



# MONTEVIDEO RESILIENCE STRATEGY





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## LETTER

**DANIEL  
MARTÍNEZ****MAYOR OF MONTEVIDEO**

We are in the midst of a time of change loaded with multiple transformations and challenges and one of the most significant among them is the unprecedented growth of urbanization, particularly in Latin America. 80% of Latin Americans live in urban centers, which are spaces in which approximately two thirds of the gross domestic product of our countries is generated. In order to ensure the wellbeing of future generations, cities seem to consolidate themselves as the main scenario to be promoted in terms of resilience. Local governments - as direct recipients of the positive and negative impacts of globalization - are called to redouble their efforts in a context of cooperation and support within the New Urban Agenda and the Sustainable Development Goals framework, to generate conditions that ensure, considering their proximity with the population, the right to the city of all its inhabitants.

Montevideo has been working for decades on designing public policy guidelines with a prospective vision, and from its planning they have been aligned under a socio-territorial approach. Efforts have been made to reverse the segregation processes in the urban fabric, the lack of access to housing and public services, as well as the social, environmental and economic vulnerability of the most susceptible sectors of our society.

Given these challenges, we understood that at this development stage of Montevideo, our first objective was to increase the capabilities of our city, having a deep understanding of its weaknesses and strengths, addressing the demands of its inhabitants and encouraging us to think about our desire to build the Montevideo that we dream of from a new approach.

Thanks to developing the resilience strategy process, we managed to identify the shocks and stresses that threaten our city. We approached them in a collaborative way, incorporating into the process the largest possible number of actors that make up this system's "subsystems" which determine the social, cultural, economic and environmental relationships of our territory. Consequently, the results allowed us to identify (with a holistic approach) the challenges that the city presents, allowing us to elaborate answers that promote wealth and diversity into Montevideo's reality.

Having the opportunity to be a part of the 100 Resilient Cities network has allowed us to advance substantially in this way, providing us support for generating a transversal approach when planning and managing the city, promoting the integrality and complementation of actions, which are encouraged from the departmental government.

This Resilience Strategy represents a great step forward in the aforementioned challenges. In it we see a living, dynamic and open document, whose main objective is to guide us in the process of transforming Montevideo's reality, marking the guidelines that we must follow in order to build a more inclusive, supportive, innovative, dynamic capital, prepared to face the challenges of building a better future for its population. On the other hand, it acts as an invitation to all of you to join us from your different roles in the beautiful challenge of building an increasingly human and resilient Montevideo.

## LETTER

**MICHAEL  
BERKOWITZ****PRESIDENT OF 100 RESILIENT CITIES**

On behalf of the entire 100 Resilient Cities team, I am proud to congratulate the city of Montevideo, Mayor Daniel Martínez, and Chief Resilience Officer Gabriella Feola on the release of the Montevideo's Resilience Strategy. This is an important milestone for our partnership and for the city, and we are proud to have been part of one of the most innovative efforts in Uruguay, in our network, and in the region.

Since its founding in 1726, the capital of the Oriental Republic of Uruguay has had a high quality of life and vibrant culture reflected in its architecture, traditions, and music. With a lengthy coastline and significant rural areas, Montevideo is more than just an urban center. However, rapid urban expansion and the impact of acute shocks constantly challenge the stability of Montevideo's urban fabric and threaten its natural resources.

Both Uruguay and Montevideo have positioned themselves as global leaders in reducing carbon emissions due to major political changes brought about by participatory and strategic planning. Montevideo's Resilience Strategy builds upon this work and presents a unique opportunity to address unresolved urban challenges. An essential part of developing the Resilience Strategy is understanding and addressing Montevideo's acute shocks and chronic stresses, whether they be flooding, infrastructure collapse, economic inequality, or lack of public transportation. Montevideo's Resilience Strategy shows the city's progress in engaging a broad range of stakeholders while keeping citizens at the core of its vision. With 4 pillars, 14 objectives, and 40 concrete actions that contribute

to the city's resilience, the Strategy promotes making Montevideo a more inclusive and supportive city. One of the most innovative aspects of Montevideo's Strategy is the Resilience Labs - spaces for experimentation that offer ways to rethink solutions and pilot new models of governance - which will transform Montevideo's capacity to respond to 21st century challenges. Some of the many innovative goals in the Strategy include improving the quality of public transportation, transforming public spaces into catalysts for environmental conservation and socioeconomic development, and using digital tools to facilitate participatory governance.

Through the commitment and hard work of Chief Resilience Officer Gabriella Feola and her team, and the leadership of the Mayor Daniel Martínez, this Strategy is an accurate reflection of Montevideo's needs and priorities. This strategy is only the beginning of the exciting work to come in the months and years ahead. From the 100 Resilient Cities family, we are very excited to continue our collaboration with Montevideo and to be a strategic ally in the implementation of initiatives, which will have a positive impact for all Montevideans. Congratulations again on this enormous achievement!

## LETTER

# RAMÓN MÉNDEZ

**PLANNING AND RESILIENCE DEPARTMENT  
DIRECTOR**



Montevideo has a long history in strategic planning. The elaboration of a territorial and urban planning for the city more than 20 years ago, known as the Montevideo Plan, was innovative for both the country and the region. It enabled an understanding of urban planning, a higher commitment to the territory and citizens by choosing to improve the quality of life of its inhabitants, the improvement of their public services and their environmental conditions. Continuing with this tradition, we find ourselves in a new process, to agree on our vision of the future —Montevideo's vision of tomorrow - with the participation of different actors: public, private, academia, neighbours, social, political and professional organizations. We understand that building the resilience strategy within the framework of this process, causing a cross-synergy between both, is a great opportunity and the best way to incorporate the resilience perspective into a strategic approach.

When deepening the concept of resilience, we found that Montevideo had been working on many aspects that had already contributed to improving its resilience, and so we sought to identify those actions and put a value to them. For this reason, many of the initiatives that we are proposing in the four pillars of the strategy maintain a common thread with what has been done previously, but with a short, medium and long-term projection. As a novelty, I highlight the presentation of three resilience laboratories, which are processes that address strategic issues in a transversal manner, placing resilience in their core and providing a new perspective of management.

We are proud that Montevideo has a resilience office in the Planning Department, capable of enabling the participation of different sectors into the discussion and being able to build agreements on key issues that guide the resilient development, and that are all consolidated with this Strategy.

The new challenge that we now face is to advance in its implementation, following always a transversal, articulating and participatory path. We hold many expectations in achieving concrete and visible transformations, which not only improve physical spaces, but also people's lives, and thus, promoting social integration.

I am grateful to the 100RC Program of the Rockefeller Foundation for selecting Montevideo out of one hundred cities, for facilitating our participation in a network that promotes the exchange of experiences, and for supporting our path towards building a more resilient Montevideo for tomorrow.

## LETTER

# THE RESILIENCE TEAM



Building urban resilience means transforming the challenges of our cities in the face of global change and uncertainty, into opportunities that guarantee its inhabitants the full exercise of their rights, based on tolerance, solidarity and respect for diversity in all its expressions.

Under this framework, we are pleased to present this document, which constitutes as the road map for building a resilient Montevideo and which is the result of an open and collaborative process that incorporated diverse voices and views on the daily reality of Montevideo.

The resilience strategy recognizes the work that has been done, capitalizing on successful initiatives from diverse local actors, by which we seek to further strengthen the value of resilience through an articulate and complementary holistic approach; it also incorporates new specific proposals that contribute to the solving of the resilience challenges that have not yet been solved. The collaborative approach adopted allowed us, in turn, to begin to integrate the resilience perspective into other planning processes; amongst them is the strategic plan «Montevideo del mañana», a process that is building a long-term vision in metropolitan and national terms in a participatory and collective manner.

A fundamental milestone in building this initiative was the creation of the Resilience Executive Unit (UER for its acronym in Spanish) within the Planning Department of the Intendency of Montevideo. This institutionalization allowed, at a tactical level, to legitimize the advancement in elaborating the strategy and strengthening the role of the new unit in its relationship with other areas of the

local and national government, as well as with civil society actors, academia and the private sector. At a strategic level, it ensures the continuity of the process that has been initiated, granting sustainability to the implementation of the strategy beyond the political and economic situation that the future may determine.

This document is the culmination of a process of articulation, of joint learning, of the collective generation of ideas, which all promote a connected and dynamic Montevideo, inclusive and supportive, innovative and co-creative, committed and prepared. But it is also the beginning of a new phase, which implies a shared effort and a collective responsibility to effectively build that so-desired Montevideo.

Being part of the 100 Resilient Cities Program has allowed us to get to where we are today. The Program has provided support, both technical and methodological, as well as professional and human, bringing us closer to the realities and experiences of other cities, which all act as ongoing inspiration for our work. We are convinced that being a part of this network is a value in itself, which allows us to have a broader and more comprehensive vision of what it means to build a more resilient city today.

We express our gratitude to the 100 Resilient Cities Program for its invaluable support in each phase of the process; to Arup, our strategic partner, for their constant collaboration, and to all those who in one way or another have contributed to the development of this strategy, which will allow us to achieve a more resilient Montevideo together.

# EXECUTIVE SUMMARY

Montevideo is the capital of the Eastern Republic of Uruguay and is also the administrative headquarter of Mercosur, located in the south of the country with its coast bordering Río de la Plata. It is a port city, as well as an economic and cultural hub, with a strategic geopolitical position that naturally rendered it a critical node for trade and tourism within the region. Montevideo is home to almost half of its national population and counts for more than 50% of its national gross domestic product. It has a rural area which accounts to approximately 60% of its land area.

Montevideo set out to build a vision of the future, taking contemporary challenges into account, through a prospective planning process to build its strategic plan, Montevideo del mañana. This plan is focused on creating a vision for the year 2050 as well as creating short, medium and long-term guidelines, which are set to be agreed upon collectively as a society. It acts as a unique opportunity to install a perspective of resilience in the inhabitant's ways of thinking and building the city.

In May 2016, Montevideo was selected to become part of the 100 Resilient Cities Network (100RC) promoted by the Rockefeller Foundation; a platform aimed at helping cities become more resilient to physical, social, economic and climate challenges in the 21st century. Thus, its goal is to develop a Resilience Strategy that may be integrated into Montevideo's strategic Plan, Montevideo del mañana.

During 2017, the Resilience Executive Unit was created within the Intendancy of Montevideo, responsible for leading this process and thus developing a diagnosis and an evaluation of the current situation, through collective work developed in workshops, expert panels, interviews, perception surveys and with the existing data. In October, the Preliminary Resilience Assessment was published, which summarizes the most relevant impacts and chronic stresses, and identifies the Discovery Areas that are to be deepened in order to develop the strategy.


The main challenges identified are as follows: the expansion of the urban area and the territorial development model; social, economic and territorial inequality; mobility and transportation; environmental


sustainability and waste management; climate change, coastal territories and risk management. From this diagnosis, work efforts were made to develop the strategy, through specific workshops, work meetings and consultations. All of this was carried out with the purpose of generating both ideas and proposals for intervention.

Montevideo's resilience strategy is organized into 4 pillars, 14 objectives, 45 initiatives and 3 strategic processes called "resilience laboratories", which aim to help develop the vision of Montevideo's Resilience.

These pillars address the challenges of resilience, providing a long-term vision that defines the assumed strategic direction along with a set of objectives aimed at achieving this vision.

The 4 pillars are:

 **A CONNECTED AND DYNAMIC MONTEVIDEO**

 **B INCLUSIVE AND SUPPORTIVE MONTEVIDEO**

 **C INNOVATIVE AND CO-CREATIVE MONTEVIDEO**

 **D COMMITTED AND PREPARED MONTEVIDEO**

The initiatives presented are actions, projects, plans or programs which all contribute towards achieving said objectives. They include original proposals that came out of the work meetings, participatory workshops and studies conducted to identify the best ways of addressing the challenges posed, to which certain initiatives already proposed in other sectoral plans were added, either because they directly contribute towards building

resilience or because they can be enriched if seen through a lens of resilience.

**Pillar A** includes initiatives aimed at controlling urban expansion, promoting the maximum use of consolidated areas and revitalizing precarious central areas; to prioritize the use of public space for public transportation over individual motorized vehicles; as well as initiatives which promote the transformation of the energy matrix in relation to urban mobility.

**Pillar B** includes initiatives designed to reverse socio-spatial segregation and guarantee access to the rights of the city; deepen the cultural dimension of urban development as a driving force for integration, equality and recognition of the diversity of inhabitants; strengthen public space as an area for social integration, citizen safety and coexistence; and promoting participatory and decision-making mechanisms, in a transparent, effective and innovative manner.

**Pillar C** includes initiatives aimed at promoting development through prioritizing a circular, social and solidarity-based economy; promoting individual and collective creativity as a driving force for the innovation and development of economic sectors based on knowledge, culture and new technologies, and to establish Montevideo as an attractive and open city, placing value in its cultural, social and natural heritage.

Lastly, **Pillar D** includes initiatives aimed at promoting environmental management that incorporates the ecosystem and watershed management approach; reducing the impact of solid waste on the environment by installing new management systems and the best available technologies; giving value to the rural territory, promoting the responsible use of its environmental services and recognizing the urban-rural complementarity; strengthening civic commitment to taking care of the environment and improving their abilities in understanding, preventing and responding to risk situations from a resilient perspective.

The Strategy also proposes 3 resilience laboratories. These are not plans or projects, but resilience-building processes that, due to their multi-disciplinary characteristics and strategic value, allow for an integral approach to the 4 pillars and decisively contribute towards achieving Montevideo's resilience vision.

These are:



The transformation of the Pantanos Stream Basin, a socially high vulnerability zone, with precariousness in housing and environmental degradation, was classed as a laboratory because it presents a multidimensional problem that articulates all the strategy pillars within a territory considered strategic.

The coastal territory laboratory addresses the multidimensional problems that exist on the coastal front of Montevideo, a territory also defined as strategic by the Planning Department for Land Use and Sustainable Development. This laboratory is aimed at designing and implementing a general system for managing the coastal space, using integrated coastal management criterions.

The main purpose of the third laboratory is to design and implement an integral risk management plan, which includes measures of prevention, reduction and risk compensation, considering the intersections and synergies between disaster risk management and other aspects of development, under a human rights approach.

In short, the Resilience Strategy is a tactical and strategic guideline that seeks to prepare us, so that we can adapt, recover and emerge even stronger in the face of different impacts and stresses. It is also a call to action so that we can all build a dynamic, attractive, enjoyable, innovative and equal Montevideo, with committed and empowered citizens in solidarity - in other words, to achieve a resilient development of Montevideo.



# INTRODUCTION



# 100 RESILIENT CITIES INITIATIVE

The 100 Resilient Cities Network (100RC) is a program created in 2013 by the Rockefeller Foundation aimed at helping cities around the world to build resilience in the face of the physical, social and economic challenges of the 21st century, whose complexities are increasing in a progressively interconnected world.

Each city has its own characteristics that shape its identity, but even so, there are common challenges that can be identified in the vast majority of them. For this reason, the network not only collaborates with cities individually, but also facilitates creating a global resilient development practice that promotes cooperation through the exchange of good practices and experiences.

Montevideo joined 100RC in May of 2016. Its incorporation into the network represents an international recognition of the work carried out; but it also demonstrates the commitment of the city to address, from a new perspective, the challenges that have not yet been solved and that hold immense opportunities of growth and development.

Being part of the network allows access to specialized technical assistance, methodological support, analytical tools and specialized services in urban resilience, as well as having financial resources, which allows having a specialized office that promotes the resilience agenda of the city. But above all, it offers the opportunity to be part of a global network of cities, being able to exchange experiences under a scope of mutual inspiration and collaboration.



- ⊙ 100RC cities that have inspired us in the process
- Cities member of the 100RC initiative

# URBAN RESILIENCE

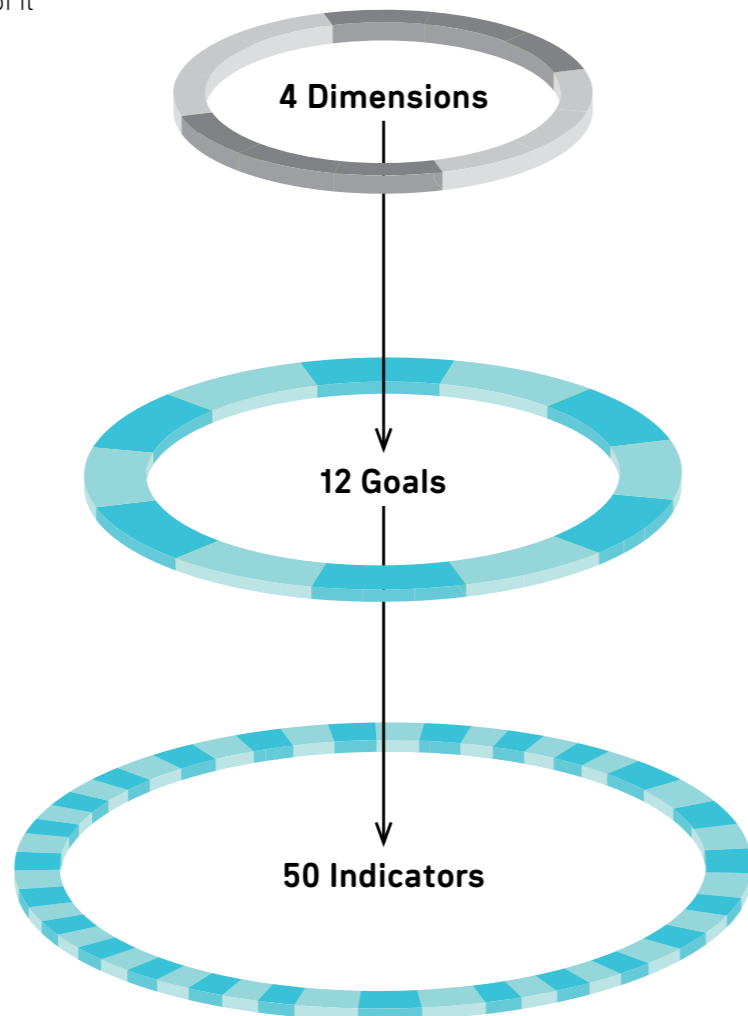
The challenges facing the 21st century cities derive from patterns of global change, including changes in political and economic models, social and cultural fractures, changes in weather patterns, stresses and conflicts over the use of territory and the use of natural resources. All of these elements, within a high interacting local and global environment, which further multiplies the uncertainty surrounding the future.

The resilience approach, when applied to the development of urban territories, incorporates a different way of addressing these challenges. It considers both the abrupt changes (a consequence of shocks) and the gradual changes (a consequence of underlying stresses), as well as the interactions that are generated between both. In other words, it focuses on change and bets on developing its managing capacities, to positively take advantage of it for the benefit of a more sustainable development.

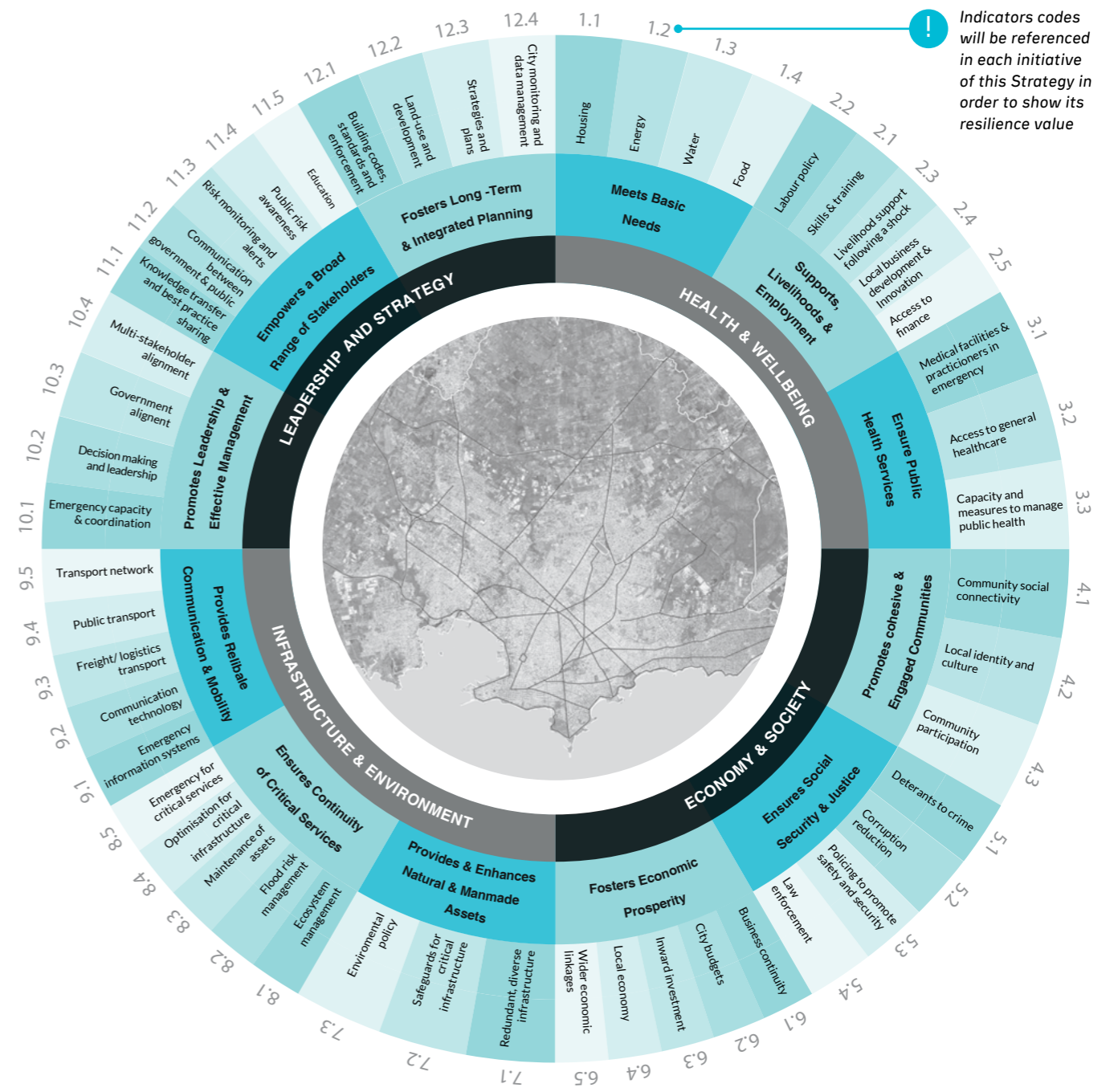
Urban resilience is the ability of people, communities, institutions, companies and systems that make up a city, to adapt, grow and thrive in face of chronic shocks and stresses that can weaken its structure and affect its operation. It is the capacity of a city to permanently improve for the benefit of all its citizens.

The Resilient Cities Framework<sup>1</sup>, developed by 100RC, takes particular care of urban complexity by integrating, through a holistic approach, all aspects concerning territorial development. It is made up of 4 dimensions, 12 resilience drive factors and 50 indicators, which all help in the understanding of every city's processes that are associated with building resilience.

This conceptual framework was applied whilst building this strategy, as a lens to diagnose weaknesses and to identify opportunities for strengthening resilience in Montevideo, and as a systematization, tool to better understand the origin of current changes and respond more effectively in the face of future challenges.



## CITY RESILIENCE FRAMEWORK



### RESILIENCE QUALITIES

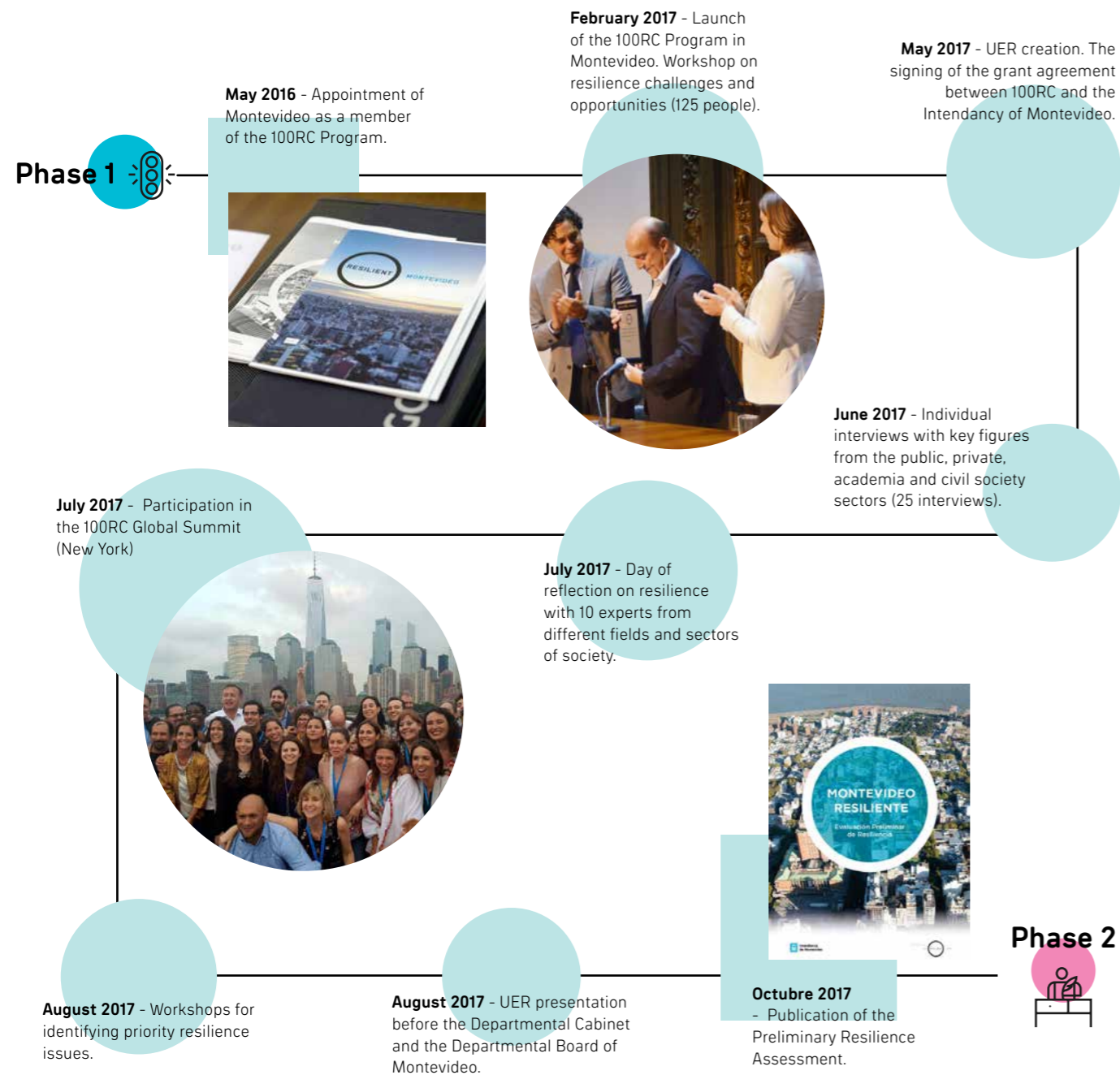
A resilient city is characterized by integrating seven qualities in its systems

- REFLECTIVE**: Use its past experience to inform future decision making.
- RESOURCEFUL**: Recognize alternative ways of using resources in times of crisis to achieve their goals.
- INCLUSIVE**: Prioritize a representative consultation to obtain a sense of belonging in decision making.
- INTEGRATED**: Convene a wide range of systems and institutions through articulated work.
- ROBUST**: Well-designed, built and managed systems that integrate quantitative and qualitative approaches.
- REDUNDANT**: Have the capacity and additional resources to respond effectively in cases of disruption.
- FLEXIBLE**: Have the ability to adapt in response to contextual change of circumstances.

(1) Arup, 2014

# STRATEGY FORMULATING PROCESS

Throughout the building process of this strategy, the Resilience Executive Unit (UER) team actively collaborated in building Montevideo's strategic plan Montevideo del mañana. This participatory planning process was initiated in August 2017 and was aimed at collectively building a 2050 vision and a 2020-2030 action plan for Montevideo. The parallel development of both processes constituted a unique opportunity to incorporate the resilience perspective not only in the strategic planning of Montevideo but also an opportunity to install such perspective in the inhabitant's ways of thinking and building the city.

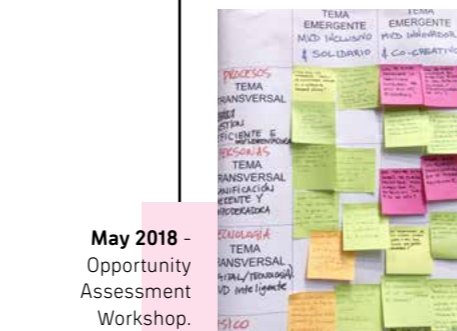


## Phase 2



**November 2017** - «Framing the resilience opportunity: Transformation of the Pantanos stream basin», workshop, applying the Resilience Value Realization (RVR) methodology (30 participants).

**February 2018** - Exchanges with the network's cities. Barcelona: Port-city/District @ 22 productive and innovative integration. Medellín: Comprehensive Urban Projects.



**March 2018** - Official launch of the Resilience Laboratory «Transformation of the Pantanos Basin». Creation of the Pantanos Interinstitutional Executive Committee (CEIP).

**April 2018** - «Possible integral waste management actions» workshop with the support of Veolia, partner of the 100RC platform (30 participants).

**May 2018** - «Towards a more resilient coastal territory» workshop, with the support of the strategic partner, Arup, and the local consulting company DeCerca (40 participants).

**May 2018** - Opportunity Assessment Workshop.



**September 2018** - Launch of Montevideo's Resilience Strategy.

## February to May 2018 - Thematic consultancies:

- Circular economy opportunities in Montevideo.
- Development bases for an integrated risk management plan.
- Studying Montevideo's tourist potential.
- Ideas for an integrated management plan for the coastal territory.
- Creative industries for an innovative Montevideo.

Preparing the consultancies involved carrying out 70 interviews. The results were presented in 3 working groups specifically designed for this purpose.



(March onwards) Round table discussions within the «Transformation of the Pantanos basin» Laboratory framework.

