



# VOLUNTARY LOCAL ITALY 2022 LOCAL REVIEWS

## ANNEX 2



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# VOLUNTARY LOCAL REVIEW 2022

**Abruzzo Region,  
Marche Region,  
Umbria Region**



## Presidential statements



**Emanuele Imprudente**, Abruzzo Region Vice President

*“The Abruzzo Region intends to continue and strengthen the collaboration activities with the Regions of Umbria and Marche as fundamental for the achievement of the objectives of the Regional Strategy for Sustainable Development. In the future, further involvement and comparison between the Regions is hoped, also through the establishment of technical tables aimed at comparing specific issues ”.*

**Francesco Acquaroli**, Marche Region President

*“Sustainability represents a bottom-up process and acts in a transversal way. Several experimentation areas have been activated, starting from our villages, which are places that represent a fundamental heritage of regional identity. On these areas, interventions such as the digital transition, the development of economic activities, the cultural heritage and activities, the active labor policies, the support for business creation and the agricultural and food supply chain promotion converge. The final aim is the social, economic and environmental sustainability.”*



**Roberto Morroni**, Umbria Region Vice President and Councillor for agricultural and agri-food policies, protection and environmental enhancement



His department deals with:  
Agricultural and agri-food policies, Rural Development, Forest planning and mountain development, Promotion of naturalistic systems, Protected areas and parks, Hunting and Fishing, Energy from renewable sources, Environmental protection and enhancement, Pollution prevention and protection, Regional waste plan, Water risk, Integrated water cycle, Quarries, Mines and mineral Waters. For the purposes of the Regional Strategy for Sustainable Development, his department ensures the coordination of the steering committee with other regional departments and Municipalities.





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# Introduction



RESIDENTS (n.)	
Abruzzo	1.281.012
Marche	1.498.236
Umbria	865.452
<b>TOT</b>	<b>3.644.700</b>

TOTAL AREA (Km <sup>2</sup> )	
Abruzzo	10.832
Marche	9.401
Umbria	8.464
<b>TOT</b>	<b>28.697</b>

GDP (€/per capita in PPS)	
Abruzzo	24.000
Marche	26.500
Umbria	24.900
<b>Italy</b>	<b>28.000</b>

Map of Italy with our three Regions

### Who?

The Italian Republic is constituted by 20 Regions, which are autonomous entities with defined powers and represent the first level of the local division. Abruzzo, Marche and Umbria represent three Regions with ordinary Statutes and with no Metropolitan Cities in their territory.

### Why?

Our three Regions decided to join forces and to create their own administrative grouping, in order to explore the issue of *resilience*, which, in our experience, plays a crucial role after the series of earthquakes that, in 2016, destructively affected part of our territory.

### Where?

Abruzzo, Marche and Umbria are three Regions in the central part of the Italian peninsula.



### What?

After the adoption of the Agenda 2030 by the UN, the Italian government, in 2017, approved its national Strategy for Sustainable Development. Consequently, the Regional Administrations, as well as the autonomous Provinces, started their own process aimed to develop local Strategies.

### When?

The Italian Ministry for Ecological Transition foster the cooperation between Regions, in order to develop local strategies.

Some 65% of the actual Goals and targets cannot possibly be achieved without the contribution of local and regional governments.

Voluntary local Reviews. A Comparative Analysis of Existing VLRs, UCLG, UN Habitat, 2020

# 1

## Resilience across Regions - a successful case of cooperation

### 1.1. General data about the regional partnership



The Regions of Abruzzo, Marche and Umbria are defining their regional strategies for sustainable development and, at the request of the Ministry for Ecological Transition, have started a strong collaboration to deepen the application of a specific theme at the territorial level (**resilience**).

The three Regions decided to choose the one of resilience as the joint issue in regard of their tragic common experience result of the 2016 Central Italy earthquake, actually composed of several single seismic events, which destroyed a significant part of their inhabited centres, causing extensive damages, not only under the economic aspect, but under the social one too.

The theme of resilience is a strategic tool for the Regions in order to adequately develop their actions and principles aimed at ensuring sustainability according to local and regional needs or circumstances. Although Abruzzo, Marche and Umbria are currently at different administrative stages regarding the adoption and implementation of their Regional Strategies for Sustainable Development, resilience is a common element.

In this regard, in December 2021, the Marche Region Legislative Assembly approved the Regional Strategy of Sustainable Development (*Strategia Regionale di Sviluppo Sostenibile – SRSvS*), aimed to integrate the 17 SDGs pursuit into the regional future planning and strategies. Umbria Region, in October 2021 with the administrative act n. 1016, pre-approved the preliminary document for its Regional Strategy of Sustainable Development. Abruzzo Region, on the same month (October 2021) approved the Regional Strategy for Sustainable Development Plan, with the Regional Council Resolution n. 665/2021.

In order to develop the theme of resilience and to work in line with the various local needs, the three Regions synergistically cooperate also with the academia and with regional Universities. Abruzzo Region works together with the Department of Civil and Environmental Engineering and Architecture within the University of L’Aquila, Umbria Region with the Department of Engineering within the University of Perugia, Marche Region with the University of Camerino and the Polytechnic University of Marche. This kind of cross-sector partnership ensures the production of various documents and proposals, which are extremely useful in order to create common strategic guidelines upon which Regions are supposed to base their own choices.

Therefore, after the already mentioned ministerial request, the Regions have been able to develop three different directions of development, perfectly integrated within the aspect of resilience:

1. Developing municipal **planning methodological criteria and guidelines** aimed to ensure the territorial resilience and the sustainable rebuilding, also using supra-municipal strategic documents as Regional Strategy of Sustainable Development territorial references;

2. Addressing the **climate change issue** in a synergistic way by locating the problem with respect to the Central Apennine Mountains river basin (Tiber river basin);
3. Implementing the regional and interregional **green infrastructure** through the enforcement of the interregional Ecological Network.

### 1.1.1. Multilevel and integrated forms of cooperation



Abruzzo, Marche and Umbria set up a specific concertation system using both formal and informal means of cooperation. In detail, referring to resilience, the three Regions have decided to cooperate without signing a specific agreement (informal mean), but defining a common working method:

- 1) one coordinator for general activities has been identified (Umbria Region),
- 2) the coordinator established a shared agenda of working meetings,
- 3) each shared step was reported to the Ministry.

While Umbria coordinates the general activities, each Region is responsible for a specific direction of development (1<sup>st</sup> direction Planning methodological criteria: Umbria; 2<sup>nd</sup> direction Climate change issue: Marche; 3<sup>rd</sup> direction Green Infrastructure: Abruzzo).

In addition, in order to ensure the full development and implementation of the three directors, several formal means of cooperation have been developed within the integrated system, such as the Q-CUMBER protocol (*see chapter 4*).

Municipalities, which represent the lower administrative level of cooperation and have the most direct connection with local stakeholders and citizens, have been involved within the multi-level partnership by each regional administration. In this regard, the Marche Region developed a specific protocol, aimed to guarantee the cooperation with the National Association of Italian Municipalities (*Associazione Nazionale Comuni Italiani - ANCI*) and to spread sustainability criteria at local level. In order to strengthen the implementation of the three directions of sustainability, regional administrations identified several Municipalities that have represented “pilot cases” and that have the capability to guarantee the cooperation at all levels. In fact, these Municipalities operate with their own Regions, as well as with the other Regions within the working group.

## 1.2. Governance and stakeholders involvement

The main objective of our regional grouping is to ensure the full cooperation and integration for what concerns all principles and actions of sustainability, with a specific focus on the issue of resilience. In order to do so, we are still trying to define and enhance the multi-level and multi-actor form of collaboration, which perfectly meets national and local needs.

<p><b>Governance</b></p>	<p>Our aim is the share as well as the contagion of ideas and good practices related to the principles of sustainable development and to the SDGs across different administrative levels. For what concerns the actions falling into category A, in line with the provisions of the Agreement signed with the Italian Ministry, the Regions have prepared the setting up of control rooms, which represented a crucial moment of governance.</p> <p>The construction of the governance for the Regional Strategies definition has moved along two paths. The first path was implemented through constant dialogue with representatives of the Ministry and of other Regions, the second path was activated with the involvement of institutional actors such as Municipalities, Universities and civil society, concerning the schedule and the governance of territories in a climate change scenario.</p> <p>In this regard, the involvement of local institutions and civil society, falling into category B actions, has been activated on two fronts: the first one, due to the contribution provided by Environmental Education Centres (<i>Centri di Educazione Ambientale – CEA</i>), which have activated consultation and participation forms in the field of environmental education and sustainable development within schools. For what concerns the Abruzzo Region, the project involved the creation of educational materials on the subject of sustainability and the training of teachers and students concerning the issue of hydrogen and fuel cells, with the objective to foster the general interest in this area. The educational materials, developed as part of the project, are available at the dedicated website (<a href="https://www.hyschools.eu/platform">https://www.hyschools.eu/platform</a>). The project was concluded in February 2020, but coordination with schools is ongoing.</p> <p>The second front of local institutions involvement has been developed as part of the participatory process carried out within the Regions with the control room, due to thematic meetings which allow the participation of local actors and, in particular, of Park Authorities.</p> <p><b>Regional activities:</b></p> <ul style="list-style-type: none"> <li>• The Abruzzo Region control room is composed by managers of regional services who relate to the issues of sustainable development and it is considered to be the hub between policy activities and typically managerial and management activities. After the setting up of the control room, a series of tools have been launched to make territorial consultations even more possible.</li> <li>• Defining all the elements of the regional governance was the first regional step toward the Marche Region Strategy definition. The control room is composed by regional managers of sectors, which are somehow connected to sustainable development, and represents the meeting point between managerial and technical activities and the political sphere. The transversal nature of this control room allows the complete balance between all different dimensions of sustainable development and the full cooperation. In this regard, several training courses addressed to local administrations, which have been designed in order to ensure the lifelong learning opportunities (SDG 4) within the administrative area, have been launched.</li> <li>• The Umbria Region control room is chaired by Roberto Morroni, the regional vice-president, and it is composed by regional directors and structures and the Regional Agency for Environmental Protection. The control room aims to coordinate and manage all the development activities and the contributions resulting from regional fora within the Strategy itself.</li> </ul>
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<b>Stakeholders involvement</b>	<p>Since the 17 SDGs, which constitute the core of our sustainability goals and strategies, affect every aspect of everyone's life, the full and constant involvement of stakeholders, including students, civil society, third sector and interest groups, represents an essential condition for the achievement of our local sustainable objectives.</p>
	<p><b>Regional activities:</b></p> <ul style="list-style-type: none"> <li>• The Marche Region established several <b>moments of confrontation</b> between the regional administration and the stakeholders. Besides the Regional Forum of Sustainable Development, civil society, organizations and the third sector have been involved due to multiple tools. In particular: the initial survey aimed to define the common knowledge of sustainability principles, the six educational and informative webinars, several online workshops, moments of public consultation, activities for children and young people and the Regional information, training and environmental education system (<i>INFEA Marche</i>) events, realised due to the Environmental Education Centres efforts. For what concerns the Regional Forum of Sustainable Development, the Region has launched its first session before the drafting of the Strategy, in order to define the issues that are perceived to be of major relevance by civil society. Then, after the Regional Strategy approval, the Marche Region decided to launch the second session of Forum, in order to guarantee the involvement and the information of civil society for what concerns the main points of the Strategy. In particular, the latest session focuses on the issue of climate change and on the adaptation response, which is at the base of the future Regional Plan.</li> <li>• The Umbria Region is carrying out a specific participatory process due to the activation of <b>six territorial FORA</b> articulated on the basis of homogeneous areas. The FORA are coordinate by the Municipalities Association for Sustainable Development (<i>Associazione dei Comuni per lo Sviluppo Sostenibile - ANCI-FELCOS</i>) and they provide thematic meetings about the four main areas of action defined by the National Strategy for Sustainable Development (People, Peace, Planet and Prosperity – <i>the four P</i>). The discussion has been opened starting from the Strategy preliminary document, which was pre-approved by the Regional Council with Resolution 1016 of 17<sup>th</sup> October 2021. The objectives defined with the activation of the FORA are: involving the community members, in order to make people active subjects in the path towards sustainability objectives; adopting, as working method, the integration and involvement of local actors, Municipalities, Provinces, Research Institutes and Universities, but also neighboring Regions, National Park Authorities, Regional Agencies for Environmental Protection (<i>Agenzie Regionali per la Protezione dell'Ambiente - ARPA</i>) and other subjects, in order to create new opportunities and to ensure active resilience against difficulties and problems. At the end of the confrontation phase, the regional objective is to carry out a synthesis of the contributions received in order to define the participated Regional Strategy document.</li> <li>• The Abruzzo Region has signed a <b>Memorandum of Understanding</b> with the Department of Civil, Construction-Architecture and Environmental Engineering (DICEAA) of the University of L'Aquila and with the Regional Parks. This protocol establishes that the Abruzzo Region is the lead body that will follow the activities through the establishment of a permanent technical table. The aims of the Technical Roundtable are related to the experimentation and promotion of sustainable urban planning, environmental monitoring, ecological connectivity and adaptation to models of climate change. The activities that have been planned under the Memorandum of Understanding will be identified and regulated from time to time in subsequent implementation agreements. Through the Environmental Education Centres (CEA), <b>training and awareness raising activities</b> in schools on SNSvS issues were also launched.</li> </ul>



### 1.3. Policies coherence

<p><b>Policies coherence</b></p>	<p>Our three Regions aim to ensure the full horizontal as well as vertical forms of policies coherence. In particular, while the horizontal coherence refers to the cooperation between Regions, the vertical one is related to the integration between ministerial and regional or local actions.</p> <ul style="list-style-type: none"> <li>• For what concerns the Abruzzo Region, the Strategy constitutes an important strategic reference for the transformations of the territory and it is the object of integration with all <b>regional planning and programming</b> and with the related implementation phases. Among the planning documents, the Strategic Planning Document (DSP) and the Regional Economics and Finance Document (DEFR) are of particular importance. The DSP and the DEFR, in fact, analyse and summarize the results of the implementation of regional public policies (in economic, social, territorial and financial terms) in the medium term and describe the actions to be implemented, linking them to three strategic pillars: combining growth sustainable economy with the reduction of inequalities, while respecting the balance of public finance. The national and regional strategies are linked with the official economic policy documents with particular reference to the National Reform Program (PNR) and the Economic and Financial Documents (DEF and DEFR) and, following the Covid-19 pandemic, with the National Recovery and Resilience Plan (PNRR). The implementation of the Strategy provides a multilevel governance approach, within which the Region has the task of declining the general objectives and lines of action identified on a local scale, implementing a "territorialisation" of the national approach.</li> <li>• The main <b>planning documents</b> of the Marche Region are developed with reference to the sustainability principles. The Region aims to ensure the full coherence between, on the one hand, the objectives and activities of its Strategy of Sustainable Development and its Economic and Financial Document, European Structural and Investment Funds Management Plan (2021-2027) and Performance Plan. While, for what concerns the environmental context, the coherence is guarantee due to specific tools, such as the Strategic Environmental Assessment (SEA) procedure or the analysis of coherence for plans not following under the SEA regulation. In this regard, the Marche Region has already planned a specific training course, addressed to internal administrative officials, which is going to highlight the importance and describe the using methods of these forms of analysis.</li> <li>• The Umbria Region is acting in order to develop the Regional Strategy of Sustainable Development in line with the Regional Economic and Financial Document and with the strategic document of the EU 2021-2027 programming period. Moreover, the Strategy actions are supposed to be harmonised with the Recovery and Resilience Plan missions.</li> </ul>
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**Regional toolbox:**

- The **Global citizenship education** has been used within the Marche Region as a transversal tool in order to guarantee the policies coherence.

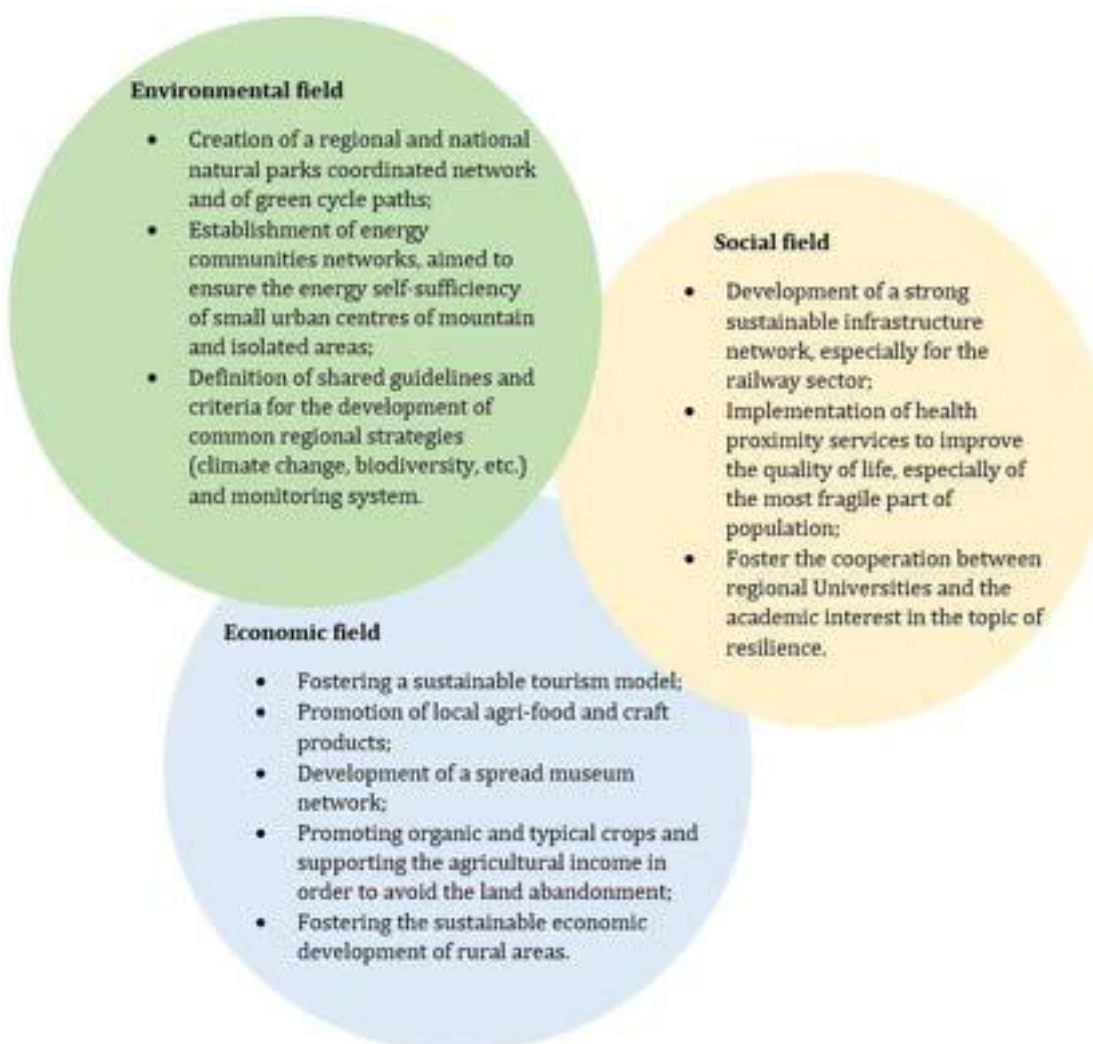
Within the Agenda 2030, the SDG 17 represents a crucial instrument that could be used in order to guarantee the cooperation between administrations at all levels, as well as the policies coherence within the same subject.



**Strengthen the means of implementation and revitalize the global partnership for sustainable development**

Strong forms of partnership between nations are necessary for the achievement of all the Sustainable Development Goals introduced within the 2030 Agenda. At the same time, in the local context, a stable actions and policies integration between the three Regions improves our capability to achieve sustainability at every level. Despite the administrative borders, our territories are strongly and intrinsically interconnected due to geographical, morphological, social and economic similarities, which have to be encouraged and explored.

In this regard, the SDG 17 “Partnership for the goals” may represent not only one of our goals, but also an important tool for the achievement of future objectives and for the coordination of our policies and strategies. In addition, for what concerns our regional grouping and the resulting implementation of the three directions of development, the SDG 17, in its local meaning, constitutes the main instrument and the best guarantee of success. Our future common actions, aimed at implementing the three directions, are supposed to affect any regional sphere of action:



For what concerns the issue of climate change, meant as one of the three shared directions of development adopted by our regional grouping, the *partnership of goals*, which represent the core of SDG 17, has an even more important role. In fact, in order to achieve significant goals against the threats posed by climate change, which has no boundaries, the regional strategies, including the ones related to the local adaptation plans, should follow common trends and principles. In particular, during the preparatory phase, our three regional administrations are willing to share guidelines, data and

methodologies, to ensure the best possible form of cooperation and partnership. In this regard our goals are:

- Implementing an *early warning model*, for the weather alert;
- Fostering common actions in order to reduce soil consumption and desertification;
- Acting as a regional grouping for the definition of the National Climate Change Adaptation Plan (*PNACC- Piano Nazionale di Adattamento ai Cambiamenti Climatici*);
- Implementing regional and inter-regional green infrastructure, as well as all the other practices that may be useful for carbon sink;
- Acting for the update of the National Strategy for Sustainable Development monitoring system, by defining new indicators, which should be more consistent and effective in relation to the climate change issue.

However, the *partnership for goals*, which represents the cornerstone of SDG 17, is not just about interregional cooperation, but also about the one between Regions and other subjects, especially local Universities. In particular, this cross-sectoral form of partnership aims to define a common knowledge framework and the most suitable indicators system, develop models for facing disasters and guarantee quick recovery procedures, ensure the correct territorial and emergency planning criteria and base development and recovery models on the principles of circular economy, always by including local stakeholders and actors. In this regard, the University that cooperates with the Abruzzo Region aims to develop a specific methodology for the inclusion of the Ecological Network in regional legislation and criteria for evaluating the ecosystem occlusion caused by infrastructures, and provide adequate training to public administrations. The Marche Region supports the permanent cooperation with some of its regional Universities in order to define the reference areas for environmental assessments, for the right definition of future actions and the proper way to apply the ITACA Protocol. While, the University of the Umbria Region, in line with the other Universities, aims to develop methodological criteria and guidelines for municipal planning in order to implement the territorial resilience and the sustainable reconstruction, and to create specific tools to use resources and funding according to the most urgent priorities. Moreover, the Umbria Regions is cooperating with the University in order to develop the Regional Strategy of Sustainable Development on the level of homogeneous territorial areas (the Region defined six different areas), with the aim to identify specific needs and adequate actions for the local context.

# 2

## Municipal planning methodological criteria - The Umbria Region

The common condition and the consequent needs of Municipalities affected by the seismic events between 2016 and 2017 have pushed our three Regions to cooperate in order to define the guidelines for municipal planning in territorial contexts with high seismicity. These guidelines aim to share a common planning model, not conditioned by administrative boundaries and able to identify effective territorial solutions in order to immediately respond to the emergency and, in particular, to ensure an adequate resilient response for the urban building context affected by the disaster.

### Regional toolbox:

- **The Q-CUMBER protocol** between Ministry of ecologic transition, Marche Region, Abruzzo Region and Umbria Region, aims to share and test a tool for the support to decision-making in planning, programming, design and validation to different territorial and environmental contexts in environmental evaluations (Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA)). For the SEA, the protocol is testing a common approach in urban planning, based on the implementation of ecological network, for some Municipality in the Apennine area shared by the three Regions (for Marche Region, three Municipalities are currently participating to the test: Castelsantangelo sul Nera, Arquata del Tronto and Colli al Metauro; for Umbria Region Norcia, Nocera Umbra, Città di Castello, Narni, Bastia Umbra; for Abruzzo Region Collaromele, Fagnano Alto, Scoppito, Ocre).  
For EIA, the tool is tested for different project categories: Marche Region is testing the tool for projects interacting with river ecosystems; Umbria Region for the mining activities and waste treatment systems; Abruzzo Region for photovoltaic and livestock projects as well as for the definition of environmental sustainability actions consistent with the SNSvS.
- **VAUTERECO** (Evaluation of Urban and Territorial Assets for resilience of communities) protocol between Ministry for Ecological Transition, University of Camerino, Polytechnic University of Marche: in the framework of the Regional Strategy of Sustainable Development (RSSD) of Marche Region, the project analyses the role of open space in the urban planning and the potential for ecosystem services. It includes a territorial analysis for ecological network at trans-regional level, to provide a common framework for the SEA of urban planning.
- The Marche Region approved its **regional law "Support for integrated upgrading and enhancement initiatives of villages and historic centres of the Marche region and promotion and development of widespread and sustainable tourism"** (regional law n. 29, 22<sup>nd</sup> of November 2021). The law focuses on the actions of regional relaunch through interventions for villages, historical centres and inner areas. In addition, it is fully integrated in the strategy aiming at the revitalization of the socio-cultural and economic developed around new policies for tourism, for the enhancement of food and wine products, of craftsmanship and entrepreneurial skills and for the requalification of the urban landscape.

### 2.1. The relation between municipal planning methodological criteria and SDGs



#### Make cities and human settlements inclusive, safe, resilient and sustainable

The first common direction of development shares the majority of its objectives with the Sustainable Development Goal 11. In order to found and implement an inclusive and sustainable form of urbanization, it is necessary to pursue the common capability to plan and manage participative, integrate and sustainable human settlements. Moreover, regional administrative structures aim to significantly reduce the number of total citizens who are killed or affected by natural disasters as well

as all direct economic losses, which are especially related to global GDP and caused by natural disasters, with particular regard to the protection of poor and most vulnerable people groups.

In line with their direction of development, Regions are expected to reduce the negative per-capita environmental impact of cities, with respect to air quality and waste management (including the one of urban waste), but also to foster common access to public green, safe, inclusive and accessible areas, especially for women, children, elderly and people with disabilities. In addition, regional policies and actions have to support the positive economic, social and environmental linkages between urban, peri-urban and rural areas, enhancing the relations and the integration between the municipal, regional and interregional (especially between neighbouring Regions) forms of planning. In doing so, our Regions aim to adopt an integrated form of management, in relations to all levels of disasters risk, by enforcing prevention activities and forms of early warning in case of natural disasters. In addition, the Minimal Urban Structure (*Struttura Minima Urbana*) should be developed and implemented within the municipal planning, in order to increase the general resilience during and after natural disasters.

For what concerns the issue of social security, the Umbria Region established a form of partnership with the United Nations Children's Fund (UNICEF) in order to develop, at the local level, the Child-Friendly Cities Initiative (CFCI). The project aims to act in urban areas, in order to raise the awareness within local population and administrations about the need and urgency to create safe spaces for children. In fact, especially in the urban context, areas dedicated to children, could be, actually, dangerous ones.

## 2.2. Future recommendations

The Umbria Region main objective is to increase the general resilience, due to adequate preventive actions, and to allow local administrations to ensure a minimum efficient urban structure and, consequently, the functioning of essential structures, including hospitals and other places for the exercise of public functions, in case of other seismic disasters.

# 3

## Climate change – the Marche

### Region

**Climate change** represents one of the greatest challenges of our century, since it has the strong capability to alter the climate and so the temperatures of our Planet in a way that makes difficult to continue perceiving our life as it has been until now. This dangerous increase in global temperatures, which goes far beyond the natural climatic alterations that use to be recorded between centuries or eras, is mainly caused by human actions and behaviours, which do not respect the natural balance. According to the Intergovernmental Panel on Climate Change (IPCC), in 2021, global temperatures have already increased of 1.1°C from 1850 and 3.3-3.6 million people are nowadays described as directly affected and vulnerable to climate change. In Italy, average temperatures have already increased of almost 3°C in comparison to pre-industrial values: the main consequences are already measurable and visible. Among other things, climate change and so its countless and global consequences have the capability to worsen the situation in crisis areas, which usually already face important environmental problems. Moreover, the effects of climate change events have the power to directly affect all kind of areas and fields: indeed, they jeopardize the stability reached within the environmental, as well as within the economic and social context, making almost impossible the achievement of sustainability under all of its three crucial pillars. In addition, extreme weather events, such as extreme rainfall or tropical storms which happen to be more frequent in our territories and have direct connections with climate change, have also severe impacts on ecosystems and society. The severity of destruction caused by this kind of events depends, also, on human factors (including the increase in number of infrastructure).

In order to face the challenge of climate change we have two possible solutions: the mitigation and the adaptation strategies. In particular, the first strategy aims to adopt specific measures in order to reduce greenhouse gas emissions and to enhance the absorption. On the other hand, the adaptation objective acts in order to reduce the vulnerability of natural and socio-economic systems and to increase their resilience facing a changing climate. The adaptation strategy should be perfectly integrated with the other specific thematic policies, such as the ones related to the water resources and ecosystems management or to the regional development. In this regard, our objective is to ensure the alignment between international, national and regional policies, starting from the UN Agenda 2030, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction.

The main objective of the common action line shared between Regions is to ensure development and implementation of regional adaptation plans. In fact, through the adoption of local adaptation measures and actions, natural as well as socio-economic systems are expected to become able to reduce their vulnerability to climate change and to increase their general resilience. That is the reason why, in 2022, the Marche Regions, with the support of academic and research centres, has begun its path toward the adoption of the Regional climate change adaptation plan.

Since the three Regions are located within the same river basin, namely the one of Tiber River, they deem appropriate defining one shared climate scenario, starting from the common knowledge framework, which includes also the competent River Basin Authority, able to pinpoint the most appropriate and effective actions. These common actions should be adopted in order to mitigate the potential effects of extreme climatic events that may occur in our territories. In this context the Regions want to define strong coordination approaches for a shared early weather warning system, especially for border territories and Municipalities. In addition, Regions want to work together for a common identification of measures and actions aimed to offer greater resilience to the occurrence of extreme phenomena, especially in terms of prevention. As a result, the adaptation to climate change at local level is expected to acquire increasingly importance and to be applied in the formation of new municipal



urban planning, in order to create a synergic link with the line of collaboration described in the above chapter 4.

According to our perspective, addressing the issue of climate change is crucial in order to ensure the principles of sustainable development for several reasons. The first one is that climate change has a temporal perspective that goes beyond the 2030, that represents the limit for the achievement of the SDGs goals, but the necessity of ensuring sustainability will go far beyond this date, since it represents the mean that allows the very human existence on Earth.

Regional Strategy of Sustainable Development (RSSD) of Marche Region strongly includes the principles of adaptation to and mitigation of climate change. Since the RSSD defines a close integration with environmental evaluations, the Strategic Environmental Assessment (SEA) and the Environmental Impact Assessment (EIA) represent the tools for the concretization of adaptation and mitigation measures in relation to plans and projects.

#### **Regional toolbox:**

- The Marche Region, in 2022, has started the definition of its **Regional climate change adaptation plan**, thanks to the cooperation with external experts and research centres and to the implementation of its Regional Forum for Sustainable Development second session. The Forum, in fact, has the objective to involve the civil society in the definition of the Plan priorities and to understand its perception about the issue of climate change and adaptation strategies.
- **Multifunctional forestry and plant models and techniques for compensation and mitigation measures in EIA** - Environmental Impact Assessment - proceedings (VEC): the project, developed by the Marche Region, in collaboration with the Polytechnic University of Marche, Department of Forestry Sciences, has developed a new approach to quantify the biotope to restore in the case of deterioration/destruction by project implementation. This approach considers the ecological value of different typology of biotope and allows improving not only the mere carbon absorption, but also the adaptation functions and the other ecosystem services.
- The **Covenant of Mayor** is the world's largest movement for local climate and energy actions undertaken by local authorities. In this context, the **Sustainable Energy and Climate Action Plans (SECAP)** are documents aiming to define the different actions, strategies and responsibilities to achieve local authorities' long-term energy consumption and CO<sub>2</sub> emissions reduction targets. The Marche Region, in 2017, has joint the Covenant of Mayor as territorial coordinator and acted in order to support the involvement of regional Municipalities, also for what concerns the supra-municipal level. According to the latest data, referring to 2020, 102 Municipalities, which represent the 70% of regional population, has joint the Covenant. Additionally, some Municipalities joint forces such as Vallesina Joint Secap (including 11 Municipalities) in order to produce common plants. In this regard, the Region is providing technical assistance to the interested Municipalities, in order to confirm their adhesion and to complete the related SECAP development. In addition, the Region is supporting the Municipalities also by increasing the specific reward criteria of public funding in order to foster the implementation of municipal strategic actions.
- The European Union leads the fight against climate change and sees it as its top priority. Local authorities have a leading role in achieving the climate and energy targets set by the EU. All 305 Municipalities in the Abruzzo Region have joined the **Covenant of Mayors** and the four Provincial Administrations together with the Region have guaranteed their support action as intermediate bodies, with a view to multilevel governance. For this shared energy policy, the Covenant of Mayors in place in the Abruzzo Region is visible at European level and has been defined by the European Commission as a **good practice** to be disseminated and replicated and has also received a special mention in the context of the Sustainable Energy campaign for Europe in Italy. A fundamental element for the municipalities that signed the Covenant of Mayors was the drafting of the Municipal Action Plan, Sustainable Energy Action Plan (SEAP). This document, based on the balance of CO<sub>2</sub> emissions (Baseline Emission Inventory - EIB), reports the strategies for achieving the 20-20-20 objective, and therefore the specific interventions to be carried out.
- The three Regions act in order to develop the awareness about the issue of climate change adaptation and to integrate this awareness within all the municipal planning instruments.

## 3.1. The relation between climate change and the SDGs

Climate change affects all 17 SDGs, below we focus on just some SDGs.



### Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

In a constantly changing environment, education and information represent two essential tools to understand our reality and how to react to its continuous challenges. In addition, the issue of climate change, in consideration of its global and boundless nature, is going to increasingly affect the everyday life and activities of the global population, which, in order to adapt to this new climatic situation, need to be informed in every respect. This kind of education is pursued due to already existing tools, which should be specifically tailored, according to the target and to the specific necessities and fields of interest.

In this regard, young people are perceived to be the first target of the information and education strategy for several reasons. First of all, they represent the part of global population that is supposed to be most affected by the consequences of climate change, since, according to the nowadays predictions, their lifetime will be entirely characterized by the climate issue. As a result, they also represent the first generation which will be somehow forced to find concrete solutions to deal with the increasing temperatures, and so with their consequences, in order to preserve their existence as well as the one of our Planet.

However, lifelong education and information should be ensured to all segments of the global population, also for what concerns the climate issue, since, in order to be aware and to act in the right way, people need to know how to do so.

Moreover, the climate debate and the related action strategy should be developed according to both political principles and civil society directions, according to the so-called **bottom-up process**. However, in order to participate to the climate debate and to have an actual active part, citizens and other private actors need to have enough information and knowledge of the problem, ensuring the development of the participative process itself. Indeed, because of the very nature of the problem, climate change solutions should be developed according to the necessities and the capability of global population, which, for these reasons, is a crucial subject. With a view to make it possible, administrations and decision makers have to create strong forms of cooperation with the civil society, also by joining forces with the third sector and institutionalizing the civil involvement in the path toward local sustainability.

#### **Regional toolbox:**

- The **Regional Forum for Sustainable Development** (*Forum regionale per lo sviluppo sostenibile*) of Marche Region, developed in cooperation with the regional Centre for volunteering services (*Centro Servizi per il Volontariato- Marche*) aims to guarantee the full involvement of citizens and students as well as the civil participation for what concerns the issue of sustainable development.
- The Global citizenship education plays a crucial role within the Marche Region Strategy of Sustainable Development. It represents a sustainability vector, which connects all the actions of the Strategy together, but also a great tool in the fight against climate change.



### Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Climate change is supposed to have significant effects on oceans, seas and marine resources, in every respect. The coastal system plays a crucial role in the territorial strategic development, in particular due to the concentration of natural habitats, connecting infrastructures, tourist sites and urban centres. The

events related to climate change cause various problems to the coastal system: between the most challenging ones are those related to the coastal erosion, the sea level rise and the increase in frequency and intensity of extreme events. In order to face the several challenges, regional administrations need to have enough data, connected to physical (extension of the beach emerged, saline intrusion,...), bio-ecological (algae blooms, chemical and ecological status,...) and socio-economic (populations density, presence of roads and railways near the coast,...) indicators.

According to the latest scientific investigations, climate change impact in coastal areas will lead to several outcomes, including the increase of flooded areas and the reduction of beaches extension, with consequent negative effects on tourism sector and on urbanizations and infrastructures. In addition, climate change effects will also have consequences on availability of drinking water due to salt intrusion in coastal aquifers, on the increasing of infrastructure at risk of flooding and on affecting the productivities of fishing and aquaculture sectors.

As a matter of fact, degradation of coastal and marine areas and ecosystems has the capability to jeopardize the physical, economic and food stability of local as well as of the international community, since seas are no longer able to provide some of the critical ecosystem services, such as carbon storage or oxygen generation (IUCN).

In addition, climate change will exacerbate the already existing deterioration of coastal and marine environments, caused by human land-based activities (such as urban discharges or plastic waste) and by the unsustainable exploitation due to the overfishing and other environmental damaging activities.



**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

Healthy land provides the basis for the existence of life on our Planet, and ecosystems represent important indicators in order to monitor the status of the environment.

*The annual value of the world's total terrestrial ecosystem services has been estimated at 75 trillion USD in 2011, approximately equivalent to the annual global Gross Domestic Product. [...] Valuing ecosystem services with monetary methods often overlooks these intangible services that shape societies, cultures and quality of life and the intrinsic value of biodiversity.*

*IPCC, 2019, Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*

However, the natural balance of planet Earth is deeply in danger since the loss of biodiversity is challenging almost all the natural areas in urbanized territories. The global temperatures increase, related to climate change, has strong effects on land systems and ecosystems. In fact, warmer temperatures and changed precipitation patterns have altered the period of growing seasons, contributed to the reduction of regional crop productivity and of freshwater availability, and put biodiversity under further stress. Human society has a dual role for what concern the land and ecosystems degradation related to climate change: on the one hand, it is one of the main causing factors, especially for all polluting activities; while on the other hand, it is one of the most seriously affected entities. Almost one-quarter of total anthropogenic greenhouse gas emissions, especially methane and nitrous oxide, arise mainly from land management and agricultural activities, such as deforestation, fertiliser application and livestock.

The vulnerability of ecosystems has increased due to climate-related extreme events: land continuously interacts with the atmosphere through exchanges of natural elements, such as water or energy. Climate changes could affect the equilibrium in these exchanges affecting the stability of ecosystems.

According to the IPCC, during the last decade, climate change have started to show its effects on many plant and animal species, leading to significant range size and habitat location changes and modifications in seasonal activities.

### **3.2. Future recommendations**

The Marche Region is active in the definition of its Regional climate change adaptation plan, which is supposed to be approved in the near future and is expecting to be the innovative tool by which the adaptation strategies will be included within all the sectorial planning. In this context, the Strategic Environmental Assessment procedures are going to be more and more focused on the issue of climate change and, in particular, on the related adaptation strategies and actions.

# 4

## Green infrastructures – the Abruzzo Region

Green infrastructures represent important tools in the fight against climate change and its catastrophic effects on the territory as well as on society. In order to implement an integrated regional green infrastructures systems, Regions has to start with integrating green urban and suburban areas and woodland at all levels, compensating for the soil consumption, which represents a great threat for ecosystems stability.

### **Regional toolbox:**

- The technical table will have a fundamental role in the implementation of Abruzzo Regional Sustainable Development Strategy as it represents the tool that allows the involvement of all local authorities. The University of L'Aquila will provide a fundamental contribution to the technical table. Its Department of Civil, Building-Architecture and Environmental Engineering (DICEAA) was funded by the Ministry for Ecological Transition in order to develop research projects to support the implementation of the National Strategy for Sustainable Development. The DICEAA, in fact, presented its project “**Sost.EN. & Re - Sustainability, resilience, adaptation for the protection of ecosystems and physical reconstruction in Central Italy**”, which falls within the category of "Research projects to support the processes of elaboration and implementation of regional and provincial strategies for sustainable development". Furthermore, the Memorandum of understanding, signed between the regional administration and the University, is structured in such a way as to allow the involvement of new partners, such as the Regional Reserves of Abruzzo, currently represented by the Abruzzo Region, the neighbouring Regions (primarily Marche and Umbria) and the related protected areas, with the goal of establishing an interregional ecological network. The enlargement of the partnership and the signing of Memoranda of Understanding between the Regions represent, in fact, a key point for sharing projects of large territorial value. The action of the protocol, therefore, does not end with the drafting of the Regional Strategy, but finds its origin in it, drawing its effects in the long term, and laying the foundations for a wide-ranging collaboration between the institutions operating in the area. One of the most important opportunities offered by the Memorandum of understanding is the possibility to have, through the collaboration of the Parks, a sort of "territorial laboratory", which can allow the realization of pilot projects that can lead the way for the Region as well as for the interregional cooperation.
- According to the Umbria Region, it is necessary that the new Regional Strategy of Sustainable Development could be integrated and could synergistically cooperate with the Regional Strategy for Biodiversity, based on the Regional Management Strategy for the Natura network 2000 and the Framework of Priority Actions for Natura 2000, both approved on 2018. These instruments allowed the Region to submit to the European Commission the integrated Life project “**Imagine Umbria**”, aimed to fully implement the Natura 2000 network within the Region and realize, at least, the 40% of actions expected within the Framework of Priority Actions for Natura 2000. In particular, the project, which has been launched during the last months on 2020, provides guidelines for the creation of an integrated management system, able to ensure the achievement of the conservation objectives described within the Habitat and the Birds European Directives. In this regard, the economic and technical sustainability represent the crucial elements, which have to be fulfilled due to development of management policies and actions toward:
  - The proactive management of habitats and species,
  - The coherence between the Natura 2000 network and the external territories (ecological connectivity and landscape),
  - The training of professionals suitable for the management of the Natura 200 network,
  - The citizens’ involvement,

The measures that are expected to be activated aim to the fulfilment of some general priorities, such as:

- Improving the governance structure, due to the involvement of all local stakeholders, in order to guarantee an integrated management of Natura 2000 sites,
- Maintaining and improving the conservation status of habitat and species, also in relation to the strategies of mitigation and adaptation to climate change,
- Training and increasing the awareness of technical operators and officials of Public Administrations,

- Increasing the awareness of Natura 2000 central role, related to the development of ecosystem services and green professions,
- Monitoring the conservation status of species and habitats, in accordance with European Directives.
- The Marche Region provided, on 2022, two editions of its workshop “**Sustainability elements for the buildings and structures design**”. Both editions were addressed to technicians of the Regional and of Local Authorities and had the aim to provide indications for the increase of sustainability, with regard to buildings realisation, restructuring and maintenance (roads, underground pipeline, etc.) and took into account the importance of maintaining undamaged ecosystems, fostering the green infrastructures creation and natural based solutions use.
- Marche Region and Polytechnic University of Marche signed an **agreement** in order to study different models and techniques for the realization of multifunctional forestry projects within the regional territory. In particular, the aim was defining new forestry plans, which could represent technical-scientific references for designers. These models concern the developing of site-specific tree-shrub plant modules in order to provide Ecosystem Services in urban, peri-urban and extra-urban environments in line with the Ecological Network of the Marche Region (*Rete Ecologica delle Marche – REM*) and then, for the concrete realization of the regional green infrastructure.

## 4.1. The relation between green infrastructure and the SDGs

The issue of green infrastructures represents a cross-cutting theme, which perfectly aligns with **all the 17 SDGs** of the Agenda 2030, as well as with our three interregional directions of development and with actions and objectives of each Regional Strategy of Sustainable Development.

Regional Strategies of Sustainable Development aim to represent implementation tools that define the regional reference framework for planning, programming and evaluating environmental and territorial processes. In this regard, at the very beginning, the definition of Regional Strategies has outlined how the active participation of local communities constitutes a crucial element.

Even if each Region follows its own administrative path towards the Strategy definition, generally our projects could be divided into three categories of actions, further divided into sub-categories:

- A - Governance of the Regional / Provincial Strategy for sustainable development;**
- B. Involvement of civil society;**
- C. Preparation of the Regional Strategy Document for Sustainable Development.**

In order to develop our documents and then the final Regional Strategies, research plans, technical documents, methods and tools for monitoring, evaluating and implementing National and Regional Sustainable Development Strategies have been defined. At the same time, it has been essential to activate consultation and participation forms with civil society and academia.

The cooperation between Regions and Universities relies on:

1. Positioning with respect to the objectives of the SNSvS and the 17 Goals of the 2030 Agenda;
2. Definition of the system of regional objectives and priority actions;
3. Definition of the system of indicators and of the monitoring and review plan.

Specifically, the University of L'Aquila has undertaken measures to define the positioning of regional planning with respect to the objectives of the SNSvS, of the 2030 Agenda Goals and of the general sustainability level, in order to consciously optimize the choice of indicators. After the definition of priority areas, a new set of regional indicators has been defined. The activity carried out by the DICEAA group has been conducted in synergy and collaboration with the regional Environmental Assessment Service through a series of periodic meetings and actions have been agreed and shared from time to time.





## **Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

To achieve this goal, a collaboration is underway between the Abruzzo Region and the University of L'Aquila (DICEAA) for the definition of regional ecological networks. The collaboration is aimed at: reordering previous regional experiences; defining the regional framework on environmental fragmentation by means of technical devices called “Ecosystem occlusion profiles of infrastructures” extended to the major road arteries; proceeding with the regional mapping of the gates of the main infrastructures; defining the abacus of potential interferences with respect to the forecasts of municipal planning instruments; proceeding with the elaboration of the indicators aimed at configuring and monitoring the “effective ecological network”. The collaboration is expected to end with the study of the current regional settlement structure for the assessment of anthropogenic interference on the structures of environmental continuity.

At the same time, an activity of recognition and comparison with other Regional Plans and Programmes of different Services has been started, in order to know the evolution of the environmental context.

### **4.2. Future recommendations**

In the near future, in order to fully implement the relation between interregional green infrastructures and SDGs, our three Regions aim to:

1. The training activity, which will be carried out by the Environmental Education Centres and will be addressed to municipal technicians, is going to be planned. The training activity is aimed at deepening and raising awareness of local authorities on the topics covered by the SNSvS;
2. One of the main objectives that our Regions wants to achieve with the Agreements with the Ministry is the final definition of regional ecological networks.
3. The Regions are trying to define specific partnership with research centres and agencies, in order to focus on the issue of indicators and data analysis, which represents the basis of all administrative policies and actions. In identifying the indicators, and in line with our strong and integrated interregional form of cooperation, other institutions will be involved:
  - the regional structures of Marche and Umbria for the identification of common indicators close to the neighbouring areas;
  - the Abruzzo Regional Services for the definition of indicators that will be more suitable for their planning activity;
  - the Park Authorities, through the Permanent Technical Table, which allow the comparison between most suitable environmental indicators to describe the various territorial realities;
  - the Abruzzo regional division of the National Association of Municipalities (Associazione Nazionale Comuni Italiani – ANCI Abruzzo), in order to inform Municipalities about the projects and the possibility of having a discussion on the work done;

4. The involvement of civil society is guaranteed by the organization of regional Forum (the Marche Region, in May 2022 launched its second edition), in order to establish a comparison on environmental procedures and focus the attention of professionals and technicians on the 2030 Agenda objectives.

**Regional toolbox:**

- Abruzzo Region approved a collaboration agreement with its **Regional Agency for the Environmental Safeguarding** (Agenzia Regionale per la Tutela dell'Ambiente – ARTA Abruzzo), for an in-depth study of the indicators previously launched by the University of L'Aquila. This study will be aimed at identifying, among those already selected, those indicators that, due to their availability and representativeness, will constitute the most suitable set, also identifying the scale of use at the various territorial levels.
- **SOSTENERE** (Sustainability, resilience, adaptation for the ecosystems protection, physical reconstruction in the central part of Italy): research project developed by the University of L'Aquila and Abruzzo Region.
- The Marche Region established its **Ecological Network** (REM) with the regional law n. 2 approved on 5<sup>th</sup> February 2013. The regional law establishes that: *“The Marche Region Ecological Network has been included within the instruments of territorial and urban planning adopted after the entry into force of this law. This law identifies tools for the implementation of the REM by territorial and urban planning.*

# 5

## Conclusion

*The VLR as driver of innovation, which allow our Regions to advance progress on their local priorities and to maximize our potential as a basis for behaviour change and new policy application.*

*Communiqué on Voluntary Local reviews, UN Habitat, Madrid, UCLG, 2021*

Within this integrated and shared field of action, and in line with the Voluntary National Review presented by the Italian Ministry for Ecological Transition, our Regions decided to institutionalize their already in force partnership, by presenting to the international arena their own Voluntary Local Review. The common work behind the creation of the VLR, represented a new tool to guarantee and show this productive interregional cooperation case, as well as to explore a new instrument that no one of the three Regions had ever used.

One of our common interests is representing the results we are able to achieve by facing the issue of development during the next decades, and in particular, by teaming up, synergistically addressing problems and difficulties related to the research of a new pattern of development, which has to be dramatically different from the previous ones adopted in the past years. In our case, **three contiguous Regions, always respecting their identity characteristics, decided to join, in order to pulling together and to find common solutions to growing difficulties, especially climatic and seismic ones, also in relation to the social territorial isolation and economic hardship.** As a result, the greatest outcome has been our common and share response, which is stronger and more resilient than the ones that may be developed within each regional context.

According to our vision, the cooperation between our three Central Italy Regions plays a crucial role in the fields of sustainability and resilience, by working together and sharing some aspects of different Regional Strategies of Sustainable Development. In this context, we are aware that **the integration and the knowledge sharing are the most important tools in order to increase the territorial resilience and to allow communities to act before and after the occurrence of calamitous events.**

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 Regione Emilia-Romagna



# VOLUNTARY LOCAL REVIEW 2022

EMILIA-ROMAGNA  
REGION  
METROPOLITAN CITY  
OF BOLOGNA



## FOREWORD

### ***Institutional collaboration is added value to build a sustainable future***

*Stefano Bonaccini*, President of the Emilia-Romagna Region

*Matteo Lepore*, Mayor of the Metropolitan City of Bologna

All countries are called upon to strive to define their own sustainable development strategy to achieve the goals set out in the UN 2030 Agenda for Sustainable Development. With the 2030 Agenda Regional Strategy for Sustainable Development and the Metropolitan Agenda 2.0, our territory assumes the paradigm of development and growth based on environmental, social, economic and institutional sustainability, as well as on the principles of universality, integration, participation and social inclusion. Goals aimed at reducing economic, social, environmental and territorial divides and achieving full gender equality at a time when the pandemic has inevitably marked breaking points on all fronts of sustainability. In recent months this has been compounded by the disturbing scenario of a war not far from our country's borders, which challenges us as bearers of a democratic and pacifist conscience, but also as citizens of a broader Europe where we are called upon to make our voice heard and to do our part. A crisis that is also affecting our territory and our communities economically, and that is already having a great impact on the families and businesses that live and work in this area due to the rising costs of energy and raw materials. This is why we must continue to work as one community, inspired by the Goals of the UN 2030 Agenda. Our territory has the capacity to become a laboratory for these new policies, investing in energy and waste, developing a new green production chain, stimulating a change in food consumption, reducing – as envisaged by regional law – land consumption, triggering virtuous processes of urban and environmental regeneration, and promoting biodiversity in every action. In this context, the 17 Goals of the UN 2030 Agenda represent a great opportunity for change, also in view of the resources of the National Recovery and Resilience Plan (NRRP) and the seven-year programming of European funds, for which the region has defined the priorities for action in the Regional Strategic Document for the Unified Programming of European Development Policies 2021-2027 and in the new Regional Strategy for Smart Specialisation in Research and Innovation 2021-2027.

As already shared in the Pact for Work and Climate, the objective in Emilia-Romagna is to generate new quality jobs, accompanying the region in the ecological and digital transition in order to reduce economic, social, environmental and territorial divides and achieve full gender equality.

The role and collaboration of regional and local institutions is crucial, indispensable for achieving many of the goals and targets of the UN 2030 Agenda, and this requires coordination of efforts at every level of government.

This is why it was decided to set up a multi-level regional steering committee with the local authorities to define a shared set of measurable and consistent objectives at the various levels of government, starting from the experience of the metropolitan city of Bologna and the many experiences already in place throughout the region. The objective is the involvement of municipalities in the process of the territorialisation of the SDGs, in order to create a multi-level system of Sustainable Development Agendas and Strategies embedded in the programming cycle of the authorities



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## Introduction

The 2030 Agenda Strategy for Sustainable Development of the Emilia-Romagna Region and the Metropolitan Agenda for Sustainable Development 2.0 of the metropolitan city of Bologna were drafted through interaction and collaboration among the various bodies and are incorporated in their strategic instruments.

### **The 2030 Agenda Regional Strategy for Sustainable Development**

The Emilia-Romagna 2030 Agenda Regional Strategy for Sustainable Development is rooted in the regional council's 2020-2025 Mandate Programme and in the Labour and Climate Pact signed on 14 December 2020 with the institutional, economic and social partnership and the metropolitan city of Bologna.

In keeping with the Mandate Programme, in which the council had already underscored the relationship between its own objectives and those of the UN 2030 Agenda, the Pact for Work and Climate outlines a shared project for the relaunch and development of Emilia-Romagna aimed at generating new quality jobs, accompanying Emilia-Romagna in the ecological and digital transition. This project, which takes the UN's 2030 Agenda for Sustainable Development as its primary reference, is based on sustainability in its three inseparable components, i.e. the environmental, social and economic, with the aim of reducing economic, social, environmental and territorial divides and achieving full gender equality.



The 2030 Agenda Strategy for Sustainable Development was approved by Council Resolution no. 1840/2021.

### **The Metropolitan Agenda for Sustainable Development 2.0**

The definition of a Metropolitan Agenda for Sustainable Development 2.0 comes as the culmination of an important process lasting several years. Defined as a wide-ranging local body responsible for strategic, environmental and territorial planning, economic growth and social development, mobility and infrastructure, and services to the municipalities that make it up, the metropolitan city has the role

of identifying and coordinating development strategies for the entire metropolitan area, in close cooperation with national and regional policies. From its earliest years, the metropolitan city of Bologna has therefore been at the forefront in implementing the principles of sustainable development. It is no coincidence that in June 2017 Bologna was chosen as the venue for the G7 Environment Ministers' meeting that ended with the signing of the Bologna Charter for the Environment by the mayors of Italy's metropolitan cities. The Charter is rooted in the international principles of the United Nations 2030 Agenda and aims to translate them into virtuous local practices through the territorialisation of sustainability policies at a local level. Specifically, the Charter identifies eight environmental issues related to Goal 11 - Sustainable Cities and Communities and makes commitments that can be traced back to the EU strategy guidelines, indicates measurable goals and targets and defines possible prospects, even on a national scale. Reinforcing its commitment and involvement on sustainability issues, the metropolitan city of Bologna has placed environmental, economic and social sustainability at the forefront of the founding principles of the 2018 Metropolitan Strategic Plan 2.0 (MSP 2.0), the policy approved by the metropolitan council, which guides the actions of the metropolitan city, the municipalities and unions of municipalities, identifying strategic, medium- and long-term objectives. In this context, in 2019 a first metropolitan Agenda for Sustainable Development was drawn up in implementation of the Bologna Charter for the Environment, with the identification of strategies and political guidelines in relation to the goals more properly ascribable to the main environmental issues of interest to the territory, i.e. air pollution, land use and green management, waste management and circular economy, water supply, energy consumption and renewable sources, mobility. Following the



public notice of the Ministry of the Environment for the funding of Metropolitan Agendas for Sustainable Development of July 2019, the metropolitan city of Bologna presented the Agenda 2.0 project to apply all the SDGs at the local territorial level taking into account all the dimensions of sustainability, in an approach that includes local actors.

# 1

## Framing

### 1.1 Emilia-Romagna Region



#### Economy (Source: Istat)

GDP (2020): 149,633 million current euros  
GDP per inhabitant (2020): 33,614.10 current euros  
No. of companies (Asia 2019): 359,017  
No. of employees in companies (Asia 2019): 1,630,292  
No. of farms (2013): 64,480

#### Labour market 2020 (Source: Istat)

Employment rate: 68.8%  
Male employment rate: 75.5%  
Female employment rate: 62.0%  
Unemployment rate: 5.7%  
Male unemployment rate: 4.8%  
Female unemployment rate: 6.9%

Population as at 1-1-2021 (Source: Emilia-Romagna Region)

Total residents: 4,459,866

Male residents: 2,172,153

Female residents: 2,287,713

*The regional population shown does not include the municipalities of Montecopiolo and Sassofeltrio (which joined Emilia-Romagna in June 2021)*

Territory as at 1-1-2021

Number of provinces: 8

Number of metropolitan areas: 1

Number of municipalities: 328  
*(not including the municipalities of Montecopiolo and Sassofeltrio, which joined Emilia-Romagna in June 2021)*

Surface area: 22,452.78 km<sup>2</sup>  
*(not including the territories of Montecopiolo and Sassofeltrio)*  
(Source: Istat)

Population density: 198.63 inhabitants per km<sup>2</sup> (Source: Istat for surface area, E-R for population)

Agricultural surface area used (2013): 1,038,052 hectares (Source: Istat)

## 1.2 Metropolitan city of Bologna



**Population as at 1-1-2021** (Source: Emilia-Romagna Region)

Total residents: 1,015,608

Male residents: 491,283

Female residents: 524,325

Households as at 31/12/2020 (source: municipal registers): 493,495

Percentage of youth (<= 14 years) as at 31/12/2020 (source: Istat): 12.4%

Percentage of elderly (>=65 years) as at 31/12/2020 (source: Istat): 24.4%

**Territory as at 1-1-2021**

Number of municipalities: 55

Number of unions of municipalities: 7

Surface area: 3,702.32 km<sup>2</sup> - (Source: Istat)

Percentage of land consumed in 2020 (source: ISPRA): 8.9%

Population density: 274.3 inhabitants per km<sup>2</sup> (Source: Istat)

Agricultural surface area used (2013): 173,224.46 hectares (Source: Istat)

### Economy

Average income per taxpayer (2021 tax forms for 2020 income; source: MEF): €25,934

No. of active companies (Asia 2019): 86952

Percentage of female enterprises (infocamere 2019): 21.3%

No. of employees in companies (Asia 2019): 430,499

No. of farms (2013): 10,790

### Labour market 2020 (Source: Istat)

Employment rate: 70.2%

Male employment rate: 75.2%

Female employment rate: 65.2%

Youth employment rate: 18.3%

Unemployment rate: 4.7%

Male unemployment rate: 4.3%

Female unemployment rate: 5.2%

Youth unemployment rate: 23.2%

# 2

## Governance model

### 2.1 Governance of the Emilia-Romagna Region's 2030 Agenda Strategy for Sustainable Development

The 2030 Agenda strategy for the Sustainable Development of the Emilia-Romagna Region was drafted by an interdepartmental technical working group made up of more than 40 representatives of the general directorates, called upon to contribute to the definition of the document, an operational steering group made up of experts from the competent structures for methodological support and the alignment with the Regional Economic and Financial Document (REFD), as well as the steering committee for the governance and strategic control of the regional planning established by Regional Decree 602/2021.

The delegation of the 2030 Agenda is entrusted to the vice president of the region, who coordinates the work together with the director of the cabinet of the council president.

A cross-cutting work, therefore, functional to generating the integration of the key dimensions of sustainability in all policies that is indispensable to achieve the objectives, carried out with the support of ASviS, and the involvement of the investee company Art-ER and the Regional Agency for Prevention, Environment and Energy (ARPAE), as well as the network of regional universities united in Emilia-Lab.

Specifically:

- *Together with ASviS, analyses of the Region's positioning with respect to the Goals of the 2030 Agenda and the identification of quantitative targets for 2025 and 2030 were performed.*
- *Together with ARPAE, methods for the construction of integrated reports and indices for decoupling environmental pressures from economic growth were studied and set up, and sustainability training and education actions were planned and implemented.*
- *With the support of Art-ER, initiatives for stakeholder involvement and communication of sustainable development goals were set up and managed, and contributions from various participatory fora or sectoral experiences were systematised.*
- *With the support of Emilia-LaB, the network of universities in Emilia-Romagna for scientific, didactic and informative collaboration in the field of economic studies, aspects such as the impact of policies and the territorialisation of sustainable development objectives were explored in particular.*

### 2.2 The governance of Agenda 2.0 of the Metropolitan City of Bologna

The Metropolitan Strategic Plan technical operational coordination office within the general directorate of the metropolitan city takes care of, supports and coordinates the implementation of Agenda 2.0.

It was deemed appropriate to avoid the multiplication of “places of debate”, preferring to use the institutional venues envisaged in the metropolitan by-laws. All stakeholders (institutional and non-institutional) have been involved in various ways since the early stages of the Agenda 2.0 definition project, in order to outline an Agenda 2.0 co-designed and shared with the most significant organisations of the territory.



It was decided to maintain the governance system that accompanied the work on the drafting of the strategic plan, strengthening it with the establishment of an inter-sectoral and inter-institutional working group to act as a steering committee for the implementation and deployment of the Metropolitan Agenda for Development 2.0. It is composed of one or more representatives for each sector/area of the metropolitan city and a representative for the municipality of Bologna, the Emilia-Romagna region and ARPAE. The working group is called upon to discuss and evaluate the progress of the project as a whole and the results produced by the individual actions undertaken. For specific technical issues, additional in-house or external professionals from both public and private entities may be called upon to participate as experts and authoritative witnesses.

Another place for discussion is the office of the presidency. Composed of the metropolitan mayor and the presidents of the unions of municipalities, it is the body supporting the work of the metropolitan conference of mayors, and therefore the body best suited to activate local actors. Meetings with the office of the presidency accompanied the Agenda 2.0 drafting process, and depending on the progress of the work were used for discussion and debate, gathering input and sharing content.

Furthermore, to ensure a more fruitful discussion, the councils of each union and the municipality of Bologna were directly involved in working groups and workshops.

Particular attention is paid to the participants in the table of investee companies and the development council, places of participation and discussion with economic and social actors established during the drafting of the Metropolitan Strategic Plan 2.0. Additional support was provided by ASviS as scientific and technical advisor.



# 3 Territorial strategies and the consistency of public policies for sustainable development

## 3.1 The Emilia-Romagna Region's 2030 Agenda Strategy for Sustainable Development

The positioning of Emilia-Romagna with respect to the targets defined at a national level confirms the great history of the region, undoubtedly among the most advanced in Europe in terms of health, education, employment, innovation, social inclusion and growth.

As the following radar chart shows, compared to Italy as a whole Emilia-Romagna was above the national average in 2020 in most of the goals, underscoring the need to accelerate environmental sustainability, including by continuing the coordinated action with other Po Valley basin regions with respect to air quality.



Source: Elaborations of the Emilia-Romagna Region Statistics Office on ASviS 2020 data

Indeed, the chart based on composite indices drawn up by ASviS shows that Emilia-Romagna ranks above the national average in 9 of the 14 goals: Goal is in line with the national average. It is below the national average for Goals . For goals 13, 14 and 17, there are no significant comparable and up-to-date data available on a local scale.

### 3.1.1. THE 17 GOALS OF THE EMILIA-ROMAGNA REGION

Each of the 17 Goals is presented as follows:

- **Introduction:** a short text framing Emilia-Romagna's objective, values and principles.
- **Positioning:** a chart and a text frame Emilia-Romagna with respect to a composite indicator that ASviS has elaborated and uses to monitor the progress made by Europe, Italy and its territories over time for each of the 17 Goals. Such elaborations make it possible to represent a set of indicators relating to the same field of analysis and territory through a single, easy-to-read index.
- **Strategic lines of action:** the Regional Strategy relates the lines of action of the Mandate Programme and the Jobs and Climate Pact to each Goal as they are instrumental in achieving the targets by 2025-2030. The source is represented by symbols:



Specific objectives of the 2020-2025 mandate programme

#### Jobs and Climate Pact



Emilia-Romagna, region of knowledge and know-how



Emilia-Romagna, region of ecological transition



Emilia-Romagna, region of rights and duties



Emilia-Romagna, region of work, enterprises and opportunities

DT  
Digital  
transformation

Digital transformation

S  
Simplification

Simplification Pact

L  
Legality

Legality

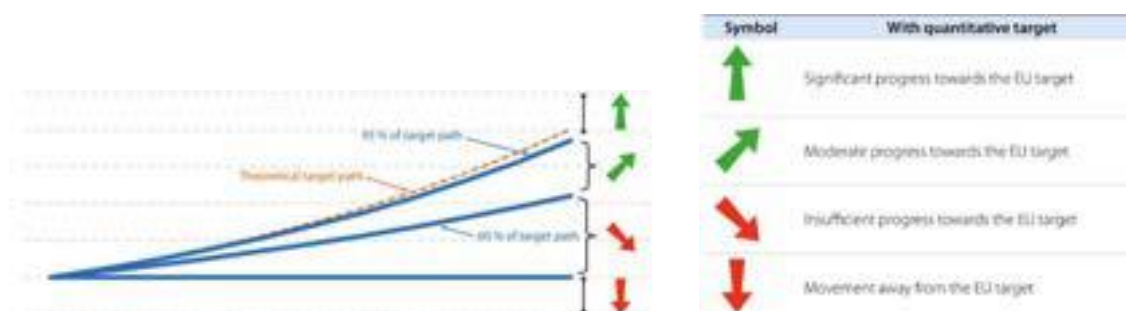
P  
Participation

Participation

**Regional indicators and targets:** The 2030 Agenda regional strategy for Sustainable Development identifies about **100 targets**, i.e. quantitative objectives to be reached by 2025 and/or 2030, partly coinciding with those assumed at a European and national level, partly defined at a regional level. Both are **quantitative targets using result indicators** (impact and/or output indicators).

