKGROUND

The Agenda and the participatory processes that helped produce it were based on a desire to generate an open, cross-sector reflection in the metropolitan sphere. To do this, dialogues were established with other institutions and professionals from different disciplines from the outset, using multiple formats and spaces for providing information, participating and collaborating.

5.1.1. Municipal consultations, 2010-2013

This first phase was designed with the aim of incorporating the municipal perspective from the outset in drafting an urban planning instrument of these characteristics. In this sense, it provided the basis for a working system that showed the willingness of the PDUM to open up to joint reflection with some of the main experts on the local reality and who in the future would be the guarantors of the effective development of the PDUM guidelines.

To this end, a series of interviews were carried out with the 36 metropolitan councils to obtain detailed information on the urban development opportunities and weaknesses identified as the most relevant by the different municipalities. From this initial compilation, an inventory was drawn up classifying the content of the conversations into four categories, which would later serve to structure the proposals in the Plan: areas of opportunity or review; areas for improvement or transformation; infrastructures and services; and natural or heritage protection.

5.1.2. Knowledge generation, 2013-2015

Once the first phase was completed, the next phase was started to gather as much knowledge as possible from the various disciplines concerned with the elements to be regulated by the PDUM.

Three key events were organised to achieve this: first, an open, cross-disciplinary debate was generated in technical workshops; secondly, the results were published to make them available to the general public; and, finally, an informative exhibition with a summary of the results was designed.

Discussion workshops

The technical workshops were structured into theme-based presentations to make comparisons with international experience. guided by relevant speakers on the subject, with local experience provided by various technical specialists. These concluded with round table discussions that continued as online debates lasting for four weeks. The debates were held on the Zyncro platform. Finally, an executive summary of each of the debates was drawn up to bring together the main arguments and elements.

A total of six debates were organised, held in various locations in the metropolitan area, with the aim of bringing them closer to the different metropolitan territories. Topics of interest were selected to be addressed in each debate. The initiative had a broad scope, bringing together a pool of more than 1,000 experts and more than 400 registered participants in the subsequent online debates.

Publication of the first series of the journal *Quaderns*

These technical debates produced a knowledge base that was disseminated through the publication of "Quaderns PDU metropolità" collection of journals.

"Metropolis Barcelona" exhibition

To conclude this phase, the "Metropolis Barcelona" exhibition was organised. The aim was to reach beyond the strictly technical and professional audience. Guided tours were scheduled throughout the exhibition period and suggestions and contributions from the public were collected at the end of the tour. The exhibition catalogue, consisting of two volumes and an atlas of the contents on display, was also published, and the AMB digital platforms were used to publicise it.

The exhibition was then redesigned and displayed in various academic forums around the world: at the Harvard University Graduate School of Design (GSD), Boston; at the Illinois College of Architecture, Chicago; under a different name, at the Shanghai Urban Space Art Season 2015 (SUSAS), with the title "Barcelona Urban Experience. 25 Years of Urban Remodelling of the Barcelona Metropolitan Area"; and at the 2017 Seoul Biennale of Architecture and Urbanism, in the "Cities Exhibition" section, titled "Mixed Use, Mixed Time, Mixed People".

5.2. THE PLAN PROPOSAL DOCUMENT, 2016-2018

From this starting point, the aim in drafting the PDUM was to provide a diagnosis of the territory shared with its various stakeholders. This was, in fact, the first mission of the Master Plan Drafting Service (SRPD), set up to centralise the metropolitan urban discourse in a single working team focussing exclusively on this purpose. The tasks of the SRPD in the Plan Proposal phase were organised in two stages:

— The first stage (2016-2017). This served to consolidate the framework of the future PDUM Proposal and had two objectives: drawing up the main urban planning guidelines together with experts from the academic, professional and institutional world through thematic discussion round tables; and defining the tools and governance organs to accompany the preparation of the PDUM. At the same time, work began on the PDUM website, which would then serve as a platform for dissemination and participation (urbanisme.amb.cat).

— The second stage (2017-2018). This served to draw up the first diagnosis of the PDUM, used to produce the Plan Proposal document. In this second stage, the "Metropolis of Cities" exhibition was also designed to explain the content of this document to the public.

It should be noted that the PDUM Proposal document included the participation programme, describing all the participatory strategies in detail, and the roadmap for the design of the future participation process that would take place during the public information period.