## September 2018 - Resilience Strategy Implementation.

## Phase 3





**CURRENT  
CONTEXT**

# MONTEVIDEO IN NUMBERS

Population

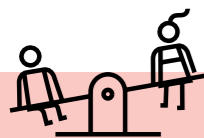
## 1.319.108

inhabitants (INE 2011)



### 2 out of 5

Uruguayans live in Montevideo



### 2 out of 10

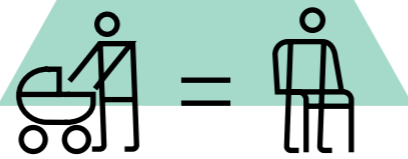
inhabitants of Montevideo are less than 15 years old.

The literacy rate reaches **99%**



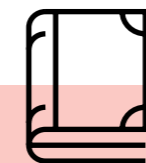
## Intercensal population growth

Montevideo has maintained its population almost stable, with a slight decrease, during the last 20 years



1996-2004: - 0,2%

2004-2011: - 0,1%



### 80%

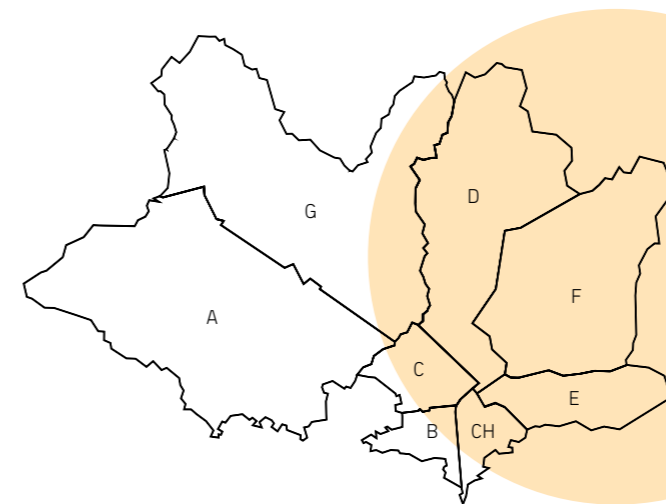
of the population has at least 9 years of formal education

### 70%

of households have an internet connection.



>100 public spaces offer free connectivity



Territorial extension:

## 530 km<sup>2</sup>

It has 8 municipalities, which are territorial units with elected governments conformed by a mayor and four councilmen.



Unemployment rate 2017:

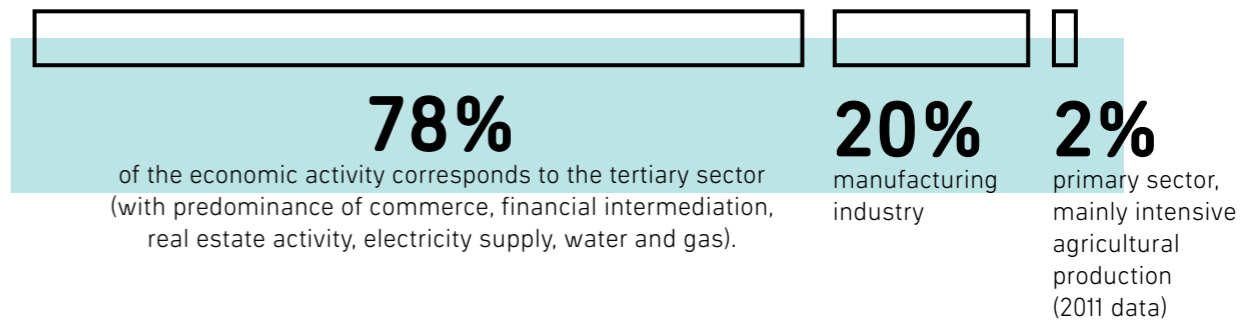
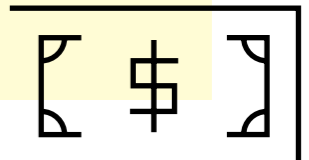
### 8,2%

(INE 2017)

Average monthly income per capita at current values (2018):

### 26.620 pesos

(930 USD) (INE 2018)



It is the country's main port. It received more than

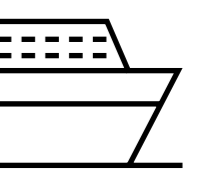
### 4.400

ships in 2017.

(ANP 2018)

It is the country's main tourist destination. In 2017, it received more than

## 1 million tourists



114 cruise ships docked in its port. (MINTUR 2018)

# MAIN RESILIENCE CHALLENGES

Montevideo has an area of 530 square kilometers and is the smallest department in Uruguay, but it is also its capital; it is home to almost half of the population and where more than 50% of the national GDP is generated.<sup>2</sup> These characteristics, together with its status of being the country's main port and one of the most important on the south Atlantic coast, render it as geopolitically and economically strategic. That is why its resilience capacity acquires a fundamental relevance, not only at the local level, but also in the national and regional context.

During the preliminary resilience<sup>3</sup> assessment (PRA), a collective identification of the most relevant shocks and chronic stresses for the city was made, based on the statistical analysis of the data available (in pre-existing studies) and in a study of perceptions specifically conducted to complete the diagnosis. These results were systematized under the resilience approach and were exposed in collective debates that allowed for the establishing of links, similarities and cause-effect relationships, that were sometimes unthinkable or hardly known. This allowed the main challenges in building resilience to be identified.

The challenges identified, which are explained and developed below, do not constitute an exhaustive list, but they form the basis that sustained the development of this strategy. The constantly changing conditions that underlie 21st century transformations, and the very definition of resilience, implies maintaining permanent and continuous attention to identify new shocks and stresses in the future.

## EXPANSION OF THE URBAN AREA AND TERRITORIAL DEVELOPMENT MODEL

- HOUSING / INFORMAL SETTLEMENTS
- LACK OF AFFORDABLE HOUSING
- UNCONTROLLED URBAN DEVELOPMENT
- INADEQUATE INFRASTRUCTURE
- AGING INFRASTRUCTURE

## SOCIAL, ECONOMIC AND TERRITORIAL INEQUALITY

- HOUSING / INFORMAL SETTLEMENTS
- AGING POPULATION
- POVERTY
- INADEQUATE EDUCATION SYSTEM
- ECONOMIC INEQUALITY
- GENDER INEQUALITY
- ABUSE OF DRUGS / ALCOHOL

## MOBILITY AND TRANSPORTATION

- INADEQUATE SYSTEMS OF PUBLIC TRANSPORTATION
- VEHICULAR CONGESTION
- TRAFFIC ACCIDENTS

## ENVIRONMENTAL SUSTAINABILITY AND WASTE MANAGEMENT

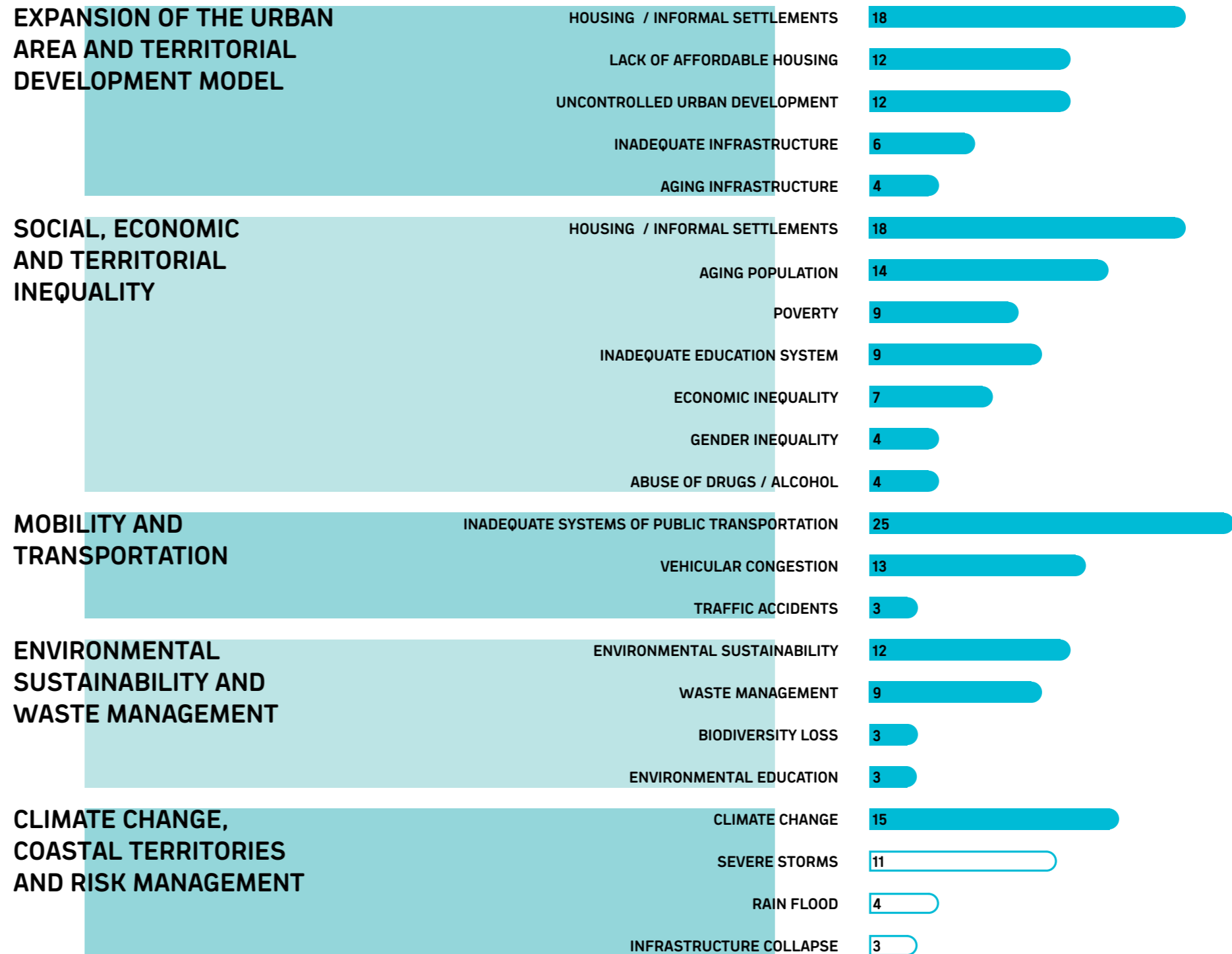
- ENVIRONMENTAL SUSTAINABILITY
- WASTE MANAGEMENT
- BIODIVERSITY LOSS
- ENVIRONMENTAL EDUCATION

## CLIMATE CHANGE, COASTAL TERRITORIES AND RISK MANAGEMENT

- CLIMATE CHANGE
- SEVERE STORMS
- RAIN FLOOD
- INFRASTRUCTURE COLLAPSE

## VOTES

STRESS  SHOCK



(2) OPP, 2011

(3) Intendancy of Montevideo, 2017

**CHALLENGE 1:**

**EXPANSION OF THE URBAN AREA AND TERRITORIAL DEVELOPMENT MODEL**

The urban growth of Montevideo is extensive and is carried out in low demographic pressure conditions. Even though the population had a negative growth in the last two intercensal periods (1996 -2004 - 2011), remaining practically stable for more than 20 years, the expansion of urban land has been constant since the middle of the last century. This gives the department a population density of just 25 inhabitants per hectare, which amounts to 70 inhabitants per hectare if considering only the urban land. The institutional and economic crisis that affected the country in the mid-70s and early 80s sharpened the territorial expansion and population expulsion processes from the consolidated city. This led to the precariousness of some sectors, in which a provision of high quality urban services and equipment (that is underutilized) and a stock of about 2,000 abandoned houses is maintained.

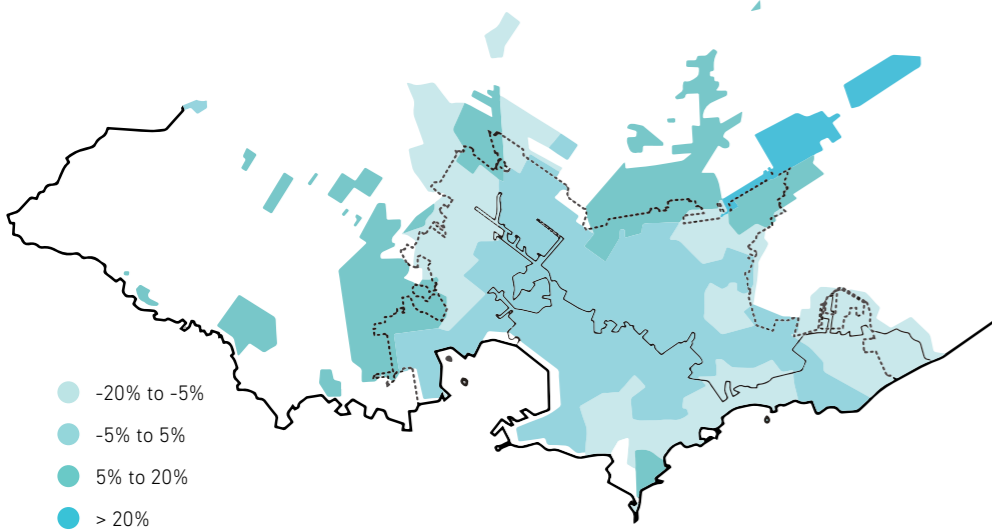
Faced with this situation, Montevideo has been developing an important strategy in territorial planning since the 1990s, and since 1998 it has a Land-Use Planning (POT) and several sectorial plans, making them pioneers on the issue at a national and regional level. However, some of

the designed land management tools have not had the expected results on land speculation and on reversing the expansion process. This is either because they are difficult to apply, since the regulatory process has not been completed or because their conceptual foundations and action protocols are not clearly defined and diffused.

The unnecessary growth of the urban fabric, which requires maintaining low residential densities, not only implies an inefficient use of the urban territory's assets and a considerable increase in the cost of land (limiting the access to it from a large part of the population), but also implies an unnecessary pressure on natural resources and traditional rural activities, thus generating land use conflicts, especially in the urban-rural interface.

Increasing Montevideo's resilience means capitalizing on its powerful installed endowment, building a more efficient territory, where the available assets in the consolidated city are used to overcome inequities in the use and enjoyment of urban habitat quality, interacting harmoniously with its productive and rural natural environment.

Intercensal population variation 1996 - 2004



..... Sanitation coverage  
 — Gas coverage

Source: Intendencia de Montevideo (2012a)

There are more than **2.000** abandoned houses

**70**  
 inhab./ha  
 Urban area population density (2011)

**25**  
 inhab./ha  
 Department's population density (2011)

**CHALLENGE 2:**

**SOCIAL, ECONOMIC AND TERRITORIAL INEQUALITY**

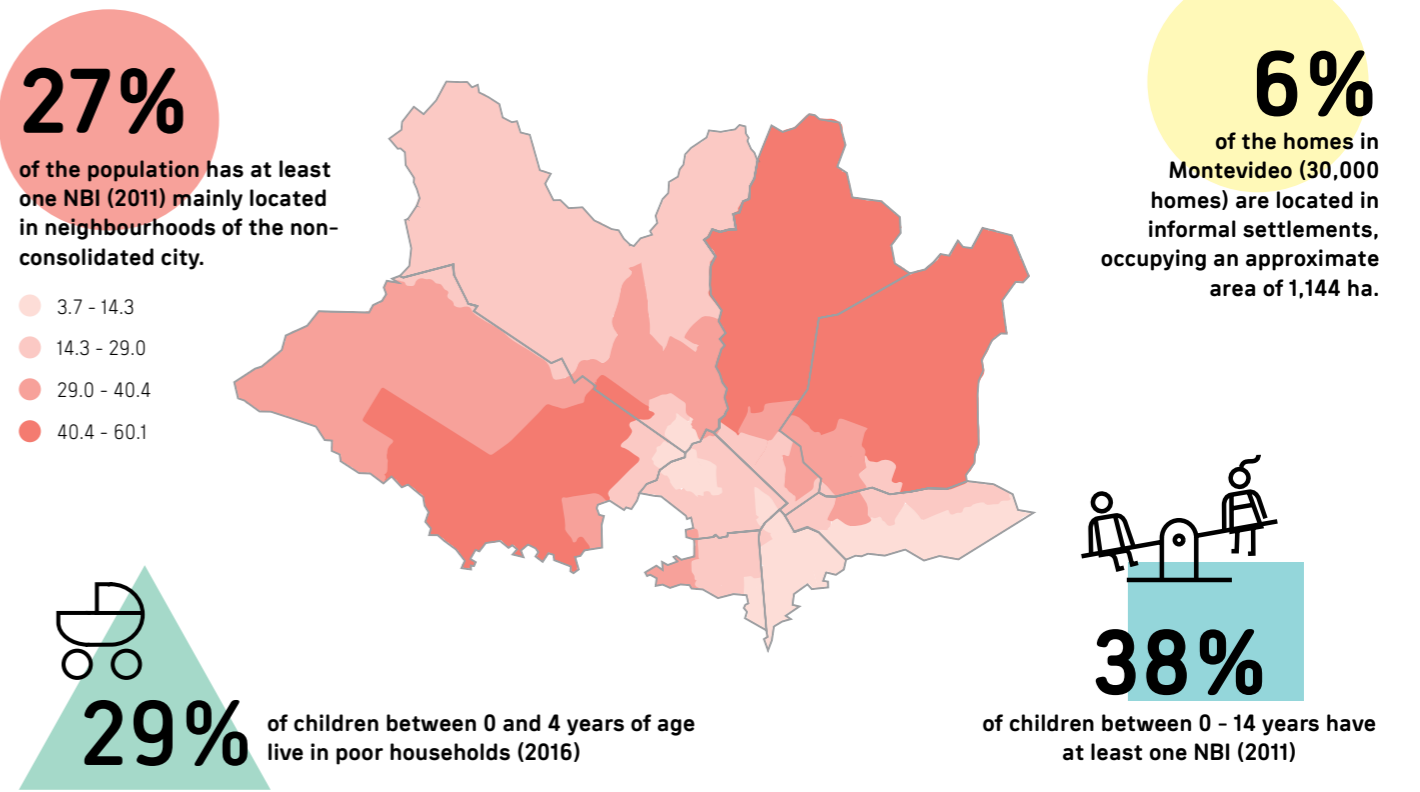
Both the country and Montevideo were affected by major institutional or economic crises in the 70s, 80s and early 2000s. At the national level and at the departmental level, policies have been applied that have managed to revert, in general terms, the economic inequities generated by these crises. For example, in Montevideo, the percentage of poor households fell from 26% in 2006 to 8.3% in 2016.<sup>4</sup> However, it has not been possible to overcome the territorial segregation that followed the urban expansion processes associated with these crises.

Socio-territorial segregation (social segmentation and territorial fragmentation) implies generating locations with internal social homogeneity and little social interaction between them, characterized by strong asymmetries in their urban qualities, their equipment and infrastructure, the qualification and public use of space, housing solutions and its inhabitants access to the city's<sup>5</sup> resources.

According to data for the year 2011, 26.8%<sup>6</sup> of Montevideo's population has at least one unsatisfied basic need (NBI)<sup>7</sup>, which is mainly concentrated in unconsolidated areas, particularly along major roadways and watercourses, as well as in some slums in central areas. In these neighbourhoods, the population with unsatisfied basic needs reaches between 40 and 60%.

This situation demonstrates a territorialized expression of social inequality, which becomes even more complex if one considers the age dimension of this population (between 40-60% of children under 14 years of age in non-central neighbourhoods have at least one NBI) and the ethnic background (45% of the Afro-descendant population has at least one NBI).

In this context, one of the most important stresses that emerged in the preliminary resilience assessment is the lack of social cohesion. This is not only linked to territorial segregation. The recognition and respect for the diversity of all the inhabitants becomes fundamental in building resilience; from rural workers to the migrant population, considering age, gender and socioeconomic differences.



(4) Intendencia de Montevideo, 2017; (5) Intendencia de Montevideo, 2012; (6) Calvo, 2013; (7) The dimensions considered as basic needs are: decent housing, potable water supply, sanitary service, electrical energy, basic comfort devices and education.

**CHALLENGE 3:**

**MOBILITY AND TRANSPORTATION**

The results of the preliminary resilience assessment indicate that mobility is one of the most relevant stresses perceived by the citizens of Montevideo. The urban mobility system not only enables the movement of people and goods, but also plays a key role in social inclusion and contributes to the democratic appropriation of the city.

The urban expansion process led to the emptying of the central areas and making the population locate along the main road corridors, generating greater dependence on individual displacements and a greater demand for collective public transportation to peripheral areas of the city. Likewise, the socio-territorial segregation (generated because of this expansion) led to a neighbourhood logic with low interaction between themselves and with difficulties in accessing those areas with better habitat qualification.

The role of Montevideo as the national capital and as the country's main port has also generated in recent years, under a context of sustained national economic growth, an increase in the pressure of freight transportation in the

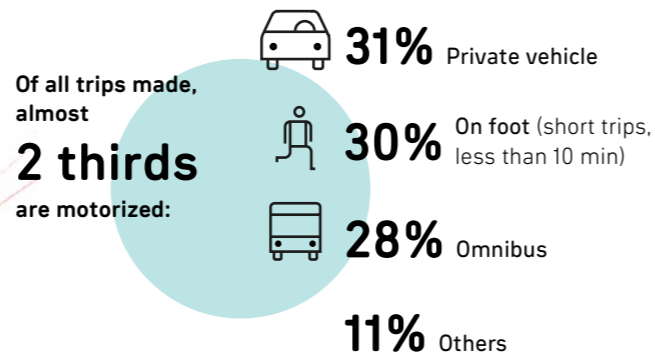
urban fabric and the consequent impact on the flow and local safety traffic. In addition, its status as the main urban center of the metropolitan area implies that approximately 22% of trips within Montevideo are originated in the metropolitan area.<sup>8</sup>

Alongside these processes is the considerable vehicle fleet increase in Montevideo and the fact that sustainable mobility means have not yet found an adequate and attractive alternative for their development: although in short-distance trips, transportation by foot has a high prevalence, in medium and long trips, the growth of motorized transportation has been accentuated, with the predominance of the individual private vehicle.

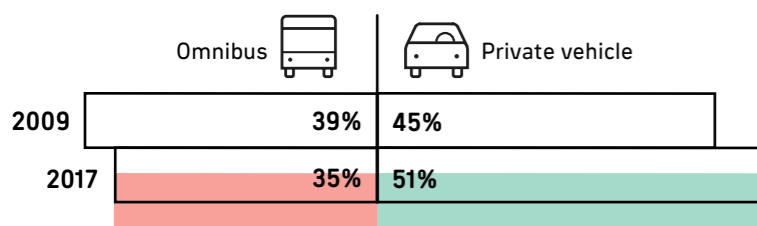
Montevideo has advanced in the search for solutions based on applying technologies, among which, the creation of the Metropolitan Transportation System and the Mobility Management Center stand out. However, deepening mobility and connectivity policies still remains an important challenge in line with the planning processes and the observed territorial dynamics.

Montevideo's mobility system is an essential instrument for qualifying and consolidating centralities, making the city's public facilities accessible for collective use while at the same time promoting democratic ownership of it.

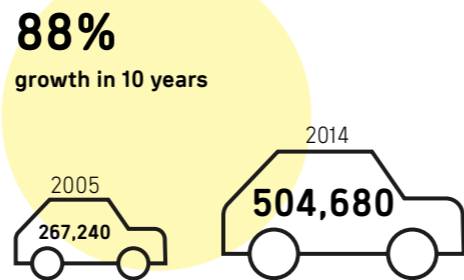
Real-time travel mapping



Modal split, excluding walking trips



Montevideo's Automotive Park:



**CHALLENGE 4:**

**ENVIRONMENTAL SUSTAINABILITY AND WASTE MANAGEMENT**

The dynamics of unplanned urban expansion have impacted the department's natural resources generating several environmental problems and conflicts: the territorial regression of rural areas and the degradation of productive agricultural land, the contamination of water resources, the loss of biodiversity and the affectation of fragile ecosystems mainly associated with rivers and streams.

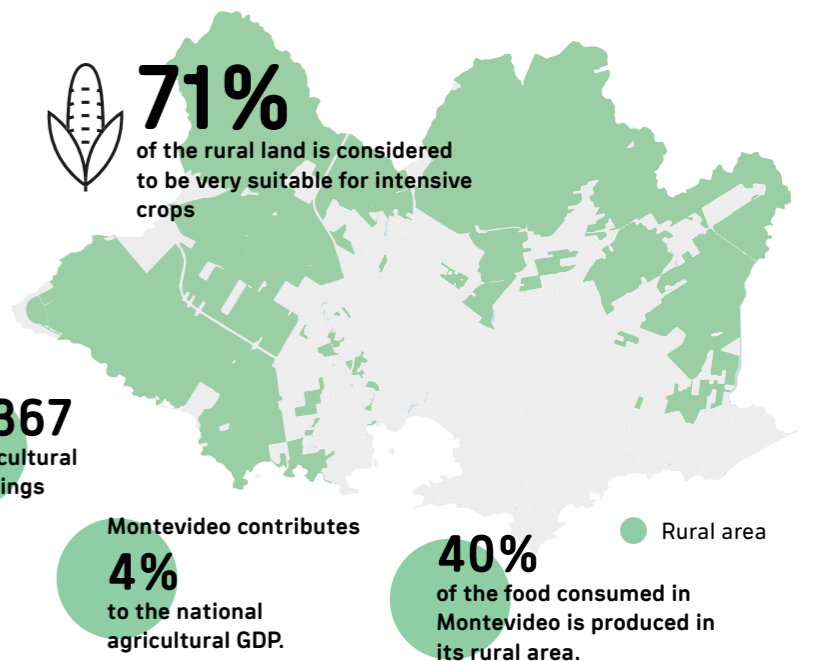
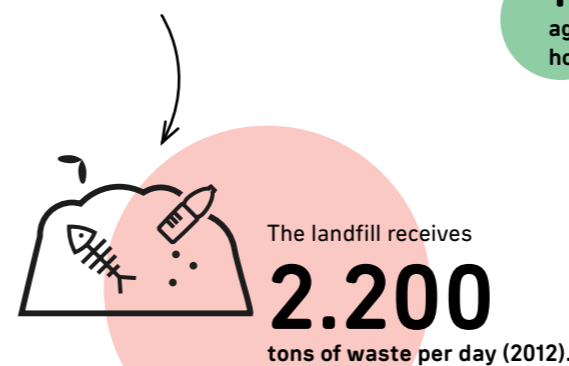
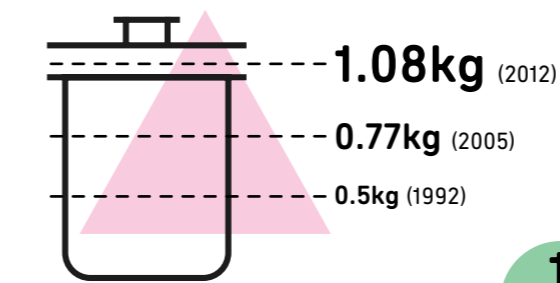
62% of Montevideo's department territory is rural and despite its low population concentration, it plays a fundamental role in producing vegetables and fruits for internal consumption. Its importance, however, goes beyond its productive value; rural producers have a small-scale production system that generates a characteristic cultural landscape, associated with Montevideo's rural identity.

In addition, it constitutes a green space located in the metropolitan area, which plays a vital role from an environmental, landscape and recreational point of view. It is an area with ecological and environmental values of great significance, such as the Santa Lucía river wetlands (today it is a protected area which entered the National System of Protected Areas) and the west coast of Río de la Plata that still maintains high naturalness values.

The environmental degradation problems also occur in the urban and suburban areas of Montevideo. In this case, waste management is one of the aspects in which the perception analysis carried out reflected the sensitivity of the people of Montevideo, mainly because it is associated with the contamination of the department's water resources. Informal settlements on its banks cause contamination of the water, both by the direct discharge of household effluents, as well as by playing a receptor role in clandestine classification points and in informal waste disposal.

It is necessary to address environmental stresses and conflicts with a multiscale and multi-territorial approach; it is especially important to consider the basin scale water resources to help achieve an integrated management of problems and solutions.

Evolution of waste generation (kg per person per day).



**7716 ha**  
del territorio montevidiano corresponden al Área Protegida con Recursos Manejados Humedales de Santa Lucía

(8) Intendancy of Montevideo, 2017c



**CHALLENGE 5:**

**CLIMATE CHANGE, COASTAL TERRITORIES AND RISK MANAGEMENT**

In the preliminary resilience assessment, 3 relevant shocks for the city were identified, all linked to climate variability and climate change: severe storms (winds and heavy rains) and their direct consequences: flooding by rain and collapse of houses, woodland and infrastructures. These shocks affect the entire department but acquire special significance in relation to the territories linked to the department's bodies of water.

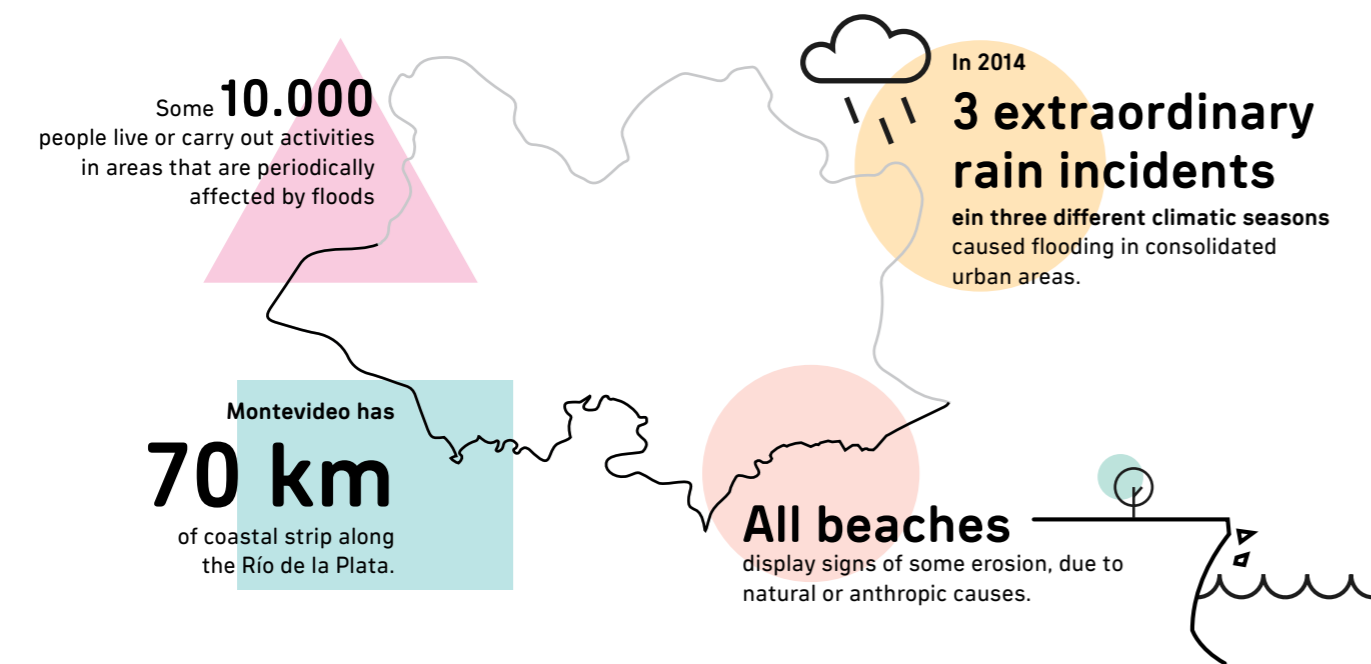
The coast of Rio de la Plata is of great importance for all the people of Montevideo, not only for its symbolic value as the main democratic space for coexistence, but also for its economic relevance: its 20 km of beaches constitute a landscape and heritage value that contribute to Montevideo's status as the main tourist destination in the country. Likewise, it houses the country's main port, being Uruguay's entry and exit door for trade.