In order to monitor how the regional situation is evolving with respect to the targets defined, the **Eurostat methodology** is used, which, drawing on at least five years of historical data, assesses the intensity and direction in which an indicator is moving with respect to the target set. This assessment has four classifications:

1. Significant progress (the target will be reached)
2. Moderate progress (the target will not be reached, but movement is in the right direction)
3. Insufficient progress (target will not be reached due to minimally positive trends)
4. Wrong direction (the target will not be reached, in fact results are moving further away from the target)



**Target table:** for each target identified provides:

- **Indicator:** specifies whether the indicator belongs to the composite developed by ASviS or whether it is an indicator chosen by the Emilia-Romagna Region
- **Indicator description:** defines the indicator
- **Positioning of the Emilia-Romagna region**
- **Target:** indicates the quantitative objective and the institution/body that defined it. If the Emilia-Romagna region has chosen a more challenging target, both targets are noted.

**Related Goals:** indicates the main other goals that contribute to the achievement of the objectives.

### 3.1.2 IMPLEMENTING THE STRATEGY

#### Tools to guide administrative action

Just as at the national level the implementation of the National Sustainable Development Strategy (NSDS) has to link up with planning documents, in particular with the National Reform Programme (NRP) and, more generally, with the Economic and Financial Document (EFD), at the regional level the strategy has to coordinate with a plurality of planning and governance tools both internal and “external” to the administration.

On this aspect, both the 2030 Agenda and the National Strategy for Sustainable Development are very clear: the identified goals can only be achieved through the integration of different levels of governance. A governance that must necessarily be collaborative, multi-level (vertical and horizontal), as well as a director and catalyser of the commitments of all the actors involved, and therefore capable of co-designing with the territory itself, improving the pre-existing conditions and also targeting its own

organisational performance towards this goal in order to increase the level of economy, efficiency and effectiveness of its action.

Below are the main economic programming, planning and control instruments of the administration to implement the objectives of the regional strategy.

### **European session of the legislative assembly**

Since 2008, the Emilia-Romagna Region has developed its own model of participation in the formation and implementation of European Union policies and law, summarised in the European session of the legislative assembly (Regional Law 16/2008).

The European session offers a political summary of what the region has achieved (ascending phase) through a report on the state of compliance of the regional system prepared by the council and on what it intends to achieve (ascending phase) in the matters within the region's remit concerning the initiatives announced by the European Commission in its annual work programme, with particular attention to those having a potential impact on the Emilia-Romagna territory.

In the regional compliance report prepared by the council, it will be necessary to report on the regional 2030 Agenda Strategy for Sustainable Development in the context of regional development policies, with a particular focus on cohesion policies.

### **Regional Economic and Financial Document (REFD)**

The Regional Economic and Financial Document (REFD) of the Emilia-Romagna region, approved by the council by 30 June each year, starting from the Mandate Programme and the Labour and Climate Pact defines the strategic objectives that the regional government intends to achieve during the legislature, specifying the results expected for each objective each year of the three-year period, coinciding with the time span of the budget forecast, and at the end of the legislature.

The strategic objectives are illustrated by mission and budget programme as required by Italian Legislative Decree 118/2011, and are broken down by department of reference. The Regional Economic and Financial Document (REFD) defines the framework of reference for the preparation of multi-annual and annual budgets and for the definition and implementation of regional policies.

Within the REFD, objectives for change are also enumerated as strategic objectives are transformed into technical goals that the government identifies and uses to elaborate performance assessments.

For some years now, the strategic objectives in the REFD have been correlated with national strategic areas and choices, and through them with the global goals of the 2030 Agenda. Looking ahead, in order to ensure programming that is fully consistent with the strategy, as well as to implement an increasingly integrated regional policy monitoring and evaluation system, the strategic objectives of the REFD and the objectives for change will have to be correlated with the Goals and targets of the 2030 Agenda Regional Strategy for Sustainable Development.

### **EU and national planning (ERDF, ESF+, EAFRD, FSC)**

For the 2021-2027 planning cycle, the European Union has adopted the UN 2030 Agenda for Sustainable Development and the Green Deal as a high-level strategic reference for planning.

With the **Regional Strategic Document for the unitary planning of European development policies 2021-2027** (RSD), approved by the legislative assembly in June 2021, the Region outlined the strategic

framework within which to address all the European and national resources that the region will benefit from, with the aim of relaunching the development of the regional territory in a sustainable way and to lead Emilia-Romagna towards the European targets to be achieved by 2030 and 2050.

With a vision of planning based on integration and complementarity, the RSD orients the operational programming of the funds managed by the regional administration towards the strategic objectives of the **Jobs and Climate Pact**, directs the capacity of the regional system to attract additional resources, broadening the policy mix for sustainable development and favouring a vision of planning based on integration, which enhances complementarity and synergies.

The RSD is therefore the regional planning tool for European development policies that ensures the “translation” of the strategic objectives that can be pursued through the European funds into specific objectives of the regional operational programmes, helping to define their economic and financial planning within the framework of the REFD.

The RSD, the **Smart Specialisation Strategy 2021-2027**, also approved in June 2021, which assigns research and innovation a driving role in the transition towards fairer and more sustainable production and consumption models, adopts the priorities of the UN 2030 Agenda, taking the same challenge-based approach that is indispensable for addressing the challenges of change and responding to society's new needs, both on the economic and on the environmental and social fronts. Regional Operational Programmes, also thanks to the thematic concentration thresholds<sup>[1]</sup> indicated by Regulations, will be a decisive tool to fully and concretely implement the development objectives outlined in full consistency by regional unitary planning, the Jobs and Climate Pact and the Emilia-Romagna 2030 Agenda Strategy. This consistency gives value to the method of discussion and sharing with the local authorities and all the economic and social representatives inaugurated with the Jobs Pact of 2015 and further strengthened with the Jobs and Climate Pact, consolidates the role of direction and control proper to the regional legislative assembly, and confirms the will of the institutions and the entire territorial system to pursue a precise trajectory of sustainable development.

The "Steering Committee for the Governance and Strategic Control of Regional Planning" established by Regional Decree 602/2021 has the task of promoting and verifying the full consistency between the **regional planning of the 2021-2027 European funds and the objectives of the 2030 Regional Agenda for Sustainable Development**.

### **Territorial strategies**

With the approval of the new Leipzig Charter entitled “Transformative power of cities for the common good”, the European states reaffirmed their commitment to the European urban agenda towards 2030 in line with the 2030 Agenda for Sustainable Development and the European Green Deal. The Leipzig Charter therefore supports transformation through integrated urban development, realised through a multi-level and participatory approach.

The reflections and learnings from the Urban Agenda for the European Union are also a reference for the urban strategies that the region promotes in the 2021-2027 planning.

The 2021-2027 RSD, in light of a strategy and objectives with a regional scope, identifies four territorial macro-areas to direct and organise coordinated resources and policies to – Via Emilia Axis, Coastal Axis,

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<sup>[1]</sup> The concentration threshold for the REFD in the most developed regions is 85% on policy objectives 1 - Smarter Europe and 2 - Greener Europe, and at least 30% of the resources on the latter. In the ESF+ at least 25% of the resources must be invested in social inclusion, 12.5% on NEETs, 5% on Child Guarantee, 3% on Fead



Po River and Lower Po Valley Axis, Apennine Axis – and two specific areas to focus integrated territorial strategies on. On the one hand, the more fragile and peripheral areas and territories, identified by the National Strategy of Interior Areas, and in any case the entire Apennine territory, with the essential objective of counteracting territorial imbalances, starting with demographics. On the other hand, cities and urban and intermediate territorial systems, as a privileged dimension for functional strategies to achieve the goals of the 2030 Agenda, to maximise the impact on a regional scale with respect to the ecological and digital transition. These are **Urban Transformation Agendas for Sustainable Development** linked to the Jobs and Climate Pact and the 2030 Agenda Regional Strategy for Sustainable Development, multi-level governance tools functional to the achievement of common objectives that, in the sharing of resources and commitments, involve the regional administration, local authorities, citizens, enterprises and stakeholders in a network, albeit with different roles.

More generally, the challenges posed through the objectives and targets of the Agenda 2030 Regional Strategy for Sustainable Development should be an integral part of all integrated territorial strategies for local development, be they urban, intermediate or inland areas, in order to foster the expected transformations, increase resilience, decrease inequalities and ensure a non-disparate development of territories.

### **Sectoral planning**

Sectoral planning, through which the strategic objectives defined in the various regional planning documents are implemented, must in turn take into account the thematic and sectoral dimension of sustainable development by incorporating the objectives and targets of the regional strategy into plans and programmes. It will likewise be crucial to include in the monitoring of sector plans the benchmark indicators defined in the regional 2030 Agenda Strategy for Sustainable Development.

### **Environmental assessments**

The Strategic Environmental Assessment (SEA) conceived under European Directive 2001/42/EC with the aim of enriching plans and programmes under development with appropriate environmental considerations is an important opportunity for the effective integration of sustainability aspects into planning.

For Plans and Programmes and their variants as well as for Projects and their modifications subjected to environmental assessment procedures (SEA/VALSAT, EIA, Verification of subjectivity to SEA/VALSAT and EIA), it must be made explicit in the documents provided by the proponent and in the assessments of the competent authorities how the Plan/Programme or Project contributes to the achievement of the objectives identified in the 2030 Agenda Regional Strategy for Sustainable Development.

If the implementation of a Plan/Programme or the development of a Project results in a worsening of environmental conditions with respect to the objectives and targets of the 2030 Agenda Regional Strategy for Sustainable Development, evidence of the planned mitigation and compensation measures must be provided.

The contribution to the achievement of the goals and targets of the 2030 Agenda Regional Strategy for Sustainable Development - 2030 Agenda must be monitored over time using specific indicators consistent and dialoguing (scaled) with those of the Regional Strategy.

## Performance plan

The Performance Plan, a three-year planning document prepared pursuant to Italian Legislative Decree no. 150/2009 and Regional Council Decree no. 468/2017, adopted annually by the Council, contains the objectives of change and the operational objectives that derive from them starting from the strategic planning objectives of the REFD and the related Update Note (UNREFD), as well as the related indicators and targets for the measurement and evaluation of organisational performance.

Looking ahead, the measurement of organisational performance will require the introduction of change objectives, operational objectives and consequently **direct** and **indirect impact indicators** closely linked to the targets defined in the 2030 Agenda Regional Strategy for Sustainable Development.

## Information systems and administrative acts

In order to highlight and monitor the contribution of the regional action to the Sustainable Development Goals outlined in the 2030 Agenda regional strategy, an explicit reference to the 17 Sustainable Development Goals may be included in the texts and information attached to the council resolutions and executive decisions. The connection between the administrative acts and the goals as defined in the 2030 Agenda Regional Strategy for Sustainable Development can be developed through an evolution of the regional information systems in use.

## Sustainability education

Education is one of the central focuses of the UN 2030 Agenda for Sustainable Development. A specific goal – Goal 4 – is dedicated to education, but it cuts across all the SDGs as an interdisciplinary and systemic key. As stipulated in the national strategy, sustainability education is an integral part of the 2030 Strategy: it is a useful “vector of change” to trigger the transformation of the current development model. Referring to the most advanced international models, it does not merely transfer “knowledge” but promotes the “skills” necessary for ecological transition.

In Emilia-Romagna, sustainability education received a particular boost thanks to Regional Laws no. 15/1996 and no. 27/2009, which made it possible to implement programmes and the birth of the network of **Centres for Sustainability Education (CEAS)** coordinated by ARPAE's Regional Thematic Centre to support the sustainability strategies and actions of the regional system since the first local 21 Agendas in the 1990s. A process and function that has had significant continuity and ensured continuous improvement.

It is no coincidence that the sustainability education network (SEN), strengthened by inter-institutional partnerships (including the one with the MiTE with the project “Sustainability as a learning process”) and with the worlds of research and education, green business and volunteering, is and will be in the future an active player in the 2030 Regional Strategy for Sustainable Development and in those that will be developed at a local level with its three-year programmes.

The INFEAS 2020-2022 regional programme for sustainability education also contributes to these aims, presenting the main SDGs using educational, participatory, active and transformative teaching methods. Its five integrated educational action areas (human landscapes and ecosystems, sustainable resource

management, environment and well-being, climate crisis and urban resilience, green and circular economy) generate projects that build knowledge and consistent actions.<sup>1</sup>

### **Accompanying actions**

The 2030 Agenda Regional Strategy for Sustainable Development will be disseminated and accompanied by a process of establishing roots in the local communities as well as improved measurement effectiveness in accordance with the national strategy.

To this end, the following lines of action are planned:

- Establish a **partnership with ANCI-ER and UPI-ER** to foster the territorialisation of the SDGs and the identification of targets for sustainable development, consistent with the various levels of government.
- In partnership with the ASviS national training school, define a **2030 Agenda training plan** that envisages actions aimed at regional and local authority personnel, actions for employees of organisations that have an agreement with the SELF platform, educational modules to be made available for training courses co-financed by the region, and more generally training that is aimed at the entire regional community via MOOC.
- Pursue the definition of **new indicators**, including decoupling **indicators** (see paragraph 7.3.1) with the aim of improving the monitoring of the Strategy's policies and lines of action, also aimed at the creation of common and uniform methods and measurement systems at a local level.
- Support the development of **participatory processes** pursuant to Regional Law 15/2018 "Law on Participation in Public Policy Making" with the **Region's Participation Observatory**.
- Carry out a survey of **good local practices**, starting with those nominated for the Responsible Innovators Award, in order to promote the actions carried out in the region that contribute to the implementation of the 17 objectives of the 2030 Agenda for Sustainable Development.
- Launch **information and communication campaigns** aimed at the regional community to raise awareness of the 2030 Agenda Regional Strategy for Sustainable Development, the objectives it sets, the actions the region is putting in place to achieve them, and the contribution everyone can make to the project. As already shared with the signing of the Jobs and Climate Pact, the challenges we have outlined require an active and participatory public. Communicating and sharing with an informed and aware civil society is the first "**common good**" of a democracy. The implementation of the Pact and the Strategy, as well as the results of the annual integrated monitoring, will be accompanied by information and communication actions that ensure transparency, accountability and shared responsibility with respect to the change that we want to pursue together, that consistently orient individual and collective behaviour with respect to the transformation needs of the economy and society, with particular attention to the issue of

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<sup>1</sup>[https://www.arpae.it/it/temi-ambientali/educazione\\_alla\\_sostenibilita/azioni-educative/progetti-e-azioni-di-sistema/educare-all2019agenda-2030/educare-agenda-2030](https://www.arpae.it/it/temi-ambientali/educazione_alla_sostenibilita/azioni-educative/progetti-e-azioni-di-sistema/educare-all2019agenda-2030/educare-agenda-2030)

the climate emergency and its effects, but that also ensure that the public is aware of the opportunities that the transition processes under way offer the region and in particular the new generations.



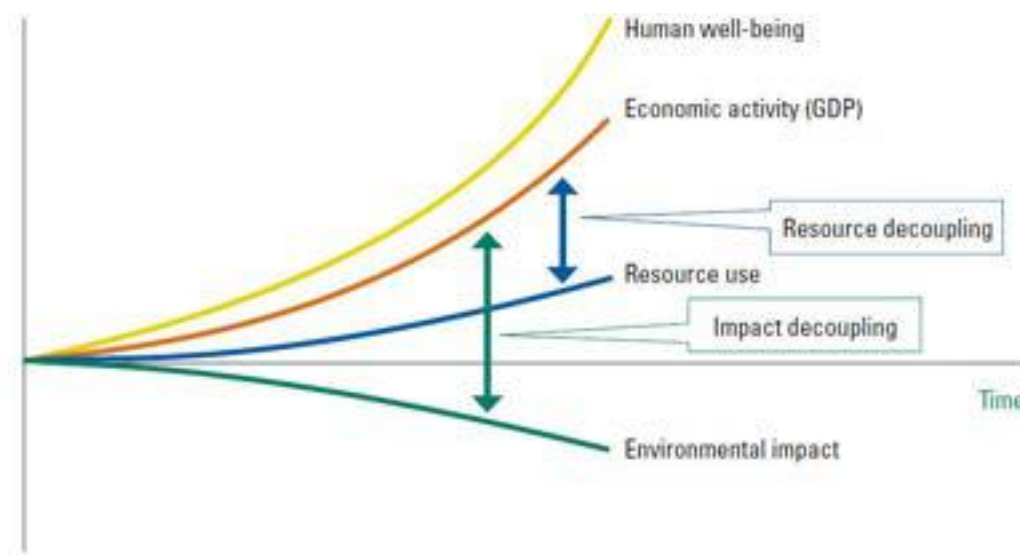
### Decoupling indicators

The relationship between economic growth and environmental degradation has long been the subject of extensive debate. The current economic model must deal with the **finite nature of the resources** the planet makes available – both non-renewable (minerals and fossil fuels) and renewable (such as biomass) – if they are consumed at a higher rate than the time needed to regenerate them.

For this reason, **breaking the link between resource consumption and economic development** (Resource Decoupling) was identified as one of the main goals of the Lisbon Strategy for Growth and Jobs (European Commission, 2005) and the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda.

Indeed, some SDGs call for decoupling indices, more commonly referred to as intensity indices, of environmental pressures or material flows from the economic value produced. These indices, also called integrated indices, are a response to the need for an integrated analysis and reading of sustainable development and thus of our development model.

The OECD defines decoupling as breaking the link between environmental pressures and economic goods, considering two complementary approaches: resource decoupling and impact decoupling. **Fig 1**



**Fig 1** Stylised representation of resource decoupling and impact decoupling. Source: UNEP “Decoupling of natural resource use and environmental impacts from economic growth”, p. 5

Resource decoupling refers to the goal of reducing resource use per unit of economic activity, represented by the ratio of GDP (determinant) to the rate of resource use (Resource Use or Domestic Material Consumption), such as for example energy or material consumption.

Impact decoupling, i.e. the ratio of GDP to environmental impact, occurs over time if the environmental impact decreases as the value produced in economic terms increases. **For both indices, the higher they are the more it is confirmed that decoupling has taken place.**

The inverse of this index, the intensity index, is considered by the United Nation Environment Programme (UNEP) to be one of the most effective in representing the decoupling of environmental pressure from economic growth in a circular economy-oriented path.

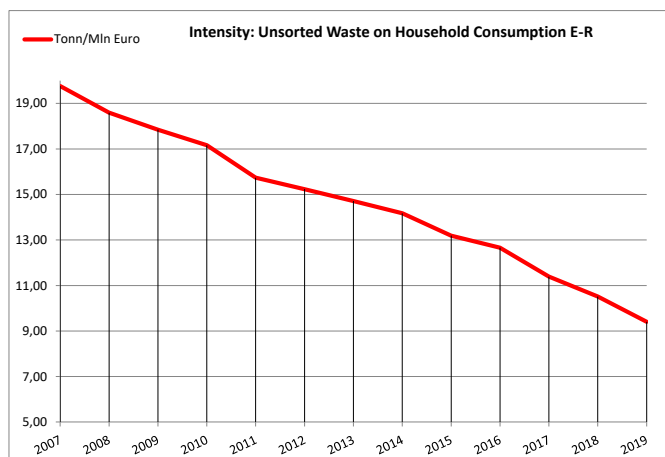
1. Graphical representation of the intensity index considered as the relationship between environmental pressures and economic determinant. Where the index is decreasing, it can be assumed that decoupling is taking place
2. Contextual representation of the two component indicators of the intensity index (*determinant* and *pressure*, i.e. *denominator* and *numerator*), made comparable in the same chart. The two charts together (**1 and 2**) thus make it possible to verify a potential path of decoupling, absolute or relative, and identify respective responsibilities
3. Analytical verification with the OECD decoupling factor. If it is between 0 and 1, decoupling is confirmed. Alternatively, if the factor is equal to 0 or negative, there is no decoupling

<sup>2</sup> “Indicators to measure decoupling of environmental pressure from economic growth”, OECD 2002. ARPAE extracted the methodology from the OECD publication and proposed it to the SNPA Task Force on the 2030 Agenda at the Decoupling Workshop held by videoconference on 20 May 2020 <https://www.arpae.it/it/notizie/workshop-online-sul-disaccoppiamento>

The first analysis proposed is on the **decoupling of unsorted municipal waste generation over the period 2007-2019**<sup>3</sup> which may be followed by other decoupling analyses such as on energy consumption and climate-altering gas emissions.

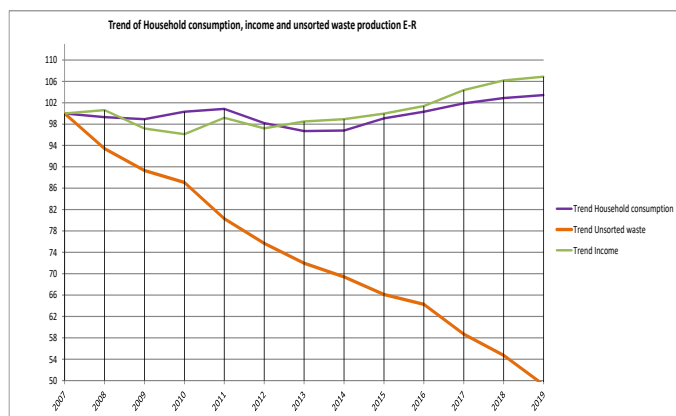
Application to the case study:

- 1) When checking the decoupling of the generation of unsorted municipal waste (MSW)<sup>4</sup> from the economic growth indicator (Expenditures on household consumption)<sup>5</sup> the intensity index shows a decreasing trend and thus it can be assumed that decoupling has occurred.



**Chart 1** Intensity index - Elaboration by ARPAE

- 2) Analysing the trends of **Chart 2** and maintaining the focus on Intensity, one can look for cross confirmation of the decoupling taking place, whether absolute or relative, and the respective responsibilities: whether due to an increase in economic output (the denominator) or a decrease in environmental pressure (the numerator).



**Chart 2** Household consumption and production of unsorted municipal waste - Elaboration by ARPAE

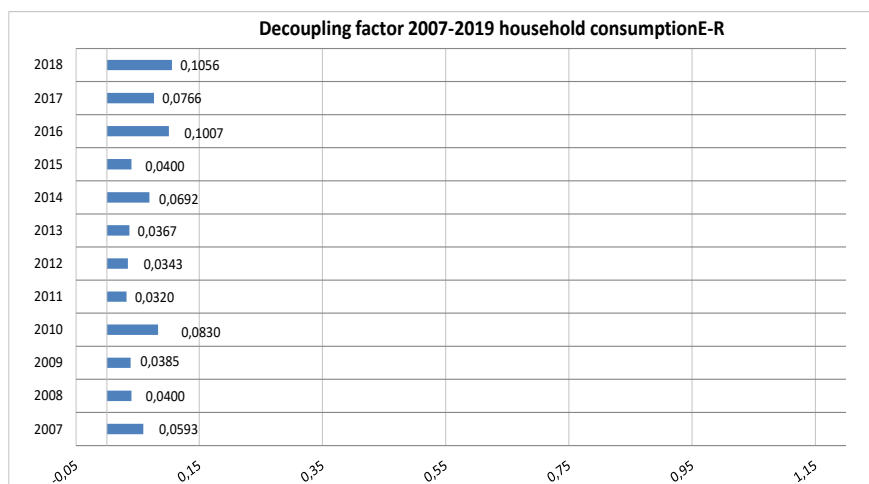
<sup>3</sup> <https://www.arpae.it/it/ecoscienza/numeri-ecoscienza/anno-2021/numero-3-anno-2021/la-sostenibilita-al-centro/bonazzi-palumbo-ecos2021-03.pdf/view> [Bonazzi and Palumbo in *Ecoscienza* 3/2021, p. 32-35]

<sup>4</sup> This indicator of waste production, also referred to as *Intercepted*, is suggested by the OECD 2002 document: i.e. the total amount of municipal waste production that is sent for disposal and/or energy recovery.

<sup>5</sup> Household consumption expenditures are suggested as a determinant by the 2002 OECD paper for the verification of municipal waste decoupling.



This latter check gives us confirmation of a convincing decoupling over the same time period. (**Chart 3**)



**Chart 3** Decoupling factor - Elaboration by ARPAE

**Summary comment:** The decoupling of the regional production of unsorted municipal waste from the indicator of economic growth, both graphically and analytically, is confirmed over the period.

Indeed, it can be seen from **Chart 2** how close we are to *absolute decoupling*, which is already anticipated by the continuously decreasing trend of the intensity index in **Chart 1**.

The satisfactory presence in Emilia-Romagna of an absolute decoupling of the production of this waste, in itself rare, is further characterised by the assignment of responsibility to the constant decrease in environmental pressure.

The contribution to decoupling made by the continued reduction of unsorted municipal waste, the intercepted, is greater than the increase in the economic indicator.

Thus the absolute decoupling in the years 2007-2019 is due to a greater reduction in unsorted waste rather than not entirely confirmable economic growth after the financial crisis that started in 2007 and then became transversal and global.

## 3.2 Agenda 2.0 and the consistency of the public policies of the metropolitan city of Bologna

The Metropolitan Agenda 2.0 is consistent with the national strategy and with the Emilia-Romagna region's Strategy for Sustainable Development, not to mention the main European Union strategies and policies. The Agenda identifies 77 indicators related to the 17 UN Agenda Goals that can analyse the metropolitan context and compare it with regional and national contexts. The selection of indicators chosen to monitor the metropolitan city's progress was done in keeping with the Ministry of Ecological Transition's proposal to assign the indicators of the national sustainable development strategy to the National Strategic Objectives (NSOs) and the first ASviS Territorial Report of 2020. Based on the indicators selected, the relevant 29 quantitative targets defined by European, national and regional planning were identified, offering an assessment of the analysed territory's distance from them over time. As described for the regional strategy, here again the Eurostat method was used to assess the achievement of the quantitative targets, which involves assessing the intensity and direction the indicator is moving in with respect to the target using arrows.

For each UN 2030 Goal the Agenda 2.0<sup>6</sup> is divided into two components:

1. **mcBO's positioning** with respect to: quantitative contextual objectives measured by indicators defined by European, national and regional planning or identified by ASviS-Urban@it experts or obtained using the Eurostat method<sup>7</sup>; specific objectives relevant to mcBO's strategic choices.

These data are compared with larger territories (national, regional).



2. The **main actions already in place or in the process of being implemented**, resulting from a wide-ranging survey of European, national, regional, metropolitan and where possible municipal strategies, plans, programmes and regulations. The actions are included in the **"planning scenario"** where they are actions already in place or planned; or in the **"target"**

<sup>6</sup> [https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/Home\\_Page/Agenda\\_in\\_evidenza](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/Home_Page/Agenda_in_evidenza)

<sup>7</sup> 29 were identified: the list is detailed in Chapter 6.

*scenario*” where they refer to longer-term guideline actions contained in the **National Recovery and Resilience Plan**, in the **Emilia-Romagna Regional Pact for Work and Climate** and in the **Metropolitan City Pact for Work and Sustainable Development**.

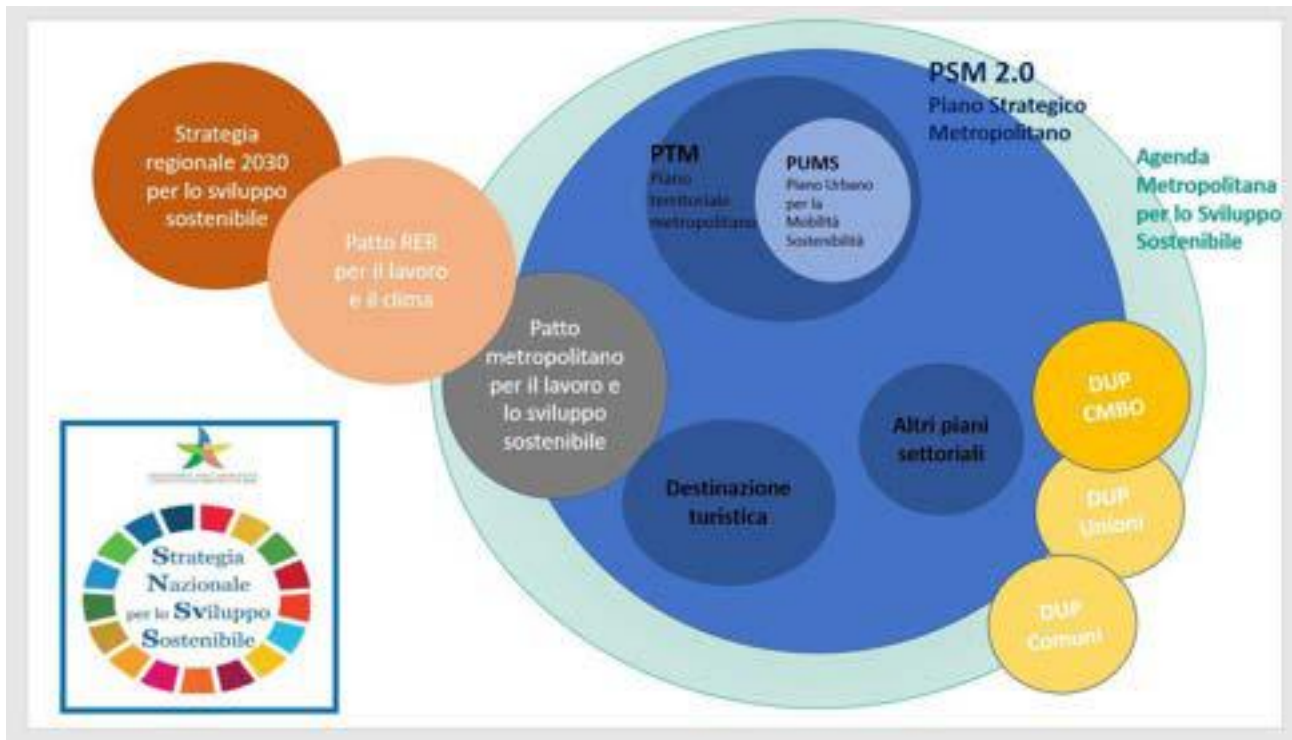
Target	Azioni scenario Programmatico CM	Azioni scenario Obiettivo (Patto per il lavoro e lo sviluppo sostenibile della CM, 2021)	Policy e/o progetti del PSM 2.0 e indicatori specifici
3.6	Servizio di supporto alle relazioni scuola territorio-mondo del lavoro. Finalità tra le altre cose progetti di innovazione dei percorsi tecnico-professionali in sintonia con gli obiettivi di sostenibilità economico-sociale-ambientale e con le esigenze del mondo del lavoro e i temi di sviluppo locale, al fine di una migliore occupabilità (PSM 2.0 2018, 4, IV, 4, 1, p. 55)		Policy: Insieme per il lavoro. Indicatore: n. percorsi formativi insieme per il lavoro, 243 nel 2019. Policy: Piano di intervento metropolitano per il secondo tra scuola, Formazione e lavoro. Indicatore: n. azioni/progetti compresi nel Piano, 25 nel 2019 n. soggetti pubblici e privati compresi nel Piano, 114 nel 2019. Policy: Protocollo di intesa tra CM, Camera di Commercio e Ufficio scolastico territoriale. Indicatore: n. azioni/progetti attivati, 25 nel 2019. Policy: Protocollo di intesa tra CM, Inps, Inpsil e Ufficio scolastico territoriale. Indicatore: n. azioni/progetti attivati in collaborazione con Inpsil Inps, 1 nel 2019.
3.6	Progetto Operazioni orientative per il successo formativo. Realizza servizi in tema di orientamento scolastico, formativo e professionale rivolti a docenti, giovani e famiglie (PSM 2.0 2018, 4, IV, 8, 1 e 2, p. 69-70)	Progetto 1.6 Orientamento e supporto al successo formativo per adolescenti e giovani. Consolidamento del sistema metropolitano di orientamento per il successo formativo, strutturandone ulteriormente l'architettura metropolitana e distribuita, sviluppando le azioni e gli strumenti innovativi già in essere e incrementando la capacità di integrazione sinergica degli attori pubblici e privati interessati.	Policy: Piano triennale e annuale Orientamento e successo formativo. Indicatore: n. delle istituzioni scolastiche di secondo grado ed enti di alta formazione nel Piano, 80 nel 2019. Progetti: Bando annuale per la concessione delle borse di studio. Indicatore: n. beneficiari borse di studio, 1528 nel 2019 (suoi 424.000 complessivi).
3.6	Festival della Cultura tecnica. È un cartellone annuale di eventi aperti alla cittadinanza che si svolge dal 2014 ed è promosso in collaborazione con numerosi partner, valorizza il percorso tecnico e professionale e la cultura tecnica, scientifica e tecnologica in raccordo con la cultura umanistica, approfondisce il rapporto tra sviluppo sociale, culturale ed economico e ospita eventi di avvicinamento tra giovani e mondo del lavoro (PSM 2.0 2018, 4, IV, 5, 1, p. 26)	Progetto 1.7 Cultura tecnica, scientifica e tecnologica e nuove competenze nella scuola secondaria per la sostenibilità sociale, economica e ambientale. Il prevede il potenziamento delle azioni metropolitane e regionali del Festival della Cultura tecnica, con engagement alla dimensione nazionale.	Progetto: Festival della Cultura tecnica-edizione metropolitana di Bologna. Indicatore: 200 eventi e 100 soggetti coinvolti nel 2019.
3.6	Investimento continuo e costante nella cultura tecnica. Deve divenire strumento competitivo nazionale, rappresentando un fattore cruciale anche per la creazione delle startup lavorative delle persone e delle imprese (PSM 2.0 2018, 4, IV, 4, 1, p. 54)	Progetto 1.7 Cultura tecnica, scientifica e tecnologica e nuove competenze nella scuola secondaria per la sostenibilità sociale, economica e ambientale. Azioni nella scuola secondaria di primo grado (progetto pilota, Summer school della Cultura tecnica) Azioni nella scuola secondaria di secondo grado (percorsi per le Competenze trasversali e l'orientamento ICT) - ex abbinata scuola-lavoro, formazione tecnica e professionale in rete).	Progetto: Cultura tecnico-scientifica nella scuola primaria e secondaria di primo grado. Indicatore: n. azioni/progetti attivati nella scuola primaria e secondaria di primo grado, 5 in 81 istituti nel 2019. Progetto: Cultura tecnico-scientifica nella secondaria di secondo grado e nella IFT. Indicatore: n. azioni/progetti attivati nella scuola secondaria di secondo grado e nella IFT, 11 in 83 istituti nel 2019.

Finally, the actions of the province capital are assessed. This part could be expanded to include other municipalities.

The Metropolitan Strategic Plan 2.0<sup>8</sup> took a central role in identifying actions for the pursuit of targets on all dimensions, and its monitoring and evaluation system offered the possibility of identifying an initial set of specific indicators associated with Agenda 2.0 actions.

Agenda 2.0 is therefore a cross-cutting key for interpreting policies at various levels and not a new plan separate from the others, with the definition of qualitative-quantitative objectives and indicators that are directing the planning of the body, starting with the **Urban Plan for Sustainable Mobility** and the **Metropolitan Territorial Plan**. Moreover, the integration of Agenda 2.0 into the metropolitan strategic and sectoral planning is ensured through its embedding in the Single Planning Document (SPD) of the metropolitan city, for which a specific experimental action has been implemented.

<sup>8</sup> [https://psm.bologna.it/Engine/RAServeFile.php/f/documenti/Relazione\\_PSM\\_2.0.pdf](https://psm.bologna.it/Engine/RAServeFile.php/f/documenti/Relazione_PSM_2.0.pdf)



# 4

## Forums and means for involving civil society

In order for the Strategies and Agendas to work and to concretely respond to the objectives for sustainable community development, their elaboration and implementation must be shared with civil society and local stakeholders.

The metropolitan city has promoted a series of **communication and dissemination initiatives inside and outside the body**, with a focus on **its employees, school communities**, as well as **local institutions and stakeholders**. This involvement, which is fully in line with the spirit of the UN 2030 Agenda, in fact aims at ensuring mutual accountability among the actors in the area and contributes to the initiation of a shared governance process. Agenda 2.0 was publicly presented at an **international event** held remotely on 24 June 2021, which more than 200 people followed.

In order to guarantee the maximum participation of the region both in the strategy drafting phase and in its implementation, the Emilia-Romagna region has established the **“Forum for the 2030 Agenda Regional Strategy for Sustainable Development”** based on the integrated evolution of already established or ongoing regional participatory experiences.

The Forum is also instrumental in ensuring synergies with the **Emilia-Romagna Sustainable Coordination (ERSC)** and with **Agenda 2.0 for Sustainable Development of the metropolitan city of Bologna**. The aim is to optimise initiatives, resources and tools with respect to the 2030 sustainability goals, as also required by the national framework supporting the construction of metropolitan agendas.

This network, which will be expanded over time, characterised by the involvement of other administrations, the economic and social partnership, businesses and civil society, takes place in an articulated and flexible but integrated framework through tools and discussions, with a view to the continuous refinement of forms of cooperation for sustainable development.

### 4.1 Stakeholder engagement in the Emilia-Romagna region

On 14 December 2020, after a long process of elaboration and discussion, the region and the institutional, economic and social partnership<sup>9</sup> signed the **Jobs and Climate Pact**.

The Pact – which draws significantly from the UN's **2030 Agenda for Sustainable Development** – outlines a project for the **relaunching and development** of Emilia-Romagna, establishing shared commitments and responsibilities with respect to a common path that improves the quality of life of people and the planet and overcomes the conflict between **development and the environment**. A path

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Emilia-Romagna region, Associazione Generale delle Cooperative Italiane (AGCI), Associazione Nazionale Comuni Italiani (ANCI), Associazione Nazionale dei Costruttori (ANCE), Metropolitan City of Bologna, Coldiretti, Comitato unitario delle professioni intellettuali degli ordini e dei collegi professionali (CUPEP), Commissione regionale ABI, Municipality of Bologna, Municipality of Cesena, Municipality of Ferrara, Municipality of Forlì, Municipality of Modena, Municipality of Parma, Municipality of Piacenza, Municipality of Ravenna, Municipality of Reggio Emilia, Municipality of Rimini, Confagricoltura, Confapi Emilia, Confapindustria, Confartigianato, Confcommercio, Confcooperative, Confederazione Generale Italiana del Lavoro (CGIL), Confederazione italiana agricoltori (CIA), Confederazione Italiana Sindacati Lavoratori (CISL), Confederazione nazionale dell'artigianato e della piccola e media impresa (CNA), Confederazione Produttori Agricoli (COPAGRI), Confesercenti, Confimi Romagna, Confindustria, Confprofessioni, Confservizi, Consiglio Nazionale delle Ricerche (CNR), federazione italiana Biciclette (FIAB), Forum Terzo Settore, Legacoop, Legambiente, Province of Ferrara, Province of Forlì-Cesena, Province of Modena, Province of Parma, Province of Piacenza, Province of Ravenna, Province of Reggio Emilia, Province of Rimini, Politecnico di Milano, Rete dei Comuni Rifiuti Zero, Ufficio scolastico regionale, Unioncamere, Unione delle Province d'Italia (UPI), Unione Generale del Lavoro (UGL), Unione Italiana del Lavoro (UIL), Unione Nazionale Comuni Comunità Enti Montani (UNCCEM), Università Cattolica del Sacro Cuore, University of Bologna, University of Ferrara, University of Modena and Reggio, University of Parma.

as challenging as it is necessary, particularly for the Po Valley, that does not jeopardise productive and natural capital, the employment of people and the well-being of society, but is instead a **driver of new and different development**.

For these same reasons, the Pact assumes **2030** as its horizon, which is indispensable to set the territory's development on new foundations and align Emilia-Romagna's pathway with those envisaged by the 2030 Agenda, the Paris Agreement, the European Union's target to reduce climate-changing emissions by at least 55% by 2030, the 2021-2027 planning of European funds and the National Recovery and Resilience Plan.

### The working method


The Pact is based on the quality of relations between institutions, economic and social representatives, mutual recognition of the role that each of the signatories plays in society, the sharing of strategic objectives and the consequent assumption of responsibility.

The signed document and the path of **democratic participation** and **shared planning** that accompanied its elaboration are a confirmation and a “relaunching” of the method started in 2015 with the signing of the Jobs Pact, which in five years allowed Emilia-Romagna to recover ground from the long crisis that began in 2008, positioning it in terms of GDP per capita, added value, unemployment rate and exports among the best performing Italian and European regions.

Debate and sharing strengthen democracy and generate cohesion, and are a heritage that this region has been able to cultivate even in the most critical moments. The region has chosen to develop them further in order to cope with the complexity of the times and to undertake those changes necessary to guarantee a prosperous future for the public, and especially for the **younger generations**.

### Strategic objectives and cross-cutting processes

The Pact outlines four strategic objectives and four cross-cutting processes that drive decisive dynamics for the inhabitants of the region. Each of them sets out guidelines that indicate the actions that the signatories consider to be priorities and undertake to implement in accordance with their own roles.

FROM THE STRATEGIC OBJECTIVES OF THE PACT TO THE REGIONAL STRATEGY		
Emilia-Romagna, region of knowledge and know-how	Investing in education, training, research and culture: not to undergo change but to bring about change; to generate quality jobs and combat precariousness and inequalities; to innovate manufacturing and services; to accelerate the ecological and digital transition.	
Emilia-Romagna, region of ecological transition	Accelerating the ecological transition to achieve carbon neutrality before 2050 and moving to clean and renewable energy by 2035; combining productivity, equity and sustainability, generating new quality jobs.	
Emilia-Romagna, region of rights and duties	Tackling territorial, economic, social and gender inequalities that weaken cohesion and prevent equitable and sustainable development	
Emilia-Romagna, region of work, enterprises and opportunities	Design a European, young and open region that invests in quality, professionalism and innovation, beauty and sustainability; to attract businesses and talent, supporting territorial vocations and adding new value to manufacturing, services and professions.	



FROM THE CROSS-CUTTING PROCESSES OF THE PACT TO THE REGIONAL STRATEGY	
Digital transformation	Make a major investment in the digital transformation of the economy and society starting with the three indispensable components: infrastructure, right of access and people's skills.
Simplification Pact	Strengthen and qualify the public administration and reduce bureaucracy to increase competitiveness and protect the environment and work within the law.
Legality	Promote legality, an identity value of our society and a guarantee of social and environmental quality.
Participation	Foster a new empowerment of communities and cities, engines of innovation and development, in the concrete management of Pact strategies.



## 4.2 Stakeholder engagement in the metropolitan city of Bologna

The opportunities for engagement with the metropolitan city's **stakeholders** took place through **institutional and project meetings**, such as the seminars of the mayors (16 November 2020) and of the development council together with the table of investee companies (17 November 2020), the participatory process in the Union of Municipalities of the Reno, Lavino and Samoggia Valleys, in the new Imola district and in the municipality of Bologna (25 March-23 April 2021), and **quantitative and qualitative surveys**: all this contributed to generating an ecosystem leading to the validation of the metropolitan city's Agenda 2.0 proposal.

The **path**<sup>10</sup> that involved the administrators and stakeholders of the municipality of Bologna, the new Imola district and the Union of the Municipalities of the Reno, Lavino and Samoggia Valleys was aimed at creating a shared vision on the sustainable development objectives and actions included in Agenda 2.0. It was prepared by sending a guide to participants to help and direct their reflection. This document has a part on context and a part listing the quantitative objectives and core indicators of UN Agenda Goal 11 "Sustainable Cities and Communities", with an analysis of the specific territory, classified by dimensions (social,<sup>11</sup> environmental,<sup>12</sup> economic<sup>13</sup> and institutional<sup>14</sup>). For each Goal/Target the following are presented: the distance from the Goals at a national, regional, metropolitan city and specific territory level, when data availability allows, with relevant commentary; the main actions

<sup>10</sup> [https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/documenti](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/documenti)

<sup>11</sup> 1. No poverty; 2. Zero hunger; 3. Good health and well-being; 4. Quality education; 5. Gender equality; 10. Reduced inequalities.

<sup>12</sup> 7. Affordable and clean energy; 11.2. Mobility; 13. Climate action (combined under Metropolitan Bologna carbon neutral 2040-2050); 6. Clean water and sanitation; 11.3 Land consumption (later merged into 15. Life on Land); 11.6. Air quality; 12. Responsible consumption and production;

<sup>13</sup> 8. Decent work and economic growth

<sup>14</sup> 16. Peace, justice and strong institutions.

already in place or planned for each level, the result of a necessary selection; the summary of the Emilia-Romagna region's Pact for Jobs and Climate (December 2020) and the metropolitan city's Pact for Jobs and Sustainable Development (January 2021) with an indication of the lines of action of the strategic objectives of the regional pact and the project actions of the three clusters of the metropolitan pact.

The various meetings were conducted online as follows:

1) Plenary phase: introduction to the process, illustration of the main principles of the approaches with which Agenda 2.0 was constructed, the method employed to elaborate quantitative and qualitative objectives and the respective targets. Explanation of the quantitative targets and their main actions in Agenda 2.0 pertaining to 13 of the 17 SDGs of the 2030 Agenda including 3 targets for goal 11. The Guide to the participatory path was presented.

2) Working tables. Three working tables were structured, related to the classification of goals and targets of Goal 11 by prevailing dimensions, namely: a) social; b) environmental; c) economic and institutional. Dedicated to listening, collecting and discussing ideas and proposals in order to arrive at an overall framework – shared as much as possible throughout the Bologna metropolitan area – of objectives, indicators and actions to achieve them. During these virtual tables, the following questions were asked:

1. Quantitative targets identified at a national or a regional level can be differentiated at a metropolitan, union and municipal level and how?
2. Are there other quantitative targets that could be identified at metropolitan, union and municipal levels? If so, which?
3. What further actions should be taken at the level of the metropolitan city and municipality of Bologna to achieve the quantitative objectives (target scenario)?

3) Concluding phase: report in plenary session on what was discussed in the working tables and sharing of the main results that emerged aimed at aligning the different areas of sustainability.

In general, it can be emphasised that in the various meetings of this participatory process a significant awareness of planning instruments has emerged, including some that are supra-territorial, as well as an inclination on the part of the participating subjects to read the metropolitan context in light of sustainable development issues.

## 6 INCONTRI DI CONSULTAZIONE

25/03/21 Comune di Bologna – stakeholder  
31/03/21 Comune di Bologna – amministratori  
12/04/21 Unione Reno Lavino Samoggia – amministratori  
16/04/21 Circondario Imolese – stakeholder  
19/04/21 Unione Reno Lavino Samoggia – stakeholder  
16/04/21 Circondario Imolese – amministratori

270 PARTECIPANTI

## FINALITÀ:

Creare una visione condivisa degli obiettivi/target ed azioni di Sviluppo Sostenibile inseriti nell'Agenda 2.0

**MODALITÀ DEGLI INCONTRI** (coordinati e facilitati da FIU)

- consultazione mediante **brainstorming** (board di Miro)
- suddivisione dei partecipanti in **3 gruppi** :  
**sociale e welfare** (Goals 1-2-3-4-5-10), **economia** (Goals 8-12-16) ,  
**ambiente** (Goals 6-7-11-12-13)

Nei diversi incontri del processo partecipato è emersa una **significativa consapevolezza degli strumenti di pianificazione**, anche sovra-territoriale, e una **propensione da parte dei soggetti partecipanti alla lettura del contesto metropolitano alla luce dei temi dello sviluppo sostenibile**.



At the same time as the participatory process, the mapping of ongoing actions in the metropolitan area was initiated with the aim of investigating good practices that contribute to achieving the Sustainable Development Goals (SDGs) of the UN 2030 Agenda. The survey aims to integrate Agenda 2.0 with good sustainability practices and disseminate them with a view to replicability and diffusion, raising awareness. The activity of identifying actions or good practices in the metropolitan territory started from the reconnaissance of the actions already in place or planned in the various planning instruments of the metropolitan city. The most recent instruments drawn up at a regional level (*Emilia-Romagna Regional Jobs and Climate Pact*) and at a metropolitan level (*Metropolitan Jobs and Sustainable Development Pact*) were also analysed. In both cases, the qualitative analysis of the current strategic planning was used to make an association between the various lines of action and projects and the specific targets of the SDGs. The reflection on the location of the lines of action of the Metropolitan Pact and the projects of the Regional Pact was functional to their classification by SDG goals and targets, in line with the choices of method and merit made in the various activities outlined in them and therefore consistent with the Agenda 2.0 approach.

In order to carry out a comprehensive survey of the actions and good practices implemented or being implemented by stakeholders in the area, a **questionnaire by invitation** was prepared. The questionnaire, a purely qualitative survey, was addressed to the metropolitan city's stakeholders, totalling 122 entities of various nature. The survey, which started on 8 March 2021 and ended on 2 April 2021, was conducted on the metropolitan city's web platform. The questionnaire is divided into the following three sections:

- 1) Identification questions: designed to classify the entity-stakeholder on the basis of its legal nature, size and location in the metropolitan territory.
- 2) Description of priority actions: each entity is asked to indicate a maximum of five actions/projects/good practices carried out or under way in the entity in the last five years that are considered to have contributed or contribute to the achievement of the UN 2030 Agenda's sustainable development goals, the association of which must be made explicit. If there are more than five, the entity is invited to choose the most significant ones on the basis of the area of intervention considered a priority by the entity, and of these those considered to have the

greatest impact. For each of these, basic information was requested (objectives, content, type, duration, territorial context, partnership, costs, funding sources, measurement of results), and links to external content could be included.

- 3) Additional actions: respondents were given the opportunity to list up to a maximum of 10 additional projects with a summary description and association with the relevant SDG(s) to report additional actions/projects/good practices of particular relevance.

The respondents totalled 47 out of 122 organisations, or 38.5% of those invited. The total number of priority actions/good practices/projects was 178, while 55 were “further actions” entered in the third section by the participants.

Each action was associated with one or two Sustainable Development Goals (SDGs) of the UN 2030 Agenda to which it contributes/has contributed or will contribute most.

An analysis of the surveys (*fig. 1*) reveals a primary focus on the environmental dimension of sustainable development, with an expected prevalence for its interactions with urban environments (goals 7, 11, 13, 15). Related to this was the focus on production and consumption from a circular economy perspective (goals 12 and 9), which, however, is not significantly reflected in the socio-economic implications. The goals dedicated to them (goals 1, 5, 8) remain below the median value of 10 associations, with the exception of goal 10. Reducing inequalities reached 17 associations (or 6% of the total), testifying to an increasing focus on social vulnerabilities. The focus of priority actions related to goals 3 and 4 further reflect the needs that the COVID-19 pandemic highlighted at a territorial level. Lastly, the presence of 10 associations – the median value – with Goal 17 is worthy of note. Partnerships for goal achievement: this finding indicates a positive focus on the need to create networks for sustainable development, fully in line with the spirit of the UN 2030 Agenda.

This snapshot remains valid even if we consider other actions that the respondents could describe (*fig. 2*): there is always a prevalence of goal 11. Sustainable cities and communities at 21%, followed by Goal 3. Good health and well-being at 12%, goal 13. Climate action and 4. Quality education at 10%, goal 15. Life on Land at 8%. Associations with Goals 14. Life below water and 16. Peace, justice and strong institutions are always absent.

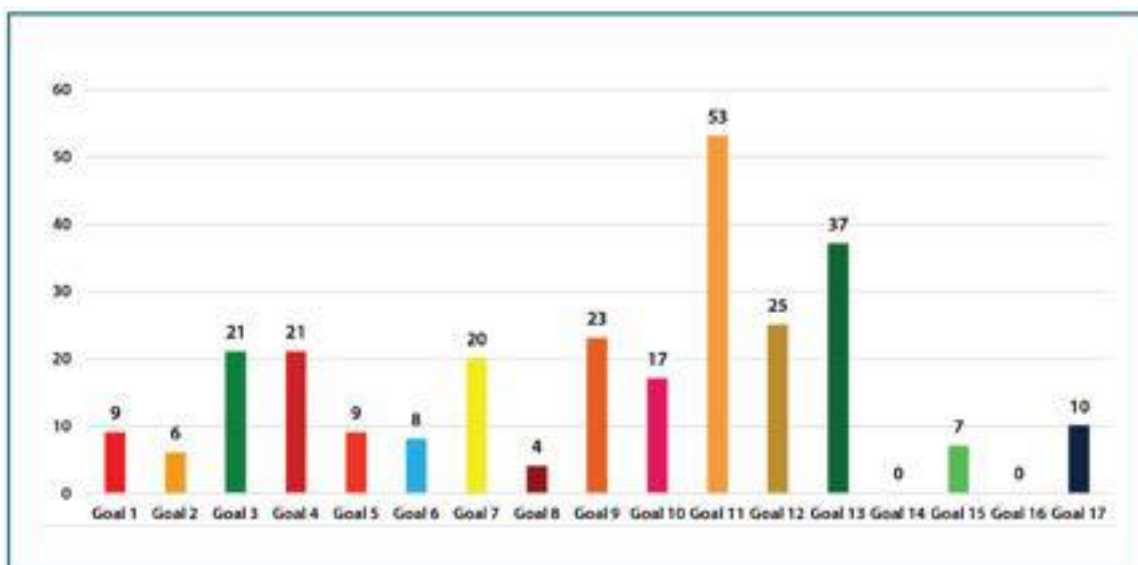


Fig. 1 - Contribution of priority actions/projects/good practices to the Sustainable Development Goals (SDGs)

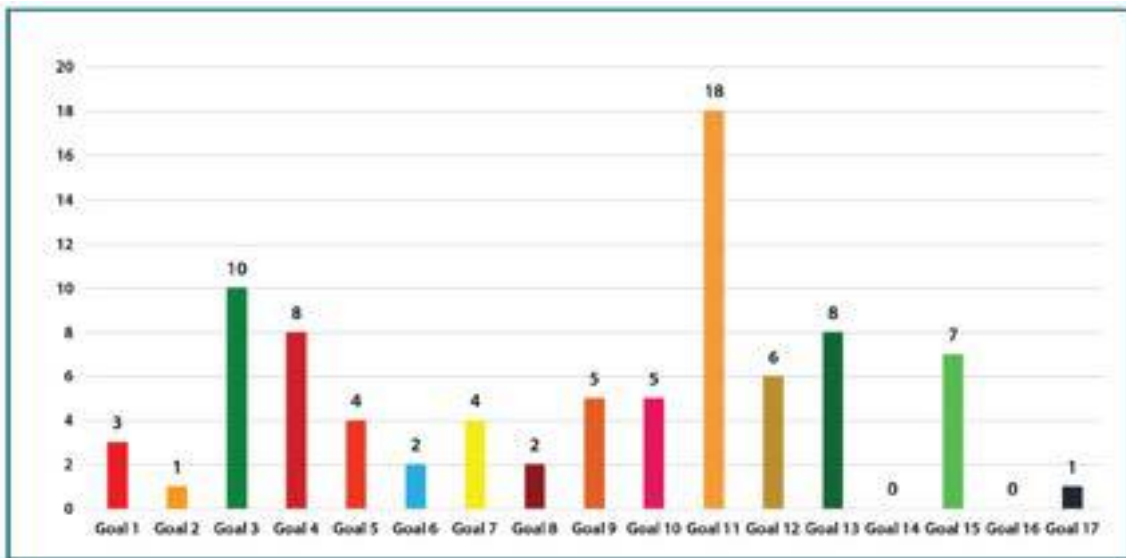


Fig. 2 - Contribution of further actions/projects/good practices to the Sustainable Development Goals (SDGs)

#### 4.2.1 SUSTAINABLE WORKING STYLES

Sustainable work styles are defined as a way of experiencing everyday working life in a socially, environmentally and economically sustainable manner, i.e. compatible with social cohesion, environmental protection and economic development.

The metropolitan city of Bologna was committed to developing an action that would bring forth proposals for sustainable work styles from the grassroots, from the very employees who make up its communities and its social and human capital.

The avocado was provocatively chosen as the logo, the cultivation of which is known to be one of the most unsustainable, but whose local cultivation is currently being experimented with in order to reduce its importation.

The product of this project is the document *Sustainable Working Styles: a handbook for metropolitan local authorities*, produced after the participatory process with the employees of the metropolitan city of Bologna, which reports on the results and the process followed, also providing some useful tools to implement it, in order to make it replicable in other contexts and in other public organisations.

The participatory process, which started in January and ended in September 2021, consisted of three phases:

1. Exploration phase: a selected group of employees in managerial and organisational positions was interviewed, which raised the first needs and issues relevant to the organisation with regard to the topic of sustainability and the first ideas for practical proposals. Based on these initial elements, a survey was drawn up for all employees of the organisation to investigate their perception of the current status of the organisation with regard to sustainability, as well as to encourage active participation with the possibility of proposing ideas and suggestions.

2. Conceptualisation phase: this phase consisted of a focus group involving young Generation Y employees, and a collective co-design phase that made it possible to arrive at new ideas and concrete proposals from the grassroots, with the aim of taking them forward towards feasibility, even autonomously by the employees themselves. The ideas developed are as follows: *Water at 0 m* - Water for all without plastic; *Urban-indoor forestation* - Adopt a green area; *Welcome to the metropolitan city* - Onboarding.

3. Dissemination and experimentation phase: drafting of the handbook for sustainable work styles, to be supported, disseminated and replicated in the other entities of the Bologna metropolitan area.

#### 4.2.2 INVOLVEMENT OF THE METROPOLITAN SCHOLASTIC COMMUNITY

The National Strategy for Sustainable Development 2021 aims at strengthening the area dedicated to the “Vectors of Sustainability”, enabling conditions for triggering a transformation towards sustainable development: one of these is dedicated to the “culture of sustainability”, understood as education, training, information and communication. Specifically, education is articulated both as a capacity to recompose educational fragmentation, innovating the places and actors of education, and as an activator of an educating community through, for example, the development of educational partnerships for sustainable development. The aim is to make schools and all those who attend them increasingly aware that sustainability is a choice that must be translated into concrete initiatives every day, that it is precisely the skills and creativity of teachers and students that can be promoters of this development.

At the local level, the metropolitan city of Bologna is supporting the school community in establishing paths to inform, educate and promote sustainable development issues, investing in the education of teachers, students and staff working in the school. Specifically, it took two specific actions:

1. The announcement of a **competition on sustainable development issues**<sup>15</sup> aimed at all secondary schools in the metropolitan territory. In partnership with the regional scholastic office, Office V - Territory of Bologna, with a public notice the metropolitan city of Bologna announced for the school years 2019/2020 and 2020/2021 a competition of ideas for the dissemination of the principle of sustainable development in the metropolitan area’s secondary schools. This initiative intends to promote the establishment of scholastic communities of shared practices, to pursue the sustainability dimension through: the creativity and skills of teachers and students, promoters and protagonists of sustainable development choices; the involvement of the scholastic community, and the launching of education and awareness-raising processes for sustainable development; the promotion of environmental and sustainability culture. The aim is to raise the awareness of and responsibility for environmental issues in younger and older generations.

For the 2019/2020 edition, students were invited to design and implement an awareness-raising campaign on Agenda 2.0 issues. Forty-three classes participated and 13 project ideas were awarded

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<sup>15</sup> [https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/Home\\_Page/Archivio\\_news/Leva\\_per\\_la\\_sostenibilita](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/Home_Page/Archivio_news/Leva_per_la_sostenibilita)



€1,000. From these, a specially formed commission chose the three winning projects, which won €2,000 for first place, €1,200 for second place and €800 for third place.<sup>16</sup>

The 2020/2021 edition (still in progress) requires students to tell the story of sustainability – in the broad and articulated sense of the UN 2030 Agenda – by means of a video starting from the places/people in the metropolitan area who practise it, enhance it and promote it, identifying a public space to be reinterpreted in a sustainable key. As in the first edition, the same cash prizes are planned, which will be used by the participating schools both to make the submissions and to promote other sustainability-related actions.

2. The focus on sustainable development issues of the **Festival of Technical Culture**,<sup>17</sup> an initiative conceived and promoted by the metropolitan city of Bologna and implemented starting in 2014 in collaboration with numerous partners including institutions, schools, bodies and companies within the framework of the Bologna Metropolitan Strategic Plan. The festival is structured as a calendar of events aimed at raising awareness and appreciation of all the channels and directions of technical and vocational education and training; at promoting greater awareness of the connections between doing and thinking and of the importance of technology and science in people's lives (technical-scientific skills as citizenship skills); to promote the connection between the education and training system, the production system, local authorities and all the players in the area, for a community development that is simultaneously social, cultural and economic; to give visibility to the innovative projects and initiatives implemented by all the metropolitan players with respect to the aforementioned topics. The events are free of charge and aimed at different targets, and great attention is paid to young people and the education system, as well as to the involvement of citizens and local communities.

Starting with the 2018 edition, the metropolitan city and the Emilia-Romagna region have promoted the dissemination of the festival in all the provinces of the region.

The 2020 festival inaugurated a cycle of editions dedicated to the UN 2030 Agenda for Sustainable Development, in strong connection with Agenda 2.0, dedicating it in particular to “sustainable development and resilience”, understanding the latter as a key factor also for overcoming the crisis caused by COVID-19. The 2021 edition paid specific attention to the education system, choosing as its focus the UN objective “Quality education” to contribute to an assessment, also from a scientific point of view, of the positive and negative effects of remote learning, lockdowns, social distancing etc. on the teaching/learning processes, on the organisation of schools and other educational agencies, on professional skills, on the psycho-social dimensions of youth and adults, on orientation, on the importance of education to counteract the loss of work and opportunities, on the role of the local region and the production system, capitalising on experiences and starting from new knowledge to reprogramme the actions and intervene on the marginalities that have been created.

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<sup>16</sup> Videos of the winning schools:

[https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/Home\\_Page/IdEE\\_giovani\\_e\\_vincenti\\_per\\_lo\\_sviluppo\\_sostenibile](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/Home_Page/IdEE_giovani_e_vincenti_per_lo_sviluppo_sostenibile)

<sup>17</sup> <https://www.festivalculturatecnica.it/>



# 5

## Pilot actions of the metropolitan city of Bologna

As part of Agenda 2.0, the metropolitan city has launched a series of pilot projects, each of which contributes to the achievement of the SDGs.

1. Transition towards a circular economy in the hill and mountain area of the metropolitan city of Bologna.
2. Pre-feasibility study on the reorganisation of public transport services in production areas.
3. Guidelines for metropolitan forestry.
4. Operation Centre & Cities Web.

As noted in *section 4*, parallel and cross-cutting actions concern **communication and dissemination of sustainable development within and outside the organisation**.

### 5.1 Transition towards a circular economy in the hill and mountain area of the metropolitan city of Bologna

The metropolitan city has addressed the issue of circular economy, developing a project that specifically concerns the 23 municipalities of the Apennines: what does it mean to pursue a circular economy in a hill and mountain area? Which aspects come more naturally and which are more complex to manage? How can companies in this area, which for geo-morphological and historical reasons are less involved in the innovation and development that characterise the Bologna metropolitan area, be supported and accompanied towards a future of circularity? To answer these questions, the metropolitan city promoted the drafting of guidelines,<sup>18</sup> starting with an analysis of the current spread of the circular economy in the aforementioned 23 municipalities, interpreted in light of a specially designed circularity indicator.

The concept of “circular economy” was broken down into 10 relevant dimensions: eco-design; procurement; energy and resources; waste; transport and logistics; promotion of sustainable lifestyles; circularity of supply chains; sharing with the local community; inclusiveness and certification. For each of these, the document explains the different activities in which that particular dimension of circularity can manifest itself; it discusses the actual or potential problems for Apennine enterprises wishing to measure up to that dimension of circularity; it puts forward solutions and presents good practices related to the above critical issues; and finally it proposes how to cast the dimension of circularity in the context of the Apennines of Bologna.

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<sup>18</sup>

[https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/Home\\_Page/Archivio\\_news/economia\\_circolare\\_nel\\_territorio\\_collinare\\_e\\_montano](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/Home_Page/Archivio_news/economia_circolare_nel_territorio_collinare_e_montano)

The drafting was supported by a series of interviews with companies in the area (including BASF, DISMECO, HERA, GAL Appennino Bolognese), which allowed us to discuss and better understand the needs of the Bolognese Apennine businesses in a possible circular economy.

The guidelines highlight the greater propensity for circularity of the municipalities of the foothills and those in the eastern part of the Reno Valley, but also a marked predisposition to sustainable tourism for the Setta Valley and sustainable mobility for the Reno Valley thanks to the location of two of the four local lines crossing the entire regional Apennines, and a certain attention to the issue of waste in the Santerno Valley. Finally, the map shows an evident entrepreneurial vocation for the Samoggia Valley, but certainly due to the concentration of enterprises in the lowland localities of the merged municipality, from Crespellano to Bazzano, rather than to a true aptitude for green enterprise on the Apennine side of the valley. Finally, worthy of note is the lack of a territorial position with respect to the topic of energy, and on the contrary a similarity in level of interest for environmental matters, proportionally increasing as one travels from foothill to crest.

## 5.2 Pre-feasibility study on the reorganisation of public transport services in production areas

This pilot project involves the drafting of a pre-feasibility study on the reorganisation of public transport services to **improve public accessibility of production areas**, including in terms of improving the quality of life of the workers themselves.

The objective is to identify the conditions, necessary services, agreements to be made and the administrative and legal framework for the realisation of new local public transport services for industrial or logistical areas of metropolitan importance also covered by private funding and/or in the form of “mobility vouchers” for workers.

In order to make the pre-feasibility study as responsive as possible to the most up-to-date actual conditions governing and directing the matter, a **preliminary in-depth study was carried out on the administrative/legal and economic/fiscal issues** related to the various possibilities and opportunities for promoting and supporting the activation of public transport services (and sustainable mobility in general) to improve the accessibility of productive areas. The most potentially effective solutions, and therefore worthy of further study, were identified as those related to the financing of local public transport passes, collective reserved transport, so-called mobility vouchers, car sharing, car pooling, and the establishment of company and area mobility managers. The work provides a complete, up-to-date and useful framework for technicians in public administrations and companies on issues related to the promotion of public transport and sustainable mobility for people working in the metropolitan production system, in particular regarding the economic/fiscal and legal/administrative definition of the formulas that can be employed; the conditions and the administrative and legal framework for the realisation of new LPT services for productive areas; the possible types of agreement between companies, public transport service managers and administrations; the favourable tax conditions for companies and employees for the purchase of public transport services, employee passes, collective reserved transport services; the opportunities for supporting company welfare (e.g. mobility bonus); innovative incentive solutions; incentives for company (and area) mobility management policies; possible sources and solutions of public/private financing; policies/measures to be included within territorial agreements and understandings to encourage sustainable mobility.