5.2.1. First stage, 2016-2017

The thematic discussion round tables

Based on the conclusions drawn from the workshops and the municipal consultations, work began on drafting the Plan Proposal document by setting up discussion round tables. These were co-chaired by members of the Plan drafting team and external experts, and were organised around eight thematic areas considered crucial for the drafting process and on which the PDUM should have a special impact: urban metabolism and services; mobility and transport infrastructure; the landscape of the metropolis (ecology, leisure and production); areas of innovation and centrality; economic activity estates; street-aligned residential fabric; block developments; and scattered housing developments.

These spaces for reflection were designed for a multidisciplinary group of experts to collaborate in drawing up a consensus document of urban planning guidelines from the perspective of the theme analysed. The results, which were subsequently published in the aforementioned journal collection "Quaderns PDU metropolità", with the subtitle *Directrices urbanísticas* (Urban Planning Directives), were the starting point for the co-production spaces with the local metropolitan councils.

The definition of institutional and citizen participation

Alongside the more academic reflections in the round tables, the *Framework and Structure of the Urban Master Plan Drafting Process Document* was drawn up to define the governance tools for the drafting process and the roles of each proposed commission or working group.

This participatory structure was defined in three areas: the political-institutional sphere, which included stakeholders from the local, metropolitan and regional government authorities; the technical sphere, which included representatives of the metropolitan municipalities and other sectors in urban planning and other fields related to urban and regional policy; and the civic sphere, which brought together the various civil society stakeholders whose participation was considered necessary for drawing up the Plan.

With regard to the **political-institutional sphere**, defined as spaces for participation in which technical decisions are connected to political will in exercising the responsibility untrusted by citizens to their elected representatives at any given time, four levels of participation were defined:

1. Governing Committee. This was the space for strategic discussion and decision-making regarding the orientation and approval of the work plan. It was made up of:

— Six representatives of the AMB Governing Board, in proportion to each political group.

— Eleven representatives from the metropolitan municipalities:

- Two representatives from Barcelona City Council.
- One representative from each of the municipalities with more than 100,000 inhabitants (L'Hospitalet de Llobregat, Badalona and Santa Coloma de Gramenet).

— Six participants representing municipalities sharing common characteristics, in terms of territorial area:

- Llobregat Continu Urbà area (Cornellà de Llobregat, Esplugues de Llobregat, Sant Joan Despí, Sant Just Desvern and L'Hospitalet de Llobregat).
- Nord area (Montgat, Sant Adrià de Besòs, Tiana, Badalona and Santa Coloma de Gramenet).
- Llobregat Delta area (Castelldefels, Gavà, El Prat de Llobregat, Sant Boi de Llobregat and Viladecans).
- Ordal-Garraf area (Begues, Cervelló, Corbera de Llobregat, Palma de Cervelló, Torrelles de Llobregat and Sant Climent de Llobregat).
- Vall Baixa area (Castellbisbal, Sant Andrés de la Barca, Papiol, Pallejà, Molins de Rei, Sant Vicenç dels Horts, Sant Feliu de Llobregat and Santa Coloma de Cervelló).
- Vallès area (Cerdanyola del Vallès, Sant Cugat del Vallès, Ripollet, Montcada i Reixac, Badia del Vallès and Barberà del Vallès).

2. Metropolitan Council Advisory Committee. This was established as the AMB government information and meeting point with a representative of each of the metropolitan political groups.

3. Executive Committee with the Generalitat de Catalunya. This was the forum for the AMB Government and the Generalitat de Catalunya, through the Secretariat for Urban Habitat and Territory.

4. Committee for Relations with Other Institutions. This was implemented through meeting spaces with representatives of the AMB and other government authorities with competencies on the issues addressed in the PDUM, such as professional associations.

Unlike the political-institutional committees, the **technical sphere** committees provided technical and professional guidance and validation for the work of the Plan drafting team in the various subjects and fields of action. There were four categories of committee in this area:

1. Technical Steering Committee. This was the space for coordinating technical work and production processes. Its mission was to define and validate the strategic lines of work developed by the team. The committee was made up of: the manager and directors of all areas of the AMB; the director of Urban Services, who was the PDUM technical director; the head of the SRPD; the head of the President's Office, and a lawyer, with legal advisory functions in town planning matters. Finally, as well as the members of the committee established in the framework, a representative of Barcelona City Council was also included, given the specific weight of the municipality in the metropolitan area as a whole.