The continuous impacts due to extreme weather events has led to sand losses from its beaches, changes in its coastal dynamics, affecting its main marine and terrestrial ecosystems, and increasing the affection risks of strategic

infrastructures located on the coast (a power plant, an oil refinery, port facilities, urban sanitation facilities) and of an important stock of houses (the coastal neighbourhoods are the most densely populated and house 20% of the department's population).

The main urban water courses (Pantanosos, Miguelete and Carrasco streams) are also affected by the effects of climatic variability, especially the frequency and intensity of rainfall, whose impact increases because of uncontrolled urban development in potentially flood-prone areas.

Over the years, an important institutional capacity response to disaster events has been built, through the actions of the Departmental Emergency Coordinating Center (CECOED) and the implementation of sectoral policies by various agencies (for example, relocation of housing that is located in flood areas or the implementation of successive drainage and sanitation plans, among others). However, in many cases, these sectoral actions are not identified, neither by the officials themselves nor by citizens in general, as initiatives linked to risk management. It is necessary to strengthen the risk perception, whether related to climate activity or not, and to build an integrated and contemporary prevention, mitigation, preparation, emergency care, rehabilitation and recovery approach.



**EMERGING CHALLENGE:**

**TRANSFORMATION OF THE PRODUCTIVE MATRIX**

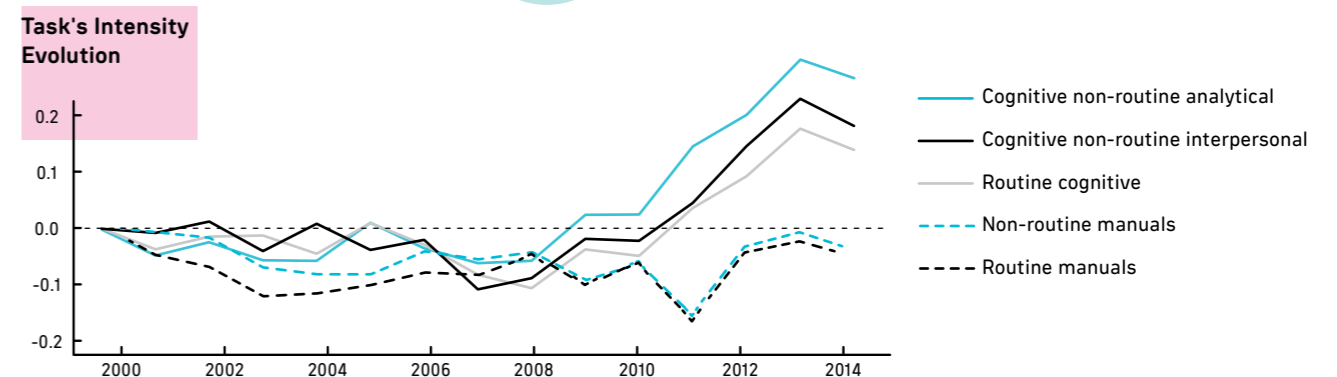
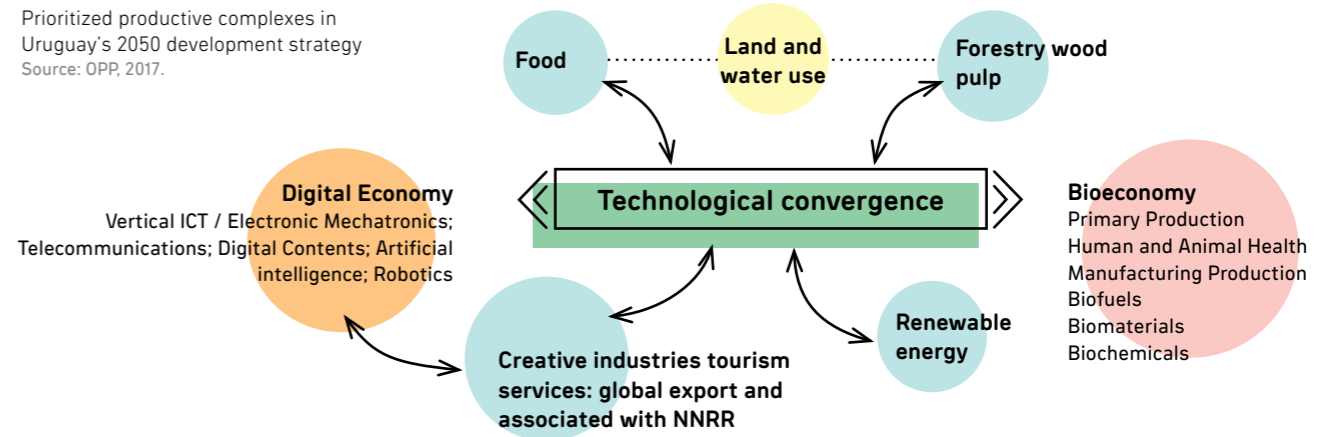
Although the potential impacts of technological transformation on the automation of employment were not identified as relevant during the preliminary resilience assessment, this is an issue that is being intensively debated at the public level in the country. In fact, the transformation of the productive matrix is one of the five prioritized dimensions in building the National Development Strategy for 2050 that is carried out by the Office for Planning and Budget (OPP) of the country's Presidency, and one of the seven debate topics of the Montevideo del mañana plan, which is being carried out by the Intendancy of Montevideo.

To highlight this national challenge, the OPP has developed a prospective study<sup>9</sup> to provide elements for social reflection and for designing public policies on the subject. From investigations conducted on a global scale, this study recognises the emergence of a sixth technological revolution since 2010 (based on the digital revolution), which is applied to renewable energies, biotechnology

and nanotechnology, and characterized by sustainable development and the promotion of the circular economy. The results obtained confirm that Uruguay is not isolated from the effects of labour market automation. The activities with the greatest risk of automation represented 16% of the jobs in 2015 and play a fundamental role in the country's exports value chain. However, in recent years, the intensity of cognitive tasks has indeed grown in Uruguay, which are more difficult to automate. That is to say, the country is in a useful position to take advantage of the technological revolution by modifying its productive matrix, without generating a technological unemployment increase.

For this reason, the 2050 development strategy places focus on the prospective planning of 6 productive complexes that are considered to be strategic. Montevideo must face this challenge and accompany this national policy, all the while enhancing its own strengths to boost its prioritized production complexes: digital economy (TICs, electronics, robotics, artificial intelligence, internet of things, communications), tourism, creative industries and global service exports, betting on developing professional, scientific and technical activities, linked to creative and innovative thinking and interpersonal skills.

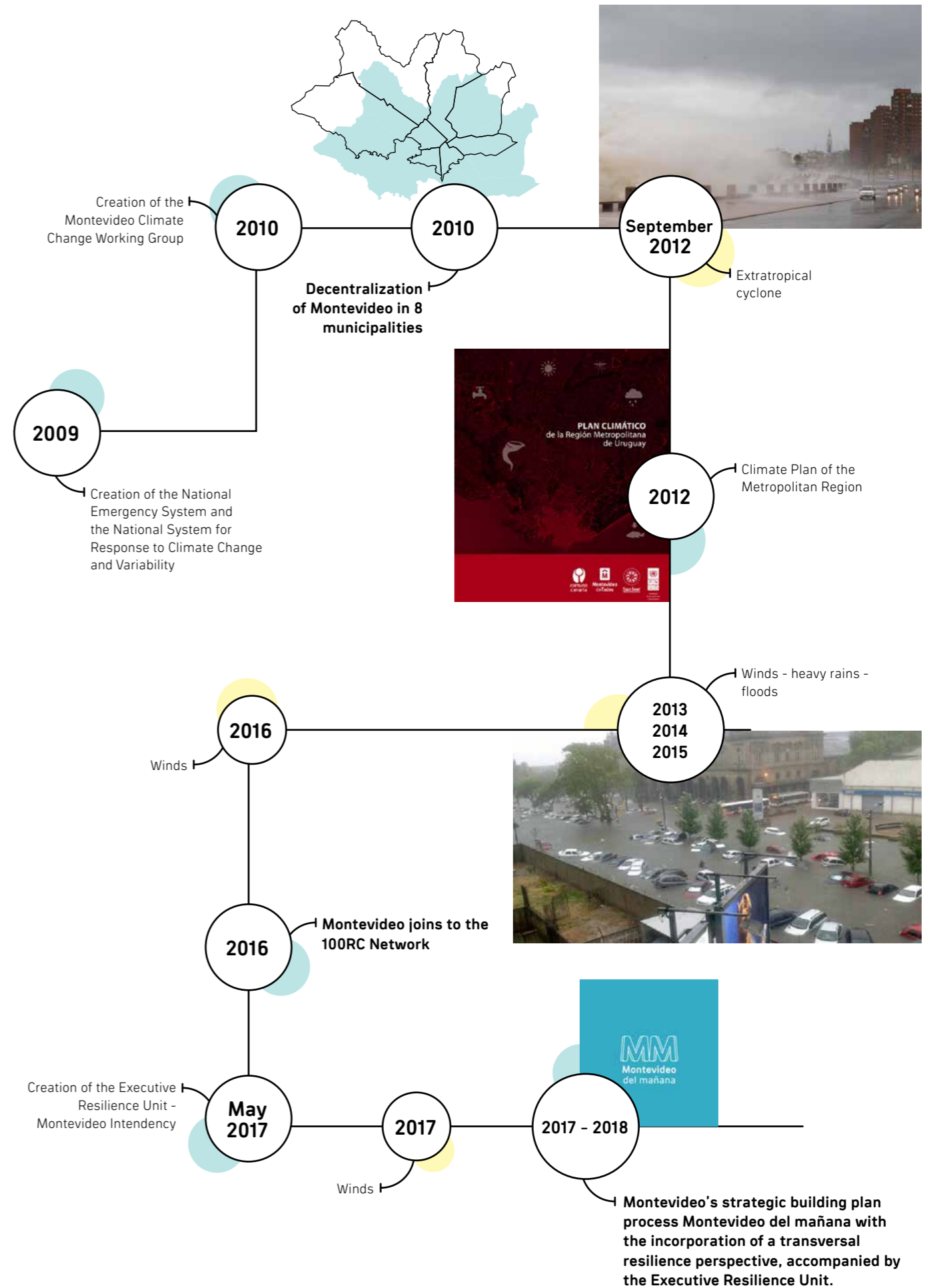
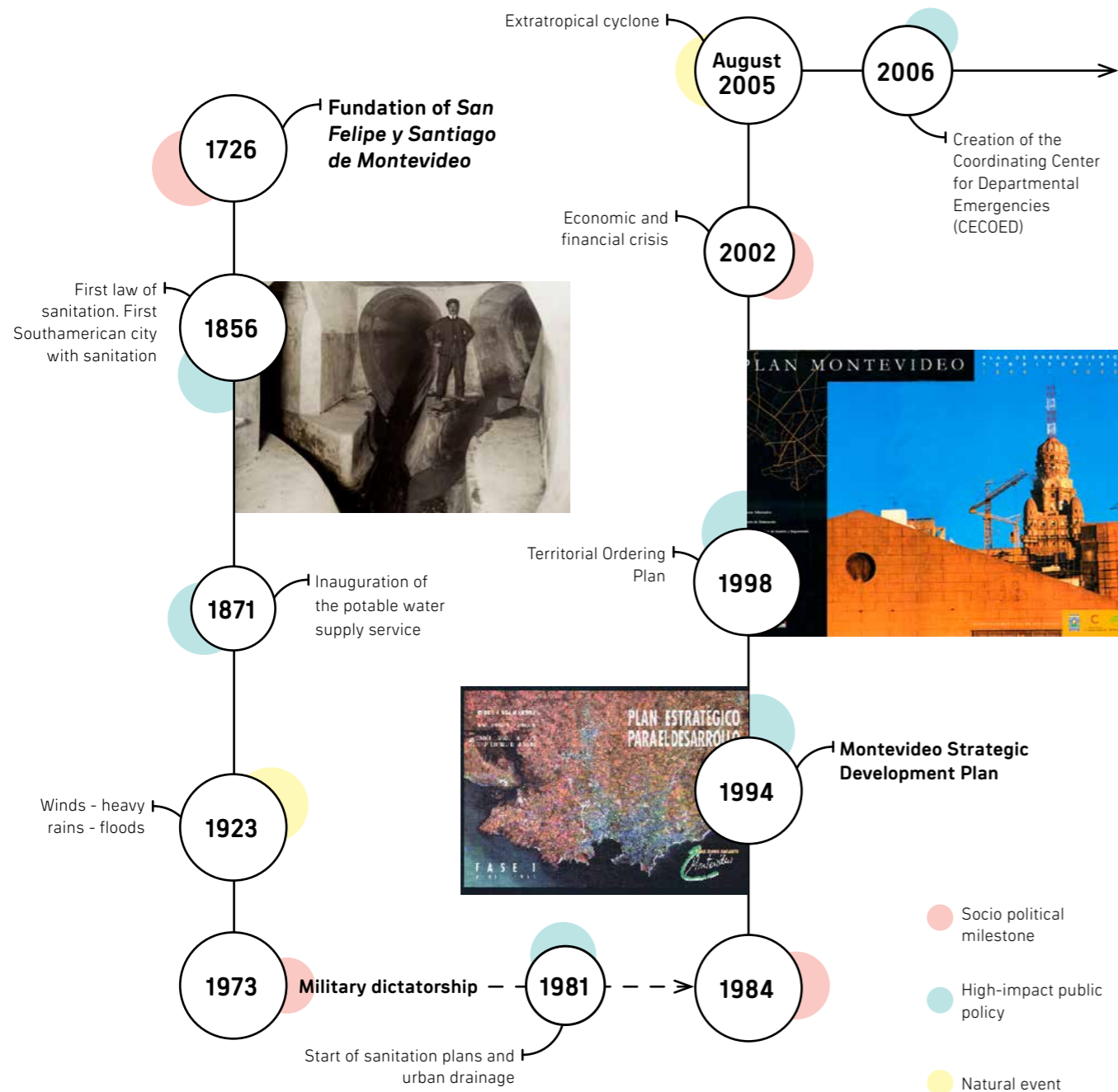
Prioritized productive complexes in Uruguay's 2050 development strategy  
Source: OPP, 2017.



(Graph 1, page 19 of the OPP Report). Changes in Uruguayan jobs between 2000 and 2014: decrease in the intensity of routine manual tasks (MR) and increase in cognitive tasks, especially non-routine cognitive analytical tasks.

(9) OPP, 2017

# MONTEVIDEO'S HISTORICAL PATH ON BUILDING RESILIENCE





# 03

## RESILIENCE STRATEGY

## APPROACH ADOPTED FOR THE STRATEGY CONSTRUCTION



Montevideo's resilience strategy is being compiled in an integrated manner with other planning development processes that are occurring simultaneously, both at departmental and national levels. In its elaboration, this unique situation of convergence is exploited by evaluating other planning processes, learning from them and giving them feedback. Therefore, maintaining coherence with what has been done and, thus, generating a profound impact by incorporating a resilience approach when planning a sustainable development.

### The resilience strategy values Montevideo's planning tradition

Montevideo has a long tradition in participatory planning management. Even though the term 'resilience' has been incorporated only very recently within Montevideo's action framework, the concept, in its broad sense, has been underlying in several planning processes: from territorial planning to housing relocation programs in flood-prone zones; and similarly, from successive urban sanitation plans to public space policy prioritization (as a privileged area for social integration). However, it is necessary to integrate the concept transversally and medullary to the strategic planning processes of the city, so that it permeates all of its management areas.

The resilience strategy is based on Montevideo's planning tradition. It recognizes the initiatives that have already been carried out and relates them to identifying the emerging benefits of joint implementation; it complements them when necessary with a new perspective and integrates them into a new agenda designed to manage change under a resilience approach.

### The resilience strategy is integrated into the *Montevideo del mañana* development process

The beginning of the resilience strategy building process coincided with the department's prospective planning process, *Montevideo del mañana*, destined to build a long-term development (2050) vision and guide to the short, medium and long-term actions that are necessary for its realization.

The UER participates as a key actor in this process, maintaining a permanent exchange of ideas, concepts and proposals: the inspiring 2050 vision of *Montevideo del mañana* was built simultaneously alongside the resilience vision; its strategic axes were aligned with the resilience pillars; and the key debate topics for *Montevideo del mañana* were the subject of special study in the resilience strategy, in order to provide new inputs for building broad social agreements.

In this context, the development of the resilience strategy within the 100RC framework constitutes a unique opportunity to install the resilience perspective not only in Montevideo's process *Montevideo del mañana*, but also in the inhabitant's ways of thinking and building the city. And, at the same time, it serves as a challenge to optimize the use of the methodological tools in both processes, avoiding duplicating efforts and ensuring coherence in the results.

### The resilience strategy capitalizes Montevideo's role in the sustainable development of the country

The resilience strategy development process also coincides with Uruguay's National Development Strategy for 2050 building process, which seeks to collectively reflect on the Uruguay of the future, generating a consensual vision of the country and defining the strategic guidelines to achieve it.

Montevideo, as a capital city, is a strategic territory, recipient and executor of national policies that are defined within that framework, and therefore must address challenges that transcend its powers and responsibilities. To do this, it must prepare itself to accompany the implementation of the government's national policies without losing its own identity and long-term development vision. Thus, several initiatives included in this strategy are led by national institutions and Montevideo accepts them as playing a key role in leading actions in its territory. In this respect, the resilience value that is built in Montevideo is amplified and generates positive impacts on building resilience at a national level.

# STRUCTURE OF THE STRATEGY

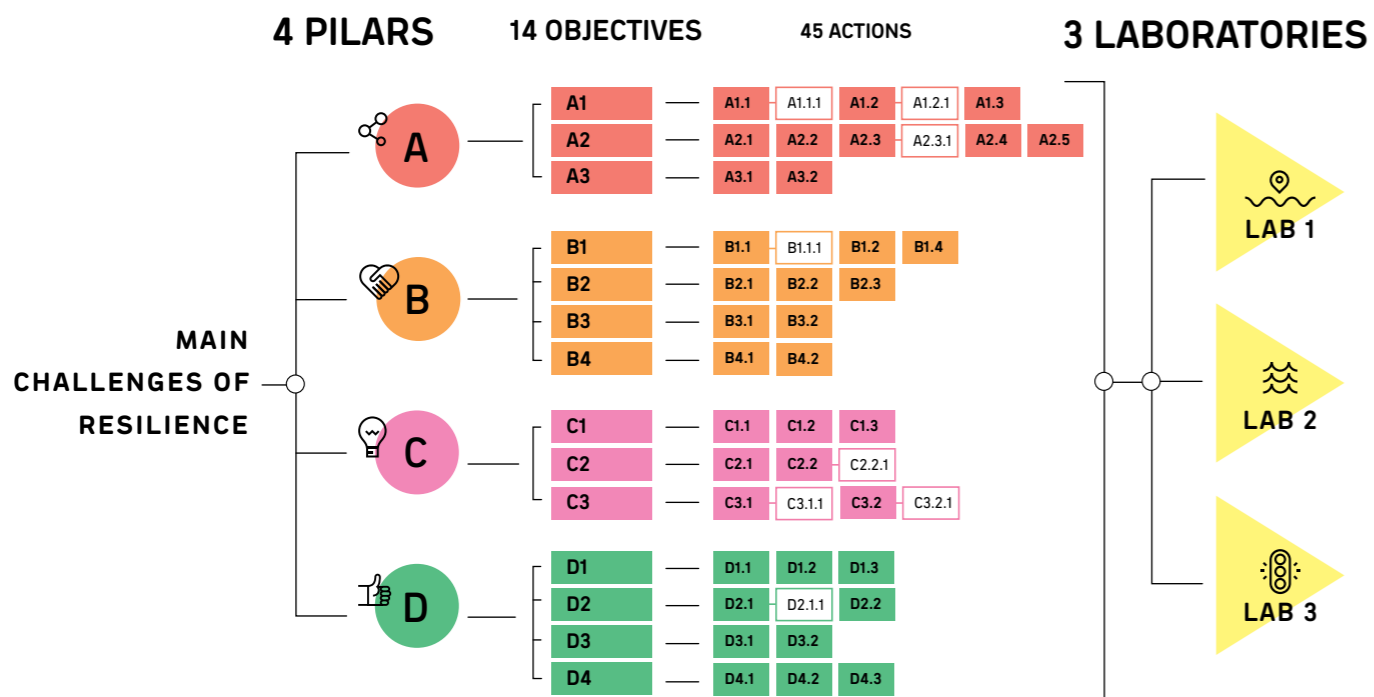
Montevideo's resilience strategy is organised into 4 pillars, 14 objectives, 45 initiatives and 3 strategic processes that we have called «resilience laboratories». Together, these pillars, objectives, initiatives and laboratories all contribute to building Montevideo's Resilient vision.

The pillars address, in a systematic and comprehensive manner, the main challenges identified in the preliminary assessment of resilience, taking into account the vision, development axes' and Montevideo's future debate topics in the prospective planning process of Montevideo del mañana. Each pillar has a long-term vision that defines the strategic assumed direction and a set of objectives that are aimed at achieving this vision.

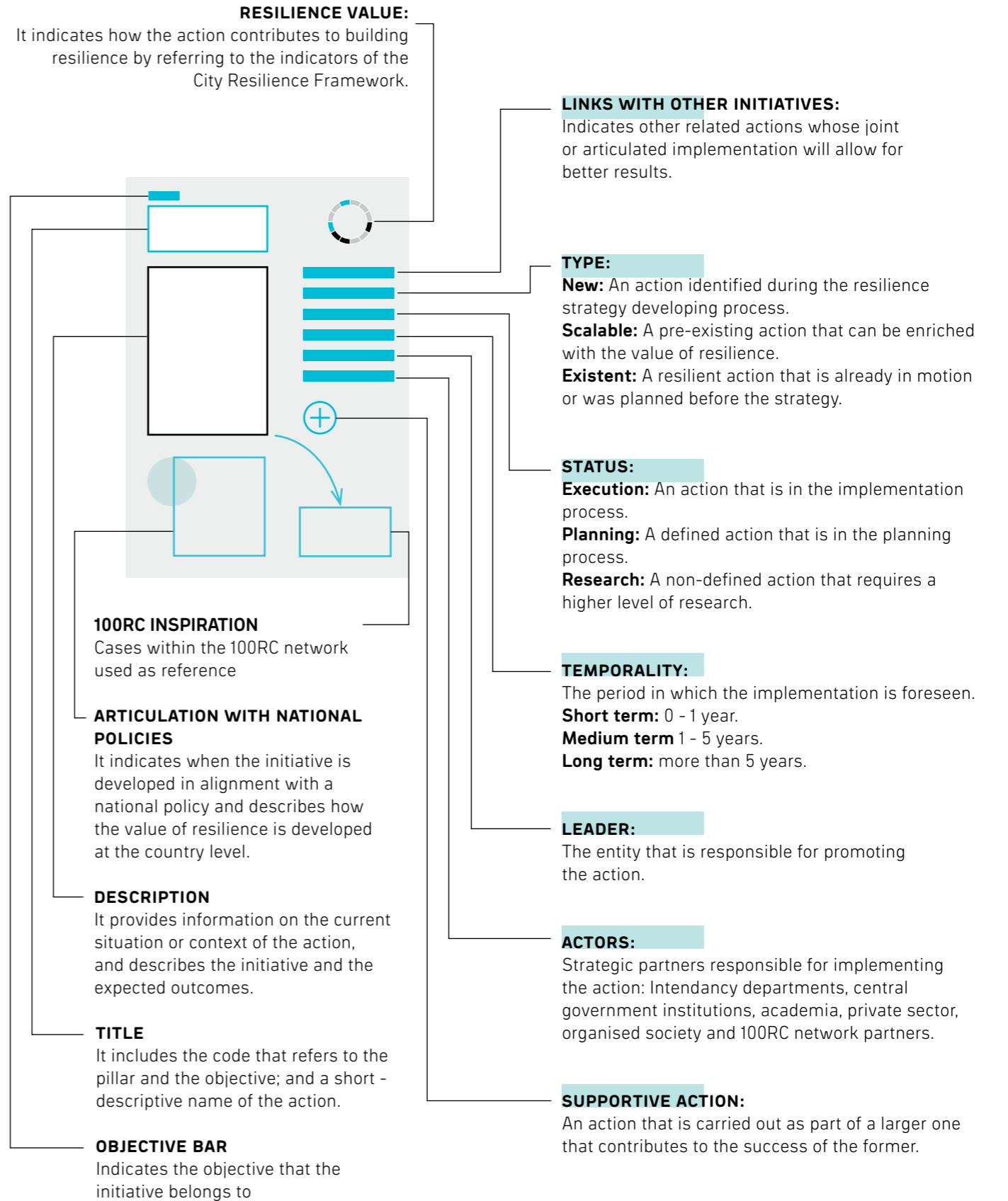
The initiatives are actions, projects, plans or programs that contribute to achieving the objectives. Whilst each initiative is associated with a particular objective, they were also selected for their value, as they multiply the

value of resilience; as a result, they also contribute directly or indirectly to achieve other objectives of the same or of different pillars. The list of 45 initiatives includes original proposals that came out of working groups, participatory workshops and studies conducted in order to identify the best ways to address Montevideo's resilience challenges, to which others of the Intendancy's sectoral plans were included, either because they directly contribute to building resilience or because they can be enriched if the resilience lens is incorporated.

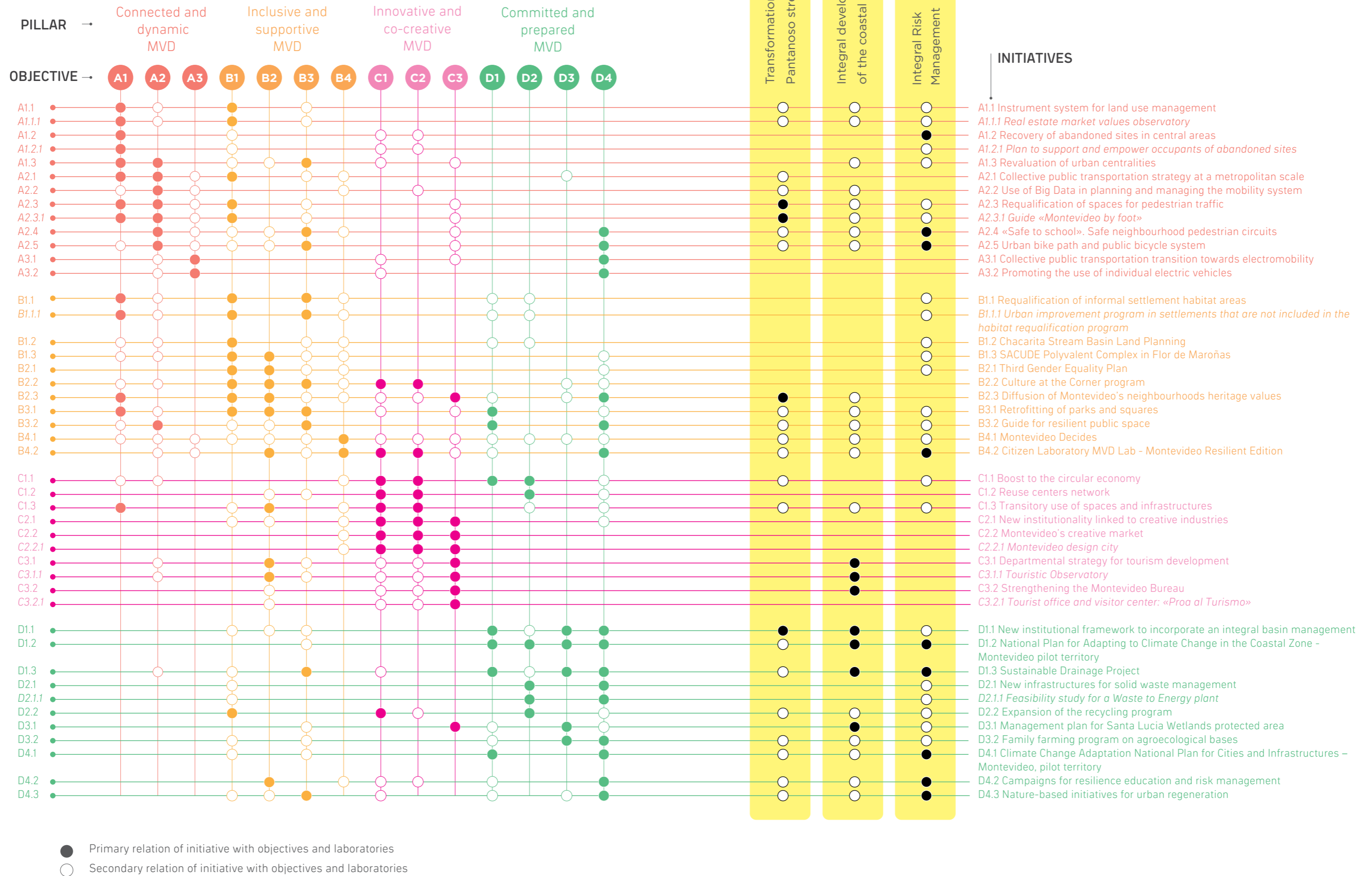
Laboratories are neither plans nor projects nor actions. These are resilience building processes that due to their transversality and strategic value characteristics, allow for an integral approach to the 4 pillars and contribute towards achieving Montevideo's Resilient vision in a decisive manner.