Based on the conclusions and indications of this preliminary work, a pre-feasibility study is being developed for the reorganisation of public transport services to improve the public accessibility of the Ozzano area, where both IMA and the Veterinary Department of the University of Bologna are located.

### 5.3 Guidelines for metropolitan forestry

Consistent with the 2019 Climate Decree, which promotes various measures to improve air quality, and in line with the strategies of the Metropolitan Territorial Plan (MTP), the metropolitan city of Bologna has developed a **strategy to define a unified, coherent and coordinated metropolitan forestation programme** capable of bringing together all the free areas available for forestation in the metropolitan territory, and involving, in particular, the most critical and sensitive areas that most urgently need action to improve their situation.

The intention is to create a true “**green infrastructure**” to serve the environment and the community, functional to the well-being and health needs of ecosystems and the public.

In order to define this strategy, the metropolitan city conducted a territorial survey that has allowed for the construction of a qualitative and quantitative framework regarding the current situation of forestation in the metropolitan territory, with an analysis of the dynamics of the last decades, also spotlighting the most critical territorial areas from the point of view of climate-altering emissions and air quality, without neglecting a framework of the regulatory and planning instruments related to forestation in the metropolitan and regional territory, starting from national and international regulations. Furthermore, an in-depth study was carried out on the planning and green regulation strategies and tools adopted by the individual municipalities through the administration of a questionnaire addressed to the municipalities that present the most critical issues with respect to air quality, i.e. those in the plains and those that, although in hilly areas, are characterised by the presence of supra-municipal production areas and metropolitan HUBs and/or integrated metropolitan functional hubs (Sasso Marconi, Pianoro and Valsamoggia).

From the overall picture, however, it clearly emerges that the metropolitan city's future projects will have to focus on the most sensitive areas such as the plains, the conurbation that has grown up around the provincial capital, the major road axes, the supra-municipal production and logistics areas and the functional poles (including Interporto in the municipality of Bentivoglio, Centergross in Castel Maggiore, the CAAB Agrifood Centre and the airport in Bologna), and in a few cases in the hilly areas in the broader stretches of the Reno, Savena and Santerno valleys.

The ***Guidelines for metropolitan forestation***<sup>19</sup> that have thus emerged offer the reader (whether a planner, technician, administrator of the metropolitan area of Bologna, or other public or private person) a tool that contains the main planning and technical-operational elements of reference for carrying out urban and extra-urban forestation operations that are sustainable from both ecological-environmental and socio-economic points of view. The *Abacus of Green Types and Plant Species* suggests different types of interventions and technical forestation solutions according to the setting in question

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<sup>19</sup>

[https://www.cittametropolitana.bo.it/agenda\\_sviluppo\\_sostenibile/Home\\_Page/Archivio\\_news/Linee\\_guida\\_per\\_la\\_forestazione\\_metropolitana](https://www.cittametropolitana.bo.it/agenda_sviluppo_sostenibile/Home_Page/Archivio_news/Linee_guida_per_la_forestazione_metropolitana)

(urban, peri-urban and extra-urban) and the characteristics of the main tree plant species suitable for use in the Bolognese territory are available, with particular attention to the city and the plains.

In the *Area Planning Sheets* the Guidelines are "put into practice", starting with certain topics that the Metropolitan Territorial Plan identifies as strategic for spatial planning purposes: Ecological network; Bicycling network; Mobility centres; Agricultural ecosystem; Supra-municipal production areas and/or integrated Metropolitan Hubs. Indeed, for each area considered, the design, execution and management aspects of the projects are identified, including the costs of installation and maintenance that must necessarily be foreseen in order to guarantee their success.

## 5.4 Operation Centre & Cities Web

The project envisages experimentation in three municipalities of the metropolitan area (**Bologna, Granarolo dell'Emilia, Imola**) and in the **metropolitan city** with a platform designed to monitor the indicators identified by Agenda 2.0 along with others deemed of interest by the local administrations. This tool was developed by the Hera Group to help administrations, bodies and any organisation to monitor the territory using simple, innovative methods in order to compare and be able to efficiently plan strategic improvement actions aimed at sustainability, and therefore at achieving the 17 goals of the UN 2030 Agenda.

This platform is based on the use of two monitoring dashboards working in synergy: the Operation Centre and the Cities Web.

The Operation Centre is an informative dashboard that will allow the three experimenting municipalities to collect, catalogue, represent and analyse their environmental, social and economic data on an interactive medium. Specifically, a tool known as the "environmental passport" was developed that features KPIs in three macro areas – environmental, social and economic – and is automatically updated by data that can be drawn from any system: IoT sensors, open data, proprietary or third-party data. Employing an innovative and intuitive approach, it is possible to have a detailed view of the territory and its data, comparing them with common sustainability goals in order to quickly understand what actions to take and initiate in order to improve and increase the territory's efficiency.

The Cities Web is the second, higher-level dashboard, developed for those administrations that have smaller ones within them, as in the case of the metropolitan city of Bologna. The Cities Web brings together all the individual data points produced by the three Operation Centres, making it possible – with an integrated approach – to promote, plan, implement and manage the sustainability and smartness of these territories involved in the trial.

# 6

## The territorialisation of the SDGs

### 6.1 Towards an SPD scheme integrated with Agenda 2.0 for sustainable development

As we noted in *section 3*, Agenda 2.0 must become a point of reference for guiding and integrating planning and programming tools, culminating in the embedding of this document in the programming cycle of entities through the three-year Single Planning Document (SPD).

In the future, a **single integrated multi-level system** will have to be developed in order to **bring together the planning of all local authorities in the metropolitan area in a single process, ensuring consistency with the objectives of Agenda 2.0, as well as its continuous monitoring and updating.**

This experiment has involved not only the **metropolitan city** itself, but also the **new Imola district**, the **union of the municipalities of Reno, Lavino and Samoggia**, the **municipality of Bologna** and the **municipality of Monte San Pietro**. Given the cross-cutting nature of this action, which involves the various levels of government of the territory engaged in the planning and implementation of public policies, interacting with multiple sectors of intervention and disciplines, it was necessary to set up a cross-sectoral and inter-institutional working group involving external entities such as ASviS and Urban@it in addition to the aforementioned institutions.



Each of the experimenting bodies published together with the SPD 2022-2024 an **annex entitled “Towards an SPD scheme integrated with Agenda 2.0 for Sustainable Development of the Metropolitan City of Bologna”** divided into two parts.

1. The first part is devoted to the positioning of each of the experimenting institutions with respect to the 26 goals of Agenda 2.0. For each of the 26 quantitative goals the following is provided:

- Association with the UN 2030 Agenda goals: for ease of reading, the goals and targets have been divided into four areas: social, environmental, economic and institutional.
- Last available national, regional and metropolitan annual data. It was not possible to calculate some indicators at a municipal and/or metropolitan city level according to the methods and sources of the other territorial levels due to the lack of the relevant data. In such cases proxy indicators were used, which provide values that are not directly comparable with those calculated for the other levels.
- Short-term (5 years) and long-term (10 years) assessment for each level, so as to facilitate an immediate comparison between the various institutional levels. To assess the achievement of the quantitative target, where historical data are available (otherwise the last available value is provided) the Eurostat method was used, which involves assessing the intensity and direction that the indicator is moving in with respect to the target using arrows. This assessment depends on the ratio between the actual growth rate and the growth rate needed to achieve the target, and has four possible assessments with the corresponding arrows having a different colour (green or red) and a different slope.

### Objectives with a predominantly environmental dimension

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo	Valutazione di lungo periodo	Metodologia
2.4	Entro il 2030 ridurre del 20% l'utilizzo di fertilizzanti distribuiti in agricoltura rispetto al 2018 (kg per ettaro)	CM 550,3 (2019) E-R 736,5 (2019) ITA 322,6 (2019)	↓ ↓ ↓	↑ ↓ ↑	A <sup>1</sup>
2.4	Entro il 2030 ridurre del 50% l'utilizzo di fitosanitari distribuiti in agricoltura rispetto al 2018 (kg per ettaro)	CM 10,9 (2019) E-R 19,2 (2019) ITA 9,2 (2019)	↓ ↓ ↘	↗ ↘ ↘	A <sup>2</sup>
2.4	Entro il 2030 raggiungere il 25% della superficie agricola investita in coltivazioni biologiche	E-R 15,4% (2019) ITA 15,8% (2019)	↑ ↑	: :	A <sup>3</sup>
6.4	Entro il 2030 raggiungere quota 80% nell'efficienza delle reti di distribuzione dell'acqua potabile	CoBo 71,9% (2018) E-R 68,8% (2018) ITA 58,0% (2018)	↓ ↓ ↓	: ↓ ↓	C

6.6	Entro il 2027 portare tutti i corpi idrici al livello buono o eccellente di qualità ecologica	CM 26% (2017-2019)	↓	:	A <sup>4</sup>
7.2	Entro il 2035 raggiungere il 100% di energia da fonti rinnovabili	CM 14,3% (2019) ER 20,5% (2019) ITA 34,9% (2019)	↘ ↓ ↓	:	A <sup>5</sup>
11.2	Entro il 2030 aumentare del 26% rispetto al 2004 il numero di posti-km per abitante (prodotto del numero di km percorsi nell'anno dai veicoli del TPL per la loro capacità media rapportato alla popolazione residente)	CoBo 3899 (2019) E-R 2809 (2019) ITA 4624 (2019)	↘ ↘ ↘	↓ ↓ ↓	D
11.2	Entro il 2030 raddoppiare l'estensione delle piste ciclabili rispetto al 2019 (km per 100 km <sup>2</sup> )	CoBo 96,9 (2019) ITA 24,2 (2019)	↗ ↗	:	A <sup>6</sup>

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo	Valutazione di lungo periodo	Metodologia
11.6	Entro il 2030 ridurre i superamenti del limite di PM10 a 3 giorni all'anno (n. giorni)	CM 42 (2020) E-R 75 (2020) ITA 83 (2019)	↓ ↓ ↘	↘ ↘ ↘	A <sup>7</sup>
12.4	Entro il 2030 raggiungere quota 80% di raccolta differenziata dei rifiuti urbani	CM 65,5% (2019) E-R 70,6% (2019) ITA 61,4% (2019)	↑ ↑ ↑	↑ ↑ ↑	A <sup>8</sup>
12.5	Entro il 2030 ridurre la produzione di rifiuti urbani per abitante del 27% rispetto al 2003 (kg pro-capite)	CM 592,2 (2019) E-R 662,8 (2019) ITA 499,3 (2019)	↓ ↓ ↓	↓ ↓ ↘	D
13.2	Entro il 2050 azzerare le emissioni di gas climalteranti (migliaia di tonnellate di Co2 equivalente)	CoBo 1801 (2018)	↘	↘	A <sup>9</sup>



15.3	Entro il 2050 azzerare l'aumento del consumo di suolo annuo (ettari annui di suolo consumati per 100.000 abitanti)	CM 7,4 (2020)		:	A <sup>10</sup>
		E-R 9,5 (2020)		:	
		ITA 8,7 (2020)		:	
15.5	Entro il 2030 raggiungere la quota del 30% delle aree terrestri protette	E-R 4,2% (2019)	:	:	A <sup>11</sup>
		ITA 10,5% (2019)	:	:	

### Objectives with a predominantly social dimension

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM	Metodologia
1.2	Entro il 2030 ridurre del 20% il numero di persone a rischio di povertà o esclusione sociale rispetto al 2019	CM 20,5% (2017) <sup>16</sup>	:	:	A <sup>17</sup>
		E-R 15,5% (2019)			
		ITA 25,6% (2019)			
3.6	Entro il 2030 dimezzare il numero di feriti derivanti da incidenti stradali rispetto al 2019 (n. feriti ogni 1.000 abitanti)	CM 3,4 (2020)			A <sup>18</sup>
		E-R 3,4 (2020)			
		ITA 2,7 (2020)			
4.2	Entro il 2030 raggiungere quota 98% di partecipazione alla scuola d'infanzia (4-5 anni)	CM 94,4% (2019)		:	A <sup>19</sup>
		E-R 93,5% (2019)		:	
		ITA 96,0% (2019)		:	

4.3	Entro il 2030 raggiungere la quota del 50% dei laureati tra i 30-34 anni (percentuale tra i 25 e i 39 anni)	CM 41,8% (2020)	↑	↑	A <sup>20</sup>
		E-R 33,6% (2020)	↗	↑	
		ITA 28,3% (2020)	↗	↗	
5.1	Entro il 2030 dimezzare il gap occupazionale di genere rispetto al 2020 (tasso di occupazione femminile / maschile)	CM 85,8 (2020)	↗	↘	A <sup>21</sup>
		E-R 81,8 (2020)	↘	↘	
		ITA 72,6 (2020)	↘	↗	
10.4	Entro il 2030 raggiungere quota 4,2 nell'indice di disuguaglianza del reddito disponibile (ultimo quintile / primo quintile)	E-R 4,6 (2018)	↗	↘	B
		ITA 6,1 (2018)	↘	↘	
		CM 9,3 (2015) <sup>22</sup>	:	:	

#### Objectives with a predominantly economic dimension

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM	Metodologia
8.5	Entro il 2030 raggiungere la quota del 78% del tasso di occupazione (20-64 anni)	CM 76,6% (2020)	↑	↑	A <sup>12</sup>
		E-R 73,8% (2020)	↑	↘	
		ITA 62,6% (2020)	↗	↘	
8.6	Ridurre entro il 2030, la quota di giovani che non lavorano e non studiano (Neet) al di sotto del 10%	CM 15,0% (2020)	↑	↘	A <sup>13</sup>
		E-R 15,9% (2020)	↗	↘	
		ITA 23,3% (2020)	↘	↘	
9.c	Entro il 2025 raggiungere la quota del 100% di famiglie servite dalla banda larga ad almeno 30Mbps	CM 76,0% (2019)	:	:	A <sup>14</sup>
		E-R 68,1% (2019)	:	:	
		ITA 66,0% (2019)	:	:	
9.5	Entro il 2030 raggiungere quota 3% di incidenza della spesa totale per Ricerca e Sviluppo sul PIL	E-R 2,03% (2019)	↑	↑	A <sup>15</sup>
		ITA 1,45% (2019)	↘	↘	

#### Objectives with a predominantly institutional dimension

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM	Metodologia
16.3	Entro il 2030 ridurre l'affollamento degli istituti di pena al 100%	CM 134,2% (2020)	↗	↑	C
		E-R 104,9% (2020)	↓	↑	
		ITA 105,5% (2020)	↓	↑	
16.7	Entro il 2030 raggiungere quota 195 giorni di durata dei procedimenti civili (n. giorni)	E-R 258 (2020)	↑	:	B
		ITA 419 (2020)	↘	:	

2. The second part uses a matrix to illustrate the association between the Agenda 2.0 goals and the general and specific objectives of the 2022-2024 SPDs of each authority, and, where appropriate, the performance plan indicators related to the UN 2030 Agenda targets these goals refer to.

These matrices represent an initial tool for reading the metropolitan, union and municipal SPDs in light of the 26 objectives of Agenda 2.0, having shared a single key for interpreting these instruments: they allow each experimenting authority to reason on its own shortcomings based on the data entered by the other authorities in order to fill in any gaps. It is important to point out that in drawing up Agenda 2.0 following the logic of building a multi-level system, the metropolitan city deliberately “looked” at the area to identify the indicators, regardless of its own competences. On the other hand, it may not have considered more specific objectives for the municipal area, which it will be important to discuss.

Below is an example of the matrix that relates an Agenda 2.0 objective referring to UN Goal 8.5 with the general and specific objectives of the metropolitan city's SPD.

AGENDA 2.0: Obiettivi quantitativi a prevalente dimensione economica				
n. Target	Obiettivi indicatori quantitativi Agenda 2.0	Obiettivi generali DUP 2022 – 2024	Obiettivi specifici DUP (piano performance 2021)	Descrizione Indicatore (piano performance 2021)
8.5	Raggiungere nel 2030 il livello del 78% del tasso di occupazione.	SVILUPPO E BUONA OCCUPAZIONE	Insieme Per il Lavoro	CANDIDATI PRONTI AD UN INSERIMENTO AZIENDE COINVOLTE NEL PROGETTO RINNOVO PROTOCOLLO E CONVENZIONI
			Qualità del Lavoro	COLLOQUI EFFETTUATI PRESSO LO SPORTELLO OCC ACCORDI SIGLATI IN SENO AL TAVOLO DI SALVAGUARDIA MONITORAGGIO PROTOCOLLI DI SITO INTESE PER LA BUONA OCCUPAZIONE
		CONSOLIDAMENTO TRASFORMAZIONE ED ATTRATTIVITÀ DEL SISTEMA ECONOMICO IN UNA DIMENSIONE INTERNAZIONALE	Sostegno al sistema produttivo e promozione di investimenti di carattere locale e globale	CREAZIONE DATABASE INTERNO SITI /IMMOBILI DA PROMUOVERE INCONTRI CON SOGGETTI PROPONENTI INVESTIMENTI
		CITTÀ METROPOLITANA AREA VASTA A FINALITÀ TURISTICA	Operatività della Destinazione Turistica	APPROVAZIONE PROGRAMMA ANNUALE DELLE ATTIVITÀ TURISTICHE
		GOVERNANCE RETI E INTEGRAZIONE ISTITUZIONALE PER LO SVILUPPO ECONOMICO	Una Rete di Relazioni per il territorio metropolitano	INCONTRI NELL'AMBITO DEI PATTI TERRITORIALI PER L'OCCUPAZIONE E LO SVILUPPO INCONTRI CON AZIENDE DEL TERRITORIO INCONTRI DI ANIMAZIONE E NETWORKING CON AZIENDE ECCELLENTI TRAMITE CLUBPRO

## 6.2 The Project for the territorialisation of the region's SDGs

In agreement with the regional ANCI, ALI and UPI, the Emilia-Romagna region plans to set up a multi-level coordination team. The multilevel coordination team has the task of testing the construction of the multi-level system of territorial agendas for the sustainable development of the Emilia-Romagna region in the implementation of the regional strategy, hinged on the planning tools of the authorities (SPD) and accompanied by the publication of the targets to be achieved, the actions to achieve them, and the relevant updates on the respective institutional websites.

The multilevel team includes the **metropolitan city of Bologna** and **local authorities** representing **both the various levels of government and the territories themselves**.

Stakeholders are involved through the various participatory tools of the Emilia-Romagna region, in particular the regional forum for sustainable development and the table of Jobs and Climate Pact signatories.

Activity	Description
1	<i>Definition of criteria for the multilevel team with regional ANCI, ALI, UPI and the metropolitan city of Bologna</i>
2	<i>Selection of entities participating in the experiment representative of active experiences, levels of government and territories</i>
3	<i>Identification of the set of quantitative targets the REFD and SPD actions should be associated with</i>
4	<i>Consultation on the set of targets addressed to municipalities, unions and provinces via the Participation Platform</i>
5	<i>Classification of the strategic objectives of REFD 2023-2025 on the basis of the goals and targets of the UN 2030 Agenda and association with the identified set of quantitative targets</i>
6	<i>Definition and updating of a dissemination format for the publication of quantitative targets and related actions on the pages of entities' websites dedicated to strategies and agendas</i>



# VOLUNTARY LOCAL REVIEW

# 22

**REGIONE LAZIO  
SOSTENIBILE E  
PARTECIPATA**





## INTRODUCTION/PREMISE

*The UN 2030 Agenda is a great opportunity for our community to grow because it forces everyone to make a complex but inescapable conceptual effort: to consider, at the same time and in the same space, all dimensions of living by identifying links and connections that, on closer inspection, have always been recognizable but were struggling to emerge, perhaps because they were not considered so necessary.*

*It is simpler to reason and act by separate compartments, domains or spheres of interest and also more effective in terms of visibility of results, probably, in the short term, however, this is no longer the way to go; complex problems can only be matched by equally complex solutions.*

*The pandemic has brought out with greater urgency and virulence this truth, which, moreover, is already well present in the guiding principles of sustainable development in which environmental, social and economic issues are held together in a system of continuous interaction and cause-and-effect.*

*It is not "just" a matter of viewing reality and problems from a broader perspective; it pertains to concrete everyday decisions at different scales: from citizens to policymakers.*

*The balance is a subtle one; on the one hand, the risk of getting stuck, always imagining a potential "butterfly effect," in terms solely of actions and retroactions between each phenomenon and its context; on the other hand, the perpetuation of "surgical" behaviors and decisions, treating the symptom and not the cause.*

*In this context, the decision to place health - citizens' well-being - at the center of the Strategy is the key to bringing together numerous instances and proposals, within a planning framework that aims to be horizontal and not generic.*

*SRSvS is focused on a few key words that characterize the goals and/or goal groups of the 2030 Agenda and, by reflection, the SNSvS.*

*Fighting **Poverty, Hunger, Ignorance, and Gender Inequality** to ensure and facilitate access to social and health services for all, reducing food waste, ensuring quality education in compulsory schooling and subsequent training pathways, and to provide all citizens with substantial equality of opportunity in life choices.*

***Water and energy**, primary goods, must be available and usable without waste, including through the use of technologies that safeguard their quality and enable their clean distribution and monitoring.*

***Jobs, growth and businesses** must overcome the established, and sometimes conflicting, dynamics of supply and demand, sharing a vision of sustainable development that rewards the dignity of the performance of adequately trained and/or retrained human capital and intellectual assets; increased competitiveness based on innovation, research and modern infrastructure; and a shift from a linear to a circular logic of production that preserves natural resources, such as the sea, whose economy can be an important driver of regional development.*

*For those who are not yet an active part of the system, inclusion and integration policies for "**old and new poor**," **migrants, Roma, and the homeless**, with special attention to young people, to that educational poverty that must be opposed with adequate support policies to stem the growth of inequality.*

***Places to live: sustainable and smart cities**, where digitization, especially of PA, serves citizens and businesses and is inclusive. Cities and public administrations in general, with a view to coordinated and*



multilevel governance, are required to play a function consistent with the European Green deal through the recovery and reuse of spaces and buildings, to curb land consumption, ensure the safety and efficiency of public real estate. This is as true for larger centers as it is for the **Small Municipalities**, which represent a fundamental garrison of territorial control; for these centers, the accessibility and quality of essential services: schooling, health, and mobility, is fundamental.

It is clear that the **mobility** that has been made available to date is insufficient or not functional to the needs of the various regional communities and productive realities. For this reason, it is important, in addition to reviewing passenger transport, also using soft mobility, to enhance "clean" freight transport also in order to reduce greenhouse gas emissions that play a relevant role in the ongoing climate change.

In relation to this last point, looking at the reduction of risks that extreme events and poor land and resource management can generate, it is necessary to implement policies to clean up polluted sites and combat hydrogeological and coastal disruption, including through proper water management and enhancing the natural purification systems offered, for example, by wetlands.

**Climate Change** - also encompassing a series of very diverse phenomena (increase in temperatures; variation, frequency and intensity of precipitation; heat waves; flash floods; droughts; fires, ...) - requires an ad hoc strategy, an essential and integral part of the one related to sustainable development.

On this front, too, the Lazio Region is actively engaged through a path aimed at deepening specific knowledge in terms of vulnerability and risk of the regional territory to the consequences of the changing climate, which will end with the elaboration of the contribution the Adaptation to Climate Change."

Finally, an etymological consideration: the term Strategy (στρατηγία) means "art of the army leader" and indicates a series of actions (planning, design, coordination of different means, etc.) necessary to achieve a major goal over a long period.

Agenda 2030 has given itself medium- and long-term goals, many of which, unfortunately, have not been achieved.

Today, the time available to curb the "defeat" of our planet is limited; moreover, even the best strategist of all time can do little without an adequate army. Therefore, we are all called upon to play our role, even if marginal, in the **protection of the environment, biodiversity and ecosystems and in the interest of future generations.**"<sup>1</sup>

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<sup>1</sup> Cf. Constitutional Law Feb. 11, 2022 No. 1 "Amendments to Articles 9 and 41 of the Constitution on environmental protection," published in Official Journal No. 44, Feb. 22, 2022

Article 9 The Republic promotes the development of culture and scientific and technical research. It protects the nation's landscape and historical and artistic heritage. It protects the environment, biodiversity and ecosystems, including in the interest of future generations. State law regulates the ways and forms of animal protection. Article 41 Private economic initiative is free. It may not be carried out contrary to social utility or in such a way as to harm health, the environment, security, freedom, and human dignity. The law shall determine appropriate programs and controls so that public and private economic activity can be directed and coordinated for social and environmental purposes.

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# Introduction Lazio Region Strategy for Sustainable Development

The Regional Strategy for Sustainable Development - SRSvS was approved by DGR No. 170 of March 30, 2021 Approval of the Regional Strategy for Sustainable Development (SRSvS) "**Lazio, a participatory and sustainable region**".

The SRSvS - constitutes, in accordance with the provisions of Article 34 of Legislative Decree 152/2006, the contribution of the individual Italian regions to the national sustainable growth objectives set forth in the SNSvS<sup>2</sup>, indicating by this term a development model that places environmental, economic and social aspects on the same level.

The Regional Strategy therefore indicates, the directions, priorities and actions that are intended to be taken to achieve the sustainability goals, ensuring unity in planning and choice of strategic tools that are coherent and capable of bringing a substantial contribution to the realization of the objectives set at the national level.

Citizen well-being in its physical, psychological and economic components is at the heart of SRSvS, as, moreover, of all regional planning, understood as a state of complete physical, psychological and social well-being and not simply the absence of disease (World Health Organization-WHO) and a fundamental right of people

Sustainable development is the tool that, in a holistic approach, will be able to make possible the growth of such well-being and, at the same time, the competitiveness of the production system by reducing exposure to socio-environmental and socio-health risks, as the Covid 19 pandemic has shown us.

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<sup>2</sup> The National Sustainable Development Strategy, referred to in CIPE Resolution No. 108 of 12/22/2017 "Approval of the National Strategy for Sustainable Development," now under complete revision, is, therefore, the pivotal element in the implementation in Italy of the United Nations 2030 Agenda, the result of intense technical work and a broad and complex process of consultation with central government, the Regions, civil society, universities, and the world of research and knowledge. The SNSvS declines at the national level the guidelines of economic, social and environmental policies aimed at achieving the Sustainable Development Goals by 2030, and is structured in "five areas" (People; Planet; Prosperity; Peace; Partnership) that contain the Strategic Choices and Strategic Goals for Italy and are related to the Goals of the 2030 Agenda - according to a "system of sustainability vectors" (I. Common Knowledge; II. Monitoring and evaluation of policies plans and projects; III. Institutions, participation and partnerships; IV. Education, awareness, communication; V. Modernization of Public Administration and redevelopment of public spending),

Article 34 of Legislative Decree No. 152 of April 3, 2006, as amended by Law No. 221 of December 28, 2015, stipulates that, within twelve months of the approval of the National Strategy, the Regions, must have a comprehensive Sustainable Development Strategy; to this end, with DGR no. 797 of 11/12/2018, the Lazio Region adhered to the "Collaboration Agreement for the support activities for the implementation of the fulfillments provided for in Article 34 of Legislative Decree no. 152/2006 and ss.mm.ii for the implementation of the Regional Strategies for Sustainable Development" with the Ministry of the Environment and Land Protection

Lazio orographically singular with a diverse landscape, 54 percent mostly hilly, 26 percent consisting of mountains and 20 percent of plains. The Apennine mountain system frames the region along all its borders: northwest sloping gently toward the Maremma plain, closed to the south by the Monti della Tolfa, and the valley of the Tiber River, which ends its course at Fiumicino; diagonally from north to south, the Abruzzo Lazio and Molise National Park, with the Monti della Laga and the highest peak of Mount Gorzano (2458 meters); still to the south, a second mountain range runs parallel to the first, separated by the Valle Latina where the Sacco and Liri rivers flow and end their course in the Gulf of Gaeta.

Lazio is characterized by numerous lakes of volcanic origin (Bracciano, Bolsena, Vico, Albano, and Nemi), and the plains, subtracted from swamps during the 20th century (the Agro Romano and the Pontine Plain) with its canals and coastal lakes.

Finally, the Tyrrhenian Sea that bathes the region for more than 300 km of coastline, the latter been distinguished by Mediterranean sand dunes and some promontories with centuries-old charm: San Felice Circeo in the park of the same name and the Selva di Circe, a rare example of lowland forest in Italy; Terracina with the promontory on which the temple of Jupiter Anxur stands guarding the Gulf of Gaeta; and the Pontine Islands, which are perfectly visible when the sky is clear: Ventotene, Ponza, Palmarola, Santo Stefano, Gavi and Zannone, made up of volcanic and sedimentary rocks dating back more than 200 million years.

There are 98 protected natural areas in the region (3 National Parks, 16 Regional Nature Parks, 4 State Nature Reserves, 31 Regional Nature Reserves, 2 Marine Nature Areas, 42 Natural Monuments, including two marine areas) for a total protected area of about 240 thousand hectares, 13.5 percent of the territory. An environmental heritage, made up of landscapes, archaeology and biodiversity; Lazio is one of the regions with the greatest biodiversity in Italy: in fact, it is home to 50 percent of the national fauna and flora, about 30,000 animal species and 3,500 plant species.

The region can be read through its territorial systems that collectively constitute its soul: the Tuscia, Sabina, historic Ciociaria, Castelli Romani, Monti Lepini, Ausoni, Aurunci, Ernici, Lucretili, Prenestini, and the Aniene in which traditions and knowledge have settled over the centuries. Geographical areas where historical, cultural, environmental anthropological aspects merge together with peculiar cultural identities.



## 2

## Implementation governance

### 2.1 Collaboration agreements

The Lazio Region has signed with the MATTM, (now MiTE and Ministry below in the text) two Collaboration Agreements pursuant to Art. 15 of Law No. 241 of August 7, 1990 and ss.mm.ii, to support regional structures in the implementation of the fulfillments required by Art. 34 of Legislative Decree No. 152/2006, through the financing of support activities for the processes of elaboration of the Regional Strategies for Sustainable Development - SRSvS. The first Collaboration Agreement was signed on Dec. 18, 2018 following the Lazio Region's participation in the Ministry's Public Notice on July 9, 2018 (Prot. No. 211), intended for Regions and Autonomous Provinces.

- The first Collaboration Agreement was signed on Dec. 18, 2018<sup>3</sup> following the Lazio Region's participation in the Ministry's Public Notice on July 9, 2018 (Prot. No. 211), intended for Regions and Autonomous Provinces

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<sup>3</sup> DGR 797 of December 11, 2018 D. Lgs.152/2006, Article 34. CIPE Resolution 108/2017 - Regional Strategy for Sustainable Development: - Approval of the Outline of Agreement ex art. 15 Law of August 7, 1990, n. 241 and ss.mm. and ii. and the Executive Project "Towards a Lazio of Sustainability".

- The second Collaboration Agreement, signed by the Lazio Region on April 22, 2020<sup>4</sup>, concerns the continuation of the activities related to SRSvS; the Ministry, in fact, issued on July 26, 2019 (prot. no. 333) an additional notice to address the needs for deepening and integrating the existing activities related to the agreements already signed that emerged during the work of the Technical Comparison Tables between the same Ministry, CREIAMO PA, the Regions and the Autonomous Provinces. The Lazio Region has therefore decided to use this additional funding to deepen the SRSvS aspects most related to Goal No. 13 of Agenda 2030, i.e., the Fight against Climate Change; in fact, the Executive Project submitted to the Ministry is called "Sustainable Development Strategy: the contribution of Climate Change Adaptation" (see below).

Both projects are divided into the three focus areas:

- Category A "Strategy Governance Construction."
- Category B "Involvement of civil society."
- Category C "Development of the Strategy document."

For the definition of the Regional Strategy for Sustainable Development and for the in-depth study of the aspects related to Climate Change Adaptation, we availed ourselves of the specialized support of Lazio Innova Spa, an "in-house providing" company of the Lazio Region, which is part of the Regional Steering Group, which also provided support for the development of the PODs, the Detailed Operational Plans, of ASViS - Alliance for Sustainable Development (only for the Strategy Document) and of CMCC - Euro-Mediterranean Center for Climate Change (now CMCC Foundation) .

## 2.2 Director's Cabins

The articulation of the Regional Sustainable Development Steering Committee has been modified to make it more in line with the policy and programmatic choices that have occurred over time.

In particular, it should be noted that the "functions of guiding and verifying the implementation and results of the Sustainable Development Strategy" and of "unified direction in the implementation of the planned actions" are currently attributed to the "Steering Cabin for the Implementation of Regional and European Policies 2021-2027" replacing the previous Interdepartmental Steering Cabin for Sustainable<sup>5</sup> Development as the Strategy's priorities for action are framed in the Policy Goals of European programming and in the regional unitary programming 2021-2027.

The following are members of the Steering Committee: the Regional Government; the Head of the President's Cabinet Office; the Director General of the Lazio Region; the Director of the Regional Directorate "Economic Planning"; the Director of the Regional Directorate "For Economic Development and Productive Activities"; the Director of the Regional Directorate "Education, Training, Research and Labor"; the Director of the Regional Directorate, Hunting and Fishing"; the manager in charge of the Structure of Direct Collaboration with the Governing Bodies "Institutional Communication"; and the AUDIT Authority of the ERDF and ESF+ programs. The Directors of the other Regional Directorates and Agencies are invited to the work of the technical-administrative component of the Steering Committee at meetings dedicated to matters of their competence and responsibility. To ensure constant

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<sup>4</sup> DGR 157 of 07/04/202 D.lgs.152/2006, Article 34. CIPE Resolution 108/2017 - Regional Strategy for Sustainable Development: Approval of the Outline of Agreement ex art. 15 Law of August 7, 1990, n. 241 and ss.mm. and ii. and the Executive Project "Sustainable Development Strategy: the contribution to Climate Change Adaptation"

<sup>5</sup> Cf. DGR 797/2018 e 157/2020

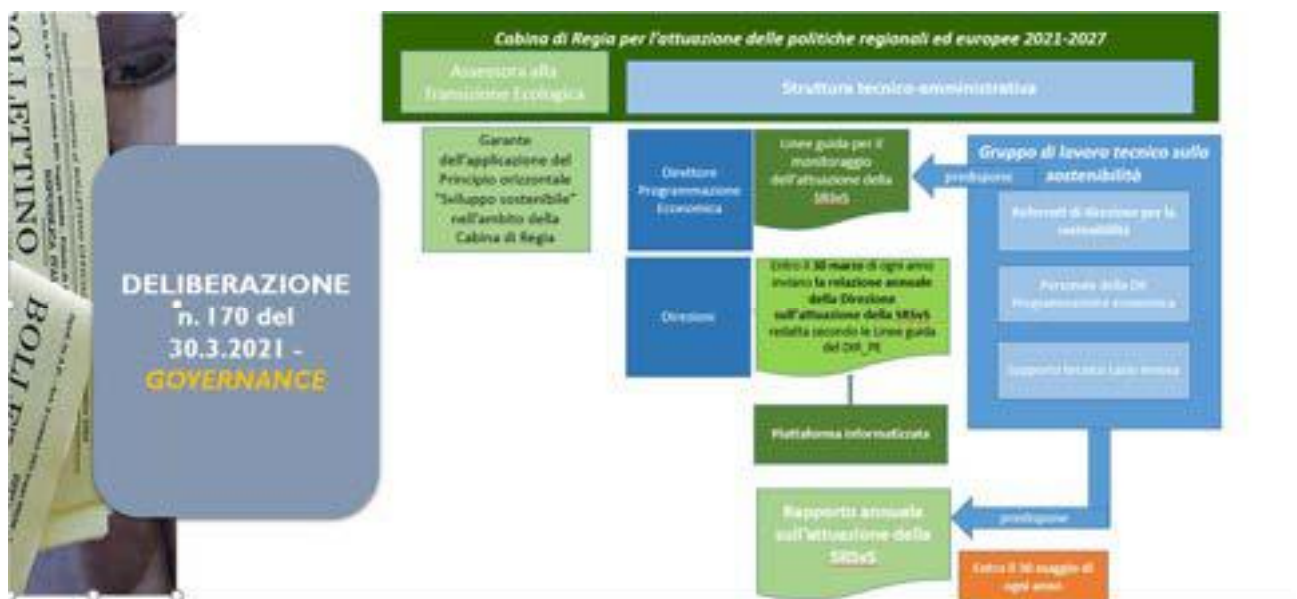


interchange with the Regional Council, the President of the Council Commission "European and International Affairs, Cooperation among Peoples" is permanently invited to the work of the Steering Committee.

Within the Steering Committee, the role of guarantor of the implementation of the Horizontal Principle "Sustainable Development" is also assigned to the Councillor for "Ecological Transition and Digital Transformation Environment and Natural Resources, Energy, Digital Agenda and Green Investment."

To support the Cabin, a "Technical Working Group on Sustainability" was established through Organization Act May 31, 2021, No. G06507, in which "Sustainability Referents" identified by the regional structures involved<sup>6</sup> and the in-house company Lazio Innova participate.

Fig 1) "Steering committee for the implementation of regional and European policies 2021-2027"



## 2.3 Multilevel governance

The Region seized the opportunity offered by the Governance of the SNSvS to be part of a wide-ranging coordination and support system. Since the start-up phase of the Strategy, a privileged interlocution with the Metropolitan City of Rome Capital - CMRC was considered appropriate and functional.

In fact, the Ministry, in July 2019, published a Public Notice similar to the one prepared for the Regions in 2018 and, even before the publication of the notice, invited the Region and the Metropolitan City to meet to coordinate their activities and jointly present a joint pilot project.

<sup>6</sup> With DGR no. 170 of March 30, 2021 Approval of the Regional Strategy for Sustainable Development (SRSvS) "Latium, a participatory and sustainable region" the Council delegated to the Director of the Regional Economic Planning Directorate the task of establishing by its own act of organization, a "technical working group on sustainability" to support the technical-administrative structure of the "Cabina di Regia for the implementation of regional and European policies 2021-2027" on the basis of the designations received from the Regional Directorates of their own "Sustainability Contact Person" the previous Inter-Departmental Steering Committee for Sustainable Development referred to in DGR 797/2018 and 157/2020 ceased its functions



Following this initiative, a fruitful collaborative relationship began between the two entities that led to the elaboration of a joint Pilot project involving Schools ("Green School H24") and saw the Metropolitan City actively participate in all the Focus Groups organized by the Region identifying shared themes, stakeholders and targeted contributions in the introductory papers<sup>7</sup>. CMRC also participates in the Ministry's tables - CreIAMO PA project of exchange of best practices; it was also present in the Focus Groups organized as part of the in-depth study related to aspects of climate change adaptation.

To support the development of the Strategy and for the exchange of common knowledge and experience, it should be noted that the Region participates in the Project "CREIAMO PA Competencies and Networks for Environmental Integration and Improvement of PA<sup>8</sup> Organizations"; the Region has, in addition, participated in MATTM-OECD initiatives related to Policy Coherence for Sustainable Development: integrating the SDGs into decision-making.

## 2.4 Status of implementation of the Regional Sustainable Development Strategy.

### 2.4.1 ORIENTING IN READING THE SRSVS

As stated in Article 34 of Legislative Decree 152/2006, the Strategy performs the function of guidance, evaluation, monitoring and control in the decision-making processes of public administration, promoting the decoupling of economic growth and its impact on the environment, compliance with the conditions of ecological stability, the preservation of biodiversity and the fulfillment of social requirements related to the development of individual potential as necessary prerequisites for the growth of competitiveness and employment.

Therefore, the Regional Strategy for Sustainable Development (SRSvS) is framed in a process of close interdependence within the planetary and long-term targets of the Goals of the 2030 Agenda; with the European goals related to the transition towards sustainability and with those related to the Cohesion Policy 2021-2027; with the national ones constituted by the economic, social and environmental policy guidelines structured in the National Strategy for Sustainable Development (NSSD) and in the policies envisaged in the "Plan for Recovery and Resilience"; with the regional ones, as is evident in the document "A New Horizon of Socio-Economic Progress - Guidelines for Sustainable Development and Reduction of Inequalities: Regional Public Policies 2021-2027, of which it is a cornerstone.

In particular, as far as the link with the 2021-2027 Guidelines is concerned, it is necessary to emphasize the reciprocal "contamination": the 2021-2027 Guidelines contain, in fact, constant references to the 2030 Agenda and the Strategy for National and Regional Sustainable Development and, of the latter,

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<sup>7</sup> The Metropolitan City also participated in the recent FGs carried out by the Lazio Region as part of the project "Sustainable Development Strategy: the contribution to Climate Change Adaptation," and the Lazio Region took part in the round of collective interviews on the macro-environments envisaged by the Agenda: People, Peace, Planet and Prosperity, dedicated to the participatory definition of the main strategies for the construction of the 2030 Agenda for Sustainable Development and the Strategic Plan of the Metropolitan City of Rome Capital, which were held online on April 9 and 10

<sup>8</sup> L2WP1 - PON Governance and Institutional Capacity 2014-20 MiTE Technical Table - Regions and Autonomous Provinces for the implementation of the National Strategy for Sustainable Development related to Sustainable Development Strategies and the Voluntary National and Local Review (VNR - VLR) process On-the-job coaching with Regions and Metropolitan Cities. LQS1 - IV Line of Action QS1 Environmental Assessments - Actions to improve the effectiveness of SEA and EIA processes related to programs, plans and projects Interregional grouping composed, in addition to Lazio, of Liguria, Abruzzo, Piedmont, Umbria and Tuscany Umbria. L5 Strengthening Administrative Capacity for Climate Change Adaptation - A5.1 Capacity Building - Interregional grouping composed of Sardinia, Liguria and Puglia and Lazio; Methodologies for Adaptation to Climate Change: Regional Scale Adaptation Planning: Climate and Resilience Technical Table. Adaptation in inland Apennine areas with high seismicity Regions Marche, Umbria and Abruzzo and Lazio.

they anticipate and make their own the main results deriving from the participatory process of the Focus groups and the Forum. The SRSvS, conversely, incorporates, among the proposals for possible interventions under the Goals coming from the consultation process, also those articulated in the "chain" macro-areas/programmatic goals/actions of the DSP 2018-23, the Pivotal Actions and the Projects of the Regional Recovery and Resilience Plan contained in the 2021-2027 Guidelines.

For a better understanding of the structure of the Strategy document "Latium, a participatory and sustainable region", the contents of its chapters are described below<sup>9</sup>.

**Chapter 2 - Lazio's positioning and trends with respect to the 2030 Agenda Goals** notes the strengths and weaknesses of the regional system and provides, from a statistical point of view, the medium/long-term positioning and trends with respect to the 2030 Agenda Goals through tables and graphs with reference to benchmarks of interest. To this end, it is noted that the analysis conducted on 14 of the 17 Goals of the Agenda<sup>10</sup> of the trend, relative to the years 2010 - 2019, calculated on the basis of the composite indicators of ASVIS source and compared with Italy, showed that Lazio presents trends very similar to the national ones in most areas with respect to both the absolute value reached by the index and its trend over the time period considered. Progress is evident for Goals 3. Health and well-being; 5. Gender equality; 9. Business, innovation and infrastructure and 12. Responsible consumption; critical issues are noted for Goals 1. Defeating poverty; 4. Education; 6. Clean water and 10. Reducing inequality.

In the same chapter, therefore, the 27 quantitative goals with their related indicators belonging to the different Goals proposed by ASviS, essential for the evaluation of the implementation of the SDGs at the different territorial levels and the methodology used to identify each type of goal, are indicated. In particular, the Eurostat methodology was used to assess the achievement of the Goals; the outcomes are represented through oriented arrows to facilitate their immediate readability, considering for the time horizon of analysis, two time scales: long-term (10 - 15 years) and short-term (5 years).

**In Chapter 3 - Framework of the Strategy**, we highlight the double level of depth that characterizes the work of the Strategy. On the one hand, the reading of the regional reality on all the goals of the 2030 Agenda, both in terms of positioning, to check its strengths and weaknesses, and in terms of lines and proposals for action to close the gaps on universal issues such as poverty, inequality, climate change, work and development, and human rights; and on the other hand, the "quasi-vertical" deepening on specific themes of priority interest that will be part of the cornerstones of the 2021-2027 regional unitary programming and that will characterize the Programs financed with EU, national and regional funds. The topics of priority interest include: climate change, with a focus on water resources and sustainable mobility (environmental dimension); the circular economy and the economy of the sea

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<sup>9</sup> The Strategy document consists of 9 Chapters plus a chapter dedicated to Acronyms and Glossary that includes an exhaustive list of acronyms and terms used; an Appendix, which reports The Positioning of Latium and Trends and contains data, statistics and graphs regarding the current regional positioning based on the latest available data, as well as assessments of the potential to achieve certain goals (set at the community, national or regional level) taking into account the projection of historical series; an Annex that collects the introductory and preparatory "Thematic Papers" for the Focus Groups

It was not possible to develop the composite indicators needed for statistical analysis for Goals 13 (combating climate change), 14 (life under water) and 17 (partnerships). With reference to Goals 13 and 14, the impossibility depends on the lack of comparable data across regions on CO2 emissions and time series data on marine protected areas. However, a framing of the two Goals with respect to available data is proposed in the Appendix

<sup>10</sup> It was not possible to develop the composite indicators needed for statistical analysis for Goals 13 (combating climate change), 14 (life under water) and 17 (partnerships). With reference to Goals 13 and 14, the impossibility depends on the lack of comparable data across regions on CO2 emissions and time-series data on marine protected areas. However, a framing of the two Goals with respect to available data is proposed in the Appendix

(economic and environmental dimension); poverty and access to education (social dimension); and smart cities (horizontal dimension to the above) in connection with the 2030 Agenda, the European Green deal and the main EU and national guidance and steering documents.

**The Methodological Approach** for the Strategy construction process is recounted in Chapter 4 and summarized below.

### **The path of construction of the Regional Strategy**

The path of construction of the Regional Strategy has several steps, characterized by statistical analysis, consultations, desk analysis, and participatory paths. Below is a summary of them.

- Regional positioning analysis. The analysis of the region's positioning on the 17 goals of the 2030 Agenda (in collaboration with ASviS) with respect to territorial benchmarks (Italy and the Center) made it possible to identify, from a purely statistical point of view, the specific strengths and weaknesses with respect to the "dimensions" investigated by the 2030 Agenda.
- Preliminary identification of the qualifying points of the Strategy. The Region, following the approach mentioned below, has identified seven macro themes of priority interest involving all components of sustainable development (environmental, economic and social): climate change adaptation and water resources; circular economy; marine economy; sustainable mobility; smart cities; access to education; poverty
- Consultations at Regional Directorates. Between the months of July and October 2019, the Region started the operational process of defining the SRSvS by carrying out a series of hearings at the Regional Directorates with direct or indirect responsibility for Sustainable Development (see §. 3.1.3)
- Regional stakeholder consultations. The Lazio Region, between July and September 2020, organized 7 Focus Groups (FGs) focused on the previously identified priority issues of interest, to consult qualified stakeholders, experts and practitioners and gather proposals, opinions and suggestions for the definition of the Regional Strategy (see § 3.1.2)
- Consultation of civil society at large. A virtual forum has been established, complementary to the National Forum envisaged in the National Sustainable Development Strategy (see § 3.4.1.)
- Interaction with targeted targets. Through a series of webinars, organized between January and February 2021, focusing on general topics related to the 2030 Agenda, the National Strategy for Sustainable Development, Focus Group themes or more specific aspects of particular relevance, schools, businesses and Local Authorities were involved (see § 3.4.2)
- Interlocution with the Metropolitan City of Rome Capital. Through the organization of working tables, also with the participation of MATTM
- Participation in the CREIAMO PA Project. In 2018, the MATTM launched an institutional path of on-the-job coaching to the regions, aimed at spreading the culture of climate change adaptation and supporting regional administrations in the implementation of adaptation strategies and plans. Lazio has joined the above initiative and, almost in parallel, also the Interregional Working Group dealing with climate change adaptation (see § 3.1.2)
- Construction of a dedicated website. This is a dedicated area within the regional website, aimed at interaction with all stakeholders involved (see § 3.4.1)

**Chapter 5** is dedicated focuses to the **Communication** activities implemented during the most acute phase of the Covid-19 pandemic, centered on the website and carried out necessarily through platforms. The chapter sets out the content, target audience, and methods of interaction and engagement with stakeholders, civil society, and all those with various interests in the strategy, as well as data on participation. It should be noted that the site accessed through the home page of the Lazio Europa and Lazio Region websites contains all the materials produced and recordings of the events carried out as part of the Strategy implementation process.

Chapters 6 and 7 represent the core of the document.

**Chapter 6 - The Regional Strategy for Sustainable Development and Priority Issues** of Concern outlines the directions to which the Region, starting from its own positioning, and with a view to coherence with supranational, EU and unitary regional development policy guidelines, intends to orient its sustainability policies. The chapter indicates the *fil rouge* that moves the entire Regional Strategy and the 7 selected priority themes: the wellbeing of the citizen in its physical, psychological and economic components is at the center of the SRSvS, as, moreover, of all regional planning, according to a comprehensive and unified approach. Sustainable development is the tool that will be able to make possible the growth of this well-being but, at the same time, also the competitiveness of the production system, reducing exposure to socio-environmental and socio-health risks, as the Covid 19 pandemic has shown us. According to this approach, the achievement of the Agenda's Goal 3 targets, "Health and well-being for all," is interrelated with all the other goals, as health is closely related to all dimensions of development, not depending only on the availability of health services, but is linked to the context in which we live. In Ch. 6, in particular are highlighted

- Consistency among the seven priority themes identified with respect to the overall approach of the National Strategy for Sustainable Development, with reference to the areas:
  - Planet: climate change and smart cities (strategic objectives II.6 and III.3)
  - People: poverty and access to education (strategic objectives I.1 and II.3)
  - Prosperity: circular economy and sustainable mobility (strategic objectives III.1 and IV.2)
  - People and Prosperity: economy of the sea
- linkages with the UN Agenda 2030, EU 2021-2027 programming, the programma Next Generation EU (NGEU), the National Recovery and Resilience Plan (NRP), and regional economic planning (Economic and Financial Document 2021-2023; Strategic Programming Document 2018-2023).

The chapter also summarizes the contents of the "thematic papers" related to the 7 priority topics of interest (climate change and water resources; sustainable mobility; circular economy; marine economy; smart cities; poverty; and access to education), prepared as introductory and preparatory documents for the individual Focus Groups to engage stakeholders in a discussion aimed at gathering possible input.

**Chapter 7, First Definition of Proposals/Actions** constitutes an indicative outline of possible actions (or types of actions) to be implemented in order to flesh out the outlined Strategy, derived from the outcomes of the Focus groups and stakeholder input.

The chapter is divided into two parts

- first part **7.1 - Directions and Proposals under the Goals of Agenda 2030** contains an initial indication of possible quantitative goals to be achieved and a series of proposals and actions under all the Goals of Agenda 2030 that derive from the outcomes of the work of the Focus Groups; for each of them, a summary table is included that also leads back to the Regional

Recovery and Resilience Projects, the Pivotal Actions and the main Programmatic Goals of the Strategic Programming Document (DSP) 2018-2023, allowing to arrive at a summary of the links between the goals of regional public policies for the long term

- the second part 7.2 - **Directions and Proposals from the participatory process (Focus Groups and Forums)** includes an in-depth analysis focused on the 7 priority issues of interest covered by the Focus Groups and collects the contributions, proposals or actions, received during the participatory process from stakeholders and civil society. The direct and indirect relationship to the relevant Agenda 2030 Goals is also indicated for each of the priority themes. The chapter highlights the transversality of certain elements consistently represented to all the issues addressed in the Focus Groups, albeit with different intensities depending on individual specificities: awareness and knowledge of the processes underway; **governance** of the phenomena, especially by administrations, local, which have the task of acting as an "enabling platform"; the simplification of decision-making processes and procedures for a more efficient and effective relationship between PPAA and citizens; the role of research and innovation, also with a view to transferring the spillovers of technological achievements effectively and efficiently to the production system, institutions, and citizens

*The Possible Impacts* of the Strategy are discussed in **Chapter 8**. Since the SRSvS is a broad policy instrument that, while embedded in a logic of unified regional development policy, does not have its own allocation of financial resources, the estimation of possible impacts takes on only a qualitative connotation, with assessments of the direct or indirect extent of the contribution that each action or chain of actions can make to the achievement of the targets in Chapter 2 to the conditionalities to which they are subject.

Therefore, for each of the proposals mentioned in Chapter 7 on the Goals of the 2030 Agenda, a matrix is proposed where, by way of example, the type is indicated, the possible implementing party (in some cases where non-exclusive competence is configured, the Region is nevertheless indicated), the targets to which the proposal is addressed, the reference time frame, the amount of estimated resources (qualitative indication; €: resources needed of small magnitude; €€: resources needed of medium magnitude; €€€: resources needed of high magnitude), and the type of impact.

**Chapter 9** covers the issues of **Implementation and Monitoring**, from the perspective of regional unitary planning, and mentions the ways in which it is intended to account for the actions undertaken, based on the indicators identified.

#### **2.4.2 SRSVS MONITORING GUIDELINES (IN PROGRESS)**

The SRSvS indicates the directions, priorities and actions to be taken to achieve the sustainability goals, ensuring unity in planning and choice of strategic tools that are coherent and capable of bringing a substantial contribution to the realization of the objectives set at the national level.

To this end, DGR 170/2021 approving the SRSvS, therefore, stipulates that each regional directorate shall produce an annual report on the implementation of the objectives set by the Strategy and assigns the technical-administrative structure of the Steering Committee (see § 2.2 Steering Committees) the task of producing a "synthesis," i.e., an annual report that gives an account of the various activities produced by all regional structures of a legislative, regulatory and related to the use of funding programmed and granted by the Region to implement the Strategy.

In order to facilitate the work of the Directorates and homogenize the format of the reports, DGR 170/2021 stipulates that the Steering Committee shall define Guidelines in order to provide the regional structures with operational tools to:

- Identify and assume in legislative, regulatory, programmatic and planning activities, and in related initiatives and implementation activities within its competence, the directions and objectives of SRSvS
- Demonstrate the contribution of individual activities and overall activity, of each directorate and regional structures as a whole, to the implementation of SRSvS, by
  - the Annual Report of each individual directorate
  - the Annual Summary Report of the Steering Committee
  - the accompanying Reports to the environmental assessment documents (for new plans and programs)

Making use of the dedicated regional information technology platform (MIR).

### 2.4.2.1 The objectives of monitoring

The monitoring activity is intended to address some specific needs:

- deepen the implementation of certain actions inherent in the Strategy; monitor the resources allocated and spent and what results they have contributed to achieving
- promote reflection on the effectiveness of programs/plans in achieving SRSvS objectives, so that the data and information collected can be used to support future operational planning
- return an accessible and usable pool of common knowledge to the regional administration, i.e., policy makers, so that it can be shared and the subject of critical reflection in the eventual need to reorient policies

### 2.4.2.2 "Levels" of monitoring and tools

There are two levels of monitoring of SRSvS:

- the first concerns the **monitoring of Lazio's trends with respect to the Goals of Agenda 2030** and will be carried out by the technical-administrative structure of the Cabina di Regia for the implementation of regional and European policies 2021-2027, supported by the technical working group on sustainability<sup>11</sup>.
- the second is inherent to the **monitoring of the achievement of the goals of the Regional Strategy implemented** by the individual Directorates.

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<sup>11</sup> In 2018, the Working Table on Indicators for the Implementation of SNSvS was established with the aim of defining a core set of indicators for its monitoring, which was attended by representatives from the Ministry of Environment, Ministry of Foreign Affairs, Ministry of Economy, ISTAT and ISPRA. The Summary Report of the work carried out by the Table with the selected set of indicators was sent to the Prime Minister's Office in July 2019. The proposed indicators are associated with the strategic choices of the SNSvS and all the goals of the 2030 Agenda, and allow comparability with the European and international level. The Report sent to the Prime Minister's Office was subsequently shared with the Regions and Autonomous Provinces and Metropolitan Cities, and the selected indicators were taken as the core for monitoring the achievement of sustainability goals



### 2.4.2.3 Monitoring Lazio's trends against the Goals of Agenda 2030















Regarding the first level, as part of the SRSVS for each goal, a short-term analysis has been carried out, taking into account trends over the past five years, on the basis of which any progress or departure from the goal is identified. Where an adequate time series is available, the long-term trend is also commented on. Given the context brought about by the health crisis and the consequent difficulty in achieving the targets set for 2020, these were postponed to 2030, while the original time horizon was maintained for the targets already planned for the year 2025. The summary table is shown below<sup>12</sup>. (Tab.1)

**Table 1 - Targets available 2020-2021**



Goal Agenda 2030	Target 2030	Fonti	Lazio	Breve Periodo	Lungo Periodo
<b>Goal 1: NO POVERTY</b>	Reaching in 2030 the share of 21.8 % - of people at risk of poverty or social exclusion	<i>(Europe 2020 Strategy)</i>	27.5% (2018)		
<b>Goal 2: ZERO HUNGER</b>	By 2030, reduce the share of fertilizer distributed in agriculture by 20% (362.4kg per ha) compared to 2018	<i>(EU Farm to Fork Strategy)</i>	453 kg per ha (2018)		:
	By 2030, reach 25% of UAA invested by organic crops	<i>(EU Farm to Fork Strategy)</i>	22.6% (2018)		:
<b>Goal 3: GOOD HEALTH AND WELL-BEING</b>	Reduce, by 2030, mortality from chronic noncommunicable diseases by 25% (186 per 100,000 population) compared to 2013	(World Health Organization)	234 per 100,000 population (2017)		
	Halve the number of deaths and injuries from road accidents compared to 2010 by 2030 compared to 2015, (35.8 per 100,000 population) and to zero by 2050	<i>(European Transport White Paper)</i>	44.3 per 100,000 population (2019)		
<b>Goal 4: QUALITY EDUCATION</b>	Achieving 10 percent of the school dropout rate by 2030	<i>(National reform plan)</i>	12.0% (2019)		
	By 2030 to reach the 40 percent share of college graduates	<i>(National reform plan)</i>	33.4% (2019)		

<sup>12</sup> In particular, it should be noted that the appendix to the Strategy document shows Lazio's performance against the identified sustainable development goals and the distance to their achievement (see 2 Lazio's positioning and trends against the Agenda 2030 goals). Quantitative targets identified by the region itself were considered where available; for areas where the region could not identify specific targets, targets set at the national and/or supranational level were used.



Goal Agenda 2030	Target 2030	Fonti	Lazio	Breve Periodo	Lungo Periodo
<b>Goal 5: GENDER EQUALITY</b>	Achieving gender parity in the ratio of employment rates by 2030 (Agenda 2030)	<i>(Agenda 2030)</i>	0.77 females/males (2019)		
	Achieve, by 2030 a 50 percent share of women in regional councils	<i>(Agenda 2030)</i>	50%		:
<b>Goal 6: CLEAN WATER AND SANITATION</b>	By 2030 to reach 20 percent of water leakage in drinking water distribution networks (-80 percent)	<i>(Asvis)</i>	47.1 (2015)	:	
	Achieve 100% of the proportion of households served by secondary sewage treatment plants by 2030	<i>(Directive 91/271/CEE)</i>	67% (2015)		:
<b>Goal 7: AFFORDABLE AND CLEAN ENERGY</b>	Reach 21% regional share of renewable electric and thermal energy in total consumption by 2030	<i>(Regional Energy Plan)</i>	10,5% (2017)		:
	Reduce energy consumption in end uses (civil, industry, transportation and agriculture), compared to 2014 values, by 13% to 2030	<i>(Regional Energy Plan)</i>	10.174 Ktep (2014)		:
<b>Goal 8: DECENT WORK AND ECONOMIC GROWTH</b>	Reach 73.2 percent employment rate by 2030	<i>(Regional Energy Plan)</i>	65.7% (2019)		
<b>Goal 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE</b>	Reach the 3% share of GDP devoted to research and development by 2030	<i>(Regional Energy Plan)</i>	1.75% (2018)		
	Reaching 100% of the share of households served by a broadband connection by 2030	<i>(National Strategy for Ultra Broadband)</i>	79.20% (2019)		:
<b>Goal 10: REDUCED INEQUALITIES</b>	By 2030 to reach 4.2 in the disposable income inequality index	<i>(Confronto best performer UE)</i>	6.4 last/first quintile (2017)		

Goal Agenda 2030	Target 2030	Fonti	Lazio	Breve Periodo	Lungo Periodo
<b>Goal 11: SUSTAINABLE CITIES AND COMMUNITIES</b>	By 2025 reduction in PM2.5 emissions (11,740 tons emitted per year by 2025)	<i>(Lazio Region Air Quality Plan)</i>	13,025 tons (2017)	:	
	By 2030, reduction of PM10 limit value exceedance days (3 days)	(OMS)	21.6 days (2018)		:
	By 2030, increase the share of seat-km offered by local public transport by 26% compared to 2004 (9,986.13 km per inhabitant)	<i>(ASviS)</i>	6,368 places - km per inhabitant (2018)		
<b>Goal 12: RESPONSIBLE CONSUMPTION AND PRODUCTION</b>	Decrease in waste generation as a result of implementing the reduction actions in the PRGR of 3% (487.2 kg/inhab*year compared to 2017) to 2025	<i>Regional Plan (Waste 2019-2025)</i>	515 kg/inhab*year (2018)		
	Annual increase in the share of separate collection (DR) to reach 70% DR in 2025	<i>(Regional Waste Plan 2019-2025)</i>	47.78% (2018)		
<b>Goal 13: CLIMATE ACTION</b>	Limiting the use of fossil fuels to reduce climate-changing emissions, compared to 1990, by 37 percent to 2030 and 80 percent to 2050	<i>(Regional Energy Plan)</i>	-11% 37546 thousand toe (2017)	:	
<b>Goal 14: LIFE BELOW WATER</b>	Achieving 100% of marine coastal water bodies in good or excellent ecological status in 2027	<i>(EU Directive 2000/60/EEC)</i>	2015-2017- Monitoring the ecological status of 22 stations: 23% "sufficient" status; 77% "good" status	:	:
	By 2030 to reach 10% share of marine protected areas	<i>(EU Biodiversity Strategy for 2030)</i>	0.50% (2019)	:	
<b>Goal 15: LIFE ON LAND</b>	Land consumption of "0" to 2050	<i>(European goal of zero annual land consumption by 2050)</i>	288.1 ha (2019)		:
	By 2030 to reach 30% share of protected land areas	<i>(EU Biodiversity Strategy for 2030)</i>	12.6% (2019)	:	:
<b>Goal 16:</b>	By 2030 to reach 171 days of duration of civil proceedings	<i>(comparison with Italian best performer)</i>	423 days (2019)		:

Goal Agenda 2030	Target 2030	Fonti	Lazio	Breve Periodo	Lungo Periodo
PEACE, JUSTICE AND STRONG INSTITUTIONS	By 2030, reduce prison crowding to 100 percent	(ASviS)	124.3% (2018)		

For the monitoring of the goals, which will be carried out by the technical-administrative structure of the Steering Committee for the Implementation of Regional and European Policies 2021-2027, the set of indicators may be supplemented with the new indicators included as part of the work on updating the National Sustainable Development Strategy 2022<sup>13</sup>.

#### 2.4.2.4 The monitoring of the achievement of the objectives of the actions of the Regional Strategy

With regard to the monitoring to be carried out by the Regional Directorates, it is represented that as part of the drafting of the SRSvS, about 500 among possible lines of address, proposals and actions have been identified under the Goals and/or priority themes in which the Strategy itself is articulated, collected through the contributions received during the participatory process by the stakeholders involved (proposals that emerged during the interventions of the Focus Groups, received in the form of written contributions, transmitted through the dedicated mail address and/or the Forum section of the website).

In general, all the guidelines, proposals and actions listed are very diverse in terms of type (tangible or intangible), time profile (short/medium/long term), reference target, implementing party, degree of implementation maturity and, sometimes, they are configured more as objectives to be pursued or even broad indications of a guiding character, being, however, useful to calibrate and direct intervention policies targeted to the needs received.

The result has been a work of rereading/revising, thematic and definitional systematization aimed at the dual objective of making these actions:

- **measurable** through a system of indicators that are meaningful and relevant to the scope; easily accessible and reproducible (by means, for example, of tables and/or graphs); controllable and comparable
- **contextualizable** and "anchorable" in a broad planning framework, which refers to the 2030 Agenda, the National Strategy for Sustainable Development and, above all, to the regional unitary planning 2021 - 2027, with particular reference to the Strategic Programming Document – DSP 2018 - 2023 (and subsequent update 2021); to sector planning.

In this way, all policies and actions of regional government find their foundation in the SRSvS and the monitoring of sustainability objectives of interventions can be ensured through the indicators of the 2021-2027 programming and the Regional Investment Monitoring (MIR) system.

Therefore, for the monitoring activity, a **Monitoring Matrix** in Excel (an example of which is given) was prepared for each directorate to fill in for the fields pertaining to it (Tab. 2); the **Matrix** reports the correlation between the reinterpreted SRSvS actions, the Strategic Programming Document - DSP (Macro Area; Programmatic Objective; Programmatic Address; Action), Agenda 2030 (Reference Goal), the National Sustainable Development Strategy - SNSvS (Strategy Area), the Community Programming

<sup>13</sup> As part of the work on updating the National Strategy, the indicators for integrated monitoring were revised to ensure their consistency with the objectives (national targets), of the ETP and the NRP; in particular, 10 indicators were added in consistency with the ETP Ecological Transition Plan while 11 indicators were already consistent with the NRP. Therefore, the number of indicators was increased from 41 to 55.

2021-2027 (identifying the specific ERDF, ESF+ and EAFRD Objectives that can be associated with it) and the indicators to be valued.

More specifically, the "revised" SRSvS actions are broken down into:

- **operational objectives**, which are directly related to the DSP mandate actions
- **Sustainability guidelines**, which decline the operational objectives.