2. Technical committees with metropolitan councils. These were responsible for establishing the ongoing technical participation of the AMB municipalities through sub-committees grouped into four large territorial areas (the same as those of the Governing Committee) to work more closely on implementing the issues addressed in the territories. Each of the municipalities, individually or by territorial area, had a technical reference representative to participate in the work of the committee.

3. Technical Working Committee with the Generalitat de Catalunya. This was a space for cooperation between the AMB Urban Planning Office and the various areas of the Generalitat de Catalunya,

coordinated through the Directorate General for Urban Planning Services, to gather technical issues over which both institutions have competencies.

4. Technical, sectoral and cross-disciplinary committees. Set up as spaces for sectoral, thematic and cross-disciplinary technical cooperation with other institutions and organisations specialising in specific areas to provide specific contributions in their field of knowledge. Similarly, the possibility was raised of establishing spaces for sectoral, thematic or cross-disciplinary technical cooperation with other institutions, organisations or specialised bodies. In all cases, Plan drafting team officials, from both the Urban Planning Office itself and other areas of the AMB, also participated.

Finally, the purpose of **civic sphere** was to enable active citizen participation. To this end, a map was drawn up of the stakeholders to be incorporated into the PDUM stable participatory structures for debate, reflection and proposals. This list of stakeholders, who were given a voice throughout the process, sought to be as representative of metropolitan society as possible and to ensure, among other requirements, gender equality and diversity in terms of the areas or sectors of activity from which the citizens came, as well as the public or private origin of their interests.

In all cases, the objective of incorporating this sphere of participation was always to include a layer of information from the public, as experts in urban environments, and to compare their perceptions with the technical assessments made by the Plan drafting team.

5.2.2. Second stage, 2017-2018

The second stage of the work on the Plan Proposal document aimed to specify the elements and content of the proposal. Once again, however, the drafting tasks did not exclusively focus on developing the technical content, but were also conceived as a process in which the team's internal work periodically alternated with presentations and discussions of the results in the committees created at different levels.

Development of the thematic lines of work

Based on the eight themes addressed in the round tables in the previous stage, and bringing together the urban planning guidelines associated with each one, the work areas were regrouped into three large blocks: areas of innovation and intense, complex activity (grouping together the round tables on centrality and innovation, and economic activity estates); the residential fabric (which included the round tables on street-aligned residential fabric, block developments and scattered housing developments) and metropolitan metabolism (with the round tables on transport and "The landscape of the metropolis. ecology, leisure and production").

Work in each block was carried out in three phases: theoretical and conceptual framework, diagnosis and proposals. The methodology involved the following working dynamics:

— First of all, the drafting service team worked on the contents of each phase for a period of two to three months.
— Secondly, workshops were designed with the metropolitan local councils grouped by sub-committee, to compare both the initial information being used by the technical drafting team and the territorial application of some of the results.
— The Plan technical team then developed the work in progress based on the results from the workshops.
— Once the work was complete, the main conclusions of each phase were presented to the PDUM Technical Management Committee for validation.
— Finally, the main conclusions of each phase were presented to the technical committees of the metropolitan local councils and the Generalitat, and a session of debate was opened on the issues. Next, an online space was set up to post all the documentation, inviting municipal representatives to make contributions.

It is worth highlighting the work carried out in the various co-production and co-design spaces, conceived as a network of stakeholders generating public policy under conditions of equality. These spaces were the political-institutional committees; the technical committees in conjunction with the metropolitan local councils; and the relationship with the civic sphere through a pilot test in the municipality of Badia del Vallès.

Working sessions with the committees

The various committees were formally constituted during this stage and the first working sessions were held. It is worth noting that cooperation was intense in the committees with the metropolitan municipalities, for three reasons in particular: obtaining first-hand information from municipal technicians on the issues under discussion; the desire to involve them in all phases of the work process, to produce a diagnosis shared by their technicians; and to obtain their opinion on the progress of the work and its territorial implementation. In addition, specific bilateral meetings were held in different thematic areas with the Generalitat de Catalunya and other institutions, such as Barcelona Provincial Council and the ATM.

In total, collaboration through the various committees involved 96 meetings, held between November 2017 and November 2018. Specifically, 2 meetings were held with the Governing Committee, 2 with the Metropolitan Council Advisory Committee, 14 with the Technical Steering Committee, 5 with the technical working committee with the Generalitat de Catalunya and 49 with the 4 committees that grouped the metropolitan councils, i.e. 12 committees per group plus a common one for the 36 metropolitan councils. At the same time, 24 working sessions were organised with the municipalities, 6 for each of the committees.