# HOW TO READ THE STRATEGY

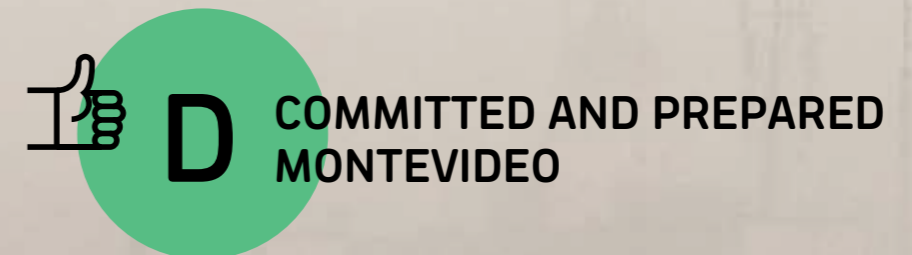
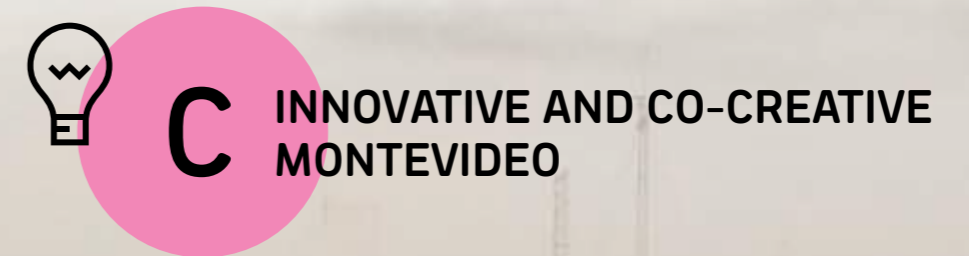
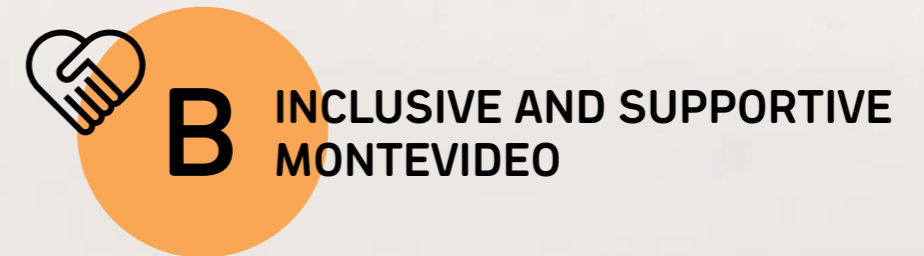


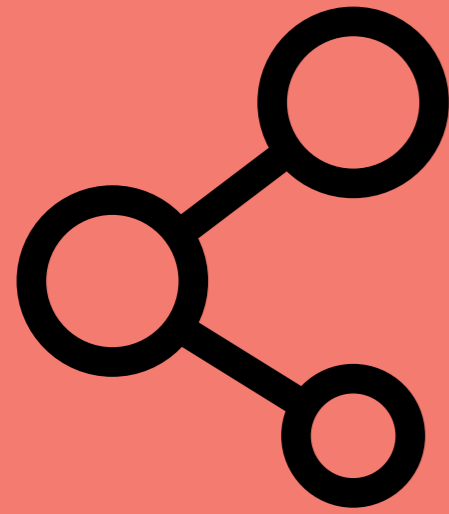
# RELATION OF INITIATIVES WITH OBJECTIVES AND LABORATORIES



# Vision

A Resilient Montevideo is a city that is **open** to the sea and the world; one that is **dynamic**, attractive and enjoyable and which celebrates the **innovation** and intelligence of its people. A **co-creative**, **equitable** and **solidary** capital, with a **committed** and empowered citizenship whereby every day better **prepares** itself for the future.





# Pillar A

## CONNECTED AND DYNAMIC MONTEVIDEO

*Montevideo is a dynamic city that is connected to the world, the region and its metropolitan environment. It is one which makes efficient use of its territory and of its installed capacities, supported by an urban mobility system that guarantees adequate connectivity, combining different transportation means and prioritizing sustainability, promoting socio-territorial integration processes and equitable use of the territory for all of the people of Montevideo.*

## OBJECTIVES

- A1** Control urban expansion, promoting the maximum use of consolidated areas and the revitalization of precarious central areas.
- A2** Promote the public use of space for collective and operational transportation over the individual motorized vehicle.
- A3** Promote the energy matrix transformation in urban mobility.





## A1

Control urban expansion, promoting the maximum use of consolidated areas and the revitalization of precarious central areas.

## A1.1 INSTRUMENT SYSTEM FOR LAND MANAGEMENT

Montevideo currently has a set of management instruments and territorial regulations that facilitate access to the land. Despite having the support of these instruments, their application has not been able to contribute efficiently to optimize land use, facilitate its access in an equitable manner nor direct urban interventions towards building the desired compact city model.

The initiative consists of revising the existing instruments and designing and activating an easy-to-apply territory management tool system that adjusts to the dynamics of the current real estate market and that contributes to channeling the use of urban land in an efficient manner. Among the instruments to be reviewed includes the land portfolio, right of first refusal, expropriation, surface rights and the promotion of instruments, incentives and disincentives for private action.

**Articulation with national policies.** *This initiative is developed within the framework agreement signed by the Intendancy of Montevideo with the Ministry of Housing, Territorial Planning and Environment (MVOTMA) to join forces and coordinate actions to move towards a National Strategy for Access to Urban Land (ENASU). This agreement will allow Montevideo to pool its experience with other departmental governments and with the national government to trigger a general improvement in the instrument system at a national level, thus multiplying the resilience value of the initiative.*



### RESILIENCE VALUE:

12.3 Urban development and land use | 12.4 Building codes and standards | 1.1 Housing | 8.2 Optimization of basic infrastructure | 10.1 Alignment of multiple parties | 11.4 Communication between government and the public | 12.1 Monitoring and data management

### LINKS WITH OTHER INITIATIVES:

A1.2 | A1.3 | A2.3 | B1.1 | B3.1

### TYPE:

Existent.

### STATUS:

Planning | Execution.

### TEMPORALITY:

Short term.

### LEADER:

Planning Department.

### ACTORS:

Urban Development Department. Smart and Sustainable Development Department. National Territorial Planning Direction (MVOTMA). Real Estate Chamber. Construction Chamber. Association of Private Promoters of Construction.



### SUPPORTIVE ACTION: A1.1.1 REAL ESTATE MARKET VALUES OBSERVATORY.

Its objective is the collection, debugging, analysis and continuous and systematic diffusion of information on real estate market values and changes in trends to generate reference models.



## A1.2 RECOVERY OF ABANDONED BUILDINGS IN CENTRAL AREAS



### RESILIENCE VALUE:

1.1 Housing | 8.2 Optimization of basic infrastructure | 5.3 Policies that promote safety and protection | 8.3 Maintenance of goods and services | 11.2 Understanding of risks | 12.3 Urban development and land use | 12.4 Building codes and standards

The objective of the program is to recover abandoned buildings and reestablish them as spaces enabled for multiple uses, including residential use, either temporarily or permanently. It is supported by departmental regulations and legal tools available under Law No. 18,308 on land use planning and sustainable development.

From a pilot scheme, the recovery of visibly abandoned sites and buildings will be put into practice in the central area of Montevideo, which includes investigating the property registry, the necessary legal process for expropriating the property and its incorporation (through an agreement with the MVOTMA, destined for accessing housing programs implemented by the national government). Based on the pilot experience, the possibility of allocating special funds for the physical rehabilitation of the buildings to be used for non-residential uses and on a temporary basis, will be evaluated.

By 2019, 30 abandoned buildings that are in the process of being incorporated into national housing programs will have been recovered. By 2020, an intervention protocol for the recovery and rehabilitation of abandoned buildings will be validated and institutionalized, in accordance with national and departmental regulations.

### LINKS WITH OTHER INITIATIVES:

A1.2 | A1.3 | B1

### TYPE:

Existent.

### STATUS:

Execution.

### TEMPORALITY:

Short term

### LEADER:

Urban Development Department.

### ACTORS:

Planning Department. Social Development Department. National Housing Direction (MVOTMA).



### SUPPORTIVE ACTION: A1.2.1 PLAN TO SUPPORT AND EMPOWER OCCUPANTS OF ABANDONED SITES.

A large portion of the abandoned buildings have been occupied in precarious conditions. The buildings recovery program is accompanied by actions aimed at avoiding gentrification, supporting empowerment and generating capacities so that occupants can be incorporated into the housing cooperative system or other housing access programs provided by the national government.



## A1.3 REVALUATION OF URBAN CENTRALITIES

It is a set of actions designed with the aim of promoting the revaluation of pre-existing urban centers and strengthening new centralities that are intended to be consolidated. These actions involve both infrastructure works, either new works or physical requalification, and regulation adjustments related to urban surplus value appropriation instruments aimed at redirecting investments from public and private sectors to ensure the best use of the territory and to allow for socio-territorial integration. By 2020, the following interventions will have been carried out:

### Extension of the Parque de la amistad and Modernisation of the Planetarium

Recovery of public space linked with the current zoo, which will result in a 100% accessible, illuminated and landscaped space, complete with playgrounds and active spaces. The zoo will be transformed into an eco-park and the planetarium will be modernised by renovating the building and installing a high-tech digital projection system.

### Italia avenue roadway Corridor

Physical infrastructure adaptation works to improve the flow of public transportation, conditioning of sidewalks, redefining construction parameters on the roadway corridor and designing specific urban value instruments for appropriating the surplus generated, aimed at strengthening the central role of Italia avenue on an urban and metropolitan scale.

### Mercado Modelo

From an open contest of ideas came a programmatic and architectural proposal for the urban development of the old Mercado Modelo and its immediate surroundings, barycenter of Montevideo, which is currently vacant due to its move to the new Food Unit of Montevideo.



### RESILIENCE VALUE:

8.2 Optimization of basic infrastructure | 12.3 Urban development and land use | 8.3 Maintenance of goods and services | 4.2 Identity and local culture | 4.3 Community participation | 6.2 City budgets | 7.3 Redundant and diverse infrastructure | 9.1 Transportation network

### LINKS WITH OTHER INITIATIVES:

A1.1 | A1.2 | A2.3 | A2.5 | B2.3 | B3.1 | B3.2

### TYPE:

Existent.

### STATUS:

Execution | Planning.

### TEMPORALITY:

Short term | Medium term.

### LEADER:

Urban Development Department.

### ACTORS:

Planning Department. Mobility Department. Environmental Development Department. Culture Department.



Corredor Av. Italia



Parque de la Amistad

## A2

Promote the use of public space for collective and operational transportation over individual transportation.



## A2.1 COLLECTIVE PUBLIC TRANSPORTATION STRATEGY AT A METROPOLITAN SCALE



### RESILIENCE VALUE:

9.1 Transportation network | 9.2 Public transportation | 4.1 Social communication and connectivity | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 12.3 Urban development and land use

### LINKS WITH OTHER INITIATIVES:

A1.3 | A2.2 | A2.4 | A3.1 | B1.1 | B2.1 | B4.1

### TYPE:

Scalable.

### STATUS:

Planning.

### TEMPORALITY:

Medium term.

### LEADER:

Mobility Department.

### ACTORS:

Planning Department. Urban Development Department. Private companies that provide public transportation services. Community of users.

Montevideo has a 2010-2020 Mobility Plan that will be subject to revision and adjustments in accordance with the current dynamics of Montevideo's territory and of the metropolitan area. At the time of this review, the resilience approach will be incorporated in order to enhance the role of urban mobility as a catalyst for the efficient use of the territory and the democratic appropriation of the city.

In particular, a strategy will be designed for transforming the public transportation system to a metropolitan scale, based on efficiency and principles of quality. This proposal will include reviewing the institutional framework and current regulatory aspects, as well as design, planning and management aspects.



## A2.2 USE OF BIG DATA IN PLANNING AND MANAGING THE MOBILITY SYSTEM

The Mobility Management Center is a service composed of several intelligent transportation systems that are applied to the administration, management, traffic control and transportation of the city of Montevideo. It possesses technological equipment that allows for the acquisition of a large volume of high complexity data in real time and on the flow, as well as the transit status in the city.

The objective of this initiative is to improve the institutional technical capacities for the better use and utilization of data (Big Data) in planning and supervising the mobility system. The planned actions include: analysis of existing capacities; generating new capabilities for data analysis; and developing specific techniques for using and applying Big Data when making decisions related to the optimization of mobility.

By 2020, at least three cases using the platform's data (compiled in the Mobility Management Center) will have been developed to improve specific aspects of the public transportation system.



### RESILIENCE VALUE:

9.1 Transportation network | 9.2 Public transportation | 9.4 Communications technology | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 11.5 Transfer of knowledge | 12.3 Urban development and land use.

### LINKS WITH OTHER INITIATIVES:

A1.3 | A2.1 | A3.1

### TYPE:

Existent.

### STATUS:

Research.

### TEMPORALITY:

Medium term.

### LEADER:

Mobility Department.

### ACTORS:

Planning Department. Sustainable and Smart Development Department. Urban Development Department.



## A2.3 REQUALIFICATION OF SPACES FOR PEDESTRIAN TRAFFIC

This constitutes a set of works aimed at improving the trafficability and accessibility of the department's main sidewalks. The type of intervention that is to be carried out will depend on the characteristics of each area of the city and may include: repairing, leveling or replacing pavements, widening sidewalks, building accessibility ramps, increasing the surface waiting areas for public transportation, improved signs, installing public litter bins and smart luminaires. This is to be implemented in a coordinated manner within each municipality.

By 2019, the requalification works for the 36 km of sidewalks dispersed over the department's 8 municipalities will be completed.



### RESILIENCE VALUE:

9.1 Transportation network | 9.2 Public transportation | 4.1 Social communication and connectivity | 5.3 Policies that promote protection and safety | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 9.4 Communications technology | 12.3 Urban development and land use.

### LINKS WITH OTHER INITIATIVES:

A1.1 | A1.3 | A2.4 | A2.5 | B1.1 | B2.3 | B3.2 | B4.2 | C2.2

### TYPE:

Existent.

### STATUS:

Execution | Research.

### TEMPORALITY:

Short term | Medium term.

### LEADER:

Mobility Department and municipalities of Montevideo.

### ACTORS:

Urban Development Department. Smart Development and Sustainable Department. Culture Department. Citizen initiative network.



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### SUPPORTIVE ACTION: A2.3.1 GUIDE «MONTEVIDEO BY FOOT»

The creation of a guide and digital application with optimal pedestrian mapping routes, equipment data for the pedestrian network, as well as information to facilitate modal interchange and relevant data on the urban network environment will be promoted.

**A2.4** «SAFE TO SCHOOL». SAFE NEIGHBOURHOOD PEDESTRIAN CIRCUITS

This project will be implemented as part of a future comprehensive intervention aimed at designing pedestrian circuits in the city and will involve the combined effort of the Intendancy of Montevideo and public schools, students, parents and neighbors. It consists of designing neighbourhood pedestrian circuits connected between each public school and to the public transportation stops of its immediate surroundings, aimed at promoting safe pedestrian transportation for schoolchildren. Likewise, digital tools will be used to map the routes and to diffuse data in the user network.

The project will initially be implemented as a pilot scheme in selected neighbourhoods. By 2019, at least one pedestrian circuit will be implemented and evaluated to define the feasibility of replicating it in other neighbourhoods of Montevideo.



**RESILIENCE VALUE:**

4.2 Identity and local culture | 4.3 Community participation | 9.1 Transportation network | 9.2 Public transportation | 10.1 Alignment of multiple parties | 11.1 Education | 11.2 Understanding of risks | 11.4 Communication between government and the public

**LINKS WITH OTHER INITIATIVES:**

A2.3 | A2.5 | D4.2

**TYPE:**

Scalable.

**STATUS:**

Research.

**TEMPORALITY:**

Short term.

**LEADER:**

Mobility Department.

**ACTORS:**

Planning Department. National Public Education Administration (ANEP). Promotion Commissions for public schools. Public transportation service providers. Neighbourhood level trade associations.

**INSPIRATION FROM THE 100RC NETWORK:**

**Safe Routes to School in Thessaloniki**

Thessaloniki works with school communities to establish a Safe Routes to School scheme. This program is aimed at enabling more young people to walk and use their bicycles, improving the urban conditions of the school environment and using digital tools to share data, encouraging the active participation of communities and implementing awareness campaigns. The implementation procedures used for the safe routes to the school address the specific needs of children as users of public space, which helps to establish pleasant public spaces and empower citizens to actively contribute to the decision-making process.



**A2.5** URBAN BIKE PATH AND PUBLIC BICYCLE SYSTEM

This constitutes a set of actions aimed at promoting the use of the bicycle as a sustainable means of transportation and complementary to other transportation means. The actions that are to be implemented are:

- Extension of the current bicycle network, by incorporating new road works and by adapting existing road axes'.
- A study for evaluating design options for an integral bicycle system that complements the current and planned endowment.
- Designing a concept for promoting the importance of using the bicycle, at both an institutional level and in the community in general.
- Expansion of the Movete public bike system, both by extending the service to new areas not yet covered in the city, as well as by increasing the number of bicycles in the system and incorporating facilities to increase the number of users.
- Evaluating new operation and management models for the public bicycle system.
- Distribution of bicycle racks in the city's public and private institutions.

By 2020, the urban bike lane network will have been increased by 100% with respect to the current 35 km endowment, and the Movete expansion plan for the public bicycle system will have been completed.



**RESILIENCE VALUE:**

9.1 Transportation network | 9.2 Public transportation | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 11.1 Education | 11.4 Communication between government and the public

**LINKS WITH OTHER INITIATIVES:**

A1.1 | A2.3 | A2.4 | D4.2 |

**TYPE:**

Existent.

**STATUS:**

Execution.

**TEMPORALITY:**

Medium term.

**LEADER:**

Mobility Department.

**ACTORS:**

Planning Department. Urban Development Department. Civil society groups linked to the use of bicycles as urban transportation.



# A3 Promote the energy matrix transformation in urban mobility.

## A3.2 PROMOTING THE USE OF INDIVIDUAL ELECTRIC VEHICLES



**RESILIENCE VALUE:**

9.1 Transportation network | 9.2 Public transportation | 7.1 Environmental policies | 7.3 Redundant and diverse infrastructure | 12.4 Building codes, standards and applications.

## A3.1 COLLECTIVE PUBLIC TRANSPORTATION TRANSITION TOWARDS ELECTROMOBILITY



**RESILIENCE VALUE:**

9.1 Transportation network | 9.2 Public transportation | 6.2 City budgets | 7.1 Environmental policies | 8.3 Maintenance of goods and services | 10.2 Government alignment

The country's consolidated change of its energy matrix towards the predominant use of renewable energies generates a unique opportunity to promote the transformation of the energy matrix in transportation. For Montevideo, this opportunity has the greatest potential regarding collective public transportation, because of the intensive use of these components, and because of the possibility of introducing electromobility on a massive scale due to the direct incidence capacity through departmental public policy.

The initiative involves the direct acquisition of 80 electric units for collective public transportation in Montevideo, and the joint implementation with the national government of a subsidy for these types of vehicles when purchased by third parties. The transformation process will be gradual due to the initial investment costs and the necessary adjustments to the complementary equipment, rules and regulations, and the necessary inter-institutional coordination. By 2020, 5% of Montevideo's public transportation fleet will correspond to electric vehicles.

**LINKS WITH OTHER INITIATIVES:**

A2.1 | A3.2

**TYPE:**

New.

**STATUS:**

Planning.

**TEMPORALITY:**

Medium term.

**LEADER:**

Mobility Department - Transportation Division.

**ACTORS:**

MIEM. MEF. UTE.

With the aim of promoting a change in the individual transportation energy matrix, a set of actions targeting both the public and private sectors is put forward. The planned actions include:

- Reconversion of Montevideo's taxi fleet to electric vehicles, through a gradual process of incentives and allows for a replacement in the renovation phase.
- A set of measures aimed at promoting the use of private electric vehicles, which include: defining parking areas for electric vehicles in public spaces; installing charging points in public spaces; adapting building regulations to facilitate the availability of vehicle loading facilities in private buildings.
- Support private initiatives regarding the electric car sharing service by implementing the previous set of measures that have been adjusted to these undertakings.

By 2020, 10% of Montevideo's taxi fleet will correspond to electric vehicles and the city will have 40 parking points dedicated to electric vehicles.

**LINKS WITH OTHER INITIATIVES:**  
A3.1 | A2.1

**TYPE:**

New.

**STATUS:**

Research.

**TEMPORALITY:**

Medium term.

**LEADER:**

Mobility Department.

**ACTORS:**

Planning Department. Human and Material Resources Department. Urban Development Department. UTE.

**Articulation with national policies.** Montevideo participates in the inter-institutional group formed by the Ministry of Industry, Energy and Mining (MIEM), the Ministry of Transportation and Public Works (MTO), the Ministry of Housing, Territorial Planning and the Environment (MVOPTMA), the Ministry of Economy and Finance (MEF), UTE, ANCAP and other municipalities of the country, dedicated to researching and developing the potential use of electric vehicles, particularly focused on public transportation. In this respect, it capitalizes on the interdisciplinary knowledge generated at the national level and leads it towards implementing departmental policies aimed at improving the quality of Montevideo's public transportation service, incorporating a resilience perspective.



**INSPIRATION FROM THE 100RC NETWORK: Wellington City**

The city of Wellington promotes the widespread use of electric vehicles (EVs) as a way of reducing dependence on the vulnerable supply chain of fuel, as well as the carbon footprint. The action taken starts with the example of the City Council, through: a) the gradual replacement of the own fleet while it is necessary to establish the replacement and b) the preference on its policy of public purchases to those contractors that use electric vehicles. Likewise, it supports the use of these vehicles in the private sector or other public sectors, by investing in the charging infrastructure in different points of the city and in charging infrastructure in private buildings.



## Pillar B

### INCLUSIVE AND SUPPORTIVE MONTEVIDEO

*Montevideo bases its local development on an inclusive, equitable and solidary model, centered on the human being, in which people can develop their maximum potential according to their needs and interests. It has modern participation and decision mechanisms, that are effective and innovative, designed to allow the integration of all people, respecting their diversity.*

## OBJECTIVES

- B1** Reverse socio-territorial segregation and guarantee access to the right to the city.
- B2** Deepen the cultural dimension of development as a driving force for integration, equity and recognition of the diversity of all inhabitants.
- B3** Strengthen public spaces as areas for social integration, citizen safety and coexistence.
- B4** Promote participation and decision mechanisms, in a transparent, effective and innovative manner.



# B1 Reversing socio-territorial segregation and guaranteeing access to the right to the city.



## B1.2 CHACARITA STREAM BASIN LAND PLANNING



**RESILIENCE VALUE:**

12.3 Urban development and land use | 10.1 Alignment of multiple parties | 1.1 Housing | 4.2 Identity and local culture | 4.3 Community participation | 7.1 Environmental policies | 11.2 Understanding of risks

The Chacarita stream basin is one of the three strategic zones defined by Montevideo’s Planning Departmental Guidelines. It is considered to be part of the department’s urban-rural interface and has a high complexity due to the socio-territorial segregation issue, the precariousness of the habitat, the loss of environmental services and the existing stresses between the different activities that coexist alongside the housing issue: agriculture, industry, the city’s final waste disposal site and the model prison Punta de Rieles, among others.

The partial territorial planning, as a legally binding tool, will establish the guidelines for a harmonious occupation of the territory and will further guide the dynamics of the current and future urban processes for building social cohesion, reversing environmental deterioration and integrating the basin with other sectors of the territory.

**LINKS WITH OTHER INITIATIVES:**  
A1.1 | B1.1 | B2.3 | D1.1 | D4.1 | D4.2

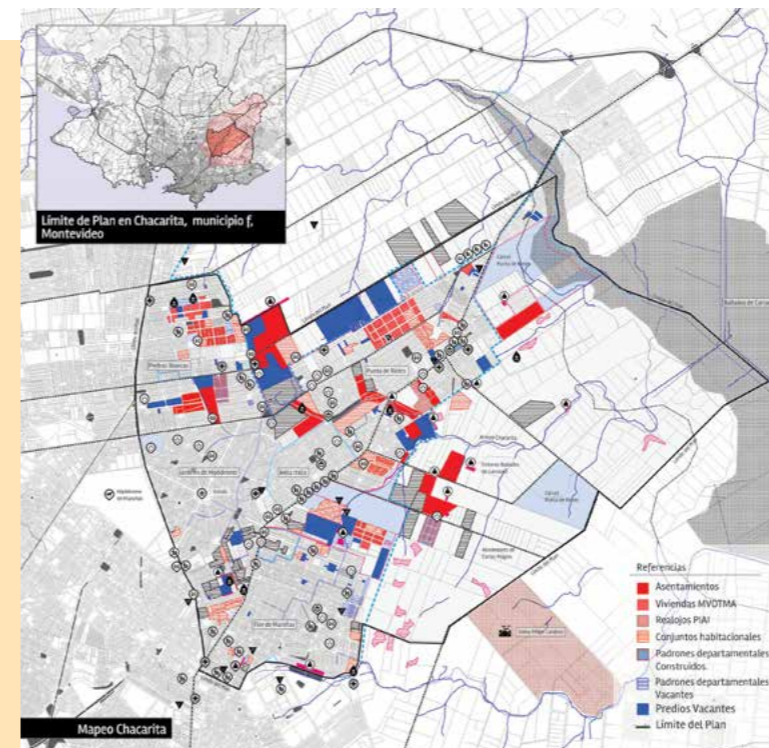
**TYPE:**  
Existent.

**STATUS:**  
Planning.

**TEMPORALITY:**  
Medium term.

**LEADER:**  
Planning Department.

**ACTORS:**  
F Municipality. Urban Development Department. Environmental Development Department. Social Development Department. Neighbourhood committees and neighbourhood references.



**RESILIENCE VALUE:**

1.1 Housing | 4.2 Identity and local culture | 12.3 Urban development and land use | 4.3 Community participation | 5.1 Measures that prevent crime | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 8.2 Optimization of basic infrastructure | 10.1 Alignment of multiple parties | 11.2 Understanding of risks

**LINKS WITH OTHER INITIATIVES:**  
A2.3 | B1.2 | B3.1 | B3.2 | D1.3

**TYPE:**  
Existent.

**STATUS:**  
Execution.

**TEMPORALITY:**  
Medium term.

**LEADER:**  
Urban Development Department - Special Execution Unit for the Neighborhood Improvement Program (PMB).

**ACTORS:**  
Municipalities. Planning Department. Environmental Development Department. Social Development Department. MVOTMA. Social Development Ministry (MIDES). ANEP. Ministry of Interior. Neighbourhood committees and neighbourhood references.

## B1.1 REQUALIFICATION OF INFORMAL SETTLEMENT HABITAT AREAS

An integral intervention for improving informal settlement habitat areas is a process that involves a set of transformations that will enable the provision and improvement of urban infrastructure and community facilities, as well as advocate the improvement of the social and environmental conditions of neighbourhoods and houses. The Intendancy of Montevideo, the municipalities and the MVOTMA are already implementing the Neighbourhood Improvement Program in a coordinated fashion, through regularization processes, providing basic infrastructure and relocating the population.

With an objective to increase the integrality of the intervention, the Intendancy of Montevideo’s specific action is added to this process, which involves creating public spaces, reclassifying spaces previously occupied by informal settlements and building new urban fronts for integrating other sectors of the city. Likewise, articulation with national public policies that are present in the same territory (health, education, safety, social development) is promoted to guarantee the optimization of resources and the generation of a greater impact in poverty reduction and in social integration. By 2020, comprehensive interventions will have been completed in 6 informal settlements in different municipalities of Montevideo.

**SUPPORTIVE ACTION: B1.1.1 THE URBAN IMPROVEMENT PROGRAM IN SETTLEMENTS THAT ARE NOT INCLUDED IN THE HABITAT REQUALIFICATION PROGRAM.**

The integrality condition of the habitat improvement program conditions the number of settlements that can be intervened with in the short term, leaving many of them temporarily relegated in the habitat rebuilding process. To mitigate this situation, this initiative is proposed so as to improve the daily life of the settlements that are not included in the integral program. It addresses the following aspects in emergency conditions: roads to improve access and connectivity; lighting for improving safety; and public spaces for recreation and citizen coexistence.

**B1.3 SACUDE POLYVALENT COMPLEX IN FLOR DE MAROÑAS**

**RESILIENCE VALUE:**  
 4.2 Identity and local culture | 4.3 Community participation | 3.2 Access to general medical care | 5.3 Policies that promote protection and safety | 7.3 Redundant and diverse infrastructure | 8.3 Maintenance of goods and services | 10.1 Alignment of multiple parties | 11.1 Education

The SACUDE complexes are part of departmental policies that promote social inclusion and coexistence. These are projects aimed at improving the quality of life of neighbourhood communities by promoting democratic access to health, culture and sports, supported by community participation. Montevideo developed the first complex in 2010, which has had positive feedback from the community and the institutions that work in building its programmatic content.

This new complex, which will be located in Flor de Maroñas, F Municipality, consists of the refurbishment and extension of an existing theater in order to build a complex that includes: a sports and related services area; a multi-purpose room; a classroom; a workshop room, a mini-theater and multi-purpose rooms. It will constitute a physical space that will house inter-institutional dialogue spaces, promoting the decentralization of activities in the territory and promoting innovative spaces for active citizen participation.

**LINKS WITH OTHER INITIATIVES:**  
 A1.3 | B1.1 | B2.2 | B2.3 | C1.3

**TYPE:**  
 Existent.

**STATUS:**  
 Planning

**TEMPORALITY:**  
 Medium term.

**LEADER:**  
 Culture Department.

**ACTORS:**  
 F Municipality. Health Department. ANEP. MIDES. Universidad de la República. Neighbourhood committees and neighbourhood references.