Regarding the **indicators to be enhanced**, again in the logic of a correspondence with other planning/programming tools, it was opted, in principle, to select the relevant output indicators of the EU programs ERDF, ESF+ and EAFRD for the period 2021-2027<sup>14</sup> or, where not relevant, to identify other output indicators (realization) directly referable and explanatory to the "chain" action of mandate of the DSP" - operational objectives - sustainability addresses of the SRSvS."

Below is an exemplification of the Monitoring Matrix that Directorates are required to fill out with reference to the last field (Indicator to be valorized) only.

Specifically:

- **SECTOR PLANNING** (pre-filled field): sectoral plans or programs and the relevant regional directorates with reference to the revised SRSvS actions are entered
- **STRATEGIC PROGRAMMING DOCUMENT** (DSP) 2018 - 2023, updated to 2021 (pre-filled field): the "chain" of the DSP articulated in Macro Area, Programmatic Address, Programmatic Objective, Action with respect to the revised actions of the SRSvS
- **AGENDA 2030** (pre-filled field): the benchmark Goals with respect to the revised actions of the SRSvS
- **NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY - SNSvS:** (pre-filled field): the Reference Area with respect to the revised actions of the SRSvS
- **REGIONAL STRATEGY SUSTAINABLE DEVELOPMENT - SRSvS** (pre-filled field): the revised actions of the SRSvS, broken down into Strategic Objectives and Sustainability Guidelines
- **PROGRAMMING 2021 - 2027** (pre-filled field): the specific Objectives of the ERDF, ESF+ and EAFRD Programs referenced against the revised actions of the SRSvS
- **INDICATOR:** the output - achievement indicator aimed at measuring "how much" of the SRSvS action has been achieved. The indicator has been identified (pre-filled field); its measurement is the responsibility of the Regional Directorates.

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<sup>14</sup> <https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:32021R1058&from=IT> - attachment 1  
<https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:32021R1057&from=IT> - attachments 1-4

**Table 2- Monitoring matrix**

SECTOR PLANNING		STRATEGIC PROGRAMMING DOCUMENT (DSP) 2018 - 2023				AGENDA 2030	NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY (SNSvS)	REGIONAL SUSTAINABLE DEVELOPMENT STRATEGY (SRSvS)		PROGRAMMING 2021 - 2027	INDICATOR (to be valorized)
Plane / Program	Regional direction	Macro Area	Programmatic Address	Programmatic objective	Action	Goal	Area	Strategic Goals	Sustainability addresses	Specific Objective (ERDF, ESF, EAFRD)	
Waste Management Plan/APEA Guidelines	Waste Directorate/Economic Development Directorate	Create value	Enterprise value	Development of enterprise places	2.01.02.0 4 Ecological ly Equipped Productive Areas (APEAs) (AC 10)	Goal 12: Ensure sustainable patterns of production and consumption.	Planet	Promoti ng the environ mental sustaina bility of producti on activitie s	Support business networks that promote production processes that reduce the impact on the territory and comply with environmental criteria and minimum recycling targets, which use eco- efficient technologies and practices, including through incentives and defiscalization and/or reward systems	b6 - promoting the transition to a circular economy	RCO 119 - Waste prepared for reuse.  Number of recognized APEAs.

### 2.4.2.5 The Monitoring of Sector Planning

Sectoral planning guides the objectives on which the activities of regional directorates are based; to this end, it assumes relevance to identify and qualify the relationship between SRSvS and planning in order to coordinate different policies and actions, monitor their effects and maximize their implementation effectiveness. An initial exercise in this regard is the Correlation Matrix for assessing regional sectoral planning against the Sustainable Development Goals-SDSvS, SRSvS, Agenda 2030- (Tab. 3), which relates SRSvS (Area, Choice, Goal); the Goals of Agenda 2030; SRSvS (priority themes); and regional Plans and Programs. The degree of correlation of the Plan/Program with the sustainability chain/system is indicated with a score between 1 (minimum) and 3 (maximum).<sup>15</sup>

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<sup>15</sup> This matrix was elaborated on the example of the one shared by the within the CREIAMO PA Project at QS1 - Environmental Assessments - Actions to improve the effectiveness of SEA and EIA processes related to Programs, Plans and Projects (interregional grouping composed, in addition to Lazio, by Liguria, Abruzzo, Piedmont, Umbria and Tuscany Umbria.





## 2.4.2.6 Operational modalities for monitoring regional directorates activities

In summary, regional directorates are asked to prepare an Annual Report on SRSvS implementation through:

1. Indication of the **Editor**, who is identified as the "Sustainability Contact Person"<sup>16</sup>
2. Indications of the **Areas** of the Directorate that collaborated in the implementation of monitoring actions
3. Compilation of the **Monitoring Matrix** for an initial compilation of the main results obtained as of March 2021 (date of approval of the SRSvS) (in operational terms, this involves enhancing the indicators in the matrix (Tab 2))
4. Modification/integration of the **Correlation Matrix between the SNSvS, Agenda 2030; SRSvS and Programming 2021-2027**, through a possible different modulation of the pre -attributed scores (Tab 3)
5. With regard to sectoral **planning/programming**, each Directorate should also complete the following 2 diagrams (for each Sectoral Plan under its responsibility)<sup>17</sup>
6. **Comments/notes** to better clarify or supplement what is indicated in the previous points

### 1) General information

Plan/Program Name	
Act and date of adoption/approval	
Possible update scheduled for (insert date)	
Details of the conclusion of the SEA procedure (Act and date)	
Indications regarding any Plan/Program monitoring actions implemented.	
Estimated resources allocated to actions/ interventions / projects in the field of sustainable development of the Regional Directorate during the last year	
Possible level of "acceptance" of the indications present in the Environmental Report of the SEA <sup>18</sup> procedure	
Notes (max 500 characters)	

<sup>16</sup> Organization Act May 31, 2021, No. G06507 Establishment of the "Technical Working Group on Sustainability"

<sup>17</sup> Regarding the Strategic Environmental Assessment of Plans and Programs, see also Ch. 3

<sup>18</sup> An exemplification of the methodology and some outputs of the SEA procedure inherent to the 2021-2027 ERDF Program (with a focus on the preparation of the Environmental Report) of the Lazio Region is provided in Appendix 1, as a possible reference model for the effort to relate the system of specific objectives (functional areas) of the Program to the 2030 Agenda, SNSvS, SRSvS, both from a conceptual point of view and a matrix exemplification.

2) First assessment of the environmental sustainability of the Plan/Program<sup>19</sup>

	Yes/ No	If Yes, to what extent	Notes
The Plan/Program has ensured/ensures the participation of citizens and their associations, representing the different instances			
The Plan/Program has ensured/ensures the decoupling of economic growth and its impact on the environment, respect for the conditions of ecological stability, preservation of biodiversity			
The Plan/Program has ensured/ensures the fulfillment of social requirements related to the development of individual potential as necessary prerequisites for the growth of competitiveness and employment			
The Plan/Program reduces the flow of matter and energy through the economic system and the associated waste generation			
Notes (max 500 characters)			

Other implementing instruments under the Directorate's responsibility on environmental issues (name and reference acts)	
.....	
Notes (max 500 characters)	

### 2.4.3 "SUSTAINABLE DEVELOPMENT STRATEGY: THE CONTRIBUTION OF ADAPTATION TO CLIMATE CHANGE"

As reported in the paragraph Governance of Implementation - Collaboration Agreements, the Lazio Region intended to continue the activities undertaken through the first Public Notice of the Ministry for the construction of the SRSvS, participating in the second Public Notice (DM prot. no. 333/2019), identifying, as a priority theme to be deepened that of adaptation to climate change.

Following the expression of interest by the Region, the Ministry requested the submission of the detailed executive project, with an indication of the actions to be carried out for the definition of the project

<sup>19</sup> Outline borrowed and readjusted according to the contents of Art. 34 of Legislative Decree 152/2006

called "Sustainable Development Strategy: the contribution of Adaptation to Climate Change" and the related budget <sup>20</sup>.

To further explore this issue, the Lazio Region has also joined the interregional grouping formed within the CreIAMO PA project of which Sardinia, Liguria and Puglia<sup>21</sup> are also part .

The integration actions to the Strategy related to adaptation to climate change (hereinafter ACC) being drafted, are aimed at deepening the objectives of the Strategy:

- 13.2 Integrate climate change measures into national policies, strategies, and planning
- 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help protect ecosystems, enhance adaptive capacity to climate change, extreme weather, droughts, floods, and other disasters, and progressively improve soil quality

The Strategy integration document will therefore contain:

- the climate and socio-economic, risk and vulnerability scenarios of specific regional land contexts and productive sectors
- the measures to enhance territorial resilience to be included in the Sustainable Development Strategy (specifically covering urban areas, urban and peri-urban parks, River Contracts and Natural Capital).

On April 22, 2020, the Ministry and the Lazio Region signed the "Agreement - ex art. 15 Law of August 7, 1990, no. 241, as amended and supplemented - of Collaboration for the activities to support the implementation of the fulfillments provided for by art. 34 of Legislative Decree no. 152/2006, as amended and supplemented, for the implementation of the Regional Strategies for Sustainable Development." The Lazio Region has therefore entrusted Lazio Innova<sup>22</sup>, already a member of the Steering Group identified for the implementation of the SRSvS project - Towards a Lazio of Sustainability, with some of the activities envisaged by the Detailed Operational Plan - POD related to the ACC.<sup>23</sup> In March 2021 there was a change in the components of the Regional Council of the 11th Legislature and the reshuffling of the related delegations<sup>24</sup> ; the subsequent reorganization involving the regional directorates, including those directly involved in the project, slowed down the appointment of the specific regional figures for the ACC. That was exacerbated by extension of the pandemic emergency from Covid-19 and the parallel hacker attack to the Lazio Region's IT systems that effectively halted the region's full operations for an extended time period.

The Ministry and Lazio Region then signed an additional deed extending the previous Collaboration Agreement unchanged in terms of expenditure, by virtue of the express terms of Article 7 of the Agreement, agreeing to extend by six months the final date for the finalization of activities at no

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<sup>20</sup> Therefore, with DGR No. 157/2020, the Outline of Agreement ex art. 15 Law of August 7, 1990, No. 241 and ss.mm.ii. and the Executive Project called "Sustainable Development Strategy: the contribution of Adaptation to Climate Change" was approved, together with the financial business plan and timetable of activities.

<sup>21</sup> A reference tool in the drafting of the Strategy is the document prepared by CreIAMO PA Line 5 - Strengthening Administrative Capacity for Climate Change Adaptation Methodologies for Defining Regional Climate Change Adaptation Strategies and Plans

<sup>22</sup> Lazio Innova SpA is a company that operates under an in-house providing regime to the Lazio Region, which exercises similar control over Lazio Innova as it does over its own services.

<sup>23</sup> DE G06644 of 03/06/2021 DGR n. 157/2020 - Implementation Project "Sustainable Development Strategy: the contribution to Climate Change Adaptation": entrusting of activities to the in house providing Company Lazio Innova SpA. Approval of Outline of Agreement and Detailed Operational Plan (DOP) The signed agreement bears the Lazio Region prot. no. 716347 - of 14/09/2021

<sup>24</sup> See Decree of the President of the Lazio Region No. T00033 of March 12, 2021

additional cost to the Administrations. The new end date of the Agreement is therefore set at June 8, 2022.

Regarding the Activities under the project, a brief summary regarding the individual categories is given below:

**Category of intervention A.** *Governance of the Regional Strategy for Sustainable Development.*

**Subcategory of intervention A3.** *Activities related to the operation of the institutional steering cabinet.*

**Action A3.1** *Integration of the technical group.*

As previously described, with DGR No. 170/2021 the Council deemed it appropriate, with a view to simplification and streamlining of political and administrative action, to centralize the functions of guidance and verification of the implementation of the results of the SRSvS to the Cabina di Regia for the implementation of regional and European policies 2021-2027", therefore, the technical working group<sup>25</sup> ceased its functions in relation to the additional activities provided for in DGR 170/2021 (cf. monitoring of the SRSvS) but continues to carry out technical-administrative support activities of the "Cabina di Regia for the implementation of regional and European policies 2021-2027" only for actions related to the implementation of the project related to the ACC.

In this context,<sup>26</sup>the technical working group was, however, integrated with specialized expertise in the field, reporting to the Regional Directorate of Natural Capital, Parks and Protected Areas; the coordination of project activities of a technical nature were, therefore, entrusted to the pro-tempore Director of the same Directorate, Vito Consoli , while the Head of the Office of Purpose Small Municipalities and River Contracts, Cristiana Avenali, was entrusted with the coordination of a political nature has been designated as the delegate of the Councillor for Ecological Transition and Digital Transformation, for policy direction on the Regional Sustainable Development Strategy.<sup>27</sup>

The working group met in order to ensure the implementation of all actions under the project the sharing of input from the individual directorates of reference.

In particular, the workshop that took place on April 5 with the support of experts from the CMCC Foundation, allowed participants to learn about the expected climate hazard and the most exposed areas, as well as to reflect on the main critical issues and adaptation goals for the Region, taking the opportunity to measure its ability to assess risks and imagine possible adaptation goals.<sup>28</sup>

**Intervention subcategory A4.** Expanding the involvement of local institutions and synergy with metropolitan cities

**Action A4.1** Establishment of a discussion table with local institutions.

With regard to the Action, the Metropolitan City of Roma Capitale has been a privileged partner for the Lazio Region since the beginning of the activities involved in the drafting of the SRSvS.

Regarding the in-depth study of the aspects related to Adaptation to Climate Change, the Lazio Region has provided for the organization of periodic meetings with representatives designated by the EELLS;

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<sup>25</sup> Cf. DPR n. T00066/2019; DGR n. 797/2018 e n.157/2020

<sup>26</sup> AO G14703 del 04/12/2020

<sup>27</sup> Assessor's Directive n. D00002 of 12/07/2021 Identification of Dr. Cristiana Avenali as the delegate of the Assessor for Ecological Transition and Digital Transformation, for policy direction regarding the Regional Sustainable Development Strategy

<sup>28</sup> As part of the hazard and exposure analysis workshop, some maps were presented that identify areas for special attention in the future

the CMRC, the Provinces and the Provincial Capitals, all the Lazio municipalities with a population > 30,000 ab, as well as ANCI Lazio have been sensitized on the issue of Adaptation and invited to designate their own contact person for the comparison activities that will be carried out in June. For the purpose of preparing the comparison, a questionnaire was, in addition, prepared for completion (see dedicated website "Lazio, Sustainable Region" - <http://www.lazioeuropa.it/laziosostenibile>)

The objectives of the activities are :

- Identify shared lines of action to promote the connection between the Sustainable Development Strategy of the Region and that of the Metropolitan City
- Identify a shared methodology at the regional and local level for the development of adaptation policies
- Identify pilot projects (e.g., coastal erosion; river, shoreline and lake contracts; water resource scarcity; other (in collaboration with and based on the directions of the Office of Purpose Small Municipalities and River Contracts)
- Acquire proposals for alignment of adaptation policies at different levels of government and, in particular, coordination with PAESCs (in collaboration with Office of Purpose Small Municipalities and River Contracts)

## **Intervention category B**

### **Intervention subcategory B4**

#### **Action B4.1** *Stakeholder Discussion Tables.*

Three Focus Groups were organized covering Urban Areas (28/04/2022); Infrastructure (29/04/2022); and Agriculture (5/05/2022), chosen in view of the important impacts that Climate Change may have on these areas and aimed at identifying the most appropriate adaptation actions.

The meetings held in dual modalities (in-person or through VC), were introduced by a talk summarizing the activities carried out to define the SRSvS, retracing its stages and main contents, recalling the positioning of RL with respect to the SDGs and the next steps and goals.

For each FG, an introductory paper was prepared and illustrated, prepared by the CMCC Foundation, containing a brief description of the regional context and a summary of Lazio's climate profile, the main types of climate risks for the different sectors, and possible adaptation options to cope with them, as identified by the latest IPCC (Intergovernmental Panel on Climate Change) report.

The discussion with stakeholders was animated through the use of the Mentimeter platform that allows for feedback with interactive elements such as surveys. The use of this platform allowed for immediate feedback on some of the questions posed by the speaker and certainly had the merit of acting as a "facilitator" for the initiation of discussion and involvement of stakeholders.

At the end of each FG, participants were asked to submit a written contribution, indicating May 15 as the deadline; the document summarizing the contributions received will form a part of the SRACC

### **Intervention subcategory B4.**

#### **Action B4.2** *Webinars aimed at enterprises.*

Webinars aimed at enterprises have been scheduled for the end of May (26 and 31/05). A number of coordination meetings were held to define the content and identify stakeholders (11/05; 16/05). With

regard to stakeholders, it was decided to involve small and medium-sized enterprises and start-ups in particular; the webinars are aimed at the entire regional productive fabric, starting with agriculture (other sectors: utilities, transport, energy, waste, agriculture, food, manufacturing, mechanical, tourism, port activity). During the webinars, a technical paper was presented containing a summary of the main reference documentation, the regional climate profile with a focus on the topics covered by the webinars, and the objectives to be achieved; companies will be asked to present some good practices. The contributions from the webinars will be processed and the outcomes summarized in the final draft of the strategy paper.

**Intervention category C**  
**Subcategory of intervention C5**

**Action C5.1 Mapping regional policies and actions.**

Back-office work on the mapping of regional policies is nearing completion, involving the analysis of sector planning including through the use of summary matrices.

In particular, for the mapping of the planning tools in place, express reference was made to the "Guidelines for Regional Strategies for Adaptation to Climate Change"<sup>29</sup> (hereinafter Guidelines) document produced by the Conference of the Regions and Autonomous Provinces in December 2019, which enhanced the experience shared by the Regions of Sardinia and Lombardy<sup>30</sup> regarding the Regional Strategies adopted .

As indicated in the Guidelines (see Document cited §M.S3 Integration of Adaptation in Plans and Programs) a mapping of the current planning framework was carried out, according to the specific minimum criteria indicated, to indicate whether, and how, the issue of adaptation to climate change is addressed in various regional plans and programs concurrent to the environmental and risk management subject, i.e., to assess whether explicit or implicit adaptation measures are already defined.

For the purpose of the above assessments, the SRACC Objectives assumed for the consistency matrix of individual Plan/Program content and objectives are given below. These Objectives make explicit reference to what is outlined in the National Strategy for Adaptation to Climate Change (SNACC)<sup>31</sup> (Tab 4).

**Table 4 - Codification of the Goals of SRACC and the reduction of related risks.**

Code	Macro-objective	Reducing the risks associated with the objectives
SRACC- A1	Minimizing risks from climate change	<i>Alterations in the hydro-geological regime that could increase the risk of landslides, mud and debris flows, rock collapses, and flash floods</i>
SRACC- A2		<i>Soil degradation and higher risk of soil erosion and desertification</i>

<sup>29</sup> MASTER ADAPT Program (MAINSTREAMING EXPERIENCES AT REGIONAL AND LOCAL LEVEL FOR ADAPTION TO CLIMATE CHANGE) - Conference of the Regions and Autonomous Provinces "GUIDELINES FOR REGIONAL ADAPTATION STRATEGIES TO CLIMATE CHANGE" - Document 19/220/CR9a/C5 - December 18, 2019 the Guidelines for Climate Change Adaptation Strategies developed under the project that "... can therefore be a useful reference and coordination tool when drafting their own adaptation strategies and strengthen synergies between adaptation, sustainable development and disaster risk management, as encouraged by the European Commission..."

<sup>30</sup> the two regions are collaborating on the "Life Master Adapt" project, at the head of a technical-scientific and institutional partnership comprising, in addition to the regions mentioned above, ISPRA, University of Sassari, IUAV University of Venice, Fondazione Lombardia per l'Ambiente, Coordinamento Agende 21 Locali Italiane and Ambiente Italia Srl

<sup>31</sup>Cf. MATTM Elements for a National Climate Change Adaptation Strategy The Context of the National Adaptation Strategy - Climate Change Impacts and Vulnerability in Italy <https://www.mite.gov.it/notizie/strategia-nazionale-di-adattamento-ai-cambiamenti-climatici-0>

Code	Macro-objective	Reducing the risks associated with the objectives
SRACC- A3	Protect the health the welfare and assets of the population	<i>Risk of forest fires and drought for crops and forests</i>
SRACC- A4		<i>Risk of flooding and erosion coastal areas for increased incidence of extreme weather events and sea level rise</i>
SRACC- B1		<i>Possible worsening of already existing conditions of heavy pressure on water resources, with reduced water quality and availability, especially in summer</i>
SRACC- B2		<i>potential reduction in agricultural productivity</i>
SRACC- B3		<i>Possible impact on human health due to increased illness and mortality related to heat waves</i>
SRACC- B4		<i>Damage to the economy as a whole, mainly due to the possibility of reduced hydropower generation potential</i>
SRACC- B5		<i>Damage to the tourism sector due to reduced winter tourism offerings and lower tourist attractiveness of the summer season</i>
SRACC- B6		<i>Decline in productivity in the agriculture and fisheries sector</i>
SRACC- B7		<i>Effects on urban and rural infrastructure with possible disruption or inaccessibility of the transportation network with damage to human settlements and socioeconomic activities</i>
SRACC- C1	Preserving the natural heritage	<i>Risk of loss of biodiversity and natural ecosystems</i>
SRACC- D1	Maintain/improve the resilience and adaptive capacity of natural, social, and economic systems	

Thus, the proposed scheme formed the basis for assessing the programmatic coherence of a plan or program and for identifying potential synergies or conflicts with other existing instruments.

Next, criteria were adopted to assess whether the issue of climate change adaptation is dealt with explicitly or implicitly.<sup>32</sup> The criteria proposed in the guidelines can be defined as the minimum elements to be taken into account in plans and programs for the purpose of adaptation and should be checked by the entity responsible for drafting a plan or program (but also, by extension, a project) from the preliminary stages of its strategic design.

Table 5 shows the criteria for integrating the individual plan with the objectives of the ACC.

**Table 5 - Criteria adopted for the integration of the individual plan into the ACC**

Integration criterion	Verification element
Reference to adaptation policies	Responsible for explicit actions (SEACC)
	National Strategies (SNACC)
	National Plans (PNACC)
	Regional Strategy (ACC)
Weather-climate analysis	Identification of key climate trends
	Analysis of expected climate scenarios
	CC-related vulnerability analysis
	Assessment of land adaptive capacity
Risk analysis	Geographical analysis (location, extent)
	Temporal analysis (frequency, duration, etc.)

<sup>32</sup> The distinction between explicit and implicit adaptation measures refers to the content of plans or programs that, while not containing, explicitly, references to climate change adaptation may, nonetheless, include measures that contribute to increasing the resilience of an area even with respect to climate change-related extreme events



Integration criterion	Verification element
	Dimensional analysis (scale, intensity)
	Probability of occurrence
Vulnerability assessment	Estimation of someone/something's vulnerability to something (i.e., a climate event) at a specific time (i.e., present or future)
Adaptation goals to be integrated into the P/P and definition of design alternative	Identification of goals and design alternatives that outline CC resilient scenarios
Analysis of impacts	Analysis of the possible impacts of the P/P on the CC and the CC on the P/P
Monitoring indicators	Identification of indicators that measure the effectiveness of adaptation actions in terms of outcomes

Based on the evaluation criteria in the above table, the analysis of consistency of the individual plan with the ACC was then developed according to a matrix scheme in the following table.

**Table 6 - P/P consistency matrix with ACC**

Plan/Program	References to ACC					Responsible for explicit actions	
		Analysis meteoroclimatic	Adaptation goals (Implicit/Explicit) and definition of design alternatives		Analysis of impacts		Monitoring indicators
			Explicit	Implicites			

The analysis was carried out based on the following consistency classification:

1. Direct coherence and with explicit adaptation goals
2. Indirect coherence (implicit adaptation goals)
3. Neutral where neutrality may be due to: the subject matter addressed, the specific objectives, the goals from the Plan/Program analyzed. Neutrality must not, however, outline elements of potential inconsistency or conflict
4. Elements of inconsistency
5. Elements of potential conflict

This classification was then associated with numerical values classified into 5 classes in which the lowest class represents the highest consistency and the highest class represents more critical conditions (elements of inconsistency or potential conflict). These classes were then brought back into the range of values from 0 to 1 (as shown in the table below), in order to be comparable and comparable, according to the following diagram to which, for the benefit of ease of reading, graphic symbols have been associated.







		Value range		
1	Direct coherence and with explicit adaptation goals	0 - 0,2		
2	Indirect coherence (implicit adaptation goals)	0,2 - 0,4		
3	Neutral	0,4 - 0,6		
4	Elements of inconsistency	0,6 - 0,8		
5	Elements of potential conflict	0,8 - 1,0		

Table 7 - General summary of the consistency of the criteria adopted for verifying the integration of key P/Ps into the SRACC

Integration criterion	Verification element	Regional Territorial Landscape Plan (PTPR)	Regional Plan of Protected Natural Areas (PRANP) - being updated	Regional Forest Plan (RFP)	Regional Plan for the Prevention, Prevention and Active Fight against Forest Fires - 2020-2022 period (AIB Plan)	District Basin Authorities									Regional Water Protection Plan (PTAR)	Regional Energy Plan of the Lazio Region (PER)	Air Quality Restoration Plan (AQRP)	Regional Waste Management Plan (RMP)	Regional Plan of Mining Activities (PRAE)	Regional Plan for Transportation Mobility and Logistics (PRTML)
						Central Apennine District Basin Authority			Southern Apennine District Basin Authority											
						Water Management Plan (PGDAC.3)	Flood Risk Management Plan (PGRAAC Cycle II)	Basin coverage master plan	Water Management Plan (WMP).	Flood Risk Management Plan (PGADAM Cycle II)	Hydrogeological Structure Master Plan (PSAI-RI) Hydraulic Risk	Hydrogeological Structure Master Plan (PSAI-RF) Landslide Risk	Hydrogeological Structure Master Plan (PSEC) Coastal erosion							
Reference to adaptation policies	European Strategy for Adaptation to CC (SEACC)	×	×	×	×	×	✓	×	✓	✓	×	×	×	✓	✓	×	✓	✓	✓	
	ACC National Strategies	×	×	×	×	✓	✓	×	✓	✓	×	×	×	✓	✓	×	✓	×	×	
	ACC National Plans	×	×	×	×	✓	✓	×	✓	✓	×	×	×	×	×	✓	×	×	×	
Weather-climate analysis	Identification of key climate trends	×	×	×	✓	✓	✓	✓	×	✓	✓	×	✓	✓	×	✓	×	×	×	
	Analysis of expected climate scenarios	×		×	✓	✓	✓	×	×	✓	✓	×	✓	×	×	×	×	×	×	
	Analysis of CC-related vulnerabilities	×	×	×	×	×	✓	×	×	✓	×	×	×	×	×	×	×	✓	×	
	Assessment of land adaptive capacity	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×	×	✓	×	
Risk analysis	Geographical analysis (location, extent)	×	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×	✓	✓	×	
	Temporal analysis (frequency, duration, etc.)	×	×	×	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	×	×	✓	×	×	
	Dimensional analysis (scale, intensity)	×	×	×	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	×	×	✓	×	×	
	Probability of occurrence	×	×	×	✓	✓	✓	×	×	✓	✓	✓	✓	✓	×	×	✓	×	×	
Vulnerability assessment	Estimation of someone/something's vulnerability to something (i.e., a climate event) at a specific time (i.e., present or future)	✓	✓	×	✓	✓	✓	✓	✓	✓	×	×	×	✓	×	✓	×	✓	×	
Adaptation goals to be integrated into the P/P and definition of design alternatives	Identification of goals and design alternatives that outline CC resilient scenarios	×	×	×	×	✓	×	×	✓	×	×	×	×	✓	×	×	✓	✓	✓	
Analysis of impacts	Analysis of the possible impacts of the P/P on the CC and the CC on the P/P	×	×	×	✓	✓	×	×	×	×	×	×	×	✓	×	×	✓	✓	×	
Monitoring indicators	Identification of indicators that measure the effectiveness of adaptation actions in terms of outcomes	×	×	×	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	×	✓	✓	×	

✓ Criterion/parameter consistent directly/indirectly with SRACC

× Criterion/parameter not considered in the P/P due to irrelevance of the P/P itself

✗ Criterion/parameter not considered in the P/P but hopefully to be incorporated in future P/P updates

Table 8 – Consistency Matrix Plans reviewed with SRACC

Plan/Program		References to ACC Strategy	Adaptation measures				Responsible for explicit actions	P/P classification	
			Analysis meteoroclimatic	Adaptation goals (Implicit/Explicit) and definition of design alternatives.		Analysis of impacts			Monitoring indicators
				Goals	Design alternatives				
Regional Territorial Landscape Plan (PTPR)		☹️	☹️	😊(I)	☹️	☹️	☹️	☹️	
Regional Plan of Protected Natural Areas (PRANP) - being updated		☹️	☹️	☹️	☹️	☹️	☹️	☹️	
Regional Forest Plan (RFP)		☹️	☹️	☹️	☹️	☹️	☹️	☹️	
Regional Plan for the Prevention, Prevention and Active Fight against Forest Fires - 2020-2022 period (AIB Plan)		☹️	😊	😊(I)	☹️	😊	😊	😊	
District basin plans	Central Apennine District Basin Authority	Southern Apennine River Basin District Management Plan (PGDAC)	😊	😊	😊(E)	☹️	😊	😊	😊
		Flood Risk Management Plan	😊	😊	😊(E)	☹️	😊	😊	😊
		Basin-covered outline plans (PAIs).	☹️	☹️	😊(I)	☹️	😊	☹️	☹️
	Southern Apennine District Basin Authority	Water Management Plan (WMP) di gestione delle acque (PGADAM)	😊	☹️	😊(E)	😊	☹️	😊	😊
		Flood Risk Management Plan(PGRADAM Cycle II)	😊	😊	😊	😊	☹️	☹️	😊
		Hydrogeological Structure Master Plan (PSAI-RI ) Hydraulic Risk	☹️	😊	☹️	☹️	😊	😊	😊
		Stralcio Plan for Hydrogeological Structure (PSAI-RF) Landslide Risk	☹️	☹️	😊(I)	☹️	☹️	😊	☹️
		Stralcio Plan for Hydrogeological Structure (PSEC) Coastal Erosion	☹️	☹️	☹️	☹️	😊	😊	☹️
	Regional Water Protection Plan (PTAR)		😊	😊	😊(E)	☹️	☹️	😊	😊
Regional Energy Plan of the Lazio Region (PER)		😊	☹️	😊(I)	☹️	☹️	😊	☹️	
Air Quality Restoration Plan (PRQA)		😊	😊(I)	☹️	☹️	☹️	😊	☹️	
Regional Waste Management Plan (PRGR)		😊	☹️	😊(I)	😊(I)	😊	😊	😊	
Regional Plan for Mining Activities (PRAE)		😊	☹️	😊(I)	☹️	😊	😊	😊	
Regional Plan for Transportation Mobility and Logistics (PRTML)		😊	☹️	😊(I)	☹️	☹️	☹️	☹️	

## **Intervention subcategory C5.**

### **Action C5.2** *Development of models and scenarios at regional and sectoral levels.*

The Latium Region Climate Profile was prepared by the CMCC Foundation. It describes the climate characteristics of the region assessed on the basis of expected climate scenarios from high-resolution climate models.

The analyses conducted made it possible to characterize the climate variability observed in the recent past at the local level, identifying, for example, trends of change already taking place for some specific climate characteristics, and to assess, again locally, the expected future climate variations due to climate change on the basis of different scenarios released by the IPCC (Intergovernmental Panel on Climate Change, <https://www.ipcc.ch>).

In particular, the analysis of historical climate was conducted by means of gridded observational datasets and re-analyses (at a resolution between about 2 and 12 km resolution), while for scenarios, both different European models made available by the EURO-CORDEX program (<http://www.euro-cordex.net>; Hennemuth et al, 2017; Jacob et al., 2020) at the resolution of about 12 km, as well as high-resolution climate projection data (at about 8 km) currently available over the entire Italian territory, made available by the CMCC Foundation (Bucchignani et al., 2015; Zollo et al., 2015).

Expected climate projections for the future 30-year periods 2016-2045 (centered on 2030) and 2036-2065 (centered on 2050) were analyzed with respect to the reference period (1981-2010), in terms of both mean and extreme values. These projections are obtained by considering two different IPCC scenarios, RCP4.5 and RCP8.5, from simulated regional climate model data available under the EURO-CORDEX program mentioned above

A focus on the city of Rome was, in addition, carried out using a recent CMCC paper on the climate risk condition for 6 Italian cities (<https://www.cmcc.it/it/rischio-clima-citta-2021>), which also contains an analysis of the current and expected climate condition. In particular, the ERA5-2km reanalysis was used to analyze the climate over the period 1989-2020.

The analyses conducted constitute the starting point for subsequent impact and risk assessments carried out by integrating the hazard and exposure components in order to define the baseline, i.e., the current criticalities against which it will be assessed whether any expected changes (e.g., decrease in precipitation values, increase in number of heat wave days) could represent a further factor of aggravation of climate conditions in the future.

Based on the knowledge of the risk phenomena and vulnerability of specific regional territorial contexts and productive sectors, measures to enhance territorial resilience will then be identified for inclusion in the Sustainable Development Strategy.

### **Action C5.3** *Summary document for integration between Climate Change Adaptation Measures and Sustainable Development Strategy.*

Action is currently being implemented

### 3.1 Accompanying pathways for policy coherence

#### 3.1.1 THE REGIONAL HEARINGS

The Sustainable Development Strategy was realized through a bottom up process that involved the participation of different actors in the territory and the involvement of the Administration at the regional and local levels.

The process of defining the Strategy was initiated with Internal Hearings within the Lazio Region that were held in the summer of 2018 and involved 18 Regional Directorates (60 Regional Areas; 120 among Regional Managers and officials). The Hearings provided data, information, and suggestions for a first and fundamental information base on the regional state of the art in terms of programs, guidelines, actions and interventions useful to give depth to the draft SRSvS, but also to the regional unitary planning as a whole.

#### 3.1.2 PARTICIPATION IN INTERREGIONAL GROUPS

The Region participates in the work of the CREIAMO PA Project Groups "Competencies and networks for environmental integration and improvement of PA organizations" (National Operational Program Governance and Institutional Capacity 2014-2020 - Axis 1 "Development of administrative and institutional capacity for the modernization of Public Administration")<sup>33</sup>.

In particular, it adhered to Line of Intervention L5 - Strengthening Administrative Capacity for Climate Change Adaptation, aimed at spreading a culture of climate change adaptation at the regional and local level, activating a path of multilevel governance, in order to overcome regional and local disparities regarding the implementation of climate change adaptation pathways.

The CREIAMO PA Technical Unit of Line 5 to support the activities of the regions prepared a specific elaboration "Methodologies for the definition of regional strategies and plans for adaptation to Climate Change" with the aim of providing a tool to create conditions of coherence between Regional and local Climate Change Adaptation Strategies and the contents of the National Adaptation Strategy and Plan. The proposed methodology aims to outline governance models to be followed within the Regions and EELs, examples and techniques to define at the regional and local level the impacts and vulnerability to climate change of territories and priorities for actions.

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<sup>33</sup> CREIAMO PA offers pathways for strengthening administrative and institutional capacity as well as technical skills to public administrations and others with environmental expertise, aimed mainly at improving the quality of human resources, management of interinstitutional and stakeholder relations, levels of digitalization, and organizational characteristics. This will be achieved through training moments alternating with on-the-job shadowing activities. These modes of operation will be flanked by actions of a more "systemic" nature aimed at enhancing the comparison between territorial actors, thus strengthening the planning and implementation of environmental policies. These operational modalities respond to the need to elevate the technical skills of professionals and to accompany regional and local administrations in reorganization processes.



The methodological document was shared among the member regions of the interregional grouping also composed of Sardinia, Liguria and Puglia; in addition, critical and/or most significant aspects were discussed in depth in the organized meetings<sup>34</sup>.

Within the same line of intervention, a second table concerns the inland areas of the Apennines with high seismicity. In this case, the regions involved are those of the "crater" i.e. the regions affected by the 2016 earthquake: Lazio, Marche, Umbria and Abruzzo.

In this context, the topic dealt with mainly concerns the resilience of territories with respect to the two risk components: climate and earthquake.

Another line of intervention of CREIAMO PA to which the Lazio Region has joined is QS1 - Environmental Assessments - Actions to improve the effectiveness of SEA and EIA processes related to Programs, Plans and Projects. The interregional grouping also includes Liguria, Abruzzo, Piedmont, Umbria and Tuscany Umbria. The main focus was on the need to use a "uniform" system of indicators and to have reference targets for strategic environmental assessment that could coincide with the strategic objectives tree of the SNSvS and thus with the SRSvS.

As previously mentioned, the Correlation Matrix for assessing regional sectoral programming against the Sustainable Development Goals (SNSvS, SRSvS, Agenda 2030) used for Strategy monitoring was borrowed precisely from the work of the QS1- SEA table.

Finally, the Region took part in the table - CREIAMO PA - L2WP1 - "Regions and Autonomous Provinces for the implementation of the National Sustainable Development Strategies" for the Update of the Strategy by sending timely comments in relation to the work done for the rationalization of the Sustainability Vectors as well as to the workshops organized by MiTE within the framework of the PCSD project on policy coherence for sustainable development from the European Commission's Structural Reforms Support Program<sup>35</sup>.

### **3.1.3 INVOLVEMENT OF TERRITORIES AND NEXT STEPS (SEE ALSO § 3.4.1)**

As already reported, for the drafting of the SRSvS a dedicated website was built, which constituted the engine and container of all the activities of the Strategy as well as the main connection tool with the territory, given that, for the well-known reasons related to the pandemic, the activities planned in presence on the entire regional territory could not be realized. The site is a dedicated area within the regional website, aimed at interacting with all stakeholders involved citizens, businesses, local authorities, schools, research world, through web marketing and web advertising activities, envisaging the integrated use of social media to communicate with the different levels of recipients. Within the site, the Focus groups, Forum, webinars and general participation activities previously planned in presence have been implemented.

The site will also continue to perform this bridging function as part of the process of building the Climate Change Adaptation Contribution Document.

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<sup>34</sup> The Methodological Document prepared by line 5 of CREIAMO PA was used by the Lazio Region as a conceptual reference for the work of initiating the construction of the project start-up documents

<sup>35</sup> The project aims to define a proposal for a National Action Plan for Policy Coherence for Sustainable Development, as a pivotal tool for the implementation of the National Strategy for Sustainable Development, i.e., the integration of the SDGs into Italian decision-making.

Through the consultation of the same, it will be possible not only to access the documentation produced and all the events planned by the project: (3 Focus groups inherent to the themes "Urban Areas", "Infrastructure" and "Agriculture" and 2 webinars addressed to businesses in the area; targeted meetings with EELs and concluding Forum), but also to detect needs, requirements and proposals coming from the area, including through the online administration of a questionnaire targeted on climate adaptation issues and addressed to differentiated targets (local authorities, businesses, citizens, research institutions).

The purpose of this activity, like the one previously carried out for SRSvS, is to (in)train and raise awareness on the issues of sustainable development and climate change adaptation. In particular, as far as the work still in progress is concerned, in the face of the elaborated climate scenarios, the work with the EE LLs will allow to detect roles and responsibilities for the implementation of adaptation actions and measures by enhancing opportunities and synergies.

## 3.2 Consistency and integration of instruments

The Strategy<sup>36</sup> is framed, in a process of close interdependence, within the planetary and long-term targets of the Goals of the 2030 Agenda, the European goals related to the transition to sustainability and with those related to cohesion policy 2021-2027; of the national ones, made up of the economic, social and environmental policy guidelines structured in the National Strategy for Sustainable Development and the policies provided in the "Plan for Recovery and Resilience".

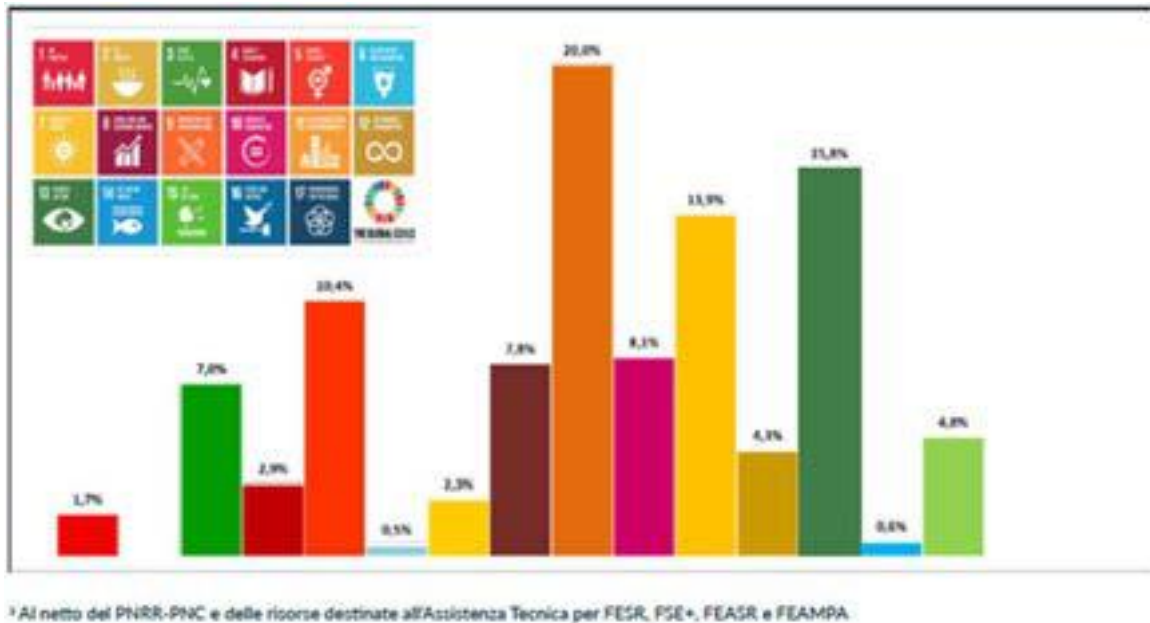
As far as regional policies are concerned, we highlight the strong link and mutual "contamination" between the SRSvS and the Unified Regional Programming: the 2021-2027 Guidelines contain, in fact, constant references to the 2030 Agenda and the National and Regional Sustainable Development Strategy and, of the latter, they make their own the main results deriving from the participatory process of the Focus groups and the Forum. The SRSvS, conversely, accepts, among the proposals for possible interventions under the Goals coming from the consultation process, also those articulated in the "chain" macro-areas/programmatic goals/actions, of the Pivotal Actions and Projects of the Regional Recovery and Resilience Plan contained in the 2021-2027 Guidelines.

The document presented on May 13, 2022 as part of the launch event for the 2021-2027 Programming "Lazio Present with Europe in the Future - The Projects of Regional Programming 2021-27 To do well, for all" is reiterated the strong link with the Sustainable Development Strategy and the clear will to contribute of the same programming to the achievement of the SDGs of the 2030 Agenda for a growth that is able to combine aspects of economic competitiveness with the principles of sustainable development.

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<sup>36</sup> Article 34 of Legislative Decree 157/2006, performs the function of guidance, evaluation, supervision and control in the decision-making processes of public administration, promoting the dissociation between economic growth and its impact on the environment, compliance with the conditions of ecological stability, the preservation of biodiversity and the fulfillment of social requirements related to the development of individual potential as necessary prerequisites for the growth of competitiveness and employment

**UNITARIAN FRAMEWORK OF RESOURCES PROGRAMMING DEDUCED TO DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT GOALS OF AGENDA 2030 (% values)**



Each intervention supported by unitary programming (Pivot Actions, PRRs, and other actions), described in timely project fact sheets, has been related to one or more goals of the 2030 Agenda and contributes to one or more Goals.

**The SEA procedure and the Environmental Report of the Lazio 2021 - 2027 ERDF Program.** <sup>37</sup>

An example of policy coherence can be represented by the preparation of the Environmental Report carried out for the SEA procedure related to the Lazio 2021 - 2027<sup>38</sup> ERDF Program .

The evaluation model adopted is that of the "Evaluation of the Overall Efficiency of Environmental and Territorial Strategies" (VECSAT Model), endowed with the flexibility to lend itself - with the appropriate adaptations - to evaluating policies, plans and programs of any level or thematic sector, although it is (or perhaps precisely because it is) very circumstantial with respect to the underlying methodological choices that inform it.

The Model aims to frame environmental assessment within a methodological framework that organically includes the "social pillar" and the "economic pillar" alongside the "environmental pillar," as they all interact profoundly in sustainable development.

In the case of the ERDF Program, in the application of the Model, the System of Reference Objectives for the evaluation is made to coincide directly with the Strategic Objectives Tree of the SNSvS-rev21<sup>39</sup> , representative of the Programmatic Framework of reference, including international, EU and national level

<sup>37</sup> The Consolidated Environment Act (Legislative Decree 152/2006 and ss.mm.ii) regulates, among others, the SEA procedure and states in paragraph 5 of Article 34 that:

"Sustainable development strategies define the framework for the environmental assessments referred to in this decree. Said strategies, defined consistently at the different territorial levels, through the participation of citizens and their associations, representing the different instances, ensure the dissociation between economic growth and its impact on the environment, respect for the conditions of ecological stability, the preservation of biodiversity and the fulfillment of social requirements related to the development of individual potential as necessary prerequisites for the growth of competitiveness and employment."

<sup>38</sup> Lazio ERDF Program 2021-2027 - Strategic Environmental Assessment - Environmental Report, prepared by Lazio Innova with the specialized support of Cras srl

<sup>39</sup> SNSvS is under review

documents of specific interest to the Program. The traditional environmental components have, therefore, been integrated with the National Strategic Objectives (NSOs) of the SNSvS, so that, in the RA, it is systematically, under the different aspects, always 7 Macrocomponents, corresponding to as many reasoned aggregations of the NSOs of the Areas People, Planet, Prosperity:

- Macro-component 1. Biodiversity /Strategic choice PLANET I - Halting the loss of biodiversity;
- Macro-component 2. Natural resource consumption /Strategic choice PLANET II - Ensure sustainable management of natural resources;
- Macro-component 3. Resilience of communities and territories, hydrogeological risk, Landscape and cultural heritage / Strategic choice PLANET III - Creating resilient communities and territories, preserving landscapes and cultural heritage;
- Macro-component 4. Climate-altering gases and decarbonization of the economy / Strategic choice PROSPERITY IV. Cutting climate-altering emissions and decarbonizing the economy;
- Macro-component 5. Health and quality of urban environment / Strategic choice PEOPLE III - Promoting health and well-being;
- Macro-component 6. Social inclusion / Strategic choices PEOPLE I. Combat poverty and social exclusion by eliminating territorial gaps; PEOPLE II. Ensure conditions for the development of human potential;
- Macro-component 7. Welfare and socio-economic development / Strategic choices PROSPERITY I - Promoting sustainable economic welfare; PROSPERITY II - Financing and promoting

The functionality of the adopted Model proves particularly effective in several respects well argued in Ch. 5 of the ERDF Program RA. Among these, it is highlighted that the two areas of evaluation (environmental and socio-economic performance) can be commensurable, but also that it is always possible to compare them separately, which is why evaluations of the pursuit of purely environmental objectives are always distinguishable from those inherent in the pursuit of socio-economic objectives, even when a synthesis evaluation of the three components is made.

Not only that, but the Model also interfaces very well with the needs for integration of multilevel strategies, assessments and monitoring placed at the heart of development policies. Limiting ourselves to listing only the instances of greatest interest for the SEA of a Program such as the ERDF, we point out the verification:

- of the ability of the ERDF Program to pursue the Strategic Objectives of the SNSvS (which are already taken as the System of Objectives for the SEA itself in this Model)
- That the ERDF Program balances the principle of Do Not Significant Harm (or DNSH), i.e., to support activities that meet Union climate and environmental standards and priorities and do not significantly harm environmental objectives as defined in Article 17 of Regulation (EU) 2020/852 of the European Parliament and of the Council;
- Of the capacity of the ERDF Programmes to pursue the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development
- that the Lazio ERDF Program, in particular, takes into due consideration the "priority themes of interest" indicated by the Regional Sustainable Development Strategy (SRSvS) that declines the national one according to local peculiarities

In summary, the SEA of the ERDF Program (and the elaboration of its RA) aimed to make a methodological contribution to the systematization of strategies, evaluations and monitoring now considered by many as a priority. From a more operational point of view, an Evaluation Matrix was developed and is proposed by the RA.<sup>40</sup>

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<sup>40</sup> Because of its informational scope, the Matrix, at first approach, is complex to read and interpret; therefore, the reader is invited to read Chapter 5 of the RA, where the methodological approach adopted and the outputs provided are detailed

## **The Strategic Programming Document and the MIR**

Regional planning as a whole is based on the five-year Strategic Programming Document (DSP), in its first version derived from President Zingaretti's electoral program, articulated on four hierarchical levels: 8 Macro Areas, 19 Programmatic Addresses, 90 Programmatic Objectives, and about 600 Mandate Actions. The latest update of the SDR, covering the five-year period 2018 - 2023, approved by DGR No. 656 of 9/11/2018 and updated by DGR No. 327 of June 4, 2021.

The programmatic outline of the DSP also informs the annually approved DEFRs, most recently by DCR No.19 of December 22, 2021. In 2020, the 2021-27 Guidelines were also approved (DCR No. 13 of Dec. 22, 2020), which summarize, again referring to the DSP's logical structure, the regional investment strategy for the seven-year period 2021 - 2027.

For some time now, internal budget management tools have made it possible, through data entry at the same time as the operation is carried out on the system, to record the connection between investments and the Mandate Actions contained in current planning documents. In practice, the operator on the budget is asked to choose a Mandate Action to associate with the expenditure he or she is making; the choice of the operation is "guided" by the association, processed upstream and made available on the system, of subsets of Mandate Actions to a given "cost center" represented by the budget chapter on which one is operating.

Starting in 2018, a parallel activity was also initiated aimed at identifying possible correlations between the Mandate Actions of regional programming and instances of available environmental strategies, namely Agenda 2030 and the National Sustainable Development Strategy - SNSvS. The result of this operation is a matrix of correlations, in which each Mandate Action is associated with one or more environmental strategy instances, for all levels of the strategies: Goals and Targets for the 2030 Agenda; Areas, Choices and National Strategic Goals for the SNSS. This enables the development of frameworks for budget items, both forecast and operational, to environmental strategies. The correlation level related to the Regional Sustainable Development Strategy will also be made available soon.

Dynamic and continuous monitoring of the relationship of spending to regional strategies is made possible, along with a number of other services, by a module called Monitoring Regional Investments (MIR), added and integrated to the regional budget management software, which enables the census and monitoring of projects corresponding to regional planning actions as soon as they produce spending.

### **3.3 Areas of innovation and the role of research**

The SRSvS also establishes conceptual relationships and interdependencies of an operational nature with Lazio's Smart Specialization Strategy (S3), whose update was adopted by the Regional Council last December 2021<sup>41</sup>. The S3 can be understood as "the place" where research, technological development and innovation are directed to the expansion of a competitive but sustainable production system.

The S3 update is part of the broader framework of the 2021-2027<sup>42</sup> programming and was carried out through an intensive partnership process and an innovative approach aimed at fostering growth and employment starting with the identification of the most competitive areas and sectors of activity, involving economic operators and knowledge

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<sup>41</sup> DGR n.997 of 30/12/2021 "PR ERDF Lazio 2021-2027 Adoption of the update document "Smart Specialization Strategy (S3) Lazio Region"

<sup>42</sup> Cf. Annex IV "Thematic Enabling Conditions applicable to ERDF, ESF+ and Cohesion Fund" of Regulation (EU) 2021/1060 (CPR) provides, among the requirements for the fulfillment of ex ante conditionality of operational objectives, the definition or update of the regional smart specialization strategy.

actors active in the region in an entrepreneurial process of discovery ("entrepreneurial process of discovery"). The S3 update included the introduction of two new Areas of Specialization, Automotive and Economy of the Sea, which were added to the existing ones: Aerospace, Life Sciences, Cultural Heritage and Cultural Technologies, Agrifood, Digital Creative Industries, Green Economy and Security, areas that affect much of the sustainability goals of SRSvS.

Although the reference contexts and cultural approaches of SRSvS (more "transversal" and aimed at the environment in the conception of sustainable development) and S3 (more "vertical" and focused on development aspects and trajectories of a technological, research and innovation nature) are different, elements of contact and contamination are discernible, for example regarding the Thematic Areas of the former and the Specialization Areas of the latter.

In particular, the SRSvS Thematic Areas related to Sustainable Mobility, Circular Economy, Sea Economy and Poverty are complementary and partly overlapping with the S3 Specialization Areas of Automotive, Green economy, Sea Economy, Agrifood, respectively. The very elaboration of some of the content of the Papers is affected by this contamination.

More generally, within S3, constant references to SRSvS/SNSvS and the achievement of the 2030 Agenda goals are easily identified.

Regarding the areas of innovation, another important element of context and contamination with SRSvS is represented by the Plan for Ecological Transition - PTE of the Lazio Region currently being developed.

The ETP was born on the heels of the one elaborated at the national level by MiTE and was launched with an Expression of Interest promoted by the Lazio Region in November 2021 with the aim of promoting any initiative aimed at achieving the goal of climate neutrality by 2050 through an integrated and scientifically grounded approach in a holistic vision that embraces the following sectors: Energy Communities; Agrivoltaics; Hydrogen; Smart-grid; Electric Mobility and Storage; Water Resource Management; Circular Economy; Natural Heritage/Biodiversity; and Land Care. Again, it is evident that the above-mentioned sectors are to a good extent relatable to those of both SRSvS and S3.

The Manifestation started in November 2021 and ended in January 2022.

A total of 479 proposals were received, with about 40 percent coming from companies of all sizes, but the presence of Local Authorities and Research Organizations is significant. The themes where the interest of proposals was most concentrated were Circular Economy, the energy theme as a whole, Natural Heritage and Biodiversity. With reference to the energy theme, a 'special attention was paid to Energy Communities, to be developed both in urban and in regional peripheral areas. This is a model directed toward a just ecological transition, based on facilities and self-production and sharing of energy from renewable sources that overcomes the current centralized model of energy production consisting of large plants powered by fossil fuels, polluting and climate-changing.

Finally, the proposals underwent careful analysis and clustering in order to identify the most interesting needs and projects that will feed into the contents of the Plan.

## **3.4 Participation and promotion of a culture for sustainability**

### **3.4.1 TERRITORIAL HOLES**

The period of implementation of the Regional Sustainable Development Strategy partly coincided with the most difficult moments of the Covid -19 pandemic. In this context, especially those activities that involved the direct involvement of the public in attendance were significantly penalized.



For this reason, it was necessary to transform the "physical" Forum, into a virtual Forum, "Lazio, Sustainable Region" (<http://www.lazioeuropa.it/laziosostenibile/>), accessible from the Lazio Region web page, which allowed, through the completion of a Questionnaire, the participation of all citizens, businesses, organizations, and local authorities that applied for online registration.

However, it was possible to present the Forum in parallel with the holding of the 2021- 2027 Regional Unified Planning Partnership Tables, which were held between June and July 2020 at various regional venues.

The SRSvS was, therefore, publicly presented during the concluding Forum, again held remotely (minus a few speakers) for the event held at the Rossellini Theater on March 2, 2021.

During the Forum, 3 videos were presented regarding the Strategy as a whole; the priority issues; and the Region's positioning with respect to the Goals of Agenda 2030. The Forum reached 506 people via Facebook.

It should be noted that the virtual space, (<http://www.lazioeuropa.it/laziosostenibile/>), is active and is being used for the continuation of activities related to the second Notice of the MATTM (MiTE) i.e. for the implementation of the project called "Sustainable Development Strategy: the contribution of Climate Change Adaptation."

### **3.4.2 FURTHER ACTIONS FOR THE INVOLVEMENT OF CIVIL SOCIETY**

#### ***Focus Group***

As mentioned above, the Lazio Region declined the activities of the Forum through the organization of 7 Focus groups focused on priority issues, identified in coherence with the strategic choices and objectives of the SNSvS.

- III.1 Dematerializing the economy by improving resource use efficiency and promoting circular economy mechanisms
- Sea Economy
- IV.2 Increasing the sustainable mobility of people and goods
- I.1. Reduce the intensity of poverty
- II.3 Reduce school dropout rates and improve the education system (Access to Study)
- Climate change and sustainable management of water resources (II.6 Minimize emissions and lower pollutant concentrations in the atmosphere; III.5 Ensure the development of potential, sustainable management and custodianship of territories, landscapes and cultural heritage)
- III.3 Regenerate cities, ensure accessibility and ensure sustainability of connections (smart cities).

As part of the FGs, qualified experts and practitioners, some of whom were also reported during the Hearings, were consulted and proposals, opinions, and suggestions for the definition of the SRSvS were collected. For each FG, the JP developed an Introductory Paper that constituted the initial framing/contextualization document of the priority issues identified with respect to the National Sustainable Development Strategy, the 2030 Agenda, and medium to long-term regional unitary planning.

Each Paper contains: conceptual contextualization; Lazio statistical and positioning aspects with respect to the theme addressed; link with EU 2021 - 2027 programming, Agenda 2030, SNSvS; EU, Italy, Lazio Region programmatic framework; effects of the Covid-19 pandemic; possible lines of intervention. The contributions received were enhanced within the Strategy document.



**514 stakeholders** participated in the FGs; more than **70,000** views on social media; 1,200 online interactions; reports with key findings were prepared.

### ***Webinars***

Due to the Pandemic, it was not possible to hold in-person dissemination/information days aimed at citizens and schools on Sustainable Development issues and the path taken at the regional level.

Therefore, it was decided to hold some webinars in order to promote greater awareness on the part of EELs on the meaning of Sustainable Development and the proactive role that the same Administrations can/must have in the planning and implementation phases of policies.

On January 20, 2021, a webinar dedicated exclusively to EELs on targeted issues was held, which was attended on the Zoom platform by 76 local governments while 766 people were able to follow it on Facebook. As part of the meeting, a questionnaire was administered, the results of which showed that training and awareness-raising actions on sustainability-related issues should be encouraged.

As part of the webinar, the Agenda 2030 roadmap, regional positioning on some of the issues of greatest interest to EELs, trends and the main results of the Focus groups in terms of proposals and directions for regional unitary planning were presented.

The two webinars dedicated to schools were held on 2/02/2021, targeting elementary and middle schools (I cycle of education) and 4/02/2021, which covered high schools.

For the first webinar, a video, produced by ASviS, on Agenda 2030 was also screened and an online application on sustainable city building was illustrated. The webinars were attended by: 34 second-cycle institutions, with over 912 students; 59 first-cycle institutions, with 774 students. It should be noted that the number and tenor of questions asked at the end of the Slide presentation showed a high level of participation and understanding by students, even the youngest ones to the topic of sustainability.

The second meeting, organized for the older children, is also part of the targeted training for teachers on sustainability issues and the Pathways for Transversal Skills and Orientation (PCTO) through the Startupper School Academy project of Lazio Innova, a subject accredited by MIUR.

As far as schools are concerned, it should be noted that MIUR is already active on the topic of sustainability and that in many cycle I and II schools Agenda 2030 is a topic of study and in-depth study.

In any case, the participation of about 1700 students shows how much the topic is felt by the school directors who joined the initiative; moreover, the interest of the students, even the youngest showed how much the topics discussed are part of everyday life for the youngest, in terms of both the behaviors adopted (separate waste collection) and the "concern" for the future (Climate Change)

### **3.4.3 TERRITORIES FOR THE PROMOTION OF A CULTURE FOR SUSTAINABILITY**

As mentioned in the previous section, as part of the drafting of the Sustainable Development Strategy there has been a significant involvement of the territories through the realization of dedicated events, despite the fact that they were all held remotely due to the difficulties brought about by the pandemic. The participation of EELs in moments of dissemination/training on Sustainable Development issues was significant and very important because municipalities, above all, play the dual role of planning/programming and implementing

policies that affect the majority of citizens' lives. The webinars organized for schools and businesses also had an appreciable number of participants, taking into account.

For the drafting of the contribution of climate change adaptation to the SRSvS, as mentioned above, it is planned to hold a number of meetings with EELs that will be conducted in the dual mode of presence and remote at the Active Spaces in the territory with the aim of also recovering that "contact" and "closeness" between administrations of different levels interrupted due to the pandemic.

A concluding Forum is also planned for the presentation of the project



# VOLUNTARY LOCAL REVIEW 2022

LIGURIA REGION





## FOREWORD

This document, drawn up on a voluntary basis, contains an analysis of the Sustainable Development Goals (SDGs) for the territory of Liguria, intended as a monitoring tool for their implementation at a regional level, also in coherence with other planning tools. The SDGs localisation process allows local authorities to identify their own priorities and territorial specificities.

The declination of the Sustainable Development Goals is linked with a participatory process involving citizens and local stakeholders and a coherence analysis of existing policies as a basis for policy design, in order to also become a strategic planning tool.

The local and regional levels play a central role as drivers of sustainable human development. The interaction between the two levels also favours the creation of bottom-up mechanisms for the implementation of objectives.

The Liguria Region's Voluntary Local Review includes:

- the definition of the governance process that led to the selection of Sustainable Development Goals and indicators for monitoring regional needs
- the various analyses of coherence between existing development plans and strategies to foster horizontal and vertical alignment, to strengthen the interaction of resources, skills and knowledge between different levels and sectors. Policy coherence also includes financial planning, with the Regional Economic and Financial Document, in order to establish clear priorities that can orient strategic planning and budget choices towards the SDGs
- the participation of local authorities and the involvement and empowerment of local communities through the activation of Regional Environmental and Sustainability Education Centres (CEAS)
- the implementation of the Sustainable Development Goals on the basis of thematic synergies, such as climate change adaptation and the circular economy.



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## Introduction

In 2015, the governments of the UN member states signed the **2030 Agenda** for Sustainable Development, the action programme for people, planet and prosperity, structured in five areas: People, Planet, Prosperity, Peace and Partnership.

The first step to declining the Agenda's principles and objectives at the national level, with a system of strategic choices, declined in national strategic objectives, specific to the Italian reality, was the approval of the **National Sustainable Development Strategy (NSDS)**, a reference document for all sectoral and territorial policies in Italy until 2030, whether they deal with the environment, society or economy.

As provided for in Article 34 of Legislative Decree No. 152 of 2006, the Regions, following the approval of the NSDS, were called upon to provide themselves with an overall sustainable development strategy that is coherent and defines the contribution to the realisation of the objectives of the national strategy, identifying the instruments, priorities, and actions that they intend to undertake.

In 2018, Regione Liguria carried out an initial reconnaissance of the instruments activated to define the objectives of the Regional Strategy for Sustainable Development, in line with the sustainable development objectives defined at a national level. This reconnaissance was updated in 2020. The results of the reconnaissance were cross-referenced with those of the territorial reconnaissance carried out by the Environmental and Sustainability Education Centres in order to identify the sustainable development objectives pursued at the regional level.

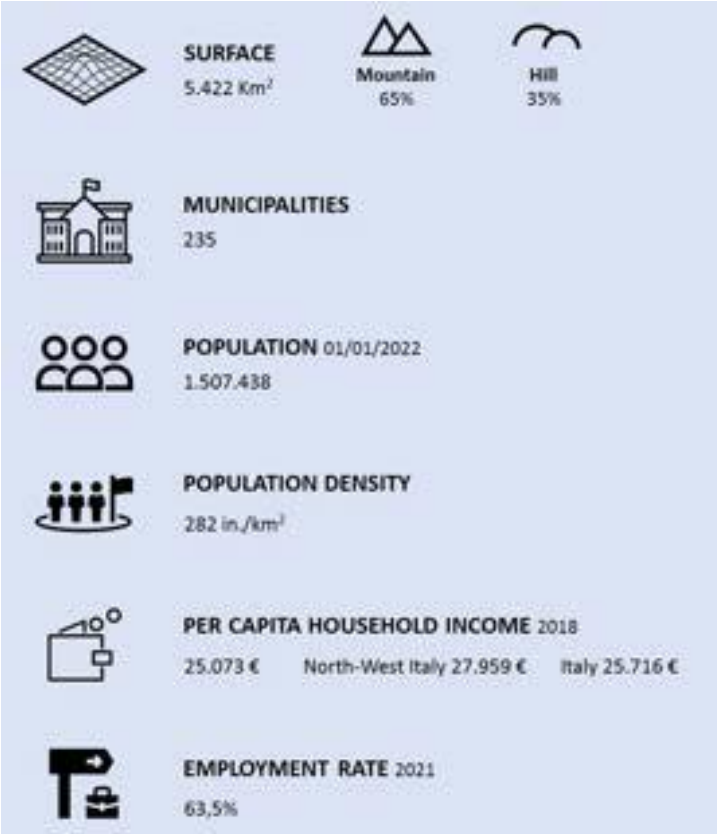
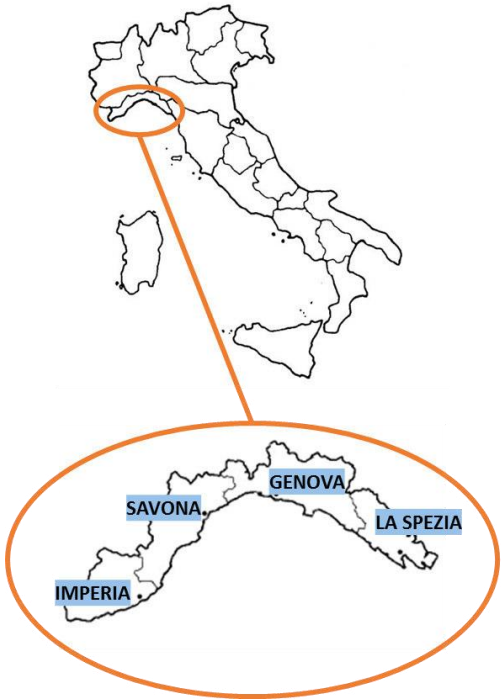
Once the strategic objectives had been identified, indicators were selected from those available in the ISTAT-Sistan SDGs Information System and those for monitoring equitable and sustainable wellbeing, subsequently supplemented with indicators from other national and regional institutional sources

Following the first Regional Sustainable Development Forum held on 10 December 2020, the Regional Council approved the final documentation of the **Regional Sustainable Development Strategy (RSDS)** with Resolution no. 60 of 29 January 2021.