Local council participation culminated in gathering together their contributions in the first version of the Proposal document. Overall, 395 contributions were received, 2 of a general nature, 248 referring to the Proposal Report and 145 on the graphic documentation.

Relations with the public

Although Catalan urban planning legislation stipulates that active citizen participation begins with the approval of the planning proposal document, the drafting of the Proposal Plan document itself already included the aim to share information with civil society through different means of dissemination.

In this phase prior to the approving the Proposal document, relations with the citizenry were largely oriented towards achieving maximum dissemination of the existence and scope of the Plan, as well as a transparent account of the drafting process. Specifically, virtual spaces – such as the specific PDUM website, containing a wide range of information on the PDUM – were set up, exhibition spaces were designed to disseminate some of the key aspects of the Plan and various public dissemination events were programmed.

The Proposal document also included the participation programme for the public information period.

Dissemination can be classified into three main groups of initiatives:

— **Social media and web portals**. Initially, the Plan was disseminated in the general media available to the AMB: its official website and social media. In the first phase, communication consisted mainly of regularly sharing the main work produced by the drafting team through the "Quaderns PDU metropolità" journal collection.

  However, at the beginning of 2018, the specific PDUM website urbanisme.amb.cat was launched. This portal gathers all the information on the content of the Plan, describes the main events so far and presents the different stakeholders who have contributed directly or indirectly to its drafting.

  In fact, as work on the PDUM evolves and the participation structures defined in the basic document are put into operation, the aim is to turn the web space into an interactive platform for collaboration with the different stakeholders in the territory.

— **Exhibitions**. The first exhibition was "Green Metropolis", which addressed a major theme in the PDUM proposals: metropolitan green infrastructure. Next, the travelling exhibition "Metropolis of Cities" was designed and toured several metropolitan municipalities to accompany approval of the Proposal document.

The aim was for the different exhibition spaces to act as showcases for the content of the Plan in these earlier phases.

— **Public dissemination events**. At the same time, the PDUM drafting team made great efforts to disseminate the various issues worked on internally to test them out in discussions outside the PDUM and also, in many cases, outside the AMB itself. Specifically, there were 68 such events, held between March 2016 and December 2018. These also included occasional participation in university master and postgraduate sessions on subjects related to the PDUM, presentations at various national and international conferences with scientific articles or posters, inter-institutional visits with representatives from all over Europe and recognitions. In addition, a number of interviews and press articles related to the Plan drafting process and its contents were published.

Participation in European projects

Finally, mention should be made of the collaboration between the Plan team and the AMB Planning Service over two years to draw up the Badia del Vallès Integrated Action Plan, within the framework of the European URBACT programme. In this case, the AMB, together with Badia del Vallès, joined the network of cities grouped under the slogan "Sub>urban. Reinventing the fringe" to improve urban fabric emerging since the mid-20th century that has been unable to find its place between the preceding consolidated and compact city and the low-density urban developments that appeared later.

Specifically, in the case of Badia del Vallès, preparation of the Integrated Action Plan (IAP) took two and a half years (from January 2016 to April 2018). It was based on the construction of a shared, consensus diagnosis with the Central Discussion Group (GCD), which helped identify, schedule and prioritise actions at different scales up to 2020.

Its objective was to define strategies, through participatory processes, to gradually correct a number urban dysfunctions and thus strengthen the sense of community in a process of social empowerment and improving the municipality's self-image. The IAP was a genuine laboratory for creation, implementation and experimentation in spaces of shared debate, in which technical staff and the public faced similar challenges to those later found in the PDUM Proposal participatory process. These mainly involved how to transfer the vision of the Plan to different scales and how to co-design the process between the public and the various government authorities involved: the metropolitan and local.