**B2 Deepen the cultural dimension of development as a driving force for integration, equity and recognition of the diversity of all inhabitants.**

**B2.1 THIRD GENDER EQUALITY PLAN**

**RESILIENCE VALUE:**  
 10.3 Leadership and decision making | 5.3 Policies that promote protection and safety | 4.2 Identity and local culture | 4.3 Community participation | 10.1 Alignment of multiple parties | 11.4 Communication between government and the public |

The Gender Equality Plan is aimed at changing the prevailing relation patterns between Montevideo's men and women, patterns which give way to inequalities and discrimination. It aims at deepening the mainstreaming of gender and the human rights perspective in Montevideo's Intendancy public policies, both in the departments and in the municipalities, in coordination with social groups and with the national government. The guidelines on which the plan is based include: equal participation; economic autonomy, use and enjoyment of public spaces, integral health, a culture without stereotypes and life that is free from gender violence.

**LINKS WITH OTHER INITIATIVES:**  
 A2.3 | B1.1 | B4.1 | B4.2

**TYPE:**  
 Existent.

**STATUS:**  
 Execution.

**TEMPORALITY:**  
 Short term.

**LEADER:**  
 Advisory Division for gender equality.

**ACTORS:**  
 Municipalities. Intersocial feminista and other civil society organizations linked to the topic.



Sacude Flor de Maroñas



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## B2.2 CULTURE AT THE CORNER

The main objective of the Culture at the Corner program is to develop culture with a territorial proximity to Montevideo's neighbourhoods. It stems from the premise of advocating the citizens' right to art and culture, but from a perspective that it should be collectively built from enjoyment, joy and the neighbour's prominence, who have a say in deciding what is done.

This initiative sets up specific cultural interventions, promoting a variety of artistic disciplines and also runs workshops that are designed by firstly recognizing and valuing what already exists in each neighbourhood. The aim is to strengthen individual skills when relating to others in a nonviolent and coexistent environment. Its focus is placed on recognizing diversity, which is reflected in imploring the participation of multiple generations, as well as including people with different skills and integrating migrants as a means of diffusing their own culture.



### RESILIENCE VALUE:

4.2 Identity and local culture | 4.3 Community participation | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making | 11.1 Education

### LINKS WITH OTHER INITIATIVES:

B1.1 | B2.3 | B3.1 | C1.3 | C3.2 |

### TYPE:

Existent.

### STATUS:

Execution.

### TEMPORALITY:

Short term.

### LEADER:

Culture Department.

### ACTORS:

Municipalities. Neighbourhood commissions.



## B2.3 DIFFUSION OF MONTEVIDEO'S NEIGHBOURHOODS HERITAGE VALUES

In the preliminary resilience assessment, a key source of socio-urban stress was pinpointed as being the lack of knowledge possessed by the people of Montevideo on the cultural values that are present in the different neighbourhoods of their city and in turn, the citizen's consequent difficulty of identifying with their city. Each neighbourhood has its own identity, resources and cultural values that can be used to reinforce the sense of belonging by the people of Montevideo and therefore can develop social capital for the neighbourhood communities. The valorization of these multiple identities contributes towards building a more socially and territorially integrated Montevideo.

The initiative proposes campaigns aimed at diffusing and valuing the tangible and intangible heritage capital of each neighbourhood, so that residents are able to connect with each other, with their neighbourhood and with their city. Each campaign will be designed according to the neighbourhoods characteristics and the specific values to be promoted, and may include workshops, citizen laboratories, tourist circuits unravelling local heritage, cultural interventions in public spaces and emblematic buildings, talks in schools and zonal centers. By 2019, at least 2 events will have been carried out, both focused on diffusing and valuing the neighbourhood heritage assets of Montevideo.



### RESILIENCE VALUE:

4.1 Social communication and connectivity | 4.2 Identity and local culture | 4.3 Community participation | 2.4 Development and innovation of local commerce | 6.4 Local economy | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making | 11.1 Education

### LINKS WITH OTHER INITIATIVES:

A1.3 | A2.3 | B1.4 | B2.2 | B4.2 | C1.3 | C3.2

### TYPE:

New.

### STATUS:

Research.

### TEMPORALITY:

Short term.

### LEADER:

Culture Department.

### ACTORS:

Municipalities. Planning Department. Environmental Development Department. Economic Development Department - Tourism Division. Neighbourhood organizations. Neighbourhood social and sports clubs. Neighbourhood cultural centers.



## B3 Strengthen public spaces as areas for social integration, citizen safety and coexistence.



### B3.2 GUIDE FOR RESILIENT PUBLIC SPACE



#### RESILIENCE VALUE:

8.2 Optimization of basic infrastructure | 7.2 Guarantees for basic infrastructure | 4.2 Identity and local culture | 4.3 Community participation | 5.3 Policies that promote protection and safety | 7.3 Redundant and diverse infrastructure | 8.4 Flood risk management | 10.1 Multi-party alignment | 11.4 Communication between government and the public | 12.3 Urban development and land use

#### LINKS WITH OTHER INITIATIVES:

A2.3 | A2.5 | B3.1 | D1.2 | D1.3 | D4.1

#### TYPE:

New.

#### STATUS:

Research.

#### TEMPORALITY:

Medium term.

#### LEADER:

Urban Development Department.

#### ACTORS:

Planning Department. Environmental Development Department. Culture Department. Municipalities.

Montevideo stands out for its strong policy on prioritizing public spaces as privileged areas for social integration, citizen safety and coexistence. It is one of its better recognised strengths and is valued highly by the people of Montevideo. This successful proficiency offers a unique opportunity to develop a strategy that can contribute to cementing the role of public space as a fundamental factor in building resilience.

This initiative aims to systematize the good practices that have already been developed and incorporate new guidelines to guide the design, building, maintenance, use management and governance of public spaces, from a resilient perspective. The guide will have a multidimensional approach to public space, incorporating guidelines that range from the physical design of resilient public spaces to climate change aspects (use of plant species for conserving biodiversity, green infrastructures, permeable pavements, etc.). It also includes the design and provision of equipment aimed at promoting the use, accessibility and residents' permanency in safe conditions, as well as strategies for generating programmatic content for their enjoyment, financing strategies, forms of governance and integral management processes that will allow for a constant evaluation of the needs, attitudes and appropriation forms of users to achieve a continuous and systematized improvement.

#### INSPIRATION FROM THE 100RC NETWORK:

##### New York: Parks for an equitable future

The New York City Parks and Recreation Department, through the "New York City Parks: Framework for an Equitable Future" program, established a strategy for capital investment, programming and maintaining public spaces, taking an approach that considers the multiple dimensions involved in the management of public spaces. This effort focuses on protecting the extraordinary investment that the city has made, whilst also taking new measures to increase the accessibility and to improve the quality and sustainability of public spaces.

#### INSPIRATION FROM THE 100RC NETWORK:

##### Oakland: Designing parks and open spaces using resilience-related criteria

The City of Oakland is developing a Prioritization of Parks Development Program, which includes conceptual plans for each public space to be built, as well as budget plans with costs of execution and maintenance. Innovatively, the program includes a system criterion that measures public spaces' resilience, which include aspects such as equity, health and safety, environmental performance, economic performance and operational feasibility and maintenance, and is supported by the active participation of the community as a feedback factor for the constant improvement of the program.



#### RESILIENCE VALUE:

4.2 Identity and local culture | 8.3 Maintenance of goods and services | 4.3 Community participation | 5.3 Policies that promote protection and safety | 7.3 Redundant and diverse infrastructure | 12.3 Urban development and land use

#### LINKS WITH OTHER INITIATIVES:

A1.3 | A2.3 | B1.1 | B3.2 | D1.3

#### TYPE:

Existent.

#### STATUS:

Execution | Planning.

#### TEMPORALITY:

Short term.

#### LEADER:

Urban Development Department.

#### ACTORS:

Municipalities. Ministry of Interior.



### B3.1 CONDITIONING OF PARKS AND SQUARES

This initiative focuses on the conditioning of public spaces at different scales to achieve complementary objectives: neighbourhood-scale squares that represent areas for violence-free coexistence of neighbours, and urban-scale parks, as areas for social integration and exchanges between neighbours hailing from Montevideo's different neighbourhoods. These physical conditioning interventions or recovery of spaces are made in accordance with the strategies developed collectively by the Intendancy and the municipalities framework, as a means of strengthening socio-territorial inclusion and coexistence, through actions that generate conditions that may deepen democratic exchange.

According to the requirements of each case, improvements will be made to existing infrastructures, providing children's games, health-oriented games, smart lighting, street furnishings, public access to wi-fi and surveillance cameras. By 2020, 7 squares at a neighbourhood scale (Las Pioneras square, Integradora Instrucciones square and Antillas, Plaza de Deportes No. 1, Leguizamo square, Libertad de Maroñas square, Larocca square, plaza de la Diversidad) and 3 urban-scale parks (Parque Batlle, Parque Capurro and Kid's Corner at Parque Rodó) will have been conditioned.

## B4 Promote participation and decision mechanisms, in a transparent, effective and innovative manner.



### B4.1 MONTEVIDEO DECIDE

Montevideo Decide is a digital platform that allows the public floor to propose and influence the Intendancy's actions. Through this platform citizens can participate in debates, generate and present project initiatives that seek to improve their lives, as well as participate in surveys and even interview the Mayor and his government team. Montevideo Decide aims to promote and create a culture of direct citizen participation through digital media, which enables anyone who is interested in generating change to have the means of doing so.

Through this platform, ideas for the co-creation of initiatives that contribute to increasing Montevideo's resilience can be debated. In this way, not only is active participation encouraged, but it also contributes to the generation of knowledge and information on the concept of urban resilience and its relevance to the territory's sustainable development. By 2019, at least 3 discussion topics will have been installed, all linked to the key challenges of building resilience in the Montevideo Decide platform.

Links with other initiatives: B4.2 | This initiative is designed to be linked to all others to such an extent that they are included as topics for debate or collaboration.



#### RESILIENCE VALUE:

11.4 Communication between government and the public | 4.3 Community participation | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making | 11.5 Transfer of knowledge.

#### LINKS WITH OTHER INITIATIVES:

B4.2 | This initiative is designed to be linked to all others to such an extent that they are included as topics for debate or collaboration.

#### TYPE:

Scalable.

#### STATUS:

Execution.

#### TEMPORALITY:

Short term.

#### LEADER:

Municipal Development and Participation Advisory.

#### ACTORS:

Planning Direction. Municipalities. People of Montevideo participating in the platform.



### B4.2 CITIZEN LABORATORY MVD LAB - MONTEVIDEO RESILIENT EDITION

The MVD Lab is a physical and digital space dedicated to facilitating exchange, interaction and innovation between citizens and their government. It is conceived as a citizen laboratory for the production, experimentation and diffusion of innovative projects that are aimed at creating new and better solutions to the challenges posed by the city. Citizen innovation is the innovation that stems from people and is aimed at the people to improve society and areas of coexistence, knowledge and action.

The objective of this initiative is to introduce the concept of innovation with a resilient focus on the different topics that are addressed by the MVD Labs, either in general instances convened around different topics or by proposing specific debates regarding solutions for resilience (MVD Lab - Montevideo Resilient Edition). By 2019, an MVD Lab Montevideo Resilient Edition will be implemented within the Montevideo del mañana framework. By 2020, an MVD Lab Montevideo Resilient Edition will be implemented, linked to resilience and risk management.



#### RESILIENCE VALUE:

11.5 Transfer of knowledge and exchange of best practices. | 4.1 Social communication and connectivity | 4.3 Community participation | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making | 11.4 Communication between government and the public

#### LINKS WITH OTHER INITIATIVES:

B4.1 | D4.2 | This initiative is designed to be linked to all others to such an extent that they are included as topics for debate or collaboration.

#### TYPE:

Scalable.

#### STATUS:

Research.

#### TEMPORALITY:

Short term.

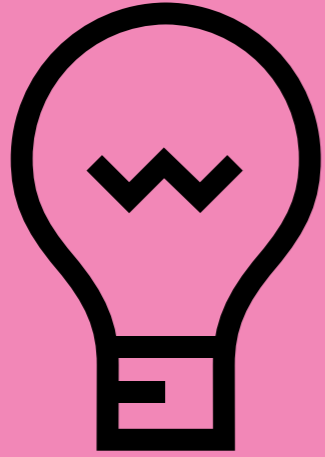
#### LEADER:

Sustainable and Smart Development Department.

#### ACTORS:

Planning Direction. Municipalities.





# Pillar C

## INNOVATIVE AND CO-CREATIVE MONTEVIDEO

*Montevideo is a thriving, multifaceted and enjoyable place, combining its role as a tourist capital with industries that are strongly centered on the creative capacity of its inhabitants, the access to knowledge, the commitment to innovation and the promotion of culture.*

## OBJECTIVES

- C1** Promote a development model that favors the circular, social and solidarity economy.
- C2** Promote individual and collective creativity as a driving force for innovation and development in sectors of the economy that are based on knowledge, culture and new technologies.
- C3** Position Montevideo as an attractive and open city, whose cultural, social and natural heritage is valued.



# C1 Promote a development model that favors a circular, social and solidary economy.

## C1.2 REUSE CENTERS NETWORK



### RESILIENCE VALUE:

2.2 Skills and training | 2.4 Development and innovation of local commerce | 6.4 Local economy | 2.1 Labor policy | 10.1 Alignment of multiple parties | 11.5 Transfer of knowledge and best practices.

## C1.1 BOOST TO THE CIRCULAR ECONOMY



### RESILIENCE VALUE:

2.4 Development and innovation of local commerce | 6.1 Business continuity measures | 6.4 Local economy | 2.1 Labor policy | 6.5 Higher economic links | 10.3 Leadership and decision making | 11.4 Communication between government and the public | 11.5 Transfer of knowledge and best practices.

A circular city incorporates the circular economy principles through all of its functions, with the aim of forming a territorial regenerative system, accessible and redundant by design. Montevideo aims to build the necessary bases to achieve a transition towards this type of economy, deepening the study of its potentialities, developing new technologies from its digital infrastructure availability and designing support tools for entrepreneurs so that they can achieve self-sustainability within this business model.

This initiative consists of designing an institutional strategy to promote innovative processes within the circular economy framework, as well as to contribute to improving their productivity and competitive conditions and to strengthen the link between companies. The strategy will include designing promotional instruments and economic-financial instruments; supporting policies through public purchases; creating innovation and research spaces, amongst others. By 2019, the strategy to boost the circular economy will have been developed. By 2020, one of the promotional instruments included in the strategy will have been implemented.

### LINKS WITH OTHER INITIATIVES:

B4.2 | C1.2 | C1.3 | C2.2 | D2.3 | D4.3

### TYPE:

New.

### STATUS:

Research.

### TEMPORALITY:

Short term.

### LEADER:

Planning Department.

### ACTORS:

Economic Development Department.  
Environmental Development Department.  
Financial Resources Department. Sustainable and Smart Development Department. Social Development Department - Social and Solidarity Economy Unit. National Agency for Research and Innovation (ANII).

### NATIONAL REFERENCE:

#### Circular Opportunities Program

The Biovalor project and the National Development Agency (ANDE) promote the Circular Opportunities Program, which is aimed at identifying and promoting the validation of ideas and the implementation of projects that go on to promote an effective transition to the circular economy. It links actors that are based on the principles of circular economy and encourages the implementation of circular business models, with particular emphasis on associative models that take advantage of synergies and complementarities. As a national program, it focuses on value chains that involve the use of resources and the use of waste from key sectors of the national economy. In Montevideo, this initiative model can be applied to assemble productive chains specifically associated with economic activities in which Montevideo shows greater strengths.

Through this initiative, based on the circular principle of maintaining products, components and materials at their highest level and highest durability, it seeks to reduce generating avoidable household wastes, extend the useful life of electrical and electronic equipment, furniture, textiles, toys and other objects; and find new users for repaired items, provide employment opportunities for people with traditional trades and offer learning opportunities in repairing and in basic aspects of traditional trades to any interested citizen.

This initiative aims to promote the creation of a network of reuse, repair and rental centers for disused objects, accessible to the public. This initiative will be framed under the supporting policies and instruments carried out by the Intendancy, who assists the development of medium and small-sized enterprises, and will consist of implementing specific events into incubator programs, workshops, academic mentoring and financing. Likewise, the creation of an exchange platform between initiatives to strengthen links and consolidate the network will be promoted. By 2019, at least 3 instances will be implemented that are specifically dedicated to developing projects committed to the reuse and repair of disused objects, within the supporting policy for medium and small-sized companies framework.

### LINKS WITH OTHER INITIATIVES:

C1.1 | C1.3 | D2.3

### TYPE:

New.

### STATUS:

Research.

### TEMPORALITY:

Short term | Medium term.

### LEADER:

Economic Development Department - Economic Promotion Division.

### ACTORS:

Municipalities. Social Development Department - Social and Solidarity Economy Unit. Sustainable and Smart Development Department. Information and Communication Division. Universidad del Trabajo del Uruguay (UTU). Club de Reparadores. Second-hand shops and repair centers already existent. Repair Café Foundation.



**C1.3**  
**TRANSITORY USE OF SPACES AND INFRASTRUCTURES**

With the purpose of targeting creativity and the benefits that arise from sharing knowledge, skills, time and available spaces in the city, the objective of this initiative is to promote the temporary use of vacant buildings and infrastructures. The transitory use enables more accessible opportunities to be offered to new entrepreneurs, as well as the impact of emerging projects to be measured and the development of cultural and social activities to be promoted. Similarly, it allows the evolution of installing permanent businesses to be evaluated, and at the same time makes a more efficient use of the installed capacity of the city whilst boosting certain sectors.

This initiative consists of promoting and supporting the creation of a digital platform through which potential users can access the available spaces and in the «meantime» they obtain said space, under certain conditions of exchange. In this way, vacant spaces or those with a higher potential of intensive use will be available to provide temporary individual and collective opportunities for economic, social and cultural development, including for example: emerging retail stores, joint work spaces, entertainment venues (bars, theaters, coffee shops), exhibition spaces, event venues, workshops and community projects.

**INTERNATIONAL REFERENCE:**

**London: Spaces for temporary use**

Meanwhile Space CIC (Espacio Mientras Tanto) es una empresa social pionera y a la vanguardia en usos temporales, que promueve la creación de comunidades vibrantes convirtiendo espacios temporalmente vacantes en uso productivo. Se focalizan en la ejecución de proyectos de alta intensidad con múltiples partes interesadas, mejoras físicas e innovación en los flujos de trabajo, de forma de lograr el máximo empleo y la generación de beneficios. Sus beneficiarios directos son empresas semilla y start-ups que buscan espacios asequibles en términos flexibles de contratación y soporte para prosperar, y las comunidades locales, generalmente en áreas urbanas precarizadas, que obtienen una mejora del entorno y las instalaciones abandonadas, nuevas actividades y servicios que contribuyen a mejorar la cohesión de la comunidad y generan nuevos empleos.



**RESILIENCE VALUE:**

2.4 Development and innovation of local commerce | 6.4 Local economy | 8.2 Optimization of basic infrastructure | 4.3 Community participation | 6.1 Business continuity measures | 7.3 Redundant and diverse infrastructure | 10.1 Alignment of multiple parties | 11.5 Transfer of knowledge and best practices | 12.3 Urban development and land use.

**LINKS WITH OTHER INITIATIVES:**

A1.2 | A1.3 | B4.2 | C1.1 | C1.2

**TYPE:**

New.

**STATUS:**

Research.

**TEMPORALITY:**

Medium term.

**LEADER:**

Planning Department.

**ACTORS:**

Municipalities. Sustainable and Smart Development Department. Urban Development Department. Neighbor's ombudsman. Culture Department. Social Development Department.

**INSPIRATION FROM THE 100RC NETWORK: Transitory urbanism in Paris**

Paris seeks to promote the use of temporary buildings and disused spaces and is in favor of taking advantage of the multiple benefits that can be generated for the city. Thus, by systematically putting the square meters available to use while waiting for real estate operations (that can take many years to develop), the urban environment conditions can be improved, the risks associated with disused and neglected conditions can be reduced and the specific needs of the community can be responded to. This initiative promoted by Paris seeks to promote the interconnection of owners and promoters with the leaders of emerging projects in the hope that all urban projects can integrate this principle based on developing a transitory or temporary occupation letter.

**C2**  
**Promote individual and collective creativity as a driving force for innovation and developing sectors of the economy based on knowledge, culture and new technologies.**



**C2.1**  
**NEW INSTITUTIONALITY LINKED TO CREATIVE INDUSTRIES**



**RESILIENCE VALUE:**

10.3 Leadership and decision making | 2.4 Development and innovation of local commerce | 6.4 Local economy | 4.3 Community participation | 6.1 Business continuity measures | 10.1 Alignment of multiple parties | 11.5 Transfer of knowledge and best practices

Montevideo has a track record in promoting the audiovisual industry, through Locaciones Montevideanas, the Montevideo Socio Audiovisual programs and the Montevideo Filma Fund. However, the audiovisual industry ecosystem is being shifted towards an environment in which multiple disciplines linked to other creative industries come together, leaving this institutional framework obsolete in the face of new challenges.

This initiative involves modifying the current institutional structure and duties, to form a multidisciplinary support pole for creative industries in a broad sense; including the traditional audiovisual sector, the video game design sectors, content development and digital applications, advertising, artificial intelligence, amongst others. It also proposes the creation of an intersectoral plan to promote the creative sector in Montevideo. This includes guidelines, areas of development and specific actions that are to be taken in order to promote the sector in the short, medium and long term, appointing the people responsible and the specific goals for carrying out each action.

**LINKS WITH OTHER INITIATIVES:**

B1.4 | B2.2 | B2.3 | B4.2 | C1.1 | C1.2 | C1.3 | C3.2

**TYPE:**

Existent.

**STATUS:**

Research.

**TEMPORALITY:**

Medium term.

**LEADER:**

Culture Department.

**ACTORS:**

Economic Development Department. Sustainable and Smart Development Department. Sectoral chambers linked to the branch. ANII.





## C2.2 MONTEVIDEO'S CREATIVE MARKET

Montevideo has been characterized by the quality and diversity of its cultural offerings. And in recent years, the creative economy has shown an important growth linked to new sectors, such as design, video games, comics, digital content applications, robotics, artificial intelligence, among others. However, these subsectors are not seen in an integrated manner, as a high-value sector of the economy or as a complement to other economic sectors relevant to the city, such as tourism.

Montevideo's creative market stages a platform for the knowledge, diffusion, promotion and commercialization of the city's creative industries' goods and services in a bid to position them as agents of innovation and to increase their competitiveness, supported by associative and network work. The actions to be included as part of this initiative include:

- Support for building a stakeholders' network in the creative economy sector.
- Creating spaces for advertising events and exchange activities between creative companies, and between them and other sectors of the economy to improve the understanding of the needs and capacities of each sector.



### RESILIENCE VALUE:

2.4 Development and innovation of local commerce | 6.4 Local economy | 6.5 Higher economic links | 4.3 Community participation | 6.1 Continuity measures for business | 10.1 Alignment of multiple parties | 11.4 Communication between government and the public | 11.5 Transfer of knowledge and best practices

### LINKS WITH OTHER INITIATIVES:

B4.2 | C1.1 | C1.2 | C1.3 | C2.1

### TYPE:

New.

### STATUS:

Research.

### TEMPORALITY:

Short term.

### LEADER:

Economic Development Department.

### ACTORS:

Planning Department. Sustainable and Smart Development Department. Urban Development Department. Ministry of Education and Culture (MEC). ANII. Sectoral chambers.



### SUPPORTIVE ACTION: C2.2.1 MONTEVIDEO DESIGN CITY

This initiative tries to shed light on and place value on the contributions that the design sub-sector can make towards the city's development and for urban enterprises. It consists of a promotion program, through public purchasing, aimed at innovation design and experimenting with projects that visibly mark Montevideo's public space and contribute to providing solutions to the territory's problems.

## C3 Position Montevideo as an attractive and open city, valuing its cultural, social and natural heritage.



### C3.1 DEPARTMENTAL STRATEGY FOR TOURISM DEVELOPMENT

Montevideo is the main tourist destination in the country and annually receives a number of tourists that closely correlates to its population rate. However, there is a poor understanding of the importance of the tourism activity and its impact on the local economy. The interventions carried out by the departmental government are isolated, associated with low levels of investment and lack a frame of reference that provides coherence around defined objectives.

This initiative consists of the design and institutionalization of a strategic plan that identifies the potential market segments and the types of tourism products of greater relevance for positioning Montevideo, defining the guidelines for its development, establishing instruments for its implementation and forms of collaboration between public and private actors.



### VALOR DE RESILIENCIA:

12.2 Strategies and plans | 6.4 Local economy | 6.5 Higher economic links | 2.4 Development and innovation of local commerce | 6.3 Received Investment | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making

### LINKS WITH OTHER INITIATIVES:

C1.1 | C2.1 | C2.2 | C3.1

### TYPE:

Scalable.

### STATUS:

Research.

### TEMPORALITY:

Medium term.

### LEADER:

Economic Development Department.

### ACTORS:

Montevideo Bureau. Trade associations linked to tourism. Planning Department.



### SUPPORTIVE ACTION: C3.1.1 TOURISTIC OBSERVATORY

This initiative consists of creating a space designed to collect data from different sectors that make up the value chain of each sector, in order to generate a rationalized system that feeds itself from different sources and crosses data with other information-generating sources. By doing so, it can provide better management tools for public and private actors.

## C3.2 STRENGTHENING THE MONTEVIDEO BUREAU

The Montevideo Bureau is a coordination tool for planning and executing strategic actions between organised public and private actors, with the aim of strengthening the department's tourism competitiveness. However, there are currently several obstacles that, according to its objectives, have weakened their actions and put limitations on the expected results.

This initiative will promote the reviewing of the organizational structure of the Bureau, its objectives, the resources needed to comply with them and the economic-financial instruments that guarantee its sustainability over time. The Cultural Offer and Entertainment Table (MOCE), one of the most successful coordination spaces, will be a specific subject of study with the objective of recognizing its positive elements and strengthening them through the diversification of the portfolio programs (such as Montevideo + Paseos and Montevideo + Museos), the establishment of new alliances between entrepreneurs and the improvement of links with the creative industries sector.

### INSPIRATION FROM THE 100RC NETWORK: Glasgow, an attractive city based on tourism development

Glasgow is portrayed as a vibrant and diverse city. A part of this positive status derives from the creation of a Leading Group made up of actors from the private sector, academia and the public sector, which focused on strengthening this image and positioning it as an attractive city on a global level. Glasgow formed an organization whose mission it was to inspire citizens and visitors to have more enriching experiences of the city. This particular organization is in charge of managing the successful city-brand: People Make Glasgow and also established the Glasgow Convention Bureau. These and other actors proposed creating a 2023 Tourism Plan, as a framework for the constant tourism-based growth of the economy. This plan is to be collectively implemented by private actors from the industry, academia and the public sector.



### VALOR DE RESILIENCIA:

6.4 Local economy | 6.5 Higher economic links | 10.1 Alignment of multiple parties | 2.4 Development and innovation of local commerce | 4.2 Identity and local culture | 6.1 Continuity measures for business | 6.3 Received investment | 11.5 Transfer of knowledge and best practices

### LINKS WITH OTHER INITIATIVES:

C1.1 | C2.1 | C2.2 | C3.1

### TYPE:

New.

### STATUS:

Research.

### TEMPORALITY:

Medium term.

### LEADER:

Economic Development Department.

### ACTORS:

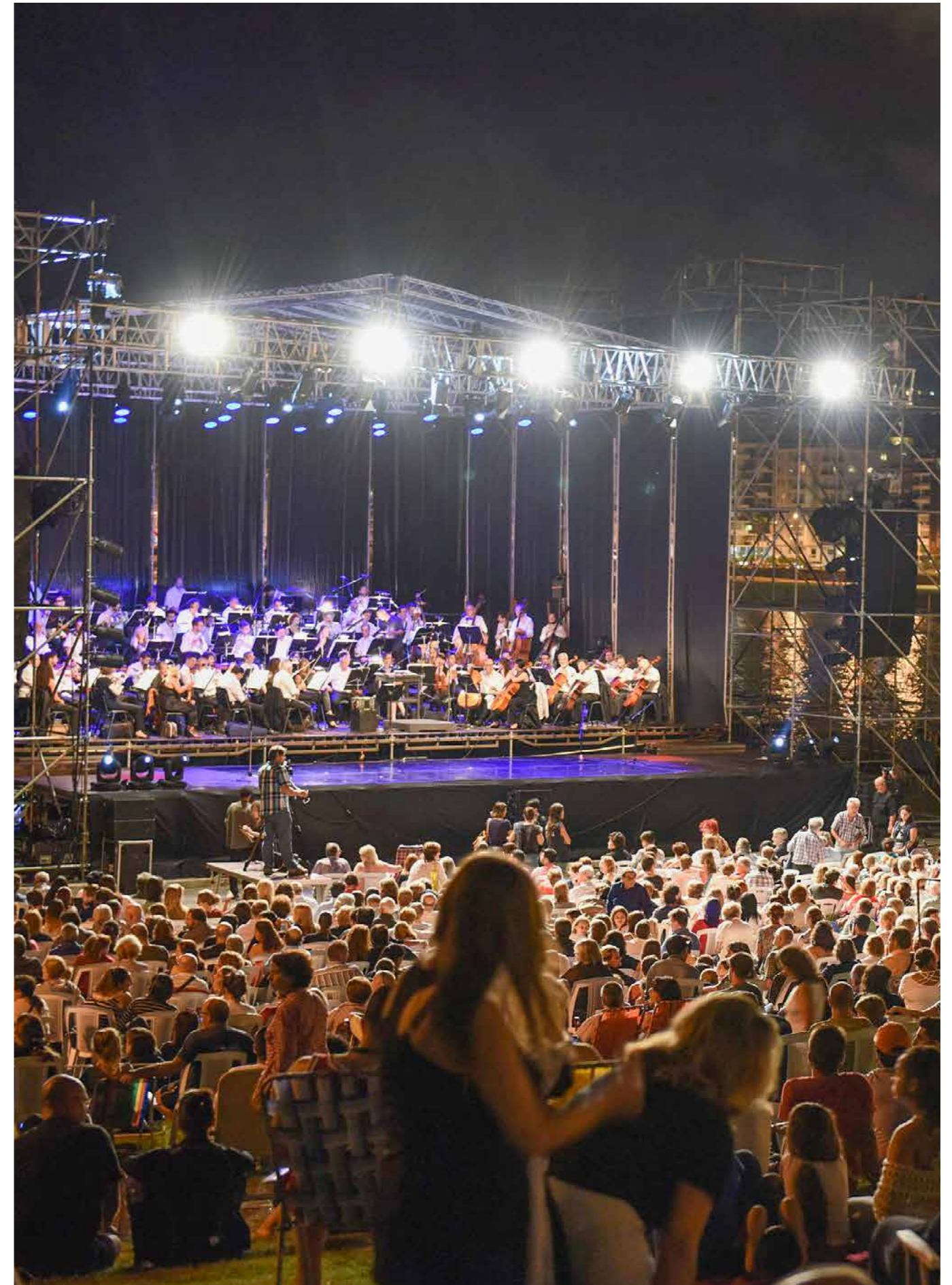
Montevideo Bureau. Chamber of Commerce. Planning Department. Sustainable and Smart Development Department. Culture Department. Chambers linked to the creative industries. ANII.