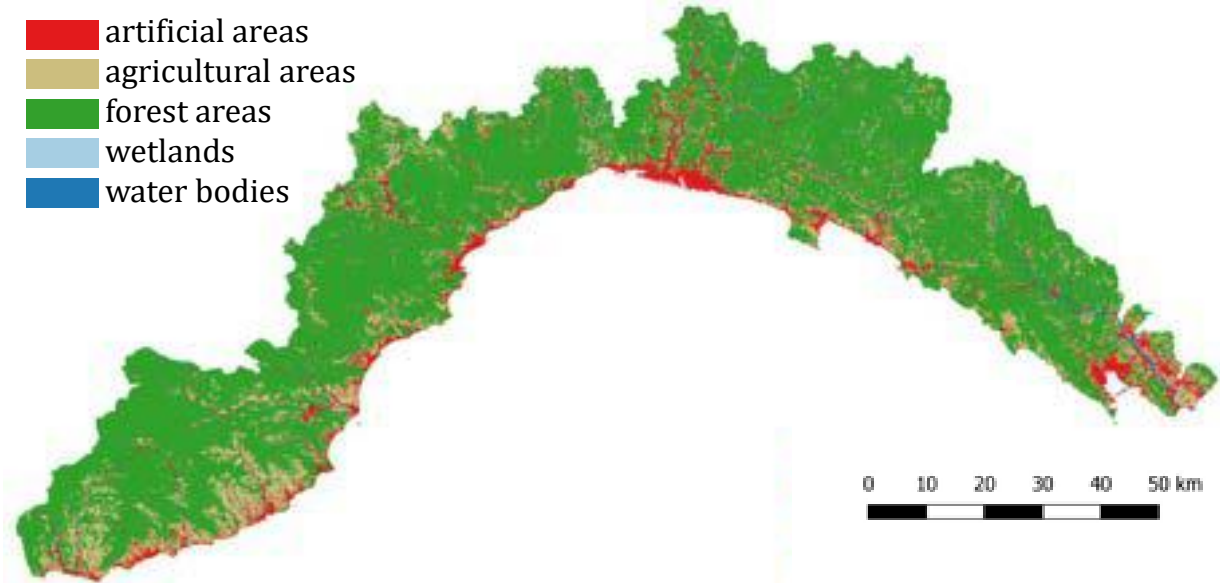
# Liguria Region overview

The region of Liguria consists of 235 municipalities and covers an area of 5422 square kilometres, with a population of just more than one and a half million inhabitants.



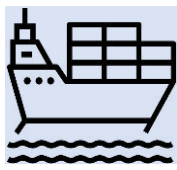
Its geographical position close to the sea, its deep waters and the conformation of its coasts have historically made the Liguria Region an important commercial port: a place of exchange of goods, people and ideas, within international dynamics. Land use in Liguria is shown in the following map.

- artificial areas
- agricultural areas
- forest areas
- wetlands
- water bodies





The identity of the Region is defined through its strengths and characterizing sectors: the economy of the sea, tourism, Life sciences, Research & innovation and Smart technologies.



### **BLUE ECONOMY**

The close relationship with the sea represents a strategic element for the Ligurian economy: blue economy sector includes **marine environment protection, naval supply chain** (construction, service, refitting), and **harbour system** (logistics, safety, controls, integrated logistics) which, altogether, represents 2% of the national GDP.

With 2,7 million TEUs in container traffic, total traffic of 68,1 million tons and 2,5 million passengers in 2019, the **Port of Genoa** (comprising four different ports distributed throughout the region and handled by a sole managing authority) is the **major Italian harbour** and among the biggest ones in the Mediterranean, managing major gateways for goods directed to northern Europe.

Blue economy in Liguria Region comprises **115 firms and 2.100 employees**, which allowed the development of **highly specialised, innovative and competitive supply** chains around large industrial groups in the fields of shipbuilding and ship repair: Liguria Region ranks 1st in the field of shipyard activities, and 2nd in terms of ship/boat building, port activities, maritime transport, and ship owning.



### **LIFE SCIENCE**

Life Sciences is a broad concept: it includes technologies, products, and services for the healthcare sector, development and production of medicines, dietary supplements, and in-vitro diagnostic devices, as well as technologies, equipment, and systems in support of health and the quality of life, for disabilities and fragility, and aimed to prevention, education, screening, diagnosis, therapy, assistance, rehabilitation and management of sanitary facilities and systems.

Life sciences has high social value, and the offer of high quality and high-tech products and services has immediate repercussions on the citizens' health and wellbeing. Such a sector is all the more strategic in a region characterized by a **demographic trend of aging**, with the highest average age data in Italy (48.7 vs 45.4 in 2019) - to cope with these dynamics, Liguria Region is a **Reference Site for the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA)**.

The sector is strategic also in terms of economic and employment potential: health-related activities involve 3.500 firms and 15.000 workers, including the biggest paediatric hospital in northern Italy (IRCSS Gianna Gaslini).

Taking into account the characteristics and needs of its territory, Regione Liguria has identified the following sub-areas of specialization: Technologies for regenerative, predictive, and personalized medicine, Diagnostic platforms, Technologies for rehabilitation, assistance, integration, and education, and Technologies and methods of using Big Data in healthcare.

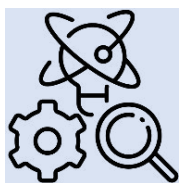


### **TOURISM & LEISURE**

Liguria Region offers a range of touristic and leisure opportunities that make it unique: **cultural and artistic, naturalistic and environmental heritage, food and wine**, each category boasts local excellence and uniqueness **able to satisfy the preferences of all travellers**.

The tourism sector has **developed and grown considerably** over the past years (except for the anomaly due to covid-19), recording 9 million tourists in 2019, reaching peaks in summertime.

Liguria has over 4.000 accommodation facilities, over 150.000 sleeping places, and approximately 50.000 workers in the tourism sector, which accounts for **10,2% of the regional GDP**, 11% of domestic consumption, and brings into the regional territory **over 15 million visitors per year**, 39% of which from abroad.



### RESEARCH & INNOVATION

The regional research & innovation context can count on a **consolidated network of specialized entities**: the Italian Institute of Technology, 15 university Departments, 5 Research & Innovation Centres working on the Regional Smart Specialisation Strategy priorities, 8 NRC institutes, the Scientific and Technological Park “Erzelli” and the IRCSSs “San Martino and Gianna Gaslini”.

Also, thanks to the activity of these organizations, Liguria Region records **positive data and trends** related to productive specialization in high-technology sectors, the incidence of high-tech export, the employees (5,7 out 1.000 inhabitants in 2019) and expenditure (1,46% GDP in 2019) in R&D, SMEs introducing product/process innovations (43,5% in 2019), and the high propensity to continuing education of the workforce employed in such fields. Some criticisms still affect the registration of patents, trademarks, and models, and the level of employment in the fields of mid-tech and high-tech industrial sectors and in knowledge-intensive services.

Liguria is the **1st Italian region in terms of mid-tech and high-tech industrial exports**. It is above the national average and in line with the European one in terms of **public expenditure on research and development** (which corresponds to 0,6% of the regional GDP). Private expenditure in R&D, instead, is in line with national values, but significantly below the European average.

Liguria Region according to the Regional Innovation Scoreboard (RIS 2021) data places among the **Moderate innovators**, in **12th place among the 21 Italian regions**.



### SMART TECHNOLOGIES

With 8.000 firms and 51.000 employees in this sector, the region devotes **significant resources** to the fields of Safety & Security, Smart Mobility, Smart Energy, and Factories for the Future.

In particular, the topic of **Smart Mobility**, and more generally the sustainability and efficiency of goods and people transport systems, is **one of the key points of the broader concept of “Smart Society”** and comprises various interacting sectors, such as the private and public people mobility, within-city and broader goods transport.

Moreover, Regione Liguria prioritizes the issue of **Smart Energy**, leveraging on the local availability of **industrial entities with great technological skills** in the energetic sector, **thermal power stations** with a growing need to lower the environmental impact, and **new technological and productive capacities** in the field of smart energy distribution. Within the context of Smart energy, the region features consolidated skills in the industrial and academic fields regarding the optimization of combustion processes and the rationalization of productive cycles with an aim to improve their energy efficiency, through the generation of energy from renewable sources, the development of smart grids and the energy efficiency of buildings.

# 1

## Positioning of Liguria Region with respect to the Goals of the 2030 Agenda

The **Italian Alliance for Sustainable Development** (ASviS) periodically develops **composite indicators** that measure the progress of Italy, its regions, provinces, and metropolitan cities **towards the SDGs**.

In April 2020, Regione Liguria signed a memorandum of understanding with ASviS for the purpose of collaboration in promoting the principles of the 2030 Agenda and defining the Regional Strategy for Sustainable Development.

It is summarised below the **positioning of the Liguria Region and its objectives, with respect to the 17 Sustainable Development set by the UN 2030 Agenda**. This work is the result of the collaboration experience between the ASviS and Regione Liguria.

The positioning of the Region in relation to the UN Agenda 2030 is **made starting from 105 elementary indicators**, mostly produced by the National Statistical System (SISTAN, ISTAT) and sources whose validity has been carefully analysed.

For the elaboration of the composite indicators, the ASviS uses the methodology of the Adjusted Mazziotta-Pareto Index (AMPI) also adopted by ISTAT<sup>1</sup> to build similar indicators on equitable and sustainable well-being. This methodology has been applied for the calculation of almost all SDGs<sup>2</sup>. If the trend of a composite index is improving, this does not necessarily mean that the region will reach the Goals in 2030, but simply that it is moving in the right direction.



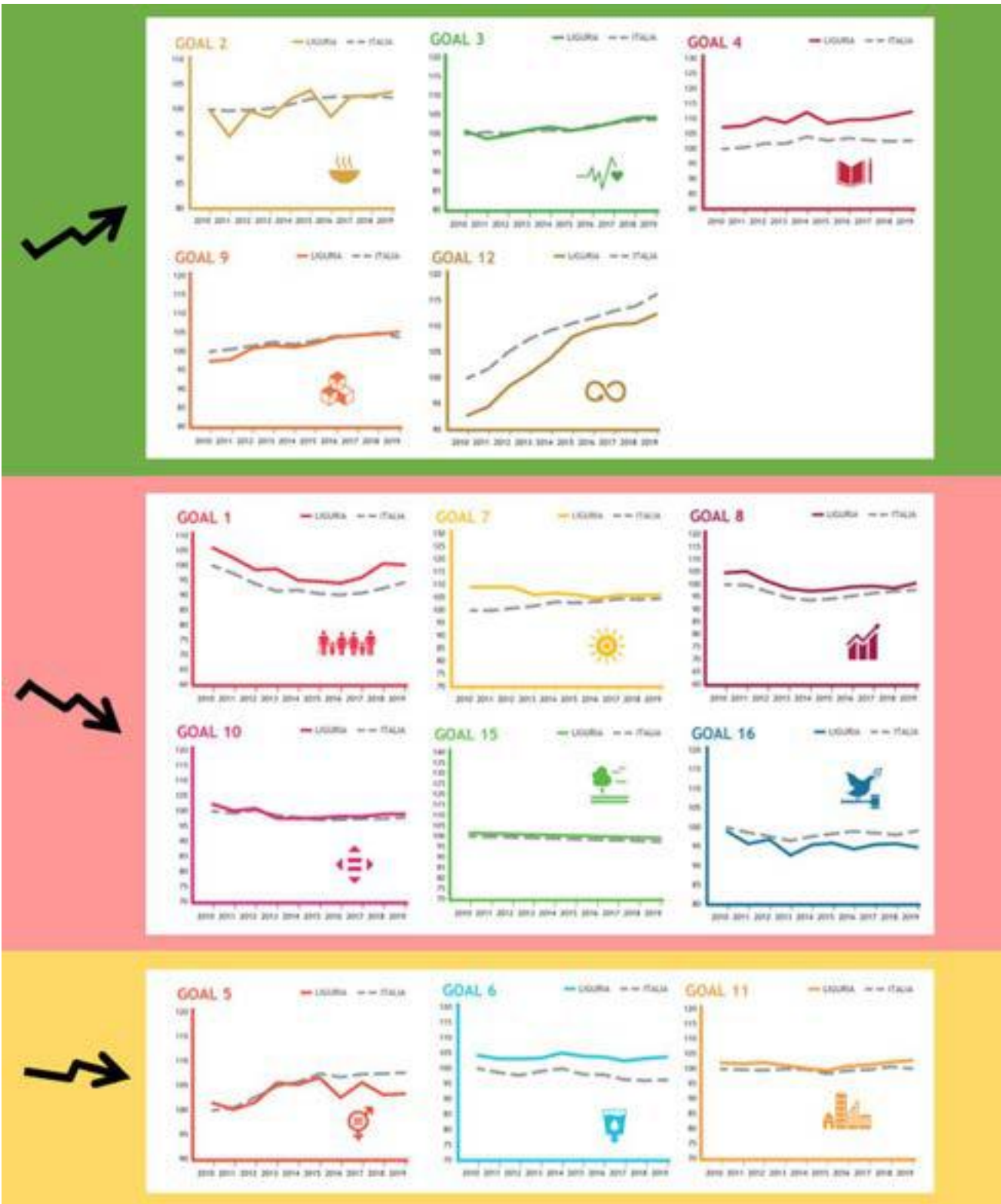
Analysing the trends observed between 2010 and 2019, it appears that Liguria is improving in 5 Objectives: sustainable food and agriculture, health, education, innovation, sustainable production, and consumption models. For 6 objectives, however, the situation is worsening: poverty, energy system, economic and employment conditions, inequalities, terrestrial ecosystem, and solid justice and institutions, while for the remaining 3 (gender equality, water, and conditions of the cities) the condition appears substantially unchanged.

<sup>1</sup> Italian National Institute of Statistics

<sup>2</sup> For Goal 13, Goal 14, and Goal 17 it was not possible, due to the lack of data at the regional level.



REGIONE LIGURIA



# 2

## The regional sustainable development strategy: governance, objectives, and indicators

### 2.1 Governance

An interdepartmental working group was set up in July 2017 with the following objectives:

- to develop the contents of the regional sustainable development strategy, through the following activities
  - identification in the various areas of competence of the instruments and activities that can contribute to achieving the objectives of the National Strategies
  - involvement of local authorities and all stakeholders, through appropriate participative and informative methods
  - definition of regional-scale objectives, instruments, and actions, in coherence with the UN 2030 Agenda and the objectives identified by the National Sustainable Development Strategy
- monitoring the implementation of the regional strategy and contributing to the monitoring of the national strategy

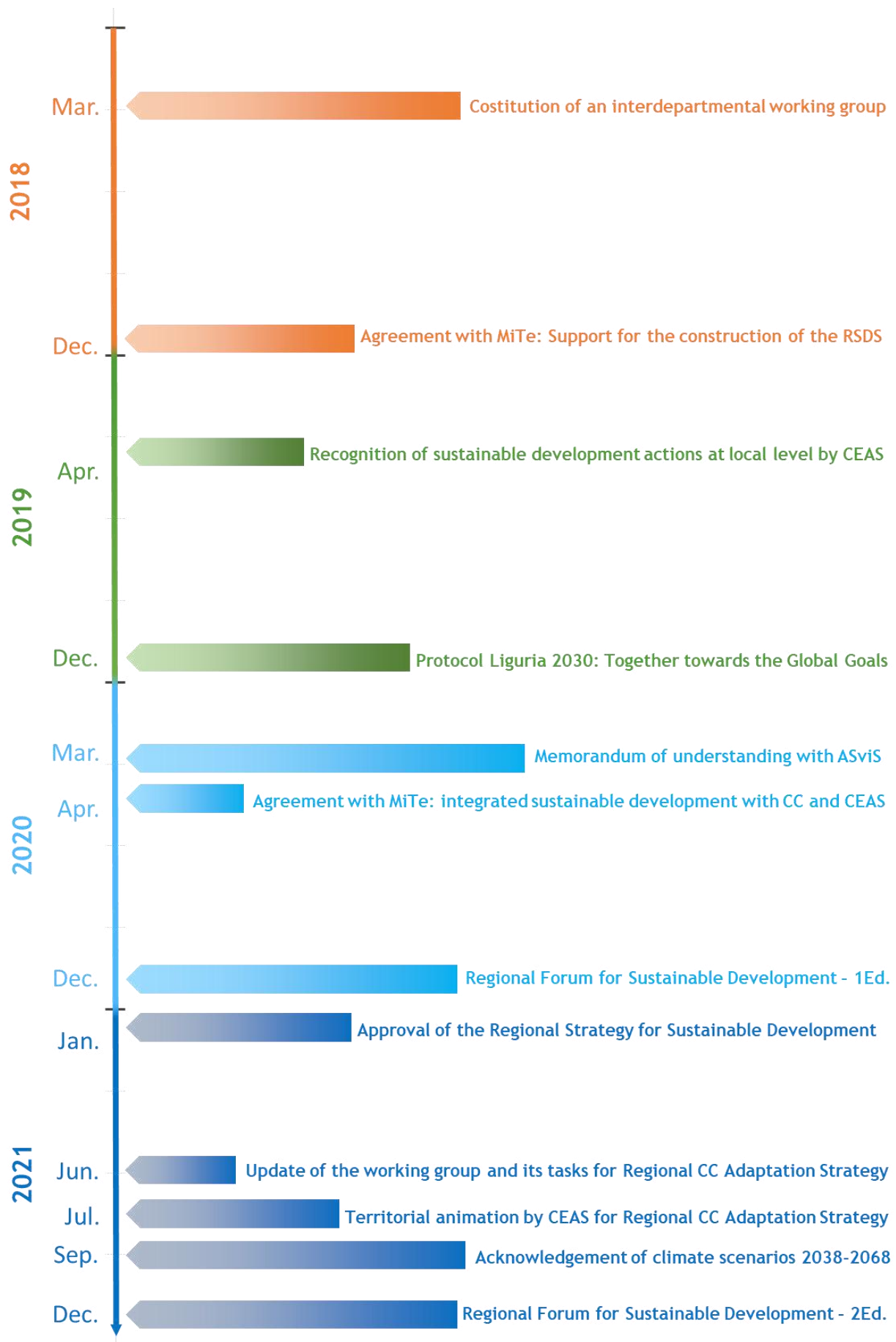
This working group was expanded in June 2021 to include representatives from all Regional Central Directorate/Departments and is coordinated by the Environmental Impact Assessment and Sustainable Development Sector.

From January 2019, the Centres for Environmental and Sustainability Education (CEAS) are involved to support the construction of the regional strategy and the involvement of civil society and local governments.

In addition, the Liguria Region has signed specific cooperation agreements with the Italian Minister for Ecological Transition (MiTe, formerly MATTM) for the support, including financial resources, to the activities necessary for the elaboration of the RSDS. Moreover, the Liguria Region is part of the permanent round table between the State and the Regions that facilitates the connection and harmonisation of processes between the different territorial levels.

In this regard, Regione Liguria participates in of the CReIAMO PA Project "Skills and networks for environmental integration and for the improvement of public administration organisations".

The main steps of the sustainable development process in Liguria are depicted in the following timeline.





## 2.2 Objectives

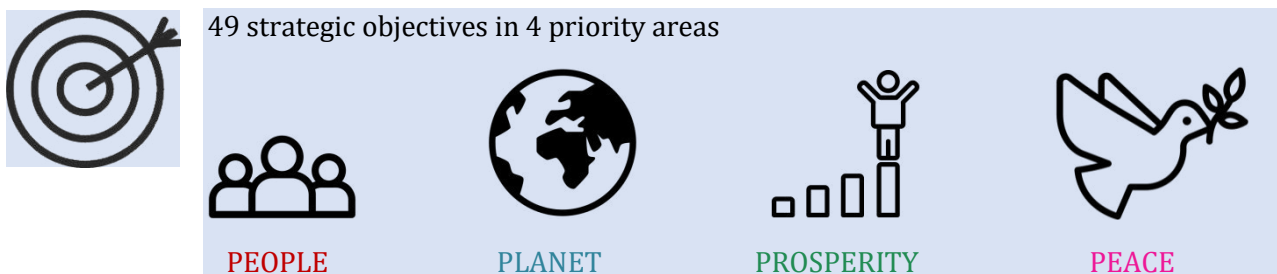
In order to **define the regional policies' contribution to the implementation of the National Sustainable Development Strategy (NSDS)**, a survey has been carried out aiming at identifying the main tools activated by the Liguria Region and the enlarged regional sector, in the various areas of competence (referring to the 2014-2020 programming period), **able to contribute to the achievement of the National Strategy objectives** (DGR 1061/2018).

The tools which have been investigated with the support of the interdepartmental Working Group include both regional regulations, Plans, and Programs (activated or planned), with the related specific action lines.

Considering the resulting instruments, a first selection of regional strategic objectives was approved with DGR 957/2019 and starting from the 88 objectives included in the NSDS, linked with a first set of indicators and with the Mission and Program objectives of the Regional Economic and Financial Document.

At the regional level, **PEOPLE, PLANET, PROSPERITY** and, in a more limited form, **PEACE** have been identified as **priority action Areas**. The **PARTNERSHIP** area of the National Strategy concerning international cooperation actions was excluded because falling under the competence of the Ministry of Foreign Affairs.

The final selection of the objectives of regional interest relates the relative implementation tools initially identified to strategic objectives of the other aforementioned 4 Areas, for a total of **49 strategic objectives** (DGR 60/2021).

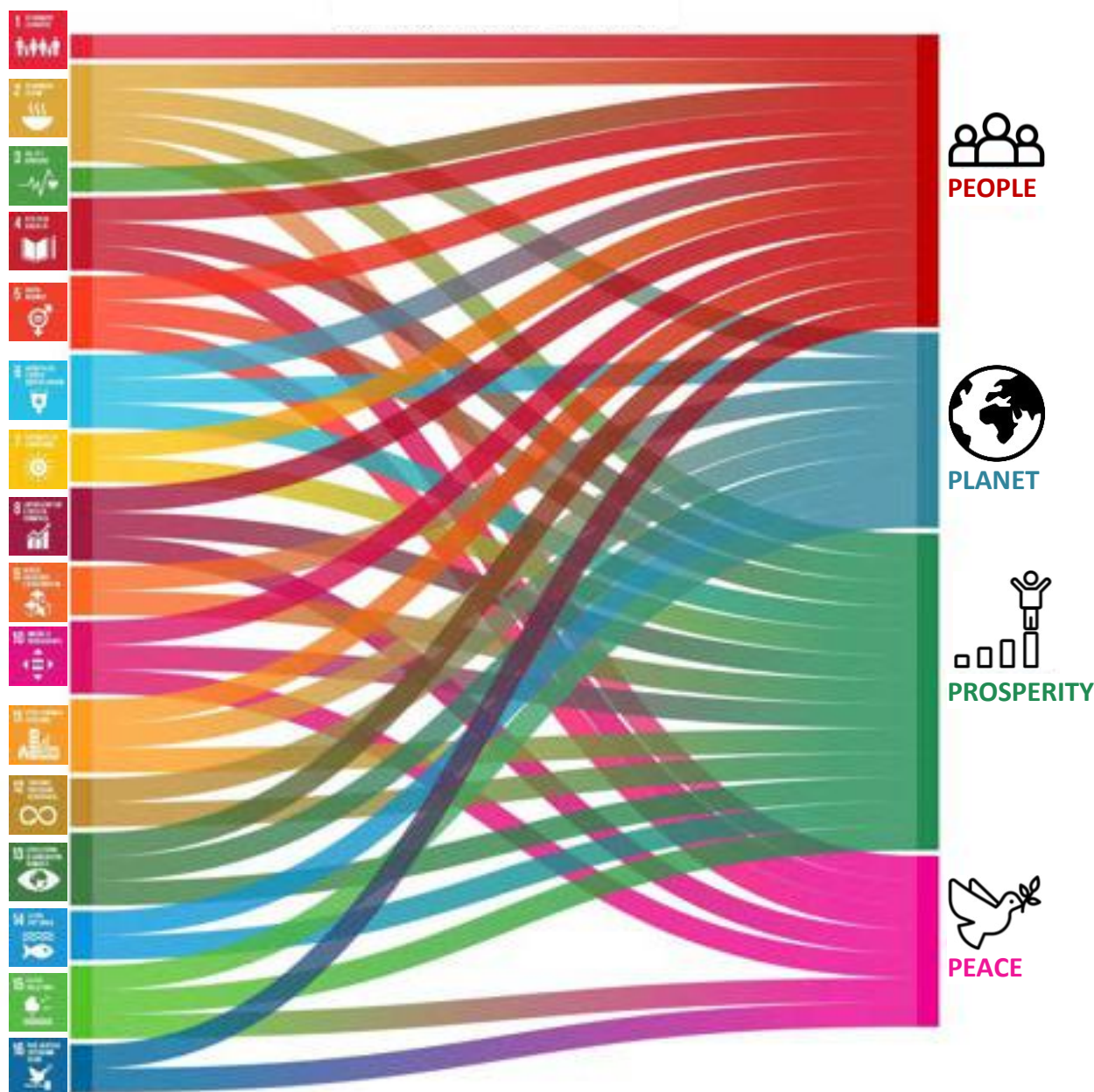




 <b>PEOPLE</b>	<b>1</b>	I.1 Reduce the poverty intensity
	<b>2</b>	I.2 Combat material and food deprivation
	<b>3</b>	I.3 Reduce housing discomfort
	<b>4</b>	II.1 Reduce unemployment for the population's weakest groups
	<b>5</b>	II.2 Ensure the social protection and welfare system full-functioning
	<b>6</b>	II.3 Reduce the school dropout rate and improve the education system
	<b>7</b>	II.4 Fighting deviance through prevention and social integration of those at risk
	<b>8</b>	III.1 Decrease the exposure to environmental and anthropogenic risk factors
	<b>9</b>	III.2 Promote healthy lifestyles and strengthen prevention systems
	<b>10</b>	III.3 Ensure access to effective health and care services, counteracting territorial gaps
 <b>PLANET</b>	<b>11</b>	I.1 Safeguard the conservation status of species and ecosystems habitats
	<b>12</b>	I.2 Stop the spread of invasive alien species
	<b>13</b>	I.3 Increase the land and sea protected area and ensure effective management
	<b>14</b>	I.4 Protect and restore genetic resources and natural ecosystems
	<b>15</b>	I.5 Integrate the value of natural capital into plans, policies, and accounting systems
	<b>16</b>	II.1 Maintain the seas vitality and prevent impacts on marine and coastal environment
	<b>17</b>	II.2 Stop land consumption and fight desertification
	<b>18</b>	II.3 Minimize pollutant loads in soils, water bodies, and aquifers
	<b>19</b>	II.4 Implement integrated water management at all planning levels
	<b>20</b>	II.5 Maximize water efficiency and adapt withdrawals to water scarcity
	<b>21</b>	II.6 Minimize emissions and reduce polluting concentrations in the atmosphere
	<b>22</b>	II.7 Ensure the sustainable management of forests and fight their abandonment
	<b>23</b>	III.1 Prevent natural and anthropogenic risks and strengthen the resilience capacities
	<b>24</b>	III.2 Ensure the high environmental performance of buildings and infrastructures
	<b>25</b>	III.3 Regenerate cities, ensure accessibility and the sustainability of connections
	<b>26</b>	III.4 Ensure the restoration of ecosystems and foster urban/rural connections
	<b>27</b>	III.5 Ensure the development of potential and care of territories and cultural heritage
 <b>PROSPERITY</b>	<b>28</b>	I.1 Increase investment in research & development
	<b>29</b>	I.2 Implement the digital agenda and enhance the deployment of smart grids
	<b>30</b>	I.3 Innovate processes and products and promote technology transfer
	<b>31</b>	II.1 Ensure accessibility, quality, and continuity of training
	<b>32</b>	II.2 Increase sustainable and quality employment
	<b>33</b>	III.1 Dematerialize the economy, and promote circular economy mechanisms
	<b>34</b>	III.2 Promote environmental taxation
	<b>35</b>	III.4 Promote social & environmental responsibility in businesses and administrations
	<b>36</b>	III.5 Abate waste production and promote the secondary raw materials market
	<b>37</b>	III.6 Promote demand and increase the supply of sustainable tourism
<b>38</b>	III.7 Ensure the sustainability of agriculture and forestry along the entire supply chain	
<b>39</b>	III.8 Ensure the sustainability of aquaculture and fishing along the entire supply chain	
<b>40</b>	III.9 Promote Italian excellence	
 <b>PEACE</b>	<b>41</b>	IV.1 Increase energy efficiency and by avoiding/reducing impacts on cultural heritage
	<b>42</b>	IV.2 Increase the sustainable mobility of people and goods
	<b>43</b>	IV.3 Reduce greenhouse gas emissions in non-ETS sectors
	<b>44</b>	I.1 Prevent violence against women & children and ensure fair assistance to victims
	<b>45</b>	I.2 Ensure the inclusion of ethnic and religious minorities
	<b>46</b>	II.2 Ensure gender equality
	<b>47</b>	II.3 Fight all discrimination and promote respect for diversity
	<b>48</b>	III.1 Intensify the fight against crime
	<b>49</b>	III.2 Fight corruption and extortion in the public system

**TAB. 2 – Priority areas and strategic objectives**

The connection of the Areas taken into consideration in the Regional Strategy (and the choices and objectives associated with them) with the Goals of 2030 the Agenda is complex and articulated, as shown below (Figure 1).



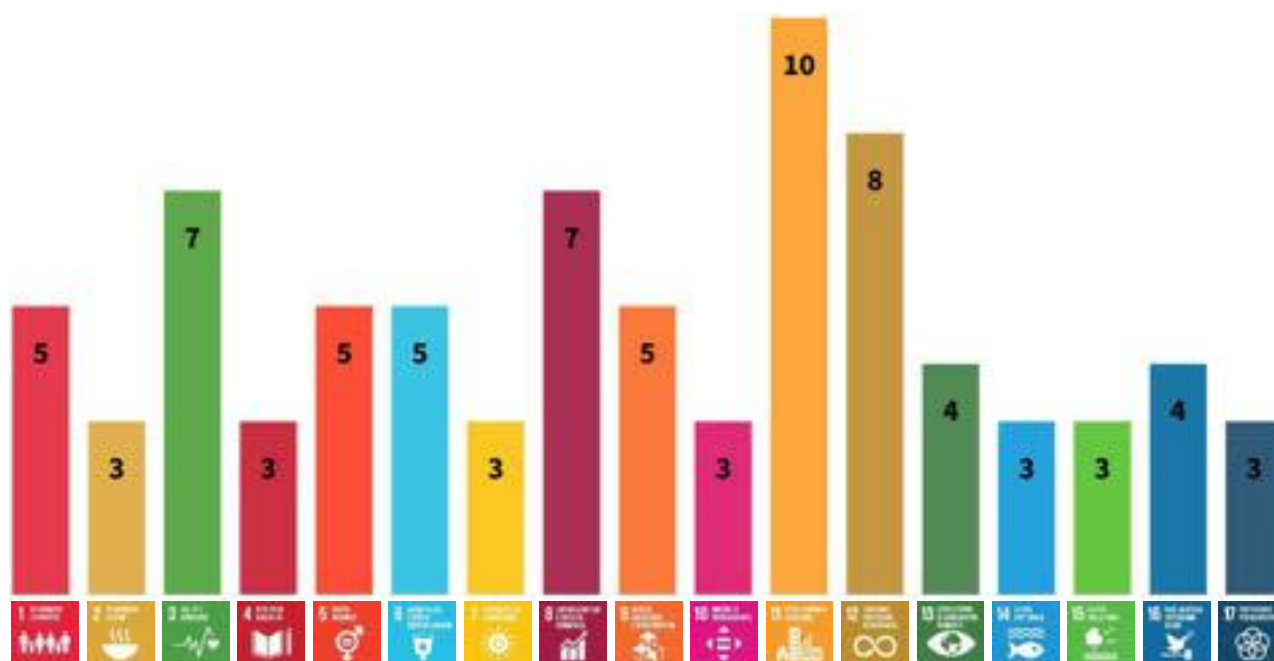
*Figure 1 - Connection between the 4P and the Goals of the 2030 Agenda*

## 2.2 Indicators

The United Nations Statistical Commission has set up the Inter-Agency Expert Group on SDG (IAEG-SDGs) to define a **shared statistical framework useful for monitoring and assessing progress toward the objectives of the 2030 Agenda**. The UN-IAEG-SDGs indicators for monitoring the 17 Sustainable Development Goals constitute a **complex system in continuous evolution**: it includes both **consolidated indicators** available for most countries and **indicators not yet defined in all details** at the international level.

To monitor the objectives of the Regional Strategy, 70 ISTAT-SISTAN SDGs indicators populated for Liguria were used, some of which were repeated in correspondence with several strategic objectives.


The following figure (Figure 2) shows the number of used indicators associated with each of the 17 Goals of the 2030 Agenda.



**Figure 2 - Number of used indicators associated with each of the 17 Goals of the Agenda 2030 (last update: June 2020)**

In summary, the reference framework for the selected indicators consists of 111 indicators, distributed as follows:

- 36 indicators proposed by the Working Table on Indicators for the implementation of the NSDS
- 38 additional BES indicators and/or ISTAT-SISTAN SDGs
- 3 ISTAT indicators
- 25 indicators already monitored by the regional Sectors or proposed by the Regional Working Group
- 9 indicators from other institution sources (Italian Institute for Environmental Protection and Research, Ministry of Agriculture, Food and Forestry and others).



Monitoring based on 111 indicators from different databases.

9 of the 12 indicators monitoring fair and sustainable well-being, included in the national economic and financial document, are included in the set of indicators of the regional sustainable development strategy.

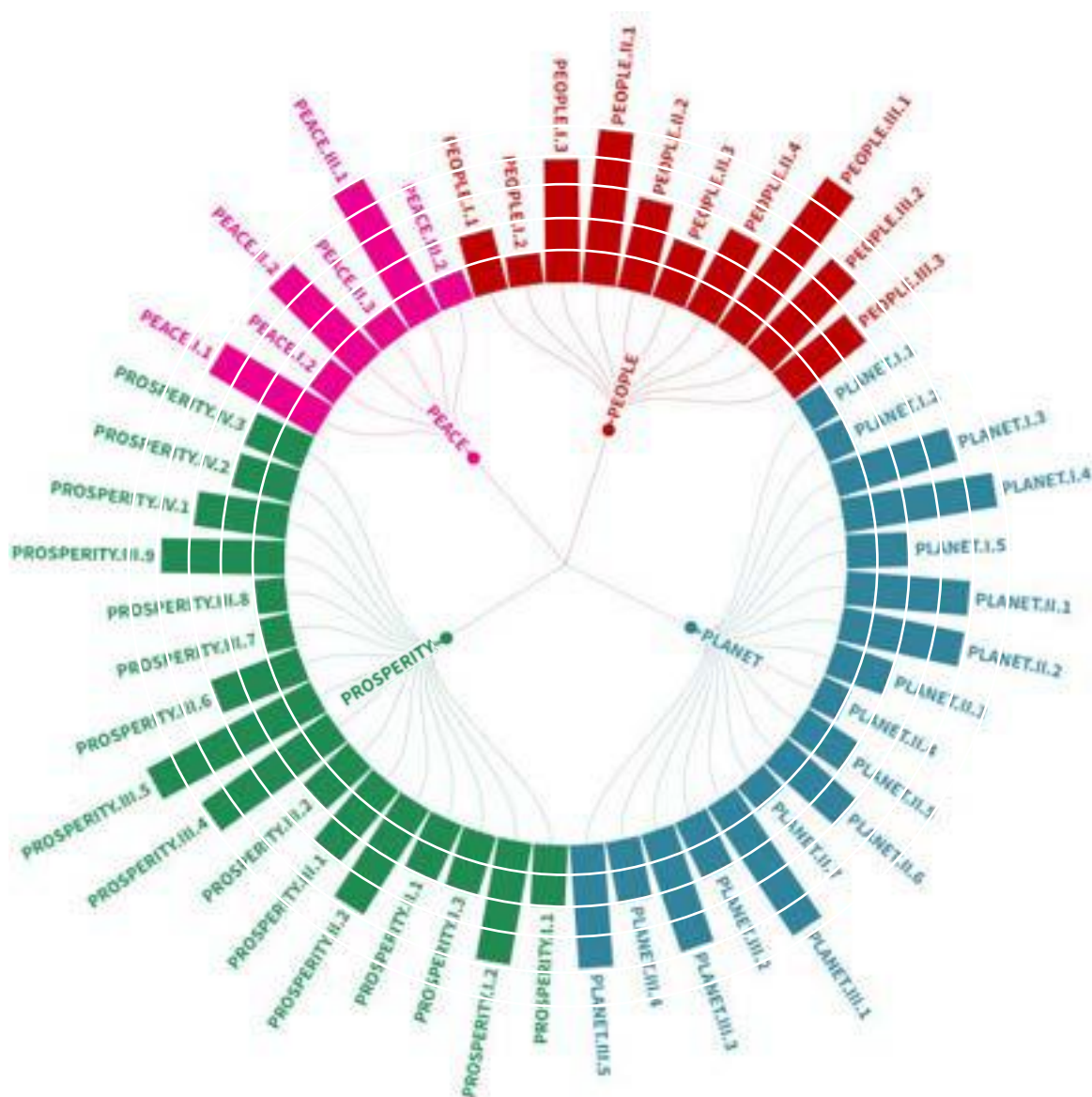
Each indicator is defined by its **characteristics**:

- **name**; obviously, in the case of indicators present in existing sets, the wording conforms to the one already in use
- **nature**, or if the indicator is BES (BES12) and / or SDGs
- **source**, that is, its database of origin
- whether or not they belong to the set proposed by the Working Table on Indicators for the implementation of the NSDS



- **measurement unit** of the numerical value
- **latest data available for Liguria**, and where available for Northern Italy (or, as a second choice, the North-West) and the national value, for comparison
- **year** (or period) relating to the last data
- **reference target for 2030** (where available); the target value was identified mainly on the basis of the reference regulations or set objectives. These regulations and objectives can be at a regional, national or supranational level. In some cases, when the target is not indicated by legislation, we proceeded to insert the best value among the Italian regions (best Italian performer) or the best among France, Germany, Spain and the United Kingdom (best European performer). Furthermore, where the Targets defined by the institutional levels for 2020 are not achieved, the Targets have been moved to 2030.

Each objective of the Regional Strategy is monitored by 1 indicator up to a maximum of 6 indicators; some indicators are repeated in correspondence with several Strategic Objectives (Figure 3).



**Figure 3 - Graphic representation of the number of indicators for each strategic objective of the 4Ps taken into consideration by the Regional Strategy. The length of the bars is proportional to the number of indicators, from 1 to 6.**

# 3

## Coordination between Regional Programming Instruments

The endeavour to make policies on several vertical - European, national, regional and sub-regional - and horizontal levels acting on a territory coherent aims at full cooperation and integration in the management of different issues and an optimised use of financial resources.

The Liguria Region participated in the coaching organised by MiTe (formerly MATTM) within the CREIAMO PA project - intervention line LQS1 "Environmental Assessments - Actions to improve the efficacy of SEA and EIA processes for programmes, plans and projects", during which an experiment on the construction of planning sustainability was launched. The main Plans and Programmes, whether subject to SEA or not, at the regional, provincial and municipal level were analysed to assess their relevance for achieving sustainability objectives.

The 25 Plans and/or Programmes listed below were included in the analysis:

No.	Name Plan/Program	IT acronym
1	Regional Programme European Regional Development Fund	PR FESR
2	Rural Development Programme	PSR
3	Hydrogeological Structure Plan	PAI
4	Flood Risk Management Plan	PGRA
5	Regional Territorial Plan	PTR
6	Regional Landscape Plan	
7	Regional Integrated Infrastructure, Mobility and Transport Plan	PRIIMT
8	Regional Plan for Air Quality Remediation and Protection and Greenhouse Gas Reduction and Air Quality Remediation Measures (DGR. 941/2018)	PRQA
9	Regional Water Protection Plan	PTA
10	Regional Environmental Energy Plan	PEAR
11	Regional Waste Management and Remediation Plan	PRGR
12	Regional Territorial Plan for Quarry Activities	PTRAC
13	Regional Forestry Programme	PFR
14	Wildlife and hunting plan	
15	Park Plan	
16	Municipal General Regulatory Plans	
17	Territorial Plan for Coastal Coordination	PTCC
18	Territorial Plan for Landscape Coordination	PTCP
19	Plan for the Protection of the Marine and Coastal Environment	PTAMC
20	Operational Programme European Maritime, Fisheries and Aquaculture Fund	PO FEAMPA
21	Three-year Green Procurement Action Plan	
22	Regional Prevention Plan	
23	Regional Programme European Social Fund	PR FSE
24	Interreg V-A Programme	
25	Special Areas of Conservation Management Plans	

For these, a level of consistency was indicated among the following: 1 low relevance, 2 medium relevance, 3 high relevance.

	No. Plan/Program																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
PEOPLE.I.1																									
PEOPLE.I.2																						2			
PEOPLE.I.3	1									1															
PEOPLE.II.1	3	2									1									2	1		3		
PEOPLE.II.2	1																						2		
PEOPLE.II.3																							3		
PEOPLE.II.4	1												1												
PEOPLE.III.1	3	3	3	3			1	3	3		2	2	2		2				3		2	3		3	2
PEOPLE.III.2								3					1		1						2	3			2
PEOPLE.III.3	2																					2		1	
PLANET.I.1	1	3							3		2	2	2	2	3				3	3	1			3	3
PLANET.I.2									2				2		3				1				2	2	
PLANET.I.3	1	3							2				2	3	3				3						3
PLANET.I.4		3			1	1			3				1	2	2				1	3	2				3
PLANET.I.5		1			2	3			3				3	3	3	2	2	2			3				3
PLANET.II.1	1		1	1					3		1								3	2	2				3
PLANET.II.2	1	1	1		3	3			2			2	1		3	2	1	2	3		2				3
PLANET.II.3	2	3			1	1			3		2				3				2		1				3
PLANET.II.4		1							3						1				2						3
PLANET.II.5	1	2							3			1							1		1				2
PLANET.II.6	3	2			1		3	3	1	2	2	1	1			1					2			3	3
PLANET.II.7		3			2	2			1				3		3	1								3	3
PLANET.III.1	3	3	3	3	3		3		1		1	2	2	1	3	3			3		1			3	3
PLANET.III.2	3	1			3				3				1			3			1		2				
PLANET.III.3	3				3		3									3			1		2				
PLANET.III.4		1			2	2						1	1	3	3	1		2	1		1				3
PLANET.III.5	2	3	1	1	2	3			1		1	2	3	3	3	3		3	1		1			3	3
PROSPERITY.I.1	3	3	1	1										1						2					1
PROSPERITY.I.2	3	3		2			2			2												1			
PROSPERITY.I.3	3	3									1		1		1						3			3	
PROSPERITY.II.1	1	3		1									2							2	1		3		
PROSPERITY.II.2	2	1			1					1	1		2		3					2		2	3		
PROSPERITY.III.1	1	2									2	2	1		3						3			1	1
PROSPERITY.III.2											1										1				2
PROSPERITY.III.4	2	2	1	1					1		1		1		3						3				2
PROSPERITY.III.5	1	2									3	2									2	2			1
PROSPERITY.III.6	2	3			1		3		1		1		1		3				1	2				3	2
PROSPERITY.III.7		3							1				3		2										3
PROSPERITY.III.8									1										1	3				2	3
PROSPERITY.III.9		3			1								1		2							1			
PROSPERITY.IV.1	3	3			1			1	2	3	1	1	2		1						2				
PROSPERITY.IV.2	2	1			2		3	3		1					1	2					1			3	
PROSPERITY.IV.3	3	2					3	1		3	1										1				
PEACE.I.1	1																							2	
PEACE.I.2	1																								
PEACE.II.2	1	1																			1				
PEACE.II.3	1	1																			1				
PEACE.III.1	1																								
PEACE.III.2	1																								

### 3.1 Coherence between regional policies and with main national policies

One of the main tasks of the regional administration is to adopt a programming, in coherence with local authorities, the state and the European Union, defining objectives, criteria and modalities of its action, respecting the principle of subsidiarity. For this reason, it is necessary to coordinate and link the regional policies with European and national programming in a coherent manner to respond effectively to the needs of the community and to pursue the social and economic development of the Ligurian territory.

The identification of a strategic directive for the regional administration is the first step towards the definition of a regional strategy that is integrated with the European and national directives and for a functional reorganisation of the regional programming instruments.

The Regional Strategy for Sustainable Development approved with DGR 60/2021 identifies and declines the strategic objectives with respect to the socio-economic context of the Liguria Region.

The Interdepartmental working group composed of the Vice Direction General for the Presidency, the Central Organisation Direction, the Central Finance, Budget and Control Direction and the Environment and Civil Protection Department highlighted the connection between the objectives for sustainable development and the different programming instruments at European, national and regional level in relation to the areas of competence of the Regional Executive and identify specific indicators and targets associated with the respective objectives (DGR 1260/2021).

The objectives of the regional sustainable development strategy have been linked to the policy objectives of the Regional Program 2021-2027 funded by European Regional Development Fund, the National Reform Programme (NRP), the missions of the National Recovery and Resilience Plan (NRRP), the budget missions, the specific objectives of the Regional Economic and Financial Document (REFD) 2022-2024, the programmatic lines of the regional government programme and the Growth Act.

The following diagram shows an example of links between the different programming instruments and the objectives of the sustainable development strategy for an area of competence of the regional executive.





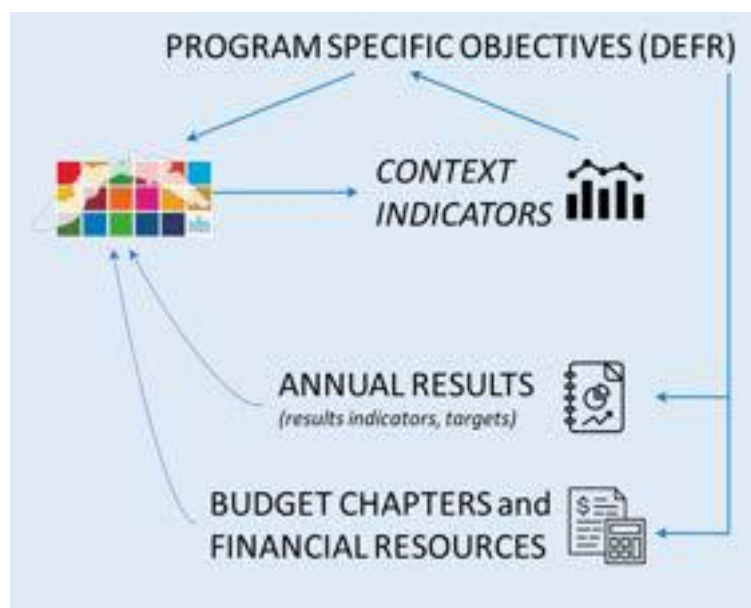
### 3.2 Coherence between the information system to support the Programming - Budget - Control (PBC) cycle and the RSDS

The regional planning process is formalised in documents that specify the activities and instruments necessary to achieve the objectives set by the Region, starting from the Government Programme and the Regional Economic and Financial Document (REFD) up to the necessary coherence of sectoral programming.

The mapping of the Programming Objectives against the objectives and indicators of the RSDS and the SDGs provides an initial correspondence between the specific objectives of the Regional Economic and Financial Document and the objectives of the RSDS.

In 2021, the Region of Liguria has equipped itself with an information system to support the Programming - Budget - Control (PBC) cycle, which manages the preparation of the specific three-year programme objectives of the REFD (and its update) and their information set (Context Indicators - SDGs and equitable and sustainable well-being indicators - Results, annual indicators and targets, financial requirements and related chapters). Through this information system, the link between the REFD objectives and the RSDS objectives has been strengthened.

The specific objectives represent the concrete objectives, aimed at final recipients, measurable by results and indicators, that the Sectors (operational unit) of the regional administration must pursue, according to their competences, constraints, resources. Through these formalized connections it is possible to link financial resources with the objectives of the Strategy and check their progressive achievement.

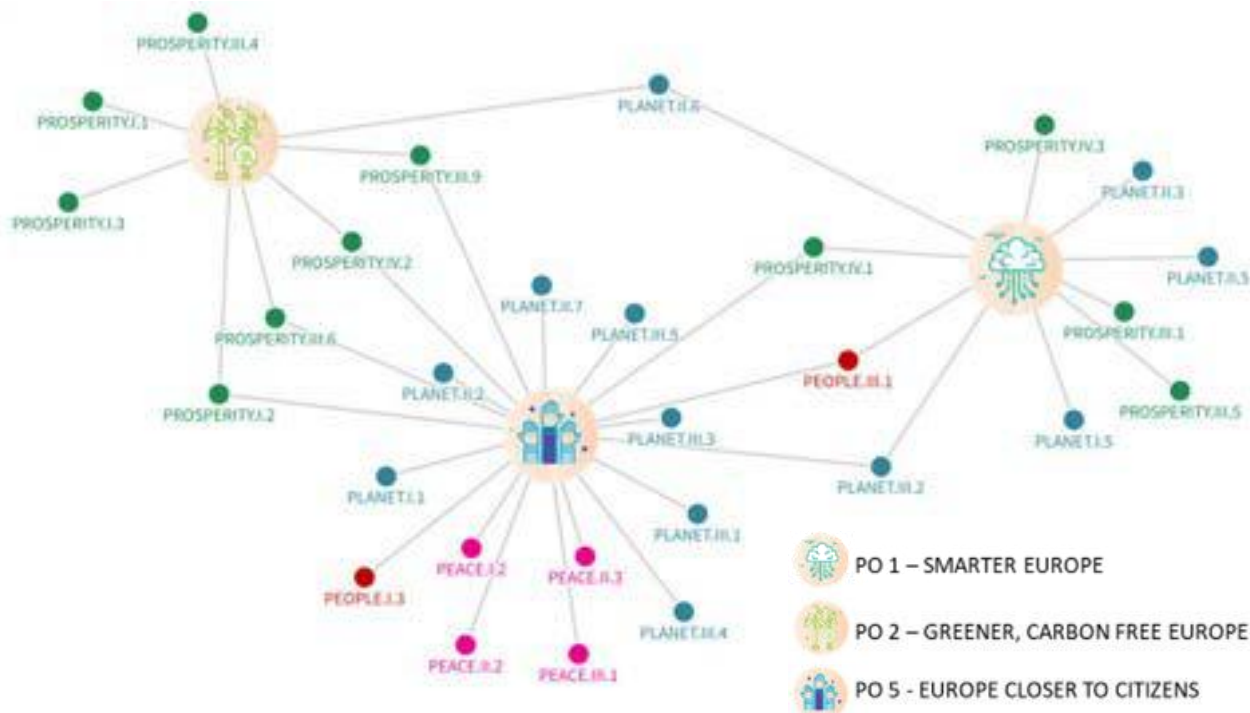


### 3.3 Coherence between the RP ERDF 2021-2027 and the RSDS

An example of policy coherence can be found in the Environmental Report produced for the Strategic Environmental Assessment procedure for the Liguria Regional Programme 2021-2027 funded by European Regional Development Fund.

The sustainability objectives are the reference for the definition of the Strategic Environmental Assessment process of the Plans and Programmes.

Therefore, appropriate ones were selected to assess the sustainability orientation of the Regional Program 2021-2027. The following diagram shows the link from the Policy Objectives and the Strategic Objectives.



### 3.4 Coherence between the Integrated Activity and Organisation Plan and the RSDS

Decree-Law No. 80/2021 introduced into the regional system, as a new planning tool, the Integrated Activity and Organisation Plan, which performs the functions of connection and support for the various programming areas covered by the same and the coordination of activities for the collection and processing of the data and information necessary for the adoption of the plan itself.

One of the focuses of the document is to describe, in coherence with economic and financial planning documents, strategies for the creation of Public Value. In this context, Regione Liguria is in the process of identifying a set of indicators associated with the budget missions and more than half of them are shared with those used for the RSDS monitoring.

# 4

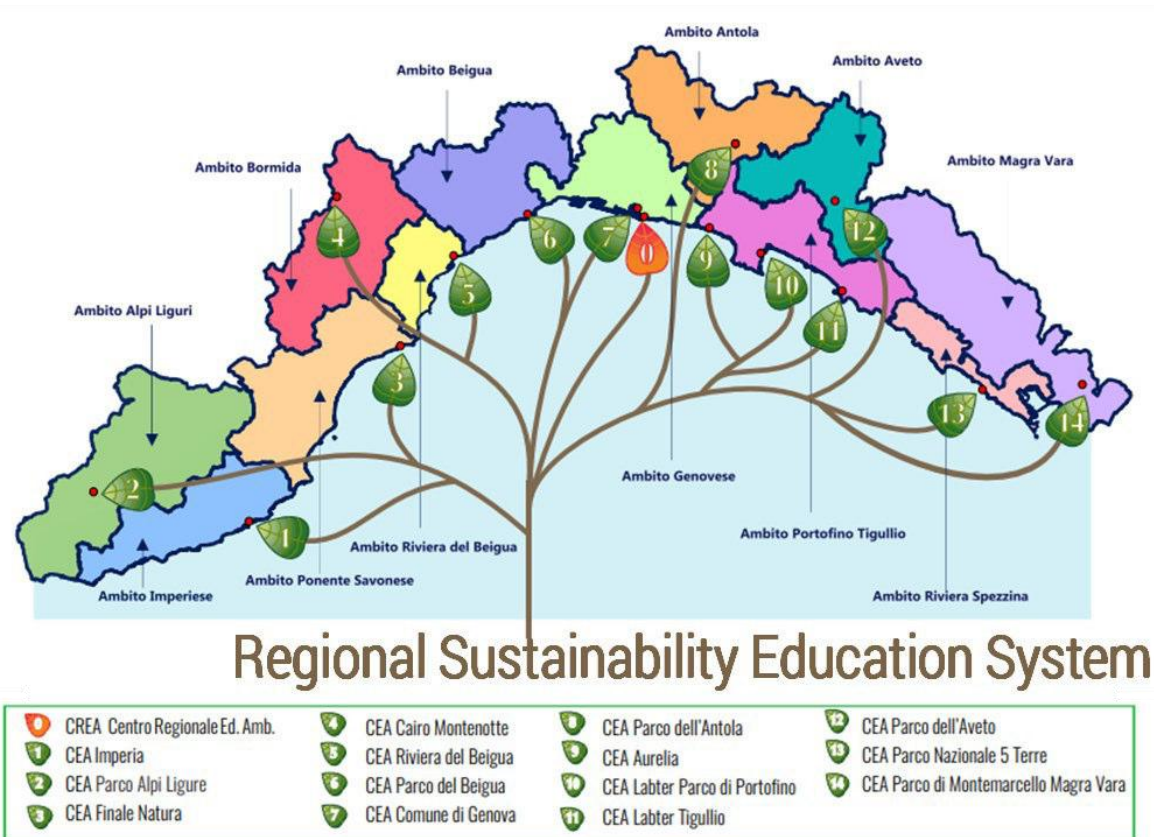
## Participation & engagement of local stakeholders

The **involvement of local public and private stakeholders** is a fundamental aspect of territorial management, right from the planning stage.

To support the construction of the regional sustainable development strategy, the **Regional Sustainability Education System** was activated: the network made of 12 territorial areas, 1 regional centre, and 14 environmental and sustainability education centres scattered throughout the region (Figure 4) was called to managed several **engagement initiatives**, such as information days, public events in the area and moments of confrontation with stakeholders.

In particular, the CEAS have carried out a **survey of the activities in progress/already planned in the short term and of those desired, consistent with the strategic objectives and the goals of the 2030 Agenda**.





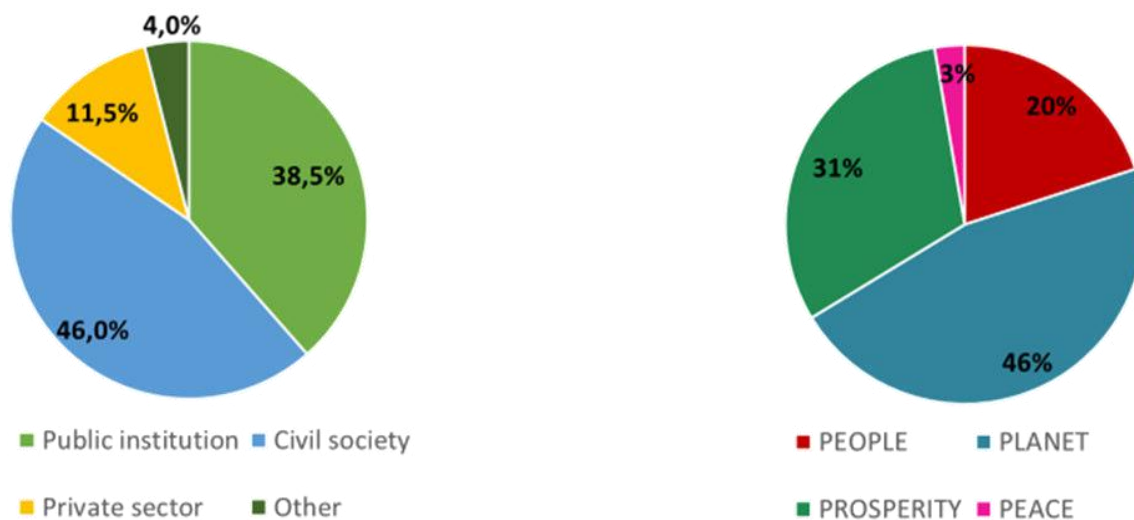
**Figure 4 – Regional Sustainability Education System**

The forum represents a place for discussion which, through the organization of specific working groups will accompany the implementation, monitoring, and revision of the Regional Sustainable Development Strategy.



The 2<sup>nd</sup> meeting of the Regional Forum for Sustainable Development took place online on **20 October 2021**, focusing on the launch of the construction process of the **Regional Strategy for Adaptation to Climate Change**, identified as a priority area for the implementation of the Ligurian sustainability objectives.

The survey made it possible to map a total of **891 initiatives** relating to sustainable development activated or planned in the near future, involving 1266 stakeholder coming from public institutions, civil society and private sector. The initiatives were therefore related to the strategic objectives divided by area.



Among the **most frequent** there are:

#### PLANET



III.1 concerning projects for the prevention of natural and anthropogenic risks and the strengthening of the resilience capacities of communities and territories

III.5 about the development of potential, sustainable management and care of territories, landscapes and cultural heritage

#### PEOPLE



III.1 to reduce the exposure of the population to environmental and anthropic risk factors

#### PROSPERITY



III.5 concerning the abatement of waste production and the promotion of the secondary raw materials market

III.6 inherent to the promoting demand and increasing the supply of sustainable tourism.

Finally, the survey carried out by the CEAS highlighted, among others, the **following priority actions**:

- Sensitization of administrators and identification of solutions to improve the response of the population in the event of floods and **promotion of self-protection measures** through weather alert systems through the use of apps, text messages, installation of visual panels and warning lights.
- **Education of the population to sustainable mobility** also through the creation of cycle paths in urban areas, bike sharing services, and ecological days.



- Promotion of door-to-door separate **waste collection** including the wet fraction, installation of biodegradable garbage bag dispensers on beaches, and containers for the collection of diapers, installation of water "houses", distribution of aluminium water bottles at school, plastic-free initiatives, reuse market, collection of used clothes and broken mobile phones (WEEE)
- Recovery and maintenance of **ancient paths**, city and path cleaning initiatives
- **Energy requalification interventions**, ordinary and extraordinary maintenance, the technological innovation of some public lighting systems, improvement of thermal insulation on the roof and installation of air conditioning systems with high-efficiency technologies.

The CEAS also carried out territorial animation activities aimed at civil society through exhibitions, conferences, theatrical performances, and excursions. They also involved schools with educational activities and games. Direct interaction was implemented by the CEAS in the form of territorial co-design tables, training meetings, interactive workshops, and video interviews.



# 5

## Future perspectives

To **achieve its sustainable development goals** as indicated in the Strategy, the Liguria Region has prepared a series of **priority implementation actions** and investigated some **thematic synergies** that can be activated with some traditional regional socio-economic sectors.

The Liguria Region has identified **two priority areas of action**, approved and partly financed also by the Ministry for the Ecological Transition (MiTe, formerly Ministry of the Environment and Land and Sea Protection MATTM).



Activation of the Regional Environmental Education Centers System for the implementation of **information and education activities** relating the implementation of the Regional Strategy for Sustainable Development

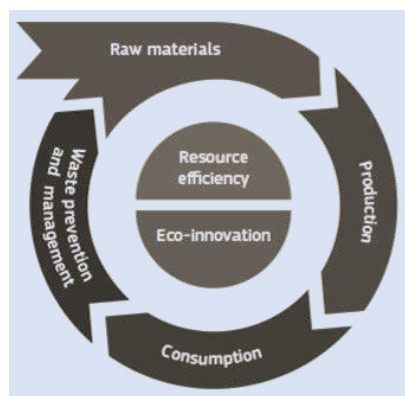


Development of areas of integrated action with the **construction of a regional strategy for adaptation to climate change** as part of the broader strategy for sustainable development.

As regards the **first area**, the CEAS accredited in the Regional System have been identified as **privileged interlocutors and intermediaries to reach the wider public** and transmit messages on sustainable development, through information and environmental education and sustainable development **activities to support the implementation of the regional strategy**. Among the initiatives carried out in the Region and traced there are exhibition stands, exhibitions, conferences, communication campaigns, excursions, guided tours, theatrical performances, territorial co-planning tables, training meetings, info points, interactive laboratories, video interviews, didactic paths in the presence or through distance learning.

As regards the **second area**, the **Interdepartmental Working group for the Sustainable Development Strategy** has been **expanded in its composition and tasks**, to include the construction of the regional strategy for adaptation to climate change (SRACC), identified as **a priority area** of integrated action for the implementation of the regional strategy for sustainable development (DGR 60/2021).

Liguria Region has started the construction process of the SRACC, which will end in **September 2022**, benefiting from the scientific support of CIMA Foundation and the University of Genoa, in the framework of a specific project financed by the MiTe.



**Furthermore**, the connection with the **circular economy** is certainly one of the most relevant issues for regional sustainable development: the growing consumption of natural resources has accentuated the **interdependence between the economic and environmental systems**, and the circular economy is central to a sustainable development able to combine economic needs with environmental and social ones, aiming at minimizing waste and reducing the use of virgin raw materials and energy consumption.

With the aim of **promoting the adoption of more sustainable consumption and production styles**, the Liguria Region intends to enhance the **thematic and transversal synergies between the**

**circular economy and fundamental sectoral issues for sustainable development**, such as **public purchases**.





Combine the theme of the circular economy with the **purchases of public administration**, so that they integrated **environmental and circular criteria in the purchasing procedures** to reorient production styles

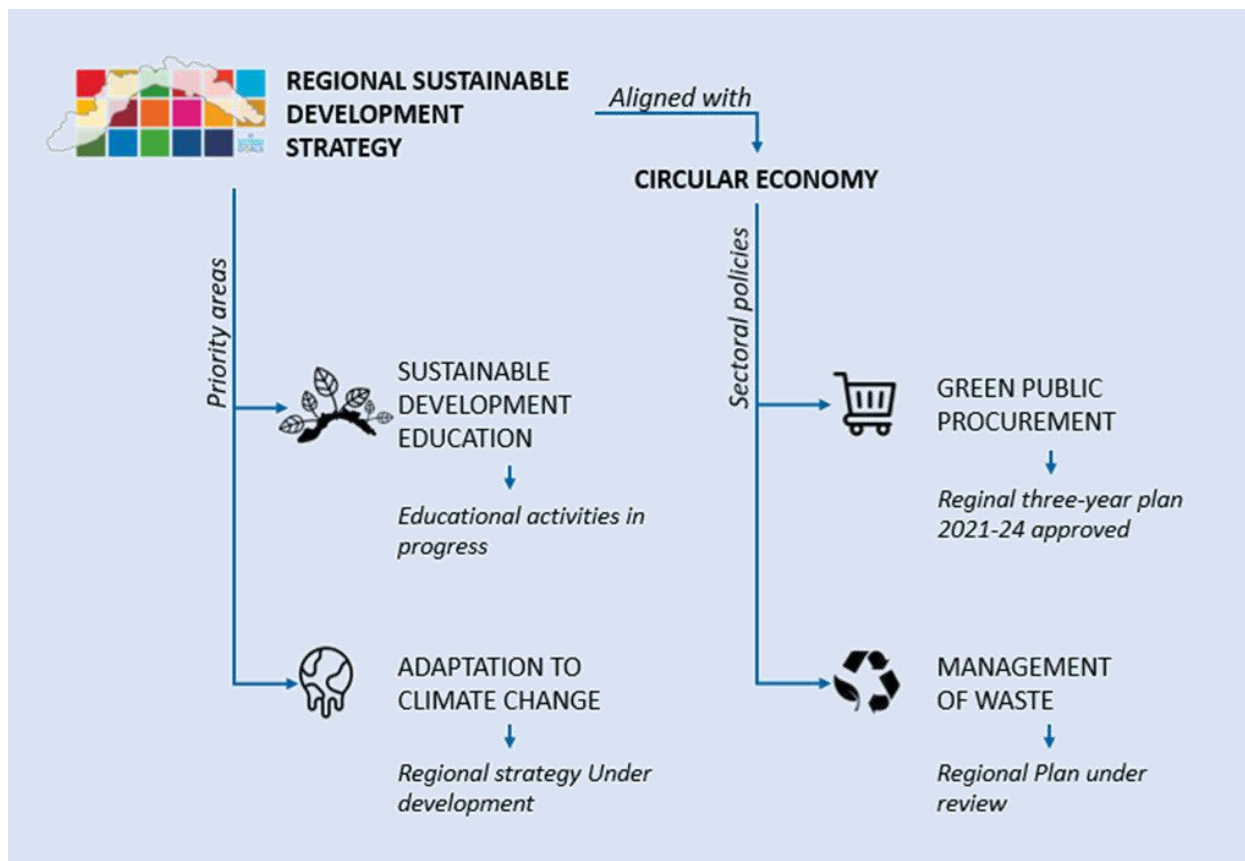


Update the **regional waste management and remediation plan** in order to promote the reduction of waste produced and the use of secondary raw materials in order to minimize waste, reduce the use of virgin raw materials and decrease energy consumption, in **circular economy perspective and waste management**

The **purchasing power of public administrations** has enormous potential in reorienting production and consumption processes since it accounts for 14% of GDP at the European level: asking for products and services with **specific environmental characteristics through green and circular public tenders** can really push the private world to invest in new production models, towards a more sustainable economic growth on a social and environmental level.