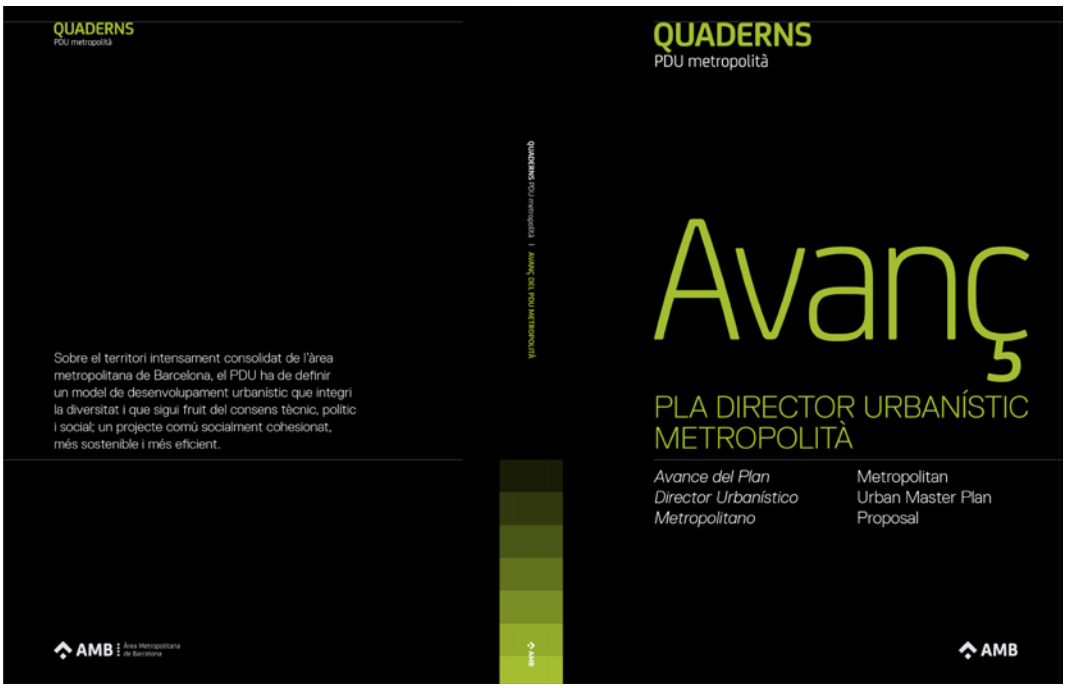
5.3. THE DOCUMENT FOR INITIAL APPROVAL, 2019-2023

Once the Plan Proposal document had been approved, the SRPD team was reorganised to prepare a document for initial approval. The work in this phase can be divided into three stages:

— The first stage (2019-2020) which consisted of the Plan Proposal public information period, involving the citizen participation process to disseminate and share the content of the Plan and gather suggestions. These contributions were categorised and analysed to assess the appropriateness for their inclusion the Plan proposal.

— The second stage (2020-2021) in which the proposals were worked on with the technical teams from the different metropolitan councils through regular meetings.

— The third stage (2021-2022) in which efforts were concentrated on the strengthening metropolitan consensus in both the political-institutional and technical spheres in order to draw up the final version of the document.



Each of these stages managed to maintain the intense participation levels that characterised the previous two phases.

5.3.1. 1st stage, 2019-2020

Public information period

Following the approval of the PDUM Proposal document by the Metropolitan Council on 26 March 2019, a period of public information was opened until 31 January 2020.

Over the six months, separate, complementary actions were carried out to provide a framework for participation for each of the stakeholders, with differing degrees of involvement, from written submission of suggestions by individuals, organisations and institutions to active participation in discussion round tables and inter-institutional collaboration.

Citizen participation during this period proved successful in disseminating and sharing the content of the Plan and reinforced the communication channels with the metropolitan social fabric. Likewise, the objective of sharing a territorial model and making citizens co-responsible for public policies affecting the functioning of the metropolis became an effective connection channel between the AMB as a metropolitan institution and the population.

Once the public information period was over, more than 2,600 contributions from both the suggestions documents and the comments made in each of the face-to-face participation spaces were classified and categorised in order to evaluate the results. This thorough reading made it easier for each working team to assess inclusion in the Plan and as an exercise in transparency, feedback and traceability in relation to all participants.

Local council participation

The technical participation and communication staff of all the metropolitan councils collaborated in organising and disseminating the public debates promoted by the PDUM Drafting Service.

5.3.2. 2nd stage, 2020-2022

Specifying the proposals

Based on all the information the PDUM drafting team produced, compiled and classified by subject during the drafting of the Proposal document, a series of working sessions were held with members of the AMB Urban Planning Coordination Unit that had previously worked on various projects in each of the affected territories, thus gaining first-hand knowledge of the urban status.

To specify the results of this work, the metropolitan area was divided into six functional zones: Vall Baixa i Ordal, Llobregat Delta, Llobregat Continu, Nord, Vallès and Barcelona. Thus, based on the contributions from local councils and each team's experiences, a proposal was drawn up by functional areas, in particular specifying the structuring elements for the proposed Plan.