### SUPPORTIVE ACTION: C3.2.1

#### TOURIST OFFICE AND VISITOR CENTER: «PROA AL TURISMO»

The installation of a Visitor Center and Tourist Office in the Ciudad Vieja strengthens the presence of Montevideo's Intendancy as a driving force for public policy in the sector and contributes to providing physical and material resources to the Bureau. It also adds content to the tourism experience in Montevideo. The intervention includes architectural work for reforming the existing building, furniture, computer equipment provision, room and interpretative contents of Ciudad Vieja that will improve the tourist experience in Montevideo.







## Pillar D

### COMMITTED AND PREPARED MONTEVIDEO

*Montevideo is a sustainable territory, which protects its coast, its water courses, its rural environment and its natural ecosystems, and manages its solid wastes in an integral way under an economic, social and environmental vision. It has empowered citizens to undertake the commitment to build an increasingly resilient territory.*

## OBJECTIVES

- D1** Establish an environmental management model that incorporates the ecosystem and basin approach.
- D2** Reduce the impact of solid waste on the environment by incorporating new management models and the best available technologies.
- D3** Value the rural territory, promoting the responsible use of its environmental services and recognising the urban-rural complementarity.
- D4** Strengthen citizen's commitment to caring for the environment and to improve their skills in understanding, preventing and responding to risk situations, from a resilient perspective.



# D1 Establish an environmental management model that incorporates an ecosystem and basin approach.

## D.1.1 NEW INSTITUTIONAL FRAMEWORK FOR INCORPORATING AN INTEGRAL BASIN MANAGEMENT

In order to preserve its ecosystem services, the challenge of stopping and reversing the environmental degradation of Montevideo's natural resources, especially those linked to its water resources, requires a new management approach and, therefore, demands the reviewing of the institutional areas and capacities that are needed for its implementation.

This initiative aims to adapt the current Environmental Development Department structure to incorporate the spaces necessary to place the ecosystem and basin management approach, as well as to define objectives and work lines to improve the management of water resources, the coastal zone and the valuable ecosystems for conserving biodiversity.



### RESILIENCE VALUE:

10.3 Leadership and decision making | 8.5 Ecosystem management | 7.1 Environmental policies | 8.4 Flood risk management | 10.2 Government alignment.

### LINKS WITH OTHER INITIATIVES:

D1.2 | D1.3 | D3.1 | D3.2 | D4.2

### TYPE:

New.

### STATUS:

Planning.

### TEMPORALITY:

Short term.

### LEADER:

Environmental Development Department.

### ACTORS:

Urban Development Department.  
Departmental Board of Montevideo.  
Municipalities. National Environment Direction  
- MVOTMA



## D.1.2 NATIONAL PLAN FOR ADAPTING TO CLIMATE CHANGE IN THE COASTAL ZONE - MONTEVIDEO PILOT TERRITORY

This plan is the national government's initiative to build a national policy for adapting the coastal areas of the country to climate change, in a process designed to generate strategies for the entire national coastal territory, with an integral basin management focus. Montevideo agreed early on to articulate and participate in the plan, as a pilot territory, with the purpose of achieving a higher degree of specificity in the strategies that are to be adopted for Montevideo's territory.

This agreement implies the following: participating in training workshops that are dedicated to developing technological tools for the evaluation of the impacts and vulnerability, the creation of joint technical teams to generate new information about the risk level of the entire coastal territory and specific diagnosis and prospective data for coastal sectors that are considered by Montevideo to be critical. Likewise, Montevideo directly participates in defining strategies to help adapt, including for its own territory, in the national policy.

### Articulation with national policies.

Montevideo participates in this national initiative, as a means of generating synergies, ensuring coherent policies at different levels of government and improving the efficiency of the resilience building processes at departmental and national levels. It aims to guide, at a national level, the available resources (which are destined to adapt to climate change) towards actions based on priority in favor of the departmental government, according to the preliminary resilience assessment results. In this way, Montevideo puts the knowledge acquired at the national plan elaboration process' disposal, whilst elaborating its resilience strategy.



### RESILIENCE VALUE:

7.1 Environmental policies | 8.5 Ecosystem management | 11.2 Understanding of risks | 7.2 Guarantees for basic infrastructure | 8.1 Emergency plans for essential services | 8.4 Flood risk management | 10.2 Government alignment | 11.3 Risk monitoring and warnings | 11.5 Transfer of knowledge and best practices.

### LINKS WITH OTHER INITIATIVES:

D1.1 | D1.3 | D4.1 | D4.2

### TYPE:

Scalable.

### STATUS:

Planning.

### TEMPORALITY:

Medium term.

### LEADER:

Planning Department.

### ACTORS:

MVOTMA. Environmental Development Department. Intendancy of Montevideo Working Group on Climate Change. Universidad de la República - Faculty of Engineering and Faculty of Sciences. Universidad de Cantabria - Spain.

## D.1.3 SUSTAINABLE DRAINAGE PROJECT



### RESILIENCE VALUE:

7.3 Redundant and diverse infrastructure | 8.5 Ecosystem management | 11.2 Understanding of risks | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 8.1 Emergency plans for essential services | 8.4 Flood risk management | 12.3 Urban development and land use.

### LINKS WITH OTHER INITIATIVES:

D1.1 | D1.2 | C1.1 | D4.1 | D4.3

### TYPE:

Scalable.

### STATUS:

Planning.

### TEMPORALITY:

Short term.

### LEADER:

Environmental Development Department.

### ACTORS:

Municipalities. Urban Development Department. Mobility Department. Planning Department.

Having a sustainable drainage network contributes to successfully managing urban waters with a basin approach, conserving the urban hydrological cycle and building communities that are more sensitive to water risk. It increases the permeability of surfaces close to basins, allows more rainwater to infiltrate the soil and avoids occasional and large discharges into the Montevideo bay. Similarly, diffused pollution of water resources is also reduced, and the ecosystem's service sources are increased.

Montevideo has made some specific interventions of this type as pilot experiences. The initiative consists of planning and implementing a sustainable drainage system, expanding the infrastructure spectrum that is to be incorporated so that they can work in an interconnected manner, including: rain gardens, rehabilitation of water courses, greenways, permeable pavements and green stripes in sidewalks, green roofs, pocket squares and floodplain and retention spaces. Firstly, a reduced set of options will be selected to be implemented in the basins of urban courses where the greatest risks and incidents (due to heavy rain flooding) have been identified.

### INSPIRATION OF THE 100RC NETWORK:

#### New Orleans: Investing in integral and innovative urban water management

The city of New Orleans will implement an integral storm water management model to complement the traditional drainage system, with an ecological infrastructure that delays and stops rainwater from building in landscaped spaces. The city partners with national and international experts to prioritize projects through a detailed analysis that focuses on hydrology, economics and social equity. New Orleans aims to reduce infrastructure costs, reduce the risks of flooding, minimise land subsidence and transform infrastructure into attractive services that may improve neighbourhoods and their quality of life.



## D2 Reduce the impact of solid waste on the environment by incorporating new management models and the best available technologies.



## D.2.1 NEW INFRASTRUCTURES FOR SOLID WASTE MANAGEMENT



### RESILIENCE VALUE:

7.2 Guarantees for basic infrastructure | 7.3 Redundant and diverse infrastructure | 7.1 Environmental policies | 8.2 Optimization of basic infrastructure | 8.4 Flood risk management | 11.2 Understanding of risks | 12.3 Urban development and land use.

### LINKS WITH OTHER INITIATIVES:

D2.2 | D4.1 | D4.2

### TYPE:

Existent.

### STATUS:

Execution | Planning.

### TEMPORALITY:

Medium term | Long term.

### LEADER:

Environmental Development Department.

### ACTORS:

Planning Department. National Environment Direction - MVOTMA. Intendancies of Canelones and San José.

Montevideo has important infrastructure for managing solid wastes, some of which are nearing the end of their service life or which, for various reasons, are not fulfilling their objectives efficiently. This initiative seeks to address this situation immediately and as a priority, in parallel with the studies and evaluations planned to select the management model and the most appropriate technologies for Montevideo's situation.

The objective is to improve the existing infrastructures in order to establish a more efficient and redundant management of solid waste. The main action and priority are extending the service life of the sanitary landfill, which will be complemented with:

- Creation of a new logistics center as an operational base for waste management.
- Optimizing the infrastructure for the landfill's leachate treatment.
- Eradicating informal activities within the landfill.
- Optimizing the biogas plant management, which is currently installed in the sanitary landfill and that it is used for generating energy for the landfill's facilities consumption.



### SUPPORTIVE ACTION: D2.1.1 FEASIBILITY STUDY FOR A WASTE TO ENERGY PLANT

Montevideo studies a variety of management models and available technologies to improve its efficiency in solid waste management, taking into account its role as a capital city and the principal center of the metropolitan area. The initiative consists of carrying out a technical and economic feasibility study for the construction and operation of a power generation plant from wastes, which is aimed at complementing the recycling solutions, and as an alternative to the final disposal in a sanitary landfill.

## D.2.2 EXPANSION OF THE RECYCLING PROGRAM



### RESILIENCE VALUE:

7.2 Guarantees for basic infrastructure | 7.3 Redundant and diverse infrastructure | 2.1 Labor policy | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 11.2 Understanding of risks

The program seeks to promote the separation of wastes at the place of origin, reducing the volume of solid wastes entering the Montevideo landfill and valuing dry fractions that cannot be received in the current four plants of the Container Management Plan.

What is being proposed is the incorporation of a new waste sorting plant and eight collection centers for recyclable dry fractions, debris, bulky waste and pruning (one in each municipality). In each of these centers, rooms for environmental education for children and the youth will be built, as well as having training activities and encouraging community participation.

### LINKS WITH OTHER INITIATIVES:

C1.2 | D2.1 | D4.1 | D4.2

### TYPE:

Existent.

### STATUS:

Planning.

### TEMPORALITY:

Medium term.

### LEADER:

Environmental Development Department.

### ACTORS:

Municipalities. Planning Department. Social Development Department. National Environment Direction - MVOTMA.



## D3 Value the rural territory, promoting the responsible use of its environmental services and recognising the urban-rural complementarity.



### D.3.1 MANAGEMENT PLAN FOR SANTA LUCIA WETLANDS PROTECTED AREA



### RESILIENCE VALUE:

7.1 Environmental policies | 8.5 Ecosystem management | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 11.2 Understanding of risks | 11.5 Transfer of knowledge and best practices.

The Protected Area with Santa Lucía's Managed Resources Wetlands, shared by the departments of Montevideo, Canelones and San José became part of the National System of Protected Areas (SNAP) in February 2015. It is an area of high conservation value, not only because of the coastal saline wetland system at the mouth of the Santa Lucía river, but also because of the presence of native vegetation, sandy beaches, rocky points and fluvial islands. In particular, the wetland area supports agricultural activity and maintains traditional trades, such as carreros, areneros, junqueros and artisanal fishing.

The initiative consists of elaborating a management plan for the protected area and establishing use and exploitation conditions for the natural resources of the area, with the purpose of conserving their prioritized ecosystems, as well as their ecosystem services, which provide the economic activity that sustains many of the surrounding families.

### LINKS WITH OTHER INITIATIVES:

D1.1 | D1.2 | D1.3 | D4.2 | D4.3

### TYPE:

Existent.

### STATUS:

Planning.

### TEMPORALITY:

Short term.

### LEADER:

Environmental Development Department.

### ACTORS:

National Environment Direction - MVOTMA. Intendancy of Canelones. Intendancy of San José.

**Articulation with national policies.** This initiative is developed in collaboration with the MVOTMA and the intendancies of the metropolitan area, within the National System of Protected Areas framework. It will be the first experience in which an institution coming from the executive branch and three department intendancies create a foundation as an instrument to manage and administer a protected area, applying innovative economic-financial tools. This initiative will allow Montevideo, as co-administrator of the area, to share its previous experience of managing the protected area and acquire new capacities for conserving biodiversity, which may be replicated in other areas of the department.

### D.3.2 FAMILY FARMING PROGRAM ON AGROECOLOGICAL BASES

The rural area of Montevideo plays a fundamental role for sustainability not only for its urban area, but for the entire metropolitan area. It plays an important role in intensive agricultural production, which contributes, to a large extent, to the food sustainability of its population. In addition, it provides employment for thousands of rural family farmers who work on small-scale farms.

This initiative aims to promote the formation of groups of family farmers around two production systems: family poultry and organic farming. It is based on a participatory research methodology integrated by producers and technicians from Uruguay's Agroecology Network, as well as other public institutions, with the objective of solving the main limitations of these production systems, improving production techniques at the farming level and identifying market opportunities which can support its sustainability.

#### INSPIRACIÓN EN LA RED 100RC:

##### Toyama: Promoting high value agricultural products

The city of Toyama promotes sustainable agriculture in its rural communities by supporting farmers to diversify production, increase productivity and add new commercial value to their products. More specifically, it focuses on identifying crops that carry the potential of developing medicinal products. The program provides training and technical skills, promoting the exchange of agricultural machinery to reduce costs and creates opportunities for young people to develop low-cost, high-value agricultural enterprises.



#### RESILIENCE VALUE:

2.2 Skills and training | 2.4 Development and innovation of local commerce | 4.2 Identity and local culture | 4.3 Community participation | 6.1 Business continuity measures | 7.1 Environmental policies | 8.5 Ecosystem management | 11.2 Understanding of risks | 11.5 Transfer of knowledge and best practices.

#### LINKS WITH OTHER OBJECTIVES:

D1.1 | D1.2 | D3.1 | D4.2 | D4.3

#### TYPE:

Existent.

#### STATUS:

Execution.

#### TEMPORALITY:

Short term.

#### LEADER:

Economic Development Department.

#### ACTORS:

Agroecology Network of Uruguay. Universidad de la República - Faculty of Agronomy. National Institute of Agricultural Research (INIA). Family farmers network.



## D4 Strengthen citizen's commitment to caring for the environment and to improve their skills in understanding, preventing and responding to risk situations, from a resilient perspective.



### D.4.1 CLIMATE CHANGE ADAPTATION NATIONAL PLAN FOR CITIES AND INFRASTRUCTURES - MONTEVIDEO, PILOT TERRITORY

This plan is an initiative from the national government to help cities adapt to climate change, within a broader strategic agenda framework related to sustainability in cities. Montevideo agreed early on, by articulating and participating in the plan, through different activity areas directly linked to building resilience. The initiative includes:

- Activities to raise awareness, consultations and risk management training among stakeholders, including: local government officials, civil society organizations (trade unions, research institutions, non-governmental organizations), financial partners and the private sector.
- Developing a strategy to intervene at a standard scale with the adaptation of medium risk homes located in consolidated flooded urban land areas, in order to prevent and minimize the impact of flooding. There will be a set of measures specifically designed for the cases identified in Montevideo, which will be applied in the private sphere with the property owners' direct participation. These measures will be accompanied by communication actions to show their relevance in reducing risks, through explanations, technical training and financing forms for carrying out its execution.

**Articulation with national policies.** This initiative is developed in collaboration with the MVOTMA's Climate Change Direction. Before beginning the process on a national level, Montevideo agreed with the leading institution to coordinate certain actions and to focus them on priority areas for building resilience. In this way, Montevideo capitalizes on the knowledge acquired while developing its resilience strategy and becomes a pilot city in the process of preparing the national plan.



#### RESILIENCE VALUE:

8.4. Flood risk management | 11.2 Understanding of risks | 1.1 Housing | 4.3 Community participation | 7.2 Guarantees for basic infrastructure | 8.3 Maintenance of goods and services | 10.2 Government alignment | 11.5 Transfer of knowledge and best practices.

#### LINKS WITH OTHER INITIATIVES:

B1.1 | D1.2 | D1.3 | D4.2

#### TYPE:

New.

#### STATUS:

Planning.

#### TEMPORALITY:

Short term.

#### LEADER:

Planning Department.

#### ACTORS:

Intendancy of Montevideo Working Group on Climate Change. Environmental Development Department. Municipalities. MVOTMA OPP. National Emergency System (SINAE). Association of Intendants. Civil society organizations.

## D.4.2 CAMPAIGNS FOR RESILIENCE EDUCATION AND RISK MANAGEMENT

Montevideo has extensive experience in environmental education activities, whose forms and contents have been updated on an ongoing basis to meet the communication needs of the institution and the preferences of the population.

This initiative capitalizes on existing activities that are aimed at promoting participation, awareness and training in environmental issues, carrying out specific actions that are linked to the resilience theme and to comprehensive risk management. Special editions of the following activities will be carried out in this vein:

- **A photography and short films contest for young people. Montevideo Resilient Edition.**

The contest's objective is to spread the concept of urban resilience among secondary school students through the creation of short films and photographs related to this topic. The proposal is built on the calls for programs annually set up by the environmental technical education team, in coordination with the National Public Education Administration (ANEP). As part of the initiative, the content elaboration for designing the Ceibal Plan is focused on the urban concept of resilience and comprehensive risk management, its relevance to the city of Montevideo and the community's possibilities of action.

- **Robotica project at the environment's service. Montevideo Resilient Edition.**

This is part of the "Local Governments: Sustainable development and equity" initiative, an activity which promotes the use of technology for environmental purposes through education and the complementarity between municipalities and territories, placing priority on the participation of educational centers. In the Montevideo Resilient edition, a robotic application project linked to risk management will be proposed.



### RESILIENCE VALUE:

11.1 Education | 11.2 Understanding of risks | 4.2 Identity and local culture | 4.3 Community participation | 11.4 Communication between government and the public

### LINKS WITH OTHER INITIATIVES:

B2.3 | B4.2 | C2.2 | D1.2 | D4.1

### TYPE:

Scalable.

### STATUS:

Research.

### TEMPORALITY:

Short term.

### LEADER:

Planning Department.

### ACTORS:

Environmental Development Department - Technical Team for Environmental Education (ETEA). Sustainable and Smart Development Department. Departmental Emergency Coordinating Center (CECOED).



## D.4.3 NATURE-BASED INITIATIVES FOR URBAN REGENERATION

The initiative refers to Edible Cities Solutions, an international cooperation project that aims to build a productive, sustainable and socially resilient network of cities, based on the systematic use of the urban landscape for food production. The methodology that is to be applied focuses on empowering communities through dynamic and inclusive participation in new business models for food production, linked to the green economy.

Montevideo will participate in the network as a «follower city», a recipient of the experience and good practices applied by the «leading» cities of the network. The proposed initiative consists of preparing a master plan for integrating actions for urban regeneration, based on nature, focused on training and the transfer of technologies to local communities.



### RESILIENCE VALUE:

2.2 Skills and training | 4.3 Community participation | 7.1 Environmental policies | 1.4 Food | 4.2 Identity and local culture | 11.2 Understanding of risks | 11.4 Communication between government and the public.

### LINKS WITH OTHER INITIATIVES:

B3.1 | B3.2 | D1.3 | D3.2 | D4.2 |

### TYPE:

New.

### STATUS:

Planning.

### TEMPORALITY:

Medium term.

### LEADER:

Planning Department.

### ACTORS:

The Technological University of Berlin. Edible Cities Solutions network cities. Urban Development Department. Environmental Development Department. Sustainable and Smart Development Department.





# RESILIENCE LABORATORIES

During the process of elaborating this strategy, it was deemed important to have, at an early stage, spaces for integral experimentation that would allow for the building of trust among actors linked to the implementation of their proposals and demonstrated the added value of including the resilience approach in management.

These experimental spaces are shaped as resilience laboratories.

Beyond the outcomes and impacts derived from the plans and projects that are implemented, the laboratories have, as mere processes, a resilience value in themselves: through the integral and transversal approach to the problem that is to be solved, a critical mass and social capital around the concept of resilience is generated in advance; intra and interinstitutional agreements are established to implement them and new governance models are experimented with to address the permanent change that Montevideo faces in the 21st century.



## TOWARDS A NEW MANAGEMENT MODEL

All of the laboratories are developed around a main initiative: a plan that incorporates a new management model for a territory or for a specific theme. This plan is the laboratory's key strategic tool, from which all of the actions that will be implemented (to meet the laboratory's objective) in the medium term will derive.

At the same time, laboratories incorporate tactical tools; a set of early actions, derived from the initiatives foreseen in the 4 pillars, that allow them to experiment through action and demonstrate results in the short term, whilst still advancing in building the laboratory's main strategic tool.

The building process for each of these strategic plans, with a one-year duration kept in mind, contain a set of initiatives centered on communication, education and building of skills and a formulation of agreements between institutions, which create the conditions that are deemed necessary to facilitate their subsequent implementation under the resilience framework.

**QUALITIES OF THE RESILIENCE LABORATORIES**

**TRANSVERSAL:**

They include all the strategy's pillars and contribute in an integral way to achieve the vision.

**STRATEGIC:**

Address highly complex situations considered strategic for building resilience.

**FOCUSED:**

They concentrate resources and willpowers around integral interventions that generate high impact results.

**TIMELY:**

They take advantage of pre-installed institutional strengths to promote early achievements in incipient processes.

**INNOVATORS:**

They promote new ways of intervening with the territory, facilitating the incorporation of the resilience approach in the management processes.



**LAB 1:  
TRANSFORMATION OF THE PANTANOSO STREAM BASIN**

The Pantanoso stream basin is one of the territories considered strategic by the Land-Use Planning Department Guidelines. It was defined as a laboratory because it presents a multidimensional problem that articulates all of the strategy's pillars in a territory considered strategic for developing a resilient Montevideo.



**LAB 2:  
INTEGRAL DEVELOPMENT OF THE COASTAL TERRITORY**

The coastal area by the Río de la Plata is a territory which forms part of the people of Montevideo's identity and is exposed to numerous anthropogenic and natural pressures. It was selected as a laboratory due to the need to generate a global development project linked to the rest of the department, without neglecting its sectoral and territorial specificities.



**LAB 3:  
INTEGRAL RISK MANAGEMENT**

Risk management in Montevideo has traditionally been considered under a sectoral approach focused on emergency care. Due to its relevance in building resilience, it requires the incorporation of a contemporary and multidimensional approach. It was defined as a laboratory so as to ensure that the new risk management policy meets the objectives of the 4 pillars of the strategy.

**4 PILLARS**





# LABORATORY 1

## TRANSFORMATION OF THE PANTANOSO STREAM BASIN



The purpose of this laboratory is to articulate in due time and form the different public and private actions that take place in the basin area as by doing so, the territorial plan's value can be used as a guide for intervening with the territory. It is then to be complemented with a management and implementation program that guarantees a deep socio-territorial transformation, and a substantial change in the collective imagination regarding the stream and its values.

Located in the center-west of Montevideo, the Pantanosos stream basin is an area of high social vulnerability, housing precariousness and environmental degradation, and approximately 190,000 people live there. Within this area, rural production, logistic and industrial uses and consolidated urban sectors all coexist with precarious settlements in low and flood-prone areas, and consequent conflicts arise from the contact of all of the diverse modalities in which the territory is occupied. This situation of social and environmental risk is deepened by the presence of informal economic activities linked to the inadequate management of solid wastes that negatively impact the environmental quality of land and water courses.

This area is subject to numerous sectoral interventions implemented by the three levels of government, without an inter-institutional coordination that takes advantage of the generated synergies and which can optimize the use of the invested resources. However, it does have a special opportunity to promote a change in the management model: the Partial Plan of the Pantanosos Stream Basin, whose territorial planning objective is to promote socio-territorial integration and contribute to the improvement of its environmental qualities, through integral planning of the territory that includes all of its different dimensions and components.

### MAIN STRATEGIC INITIATIVE:

## L1.1 INTERVENTION AND MANAGEMENT PROGRAM IN THE PANTANOSO STREAM BASIN.

The program will define the intervention model that is to be adopted, the project portfolio, the detailed design of the prioritized projects and the inter-institutional agreements and articulations required for its implementation. Likewise, the necessary studies will be elaborated to inform the decisions that are to be made regarding financing and governance, as well as to contribute to consolidating the necessary political support. Parallel to the elaboration of the program, the communication and citizen participation strategy of the laboratory implementation process will be designed.

### INSPIRATION FROM 100RC:

#### Medellín: Integral Urban Projects

Medellín has successfully developed the Social Urbanism model to promote the integral human development of its inhabitants, understanding this as a development for the people through participation of the people. This model aims to target problems such as poverty, exclusion, inequality, violence, lack of economic growth and low governance, through projects and inter-institutional programs located in the most marginal areas of the city.

One of the most noteworthy intervention instruments, developed within the Social Urbanism model, is the so-called Integrated Urban Projects (PUI), which covers all of the urban dimensions, including mobility, public space, housing, equipment, environmental improvement and the relocation of communities in high-risk areas, with the aim of solving specific problems of a defined territory.



### RESILIENCE VALUE:

1.1 Housing | 2.1 Labor policy | 3.1 Medical facilities and emergency professionals | 4.1 Promotes cohesive and committed communities | 5.1 Crime prevention measures | 5.3 Protection and safety promotion policies | 6.2 City budgets | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 8.2 Optimization of basic infrastructure | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 8.5 Ecosystem management | 9.1 Transportation network | 9.2 Public transportation | 10.1 Alignment of multiple parties | 10.2 Government alignment | 10.3 Leadership and decision making | 11.1 Education | 11.2 Understanding of risks | 11.4 Communication between government and the public | 12.2 Strategies and plans | 12.4 Building codes, standards and applications

### TYPE:

New.

### STATUS:

Execution.

### TEMPORALITY:

Medium term.

### LEADER:

Planning Department.

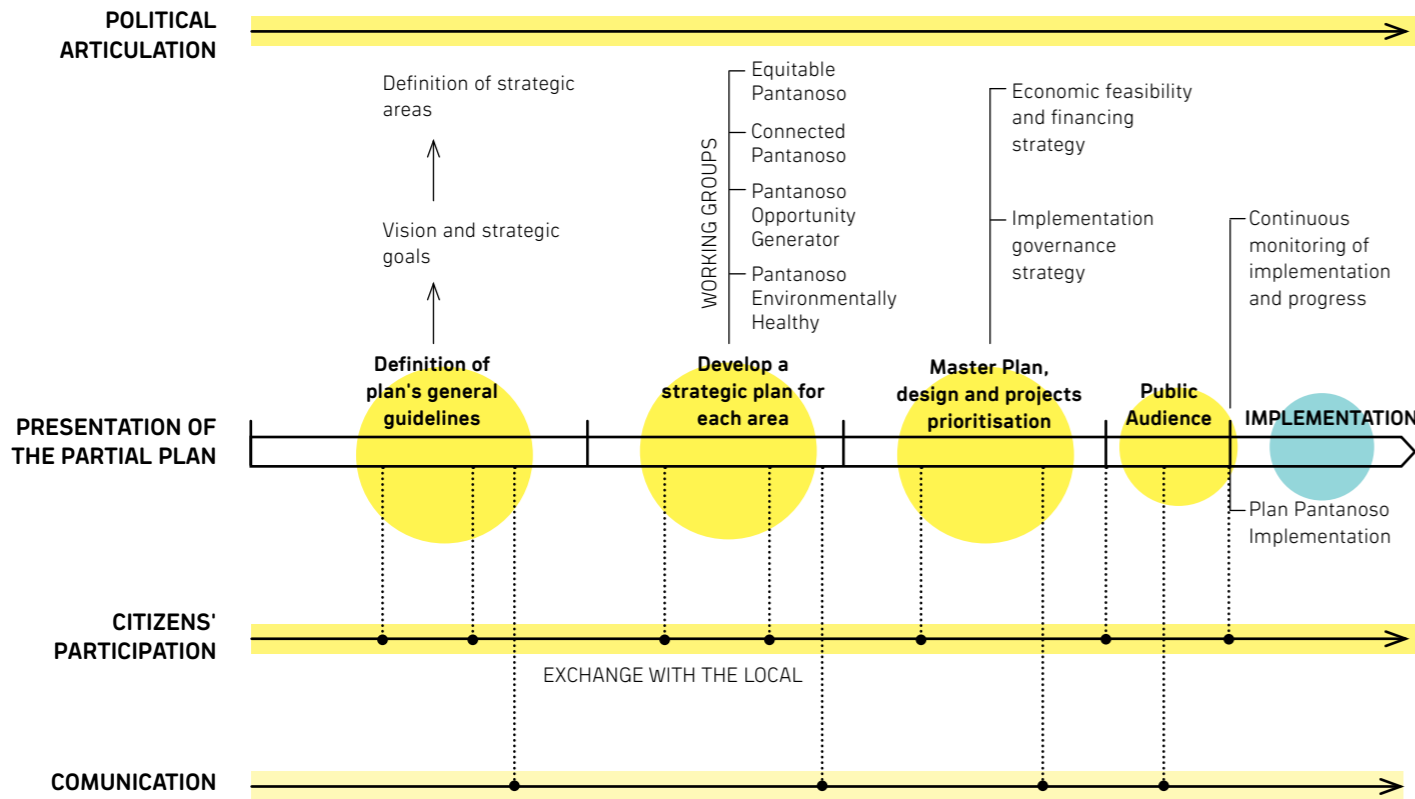
### ACTORS:

Urban Development Department. Environmental Development Department. Information and Communication Division. Planning Department. Economic Development Department. Social Development Department. Culture Department. Mobility Department. Municipalities A and G. National Housing Direction - MVOTMA. National Environment Direction - MVOTMA. National Land-Use Planning Department - MVOTMA. National Water Board - MVOTMA. ANEP. MIDES. Ministry of Interior. Saint Bois Hospital - Ministry of Public Health. Blandengues Cavalry - Ministry of National Defense (MDN). OPP. Companies and local industries. Producer organizations. Neighbourhood organizations. Social Organizations.

L 1.1

ROADMAP

The roadmap is a strategic planning process that is conceived as an effective way to reach an implementation phase that considers key factors for an integral execution of the project.