In 2021, the Liguria Region approved its **second three-year Plan for green public procurement**, recognizing the GPP as a **powerful driving factor for the demand for sustainable products** and a fundamental implementation tool of the Regional Sustainable Development Strategy.

**Products and materials' end of life** is certainly a fundamental element of the production cycle, on which action must necessarily be taken with a view to circularity and environmental sustainability: the **regional waste management and remediation Plan** currently being updated recognizes this close link, in order to promote the reduction of waste produced and the use of secondary raw materials in order to minimize waste, reduce the exploitation of virgin raw materials and decrease energy consumption, with a view to the circular economy.



**Figure 5 - Summary of priority actions and regional implementation sectors for sustainable development**



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**with the support of:**

**LIGURIA RICERCHE S.p.A.**



Sostenibilità  
in Lombardia



Regione  
Lombardia

# VOLUNTARY LOCAL REVIEW

# 22

LOMBARDY REGION  
METROPOLITAN CITY  
OF MILAN



May, 31<sup>st</sup> 2022

# VOLUNTARY LOCAL REVIEW OF LOMBARDY 2022



**Sostenibilità  
in Lombardia**



**Regione  
Lombardia**



# **VOLUNTARY LOCAL REVIEW OF LOMBARDY 2022**

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“Sappiamo che non saremo in grado di realizzare i nostri ambiziosi obiettivi e traguardi senza **un partenariato globale rivitalizzato e rinforzato** e senza **ambiziosi mezzi di realizzazione**. Il rinnovo del Partenariato Globale faciliterà un impegno complessivo intenso per la realizzazione di tutti gli obiettivi e traguardi, **unendo i Governi, la società civile, il settore privato, il sistema delle Nazioni Unite e altri attori** e mobilitando **tutte le risorse disponibili**”

*“We recognize that we will not be able to achieve our ambitious Goals and targets without a revitalized and enhanced **Global Partnership** and comparably ambitious means of implementation. The revitalized Global Partnership will facilitate an intensive global engagement in support of implementation of all the Goals and targets, bringing together **Governments, civil society, the private sector, the United Nations system and other actors** and mobilizing all available resources.”*

Agenda 2030

# 1. Sustainability in Lombardy

The recent shocks due to the pandemic and armed conflicts are part of a broader framework of crisis, which now sees the inadequacy of the development model inherited from the 20th century. In particular, the idea that there is a competition between **environment, rights, peace** and **prosperity**, and that the latter can be pursued to the detriment of the others, proves wrong. On the contrary, any damage to one of these dimensions affects the others: it is no longer possible to ignore their interdependence. Among the factors at the origin of the crisis is an imbalance in the distribution of resources which causes, for example, the obesity of about two billion people compared to eight hundred million in absolute poverty: sufficient resources for the entire human population are distributed in an asymmetrical and harmful way for everyone, demonstrating that material wealth is not sufficient to determine the quality of life. The very concept of well-being must evolve to reflect what is truly good for the person - a balanced diet, physical movement, life in peaceful conditions, the health of ecosystems - a list that ends up coinciding with what does the good of the planet. On the other hand, it is not a matter of chance: humankind has evolved on Earth and adapted to its conditions. Therefore, being sustainable does not mean giving up well-being, but the superfluous that hurts and which, if left, will not be lost, but automatically redistributed among those who demand it.

From our choices, as individuals and as a society, a chain of consequences can be negative (inequality, environmental damage, conflicts) or positive (equality, peace, well-being, health). The Lombardy Region takes this into account, whose activity as a local government is now part of the context of the recovery from the pandemic and the war crisis in the heart of Europe, which has also sharply exacerbated the energy issue. The recovery from the consequences of these events will require unprecedented efforts, but above all, it requires a **choice** on the way and the objectives to be pursued. In fact, it is a question of choosing between a conservative recovery, aimed at restoring the previous system, and an evolutionary one, capable of bringing about a structural and improving change to our way of life. Companies are also increasingly aware of it, which no longer see sustainability as a choice linked to reputation, but as concrete and direct advantages, such as the security of supply chains, the absence of socio-political risks, and the activation of inner creativity, with significant economic savings.

The green economy, in fact, is structurally virtuous: instead of being based on mass production that exhausts resources and enriches few, it requires durability and quality of goods; it is therefore based on knowledge and services and requires educated and competent people: it is therefore structurally redistributive and does not wear out resources. Italy, in particular, has a strong competitive advantage in this sense because, in the face of a historical scarcity of raw materials, it has its strong point in environmental and cultural wealth, which is even more valid in a collaborative perspective of sharing of knowledge, creativity, and competence. The adoption of Agenda 2030, in the pre-Covid era, as a guide for development, represents a firm stance towards **systemic change**, which retains its momentum well beyond the events taking place and lays the foundations for a system capable of preserving all dimensions of well-being. The Lombardy Region has joined the path undertaken by the European Union and Italy, launching the initiatives described in this report, which represent important steps toward a zero-impact region, resilient to climate change, equitable, and creator of lasting well-being.

## 1.1. Lombardy at a glance



Lombardy is a region located in the northwest of Italy, in the center of the plain formed by the river Po and circumscribed by the Alps to the north and the Apennines to the south. Its territory is densely populated (420 inhabitants / sq km), especially in the Metropolitan City of Milan and in the province of Monza-Brianza, and heavily industrialized. It is in fact the most populous Italian region (about 10 million inhabitants), and with the highest GDP in the country (almost 400 billion euros in 2019), while it is in second place for per capita GDP (about \$ 40,000 / inhabitant). These characteristics make Lombardy one of the Four Motors of European development, together with Auvergne-Rhône-Alpes (F), Baden-Württemberg (D) and Catalonia (ES). The advanced economy, the high number of companies, and the rate of innovation make it suitable for experimenting with new economic and social models, oriented toward a different development paradigm. One of the main strengths of Lombardy is its human capital: it is the destination of thousands of Italian and foreign students who are trained in its numerous universities and in many cases become part of its productive fabric.

The main challenges in the perspective of sustainable development concern, in this region, the protection and enhancement of the environment and natural capital, the adoption of circular production models, the transition to an energy system not dependent on fossil sources and zero emissions, the stop land use and resilience to climate change, leaving no one behind. Furthermore, the size and variety of its territory, which alternates densely inhabited urban areas with a large agricultural plain and equally extensive mountain areas, make the government's action towards structural changes particularly complex. A role of primary importance belongs to institutional actors, associations and entrepreneurs that are able to implement initiatives according to the peculiarities of the territory.

## 1.2. A sustainability path

Following the adoption of **Agenda 2030** as a development paradigm by the United Nations, Italy has drawn up its own **National Strategy for Sustainable Development**, published in 2018, which identifies the objectives to be pursued for sustainable growth of the country. According to the principle of coordination between levels of government, with the updating of **Legislative Decree 152/2006**, the Italian Government requested the Regions to develop their own strategy and adopt governance tools and the involvement of stakeholders and civil society to coordinate action toward these goals. In this way, the process of the Lombardy Region starts to make the sustainable development one of the key drivers of its activity, based on a long-term vision inspired by a model of fair, circular, and environmentally friendly growth. The first step was the inclusion of the principle of sustainable development among the pillars of the Regional Development Program - the main programming tool for the region's policies and actions over the course of the legislature - to then start the development of the Strategy. At the same time, various channels of involvement were established as well as tools were developed to support programming. This path led the Lombardy Region, in 2021, to have a **regional strategy for sustainable development** officially approved and accompanied by a **monitoring system** and **tools for evaluating and adapting policies, governance** within the body and capable of involving outside, a **network** of active partners who contribute to the achievement of shared objectives.

### *The stages*

2018 Sustainability among the pillars of the PRS of the 11th Legislature

2018 Pact for Development as an involvement tool

2018 Observatory on Circular Economy and Energy Transition

2019 Agreement with the Ministry of Ecological Transition

2019 Lombard Protocol for sustainable development

2019 Definition of internal governance

2020 First regional Forum for sustainable development

2020 Online platform [svilupposostenibile.regione.lombardia.it](http://svilupposostenibile.regione.lombardia.it)

2021 Regional Strategy for sustainable development

2021 Second regional Forum for sustainable development

## 1.3. Involvement and governance

The Ministry of Ecological Transition established in 2018 the national coordination and comparison table on strategies for sustainable development, with the aim of involving the Regions Metropolitan Cities, in the coordinated implementation of the national strategy. The table is a very useful tool for the Lombardy Region, which took the opportunity to provide its contributions to the national document and obtained relevant information for its business. In turn, in October 2018 Lombardy launched a discussion table with its main stakeholders, dedicated to two key themes of the ecological transition: the **Regional Observatory on Circular Economy and Energy Transition** (see *BOX*), created to discuss and define the objectives of regional policies on climate and use of resources in sharing with all the players in the area. It is flanked by the **Pact for the Development of the economy, work, quality, and social cohesion**, a table that has been active since 2001 on cross-cutting issues, which brings together representatives of the social partners, labor, and the productive world in planning regional policies. The desire to extend involvement and create a network of partners also led Lombardy to promote the **regional Protocol for sustainable development**. The Protocol consists



“ARPA - ARPA - Regional Environmental Protection Agency. PoliS – Regional research center. FLA - Lombardy’s Foundation for the Environment. ERSAF - Regional body for agricultural and forestry services. Observatory – Regional Observatory on circular economy and energy transition: governance and stakeholder involvement tool. Protocol – regional Protocol for SD: stakeholder involvement tool. INTEGRA project – Ministerial research project supporting the regional Strategy and its monitoring system. SEA – Strategic Environmental Assessment.

tender, the construction of urban strategies for sustainable development for 13 of the most populous Lombard municipalities, towards which to direct European funds. Among the partners of the Region, there is also the **Network of Universities for Sustainable Development (RUS)**, which coordinates the activity of the Italian academic world in favour of the sustainable development goals, constituting an important point of connection with the regional Strategy. Its action goes hand in hand with that coordinated by the Region through the **Regional Network for Environmental Education**, which promotes the initiatives of a series of partners to spread the culture of the environment and sustainability at all levels of education.

To coordinate activities relating to sustainable development, the Lombardy Region has defined internal governance that sees the **coordination cabinet at the center**. The Cabinet brings together the representatives of all the General Directions on a quarterly basis and is led by the head of regional planning in agreement with the Department of Environment and Climate. It is flanked by the **Committee of General Managers**, to share the strategic elements and the work path. Sustainability has also become a performance parameter on which to measure the effectiveness of the entity’s action and contributes to forming the variable component of the remuneration of General Managers and all staff.

The initiatives of the Region and the experiences carried out in the area find visibility in the **Regional Forum for Sustainable Development** (see *BOX*), a moment of discussion organized annually by the Region that gives a voice to local and international political representatives,

of a declaration of commitment that any subject, public or private, can sign to show their adherence to the principles and objectives indicated by the Region, becoming part of a network that favors the exchange of information and best practices.

These comparison tools also contribute to coordination with the institutional levels of sub-regional government; in fact, the Union of Lombard Provinces (UPL) and the Lombard section of the National Association of Municipalities (ANCI) take part. The Metropolitan City of Milan, in defining its own Metropolitan Urban Agenda for Sustainable Development, worked closely with the Region to align the method and contents of the strategies at the two levels. A **workshop on sustainable development** (see *BOX*), organized in collaboration with ANCI, was dedicated to the Municipalities to enhance the exchange of information, practices, and methodological reflections on the territorialization of the Strategy. The Lombardy Region has promoted, through a specific



exponents of the academic world, businesses and of civil society, which find space to present the good practices adopted, identify problems and priorities, update the shared vision on the future of the region. To facilitate activities and involvement, the Lombardy Region has activated an **online platform** (see *BOX*) dedicated to sustainable development, which allows the dissemination of news and collaboration between stakeholders:

[www.svilupposostenibile.regione.lombardia.it](http://www.svilupposostenibile.regione.lombardia.it).

## 1.4. The Regional Strategy for Sustainable Development of Lombardy

Lombardy Region has elaborated its own Strategy for sustainable development between 2019 and 2021, after signing a collaboration agreement with the Ministry of Ecological Transition (formerly the Ministry of the Environment). The path started with the analysis conducted by PoliS-Lombardia, the regional research institute for supporting Lombardy's policies, from positioning (also through the annual Lombardy Report) to the regional policies with respect to the SDGs. With the collaboration of all the Region's General Directorates, a first Strategic Document was drawn up, which indicated about 90 objectives, some quantitative targets, and a series of indicators for monitoring.

The dialogue with the stakeholders held through the governance bodies and during the first regional Forum for sustainable development, together with the consultation of citizenship thanks to the dedicated website, led to the first version of the Strategy, approved on 29 June 2021, and updated in the October of the same year, with the support of Lombardy's Foundation for the Environment (FLA). In the current version, the Strategy is divided into five strategic macro-areas, which, in turn, are divided into 27 areas of intervention. These group the 96 Regional Strategic Objectives (OSR). An introductory section summarizes the elaboration of the document, its context, and the relationship with the national, European, and international levels, while the concluding section describes the governance and the next steps. The qualitative dimension of the strategic objectives is accompanied by the quantitative dimension expressed in the **targets** and related indicators.

To keep track of Lombardy's progress towards the goals, **monitoring system** has been developed, based on two tiers of indicators: the "core" tier only involves "state indicators" and in limited

### *The Observatory on Circular Economy and Energy Transition*

*Established in 2018, the Observatory is a discussion body dedicated to energy issues and production models, open to the representatives of all stakeholder groups. It includes two coordination tables, one at an institutional level and one at a technical level, and a series of thematic tables. The purpose of the Observatory is to jointly define the guidelines, objectives and expected results of regional policies and strategies for the environment and climate, and to provide technical contributions to be integrated into regional plans and programs.*

*In addition to the formal members of the Observatory, bodies, organizations and experts with specific experience and expertise in the sector in question are invited to the thematic tables. The thematic tables activated up to now are the following:*

#### *Circular Economy Area:*

- Sewage sludge
- Construction and demolition waste
- Melt slag
- Food waste
- Plastics
- Policies for the circular economy
- Non-recoverable residues

#### *Energy Transition Area:*

- Regional requalification of public and private buildings
- Energy efficiency in industry and monitoring of technological innovation
- Behavioral Measures
- Potential development of photovoltaics in the region
- Energy communities and self-consumption
- Review of RES Guidelines
- Biogas and biomethane
- Resilience of the regional electricity system
- TRASFER OF RED II directive

### *The laboratory on sustainable development dedicated to municipalities*

*The involvement of local authorities was promoted through a laboratory on sustainable development, organized in collaboration with ANCI. In six days, the workshop accompanied the representatives of thirty local administrations, together with the Metropolitan City of Milan and the Lombardy Region in a path of information and dialogue. The technical speakers explored topics such as European planning, nature-based solutions for urban environments and energy communities; the Region presented its initiatives on sustainable development, including the Strategy and the Regional Air, Energy and Climate Program, and informed about the possible role of the territorial offices and the functionalities of the Regional Information System, as an instrument of knowledge.*

*Municipalities had space to present their experiences on international projects, energy communities and near-zero energy building, public-private partnerships, use of big data; they shared operational indications and tools and pointed out some critical issues in their work as local administrators, especially in the face of the anomalous conditions of the present moment.*

*The subjects that contributed to the laboratory include the Politecnico di Milano, the Milanese Transport Company, the Regional Agency for Agricultural and Forestry Services, the PoliS Lombardia research center and the Italian Alliance for Sustainable Development. , together with the private partners who presented their services: Edison, ABB, Comoli-Ferrari. The sixth day of the workshop, dedicated to the summary and conclusions, took place as part of the Forum for Sustainable Development of 2021; all the contents that emerged were collected in an **e-book**.*

number, thus providing a **synthetic view**, useful to update priorities in regional policymaking; the second tier extends to “process” and “contribution” indicators and goes into more detail on the specificities of the territory. Its purpose is to support the policies that implement the Strategy and to serve as a reference for the **Strategic Environmental Assessment**. The criteria for selecting the indicators were, on the one hand, **comparability** with other Italian and foreign territories, with the adoption of many indicators from national and European statistics; on the other hand, the **specificity** with respect to the characteristics of Lombardy, in addition to the **availability** of data on a local scale, the presence of a historical series and warranties on the future continuity

### *The online platform [www.svilupposostenibile.regione.lombardia.it](http://www.svilupposostenibile.regione.lombardia.it)*

*To facilitate the dissemination of information, the presentation of its initiatives and collaboration with stakeholders, the Lombardy Region has created an online platform dedicated to sustainable development.*

*The site consists of a public section and a reserved access after registration. The first offers an overview of activities related to sustainable development, presents the actors of the Protocol, makes available the text of the Strategy, the related indicators and the recordings of the Forum, of which it also hosts live streaming.*

*It also hosts a news page on the activities of the Region and its partners. The reserved area is mainly dedicated to the subscribers of the Protocol, who with access to different communities can collaborate, discuss and exchange documents on various topics. The site was used for citizens on the first draft strategy in 2021 and to stimulate subscriber participation through news.*



### *The Regional Forum for Sustainable Development*

*Since 2020, the Lombardy Region has organized an annual regional Forum dedicated to sustainable development. Alongside the regional initiatives, the Forum brings the experiences of local actors to the stage, to give visibility to good practices and keep open the dialogue on the local implementation of Agenda 2030. International politicians are invited to the debate, who in the past they included representatives from the United Nations, the European Union, and the Italian government, and from foreign regional administrations such as Wales in the United Kingdom and the state of Paraná in Brazil.*

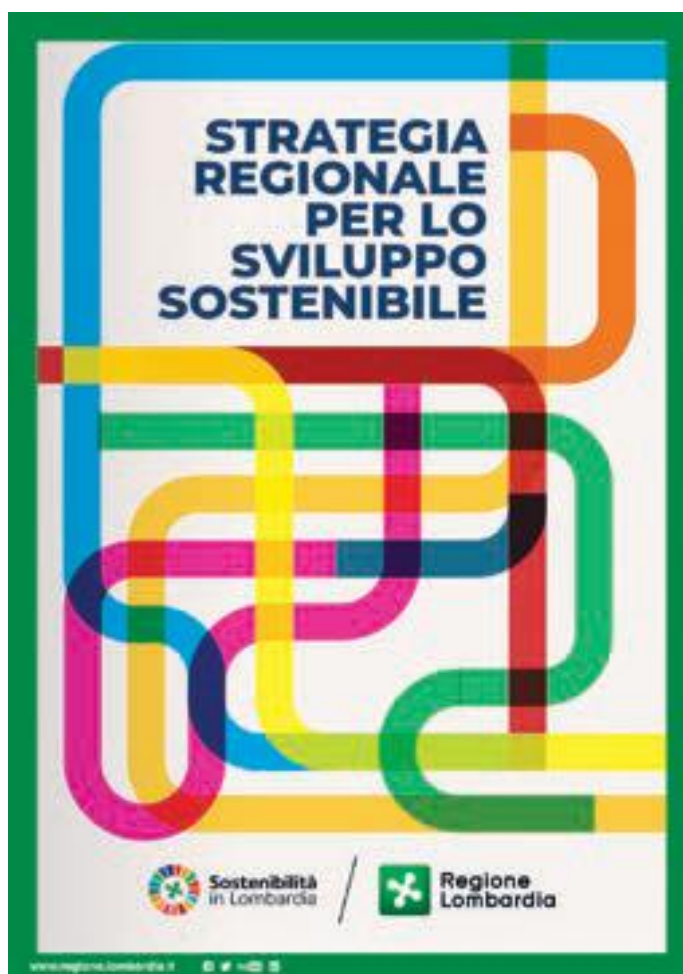
*Among the issues addressed in the past sessions we find the relationship between businesses, work and sustainable development, the opportunities for young people in the Ecological Transition, the challenges for institutions at a strategic level and in the governance of the territory, the experiences of sustainability applied in the characteristic supply chains of Lombardy.*

*The Forum is usually divided into 3-4 days, which are joined by related events in the previous days. This guarantees a wider space to explore topics of specific interest for some groups, and for the organization of initiatives by stakeholders. For the third edition of the Forum, to be held in October 2022, the proposals for events, sessions, and contents by the partners of the Region have already been collected.*

*Their participation has become central to this initiative which has the very purpose of involving civil society and contributing to the spread of a culture of sustainable development, first showing how it is already being implemented in Lombardy*

of the data; more generally, the statistical quality, assessed through specific metadata cards. Targets were selected according to the **obligations** in implementation of European Directives and national standards, or of the **commitments** undertaken autonomously by the Region through legislation or agreements. The list of indicators and targets can be consulted in the attachment to the Strategy.

The monitoring system was developed by a **working group**, which was attended by internal members of the Region, bodies of the regional system, institutional and academic figures. Among the former, the Region's Environment General Directorate, the Environmental Authority, the Presidency and the SEA Nucleus; among the Regional System: ARPA Lombardia (Environmental Protection Agency), PoliS Lombardia (research center), the Lombardia Foundation for the Environment (FLA), the Regional Body for Agricultural and Forestry Services (ERSAF); the Metropolitan City of Milan as an institutional partner; among the subjects of the academic world, the Poliedra research center of the Polytechnic of Milan, the University of Bergamo and, through the INTEGRA project funded by the Ministry of Ecological Transition, the Universities of Milan, Milan Bicocca and Brescia. The selection of indicators and targets also involved all the Region's General Directorates.



The objectives of the Strategy concern, in summary, the following themes:

### **Macro-area 1: Health, equality, inclusion**



**Fight against poverty:** integrate public, third sector, and private initiatives to fight poverty in a widespread way throughout the territory; promote social cohesion; guarantee food safety; collaborate

internationally to manage migration flows

**Fight against inequalities:** reduce economic inequalities through welfare services; those of gender, fighting violence against women and promoting the reconciliation between life and work and the participation of women in society; intergenerational ones, protecting the well-being of future generations.

**Health and well-being:** reduce the health risks caused by pollution and unhealthy lifestyles; strengthen local health and the recruitment system for health personnel; improve prevention and care services for the elderly; facilitate access to services thanks to digital technologies.

### **Macro-area 2: Education, training, work**



**Education:** fighting early school leaving; strengthening the University; contributing to an updated and adequate training offer; reducing inequalities in the education system.

**Training:** improving the link between the school system, the world of work, and research; promoting the employment and resilience of people through lifelong learning.

**Sustainable growth:** ensuring that economic growth translates into employment, access of young people to the labor market, reduction of gender inequalities, improvement of working conditions, and the balance between work and private life, especially for women..

### **Macro-area 3: Development and innovation, city, territory and infrastructure**



**Research and innovation:** strengthening the link between research and businesses, promoting innovation and digitization of production processes to develop a knowledge-based, increasingly less

linked to the consumption of resources and emissions of pollutants and climate-altering gases. **Digital:** strengthen and disseminate computer networks; promote the adoption of strategic technologies for competitiveness; digitize citizen services and public administration.

**Cities and settlements:** promoting sustainability and innovation of building interventions; combat housing deprivation, increase the efficiency of public housing services, bring land consumption to zero, and invest in urban regeneration.

**Infrastructures:** enabling the energy, digital, and mobility transition through updated, safe, and sustainable infrastructures; promoting sustainable urban logistics.

**Culture and tourism:** making the area attractive and livable thanks to the services, the cultural offer, and the quality of the environment.

**Territorial governance:** adopting participatory governance methods in complex projects, involving stakeholders, and encouraging collaboration between levels of government.

### **Macro-area 4: Mitigation of climate change, energy, production, and consumption**



**Climate change:** guiding the transition towards carbon neutrality in all sectors, promoting energy efficiency, electrification of demand, and renewable sources.



**Mobility:** adopting new models for efficient, sustainable, and human-friendly mobility; promoting smart ways and partnerships to create new sustainable infrastructure.

**Energy:** developing renewable sources and an intelligent electricity grid, making them a lever for growth; promoting energy communities.

**Circular economy:** integrating research and the productive world to develop and disseminate circular processes; coordinate sectors to bring together new demands and offers.

**Sustainable lifestyles:** supporting the exchange of good practices and citizen awareness; stabilizing the demand for sustainable solutions through green public procurement.

### **Macroarea 5: Environment, landscape, adaptation to climate change, agriculture**



**Adaptation, and resilience:** updating the policies and tools of territorial governance to make Lombardy resilient to climate change and manage related risks.

**Environmental culture:** disseminating knowledge and skills, to train the necessary professionals and involve citizens in the protection and enhancement of the environmental heritage.

**Pollution:** adopt structural measures and partnerships to improve the quality of air, water and soil, including through protection and remediation measures.

**Biodiversity:** protecting and enhancing habitats through the regional ecological network and its cultural promotion; combatting invasive alien species; managing forests in a sustainable way.

#### **The regional Catalog of environmentally relevant subsidies**

Among the commitments signed by the Lombardy Region, the construction of the regional catalog of subsidies was envisaged, based on the international commitments undertaken by Italy and as established by Article 68 of Law 221/2015.

The Catalog of subsidies acts as a support tool for public decisions that aims to represent interventions that have an impact on the environment, improving the knowledge base on the environmental sustainability of the actions taken. The document uses a broad meaning of subsidy, which includes “incentives, concessions, subsidized loans and exemptions from taxes aimed at protecting the environment”, which can be categorized into direct subsidies (that is to be found in the balance sheet items) and indirect subsidies, which can be quantified through differential estimates of the lower revenue obtained with respect to the reference benchmarks. Measures with significant environmental effects have been classified into environmentally harmful subsidies (SAD), favorable subsidies (SAF) and uncertain subsidies.

The regional Catalog, built with the support of Polis-Lombardia in collaboration with the regional General Directions, maintains an alignment with the national methodology. In order to be able to make a coherent distinction between environmentally favorable and unfavorable subsidies, they were presented analyzed and presented with a wide range of information, the assessment of which was comprehensive of the environmental impact, sustainability and social repercussions.

In the first edition (April 2021), favorable subsidies of € 224.7 million were identified, mainly concentrated in direct subsidies, and indirect, environmentally harmful subsidies of € 215.9 million. An update of the Catalog is currently in progress.

<b>Subsidies' environmental effect</b>	<i>harmful</i>	<i>favorable</i>	<i>uncertain</i>	<i>total</i>
<i>Indirect subsidies (minimum hypothesis)</i>	215,9	4,2	3,5	223,6
<i>Direct subsidies</i>	0	220,7	65,1	285,8
<i>Total (millions of euros)</i>	215,9	224,9	68,6	509,4

**Waters:** to restore rivers and lakes to natural conditions; integrate water management, hydrogeological risk prevention, renewable energy production, and local economic development.

**Cities:** build livable urban environments rich in biodiversity, adopting solutions based on nature; promote citizen awareness and participation.

**Landscape:** enhancing the landscape as an element of development and attractiveness, especially the waters and the mountains; developing green infrastructure.

**Agriculture:** promoting sustainable and competitive agriculture, with an active role in safeguarding ecosystems, resilience to climate risks, and absorption of emissions.

## 1.5. Policy coherence

The implementation of the Regional Strategy requires that **plans, programs, and actions** of the Region **comply** with its indications and that the policies aimed at different objectives do not conflict with each other. Achieving consistency depends on several factors, including the presence of solid governance capable of informing, involving, and motivating officials and the political level; the presence of quantitative targets and tools for assessing impacts of policies and their interactions.

The Lombard strategy has been connected with programming in several ways. Within the text, the objectives are related to the **main plans and programs** capable of favoring their achievement. As early as June 2021, the **Regional Economy and Finance Document (EAER)** has been linked to the Strategy, by marking each "action" with reference to the regional sustainable development goals to which it contributes. Furthermore, in accordance with Legislative Decree 152/06, the Strategy will constitute the reference for the **Strategic Environmental Assessment (SEA)** that accompanies the approval of new plans and programs, providing the criteria for aligning the new policies to a vision consistent and systemic sustainable development. Also contribute to this process of policy evaluation **Catalog of subsidies of environmental relevance** (see *BOX*) and the impact assessment model currently being developed by three Lombard universities as part of **the INTEGRA project**. The first was drawn up in line with the corresponding National Catalog and requires the Region to evaluate adjustments in the case of harmful subsidies. The second will lay the foundations for decision-making, thanks to the possibility of accurately predicting the effects of policies with respect to the relevant parameters in the perspective of sustainable development. The prospect is to place the Strategy at the foundation of the Regional Development Program, starting as early as the new legislature elected in 2023, to make it a **Regional Sustainable Development Program**.

## 1.6. Future commitments

The vision for the future of the Lombardy region responds to the broader project of a human system with the person at the center and fully integrated with natural cycles. The institutional and productive structure, supported by constant innovation, can only be at the service of life, human and natural, in a balance between the fundamental elements that can guarantee its quality: respect for rights, the health of the environment, development, peacekeeping. Elements, as mentioned, are inseparable in their mutual dependence, and cannot be prosecuted separately or, much less, concurrently. The 2030 Agenda model responds precisely to the need for a systemic approach, capable of sustaining at the same time all the factors of well-being in a lasting way. Our region is in a privileged position thanks, among other things, to the wealth of its human capital, the wealth of environmental resources and biodiversity, the solidity of its production and financial system, the efficiency of its infrastructures, and its potential for technical and technological innovation. It is therefore in the conditions to proceed swiftly toward a new structure, such as to guarantee a better quality of life accessible to all, minimize the consumption of non-renewable natural resources, achieve energy independence and climate neutrality, and



protect and enhance the ecosystems by integrating human environments with natural ones, in order to also increase resilience to adverse climatic and environmental phenomena. A region, moreover, fully inserted in the network of European territories and in international cooperation to achieve the sustainable development goals all over the world; capable, in this context, of actively contributing to global progress, focusing in particular on the ability to enhance human capital, to contribute to social and technical innovation processes and scientific research, and directing its high entrepreneurial potential towards objectives of Agenda 2030. A vision that immediately requires the adoption of new paradigms of action based on collaboration rather than competition and on a long-term perspective prior to that of a short one.

Lombardy continues on the path it has begun towards sustainability with a commitment increasingly focused on achieving the objectives shared at a global level. In particular, 2023 will be an election year for the regional administration; the new Legislature will present a new Regional Development Program to be implemented in coherence with the Strategy, in the perspective of a **Regional Sustainable Development Program**. Introducing sustainability objectives and targets at the highest level of programming can give a strong impetus to the adaptation of policies and actions, which will be implemented more and more effectively thanks to the improvement of impact forecasting models, Strategic Environmental Assessment, and indications of the Catalog of Subsidies. Furthermore, regulatory interventions on **climate change and sustainable development**, consolidate the governance and the tools identified, thus strengthening the effectiveness of the Strategy in determining the Region's activity.

The institutional action, on the other hand, is only one among the many in progress, and however relevant it may not be separated from that of all the actors of the territory, public and private, to achieve the set objectives. For this reason, future efforts will increasingly go in the direction of expanding and intensifying the **involvement** of civil society and the productive fabric, especially through the relaunch of the Protocol and the promotion of training initiatives, sustainability reporting practices, green investments, transition paths towards sustainable business models and circular production and consumption processes. A key tool in this regard will be **Green Public Procurement (GPP)**, whose progressive consolidation, also through the Regional Action Plan for GPP, will allow the Region to leverage the financial volume of its tenders to stimulate the demand for goods and sustainable services.

As President Fontana declared at the opening of the second Forum for sustainable development, the present moment represents an **opportunity of historical significance**, since a short time window still allows us to contain the effects of climate change and the loss of biodiversity; at the same time, the response to the pandemic has mobilized enough resources to bring about the necessary change. The targets on many issues, in particular on emissions, energy, circular economy and ESG performance, are defined by Europe: the responsibility of the Regions is to contribute to the creation of favorable conditions so that their territory is prepared for the deadlines and is able to grasp the many opportunities contained in the Transition.

## 2. The positioning of Lombardy Region in the National and European context

Effective and coordinated action between all the actors involved requires awareness of the starting point and the deviation from the targets to be achieved. This section presents the positioning of the Lombardy Region, with reference to the fourteen goals of the 2030 Agenda recalled by the Regional Sustainable Development Strategy.

The analysis of the positioning of the Region was developed, starting from 2017, through the “**Lombardy Report**” produced annually by PoliS-Lombardia, as a support to policy makers and, more generally, an information and knowledge tool of the Lombard reality.

In relation to the availability of statistical elaborations, refined and consolidated over the years, it was decided to provide a summary photograph of the Lombard context using, in the first place, precisely the composite indicators developed by PoliS-Lombardia; these indices, elaborated on the basis of Eurostat and ISTAT indicators, measure performance with respect to the sustainable development objectives, comparing Lombardy with 20 European countries belonging to the OECD and making use of historical series analysis for a synthetic reading of the trends.

In each of the fourteen cards referring to the SDGs, the composite indicators are flanked by two indicators selected from the ISTAT SDGs dataset, so as to allow a comparison between the values and trends over time in Lombardy, the Italian average and the Northern one. Italy. The criterion that guided the choice of the phenomena to be represented was their inclusion in the list of indicators whose targets have already been assumed by the SRSvS. Only in some cases, in the absence of a specific regional target, it was opted for indicators for which there are reference values defined by national or European planning documents, with different degrees of cogency. As will be evident from reading the fourteen fact sheets, for numerous ISTAT statistical measures that investigate the issues covered by the SDGs and only for some composite indicators, the values referring to the years 2020 and 2021 are already available and reported here; therefore, the data show variations, even sensitive ones, which record the impacts of the COVID-19 pandemic, departing from trends that could be considered as a consolidated reference base-line.

### The performance of composite indicators



Source: RL elaboration of PoliS-Lombardia data, 2021

## The composite indicators: base years and last year available

	GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	GOAL 6	GOAL 7	GOAL 8	GOAL 9	GOAL 10	GOAL 11	GOAL 12	GOAL 13	GOAL 15
<b>base years</b>	2008	2014	2013	2008	2008	2017	2013	2008	2008	2008	2010	2013	2012	2011
<b>last year</b>	2019	2019	2018	2020	2020	2018	2018	2020	2019	2019	2019	2019	2018	2019

### Notes on composite indicators

The composite indices have as their reference point the threshold value equal to 100, made up of the composite index of Lombardy in the first year of observation: they therefore assume a value of less than 100 in cases of worse positioning or worsening trend compared to the reference index and higher than 100 in cases of better positioning or improving trend. The results of the analyzes are presented according to the following structure:

- representation of the composite index of the Goal for the 20 countries organized by area, indicating the positioning with respect to the median value;
- trend reading of the positioning of Lombardy and Italy with respect to other countries using the composite index.

The details of the indicators that make up the indices elaborated by PoliS-Lombardia are shown below.

	Indicator	Description	Data provider	years
<b>GOAL 1</b> - No poverty	Population at risk of poverty or social exclusion	Percentage share of the total population	Eurostat	2008-2019
	Population in severe material deprivation	Percentage share of the total population	Eurostat	2008-2019
	People living in very low work intensity households	Percentage share of the 0-59 year population	Eurostat	2008-2019
	Population at risk of income poverty after social transfers	Percentage share of the total population	Eurostat	2008-2019
<b>GOAL 2</b> - Zero hunger	Obese people aged 18 and over	Percentage of obese people over 18 years old	Eurostat e ISTAT noi Italia	2014-2019
	Share of utilized agricultural area (UAA) invested by organic crops	Percentage share	Eurostat e ISTAT	2014-2019
<b>GOAL 3</b> - Health and Well-being	Life expectancy at birth	Number of years	Eurostat	2013-2018
	Infant mortality rate	Deaths per 1000 live births	Eurostat e ISTAT noi Italia	2013-2018
	Mortality rate attributed to accidental poisoning	Deaths per 100 000 inhabitants	Eurostat	2013-2018
	Death rate from suicide (standardized rate per 100,000 population)	three-year averages, including suicides and intentional self-harm	Eurostat	2013-2018
	Road accident death rate	Deaths per 100 000 inhabitants	Eurostat e ISTAT	2013-2018
<b>GOAL 4</b> - Quality education	Young people who leave education and training prematurely	Percentage share of young people aged 18 to 24	Eurostat	2008-2020
	Population with tertiary education	Percentage share of the population between 25 and 64 years old	Eurostat	2008-2020
	Participation of adults in education and training	In the 4 weeks prior to the interview. Percentage share of the population between 25 and 64 years old	Eurostat	2008-2020

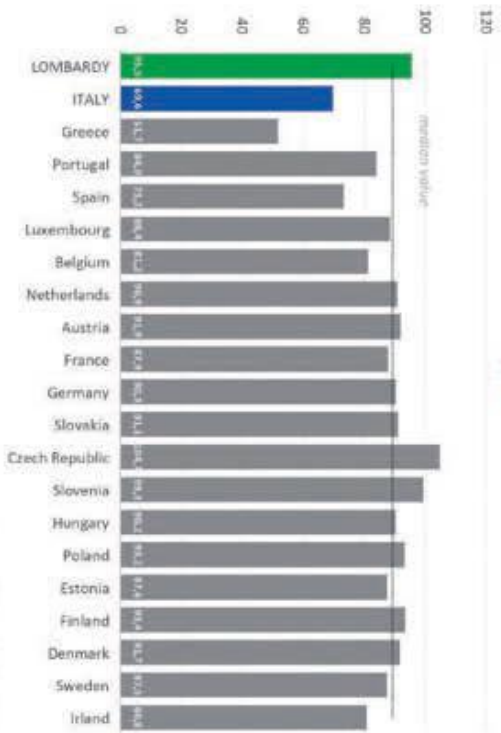
	Indicator	Description	Data provider	years
<b>GOAL 5</b> - Gender equality	Seats occupied by women in legislative assemblies	Percentage share of seats for national parliament (both chambers)	European Institute for Gender Equality, ISTAT	2008-2020
	Ratio between the percentage share of the female and male active population	The active population by sex is calculated on the population aged 15 to 64 years	Eurostat, Istat	2008-2020
<b>GOAL 6</b> - Clean water and sanitation	Bathing sites with excellent water quality	Percentage share of total bathing waters	ISTAT Noi Italia (calculated from Istat and Eurostat data)	2013-2018
	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	Percentage share of the total population	Eurostat + Istat (Lombard data calculated from IT-SILC microdata)	2008-2018
<b>GOAL 7</b> - Affordable and clean energy	Share of renewable energy in gross final energy consumption	Percentage ratio between renewable energy consumption and gross final energy consumption	ISTAT Noi Italia (calculated on Terna and Eurostat data)	2013-2014; 2016-2018
	Population unable to keep home adequately warm	Percentage share of the total population	Eurostat + Istat (Lombard data calculated from IT-SILC microdata)	2013-2014; 2016-2018
<b>GOAL 8</b> - Decent work and economic growth	Annual growth rate of real GDP <i>per capita</i>	GDP at market price, chain linked volumes in EUR and % change on previous year.	Eurostat, Istat	2008-2020
	Employment rate (Age class: From 20 to 64 years)	% of total population	Eurostat	2008-2020
	Young people neither in employment nor in education and training	% of the population aged 15 to 29	Eurostat	2008-2020
	Long-term unemployment rate (Age class: From 15 to 74 years; unemployed for 12 months or more)	% of total active population aged 15 to 74	Eurostat	2008-2020
<b>GOAL 9</b> - Industry, innovation and infrastructure	Gross domestic expenditure on R&D	% of GDP	Eurostat	2008-2019
	Employment in technology and knowledge-intensive sectors	Number of researchers per 1000 employed	Eurostat	2008-2019
	R&D personnel	Purchasing power parity	Eurostat	2008-2019

	Indicator	Description	Data provider	years
<b>GOAL 10</b> - Reduced inequalities	Purchasing power adjusted GDP per capita	Number of researchers per 1000 employed	Eurostat	2008-2019
	Gini coefficient of equivalised disposable income	Purchasing power parity	Eurostat + Istat (Lombard data calculated from IT-SILC microdata)	2008-2019
	Income share of the bottom 40 % of the population	Income inequality measure	Eurostat + Istat (Lombard data calculated from IT-SILC microdata)	2008-2019
<b>GOAL 11</b> - Sustainable cities and communities	Average number of rooms <i>per person</i>	Average of the ratio between the number of rooms in the home and the number of members of the resident family	Eurostat	2010-2019
	Road traffic deaths (standardized rate per 100,000 inhabitants)	three-year averages	Eurostat	2010-2019
<b>GOAL 12</b> Responsible consumption and production	Generation of municipal waste per capita	Kg per capita of municipal waste collected	ISTAT Noi Italia (calculated on ISPRA and Eurostat data)	2013-2014; 2016-2019
	Municipal waste disposed of in landfills	Kg per capita of municipal waste disposed of in landfills	ISTAT Noi Italia (calculated on ISPRA and Eurostat data)	2013-2014; 2016-2019
<b>GOAL 13</b> - Climate action	Greenhouse gas emissions	Tons of CO <sub>2</sub> equivalent per inhabitant	Eurostat, ISTAT Noi Italia	2012-2018
<b>GOAL 15</b> - Life on land	Protected areas	The indicator comprises nationally designated protected areas and Natura 2000 sites under the EU Habitats and Birds Directives. Percentage share of the territorial surface	Eurostat e ISTAT Noi Italia	2011-2019



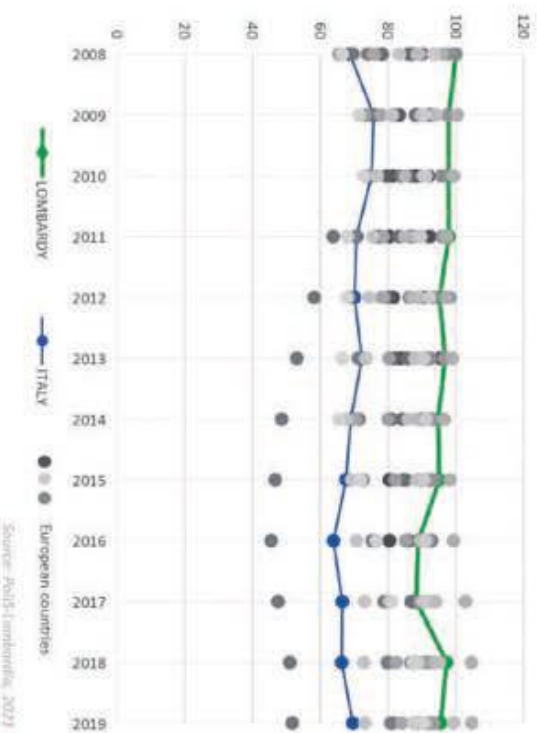
# END POVERTY IN ALL ITS FORMS EVERYWHERE

## SDG 1 – COMPOSITE INDEX



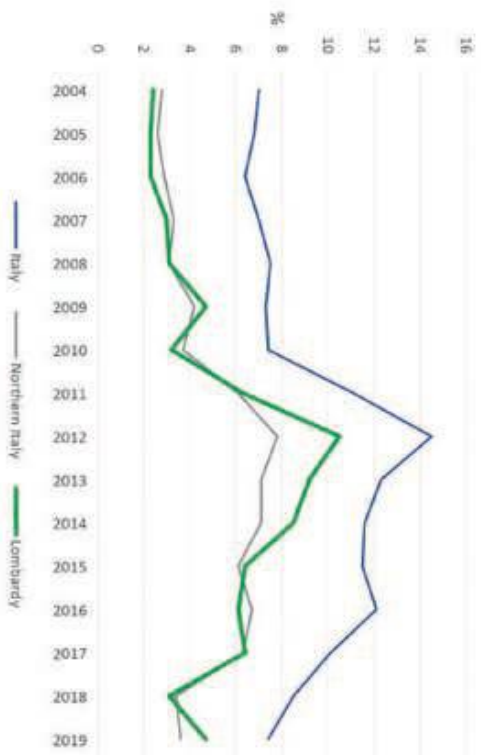
Source: Istat, Lombardia, 2022

2008-2019



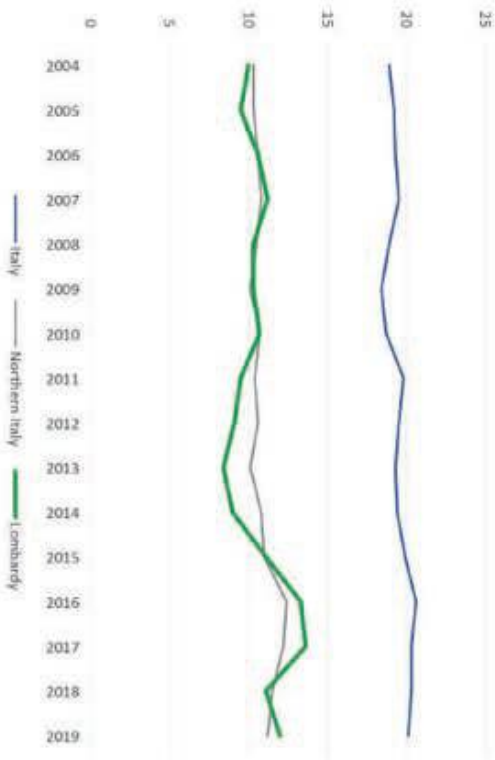
Source: Istat, Lombardia, 2022

## SDG 1.2.2 - SEVERE MATERIAL DEPRIVATION RATE



Source: Lombardia region, based on ISTAT data, years: 18-2-2022

SDG 1.2.2 - PEOPLE AT RISK OF POVERTY



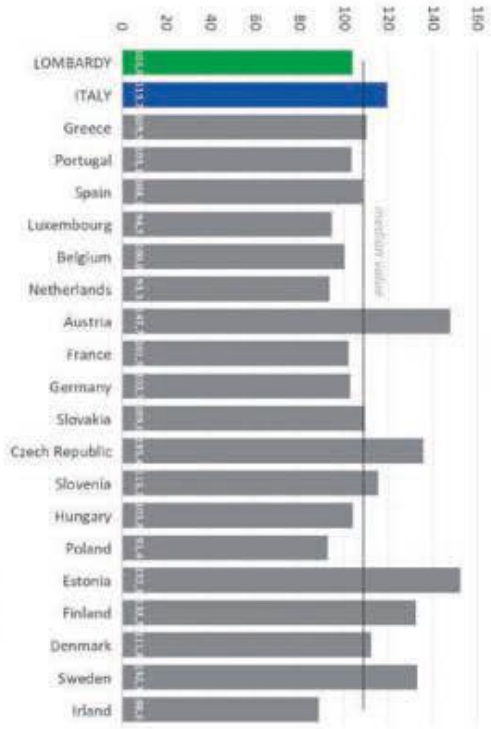
Source: Lombardia region, based on ISTAT data, years: 18-2-2022





## END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

### SDG 2 - COMPOSITE INDEX 2019



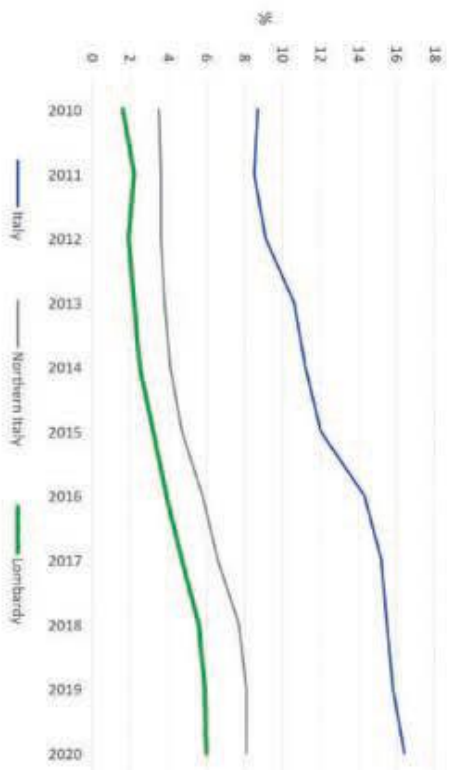
Source: Poist-Lombardia, 2021

### 2014-2019



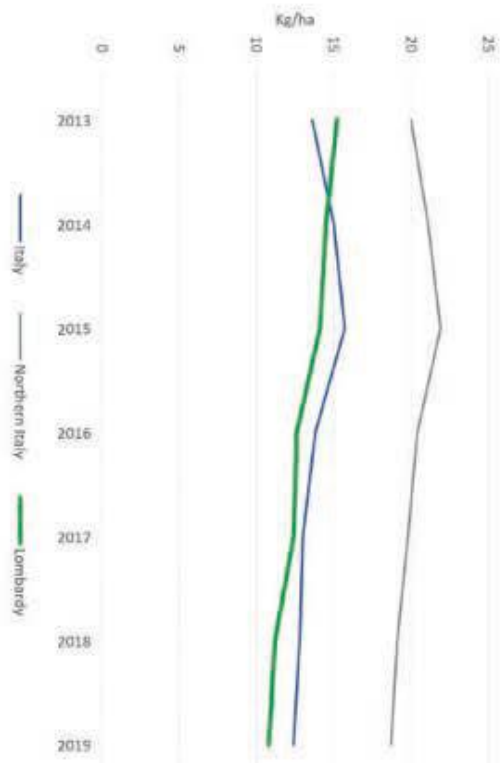
Source: Poist-Lombardia, 2021

### SDG 2.4.1 - PERCENTAGE OF UTILIZED AGRICULTURAL AREA UNDER ORGANIC FARMING



Source: Lombardy region, based on ISTAT data, v. 18-2-2022

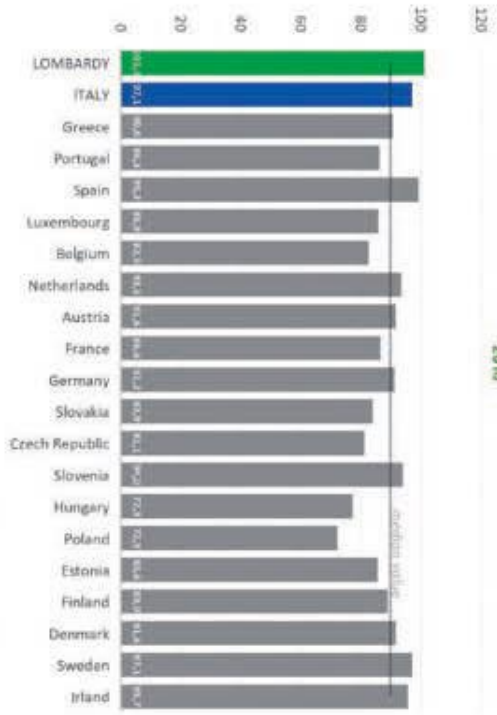
### SDG 2.4.1 - PLANT PROTECTION PRODUCTS DISTRIBUTED IN AGRICULTURE



Source: Lombardy region, based on ISTAT data, v. 18-2-2022

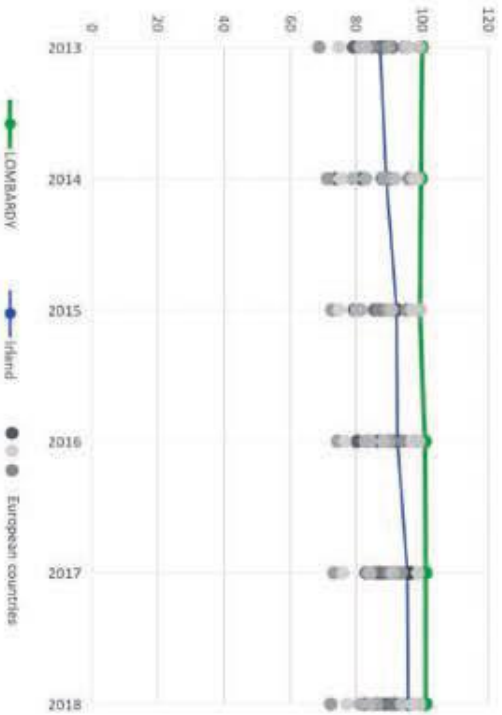
## ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

### SDG 3 – COMPOSITE INDEX



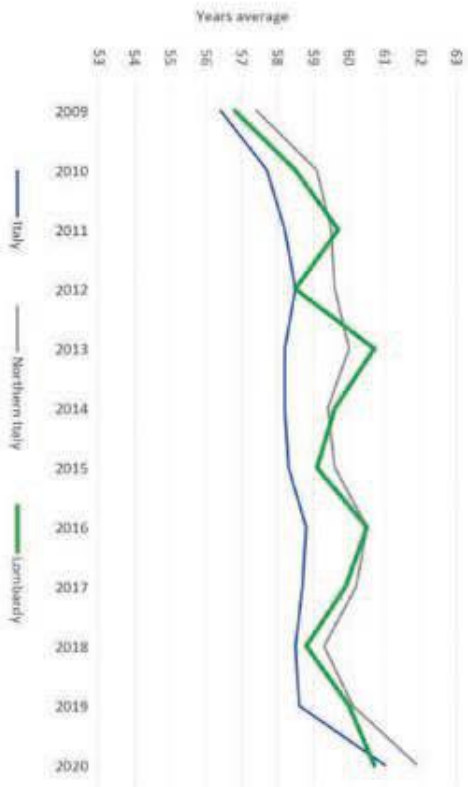
Source: Euro-Lombardy, 2022

2013-2018



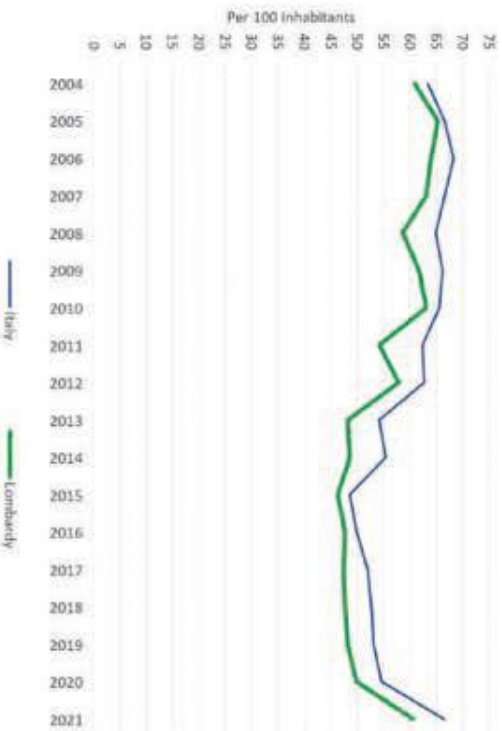
Source: Euro-Lombardy, 2022

### SDG 3.4.1 - HEALTHY LIFE EXPECTANCY AT BIRTH



Source: Lombardy region, based on ISTAT data, year: 2009-2020

### SDG 3.B.1 - INFLUENZA VACCINATION COVERAGE AGE 65+



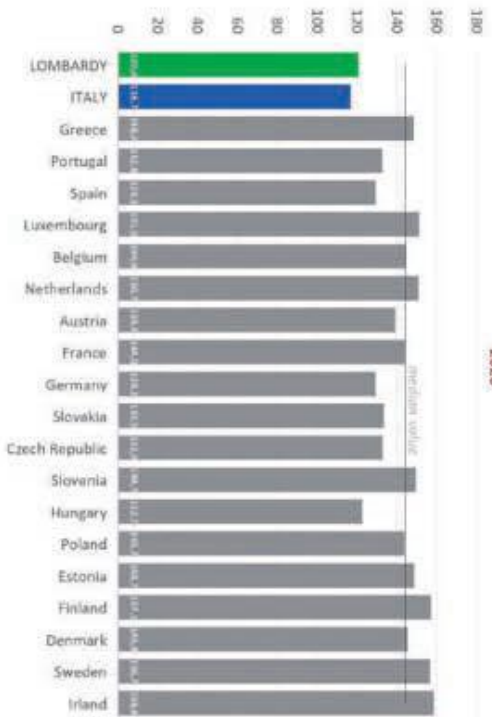
Source: Lombardy region, based on ISTAT data, year: 2004-2021



# ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

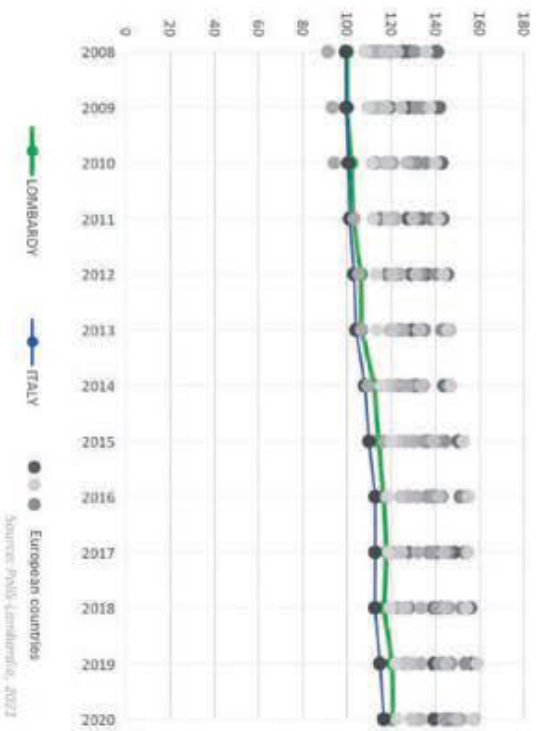
## SDG 4 – COMPOSITE INDEX

2020



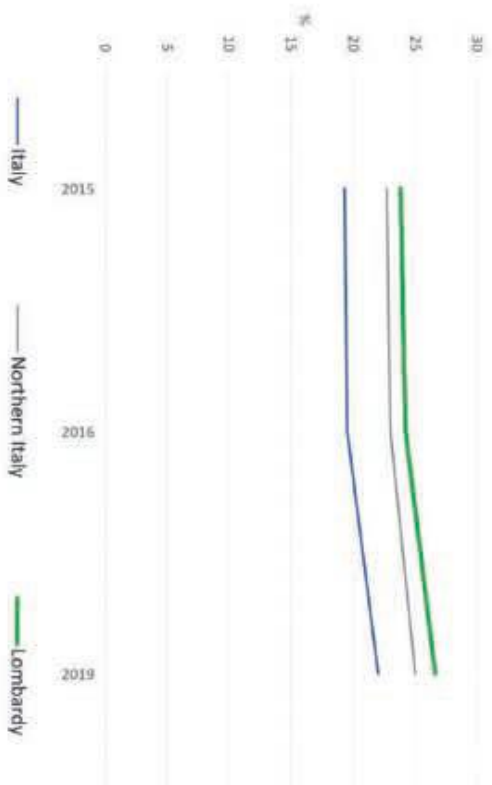
Source: PISA/Lombardy, 2021

2008-2020



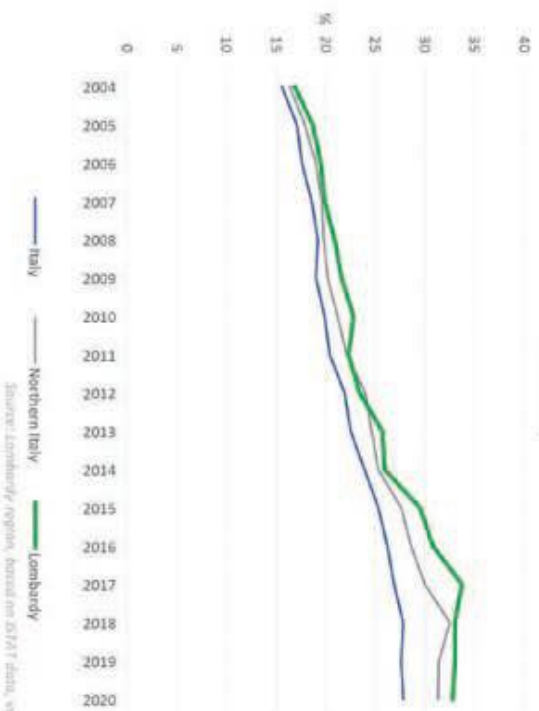
Source: PISA/Lombardy, 2021

## SDG 4.4.1 - PEOPLE WITH HIGH LEVEL OF IT COMPETENCIES



Source: Lombardy region, based on ISTAT data, years: 16-2-2022

## SDG 4.6.1 - PEOPLE HAVING COMPLETED TERTIARY EDUCATION (30-34 YEARS)

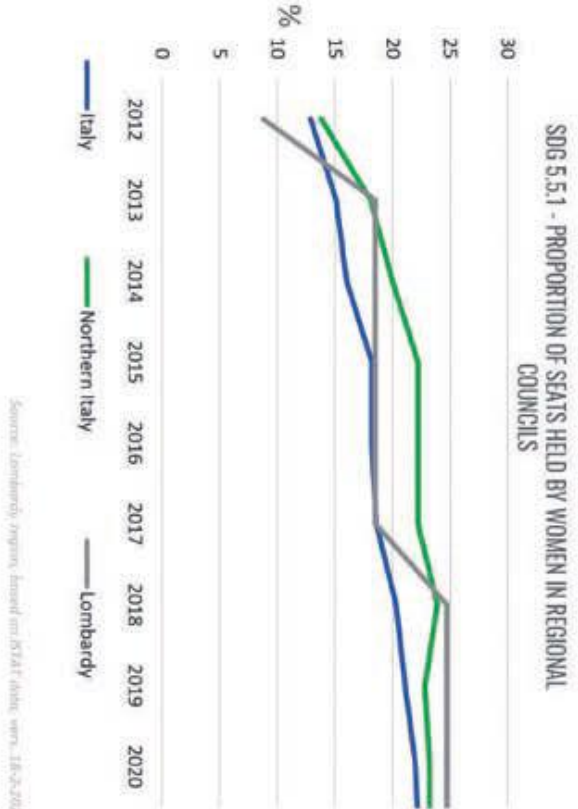
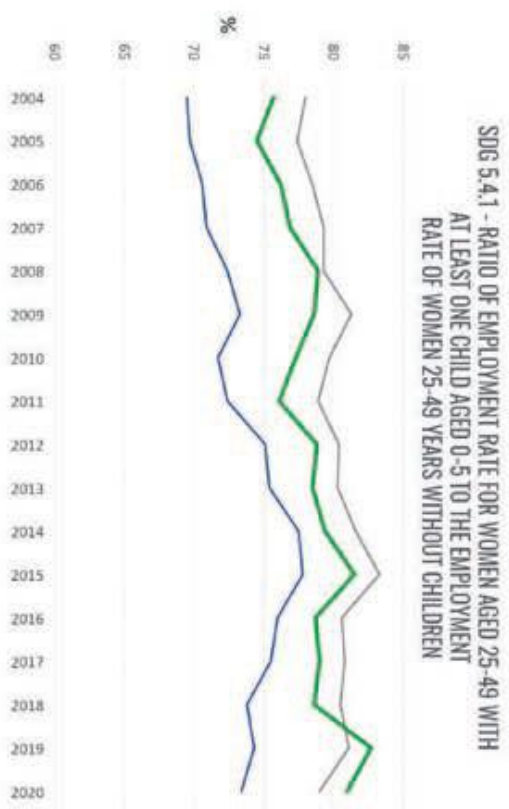
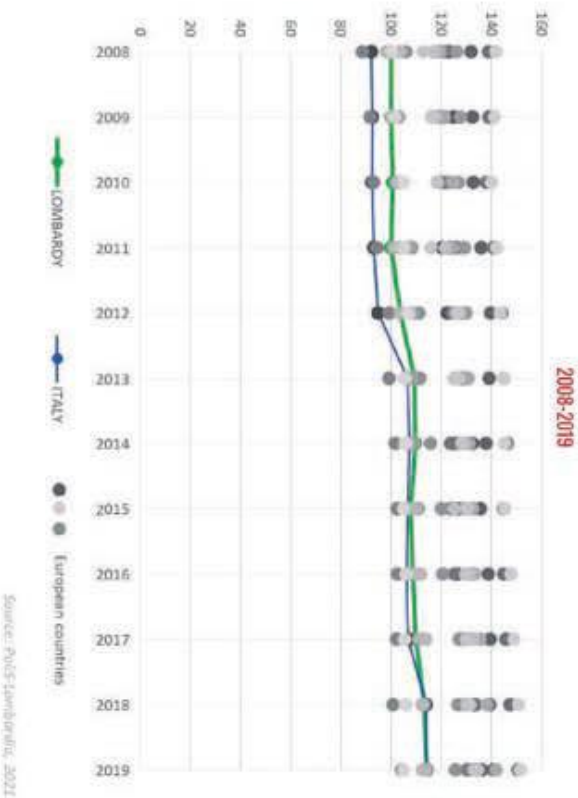
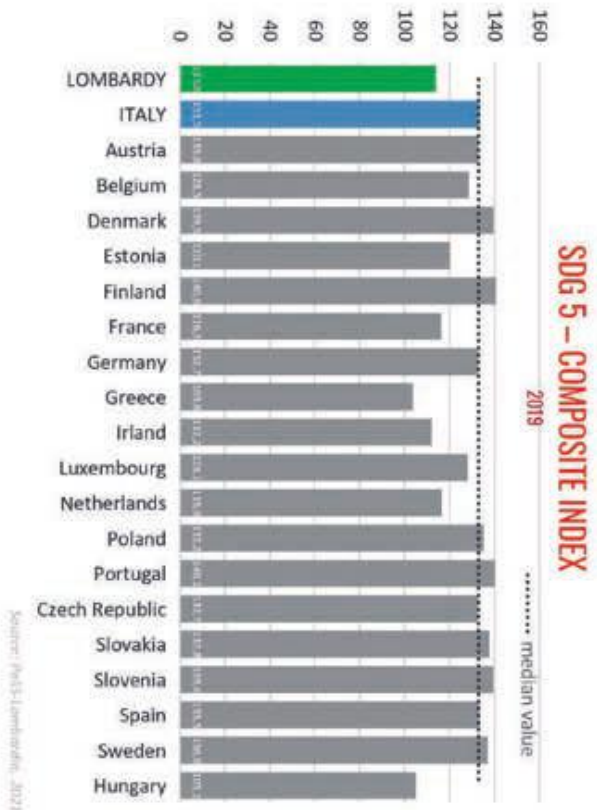