In addition to this division by territorial area, the proposals were also organised by theme. The so-called "transversal" tasks, such as the drafting regulations and the Plan report, were carried out using this territorial and thematic organisation.

Committees with the local councils

Alongside the internal work of the PDUM Drafting Service and the collaborations with various departments in and outside the AMB, numerous meetings were held with the local councils' technical urban planning teams to fine-tune and reach a consensus on the proposals. Thus, between autumn 2020 and summer 2021, 21 meetings of each of the 6 committees were held with the councils.

More than 450 contributions emerged from these meetings and were considered for the proposed Plan. These were clarified if there any doubts or lack of precision in the explanation, included, agreed on with new proposals and, in a few cases, dismissed.

Participation in European projects

As in the PDUM Proposal document drafting phase for the Sub>urban project, between 2019 and 2022 the AMB headed the RiConnect - Rethinking Infrastructure network, as part of the European URBACT programme. The network consists of eight European metropolises that want to rethink, transform and integrate mobility infrastructures to reconnect people, neighbourhoods, cities and natural spaces.

The aim of the network is to develop a joint methodology to rethink monofunctional, segregated mobility infrastructures, which entail numerous externalities poorly adapted to the territory. Rethinking them provides an opportunity to make them central and integrating elements for the metropolis based on a new mobility model.

As in the URBACT, as explained above, each of the metropolises drafted an IAP defining a vision for the future, setting out a roadmap and specifying the actions needed to achieve the objective of improvement. In this case, in developing its IAP, the AMB chose a section of the N-150 road to transform it into the Avinguda del Vallès, a friendlier, more civic and attractive metropolitan road.

The participation of all the stakeholders involved took on special relevance in this project. Thus, after identifying them, they were classified into four groups with different responsibilities and degrees of involvement.

5.3.3. 3rd stage, 2022-2023

Consensus-building for initial approval of the Plan

The main objective of the third stage was to reinforce the metropolitan consensus around the PDUM document for its initial approval, so it could then be submitted to the Metropolitan Council, which is made up of elected members of the municipal councils, as explained above.

For this reason, meetings with the metropolitan councils were held more frequently, as were all the meetings in the technical and political spheres and also once the document had been approved for initial approval, when considering how to approach the relationship with the civic sphere.

Working sessions with the committees

During this stage, both the Governing Committee and the Metropolitan Council Advisory Committee met three times. The first meeting was to explain the results and conclusions of the citizen participation

process, as well as the work proposal for initial approval. The second was to present a draft document explaining the proposals of the PDUM. Finally, the third, a month before initial approval of the Plan, was to explain the document to be taken to the Metropolitan Council.

Meetings were also held with various metropolitan political groups and continued with the Generalitat de Catalunya and other government authorities.

Intense collaboration with the metropolitan local councils continued during this period, with the aim of achieving a consensus proposal. Various meetings were held with each council to continue working towards a consensus on the progress of the work.

Relations with the public

Throughout the period of drafting the document for initial approval of the Plan, information and progress on the development of the Plan was continually and transparently shared with civil society, while dissemination of the Plan was broadened. The framework for the public information period for initial approval were also agreed on.

5.4. COLLABORATIONS IN DRAFTING THE PLAN (2014-2022). A BALANCE SHEET

The preparation of the Plan in its different phases was carried out jointly by a variety of stakeholders. Clearly, the Master Plan Drafting Service (SRPD) played a leading role in this process, but many other people and teams were also involved.

5.4.1. The SRPD team

Over its seven years of operation, 72 people have been members of the SRPD: 56% women and 44% men. The permanent team started with 12 people and grew steadily, with only 8 people leaving over the years. Although most of the team members came from the field of architecture (80%), there were also people from the fields of geography, civil engineering, environmental sciences and law.

Alongside this permanent staff, there was a fluctuating staff of 36 students with training in urban planning, seeking their first – or one of their first – professional experiences. Although most came from the field of architecture, there were also students from different university courses, such as geography, planning and computer engineering.

5.4.2. Collaborations with other AMB services and other government authorities

There was particularly close collaboration between the four services in the AMB Area of Urban Planning Policy and Natural Spaces (APUEN): SRPD, Territorial Studies and Information Service, Urban Planning Legality Protection Service and, above all, the Urban Planning Coordination Unit.