COLLECTIVE DEBATE WITH THE COLLABORATING PARTNERS' SUPPORT

The RVR (Realization Value Resilience) approach, designed by the Rockefeller Foundation in collaboration with Value Lab, derives from a project management methodology that seeks to align stakeholders around key issues that can determine the success of the project.

This approach was applied to the Pantanoso stream basin resilience opportunity framing workshop, which was aimed at identifying the potential that can come from transforming the Pantanoso stream basin in such a way that creates social, environmental and economic value. The workshop helped to align key actors around the territorial planning opportunity offered by the scheme, analyzing the ways to capture that value for Montevideo,

and to advance on defining a road map for a multisector transformation project for the basin with a mutual commitment from all levels of government.

Based on the results of the workshop, Arup, a strategic partner for Montevideo, developed the road map in detail, including references to similar urban interventions, action proposals that contribute to meeting the objectives set out in the workshop and possible arrangements for defining governance and financing issues. The final report is the guiding instrument for the development and implementation of this laboratory.



SUPPORTIVE TACTICAL ACTIONS

During the development of the main strategic initiative, the following early implementation actions will be carried out.

L1.1.1 NACIENTES PRODUCTION PARK

An intervention is proposed that is aimed at taking advantage of the current capacities of the Park of Agro industrial Activities (PAGRO) and integrates public access content into it, in the form of recreational programs, environmental restoration, environmental education, and agricultural production compatible with environmental conservation.

L1.1.2 COLÓN-VILLA COLÓN SPACE

This is an intervention that aligns the Lineal Park of Lezica with the environment's heritage values. The planned intervention in the Colón-Villa Space will be strengthened by connecting the stretch of the linear park (recently inaugurated) with the Idiarte Borda Castle, of architectural heritage value.

L1.1.3 PASO DE LA ARENA INTEGRATING SPACE

A physical intervention is proposed that would imply a substantial change in the conditioning and collective appropriation of the public spaces of Paso de la Arena by the stream. This intervention will be integrated towards developing structural solutions in the formal areas of the urban fabric that are recognized as flood areas.

L1.1.4 INTERPRETATION SPACE FOR WETLANDS

The construction of a public space in a sector threatened by the dumping of illegal waste is proposed to place value on the environmental and landscape qualities of the wetlands and its relationship with the environment's new residential areas. It is complemented by a strategy which promotes environmental education

L1.1.5 PANTANOSO ENVIRONMENTAL COMMUNICATION AND EDUCATION PROGRAM

The early interventions will be accompanied by a communication and environmental education program that further enhances them, incorporating programmatic content, promoting their collective appropriation and generating synergies among them.



RESILIENCE VALUE:

- 4.1 Promotes cohesive and committed communities
- 5.3 Policies that promote protection and safety
- 7.1 Environmental policies
- 8.2 Optimization of basic infrastructure
- 8.3 Maintenance of goods and services
- 8.4 Flood risk management
- 8.5 Ecosystem management
- 10.1 Alignment of multiple parties
- 10.2 Government alignment
- 11.4 Communication between government and the public

TYPE:

New.

STATUS:

Planning.

TEMPORALITY:

Short term.

LEADER:

Planning Department.

ACTORS:

A and G Municipalities. Urban Development Department. Environmental Development Department. Information and Communication Division. National Environment Direction - MVOTMA. MIDES. Ministry of Interior. Local social organizations

## LABORATORY 2

### INTEGRAL DEVELOPMENT OF THE COASTAL TERRITORY



The objective of this laboratory is to implement a territorial management model that ensures that the necessary coordination and arrangements are made to achieve an integrated development of the entire coastal area, enhancing its links with the rest of the city whilst recognizing the local specificities, guaranteeing a collective and equitable use of the land and maximizing its potential as the main public space of the city.

The coast of Montevideo measures over 70 km by the Río de la Plata, along which three stretches with well-differentiated characteristics can be identified: the west coast, of high naturalness, the bay of Montevideo and the east coast, densely populated and characterized by a succession of sandy beaches and rocky areas.

The coastal space is the city's main public space, both democratic and accessible to everyone. It is home to the country's main commercial port and several strategic value infrastructures (a thermoelectric power station, sanitation system plants, an oil refinery). It is the provider of valuable environmental services, it has a high landscape potential and is one of the main tourist attractions not only of the city, but of the country.

It is, therefore, a territory of high economic, environmental, landscape and symbolic value, exposed to multiple tensions, both anthropic and natural. These tensions include the competition between activities to occupy strategic spaces, the environmental impacts derived from activities in the basins (by the other water resources from the Department), the coastal erosion and other damages to the ecosystem associated with the effects of climate change.

#### MAIN STRATEGIC INITIATIVE:

### L2.1 COASTAL SPACE MANAGEMENT PLAN

The plan will be based on an integrated coastal management (MCI) criteria and will transversally address the social, economic, environmental, territorial and symbolic dimensions of the coastal area of Montevideo. Its design will establish the intervention scales, the key issues that should be the subject of the agreements between interested parties and the governance spaces linked to them. It will be the strategic instrument that guides the development of the coastal territory and, therefore, it will contain the management guidelines and the actions necessary to comply with the objectives of this laboratory. In parallel to developing the plan, the laboratory's implementation process communication strategy will be drawn out.



#### RESILIENCE VALUE:

4 Promotes cohesive and committed communities | 5.3 Application of the law | 6.2 City budgets | 6.3 Received investment | 6.4 Local economy | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 8.5 Ecosystem management | 9.1 Transportation network | 9.2 Public transportation | 10.1 Alignment of multiple parties | 10.2 Government alignment | 10.3 Leadership and decision making | 11.1 Education | 11.2 Understanding of risks | 11.4 Communication between government and the public | 12.2 Strategies and plans | 12.3 Urban development and land use | 12.4 Building codes, standards and applications

#### TYPE:

New.

#### STATUS:

Planning.

#### TEMPORALITY:

Medium term.

#### LEADER:

Environmental Development Department.

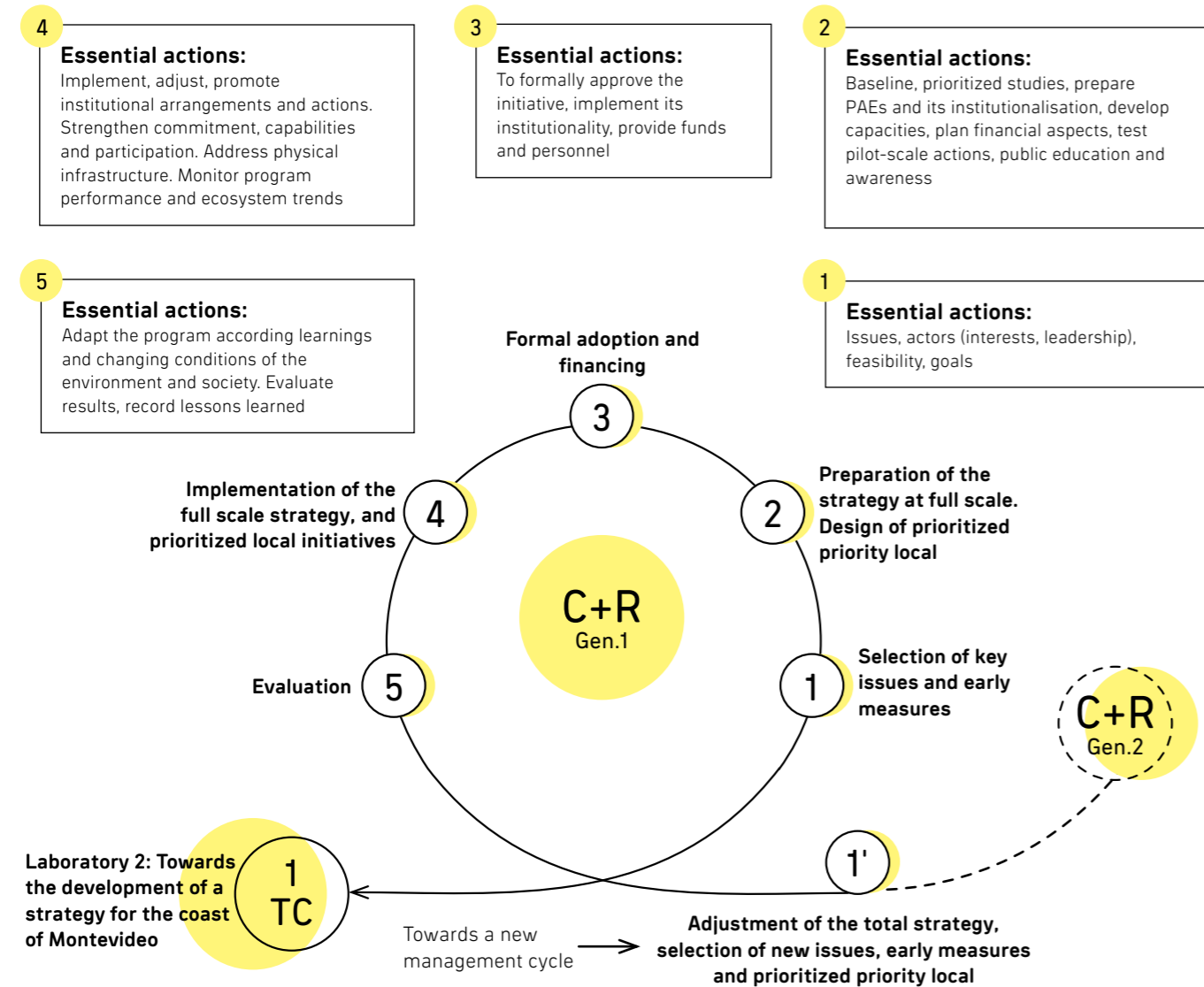
#### ACTORS:

Planning Department. Urban Development Department. Information and Communication Division. Economic Development Department. Social Development Department. Mobility Department. Intendancy of Montevideo Working Group on Climate Change. Beach Committee. Municipalities. MVOTMA MDN. MINTUR. MTOP. ANP. Universities. ANEP. Real Estate Chamber. Strategic coastal property owners. Logistic and port sector operators. Tour operators. Nautical clubs. Fishing Clubs. Agricultural producer associations. Artisanal fishermen associations. Neighborhood organizations.



# L2.1

## ROADMAP



**Laboratory 2: Towards the development of a strategy for the coast of Montevideo**

DeCerca Entidad Consultora, a local company that accompanied Montevideo in the deepening of knowledge on various issues related to urban resilience, developed the study labelled as Ideas to structure a comprehensive plan for the development of the coastal territory of Montevideo. The objective of this study was to generate a road map for elaborating a development plan for the coastal territory of Montevideo based on MCI criteria and to design a set of initiatives aimed at promoting coordinated action in the territory.

Based on the preliminary results of this study, and in collaboration with the strategic partner Arup, the Towards a more resilient coastal territory workshop was held, which was attended by an international expert consultant on the subject. For two days, the participants debated the

following question «what do we need in order to achieve an integrated coastal management? ». International experiences were presented, advances were made to Montevideo's coastal management, thematic visits to the coast were organised and the problems and opportunities of Montevideo's coast were identified.

The workshop allowed for an agreed roadmap on developing the laboratory and helped in the creation of a common vision of the integrated coastal management concept among actors from different areas, which is key for carrying out its implementation. The final report is the guiding instrument for developing and implementing this laboratory.



## SUPPORTIVE TACTICAL ACTIONS

During the development of the main strategic initiative, the following early implementation actions will be carried out.

### L2.1.1 CLEAN BAY PROJECT

This is an inter-institutional project aimed at outlining the actions needed to improve the environmental quality of the Montevideo Bay. The actions to be defined will address social, economic and environmental problems in Montevideo's main stream basins.

### L2.1.2 DIALOGUE FOR MANAGING THE TERRITORY LINKED TO THE PORT

The organization of activities and debate workshops will be implemented in order to deepen the mutual knowledge of the different actors that are linked to the port territory management and linking the territory interface with the urban environment, promoting the generation of inter-institutional agreements to improve port-city interaction.

### L2.1.3 COASTAL RISK MAP

As part of the National Coastal Adaptation Plan, Montevideo will participate as a pilot territory in building a risk map of the coast in the face of variability and climate change. This map will enable the identification of adaptation measures that are necessary to reduce the current risk level in the different stretches of the coastal front.

### L2.1.4 WORKS FOR MITIGATING EROSION IN URBAN BEACHES

This initiative includes the development of sand filling options to achieve a 25 or 20-meter-long expansion on the Brava and Honda beach platforms, including a submerged retention structure composed of geotubes and a solution for retaining possible sand losses. In Brava beach's case, a protection structure for the collector that crosses the beach is also included.



## RESILIENCE VALUE:

Resilience value: 4.1 Social communication and connectivity | 4.2 Identity and local culture | 4.3 Citizen participation | 6.1 Continuity measures for business | 6.3 Received investment | 6.4 Local economy | 6.5 Higher economic links | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 8.5 Ecosystem management | 9.1 Transportation network | 10.1 Alignment of multiple parties | 10.2 Government alignment | 10.3 Leadership and decision making | 11.2 Understanding of risks.

**TYPE:**

New

**STATE:**

Planning | Execution.

**TEMPORALITY:**

Short term.

**LEADER:**

Environmental Development Department. Planning Department.

**ACTORS:**

Urban Development. Information and Communication Division. Economic Development Department. Social Development Department. Mobility Department. Intendancy of Montevideo Working Group on Climate Change. Beach Committee. Municipalities. National Environment Direction - MVOTMA. National Land-Use Planning Department - MVOTMA. National Water Board - MVOTMA. Local social organizations.

# LABORATORY 3

## INTEGRAL RISK MANAGEMENT



The objective of the laboratory is to implement a contemporary model for an integral risk management model in Montevideo, which considers prospective, corrective and compensatory management, and which highlights the intersections and synergies between disaster risk management and other development aspects, under a human rights approach.

The contemporary conceptual framework for disaster risk management is built around the notion of social vulnerability and it is based on recognizing that risk is a process of social construction, where specific collective processes operate to create exposure conditions and vulnerability facing the environment's different physical manifestations. It thus requires a management process that is closely linked to the sectoral and territorial development management<sup>10</sup> processes. This framework implies a comprehensive approach to designing risk management policies to cover all development dimensions, as well as risk prevention, reduction and compensation.

Montevideo, for cultural, institutional and communication reasons, is far from this modern risk management model. There is a very low perception of risk, both in institutions and in the public's imagination. The Departmental Emergency Coordinating Center (CECOED) is the main departmental reference of the subject and it is recognized for its work in responding to emergencies. Other areas of the Intendancy also carry out activities related to risk management, such as the Territorial Planning Division or the Sanitation Division. However, these activities are not identified by the officials themselves, nor by the population, as activities related to risk management, as they do not fall under the concept of emergency response, the only institutional activity linked to disaster risk management (DRM).

### MAIN STRATEGIC INITIATIVE:

## L3.1 DEPARTMENTAL PLAN FOR INTEGRAL RISK MANAGEMENT.

The plan will be designed based on an approach that considers reducing the existing risks and preventing future risks in all dimensions of development. It will be the fundamental strategic instrument for risk management at the departmental level and it will, therefore, mainstream necessary actions to fulfill the laboratory's objective and the guidelines that will guide its implementation. The elaboration of the plan will be articulated with the National Policy for Integral Disaster Risk Management, developed by the National Emergency System (SINAE) and will encourage the active involvement of actors from different sectors of society, so that during the elaboration process, the whole of Montevideo becomes a scenario of learning and building resilience.



### RESILIENCE VALUE:

2.2 Skills and training | 2.3 Subsistence after the crisis | 3.1 Medical facilities and emergency professionals | 3.3 Public health management means and capacity | 4.2 Identity and local culture | 4.3 Community participation | 5.3 Policies that promote protection and safety | 7.1 Environmental policies | 7.2 Guarantees for basic infrastructure | 7.3 Redundant and diverse infrastructure | 8.1 Emergency plans for essential services | 8.2 Optimization of basic infrastructure | 8.3 Maintenance of goods and services | 8.4 Flood risk management | 8.5 Ecosystem management | 9.4 Communications technology | 10.1 Alignment of multiple parties | 10.2 Government's alignment | 10.3 Leadership and decision making | 10.4 Coordination and emergency capacity | 11.1 Education | 11.2 Understanding of risks | 11.3 Risk monitoring and warning | 11.4 Communication between government and the public | 12.1 Monitoring and data management | 12.2 Strategies and plans | 12.4 Building codes, standards and plans

### TYPE:

New.

### STATUS:

Planning.

### TEMPORALITY:

Medium term.

### LEADER:

Planning Department.

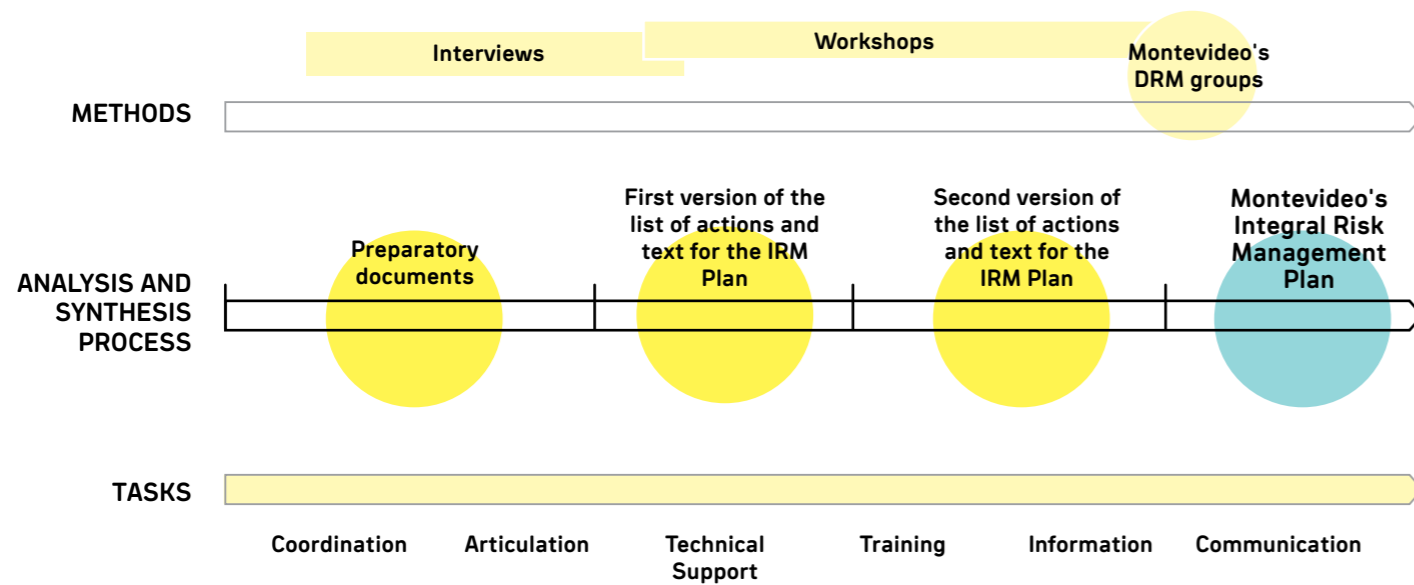
### ACTORS:

CECOED. Intendancy of Montevideo Working Group on Climate Change. Environmental Development Department. Information and Communication Division. Urban Development Department. Social Development Department. Mobility Department. Municipalities. SINAE. Climate Change Direction - MVOTMA. MDN. Ministry of Interior. ANEP. Social Organizations.

# L3.1

## ROADMAP

The roadmap is a strategic planning process that is conceived as an effective way to reach an implementation phase that considers key factors for an integral execution of the project.



### COLLECTIVE WORK WITH THE COLLABORATING PARTNERS' SUPPORT

DeCerca Entidad Consultora was also the local partner that accompanied Montevideo in the early implementation of this laboratory by preparing the study, Bases for designing a comprehensive risk management plan for Montevideo.

This study allowed the available information on the current risk management situation of Montevideo to be systematized, offering a diagnosis of the department's strengths and weaknesses on the subject, whilst generating a roadmap for preparing a comprehensive risk

management plan. It also helped propose a set of actions to promote public and institutional awareness on the subject.

The results were presented at the discussion table of the Intendancy of Montevideo Climate Change Risk Management Group's Subgroup, for the collective debate of concepts and proposals developed. The final report acts as the guiding instrument for the development and implementation of this laboratory.



### SUPPORTIVE TACTICAL ACTIONS

Durante el desarrollo de la iniciativa estratégica During the development of the main strategic initiative, the following early implementation actions will be carried out.

#### L3.1.1 STRENGTHENING THE CECOED

Evaluating, analyzing and drawing up proposals on CECOED's institutional role and its links with other planning and management areas of the Intendancy that develop key structural policies in the integral risk management processes. The process will culminate in a proposal of institutional redesign in accordance with the plan's objectives.

#### L3.1.2 PARTICIPATION INTEGRATED AND CITIZEN INNOVATION IN INTEGRAL RISK MANAGEMENT

Promoting different social participation strategies with a special emphasis on those that use TICs. They are small actions for strengthening citizen participation and knowledge of the city, based on existing spaces such as special editions of MVD Labs for risk management; environmental meetings in the Departmental Board; civil society initiatives that include risk management issues, amongst others.

#### L3.1.3 PILOT PROJECT FOR TRANSVERSAL WATER MANAGEMENT - POCITOS STREAM

Rehabilitation of the Pocitos stream, through an integrated intervention that involves the recovery of the body of water (currently partially channelled), the building of rain gardens and the landscape arrangement of the environment. The project includes distributing informational posters about the basin, the watercourse and the benefits that the intervention will give rise to.

#### L3.1.4 TRANSITORY USE OF SPACES AND INFRASTRUCTURES

A legal (ownership situation) and economic feasibility study for utilizing productive infrastructures (to be identified), with the purpose of assigning them to transitory micro-enterprises, and a study analysis on the potential impacts on risk reduction derived from their current abandoned condition.



### RESILIENCE VALUE:

4.3 Community participation | 5.3 Policies that promote protection and safety | 7.1 Environmental policies | 7.3 Redundant and diverse infrastructure | 8.2 Optimization of basic infrastructure | 8.4 Flood risk management | 8.5 Ecosystem management | 9.4 Communications technology | 10.1 Alignment of multiple parties | 10.3 Leadership and decision making | 10.4 Coordination and emergency capacity | 11.1 Education | 11.2 Understanding of risks | 11.4 Communication between government and the public

#### TYPE:

New.

#### STATUS:

Planning.

#### TEMPORALITY:

Short term.

#### LEADER:

Planning Department.

#### ACTORS:

CECOED. Environmental Development Department. Urban Development Department. Mobility Department. Municipalities. SINAIE. Neighbourhood organizations.

# Next steps

The strategy's building process offered a unique opportunity to recognize Montevideo's progress in building resilience and to demonstrate the possibilities of enhancing its results through an articulated implementation under a holistic approach. It also facilitated the installation of new spaces for collective reflection, where existing paradigms were reviewed, and new ideas were generated to build management models that can help convert the challenges derived from global change into opportunities.

The publication of this document indicates the closing of a cycle in the resilience building process and at the same time the beginning of a period of realizing ideas, obtaining results and deepening the quest for answers to challenges that have not yet been solved. Montevideo will advance in this way, deepening and consolidating the changes introduced in different areas:

Institutionally, progress will be made consolidating and strengthening the UER and the CRO figure by formalizing a team that is dedicated to the implementation, review and evaluation of the strategy. Likewise, the resilience office will assume a leadership role in incorporating the concept of resilience into the strategic and sectoral planning of the institution, and particularly, in the collective process of building Montevideo del mañana.

Operationally, the cycle will continue to elaborate annual operational plans that will guide the strategy's implementation initiatives based on a collaborative work model. The multisectoral and multi-institutional working groups that were formed while elaborating the strategy will continue to be the driving force in the implementation phase. Maintaining the momentum of these work areas and the commitment of all the parties involved is indeed a great challenge: it will require the operational plans to consider the needs of each of those involved and encourage the achievement of concrete results in the short term, while advancing in longer-term processes. This is where the strategic and focused resilience laboratories will play a fundamental role in implementing the strategy, allowing to concentrate resources and willpower on integral interventions that generate high impact results.

Showing results and learning from them will be a fundamental part of the strategy's implementation process. The importance of monitoring and evaluating

the processes is acknowledged as a form of learning and allows for continuous improvement in building resilience. Advancing on the design of specific resilience indicators that can be integrated with other development indicators of the institution, as well as deepening the analysis of links between resilience indicators and sustainable development objectives will be fundamental activities assumed by the UER, in close collaboration with the Resilience Council, in its advisory capacity and in its monitoring role during the implementation of the strategy.

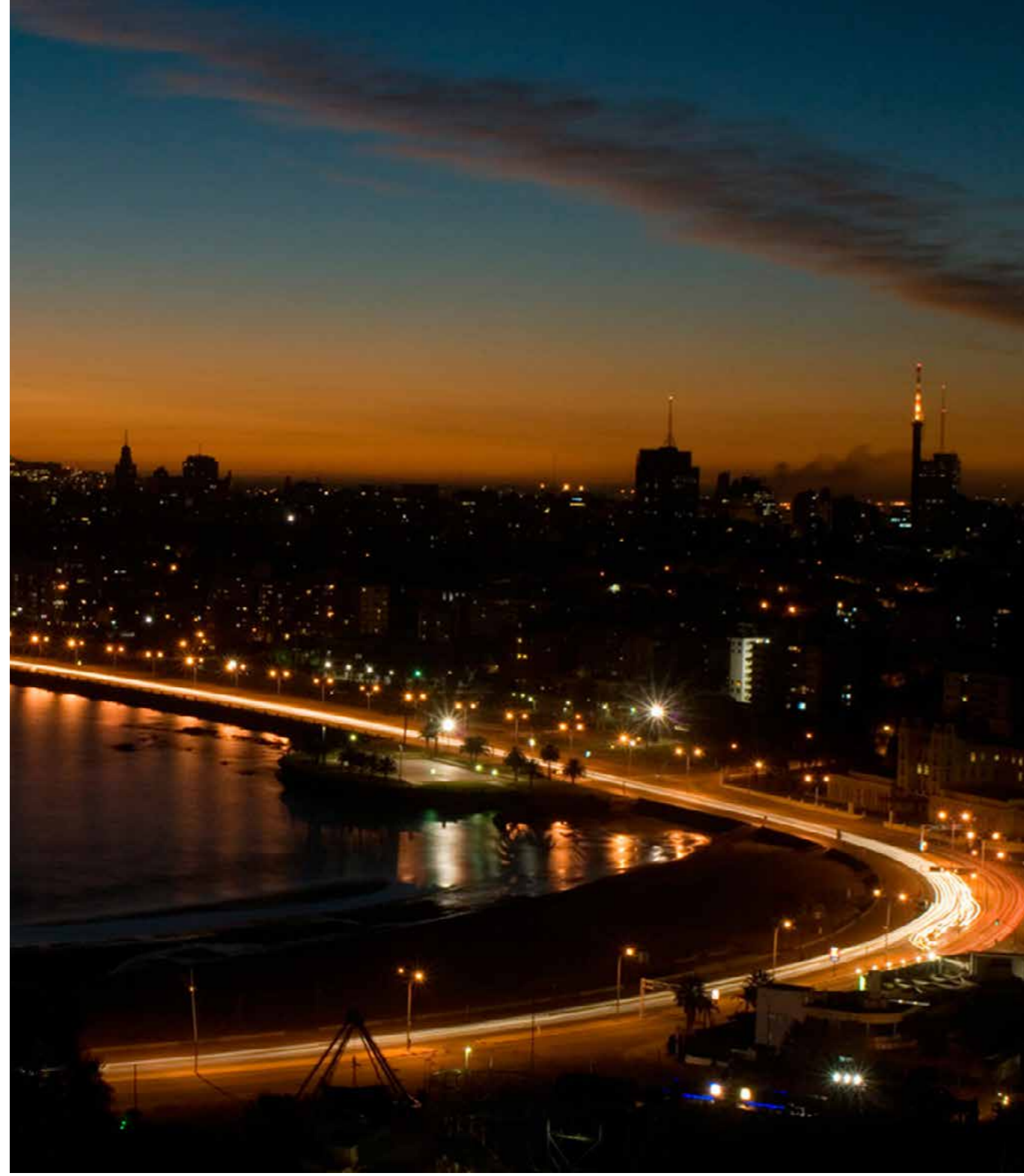
Internationally, Montevideo will capitalize on the value of belonging to the 100RC network, fostering the joint collaboration with different network members in addressing their main challenges. The participation of the platform's partners by means of working collaboratively is anticipated to complement their knowledge. Similarly, it implores international academic experts to collaborate with local universities, and resilient city leaders to exchange learned lessons with their Montevideo peers, all focusing their efforts around key initiatives for building resilience in Montevideo.

This collaborative network experience will be projected into other cities' networks in which Montevideo participates on a global scale. Transferring our experience at 100RC to other cities around the world will help Montevideo continue its path as a resilient city that is open to the world.