Source: Lombardy region, based on ISTAT data, years: 16-2-2022



5 GENDER EQUALITY

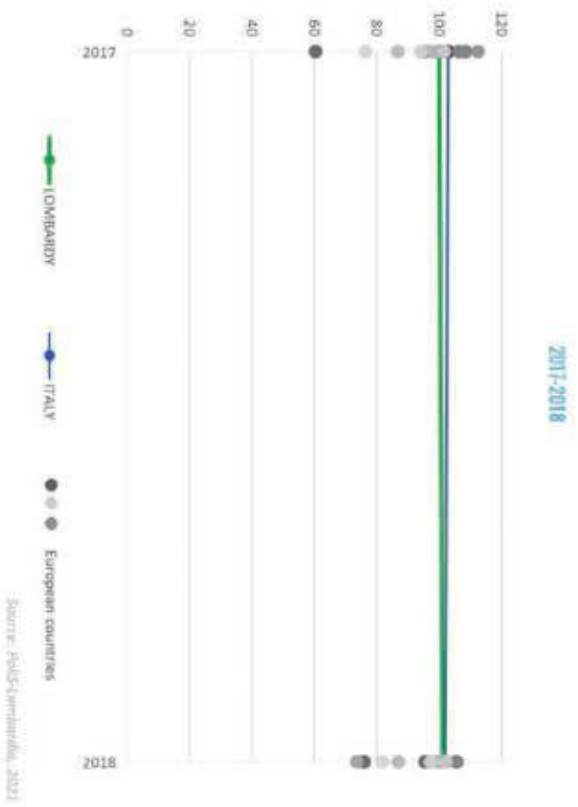
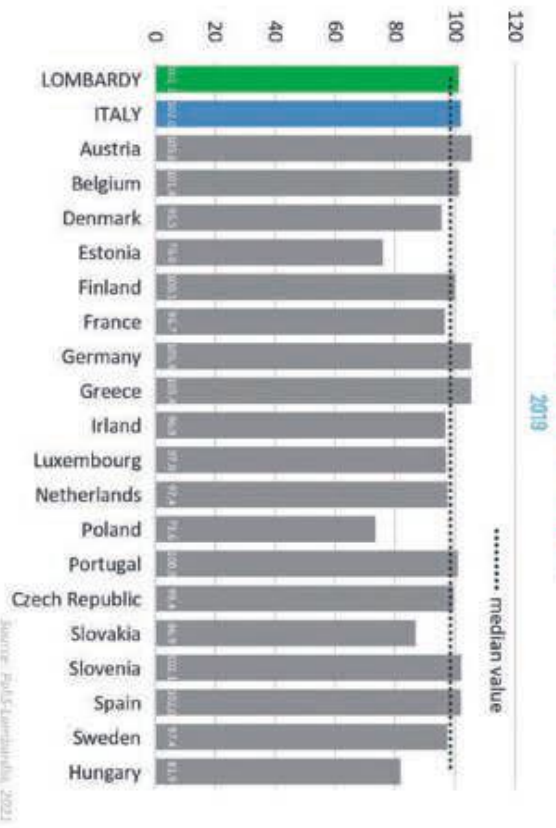
# ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS



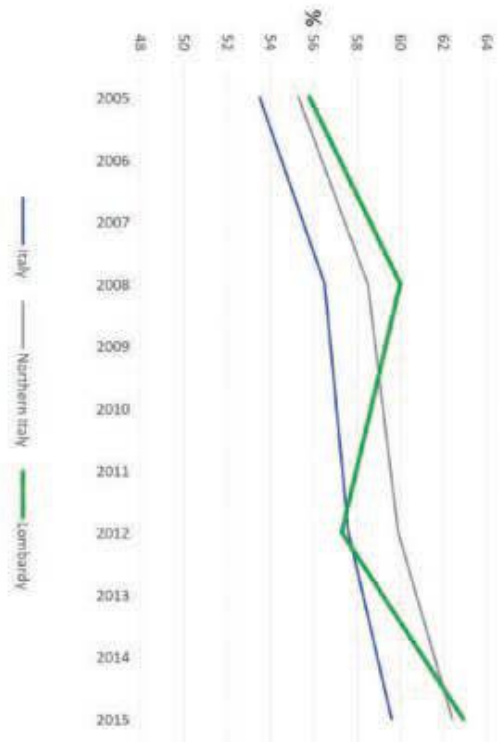


## ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

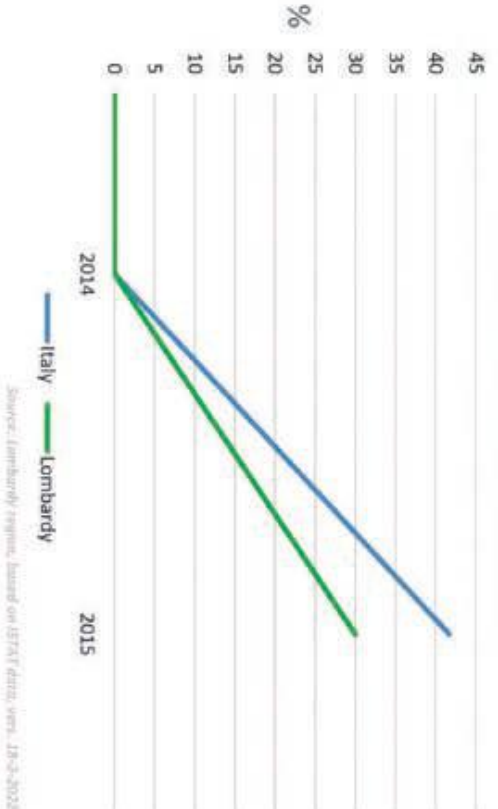
### SDG 6 - COMPOSITE INDEX



### SDG 6.3.1 - URBAN SEWAGE TREATMENT



### SDG 6.3.2 - PERCENTAGE OF WATER BODIES THAT HAVE ACHIEVED THE OBJECTIVE OF ECOLOGICAL QUALITY ON THE TOTAL WATER BODIES OF SURFACE WATERS (RIVERS AND LAKES)

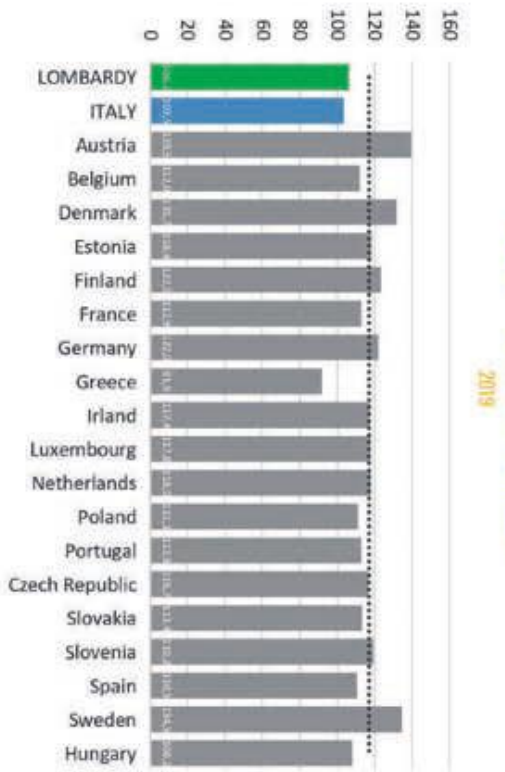






# 7 ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

## SDG 7 – COMPOSITE INDEX



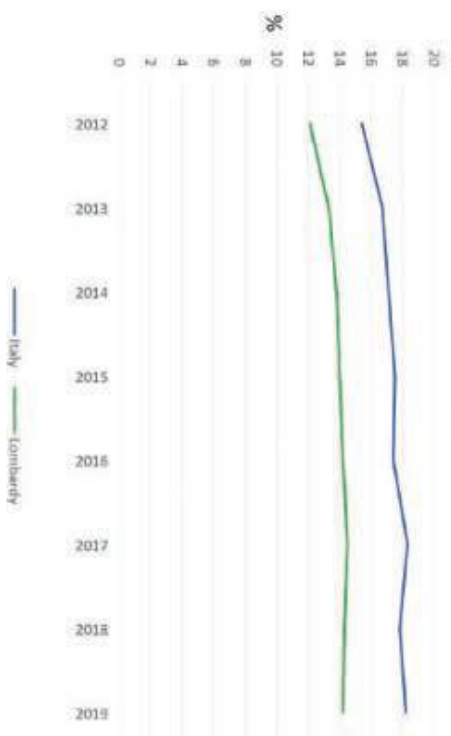
..... median value

Source: PwC-Eurobarometer, 2022



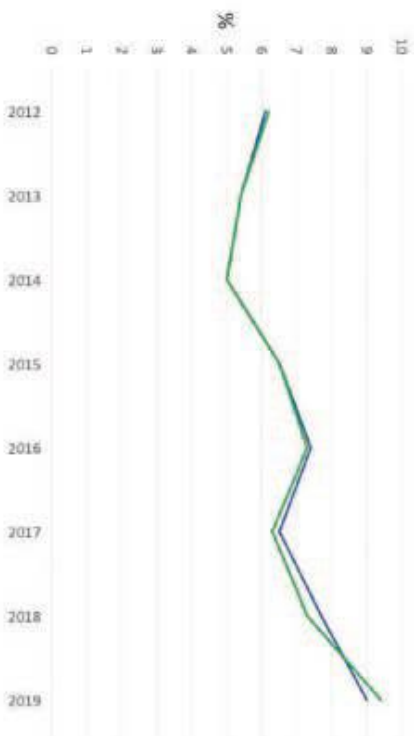
Source: PwC-Eurobarometer, 2022

## SDG 7.2.1 - RENEWABLE ENERGY SHARE IN THE GROSS FINAL ENERGY CONSUMPTION



Source: Lombardy region, based on ISTAT data, year 2019-2022

## SDG 7.2.1 - RENEWABLE ENERGY SHARE IN TRANSPORT SECTOR (IN THE GROSS FINAL ENERGY CONSUMPTION)



Source: Lombardy region, based on ISTAT data, year 2019-2022

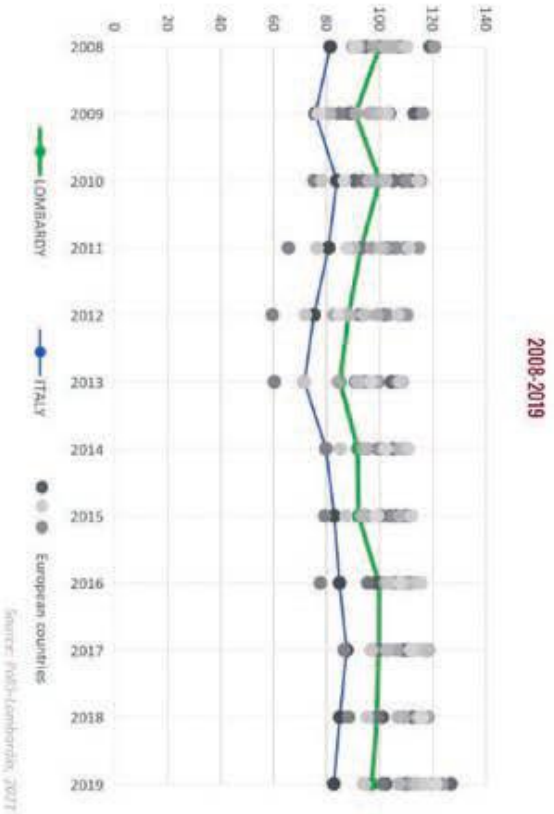
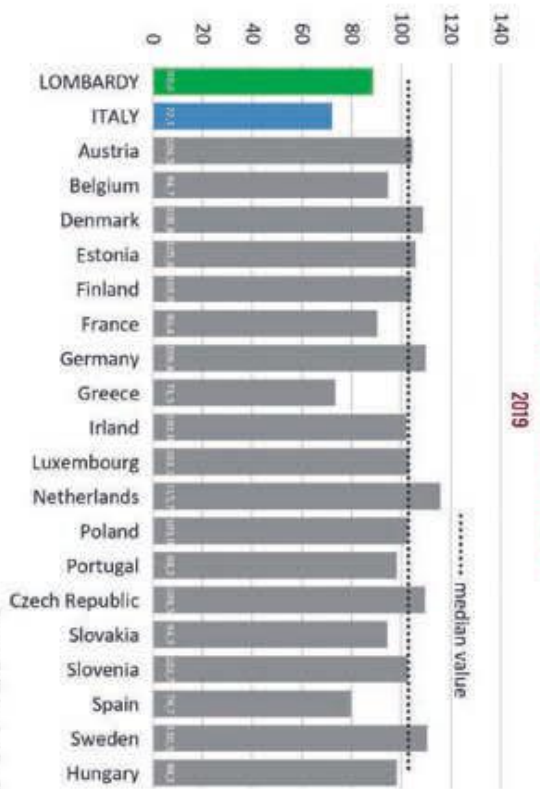




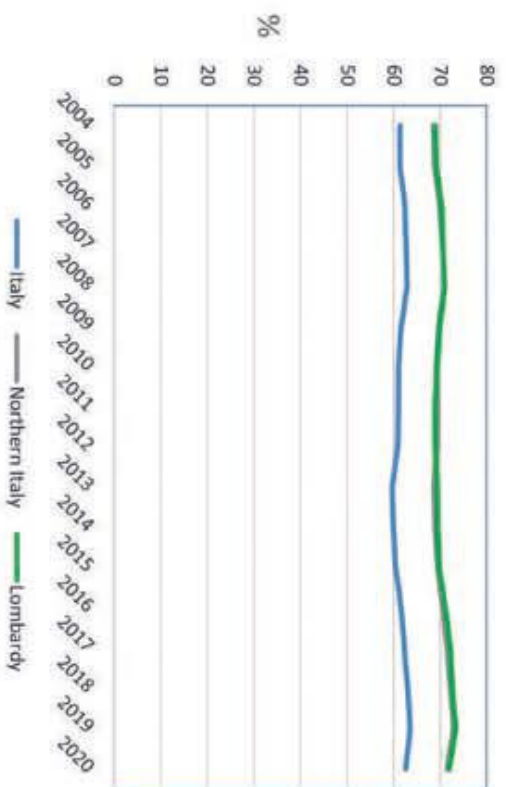
**8** PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

# PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

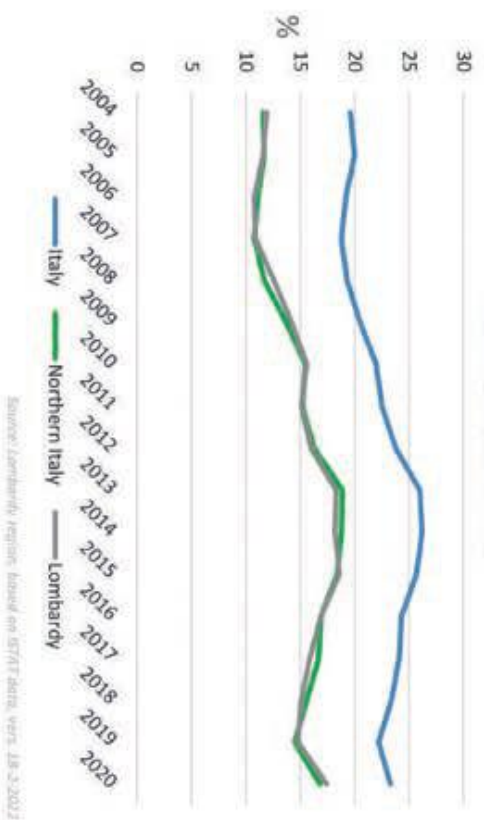
## SDG 8 - COMPOSITE INDEX



## SDG 8.5.2 - EMPLOYMENT RATE (20-64)



## SDG 8.6.1 - PEOPLE NOT IN EDUCATION, EMPLOYMENT, OR TRAINING (NEET) (AGED 15-29)

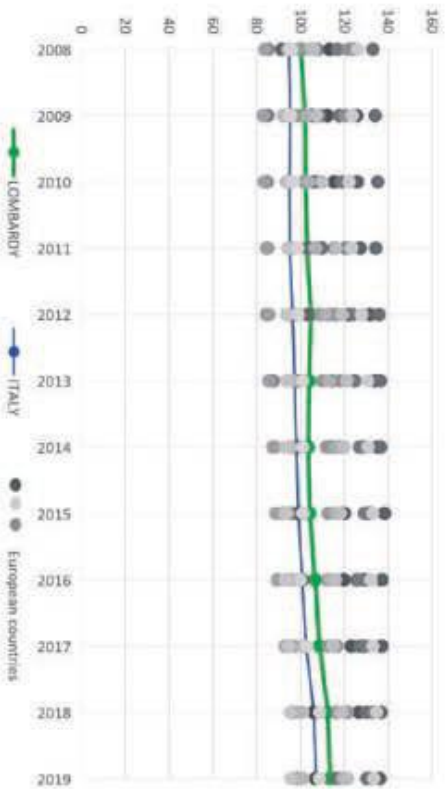
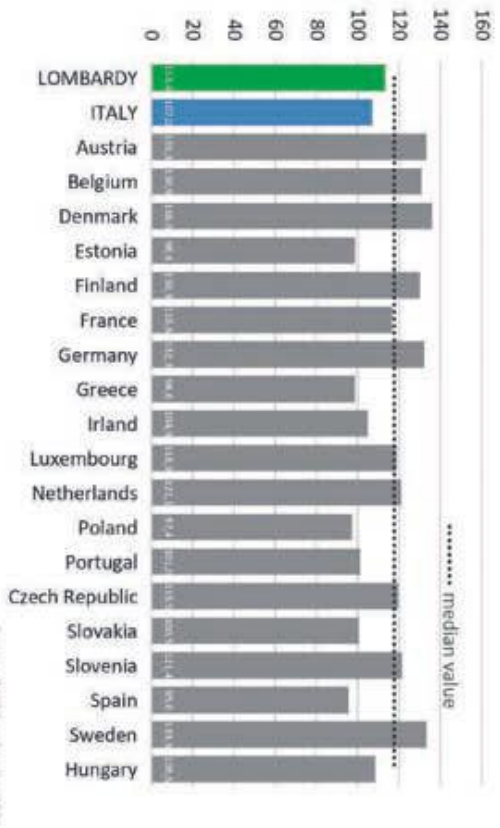




**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION**

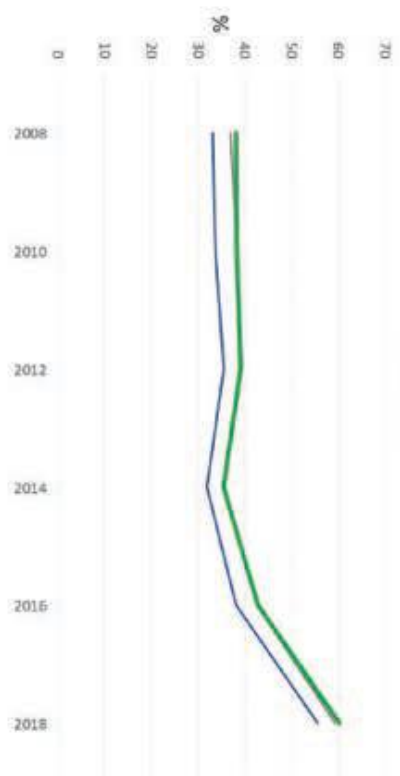
**SDG 9 - COMPOSITE INDEX**



**SDG 9.5.1 - R&D INTENSITY**



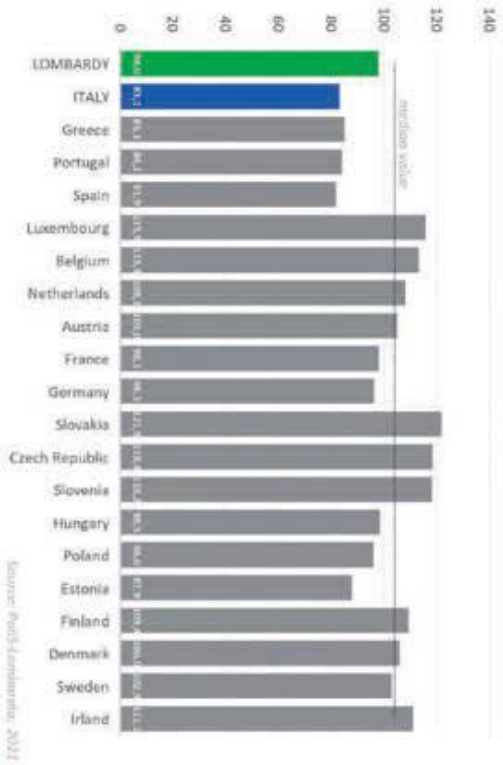
**SDG 9.5.1 - PRODUCI AND/OR PROCESS INNOVATIVE ENTERPRISES (PER 100 ENTERPRISES)**



**10**  
**REDUCED INEQUALITY**

**REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES**

**SDG 10 – COMPOSITE INDEX**  
 2019

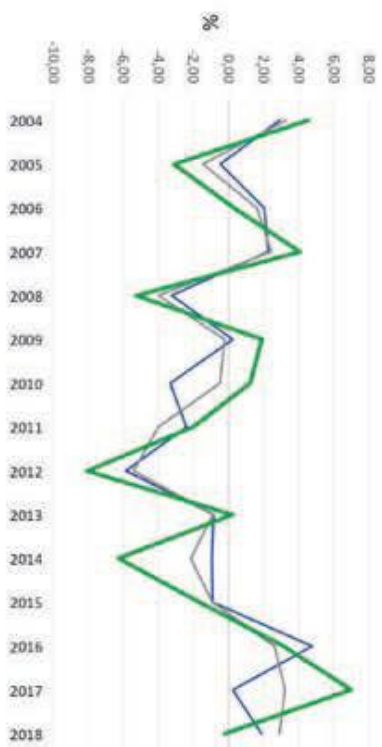


Source: Eurostat, 2022



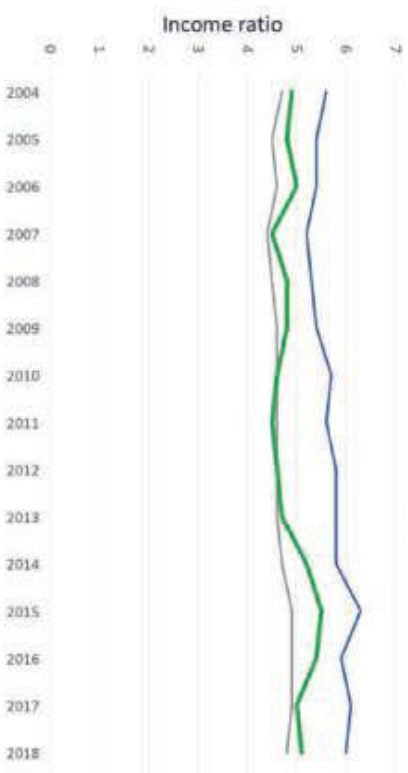
Source: Eurostat, 2022

**SDG 10.1.1 - GROWTH RATES OF HOUSEHOLD EXPENDITURE OR INCOME PER CAPITA AMONG THE BOTTOM 40 PER CENT OF THE POPULATION AND THE TOTAL POPULATION**



Source: Lombardy region, based on ISTAT data, year: 18-2-2022

**SDG 10.1.1 – NET INCOME INEQUALITY (S80/S20)**

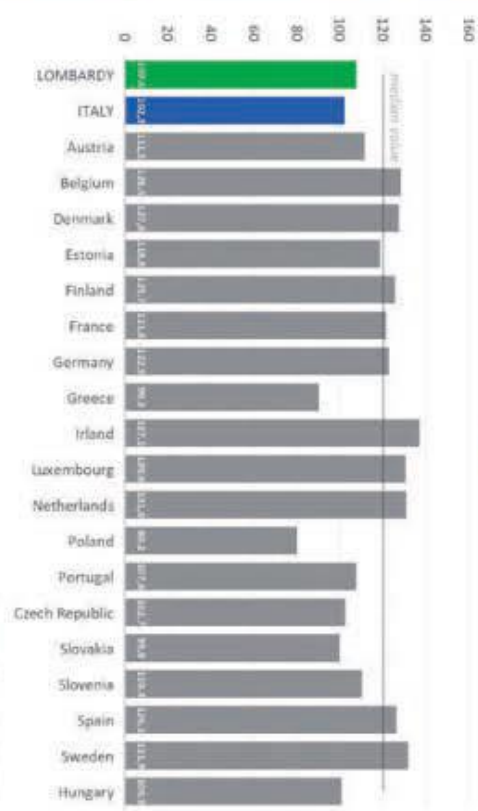


Source: Lombardy region, based on ISTAT data, year: 18-2-2022

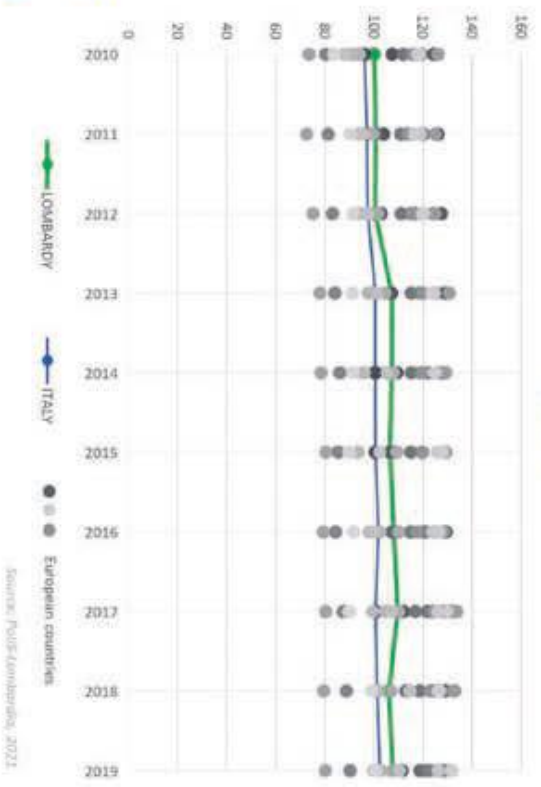


# MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

## SDG 11 - COMPOSITE INDEX

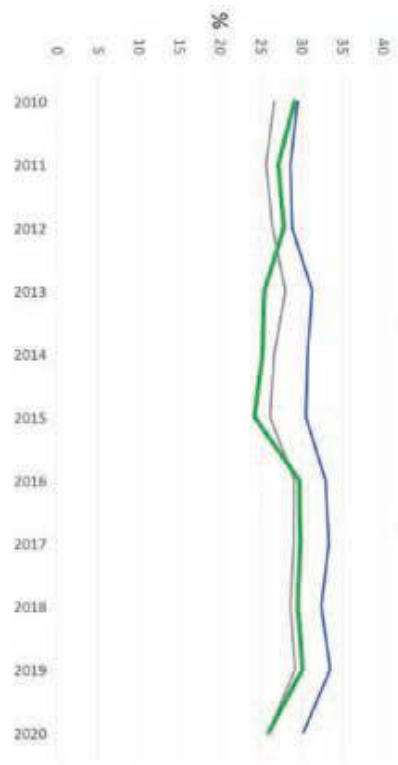


Source: Prof. Lombardi, 2021



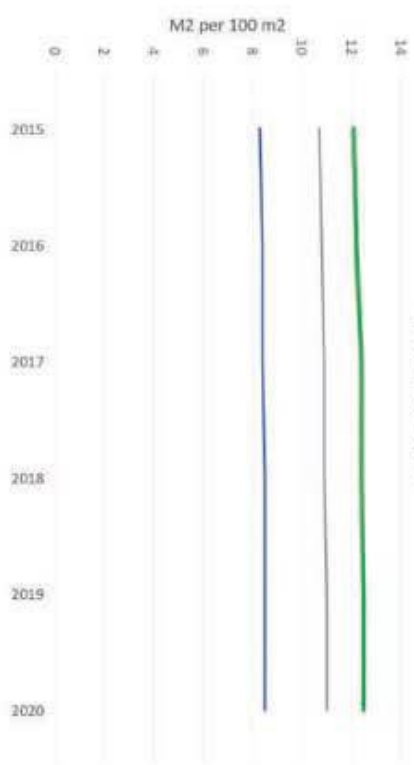
Source: Prof. Lombardi, 2021

## SDG 11.2.1 - HOUSEHOLDS PER DIFFICULTIES OF LINKS WITH PUBLIC TRANSPORT MEANS (PER 100 HOUSEHOLDS)



Source: Lombardy region, based on ISTAT data, v. 1.0. 2022

## SDG 11.7.1 - INCIDENCE OF URBAN GREEN AREAS ON URBANIZED AREA OF THE CITIES

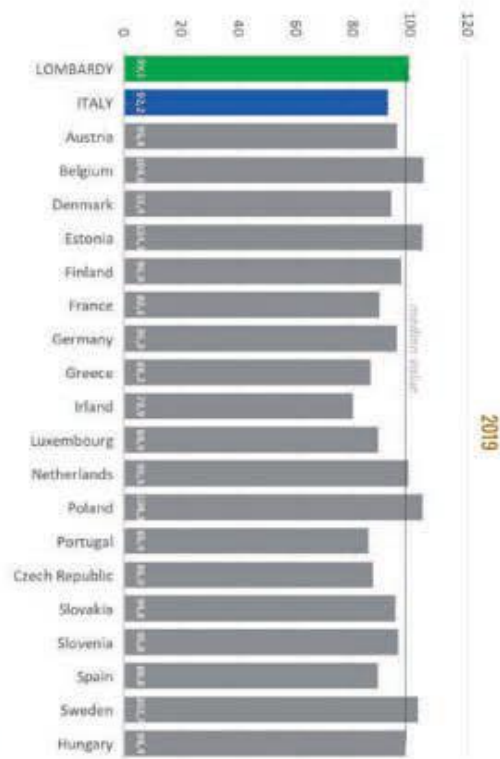
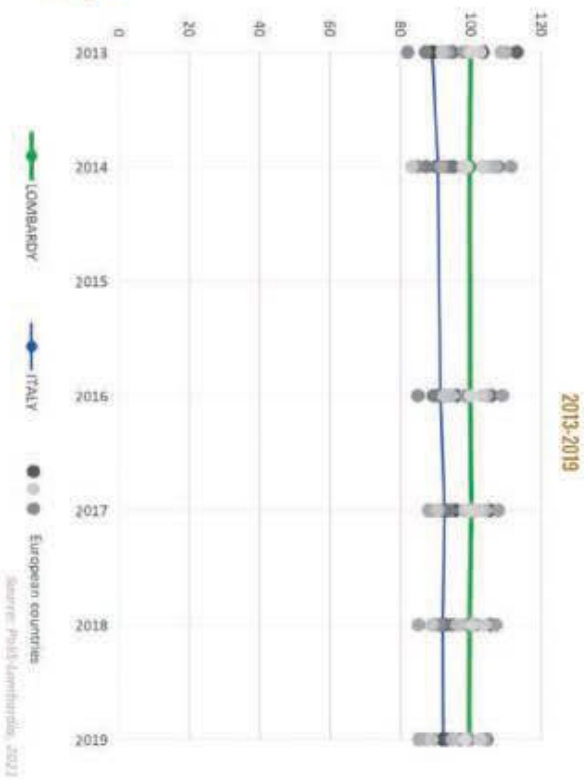


Source: Lombardy region, based on ISTAT data, v. 1.0. 2022

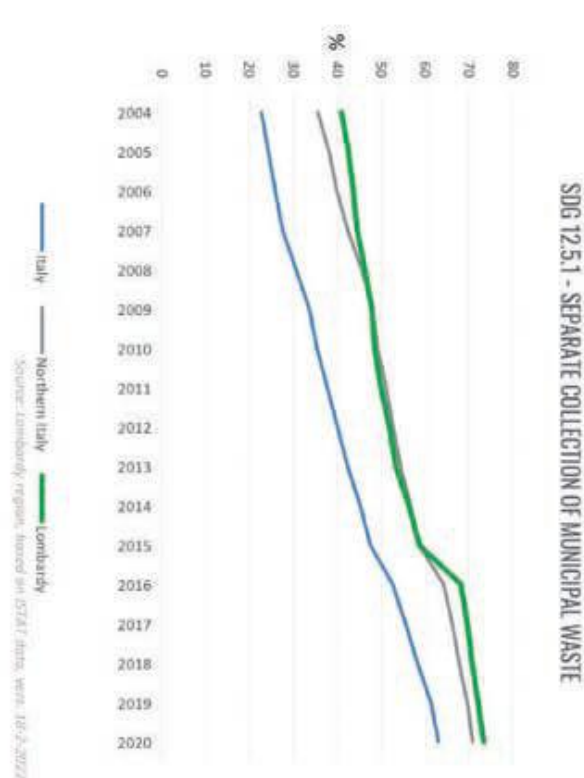




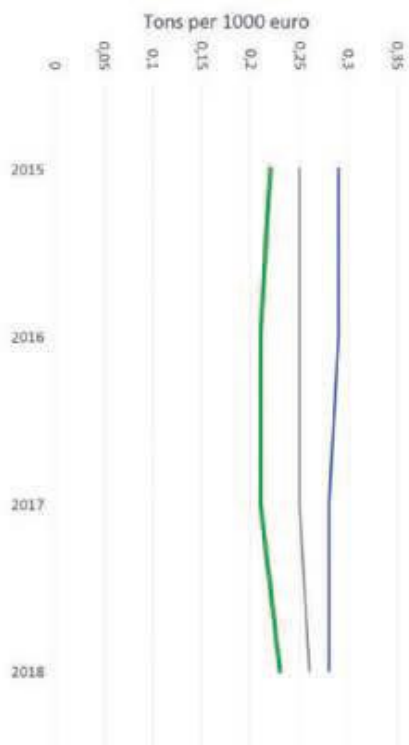
## ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



SDG 12 – COMPOSITE INDEX 2019

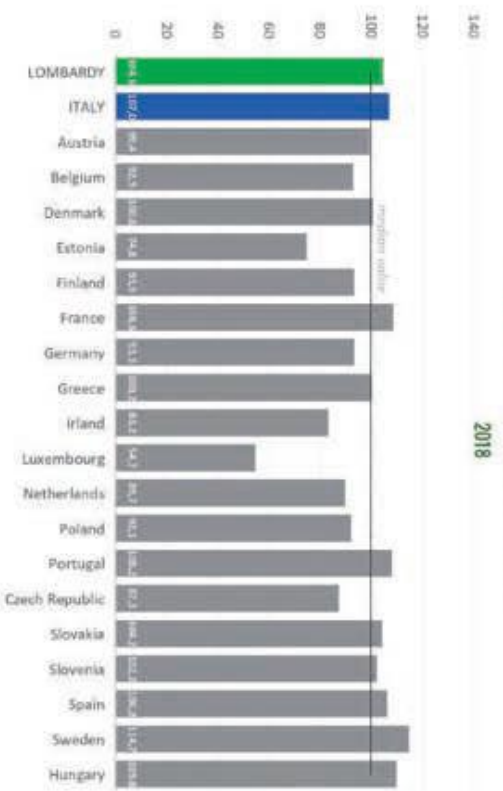


SDG 12.5.1 - SEPARATE COLLECTION OF MUNICIPAL WASTE



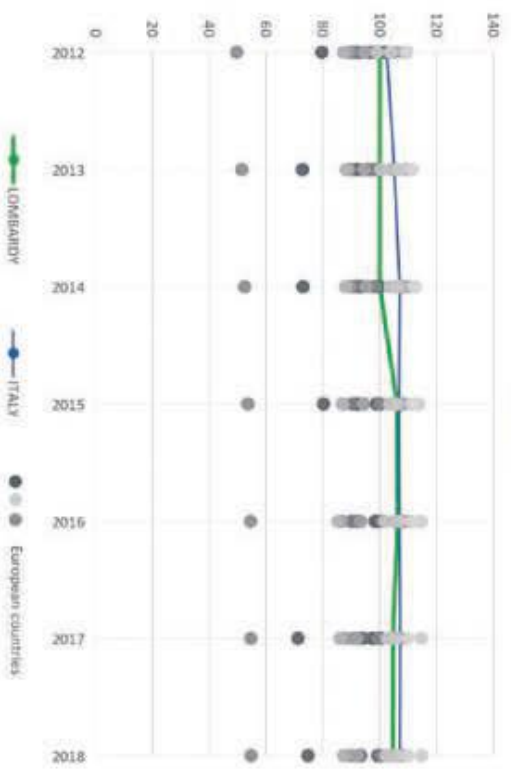
SDG 12.2.2 - DOMESTIC MATERIAL CONSUMPTION PER GDP

## SDG 13 – COMPOSITE INDEX



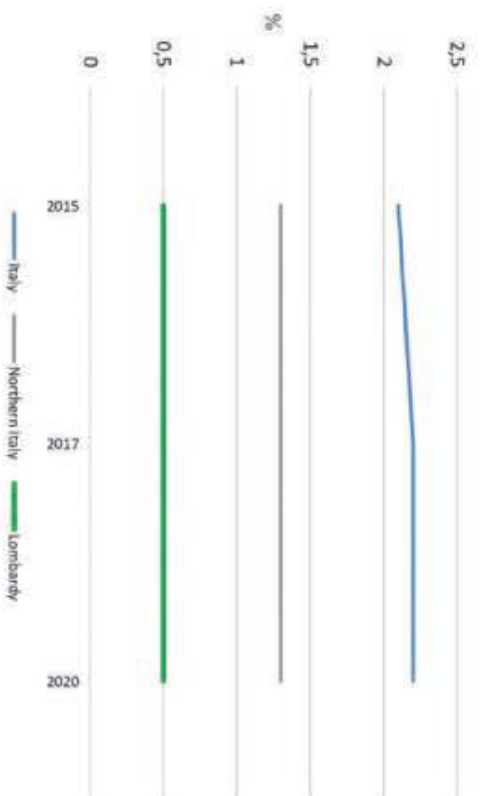
Source: Eurostat/Lombardy, 2022

2012-2018



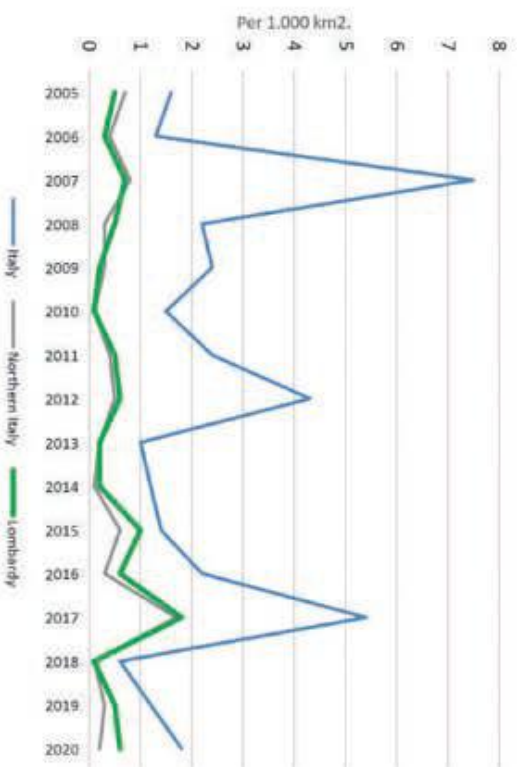
Source: Eurostat/Lombardy, 2022

## SDG 13.1.1 POPULATION AT RISK OF LANDSLIDES



Source: Eurostat/Lombardy region, based on UNISDR Global Report on Disaster Risk Reduction 2019

## SDG 13.1.1 FOREST FIRES IMPACT: AREA COVERED BY THE FIRE



Source: Lombardy region, based on ISVAT data, years: 2005-2020

# TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

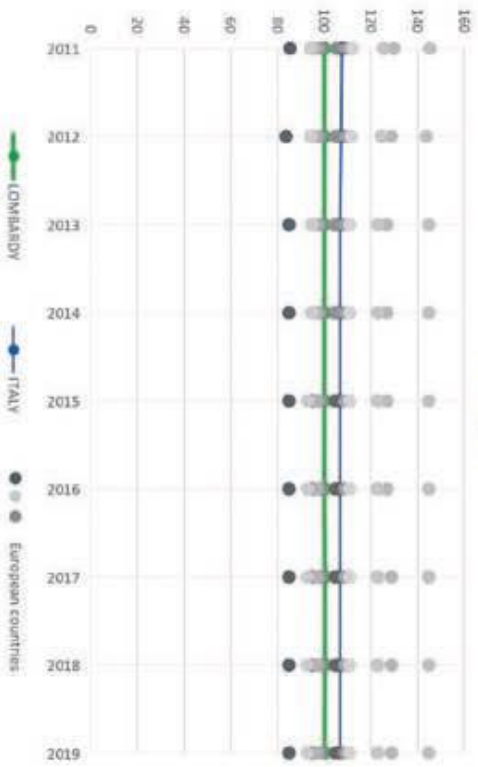
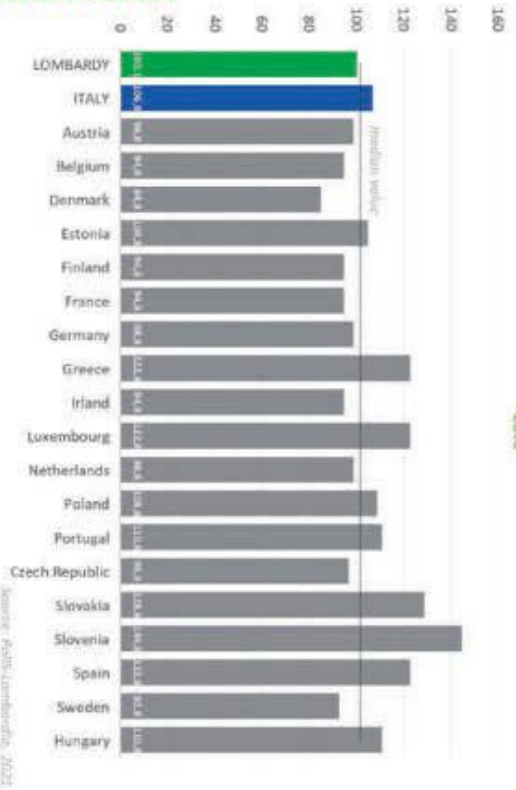




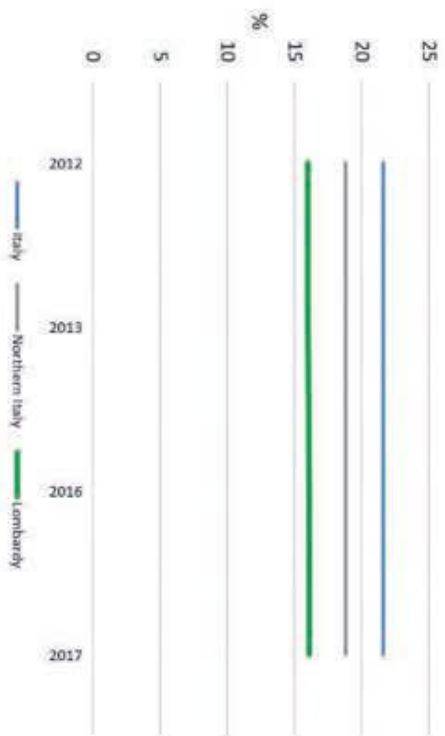


## PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS!

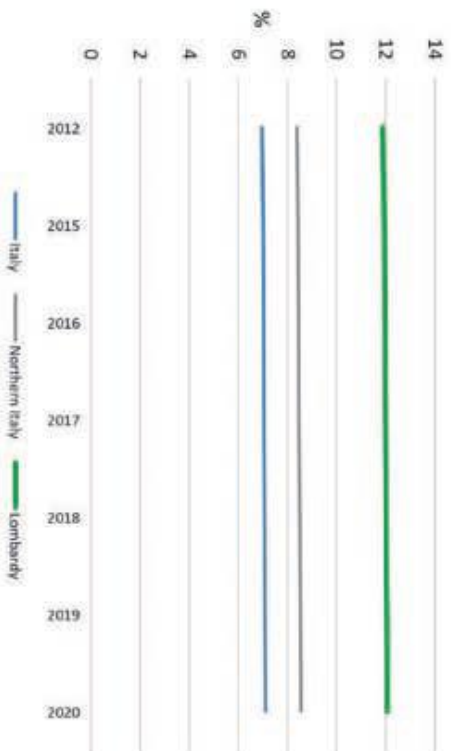
### SDG 15 – COMPOSITE INDEX



### 15.1.2 - AVERAGE PROPORTION OF TERRESTRIAL KEY BIODIVERSITY AREAS (KBAs) COVERED BY PROTECTED AREAS



### 15.3.1 SOIL SEALING FROM ARTIFICIAL LAND COVER



### 3. Actions for sustainability in Lombardy

The choice of regional targets and evaluation of Lombardy's positioning allow to identify the gap between the current situation and the objectives set. The analysis of this gap highlights which fields and actions to put in place to concretely implement the regional strategy and therefore the UN Agenda. According to the partnership principle affirmed with Goal 17, such implementation depends as much on the contribution of institutions at all levels as on the stakeholders. This section lists some of the most significant actions implemented by the Lombardy Region, the Metropolitan City of Milan, and the signatories of the Lombard Protocol for sustainable development to progress toward the objectives of the regional strategy.

#### 3.1. The actions of the Lombardy Region

Sustainability is one of the five priorities identified by the Regional Development Program of the XI Legislature for the five-year period 2018-2023. Over the past four years, the Lombardy Region has planned, financed, and implemented activities and interventions not only in the environmental field, but also in the social and economic field, in favor of a sustainable development model. The fulfillment of the commitments through interventions and actions was qualified as a performance parameter of the regional body, to enhance the remuneration of the result by the General Managers, executives, and all staff.

Here, are some projects and initiatives that represent the best practices of the region, collected under the five strategic macro-areas of the SRSVS.

#### 1. HEALTH, EQUALITY, INCLUSION



OSN 1P\_I; OSN 1P\_II; OSN 1P\_III; OSN 3P\_II; OSN 3P\_II; OSN 3P\_III;  
OSN 4P\_I; OSN 4P\_II; OSN 4P\_III

##### Include and counter discomfort

**A PLAN AGAINST POVERTY.** The Lombardy Region has adopted a regional plan to address poverty, with policies, interventions, and resources aimed at favoring - at the territorial level - a systematic and coordinated action by the various public and private subjects: Municipalities, Health Protection Agencies, Local Healthcare Companies, Employment Centers and the Third Sector. The interventions carried out and supported for the right to food (in implementation of Regional Law no. 34/2015) also fit into this framework, launching an important interconnection between the right to food, food poverty, and food waste.

**A PLAN IN FAVOR OF PEOPLE WITH DISABILITIES.** The Lombardy Region has adopted a strategy aimed at ensuring as much as possible that all people with disabilities, regardless of sex, race or ethnic origin, religion or personal beliefs, age or sexual orientation, can enjoy their human rights, and move freely regardless of their care needs and be able to decide where, how and with whom to live. In 2021, the new Regional Action Plan (PAR) was approved for policies in favor of people with disabilities 2021-2023; the PAR provides for interventions for over 1 billion euros, of which 113 million euros in support of severe and very serious disability and over 14 million, additional to the 2020 programming, for support for severe and very serious disability for the financing of life projects independent of people with disabilities and of the "After us" (the path of emancipation of people with disabilities from their family of origin). The Region also disbursed 10.8 million euros to support the care and assistance role played by family caregivers of people with severe and very serious disabilities and 10.678 million euros for school inclusion in favor of children with sensory disabilities.

**THE RIGHT TO FOOD: A FUNDAMENTAL HUMAN RIGHT.** As part of the Action Plan for the right to food, ten projects were financed for the protection and promotion of the right to food in the two-year period 2019/2020 (2.6 million euros of public contribution, 1 million euros more than for the previous two-year period) and 17 projects for the two-year period 2021/2022 (2.6 million euros). The projects, carried out by non-profit organizations, concern the

recovery, collection, and distribution of food surpluses in favor of people who are unable to access sufficient, safe, and nutritious food such as to guarantee a food balance and a healthy life, in particularly vulnerable groups of the population who, also because of the economic repercussions due to the Covid-19 pandemic, have lost or significantly reduced their income capacity.

**DECENTRALIZED COOPERATION.** In 2019, the Lombardy Region allocated 1.3 million euros for cooperation projects in developing countries. International cooperation projects were financed by civil society organizations in Ethiopia, Kenya, Mozambique, the Central African Republic, South Sudan, and Syria and by UNFPA (United Nations Population Fund) through a multi-country program for states with low income.

**SOCIAL INCLUSION FOR ALL.** The Lombardy Region promotes the strengthening of integration opportunities for citizens in difficulty and those belonging to disadvantaged groups, favoring inclusion paths aimed at people with disabilities, the elderly, and the population at a disadvantage and/or at risk of poverty and extreme marginality. In recent years, projects have been carried out:

- for the implementation of autonomy paths aimed at the inclusion of disabled people and to improve the quality of life of elderly people implemented by local areas and financed through vouchers, for a total of paths activated in the area regional in December 2021, respectively of 516 and 335.
- for the implementation of psycho-socio-educational interventions in response to the difficulties and problems of discomfort of young people and adolescents and their families for a total, in December 2021, of 934 activated vouchers.
- for the insertion into the labor market in favor of people in conditions of vulnerability and hardship through preparatory actions for insertion, for a total contribution of € 9.6 million and 53 funded projects.
- for the consolidation of social inclusion paths for people, young and old, at serious risk of marginalization, for a total contribution of 4.9 million euros and 40 funded projects.
- for the social accompaniment and for the reintegration of people subject to judicial authority provisions (young people and adults); in 2021 in particular, 35 social support projects were activated, with a loan of 7.2 million euros, which will be carried out in the period January 2021-June 2022 and the agreement between Regions and Cassa delle Amende was implemented for the realization integrated planning for paths aimed at people in particularly frail situations (psychic discomfort, chronically ill, etc.). Restorative justice programs and interventions for listening to and supporting the victims of crimes were also financed.

**DISCOVERING THE REALITY OF PENITENTIARY INSTITUTES.** Since October 2018, the Lombardy Region has launched, in concert with the Regional Superintendency of the Penitentiary Administration and the Center for Juvenile Justice of Milan, the "Path 5 Sensi" a regional awareness project, which saw the involvement of 6 Prisons throughout Lombardy. The initiative aims to bring the world of prison closer to local administrations and citizens, through a path of knowledge to facilitate the reintegration paths of the person with judicial authority provisions, with particular attention to the young adult range.

**PLAYGROUNDS ARE ACCESSIBLE TO ALL.** Continuing an experiment started already in 2018, in 2020 the Lombardy Region allocated 7 million euros in favor of the Municipalities, for the financing of projects aimed at the construction and adaptation of inclusive playgrounds in public areas. As a demonstration of the centrality of the issue of inclusion in regional policies, the Lombardy Region has decided to subsidize the tender again, expanding the actions and resources made available, for a total of 13 million euros. The new lines of action aim to finance the implementation of recreational and sporting activities such as the construction and adaptation of inclusive playgrounds, the creation of accessible nature trails, the renovation or redevelopment of semi-residential facilities for the disabled, and the organization of sports services.

### **Economic, gender, and intergenerational equality**

**ALONGSIDE FAMILIES.** Starting from 2018, the Lombardy Region has experimented with the Lombard Family Factor measure, an innovative tool that allows - on the basis of the evaluation of some parameters ranging from the presence of a loan for the purchase of the main house, to the seniority of residence in the territory of the region and to factors such as the number of children, the presence of disabled people in the family, pregnant women and elderly dependents - to guarantee an additional amount to the contributions granted in implementation of regional measures to provide concrete support from point socio-economic point of view to situations of vulnerability.

**IN SUPPORT OF GENDER EQUALITY.** In 2020, the Lombardy Region approved the Regional Four-Year Plan for Equality and Prevention and Fight against Violence against Women 2020-2023 policies which provides, thanks also to the involvement of local stakeholders, a system of integrated and synergistic actions aimed at preventing and

eradicating violence against women in all its forms, not only in the home, but also in the workplace. The objective is to affirm a culture of equal opportunities based on the recognition and protection of the fundamental rights of women in every context of economic, social, and family life. The Plan also extends the sphere of intervention to issues and targets that have not been dealt with until now or treated only marginally, such as women victims of violence belonging to disadvantaged categories or with frailties, abused men, minors victims of violence and / or witnesses of intra-family violence and orphans of femicide. The creation of the ["You are not alone" portal is part of this process](#), in which the main awareness and training campaigns promoted by the Lombardy Region and the development of the ["NonSeiDaSola" APP converge](#), with which women, citizens, operators of health and law enforcement agencies can search, through a geolocation system, the anti-violence centers and the branches closest to the user.

**LOMBARDY REGION FOR AND WITH YOUNG PEOPLE.** On 5 April 2022, the Lombardy Region published the first regional law created for and with young people. The provision has a financial endowment of around 10 million euros over the next three years and among the main innovations, it includes the establishment of a regional observatory on youth policies, the creation of a youth forum, the launch of new and additional communication and communication tools, dialogue with the new generations, including the establishment of a regional award. The process started in 2021 saw the involvement of many associative subjects, an expression of the youth universe, and numerous representatives of institutional and social stakeholders, which then resulted in the collaborative drafting of the ["Generation Lombardia" Manifesto](#), a charter of values in which the main needs, expectations and requests reported to the institutions were expressed and therefore included as a priority in the regional law. To communicate this important milestone, the Lombardy Region has focused on an innovative communication campaign, using the TIK TOK platform. #OkHaiRegione is the format through which six well-known creators of TIK TOK were asked to support the activity by promoting among the thousands of followers the importance of adhering to the Lombardy Generation Manifesto. In May 2022, the Lombardy Region launched the first concrete action to combat youth discomfort. The "Giovani Smart - SportMusicaARte" call provides 1.6 million euros, for public or private entities to promote growth and social inclusion paths, through the organization of artistic and musical workshops and access, free and open, to sports activities in the area.

**FREE NESTS AND WORK-LIFE BALANCE IN LOMBARDY.** Since 2017, the Lombardy Region has promoted, financed, and expanded the "Nidi-Gratis" measure, with the aim of both supporting families in conditions of economic and social vulnerability, and responding to the needs of work-life balance by promoting permanence, insertion, and re-insertion into the labor market, in particular of mothers and contributing to the reduction of tuition costs. The contribution, paid directly to the municipalities participating in the initiative, initially provided for the cancellation of the tuition fee, otherwise, it would be paid by the parents. In 2021, the participating Municipalities were 606 and the applications admitted for funding were 6,746. In 2019, the European Commission cited the "Free Nursery 2018-2019" measure in the "2019 Report on equality between women and men in the European Union", as an example of good practices among the actions aimed at encouraging participation of women in the labor market.

Since 2013, the Lombardy Region has also been promoting actions to support work-life balance aimed at citizens and businesses, implemented through the work-life balance networks coordinated by the Lombard Health Protection Agencies (ATS). The funded interventions include assistance and support caregivers, services for the management of pre- and post-school and school closure periods, time-saving services, consultancy services, and services in support of self-employed collaborators and freelancers.

The current programming, launched in 2020 with an allocation of 3 million euros, will end at the end of 2023.

In recent years, to complement the actions implemented through the networks, specific notices have been financed for the management of school closure periods and the financing of summer camps, and for the financing of corporate welfare projects aimed at employees, in particular micro and small enterprises.

## Health and well-being

**A LAW TO STRENGTHEN TERRITORIAL MEDICINE.** In the last months of 2021, the Lombardy Region completed the legislative process of strengthening its territorial health system, adapting the regulatory framework to current needs and future scenarios, as well as improving the ability to predict and prevent health crises, also through the reorganization and strengthening of territorial medicine. Specifically, Lombardy was the first Italian region to intervene for the use of funds from the National Recovery and Resilience Plan (PNRR) along with some specific intervention guidelines. It is a new way of working in the area, through the restructuring and modernization of the hospital asset, the adaptation of IT infrastructures, the improvement of data analysis, and the implementation of telemedicine. Among the innovations of the Regional Law, there is the establishment of the Center for the

prevention and control of infectious diseases to support the management of epidemic and pandemic emergencies in the logic of the one health; the development of proximity networks to strengthen home care. The law also identified the Community Hospitals, the Community Homes, and the Territorial Operational Centers, as an ongoing point of reference for citizens to take advantage of primary health care services and for prevention activities. By 2026 the Lombardy Region has foreseen the construction of 216 Community Houses, 101 Community Hospitals, and 74 Territorial Operational Centers.

**THE ELECTRONIC FLEBO: TOWARDS THE HEALTH OF THE FUTURE.** In February 2022, the first electronic infusion was presented, an intelligent device that allows a great innovation in infusion therapies to improve the quality of life of patients, increase more and more personalized treatments, and the effectiveness of the health system. The project, funded by the Lombardy Region with over 3 million euros (POR FESR 2014-2020) within the "Call Hub Research and Innovation", aims at the development of "smart" technologies and devices for infusion, portable, extremely precise, and reliable for ever more personalized clinical assistance, both in hospital and at the patient's home. Thanks to the electronic drip it will be possible to incentivize the delocalization of care in the area, radically reducing the number of accesses to hospitals and favoring the goal of future healthcare: home as the first place of care.

**SPORT FOR EVERYONE.** Sport plays a priority role not only as an opportunity for the well-being of the population, but also as an instrument of education and formation of the personality, growth and inclusion, prevention and protection of health, value transfer, and orientation towards correct lifestyles. For 2021, regional policies, in synergy with the main institutional and non-institutional players in the world of sport, have pursued the objective of promoting sport and its practice for all categories of the population ("Sport for all"), from young to less young, with attention to the world of school and the most fragile categories.

Sports-educational paths have been activated for growth, well-being, and inclusion also through the support of specific projects and the signing of targeted agreements such as the one with the Italian Paralympic Committee (CIP) to bring people with disabilities closer to the sport by undertaking important paths for the physical, psychic, and relational recovery of the person.

The "Dote Sport 2021/2022" is also included (approximately 2 million euros) to subsidize, in the form of reimbursement of expenses, the cost incurred by families residing in Lombardy for the sporting activity of minors between the ages of six and seventeen.

## 2. EDUCATION, TRAINING, AND WORK



OSN 1P\_I; OSN 1P\_II; OSN 4P\_II; OSN 3P\_I; OSN 3P\_II; OSN 4P\_II

### School and tertiary education

**TOWARDS QUALITY EDUCATION.** Dote Scuola is the measure of the Lombardy Region that provides for a series of contributions to financially support families and the educational path of students aged 3 to 21, residents in Lombardy, and who attend ordinary education courses or education and professional training courses (IeFP). The program consists of four components: "Didactic materials"; "Merit", to reward students who achieve excellent results; "School voucher", to support enrollment in schools, equal or public, which provide a fee for enrollment and attendance; "Preschools and Support for the Disabled", with which the aim is to cover part of the cost for teaching staff engaged in educational support activities.

**AGAINST BULLYING AND CYBERBULLYING.** Lombardy Region, in implementation of a specific regional law for the prevention and fight against the phenomenon of bullying and cyberbullying, has been promoting since 2018, [in partnership with the Regional Scholastic Office](#), the "BULLOUT" intervention line to support awareness-raising, information, and training; implement support programs for minors, victims of bullying and cyberbullying; promote rehabilitation programs aimed at perpetrators of bullying and cyberbullying; encourage the development of a policy to fight school and community bullying and cyberbullying by involving the local actors.

Regione has continued to develop annual initiatives with a view to education to respect online, among these we recall the organization, entrusted to some Lombard schools, of a HACKATHON, or a marathon, which can be carried out in one or more days, during which teams of students discuss the topic of cyberbullying.



## Vocational training

**GROWING PROFESSIONAL TRAINING.** In 2021, the Lombardy Region allocated 253.3 million euros for the consolidation of the education and vocational training system, subsidizing Vocational Education and Training courses and first-level apprenticeship contracts. In the same year, with a budget of 1.2 million euros, further support was also given to measures dedicated to the internationalization of the entire training chain.

In addition, a considerable effort was dedicated to the scholastic inclusion of disabled students from second-cycle secondary schools and VET, with a cost of approximately 58 million euros in favor of approximately 1000 Municipalities for 8000 students, to guarantee the right to study through a contribution for the activation of school transport services and educational assistance.

Another important segment of the training chain is constituted by non-academic tertiary training and in particular by the Higher Technical Institutes (ITS) system, which provides advanced and highly demanded skills, and stands out in the national scenario as a consolidated and constantly growing system, in which the Lombardy Region has heavily invested to ensure adequate specialization for the recovery of the economic and production system, as regards the training of new intermediate figures of technicians for production and services.

Also in 2021, in implementation of the updated Youth Guarantee Plan, which provides for the introduction of a measure dedicated to the reintegration of young NEETs into training courses, a new regional notice was approved aimed at tackling early school leaving and training through the creation of modular training courses, addressed to young people who, having abandoned their studies early, are without a second-cycle education and training qualification and are unemployed, with a total amount of 13.25 million euros.

## Sustainable economic growth

**ECONOMIC SUPPORT IN A "GREEN" PERSPECTIVE.** Lombardy Region, in the critical context deriving from the health emergency from Covid-19, with Regional Law 4/2021, has allocated 101 million euros to Local Authorities for interventions aimed not only at securing territories and infrastructures but also at urban regeneration projects, energy conversion, use of renewable sources, social infrastructures, environmental remediation of polluted sites, green infrastructures and ecological connections. The Lombard municipalities involved were 1,493 for 1,795 intervention projects in the Lombardy area.

**CIRCULAR ECONOMY CHAINS.** In collaboration with Unioncamere Lombardia, the Lombardy Region has published the Call for the innovation of circular economy chains in Lombardy, with a financial endowment of 3.6 million euros. The initiative is aimed at promoting and upgrading the Lombard supply chains, their innovation, and competitive repositioning in a circular economy perspective, by financing projects that consider the entire life cycle of the product or that support reuse and use of recycled materials, of products or residues deriving from production cycles as an alternative to virgin raw materials and the reduction of waste production. The beneficiary enterprises (micro / small and medium enterprises) were 53.

**SUSTAINABLE TOURISM.** In the field of tourism policies, sustainability represents one of the transversal lines of intervention for the development of the tourism sector and attractiveness, representing a competitive advantage for the territories. Starting in 2018, the Lombardy Region has promoted three editions of the "Viaggio #in Lombardia" call, aimed at public entities, tourist consortia, tourist promotion agencies, Pro Loco, and associations with a prevalent statutory purpose of promoting tourism, aimed at supporting development, promotion and communication of the tourist products expressed by the territories, as well as tourist itineraries between the capital municipalities and the "out of town" destinations in order to increase tourist flows, in a logic of sustainability / seasonal adjustment and in view of the next major events (eg. "Bergamo-Brescia Italian Capitals of Culture 2023" and "Milan Cortina 2026 Olympics"). Resources amounting to 4.28 million euros have been allocated for this purpose.

## Work

**CUSTOMIZED PATHS ACCOMPANYING WORK.** With the "Dote Unica Lavoro" measure, the Lombardy Region intends to respond to the needs of people, residents and/or domiciled in Lombardy, in the various phases of their professional life with an integrated and personalized offer of services to facilitate jobs' reintegration and professional qualification or retraining. Dote Unica Lavoro provides five levels of aid intensity, calculated on the basis of distance from the labor market, age, and gender of each individual. Each band corresponds to a Dowry. The recipients of the measure - mainly unemployed and/or employed individuals up to 65 years of age - can activate, free of charge, with an operator accredited by the Region, a Personalized Intervention Plan, functional



to job placement, self-employment, and self-entrepreneurship or retraining of one's professional profile.

**TO REVERSE THE WORKING MISMATCH.** With the aim of overcoming the misalignment between labor supply and demand, promoting the acquisition of new skills to cope with the profound transformations of production processes, and reducing the time needed to reintegrate workers into the labor market, in July 2021 the Lombardy Region launched the initiative *Formare per Assendere*, aimed at companies that have hired people who have been unemployed for at least 30 days and at the same time implement, before or after hiring, a training course to bridge the skills gap. The measure, increased several times during the year, reached a total allocation of 26 million euros in March 2022 (of which 2 million are reserved for micro and small enterprises in the transport sector) and is aimed at financing employment incentives. combined with training costs incurred by the employer and, where required, personnel selection costs. The call also favored the relaunch of female employment, considering that 54% of the work placements of the measure involved women.

### 3. INFRASTRUCTURE, INNOVATION, COMPETITIVENESS, AND CITY



OSN 1P\_I; OSN 1P\_III; OSN 2P\_II; OSN 2P\_III; OSN 3P\_1;  
OSN 3P\_III; OSN 3P\_IV;

#### Housing and building quality

**AN EXAMPLE OF URBAN AND SOCIAL REGENERATION.** Lombardy Region has promoted a significant urban and social regeneration intervention in the Lorenteggio district in Milan, according to an innovative approach that focuses on people and their needs , experimenting with a sustainable development model from the housing, construction, economic and social, replicable in other territorial contexts. The intervention, which has a financial endowment of over 100 million euros, affects a complex territorial area in which the advanced deterioration of the public heritage, both housing and collective services and open spaces, is associated with conditions of poverty, hardship social, and presence of petty crime. The project involves a multidisciplinary approach, which brings together resources and local actors, with a strong governance to develop innovative solutions capable of improving physical space and activating a process of the social and economic integration of families, creating a mix of residences, functions and collective spaces complementary to living. Specifically, the actions concern the redevelopment of public and social residential buildings, also through demolition and reconstruction; the redevelopment of the public lighting network with innovative technologies aimed not only at energy saving but also at ensuring safe pedestrian and cycle paths, equipping the district with widespread wi-fi and video surveillance and sensors for monitoring pollution and traffic and for control the occupation of parking spaces for the disabled, with a view to being a smart and inclusive city; the eco-energy efficiency of the kindergarten in the neighborhood. Not only infrastructural interventions: the project also envisaged the activation of services for accompanying housing; support for the start-up of businesses with social purposes; the provision of training courses for unemployed residents or the support of projects for the start-up or consolidation of social enterprises which at the same time activate training courses for unemployed residents.