There was also a close relationship with the different AMB departments. Among these, special mention should be made of the Technical Management Office (responsible for correcting, designing and managing the exhibitions and providing support for the communication and dissemination of the Plan through the web portal, the newsletter, media, etc.), the International Relations Area (which supported international projects in programmes such as URBACT or INTERREG SMART-MR), the Unique Projects Services Directorate (which participated in the economic evaluation of the Plan's proposals), the Public Space Services Directorate (which provided knowledge on matters related to sustainability), the Ecology Area[1] (which worked on proposals for the urban metabolism, specifically on studies of energy sovereignty and demand in buildings and in relation to the sectoral coordination of technical service planning), the Mobility, Transport and Sustainability Area, the Structural Programme Services Directorate, and, finally, the Social and Economic Development Area.

1 his area encompassed the current Water Cycle and Climate Action are

Likewise, as explained above, other government authorities were also very closely involved, especially the metropolitan local councils. The committees, bilateral working meetings and informal meetings served to include the contributions that the other authorities wanted to make to the PDUM.

5.4.3. Collaboration with the academic and professional world

In addition to collaboration with the various government authorities, a number of bodies and organisations were also directly involved in preparing the PDUM. Notable among them were the Barcelona Regional (BR) public agency and the Metròpoli Institute (formerly the Barcelona Institute for Regional and Metropolitan Studies), with which an annual framework agreement was signed to work together and facilitate closer collaboration.

Thus, Barcelona Regional collaborated on documents as diverse as the initial strategic document for the environmental documentation, the study of metabolic demands and service infrastructures, the health assessment (together with ISGLOBAL) and the mobility assessment (with ATM, the Universitat Politècnica de Catalunya – BarcelonaTech (UPC), CARNET InLAB, IDOM, PTV, KINEO and the Metròpoli Institute).

The Metròpoli Institute helped in providing support with the gender perspective (together with Col·lectiu Punt 6), preparing economic studies, drafting the social report, providing guidance to focus participation for the initial approval public information period, the environmental assessment of the open spaces and the preparation of databases, such as the facilities database.

It also collaborated with other research centres, teams and private companies on various topics. With regard to regulations, urban planning uses were addressed through specialised studies with the BCpN iHTT team and with legal advice and consultancy from Urbanland & Projects. In the environmental field, studies were carried out in conjunction with other external teams, such as the soil cover study with the Centre for Ecological Research and Forestry Applications (CREAF), the assessment of parks, green corridors and the heat island with the Institute of Environmental Science and Technology (ICTA), and geological risks with Hidrolem. For the drafting of the technical and economic framework, Knowledge Sharing Network S.L (KSNET) and Duatis Arquitectes were responsible for calculating the economic viability of the plan. In relation to mobility, Lluís Ubalde (together with Barcelona Regional) provided advice on the suburban train system, while advice was provided by Victor Ferran on the update to the accessibility study and by Metroairports for the project on airport cities.

Participation during the Proposal document public information period was co-organised with different teams depending on the type of session and audience: citizen debates with Paisaje Transversal; the quadruple helix workshops with the PEMB; and the workshops in the professional associations with their respective boards of directors. Nusos, Mikel Pau Casado and Cristina Poza also participated in facilitating and reporting on the citizen debates.

Several teams collaborated in the communication on different tasks: Oesía in the planning and development of the web portal; IBM in the development of the web portal map viewer; Banda Bisagra in the sketchnotes during the citizen participation process; La Creativa in the production of videos, images and social media during the public debates; and Spread in the layout of the document for initial approval.

Finally, in other cross-cutting issues, the Centre for Demographic Studies (CED) provided the demographic forecasts, Dribia structured the databases and Ramon Gras advised on the complex issue of innovation districts.

6 Governance of the AMB Urban Agenda

A governance structure consisting of three teams is envisaged for the monitoring and evaluation system, as described below.

Technical monitoring and evaluation team. This team will design and specify the system of indicators and select the information sources to provide data; monitor and evaluate actions by continuously updating the indicator system; evaluate results and impacts; and propose new actions by drafting related evaluation reports. The team will be made up of technicians from different areas of the AMB.