**We can all contribute to building a more dynamic, connected, inclusive, solidary, innovative, co-creative, committed and prepared Montevideo, or in other words, a more resilient Montevideo. So, we invite you to get involved in this process and to give rise to greater opportunities, to improve our quality of life and, in short, to make us all happier.**



# APPENDIX



## TABLE OF INITIATIVES

No.	Name	Type	Status	Temporality	Resilience value	Leader	Actors	Links with other initiatives	100RC inspirations	ODS
<b>Pillar A Connected and dynamic Montevideo</b>										
A1 Control urban expansion, promoting the maximum use of consolidated areas and the revitalization of precarious central areas.										
A1.1	Instrument system for land management	Existent.	Planning   Execution.	Short term.	12.3 Urban development and land use   12.4 Building codes and standards   1.1 Housing   1.2 Optimization of basic infrastructure   10.1 Alignment of multiple parties   11.4 Communication between government and the public   12.1 Monitoring and data management	Planning Department.	Urban Development Department. Smart and Sustainable Development Department. National Territorial Planning Direction (MNOTMA). Real Estate Chamber. Construction Chamber. Association of Private Promoters of Construction.	A1.2   A1.3   A2.3   B1.1   B3.1	9   10   11	
A1.2	Recovery of abandoned buildings in central areas	Existent.	Execution.	Short term.	1.1 Housing   1.2 Optimization of basic infrastructure   1.3 Policies that promote safety and protection   1.3 Maintenance of goods and services   1.2 Understanding of risks   12.3 Urban development and land use   12.4 Building codes and standards	Urban Development Department.	Planning Department. Social Housing Department (MNOTMA).	A1.2   A1.3   B1.1	9   10   11	
A1.3	Revaluation of urban centralities	Existent.	Execution   Planning.	Short term   Medium term.	8.2 Optimization of basic infrastructure   12.3 Urban development and land use   1.3 Maintenance of goods and services   4.2 Identity and local culture   1.4.3 Community participation   6.2 City budgets   1.7.3 Redundant and diverse infrastructure   9.1 Transportation network	Urban Development Department.	Planning Department. Mobility Department. Environmental Development Department. Culture Department.	A1.1   A1.2   A2.3   A2.5   B2.3   B3.1   B3.2	8   9   10   11	
A2 Promote the public use of space for collective and operational transportation over the individual motorized vehicle.										
A2.1	Collective public transportation strategy at a metropolitan scale	Scalable.	Planning.	Medium term.	9.1 Transportation network   9.2 Public transportation   1.4.1 Social communication and connectivity   7.3 Redundant and diverse infrastructure   8.2 Optimization of basic infrastructure   12.3 Urban development and land use	Mobility Department.	Planning Department. Urban Development Department. Private companies that provide public transportation services. Community of users.	A1.3   A2.2   A2.4   A3.1   B1.1   B2.1   B4.1	9   11	
A2.2	Use of Big Data in planning and managing the mobility system	Existent.	Research.	Medium term.	9.1 Transportation network   9.2 Public transportation   9.4 Communications technology   7.3 Redundant and diverse infrastructure   8.2 Optimization of basic infrastructure   11.5 Transfer of knowledge   12.3 Urban development and land use.	Mobility Department.	Planning Department. Sustainable and Smart Development Department. Urban Development Department.	A1.3   A2.1   A3.1	9   11	
A2.3	Requalification of spaces for pedestrian traffic	Existent.	Execution   Research.	Short term   Medium term.	9.1 Transportation network   9.2 Public transportation   4.1 Social communication and connectivity   5.3 Policies that promote protection and safety   7.3 Redundant and diverse infrastructure   6.2 Optimization of basic infrastructure   9.4 Communications technology   12.3 Urban development and land use.	Mobility Department and municipalities of Montevideo.	Urban Development Department. Smart Development and Sustainable Department. Culture Department. Citizen initiative network.	A1.1   A1.3   A2.4   A2.5   B1.1   B2.3   B3.2   B4.2   C2.1	9   10   11   12   13	
A2.4	«Safe to schools». Safe neighbourhood pedestrian circuits	Scalable.	Research.	Short term.	4.2 Identity and local culture   4.3 Community participation   9.1 Transportation network   9.2 Public transportation   10.1 Alignment of multiple parties   11.1 Education   11.2 Understanding of risks   11.4 Communication between government and the public	Mobility Department.	Planning Department. National Public Education Administration (ANEP). Promotion Commissions for public schools. Public transportation service providers. Neighbourhood level trade associations.	A2.3   A2.5   D4.2	9   10   11   12	
A2.5	Urban bike path and public bicycle system	Existent.	Execution	Medium term.	9.1 Transportation network   9.2 Public transportation   17.3 Redundant and diverse infrastructure   8.2 Optimization of basic infrastructure   11.1 Education   11.4 Communication between government and the public	Mobility Department.	Planning Department. Urban Development Department. Civil society groups linked to the use of bicycles as urban transportation.	A1.1   A2.3   A2.4   D4.2	9   11   12   13	
A3 Promote the energy matrix transformation in urban mobility.										
A3.1	Collective public transportation transition towards electromobility	New.	Planning.	Medium term.	9.1 Transportation network   9.2 Public transportation   16.2 City budgets   7.1 Environmental policies   8.3 Maintenance of goods and services   10.2 Government alignment	Mobility Department - Transportation Division.	MIEM. MEF. UTE.	A2.1   A3.2	7   9   11   12   13	
A3.2	Promoting the use of individual electric vehicles	New.	Research.	Medium term.	9.1 Transportation network   9.2 Public transportation   7.1 Environmental policies   7.3 Redundant and diverse infrastructure   12.4 Building codes, standards and applications.	Mobility Department.	Planning Department. Human and Material Resources Department. Urban Development Department. UTE.	A3.1   A2.1	7   9   11   12   13	



No.	Name	Type	Status	Temporality	Resilience value	Leader	Actors	Links with other initiatives	100RC inspirations	ODS
<b>Pilar B Inclusive and supportive Montevideo</b>										
B1 Reverse socio-territorial segregation and guarantee access to the right to the city.										
B1.1	Requalification of informal settlement habitat areas	Existing	Execution.	Medium term.	1.1 Housing   4.2 Identity and local culture   12.3 Urban development and land use   4.3 Community participation   5.1 Measures that prevent crime   7.1 Environmental policies   7.2 Guarantees for basic infrastructure   8.2 Optimization of basic infrastructure   10.1 Alignment of multiple parties   11.2 Understanding of risks	Urban Development Department - Special Execution Unit for the Neighborhood Improvement Program (PMB).	Municipalities, Planning Department, Environmental Development Department, Social Development Department, MIVOTMA, Social Development Ministry (MDES), ANEP, Ministry of Interior, Neighbourhood committees and neighbourhood references.	{A2.3   B1.2   B3.1   B3.2   D1.3	{13 9  10 11	
B1.2	Chacarita Stream Basin Land Planning	Existing	Planning.	Medium term.	12.3 Urban development and land use   10.1 Alignment of multiple parties   11.1 Housing   4.2 Identity and local culture   4.3 Community participation   7.1 Environmental policies   11.2 Understanding of risks	Planning Department.	F Municipality, Urban Development Department, Environmental Development Department, Social committees and neighbourhood references.	{A1.1   B1.1   B2.3   D1.1   D4.1   D4.2	{13 9  10 11	
B1.4	Sacude Polyvalent Complex in Flor de Maroñas	Existing	Planning.	Medium term.	4.2 Identity and local culture   4.3 Community participation   3.2 Access to general medical care   5.3 Policies that promote protection and safety   7.3 Redundant and diverse infrastructure   8.3 Maintenance of goods and services   10.1 Alignment of multiple parties   11.1 Education	Culture Department.	F Municipality, Health Department, ANEP, MIDES, Universidad de la Republica, Neighbourhood committees and neighbourhood references.	A1.3   B1.1   B2.2   B2.3   C1.3	3 4 5 9  10 11	
B2 Deepen the cultural dimension of development as a driving force for integration, equity and recognition of the diversity of all inhabitants.										
B2.1	Third Gender Equality Plan	Existing	Execution.	Short term.	10.3 Leadership and decision making   5.3 Policies that promote protection and safety   4.2 Identity and local culture   4.3 Community participation   10.1 Alignment of multiple parties   11.4 Communication between government and the public	Advisory Division for gender equality.	Municipalities, Intersocial feminista and other civil society organizations linked to the topic.	A2.3   B1.1   B4.1   B4.2	5 10	
B2.2	Culture at the Corner	Existing	Execution.	Short term.	4.2 Identity and local culture   4.3 Community participation   10.1 Alignment of multiple parties   10.3 Leadership and decision making   11.1 Education	Culture Department.	Municipalities, Neighbourhood commissions.	B1.1   B2.3   B3.1   C1.3   C3.2	10 11	
B2.3	Diffusion of Montevideo's neighbourhoods heritage values	New.	Research.	Short term.	4.1 Social communication and connectivity   4.2 Identity and local culture   4.3 Community participation   2.4 Development and innovation of local economy   6.4 Local economy   10.1 Alignment of multiple parties   10.3 Leadership and decision making   11.1 Education	Culture Department.	Municipalities, Planning Department, Environmental Development Department, Economic Development Department - Tourism Division, Neighbourhood organizations, Neighbourhood social and sports clubs, Neighbourhood cultural centers.	{A1.3   A2.3   B1.4   B2.2   B4.2   C1.3   C3.2	11	Bristol
B3 Strengthen public spaces as areas for social integration, citizen safety and coexistence.										
B3.1	Conditioning of parks and squares	Existing	Execution   Planning.	Short term.	4.2 Identity and local culture   6.3 Maintenance of goods and services   4.3 Community participation   5.3 Policies that promote protection and safety   7.3 Redundant and diverse infrastructure   12.3 Urban development and land use	Urban Development Department.	Municipalities, Ministry of Interior.	A1.3   A2.3   B1.1   B3.2   D1.3	3 9 11	
B3.2	Guide for resilient public space	New.	Research.	Medium term.	8.2 Optimization of basic infrastructure   7.2 Guarantees for basic infrastructure   4.2 Identity and local culture   4.3 Community participation   5.3 Policies that promote protection and safety   7.3 Redundant and diverse infrastructure   8.4 Flood risk management   10.1 Multi-party alignment   11.4 Communication between government and the public   12.3 Urban development and land use	Urban Development Department.	Planning Department, Environmental Development Department, Culture Department, Municipalities.	A2.3   A2.5   B3.1   D1.2   D1.3   D4.1	9 11	New York Oakland
B4 Promote participation and decision mechanisms, in a transparent, effective and innovative manner.										
B4.1	Montevideo Decide	Scalable.	Execution.	Short term.	11.4 Communication between government and the public   4.3 Community participation   10.1 Alignment of multiple parties   10.3 Leadership and decision making   11.5 Transfer of knowledge.	Municipal Development and Participation Advisory.	Planning Direction, Municipalities, People of Montevideo participating in the platform.	B4.2   This initiative is designed to be linked to all others to such an extent that they are included as topics for debate or collaboration.	11	
B4.2	Citizen Laboratory MVD Lab - Montevideo Resilient Edition	Scalable.	Research.	Short term.	11.5 Transfer of knowledge and exchange of best practices.   4.1 Social communication and connectivity.   4.3 Community participation   10.1 Alignment of multiple parties   10.3 Leadership and decision making   11.4 Communication between government and the public	Sustainable and Smart Development Department.	Planning Direction, Municipalities.	B4.1   D4.2   This initiative is designed to be linked to all others to such an extent that they are included as topics for debate or collaboration.	11	

No.	Name	Type	Status	Temporality	Resilience value	Leader	Actors	Links with other initiatives	100RC inspirations	ODS
<b>Pilar C Innovative and co-creative Montevideo</b>										
C1 Promote a development model that favors the circular, social and solidarity economy.										
C1.1	Boost to the circular economy	New.	Research.	Short term.	2.4 Development and innovation of local commerce   6.1 Business continuity measures   6.4 Local economy   2.1 Labor policy   6.5 Higher economic links   10.3 Leadership and decision making   11.4 Communication between government and the public   11.5 Transfer of knowledge and best practices.	Planning Department.	Economic Development Department, Environmental Development Department, Financial Resources Department, Sustainable and Smart Development Department, Social Development Department - Social and Solidarity Economy Unit, National Agency for Research and Innovation (ANII).	{B4.2   C1.2   C1.3   C2.2   D2.3   D4.3	7   8   9   11	
C1.2	Reuse centers network	New.	Research.	Short term   Medium term.	2.2 Skills and training   2.4 Development and innovation of local commerce   6.4 Local economy   2.1 Labor policy   10.1 Alignment of multiple parties   11.5 Transfer of knowledge and best practices.	Economic Development Department - Economic Promotion Division.	Municipalities, Social Development Department - Social and Solidarity Economy Unit, Sustainable and Smart Development Department, Information and Communication Division, Universidad del Trabajo del Uruguay (UTU), Club de Reparadores, Second-hand shops and repair centers already existent, Repair Café Foundation.	C1.1   C1.3   D2.3	11   12   13   14   15	
C1.3	Transitory use of spaces and infrastructures	New.	Research.	Medium term.	2.4 Development and innovation of local commerce   6.4 Local economy   6.2 Optimization of basic infrastructure   4.3 Community participation   6.1 Business continuity measures   7.3 Redundant and diverse infrastructure   10.1 Alignment of multiple parties   11.5 Transfer of knowledge and best practices   12.3 Urban development and land use.	Planning Department.	Municipalities, Sustainable and Smart Development Department, Urban Development Department, Neighbor's ombudsman, Culture Department, Social Development Department.	A1.2   A1.3   B4.2   C1.1   C1.2	8   9   10   11	
C2 Promote individual and collective creativity as a driving force for innovation and development in sectors of the economy that are based on knowledge, culture and new technologies.										
C2.1	New institutionality linked to creative industries	Existing	Research.	Medium term.	10.3 Leadership and decision making   2.4 Development and innovation of local commerce   6.4 Local economy   4.3 Community participation   6.1 Business continuity measures   10.1 Alignment of multiple parties   11.5 Transfer of knowledge and best practices	Culture Department.	Economic Development Department, Sustainable and Smart Development Department, Sectoral chambers linked to the branch, ANII.	B1.4   B2.2   B2.3   B4.2   C1.1   C1.2   C1.3   C3.2	8   9	
C2.2	Montevideo's creative market	New.	Research.	Short term.	2.4 Development and innovation of local commerce   6.4 Local economy   6.5 Higher economic links   4.3 Community participation   6.1 Continuity measures for business   10.1 Alignment of multiple parties   11.4 Communication between government and the public   11.5 Transfer of knowledge and best practices	Economic Development Department.	Planning Department, Sustainable and Smart Development Department, Ministry of Education and Culture (MEC), ANII, Sectoral chambers.	{B4.2   C1.1   C1.2   C1.3	8   9	
C3 Position Montevideo as an attractive and open city, whose cultural, social and natural heritage is valued.										
C3.1	Departmental strategy for tourism development	Scalable.	Research.	Medium term.	12.2 Strategies and plans   6.4 Local economy   6.5 Higher economic links   2.4 Development and innovation of local commerce   6.3 Received investment   10.1 Alignment of multiple parties   10.3 Leadership and decision making	Economic Development Department.	Montevideo Bureau, Trade associations linked to tourism, Planning Department.	C1.1   C2.1   C2.2   C3.1	8   9   11	
C3.2	Strengthening the Montevideo Bureau	New.	Research.	Medium term.	6.4 Local economy   6.5 Higher economic links   10.1 Alignment of multiple parties   2.4 Development and innovation of local commerce   4.2 Identity and local culture   6.1 Continuity measures for business   6.3 Received investment   11.5 Transfer of knowledge and best practices	Economic Development Department.	Montevideo Bureau, Chamber of Commerce, Planning Department, Sustainable and Smart Development Department, Culture Department, Chambers linked to the creative industries, ANII.	C1.1   C2.1   C2.2   C3.1	8   9   11   17	Glasgow

No.	Name	Type	Status	Temporality	Resilience value	Leader	Actors	Links with other initiatives	100RC inspirations	ODS
<b>Pilar D Committed and prepared Montevideo</b>										
D1 Establish an environmental management model that incorporates the ecosystem and basin approach.										
D1.1	New institutional framework for incorporating an integral basin management	New.	Planning.	Short term.	10.3 Leadership and decision making   8.5 Ecosystem management   7.1 Environmental policies   8.4 Flood risk management   10.2 Government alignment.	Environmental Development Department.	Urban Development Department, Departmental Board of Montevideo, Municipalities, National Environment Direction - MVOTMA	D1.2   D1.3   D3.1   D3.2   D4.2	3   6   11   13   14   15	
D1.2	National Plan for Adapting to Climate Change in the Coastal Zone - Montevideo pilot territory	Scalable.	Planning.	Medium term.	7.1 Environmental policies   8.5 Ecosystem management   11.2 Understanding of risks   7.2 Guarantees for basic infrastructure   8.1 Emergency plans for essential services   8.4 Flood risk management   10.2 Government alignment   11.3 Risk monitoring and warnings   11.5 Transfer of knowledge and best practices.	Planning Department.	MVOTMA, Environmental Development Department, Intendancy of Montevideo Working Group on Climate Change, Universidad de la República - Faculty of Engineering and Faculty of Sciences, Universidad de Cantabria - Spain.	D1.1   D1.3   D4.1   D4.2	9   11   13	
D1.3	Sustainable Drainage Project	Scalable.	Planning.	Short term.	7.3 Redundant and diverse infrastructure   8.5 Ecosystem management   11.2 Understanding of risks   7.1 Environmental policies   7.2 Guarantees for basic infrastructure   8.1 Emergency plans for essential services   8.4 Flood risk management   12.3 Urban development and land use.	Environmental Development Department.	Municipalities, Urban Development Department, Mobility Department, Planning Department.	D1.1   D1.2   C1.1   D4.1   D4.3	New Orleans	6   9   11
D2 Reduce the impact of solid waste on the environment by incorporating new management models and the best available technologies.										
D2.1	New infrastructures for solid waste management	Existent.	Execution   Planning.	Medium term / Long term.	7.2 Guarantees for basic infrastructure   7.3 Redundant and diverse infrastructure   7.1 Environmental policies   8.2 Optimization of basic infrastructure   8.4 Flood risk management   11.2 Understanding of risks   12.3 Urban development and land use.	Environmental Development Department.	Planning Department, National Environment Direction - MVOTMA, Intendancies of Canelones and San José.	D2.2   D4.1   D4.2	9   11	
D2.2	Expansion of the recycling program	Existent.	Planning.	Medium term.	7.2 Guarantees for basic infrastructure   7.3 Redundant and diverse infrastructure   2.1 Labor policy   8.3 Maintenance of goods and services   8.4 Flood risk management   11.2 Understanding of risks	Environmental Development Department.	Municipalities, Planning Department, Social Development Department, National Environment Direction - MVOTMA.	C1.2   D2.1   D4.1   D4.2	4   9   11   12	
D3 Value the rural territory, promoting the responsible use of its environmental services and recognising the urban-rural complementarity.										
D3.1	Management plan for Santa Lucia Wetlands protected area	Existent.	Planning.	Short term.	7.1 Environmental policies   8.5 Ecosystem management   8.3 Maintenance of goods and services   8.4 Flood risk management   11.2 Understanding of risks   11.5 Transfer of knowledge and best practices.	Environmental Development Department.	National Environment Direction - MVOTMA, Intendancy of Canelones, Intendancy of San José.	D1.1   D1.2   D1.3   D4.2   D4.3	11   14   15	
D3.2	Family farming program on agroecological bases	Existent.	Execution.	Short term.	2.2 Skills and training   2.4 Development and innovation of local commerce   4.2 Identity and local culture   4.3 Community participation   6.1 Business continuity measures   7.1 Environmental policies   8.5 Ecosystem management   11.2 Understanding of risks   11.5 Transfer of knowledge and best practices.	Economic Development Department.	Agroecology Network of Uruguay, Universidad de la República - Faculty of Agronomy, National Institute of Agricultural Research (INIA), Family farmers network.	D1.1   D1.2   D3.1   D4.2   D4.3	Toyama	8   10   11   12
D4 Strengthen citizen's commitment to caring for the environment and to improve their skills in understanding, preventing and responding to risk situations, from a resilient perspective.										
D4.1	Climate Change Adaptation National Plan for Cities and Infrastructures - Montevideo, pilot territory	New.	Planning.	Short term.	8.4 Flood risk management   11.2 Understanding of risks   1.1 Housing   4.3 Community participation   7.2 Guarantees for basic infrastructure   8.3 Maintenance of goods and services   10.2 Government alignment   11.5 Transfer of knowledge and best practices.	Planning Department.	Intendancy of Montevideo Working Group on Climate Change, Environmental Development Department, Municipalities, MVOTMA OPP, National Emergency System (SNAE), Association of Intendants, Civil society organizations.	B1.1   D1.2   D1.3   D4.2	11   13	
D4.2	Campaigns for resilience education and risk management	Scalable.	Research.	Short term.	11.1 Education   11.2 Understanding of risks   4.2 Identity and local culture   4.3 Community participation   11.4 Communication between government and the public	Planning Department.	Environmental Development Department - Technical Team for Environmental Education (ETEA), Sustainable and Smart Development Department, Departmental Emergency Coordinating Center (CECOED).	B2.3   B4.2   C2.2   D1.2   D4.1	4   11   12   13   15	
D4.3	Nature-based initiatives for urban regeneration	New.	Planning.	Medium term.	2.2 Skills and training   4.3 Community participation   7.1 Environmental policies   11.4 Food   4.2 Identity and local culture   11.2 Understanding of risks   11.4 Communication between government and the public.	Planning Department.	The Technological University of Berlin, Edible Cities Solutions network cities, Urban Development Department, Environmental Development Department, Sustainable and Smart Development Department.	B3.1   B3.2   D1.3   D3.2   D4.2	3   9   11   12	

No.	Name	Type	Status	Temporality	Resilience value	Leader	Actors	Links with other initiatives	100RC inspirations	ODS
<b>Resilience Laboratories</b>										
LAB 1: Transformation of the Pantanosos stream basin										
L1.1	Intervention and management program in the Pantanosos stream basin.	New.	Execution.	Medium term.		Planning Department.	Urban Development Department, Environmental Development Department, Information and Communication Division, Planning Department, Economic Development Department, Social Development Department, Culture Department, Mobility Department, Municipalities A and G, National Housing Direction - MVOTMA, National Environment Direction - MVOTMA, National Land-Use Planning Department - MVOTMA, National Water Board - MVOTMA, ANEP, MIDES, Ministry of Interior, Saint Bois Hospital - Ministry of Public Health, Blandengues Cavalry - Ministry of National Defense (MDN), OPP, Companies and local industries, Producer organizations, Neighbourhood organizations, Social Organizations.	Medellin	3   6   8   10   11   15   17	
Supportive tactical actions										
L1.1.1	Nacientes Production Park	New.	Planning.	Short term.		Planning Department.	A and G Municipalities, Urban Development Department, Environmental Development Department, Information and Communication Division, Information and Communication Division, National Environment Direction - MVOTMA, MIDES, Ministry of Interior, Local social organizations		6   9   11   13   14   15   17	
L1.1.2	Colón-Villa Colón Space									
L1.1.3	Paso de la Arena Integrating Space									
L1.1.4	Interpretation space for wetlands									
L1.1.5	Pantanosos environmental communication and education program									
LAB 2: Integral development of the coastal territory										
L2	Coastal space management plan.	New.	Planning.	Medium term.		Environmental Development Department.	Planning Department, Urban Development Department, Information and Communication Division, Economic Development Department, Social Development Department, Mobility Department, Intendancy of Montevideo Working Group on Climate Change, Beach Committee, Municipalities, MVOTMA MDN, MINTUR, MTOP, ANP, Universities, ANEP, Real Estate Chamber, Strategic coastal property owners, Logistic and port sector operators, Tour operators, Nautical clubs, Fishing Clubs, Agricultural producer associations, Artisanal fishermen associations, Neighbourhood organizations.	New Orleans	6   9   11   13   14   15   17	
Supportive tactical actions										
L2.1.1	Clean Bay Project	New.	Planning   Execution.	Short term.		Environmental Development Department.	Urban Development, Information and Communication Division, Economic Development Department, Social Development Department, Intendancy of Montevideo Working Group on Climate Change, Beach Committee, Municipalities, National Environment Direction - MVOTMA, Local social organizations.			
L2.1.2	Dialogue for managing the territory linked to the port									
L2.1.3	Coastal risk map									
L2.1.4	Works for mitigating erosion in urban beaches									
LAB 3: Integral risk management										
L3.1	Departmental plan for integral risk management.	New.	Planning.	Medium term.		Planning Department.	CECOED, Intendancy of Montevideo Working Group on Climate Change, Environmental Development Department, Information and Communication Division, Urban Development Department, Social Development Department, Mobility Department, Municipalities, SINAE, Climate Change Direction - MVOTMA, MDN, Ministry of Interior, ANEP, Social Organizations.	Santa Fe	3   9   11   13   17	
Supportive tactical actions										
L3.1.1	Strengthening the CECOED	New.	Planning.	Short term.		Planning Department.	CECOED, Environmental Development Department, Urban Development Department, Mobility Department, Municipalities, SINAE, Neighbourhood organizations.			
L3.1.2	Participation integrated and citizen innovation in integral risk management									
L3.1.3	Pilot project for transversal water management - Pocitos Stream									
L3.1.4	Transitory use of spaces and infrastructures									

## MONITORING AND EVALUATION INDICATORS

Montevideo assigns high relevance to the strategy's monitoring and evaluation processes, not only for the accountability of the work done, but as a form of learning and thus continuously improving in building resilience.

As part of this strategy's management, a key activity will be building a system of indicators aimed at measuring the resilience value of each initiative and the strategy in an integral manner. This is a large-scale activity and requires a level of planning and conceptual development according to its relevance in continuing to build knowledge around the concept of resilience.

The system of indicators should be articulated with other related indicators carried out by the Intendancy of Montevideo or other public and private institutions to

optimize resources and take advantage of the synergies. But it also must be in accordance with the conceptual developments promoted by the 100RC and the other monitoring and evaluation processes carried out by the network's cities. Many of these indicators will be new additions and therefore it will be necessary to evaluate their actual measurement feasibility and the possibility of building an adequate baseline.

Based on the above, it was decided that the outcome and impact indicators should be subject to careful development during the strategy's implementation phase. However, some measurement metrics are included for each of the objectives, which enable early tracking of the progress' results.

### PRELIMINARY METRICS FOR TRACKING RESULTS BY OBJECTIVE

#### A CONNECTED AND DYNAMIC MONTEVIDEO

##### A1. Control urban expansion, promoting the maximum use of consolidated areas and the revitalization of precarious central areas.

- Area of the territory occupied by urban or suburban uses.
- Population density by census segments.
- Population growth in consolidated neighbourhoods.
- No. of trips/people heading to intermediate centralities.

##### A2. Promote the public use of space for collective and operational transportation over the individual motorized vehicle.

- Percentage of trips taken in public transportation in relation to total trips.
- Percentage of non-motorized trips (pedestrians and bicycles) in relation to total trips.
- Degree of citizen valuation of the public transportation service according to the Departmental Monitor.

#### A3. Promote the energy matrix transformation in urban mobility.

- Percentage of electric vehicles in the public transportation fleet.
- Percentage of electric vehicles in the taxi fleet.
- Percentage of private electric vehicles or shared service modality in Montevideo automotive park.

#### B INCLUSIVE AND SUPPORTIVE MONTEVIDEO

##### B1. Reverse socio-territorial segregation and guarantee access to the right to the city.

- Area of the territory affected by integral intervention of the habitat.
- Number of homes in informal settlements.
- Number of people with unsatisfied basic needs by urban sectors.
- Percentage of children in poor households.

##### B2. Deepen the cultural dimension of development as a driving force for integration, equity and recognition of the diversity of all inhabitants.

- Number of people involved in cultural programs or activities linked to heritage values by territories.
- Degree of citizen valuation for the implemented cultural policies.

#### B3. Strengthen public spaces as areas for social integration, citizen safety and coexistence.

- New public space areas incorporated into the system.
- Number of public space areas managed according to the Resilient Public Spaces Guide.
- Degree of citizen valuation of the department's public spaces policy.

#### B4. Promote participation and decision mechanisms, in a transparent, effective and innovative manner.

- Number of debates related to resilience including public participation on digital platforms.
- Number of participants in MvdLab editions that are linked to resilience initiatives.

#### C INNOVATIVE AND CO-CREATIVE MONTEVIDEO

##### C1. Promote an economic development model that favors the circular, social and solidarity economy.

- Number of instruments implemented for promoting the circular economy.
- Number of new circular enterprises supported by circular economy promotion instruments.

##### C2. Promote individual and collective creativity as a driving force for innovation and for developing sectors of the economy based on knowledge, culture and new technologies.

- Number of creative economy ventures incorporated into a digital exchange platform.
- Number of physical spaces dedicated to the collaborative work of creative industries.
- Percentage of jobs in creative industries sector activities.

##### C3. Position Montevideo as an attractive and open city, valuing its cultural, social and natural heritage.

- Number of tourism products based on Montevideo's natural and cultural heritage values.
- Number of digital applications developed for tourist support services.
- Average number of days tourists stay in Montevideo.

#### D COMMITTED AND PREPARED MONTEVIDEO

##### D1. Install an environmental management that incorporates the ecosystem and basin approach.

- Number of territory intervention projects managed with a basin approach.
- Area of the territory included in the sustainable drainage network by the river basin.

##### D2. Reduce the impact of solid waste on the environment by incorporating new management models and the best available technologies.

- Volume of recycled materials in recycling plants.
- Volume of waste received in the landfill.

##### D3. Value the rural territory, promoting the responsible use of its environmental services and recognising the urban-rural complementarity.

- Land area with natural or productive rural use.
- Rural land area destined for crops with agroecological production systems.
- Rural land area under management programs for conserving biodiversity.

##### D4. Strengthen citizen's commitment to caring for the environment and to improve their skills in understanding, preventing and responding to risk situations, from a resilient perspective.

- Number of households and companies that participate in programs or projects that promote adopting property measures to reduce risks.
- Number of participants involved in environmental education activities in Montevideo's Resilient edition.

## ACRONYMS

100RC	100 Resilient Cities
ANCAP	National Administration Fuels, Alcohol and Portland
ANEP	National Public Education Administration
ANII	National Agency for Research and Innovation
ANP	National Ports Administration
CECOED	Departmental Emergency Coordinating Center
CRO	Chief Resilience Officer
ENASU	National Strategy for Access to Urban Land
ETEA	Technical Team of Environmental Education
IM	Intendancy of Montevideo
INE	National Institute of Statistics
INIA	National Institute of Agricultural Research
MCI	Integrated Coastal Management
MDN	Ministry of National Defense
MEC	Ministry of Education and Culture
MEF	Ministry of Economy and Finance
MOCE	Cultural Offer and Entertainment Table
MIDES	Social Development Ministry
MIEM	Ministry of Industry, Energy and Mining
MINTUR	Ministry of Tourism
MSP	Ministry of Public Health
MTOP	Ministry of Transportation and Public Works
MVOTMA	Ministry of Housing, Territorial Planning and the Environment
NBI	Unsatisfied Basic Need
ODS	Sustainable Development Goals
OPP	Office for Planning and Budget
PIB	Gross Domestic Product
PMB	Neighborhood Improvement Program
POT	Land-Use Planning
PRA	Preliminary Resilience Assessment
RVR	Resilience Value Realization
SINAE	National Emergency System
SNAP	National System of Protected Areas
TIC	Information and communication Technologies
UER	Executive Resilience Unit
UTE	National Administration of Power Plants and Electrical Transmissions

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