Steering Committee. This committee will be responsible for: establishing the lines of work for the technical monitoring and evaluation team; promoting and prioritising Agenda actions based on the information gathered in the evaluation reports; coordinating and strategically evaluating the development and implementation of the Agenda based on achievement of objectives; and reviewing the suitability of these objectives and the challenges identified based on new economic, social and environmental demands. The Steering Committee will submit its proposals to the Executive Committee for approval. The committee will be made up of members of the AMB Steering Committee.

Executive Committee. This will provide political leadership in monitoring the Agenda and manage and validate the proposals and actions set out by the Steering Committee.

7 Monitoring and evaluation

The AMB Urban Agenda aims to incorporate mechanisms to check the suitability of its proposals for situations likely to undergo significant transformations over the coming years. It has therefore designed a monitoring and evaluation system that allows it to adapt efficiently to new requirements and needs.

7.1. OBJECTIVE

The Agenda's monitoring and evaluation system is a tool for assessing its effective performance and adaptation to changes affecting the metropolitan territory. Its main objective is, therefore, to assess and improve the effectiveness of proposals, implementation, outcomes and impacts and adapt the Agenda, through appropriate modifications, after it has been finally adopted.

7.2. SYSTEM STRUCTURE

The monitoring system adopts a two-pronged approach to achieve this objective. The first is the identification of a set of objective, measurable and updatable indicators for the various policies and actions, adaptable to the territory at the appropriate scale and level of detail. These indicators should make it possible to quantitatively monitor both the implementation of the Agenda and the urban and territorial reality to which it is applied. This will help determine whether the proposed actions are being carried out with the planned coverage and with efficient resource management, and detect any possible deviations.

The second is qualitative evaluation based on assessment of these indicators, as well as on the contributions of citizens and metropolitan stakeholders and institutions, making it possible to design and propose possible corrective actions.

In short, it is a system that must foresee all the elements involved in the so-called "theory of change", involving detecting needs and the resources available to meet them (inputs), the actions in the Agenda, and the products obtained (outputs), and, finally, the results (outcomes).

7.2.1. The indicator system

The Agenda monitoring system established four types of indicator:

Implementation indicators. These identify the degree of execution of the actions in the Agenda, based on the established timeframe, and assess possible deviations. They will also include resource indicators to assess the efficiency of actions.

Results indicators. They identify the degree to which the objectives of each action have been achieved, based on the challenges set out in the Agenda itself.

Impact indicators. These identify whether achieving the objectives of each action has led to a real improvement in the living conditions of the population, the efficiency of the activities and the physical and functional quality of the environment.

Context indicators. These identify the behaviour of variables that do not depend solely on completing the Agenda's proposals and therefore serve to classify detectable cause-effect relationships. The indicators selected for the system will be based on the Spanish Urban Agenda database, which includes more than 50 regularly updated municipal indicators from official sources.

This classification helps in monitoring the actions included in the Agenda by sequentially identifying three processes: the pace of implementation of the actions (executive effectiveness), how the actions respond to the challenges (technical adequacy of the proposals) and the extent to which the response has a social and environmental impact (suitability of the challenges). This helps to easily identify the cause of any misalignment and thus guide future decisions on elements needing revision or redefinition: implementation mechanisms, proposals or challenges.

The frequency with which the indicators are updated will be defined according to the availability of the raw data that feeds them, although a minimum yearly rate is planned for context indicators and a biannual rate for the performance, results and impact indicators.

The territorial unit of reference will be the smallest one allowed by the available information. Thus the information can be aggregated to the necessary administrative or functional units (neighbourhood, municipality, etc.) to allow for comparison and better understanding. Efforts will also be made to break down the data as much as possible by theme.

7.2.2. Evaluation reports

The evaluation reports will be produced every four years, coinciding with the periods of the Metropolitan Action Plan (MAP), and will be drawn up by the technical team responsible for the indicator system. In line with the objectives above, each report should include a triple assessment as the basis for recommendations on reformulating the related element.

Implementation evaluation: this will assess the degree of development of the Agenda, as well as the efficiency of each action with respect in terms of resources. In this regard, it will seek to identify possible failures in the implementation mechanisms, as well as assign responsibility to the various authorities and stakeholders involved. At the same time, it will consider the possibility that difficulties in implementation may be due to the infeasibility of the proposals.

Results evaluation: this will assess whether the objectives established for the challenges have been achieved, to then determine whether the actions/proposals require redefinition.

Impact assessment: this will analyse the effects of the actions, to determine whether challenges and objectives require redefinition, either due to inadequate initial design or the emergence of new external conditioning factors that have altered the initially diagnosed situation.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