#### Infrastructure and sustainable mobility

**THE TRAINS OF THE FUTURE.** In November 2020, an ambitious project aimed at eco-sustainable transport was presented in Lombardy. The goal is to put hydrogen-powered trains into circulation on the Brescia-Iseo-Edolo railway line, replacing the old diesel trains in service since the early 1990s. The plan provides for the purchase of at least 14 new hydrogen-powered trains (for a total of 160 million euros) which will serve the line and the construction of hydrogen distribution systems. The fuel produced will initially be destined for the new clean energy trains. In addition, between 2021 and 2022, the Lombardy Region allocated 85.5 million euros for infrastructural interventions to upgrade the network and connected to the activation of the hydrogen train service.

**NEW TRAINS AND BUSES FOR A MORE SUSTAINABLE PUBLIC TRANSPORT.** Lombardy Region, starting in 2017, has embarked on the largest renewal program of trains destined for the regional railway service. With an investment of 2 billion euros, 222 trains are under construction (of which 50 are already in operation in April 2022) intended to give a new impulse to the use of the railway. The first objective of a modern and functional train is to bring more travelers to use the railway, with obvious benefits in terms of travel safety, congestion reduction, and environmental protection.

Furthermore, between 2020 and 2021, the Region approved the overall allocation of approximately 250 million euros for the purchase of new buses and for the construction of support infrastructures for alternative-fueled buses (electric, methane, hydrogen) to benefit from important ministerial funding programs (National Strategic Plan for Sustainable Mobility, a complementary fund to the PNRR, etc.), which will allow approximately 1,200 new buses to enter service by 2026.

Guaranteeing new buses means improving the quality of the service offered and increasing the attractiveness of public transport, with benefits in terms of decongesting the road network, less pollution, and greater safety.

**THE TOURIST CYCLING SYSTEM.** Lombardy is crossed by European (EUROVELO) and National (BICITALIA) cycle paths, recognized by the Regional Plan of Cycling Mobility (PRMC), as an opportunity to increase territorial development linked to sustainable tourism.

As part of the National System of Tourist Cycle Routes (SNCT), the national tourist cycle routes VENTO, SOLE, and GARDA are currently in the planning stage.

The VENTO cycle route runs mainly along the banks of the Po River for 350 km in continuity with the Piedmont, Emilian, and Veneto sections, with a connecting section with Milan which joins in Pavia. The SOLE cycle route has a north-south route between Verona and Florence, 90 km of which insist on the Lombard territory. The GARDA cycle path, of about 80 km in the Lombard section, runs along the perimeter of Lake Garda.

The national tourist cycle routes are included in the National Recovery and Resilience Plan (PNRR) and have an activation horizon in 2026.

The network of tourist cycle routes also includes itineraries of regional interest and connecting sections between the national, regional, and premises, to allow a wide use. With a view to intermodality, the cycle path system will be reachable by rail and local public transport services.

Furthermore, the Region, in addition to having financed 24 interventions with resources under the Regional Operational Program of the European Fund for Regional Development 2014-2020 (referred to in the specific measure of Axis 4 "Supporting the transition to a low-emission economy of carbon"), with funds from the Program of interventions for economic recovery (the so-called "Lombardy Plan") continues to support cycling by financing an additional 160 interventions.

**A STUDY ON ALTERNATIVE FUELS.** In December 2020, the Lombardy Region signed a collaboration agreement with the Energy & Strategy Group of the Politecnico di Milano, aimed at the construction of three scenarios for the penetration of alternative fuels (LPG, methane, biofuels, electricity, and hydrogen) to 2030 and an analysis of the effects of a transport, socio-economic and environmental nature deriving from the adoption of each reference scenario in the Lombardy perimeter. The results of the research were presented in November 2021.

**CHARGING COLUMNS: A CERTIFIED MAPPING.** The development of electric mobility is also closely connected to the availability of tools capable of giving a reliable representation of the charging infrastructures present in the area, a condition for any subsequent planning action. Lombardy Region has developed ECOMOBS, the Ecosystem of sustainable mobility which - with its cartographic and management section with access reserved for the public administration - constitutes a support tool for the planning and programming of actions functional to the completion of the infrastructure for charging of electric vehicles. The system developed is based on an innovative approach: the population and updating of ECOMOBS data do not occur with the periodic sending of tables, but through "a connection" with the data shared by the operators of the sector through an API (programming interface). Basically, the data relating to the columns managed by the operators "pass" from their databases to E015 (the digital ecosystem of the Lombardy Region that allows data exchange between public and private subjects) to be integrated into ECOMOBS. In ECOMOBS all the charging stations for electric vehicles are displayed in real-time on the map viewer. It is possible to carry out searches and queries on the basis of geographical and technical attributes and produce summary reports. In the management section, starting from the municipal scale, sustainable mobility indicators can be calculated (eg number of charging stations by type of power - slow/accelerated/fast/ultra-fast - present in a given municipality). The binomial ECOMOBS-E015 is configured as a regional prototype of the Single National Platform, envisaged by the National Plan of Electric Charging Infrastructures. For the next few years, the use of ECOMOBS is envisaged not only for electric mobility but also as a support for the development of other sustainable mobility interventions/policies.

## **New territorial governance**

**AGAINST "LITTERING": A MULTILEVEL EXPERIMENTATION.** In March 2022, the Regional Council approved the Agreement between the Lombardy Region, the Lombard Provinces, ANCI (National Association of Italian Municipalities), Lombardy and the Metropolitan City of Milan to test a pilot model of collaboration between Local

Authorities to curb the practice of “littering”, or rather the indiscriminate abandonment of waste thrown on streets and public spaces. It is an experimental model of collection and removal mechanisms, but also of waste treatment in pilot areas accompanied by investments aimed at discouraging and combating the phenomenon and identifying those responsible for the abandonment of waste. The 2.4-million-euro investment envisaged by the agreement is aimed at the purchase of technological equipment and instrumentation.

### Digital innovation

INFRASTRUCTURE FOR ULTRA-FAST CONNECTIVITY. With the signing of the Program Agreement for the development of ultra-broadband between the Lombardy Region and the Ministry of Economic Development (MISE), the fiber optic infrastructure project was launched in 2016 for a total investment of 451.7 million euros.

There are 1436 Municipalities involved, for part or for the whole of their territory, in the Banda Ultra Larga (BUL) Lombardia project, while, as a result of expressions of interest by private operators, expressed to the Ministry of Economic Development, there are 95 Lombard municipalities falling, for more than 95% of the territory, in the interest of the market (“black municipalities”) and therefore not involved in the public BUL project. In fact, according to the provisions of the Community Regulations, public intervention, such as the BUL Lombardia project, cannot overlap with the action of the private sector but acts in a complementary manner and intervenes exclusively in the so-called market failure areas (white areas) for the involvement of 2,376,989 inhabitants.

As of April 2022, 554,274 real estate units are connected by fiber optic with FTTH (fiber to the home), allowing citizens, businesses, and public administrations connections starting from 100Mbps.

### Sustainable and innovative manufacturing economic development

SUSTAINABLE FASHION. In consideration of the environmental impact of the textile industry and following multiple discussions with stakeholders in the fashion sector, in 2019 the Lombardy Region promoted the call for “FashionTech - Research & development projects for sustainable fashion”, with an endowment of 10 million euro, in support of R&D projects (industrial research and experimental development), aimed at supporting innovation in the “Textile, Fashion and Accessories” sector, according to the principles of environmental, economic and social sustainability within the overall production cycle, from design, to the choice of materials, to the production and distribution of products. The beneficiaries are partnerships made up of Micro, Small, and Medium Enterprises (MPMI), Large Enterprises, and Research Bodies / Universities. The measure made it possible to finance 17 projects.

LOMBARDY IS RESEARCH. With the institution of law no. 29 of November 23<sup>rd</sup>, 2016, “Lombardia is Research and Innovation”, the Lombardy Region favors, supports, and promotes research and innovation. In order to promote research and innovation, as strategic elements to support sustainable and lasting development of the territory and to respond to the global challenges of our time, the law defines two fundamental tools: the Three-year Strategic Program for Research, the ‘Innovation and Technology Transfer, and Research Day. The latter represents a fundamental appointment for all the scientific and technological excellences operating in Lombardy and an opportunity for meetings and discussions between scientists, entrepreneurs, personalities, and artists who have distinguished themselves for their contribution to innovation and for supporting the international research. The culmination of the day is the ceremony for the awarding of the “Lombardia è Ricerca” International Award, with which one million euros is awarded to the researcher, or team of researchers, who has made a significant contribution in the field of Life Sciences the advancement of scientific and technological knowledge, with specific regard to the effects on the well-being, health, and quality of life of all people. The Award, for the 2020-2021 edition, was dedicated to the vital process of Photosynthesis, which allows us to store the renewable energy of sunlight in the form of chemical energy in organic and biological molecules, providing nourishment and fuels essential for our development. The use of sunlight can find new applications for environmental sustainability: from the remediation of polluted environments to the purification of water, to the recycling and disposal of plastic, in accordance with the Sustainable Development Goals identified by the objectives of the 2030 Agenda.

### Quality of life

FOR THE ENHANCEMENT OF CULTURE. In 2021 the call was published for the assignment of grants for the enhancement of the Lombard public heritage for cultural purposes: innovation and sustainability. Also in 2021, the project for the international relaunch of tools, practices, and contacts for the restart of the Lombardy live

entertainment companies was approved as part of the collaboration agreement between the Lombardy Region and the Cariplo Foundation for the sharing and support of projects in the entertainment sector for the two-year period 2021/2022.

Also worth mentioning is the Next project, a laboratory of ideas for the production and programming of the Lombard show - 2021-2022 edition, with the endowment of 1,138,000.00 euros which aimed to promote the production of live shows in order to support operators of the sector hard hit by the restrictive measures imposed by the containment of the health emergency by Covid-19 and to support artistic creativity and the work of staging and rehearsing the shows.

There was no shortage, also for 2021, of contributions intended for the realization of projects for the enhancement, promotion.

#### 4. MITIGATION OF CLIMATE CHANGE, ENERGY, PRODUCTION AND CONSUMPTION



OSN 2P\_II\_6; OSN 2P\_III\_1; OSN 3P\_II\_2; OSN 3P\_III\_1;  
OSN 3P\_III\_4; OSN 3P\_III\_5; OSN 3P\_III\_6; OSN 3P\_IV\_1;  
OSN 3P\_IV\_2; OSN 3P\_IV\_3

##### Reduction of emissions in the civil sector and in transport

INNOVATIVE SOLUTIONS FOR AIR QUALITY. In July 2018, the Lombardy Region updated and implemented its Regional Plan of Interventions for Air Quality (PRIA), already approved in 2013. Among the initiatives aimed at improving air quality, we note "Move-In" (Monitoring of Polluting Vehicles), a project launched on an experimental basis in October 2019, to encourage innovative ways to control vehicle emissions by monitoring mileage, considering the actual use of the vehicle and the driving style adopted. Specifically, a black box, installed on the vehicle, makes possible to detect real distances through the satellite connection to dedicated technological infrastructure. By joining the Move-In, the vehicle will no longer be subject to the hourly and daily blocks in force but will instead be monitored through the total count of the km traveled in any time slot and within a maximum km/year limit established based on the type and the environmental class of the vehicle. Participation in the Move-In service implies the commitment, by the participating citizens, to respect the threshold of kilometers assigned on an annual basis to their vehicle. Reaching this threshold makes it impossible to continue to make use of the mileage exception introduced by Move-In, which translates into the impossibility of further use of the vehicle (at any time slot and on any day) until the completion of the year of validity of the service. Since 2021, the Move-In project has also been adopted and implemented by the Piedmont Region.

##### Development of renewable energy sources

FRENEWABLE SOURCES AND CONTRAST TO ENERGY POVERTY. In 2021, the Lombardy Region developed numerous initiatives aimed at encouraging the production of energy from renewable funds and reducing energy poverty. There are over 900 subsidized interventions (for a value of 40 million euros) for the installation of photovoltaic systems and storage systems and over 4,200 installations of electrical energy storage systems, which allow an increase in shared energy for a total of 18.1 million euros. In addition, the Region has allocated 15 million euros for the energy requalification of public structures through the installation of renewable source systems and for the increase of energy efficiency and the reduction of light pollution of public lighting systems, subsidizing the Tenders "Illumina" and "Lumen" for an amount of 15 million euros and 30.34 million euros respectively. Finally, the Lombardy Region has planned new actions, to be implemented soon, with the European resources of the 2021-2027 programming, allocating over 100 million euros of community funds to the development of infrastructures and plants using renewable sources and support for the diffusion of communities. energetic.

A REGIONAL LAW FOR ENERGY COMMUNITIES. A concrete sign of the path undertaken by the Lombardy Region towards the energy transition of the regional socio-economic system, Regional Law n. 2 "Promotion and development of a system of Renewable Energy Communities (CER) in Lombardy. Towards energy autonomy ". The legislation is supported by an initial regional investment of approximately 22 million euros which will make it possible to create a widespread network of energy production and storage plants made up of 6,000 energy communities over the next 5 years. The "network" will respond to the needs of private homes, companies, hospitals, schools, and local authorities, reducing energy costs for consumers. The coordination function of all energy communities will be carried out by the Lombardy Regional Energy Community (CERL). CERL will have to promote the culture of renewable energy sources with training and information initiatives aimed at citizens, businesses, and institutions and support the creation of individual territorial energy communities. The spread of energy communities will help to meet the 2030 objectives of

the Regional Energy, Environment and Climate Plan which provides for a reduction of one third of consumption and the doubling of energy production from renewable sources.

### Circular economy and sustainable production model

**CIRCULAR ECONOMY AND ENERGY TRANSITION.** On November 8, 2021, the Regional Law n. 20 “Discipline of the sustainable cultivation of mineral substances from quarries and for the promotion of saving raw materials and the use of recycled materials” aligned with European policies concerning environmental sustainability and the circular economy. The law encourages the use of inert materials from the reuse, recycling, and recovery of waste, as an alternative to newly extracted raw materials.

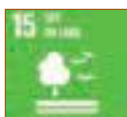
Among the initiatives of the Lombardy Region aimed at promoting a participatory approach on issues relating to the circular economy and the energy transition, particular mention deserves the establishment, in October 2018, of the Observatory on circular economy and the energy transition. It is an institutional discussion table aimed to sharing the strategic objectives of regional climate policies and for the sustainability of the use of resources with all the players in the area. Participation in the institutional debate is open to all trade associations, trade unions, universities and research bodies, associations of local authorities, environmental associations, and consumer associations. The Observatory is organized in permanent coordination tables that define the guidelines, objectives, and expected results of the process of common construction of regional policies and strategies for the environment and climate, and in thematic tables that elaborate specific contributions to be integrated into the new plans and regional programs, to which bodies, organizations, and experts with specific experience and expertise in the sector and in the topics subject to technical comparison are also invited. The multiplicity of stakeholders involved in the Observatory encourages a fertile dialogue, full of food for thought, and also for the proposal of new perspectives and regulations in the field of climate and energy policies.

**CONTAMINATION PREVENTION.** Lombardy Region continued the updating of the Regional Waste Management Plan, through the updating of the Regional Waste Management Program, which contains the Regional Reclamation Program for polluted areas. The update of the Waste Program is in line with the Directives referred to in the “Package for the Circular Economy” which have been in force since 4 July 2018. The package of new Directives is part of a broader European strategy that aims to achieve a profound change in production and consumption models, according to the new perspective of the so-called “Circular Economy”.

Regarding the implementation of the measures of the National Recovery and Resilience Plan (PNRR) and in particular, to that relating to the remediation of orphan sites (M2C4, Investment 3.4), the Lombardy Region, based on the contents of the Regional Remediation Program for polluted sites (PRB), has identified the list of sites to be redeveloped within the regional territory, through the aforementioned resources, and initiated discussions with the MITE. Lombardy Region was the beneficiary of the measures for a total of approximately 51 million euros. Finally, it should be noted that, even before the PNRR funds, Ministerial Decree 269 of 29 December 2020 governed the criteria and methods for transferring the resources to beneficiaries for the implementation of environmental remediation and restoration of orphan sites and assigned to Lombardy Region resources for a total of € 9.6 million.

Finally, in 2021, the Guidelines for the management of black slag from electric furnace steelworks were approved. The document was produced by the “Melt Slag” Technical Roundtable set up within the Observatory on Circular Economy and Energy Transition.

## 5. ECOPAESISTIC SYSTEM, ADAPTATION TO CLIMATE CHANGE, AGRICULTURE



OSN 1P\_III\_1; OSN 2P\_I\_1; OSN 2P\_I\_2; OSN 2P\_I\_3; OSN 2P\_I\_4; OSN 2P\_I\_5; OSN 2P\_II\_2; OSN 2P\_II\_3; OSN 2P\_II\_4; OSN 2P\_II\_5; OSN 2P\_II\_6; OSN 2P\_II\_7; OSN 2P\_III\_1; OSN 2P\_III\_2; OSN 2P\_III\_4; OSN 2P\_III\_5; OSN 3P\_I\_1; OSN 3P\_III\_7

### Resilience and adaptation to climate change

**RESOURCES TO INCREASE THE RESILIENCE OF TERRITORIES.** In 2021, the Region invested 104.5 million euros to fight combat climate change, improve air quality, energy efficiency, and sustainable mobility (installation of photovoltaic panels, replacement of polluting cars and vehicles, replacement of obsolete thermal systems, columns for electric charging of vehicles for public bodies, regulation of biomass-fueled thermal systems); De-waterproofing and planting interventions.

**THE NEW REGIONAL LAW TO IMPROVE THE MANAGEMENT OF EMERGENCIES.** At the end of 2021, the new Regional Law on Civil Protection (LR 27/2021) was also approved. Among the important new elements alongside



the Civil Protection authorities, the assignment of specific functions on the matter to the presidents of the Lombard provinces, as heads of large-area entities, is envisaged. The new legislative text reforms the territorial coordination of emergency management, clearly defining which government authorities of the various territorial levels are responsible for the strategic direction and coordination of the resources to be used in the event of an emergency, based on the level of impact of the events. The law also formalized the regional forest fire risk prevention plan and regulated the training of highly qualified personnel and the inclusion of special groups. The figure of the Territorial Operational Coordinator (CTO) was also introduced, with tasks of operational coordination of the resources of organized volunteering. As regards the support and strengthening of the regional Civil Protection System (Provinces, Municipal Groups, and Associations), approximately 60 million euros were allocated in the three-year period 2021-2023 for the purchase of equipment and upgrading of the offices.

### Soil protection

**FIGHT AGAINST LAND CONSUMPTION.** In December 2021, the Lombardy Region approved the adoption of the revision of the Regional Territorial Plan (PTR), including the landscape enhancement project. The Plan has the non-exclusive objective of helping local authorities in defining the landscape contents of the planning tools and proposes for the first time the Regional Green Network project, to guarantee and strengthen the conditions of protection of rural and naturalistic landscapes. It is a tool with a broad vision, no longer strictly urban planning, to regulate Lombardy to come. With a view, hoped for by the Region, to reduce land consumption. About 450 Lombard municipalities have already taken steps to reduce the areas of transformation of free soil, by over 20 million square meters. The conclusion of the approval process for the revision of the Plan is expected by 2022.

**ENHANCEMENT OF THE DISPOSED OF MINING ASSETS.** In 2021 the "Regional program for the recovery and enhancement of the disused mining heritage" was approved, to promote and enhance the heritage that can be visited. At the same time, 5.6 million euros were allocated to improve and implement the safety of the mining sites themselves and the conditions of usability.

### Biodiversity and protected areas

**BIODIVERSITY: A GOOD TO PROTECT AND ENHANCE.** The Lombardy Region invested 6.3 million euros in 2021 for territorial interventions for biodiversity, the conservation of biodiversity, adaptation to climate change, and the enhancement of ecosystem services in Lombardy's forests and protected areas, through the involvement of the private sector.

**LOMBARD PROTECTED AREAS: A BEAUTIFUL RE-DISCOVERY.** At the end of 2021, the Lombardy Region allocated 10.5 million euros to relaunch the social economic system of the Lombard protected areas and to deal with the negative impact deriving from the health emergency caused by Covid. The resources, distributed over the territories of Lombardy, will be used to consolidate and strengthen the structural and infrastructural heritage of the protected areas which will be made more usable and functional for the reception. In fact, during the pandemic period there was a surge in visits to protected areas, with a positive impact on the local economic system. Many citizens have been able to discover or rediscover the biodiversity preserved in these areas which are the real green lung of Lombardy: 25% of the regional territory is protected.

### Enhancement of forests

**ENHANCEMENT OF THE RURAL-LANDSCAPE-ENVIRONMENTAL SYSTEM.** In March 2021, the Lombardy Region approved the tender "Green infrastructures with ecological relevance and increase of naturalness" with which it pursues the objectives of safeguarding and enhancing the rural-landscape-environmental system. The interventions promoted are of an agroforestry nature and increase the naturalness, aimed at encouraging the green infrastructure of the Lombard territory. Enhancing naturalness means making areas more usable and increasing the quality of life and the attractiveness of the landscape. The measure allocated a financial envelope of 6 million euros for the strengthening of the agroforestry system for connecting green systems, with the containment of land consumption and urban dispersion, for the enhancement of rural areas and open spaces with an increase of naturalness, for the strengthening of the green infrastructure of the territory, for the construction of the regional ecological network and the increase of the forest heritage.



**NEW WOODS IN THE PLAINS AND HILLS.** The Lombardy Region is involved in safeguarding the woods and promoting more sustainable models of life also in urban centers, investing in forward-looking projects shared with local authorities. Between 2019 and 2020, in fact, the Lombardy Region has allocated 9 million euros for the creation of new woods in the plains and hills, the improvement of existing or damaged ones, forest hydraulic works, and the extraordinary maintenance of agrosilvopastoral roads. The 95 funded projects aim at the protection, conservation, and enhancement of forest ecosystems and the protection of biodiversity, including the creation of new woods in areas with insufficient woody coefficient, and are concerned with the prevention of hydrogeological instability in the areas of the foothills.

### Quality of river and lake systems

**DRONES FOR HYDRAULIC SAFETY.** The fluvial one is a fundamental ecosystem for the Lombard territory. Seveso Stream, a project started in March 2021, uses drone technology in a new way to survey the “discharges” along the Seveso River. The surveys are used to create a geo-referenced database of discharges, thus providing local authorities with a useful tool in support of their decisions and operations. Its interdisciplinary approach combines the goal of hydraulic safety with those of water quality and environmental protection. In October 2021, the project has been extended to the rivers Olona and Lambro.

**PROTECTION AND RESTORATION OF LACUSTRUM WATERS.** In 2021, interventions for the protection and rehabilitation of water were financed with 16 million euros. The main areas of investment were lakes and biodiversity protection, the recovery of lakeshores, water depollution interventions and the purchase of new sweeping boats. Through the AQST Action Program “Safeguarding and rehabilitation of Lake Varese”, 4 million euros were allocated to the modernization and strengthening of sewage systems, water monitoring and the enhancement of the lake shores.

### Smart and nature-based solutions for the urban environment

**RECOGNITION OF URBAN AGRICULTURE.** In October 2021, the Lombardy Region was the first Italian region to approve a law on urban, peri-urban, and metropolitan agriculture and on vertical farm. An initiative with several innovations, which strongly innovates the regulatory framework, recognizing green roofs in urban planning and allowing the establishment of vertical farms in all urban areas, *i.e.* innovative vertical farms where vegetables are produced in a protected environment in a continuous cycle. These activities, even if located in urban areas, such as example in industrial areas to be regenerated, will, in any case, be recognized as agricultural. The goal is to encourage innovative urban settlements to increase environmental sustainability, urban regeneration, energy-saving, resilience to climate change, and increase the supply rate of food produced in the area, reducing logistical movements. The law also recognizes multifunctional green infrastructures, that is, urban forestry interventions aimed at the implementation of a sustainable ecosystem through the interconnection between green and built and the strengthening of local ecological connections.

### Sustainable agriculture

**LESS POLLUTING AGRICULTURAL ENTERPRISES.** The provision of aeromechanical services can play a significant role in reducing the environmental impact associated with mechanization, thanks to the use of more innovative, performing, and consequently less polluting equipment than those usually used by the aeromechanical company. With a specific regional action aimed at reducing the emissions produced by aeromechanical activities, launched in January 2022, the Lombardy Region has allocated 5 million euros to support micro and small aeromechanical companies for the purchase of new machines, equipment, software, and plant wastewater treatment to reduce emissions. This measure not only supports the competitiveness of the agricultural sector, allowing the purchase of new machinery, but also promotes the protection of the environment, allowing the reduction of emissions into the atmosphere.



## 3.2. The Metropolitan Agenda of the Metropolitan City of Milan

### Introduction

Metropolitan City of Milan has chosen, along with the process of participation, exchange and partnership underway with the superordinate institutions, and in compliance with the vision of the GOAL 17.14 - *Increase political coherence for the sustainable development across local institutions* - to participate together with the Lombardy Region in the coordinated drafting of the Voluntary Local Review document.

The Metropolitan City of Milan intends to show itself to civil society at the direction of the just, equitable and ecological transition that must involve multiple realities in the construction of a new paradigm in the development system. Although the scenarios have drastically changed recently, this first public document intends to strengthen the enacted actions, to give visibility at an international level to the path towards change, so that the environmental, social, and economic issues of the territory keep up with the evolving historical and political scenario. The Metropolitan Urban Agenda for Sustainable Development, which will be published at the end of the ongoing process, will therefore be an instrument at the service of all, coordinated with the National Strategy and the Lombardy Region, and which will guide the territory in planning growth and well-being and will recalibrate goals where necessary.

### The Metropolitan City of Milan (CMM)

The Metropolitan City of Milan is a public body formally operational since 01/01/2015 according to the National Law 56/2014. In 2015 it replaced the former Province of Milan, founded in 1860. CMM includes 133 Municipalities, including the Municipality of Milan.

Its territory is divided into 7 Homogeneous Zones. Its main tasks and functions are territorial and strategic planning, including infrastructures and the ICT network, mobility and traffic, protection of the territory and the environment, and economic and social development of the metropolitan area.

### Territorial, social, and economic framework of the territory

With over 3 million inhabitants residing in 133 municipalities, of which approximately 1,330,000 live in the provincial municipality, Città Metropolitana represents the second largest metropolitan area in Italy. The population density on a metropolitan basis is in fact equal to about 2,053 inhabitants per square kilometer. A first overall reading of the state of urbanization of the metropolitan territory shows that 39% of the provincial territory is urbanized and that as much as 55% is affected by regional or local parks, with a limited amount of free residual land, which includes urban expansion forecasts. The amount of artificialized soil varies significantly, from the lower end of the Parco Sud (the rural area on the South of Milan), at 10-15%, and the high end of the North-Milanese hinterland, with 80%.

The latter shows a high presence of industrial and traffic activities, with high concentrations of PM<sub>10</sub>, NO<sub>x</sub>, and VOC, especially for the central core and the main northward routes. On the other hand, the Southern municipalities of Milan have an intermediate population density with a high presence of agricultural and livestock activities, which determines a high concentration of

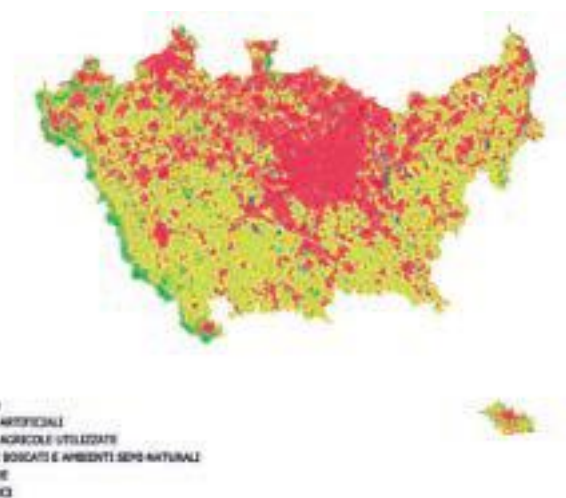
NH<sub>3</sub> in the area. However, the concentrations of PM<sub>10</sub> with a higher secondary component are registered to be high, in addition to less relevant emission density of PM<sub>10</sub> and NO<sub>x</sub>. As regards the social component, the analysis of the population structure by age group reveals a demographic ageing tendency: in the metropolitan city the share of elderly people (over 65) is equal to 22.5% (mainly represented by women).

### The urban agenda project of the Metropolitan City of Milan

Metropolitan city of Milan on 4 December 2019 signed a collaboration agreement with the Ministry of the Environment and Land and Sea Protection (MATTM), now the Ministry of Ecological Transition, aimed at defining, by the end of 2022, the urban metropolitan agenda for sustainable development. The path that led to defining the strategies for the Milanese metropolitan area took place through three main moments:

- Action A - Construction of governance
- Action B - Involvement of civil society
- Action C - Definition of the metropolitan agenda for sustainable development and integration with the metropolitan strategic plan

In the realization of the project, the Metropolitan City of Milan collaborated with the GREEN Research Center of Bocconi University, the Polytechnic University of Milan - Department of Architecture and Urban Studies - DASTU, the Italian Alliance for Sustainable Development (ASviS), as well as with Colouree and IS Media.



Land use (2019)

### Action A. Construction of the Governance

Metropolitan city of Milan has worked to involve the main internal and external actors in the preparatory works for the definition of the guidelines of the metropolitan agenda for sustainable development. On the one hand, it has internally created the top structure of the Steering Committee, which coincides with the Management Committee of the Institution, supported by the Environment Department which coordinates the committee, the project activities, and the internal working group composed of 35 participants from 6 Directorates of the Institution. The inter-sectoral working group participated in training sessions on sustainable development issues and in frequent refresher meetings, which encouraged new collaborations between colleagues and allowed the mapping of good practices already in place in the institution. Regarding the external actors, the Metropolitan City of Milan subscribed to the Protocol for sustainable development in Lombardy on 18 September 2019 and actively participates in the Sustainable Development Forum of the Lombardy Region, engaging in the events dedicated to the Regional Sustainable Development Strategy and coordinating with the superordinate body for the exchange of good practices and for the definition of the monitoring indicators. Furthermore, CMM has invested heavily in the training of local administrators and municipal technicians by organizing training sessions about sustainable development and seminars to present decision support tools developed by the Metropolitan City of Milan. In particular, between October and November 2021, CMM technicians participated as teachers in the laboratory on sustainable development of ANCI Lombardia dedicated to Municipalities. Finally, an interinstitutional working group has been set up with the metropolitan cities of Venice, Genoa and Turin, which aims to set up a system for exchanging good administrative and technical practices, as well as

to work on strategic planning. The Datalab tool was developed in synergy with the Metropolitan City of Genoa.

### Action B. Involvement of civil society

The process of involving stakeholders and engaging with strategic actors for the Milan area and civil society was fundamental to inform, train and initiate a process of sharing a common language on sustainable development. It was also very important to define the strategic priorities with the local actors. To support this process, three specific tools have been developed to implement awareness-raising, training, and engagement activities for local actors.

#### • Portal of the Agenda

[https://www.cittametropolitana.mi.it/Agenda\\_metropolitana\\_sviluppo\\_sostenibile/](https://www.cittametropolitana.mi.it/Agenda_metropolitana_sviluppo_sostenibile/)

To give visibility to the commitment of the Metropolitan City of Milan in the field of sustainable development and in defining the objectives of the 2030 Agenda, a dedicated portal has been created to share information on the path taken, on the tools developed and on the contents produced, as well as on the proceedings of the training seminars and informative events organized. An important event was organized on March 22, 2022 - with over 100 participants - to begin the process of disseminating the contents of the studies and to discuss with the local actors in the initial presentation of the strategies identified by CMM as priorities to accelerate the sustainable transition.

<b>Institutional events</b>	3 events	554 participants
<b>Training seminars on the themes of the 2030 Agenda</b>	4 events	267 participants
<b>Meetings within the CMM working group</b>	5 meetings	
<b>Support in the context of the MiTE project CReIAMO PA - L2WP1</b>	16 meetings	

#### • NETlab

<https://netlab.evidence-hub.net/>

In the context of **Goal 17** the Metropolitan City has developed, in collaboration with the Politecnico di Milano - DASTU (Architecture and Urban Studies Department), a platform animated by local, regional and national stakeholders, aimed at creating a reference community to discuss, promote and implement the objectives of sustainable development in the context of the Milanese metropolitan city. The purpose of the platform is to start a discussion on the lines of action, the most relevant and urgent challenges in the area, as well as to map projects already completed or in progress, to identify sustainable development challenges, and to connect potential stakeholders.

<b>Launch events</b>	n. 2	NETLAB presentation event	29 participants
<b>Virtual Mapathon</b>	n. 3	Workshop 1 - Mobility: sustainable infrastructures and practices	18 participants
		Workshop 2 - Supralocal welfare and sustainable production	10 participants
		Workshop 3 - Adaptation to climate change and urban ecosystem	19 participants

17 subjects registered on the NETLAB platform and 22 strategic projects were already active in the area. Furthermore, thanks to the Mapathon events, 12 challenges and 12 project proposals were launched.

• School of Sustainability (S.O.S.)

[https://www.cittametropolitana.mi.it/Agenda\\_metropolitana\\_sviluppo\\_sostenibile/SCHOOL-OF-SUSTAINABILITY/index.html](https://www.cittametropolitana.mi.it/Agenda_metropolitana_sviluppo_sostenibile/SCHOOL-OF-SUSTAINABILITY/index.html)

In the context of **Goal 4**, lifelong learning and training on sustainability, the Metropolitan City has developed in collaboration with the Politecnico di Milano - DASTU Department, the **School of Sustainability (SOS)**, a training course aimed at citizens, businesses, associations and institutional actors, with particular attention to municipalities and local administrators. The School of Sustainability enhances the excellence and training experiences currently offered in the Milanese metropolitan area and provides support to all those interested in deepening their knowledge and acquiring new skills on the issues of Sustainable Development.

<b>TRAINING OFFER</b>	University courses of the Milanese universities	n. 61
	Third parties	n. 2
	Professional associations	n. 3
<b>CHALLENGES AND PROJECTS</b>	Challenges	n. 10
	Projects to be replicated	n. 10

**Action C - definition of the metropolitan agenda for sustainable development and integration with the metropolitan strategic plan**

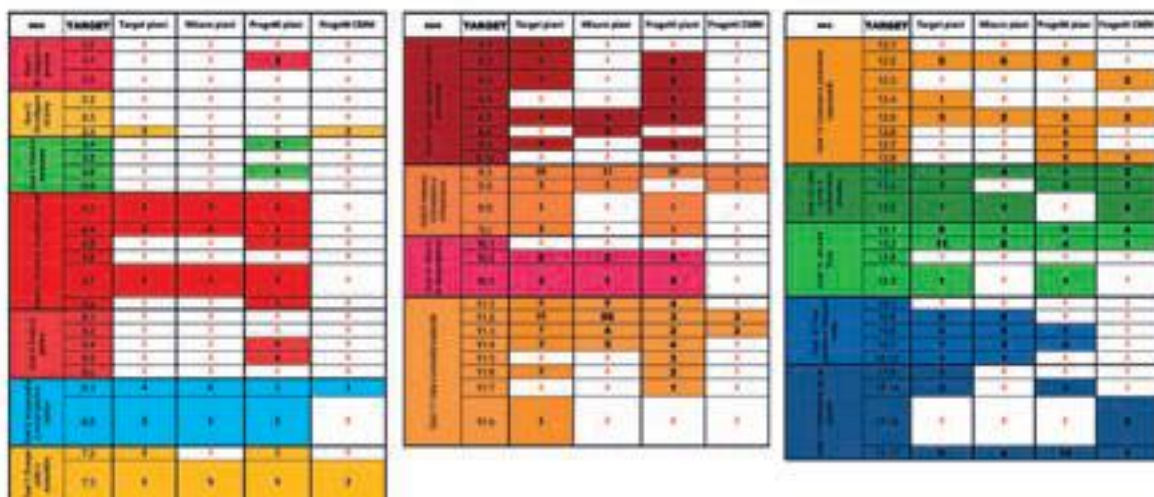
To identify the metropolitan strategies, in collaboration with the Bocconi University of Milan, it was necessary to carry out a preliminary analysis and understanding of two aspects:

- **the competences of the Authority with respect to the objectives of the 2030 Agenda, as well as how these are reflected in the programming, planning and actions tools**

Based on current legislation, especially on the reform of local authorities introduced with law no. 56 of 2014 and on the Statute of the CMM, 74 targets of the 2030 Agenda of metropolitan competence have been identified, of which 72 (and 16 SDGs) are relevant for the CMM.

Secondly, both the strategic and sectoral plans were analyzed, and in particular: the Three-year Strategic Plan of the Metropolitan Territory (PSTTM) 2019-2021, the Single Programming Document (DUP), the Metropolitan Territorial Plan (PTM), the Urban Sustainable Mobility Plan (SUMP), Quarry Plan, ongoing projects and good practices not included in the plans.

From the analysis and systematization of the actions defined in the plans and projects, it emerged that, overall, the CMM contributes to 16 SDGs and 57 targets out of a total of 72 relevant to the Entity.

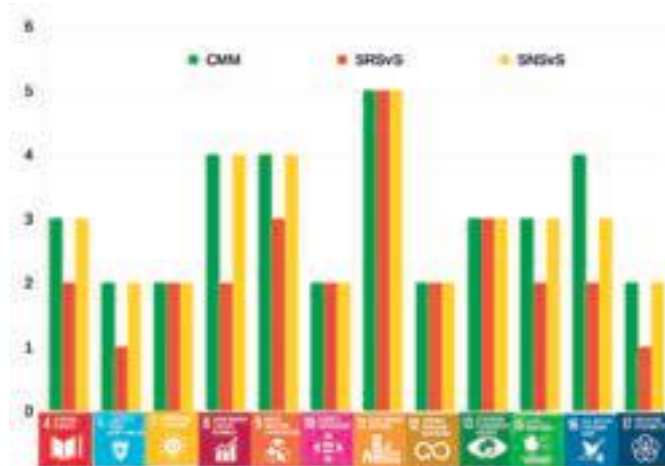


CMM targets, measures, and projects that contribute to the achievement of the SDGs and targets of the 2030 Agenda.



- the coherence in terms of sustainable development objectives between the strategic and sectoral plans of CMM with the national and regional strategies

An analysis was carried out of the strategies for sustainable development of higher levels of governance, such as the National Strategy for Sustainable Development (SNSvS) and the Regional Strategy for Sustainable Development (SRSvS). Of the 36 targets of the 2030 Agenda (out of 72 of metropolitan competence) to which the CMM contributes with targets, measures, and projects, 33 are also included in the SNSvS and 27 in the SRSvS. Finally, an analysis of the National Recovery and Resilience Plan (PNRR) was conducted with the aim of defining how the Plan and the planned investments contribute to the definition of CMM's Urban Agenda for Sustainable Development.



SDGs and metropolitan competence targets are included in the SNSvS, in the SRSvS and in the CMM plans (does not include the projects, the measures and the CMM plans).

As a result of the analysis of current Metropolitan programs and of supraordinate governance levels strategies, it was possible to identify the SDGs deemed the most relevant by the CMM, hence those to be included in the CMM Agenda. The strategic priorities that emerged are: • sustainable management of water resources - **SDG 6** • energy transition - **SDG 7** • development of resilient infrastructures - **SDG 9** • housing policies and sustainable mobility - **SDG 11** • sustainable consumption and production and the circular economy - **SDG 12** • adaptation and mitigation to climate change - **SDG 13** • reducing land consumption - **SDG 15** • digitalization and innovation of the public sector - **SDG 16**

CMM has also already activated two pilot actions related to urban regeneration SDG 11 and to the circular economy SDG12, which have been studied in order to implement the sustainable development goals.

### Positioning and monitoring

<https://sdgcittametropolitana.mi.it/>

Another important tool called **Datalab** was developed to support CMM and public administrators in the analysis and monitoring of data which, through elementary and composite statistical indicators, allow to measure and analyze the positioning of the Metropolitan City of Milan and its homogeneous areas with respect to the 17 Sustainable Development Goals of the 2030 Agenda. The platform, created together with ASviS and the start-up Colouree, makes the trends of the territory graphically visible and easily legible with respect to the targets of the UN 2030 Agenda. The ambition is to bring down the data more and more at a territorial level with ad hoc data and indicators. The objective is dual: on the one hand, **to make the data and indicators related to sustainable development accessible to the public**, on other hand **to support the Administration and professionals in the creation of reports as well as in planning and monitoring, so that policies can be adjusted when they are not effective.**



## Conclusions

The results of the analyzes and the contents mapped thanks to the described tools, will be fundamental for defining the strategic priorities of the Authority, which will see, **by the end of 2022, the publication of the first version of the Metropolitan Urban Agenda for the Sustainable Development**. The document will provide the metropolitan bodies with a trace of the reflection process for the elaboration of the new strategic documents of the Authority.

The goals of the 2030 Agenda are **already embedded in the main current CMM Plans**, from the **Three-Year Strategic Plan of the Metropolitan Territory (PSTTM) 2019-2021** to the **Urban Sustainable Mobility Plan (PUMS)** together with the recent **CAMBIO, the BICIPLAN of the Metropolitan City of Milan**. Furthermore, many actions are already active in the CMM Offices such as the memorandum for the implementation of **Green Public Procurement** in Metropolitan Cities; the **DeciWatt System**, a one-stop-shop service to accompany the Municipalities in the complex process of energy requalification of buildings; **Resilient Territories**, the one-stop shop of the Metropolitan City of Milan for the resilient transition of the territories; the multiple **forestry activities**; + **COMMUNITY** as a lifelong learning tool, permanent and free, extended to the entire metropolitan area; **Virtuous Territories** for the energy and management requalification of 143 buildings belonging to the Metropolitan City of Milan.

In conclusion, the path followed so far has made it possible to set up an innovative multilevel governance for the implementation of internal actions, which will strengthen not only the coordination and cooperation between the national government, the Lombardy Region, metropolitan cities and municipalities, but will allow to achieve shared objectives and **to implement strategies and policies at the metropolitan level more effectively, reducing any contradictions between the different levels of governance**.

### 3.3. Lombardy Region and the Urban Strategies for sustainable development

Lombardy Region has promoted the Urban Strategies for Sustainable Development (U.S.S.D.) of urban contexts characterized by **fragile conditions** to increase the social inclusion of the most fragile populations (by age, gender and material and immaterial vulnerability), reduce material and immaterial inequalities and place local communities at the center.

The Region first approved (DGR 4151 of 30/12/2020) the guidelines for the selection of Lombard municipalities in which to implement the strategies, limited to the capital and larger municipalities, where fragilities are often concentrated, and subsequently (decree 295 of 18/01/2021) it published the expression of interest for the selection of strategies to be promoted through the European structural funds for the period 2021-2027 and a competition of regional resources.

A total of 14 municipalities have been selected, which will equip themselves with their own Strategy and will implement interventions to achieve it by 2027.

The selected Integrated Sustainable Urban Development Strategies pursue three strategic objectives:

- Sustainable **urban regeneration** in the physical and immaterial dimensions of some areas characterized by social fragility, concentration of poverty and inequality, degradation or inadequacy of public space and public housing stock, insufficient or low value-added neighborhood economy and commercial services.
- The reduction of **inequalities** and material and immaterial poverty, but also of the increasing fragility of the most vulnerable sections of the population.
- Strengthening **social inclusion**.

The objectives are achieved by leveraging, individually or simultaneously, the dimension of housing, economic development, school and the quality of social and health services through the coordinated implementation of material and intangible operations, the latter to be financed under the ESF + - European Social Fund.



### 3.4. The commitments and actions of the Lombard Protocol for sustainable development

**Lombardy’s Protocol for sustainable development** concretely implements the challenge posed by the **Regional Development Program (PRS) (2018-2023)** which has indicated sustainability among the 5 priorities of the regional governance, as a *“Distinctive element of administrative action and as an opportunity to improve the quality of life of the Lombards, reconciling the needs for productive growth and involving all the players in the area: from businesses to citizens, from schools to public administrations”*.

The PRS proposes, in fact, to sign *“a Lombard Protocol among all the public and private actors that are committed to the environment, territory, transport system and the Lombard infrastructures”*, so that it can draw the first lines of work.

*Development must respect the environment and must heal those critical situations that still exists today. We must consider all aspects as a whole: the social, economic and environmental ones for a sustainable development of society. “*  
*(A. Fontana, President of the Lombardy Region).*

the Lombardy Region and the Lombard system as a whole contribute concretely with the adoption of the Protocol, combining the three dimensions of sustainability (economic-social-environmental).

*“Development is essential, but it must be pursued in respect of the environment.”*  
*(R.Cattaneo, Councilor for the Environment and Climate)*

The **Protocol of the Lombardy Region** aims to promote the application of the principle of Sustainable Development in public and private decision-making, during the transition towards an economy and lifestyles that are more sustainable and compatible with an efficient management

of the planet’s non-renewable resources. The ambition is to make Lombardy the “sustainable locomotive” of the country and a cornerstone of sustainability on the international scene.

The Protocol promotes actions in the following fields:

the transition to a low-carbon circular economy, the improvement of air quality through integrated measures, the improvement of the quality of the transport system, the development of regional green infrastructures and initiatives for nature and biodiversity, integration of urban/territorial policies with water quality and risk defense policies hydrogeological, the containment of land consumption and promotion of territorial and urban regeneration, the promotion of Green Public Procurement, the transition to a fully sustainable agricultural sector and the promotion of rural areas, the strengthening of inclusion and social cohesion, such as strong commitment to tackling all forms of inequality.

The Protocol is also opened to gather further areas of commitment and extended collaboration.

The Protocol introduces several **tools**:

the Regional Strategy for Sustainable Development, the Development of long-term scenarios, the technological innovation and research in the various areas of sustainability, information, communication, environmental education, and involvement of the school system, the Lombard Forum for Sustainable Development and sharing of best practices, monitoring for sustainability.

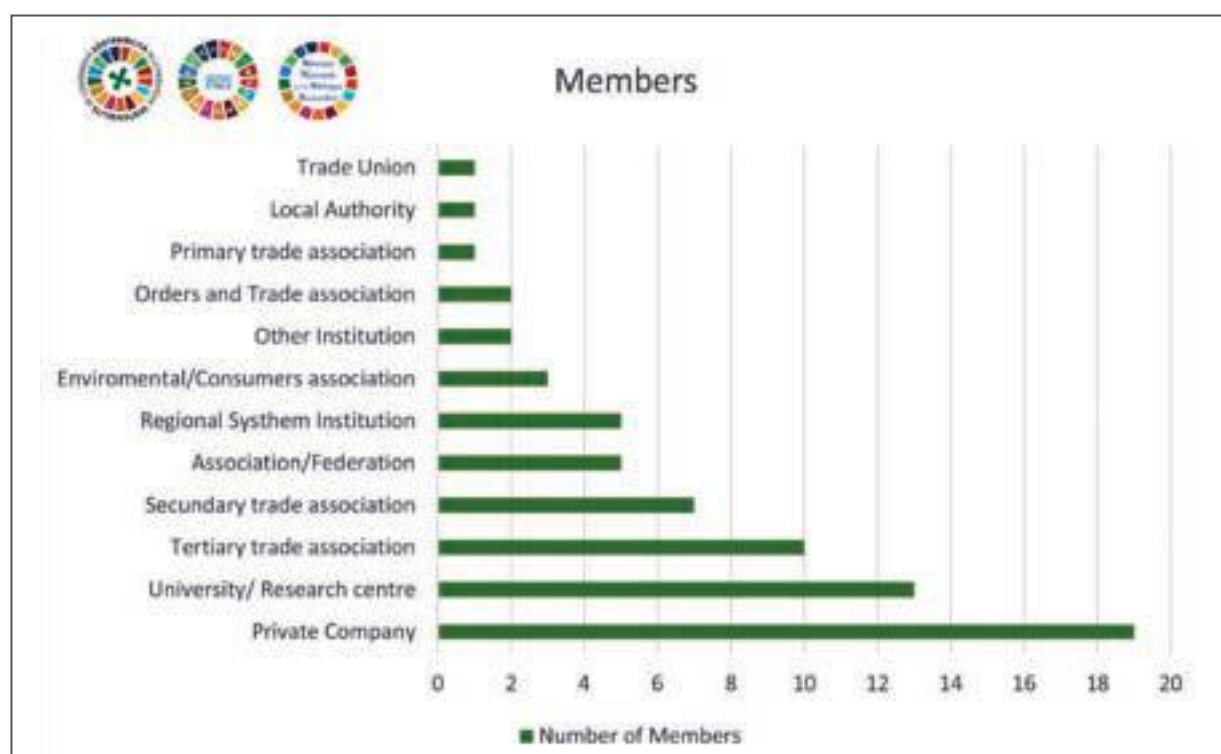
### The members

The protocol is open to the subscription of all the subjects interested in giving an impulse towards sustainability in Lombardy.

Lombardy Region intends to cooperate with companies and associations, with economic and trade union representatives, with local authorities and with the world of universities and research, by investing in different measures and initiatives.

The members of the Protocol commit to:

- applying the principle of Sustainable Development within their sphere of activity, in the economic, social and environmental dimensions.
- contributing to the definition of the regional strategy.



- establishing its own program of commitments, to be implemented with its own resources, defining times and methods.
- participating in the annual Forum, informing about the progress in the implementation of their program.

The Protocol was signed on 18 September 2019, by the President of the Lombardy Region, Attilio Fontana and by the Councilor for the Environment and Climate, Raffaele Cattaneo, with the first 54 members, including associations, social partners, universities, and representatives of institutions locals.

These first 54 members of the Protocol are above all "associative representatives", who, in turn, have sensitized further members operating in Lombardy and have proposed commitments and initiatives consistent with the aims of the Protocol itself.

As of April 2022, the members are 94, belonging to different categories (see graph).

### The actions of the Protocol

Each member has identified its own program of commitments to be implemented through concrete actions with an impact on the Lombard territory, described on the regional platform [www.svilupposostenibile.regione.lombardia.it](http://www.svilupposostenibile.regione.lombardia.it), in the "Protocol" section.

As of the end of March 2022, 283 actions were launched by 69 entities, relating to different types:

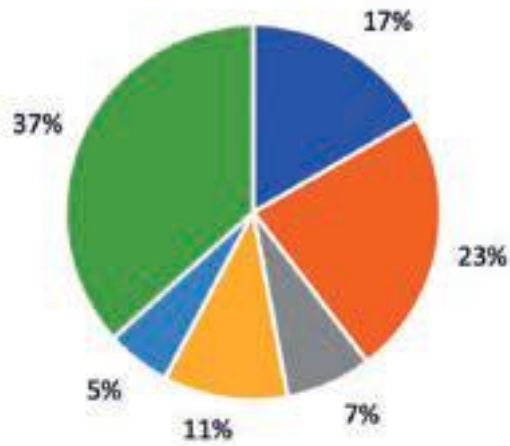
- training, education and awareness raising activities,
- activation of support or incentive tools, such as calls for tenders or other
- construction of structures or infrastructures intended to minimize environmental impacts
- management measures
- planning or programming activities

For each action, one or more specific areas of intervention have been identified: most of the actions operate within the Environment and energy (37%), Training and work (23%) and Low carbon economy (17%).





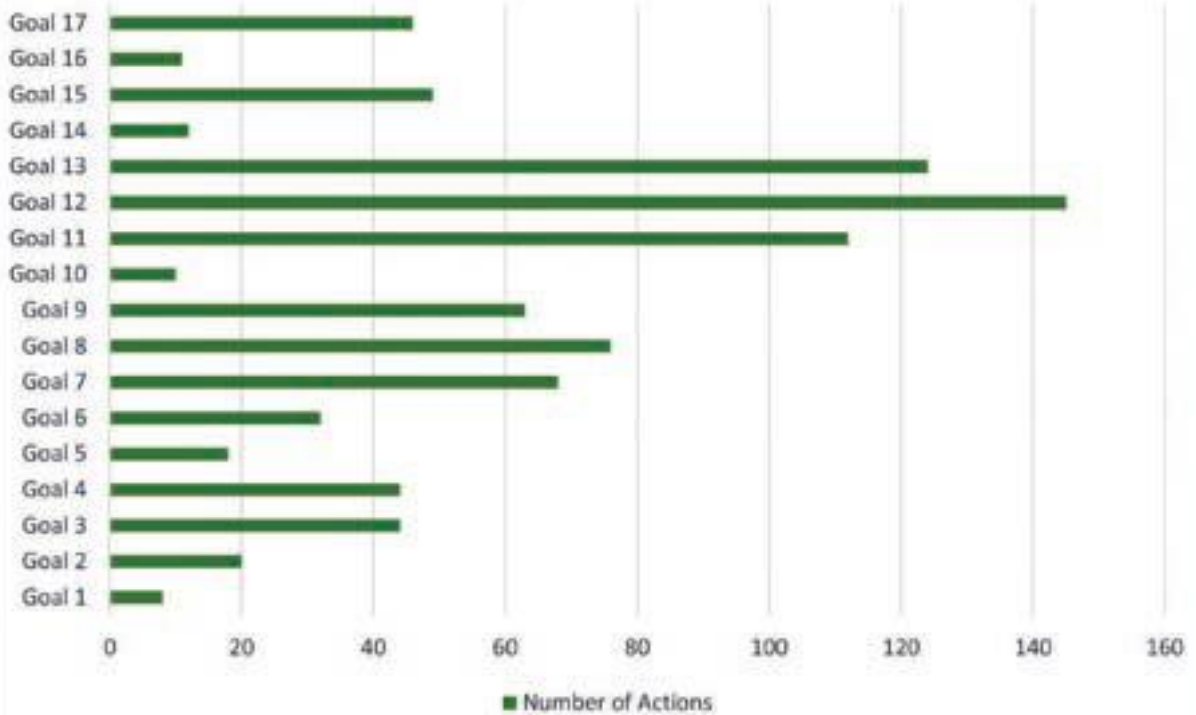
### Actions field



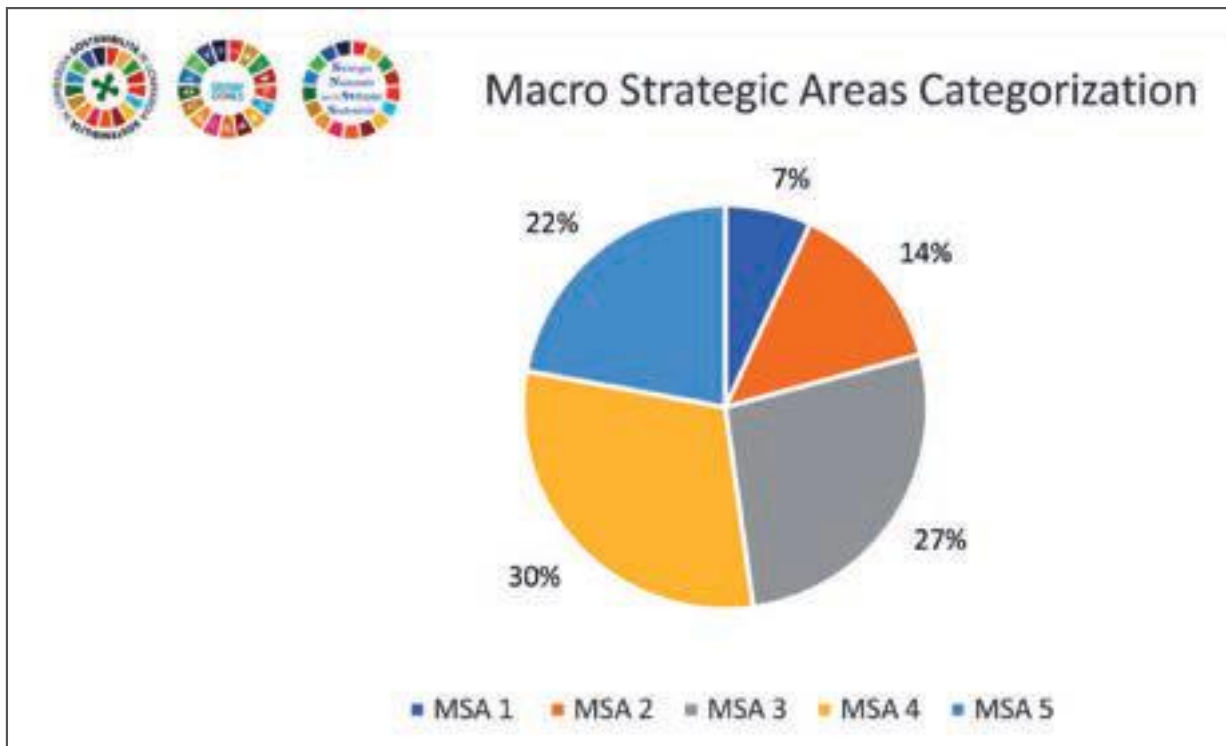
- Low carbon economy
- Training and Work
- Health
- Mobility
- Culture and Tourism
- Energy and Enviroment



### SDGs Categorization







The actions are directly related to the SDGs, the 5Ps of the National Strategy for Sustainable Development and the Strategic Macro-Areas (MAS) of the Regional Strategy for Sustainable Development.

MAS1: Health, equality, inclusion

MAS2: Education, training, work

MAS3: Development and innovation, city, territory and infrastructure

MAS4: Climate change mitigation, energy, production and consumption

MAS5: Environment, landscape, adaptation to climate change, agriculture



## Members' actions

Here below, a list of the most significant actions carried out by the subscribers of the protocol.



**MONTELLO S.P.A.** It's a private company that operates: (i) in the recovery and recycling of 765,000 tons / year of organic waste (FORSU) from separate collection (r.d.) and (ii) in the selection, recovery, and recycling of 350,000 tons / year of waste from plastic packaging from r.d.

The proposed action consists in the recovery and recycling of the biogas generated by the anaerobic digestion of organic waste from waste sorting to Biomethane, which is put into the network and returned to the territory for its use as an advanced biofuel for transport, with simultaneous recovery of carbon dioxide. intended for industrial / food use. From the aerobic treatment of the digestate, downstream of the anaerobic process, a high-quality organic fertilizer is also produced.



**ROELMI HPC** is a company specialized in the research, development, and production of ingredients for the Health and Beauty market. The company goal is to improve the quality of life, combining science and environmental preservation.

ROELMI HPC offers its network of local partners and customers (for a total of about 900 units worldwide) the ethical alternative in the field of cosmetic ingredients developed through circular economy processes, with the goal of achieving the most efficient results in final formulas, offering a responsible choice thanks to sustainable innovation. Each action in terms of developing sustainable ingredients is shared through specific documentation which, in detail, sets out the characteristics, benefits and applications of use. The digital channels are used as an immediate showcase in communication and, during the participation in sector fairs at national and international level, a timely communication of the results obtained is adopted in terms of development of new ingredients, and certification of effectiveness/performance aimed at increasing the added value for customers. The publication of technical-scientific articles in sector magazines, on the other hand, enters communication on classic channels to complete the dissemination of news.

Through its offer of cosmetic ingredients, ROELMI HPC intends to pursue the improvement of its footprint on the planet with innovations capable of acting positively on the ecosystem, understood as the union of several communities, which work in unison to improve the environment and human life.



**FONDAZIONE CARIPLO** is a foundation from banking origin committed to supporting, promoting, and innovating projects of social utility linked to art and culture, environment, social issues, and scientific research. The calls and projects of the Cariplo Foundation in the environmental area, involve the main actors of the territory, in particular public administrations, the third

sector and schools. They are encouraged to operate on the network, thus involving the local community. For initiatives in the field of sustainable agriculture, environmental education, the fight against climate change and protection of natural resources, the budget invested in 2021 was approximately 10 million Euro. The F2C – Fondazione Cariplo for climate project has been active since 2019 with the following objectives: The F2C – Fondazione Cariplo for climate project

has been active since 2019 with the following objectives: promoting mitigation and adaptation to climate change and increasing the knowledge and awareness of citizens, technicians, and policy makers about climate change.

These objectives are mainly pursued through the Climate Strategy call, aimed at supporting large territorial areas in the definition of a Climate Transition Strategy (STC) and in the implementation of some of the actions envisaged therein, including interventions for the reduction of climate change emissions, "mitigation of the impacts of extreme weather phenomena and an increase in natural capital. Thanks to two editions of the call for proposals, six initiatives have been supported and are currently underway.



#### REGIONAL AGENCY FOR THE PROTECTION OF THE ENVIRONMENT LOMBARDY

The main actions adopted in line with the principles of Sustainable Development include:

1. Set up of a specific Organizational Unit for Sustainable Development has been set up.
2. Promotion of smart working beyond the emergency phase, with the support of Bocconi University, to define the best organizational methods.
3. Establishment of the Network of Representatives for Sustainable Development which has proposed three further commitments for the Protocol (2021). The Network is developing actions on sustainable mobility (focus "Niguarda"), and has contributed to the drafting of the Home-Work Travel Plan (2021); an internal asynchronous distance learning course is being released for training on Sustainable Development issues; thanks to the Network, the "bicycle day" 2021 was promoted and implemented. The Network of Referents made it possible to systematize specific skills both at the territorial level (Departments) and at the central level (Thematic Sectors) to highlight the strong transversal nature of the theme of Sustainable Development that can only be tackled with a "multisolving" approach, that is, one that maximizes the effects of a single action on several themes.
4. To reduce the use of plastic, 800 water bottles with the ARPA logo were purchased to facilitate the supply of non-bottled water, and a water dispenser was installed in the Brescia office; a further 300 water bottles and another dispenser for the Varese office are in the process of being acquired; created the manifesto of the initiative: "We protect the environment. Always."
5. Participation in the Green School project; organization of a side-event of Forum for Sustainable Development 2020 and of an event in the Sustainability Education Fair (2021) in collaboration with FLA.
6. Regular participation in the coordination cabinet for sustainable development of Lombardy Region and in the Circular Economy and Ecological Transition Observatory.
7. Seminar dedicated to climate change for administrators and municipal technicians within the School for the Environment (06/2022).



**ENI**, an integrated company in the energy sector, is committed to the environmental sustainability of its products and has an interest in providing circular, innovative, and diversified solutions. As part of the training activities proposed for the Lombardy region, from January 2020 until March 2022, a total of 44 teaching hours were provided within the Medea, HSEQ,

Postmaster, Master Energy Innovation masters. The lessons addressed the principles of circular economy, the energy transition path at an international and European level and sustainable mobility initiatives in the context of the new corporate strategy.

The training activity in the school sector carried out with the Municipality of San Donato Milanese which sees the implementation of educational projects on the circular economy is of

particular importance. Within the initiative, there is an action to raise awareness on the correct management of waste.



**FONDAZIONE SODALITAS** is the reference partner for companies that consider sustainability a distinctive factor. It brings together 93 leading companies in the main sectors, representing an economic value equal to 20% of Italian PIL. It builds partnerships with associated companies for community growth.



Main projects:

- YOUNG PEOPLE AND WORK: 2,000 male and female students trained each year in employability skills in Italian schools.
- DIVERSITY: 800 companies and organizations adhering to the Charter for Equal Opportunities and Equality at Work.
- COMMUNITY: 200 organizations formed each year by companies to skills for social entrepreneurship.
- 20 corporate volunteering programs carried out every year.
- TERRITORY: 322 Italian municipalities participating in the CRESCO Award created with ANCI to promote the sustainable development of the territories.
- 126 companies participating in the first research on the commitment of companies to urban regeneration of the suburbs.

CAMPAIGNS FOR UNITED NATION AGENDA 2030:

- 150 business actions for a sustainable future participating in the Sodalitas Call for Future campaign.
- 33 business leaders and over 400 SMEs involved in ESG LAB, the laboratory developed with SDA Bocconi.
- 140 participants in 7 meetings of the Sodalitas Value Academy, the managerial training course on Sustainability.

In particular, the CRESCO AWARD Sustainable Cities, promoted by the Sodalitas Foundation with the patronage and collaboration of ANCI and the partnership of advanced companies on the Sustainability front, aims to enhance the innovative drive of Italian Municipalities and to reward the most effective initiatives in promoting the sustainable development of the territories.



**UNIONCAMERE LOMBARDIA** is the regional associative structure that brings together and represents the 9 Lombard Chambers of Commerce at a regional level, spreads experiences and promotes common projects, enhancing the autonomy of the individual Chambers.

ACTIONS IN ORDER TO PROMOTE CIRCULAR ECONOMY:

All the activities foreseen in the design phase were carried out with a final investment of € 143,000:

1. data analysis of waste production in Lombardy from MUD and Business Register sources, on a regional and provincial basis, to identify the sector of companies most involved and possible solutions to optimize the reuse of secondary raw materials within the production chains;
2. creation of 3 territorial focus groups, involving trade associations, public bodies, research bodies and universities to identify the environmental issues of greatest interest for the Lombardy Region;
3. realization of 19 webinars on Waste Management and Environmental Compliance and Circular Economy;
4. Specialized support: personalized technical support for the improvement of the project idea aimed at companies in the context of the tender "Innovation of the Circular Economy chains

- in Lombardy”; telematic helpdesk for questions on the administrative management of waste;
- n. 2 training cycles for professionals in the various areas of waste management;
- 5. communication made through institutional sites, the Ecocamere portal, social communication, newsletters, and press releases.



**ENERGETIC RESEARCH CENTER.** Through the research activity of RSE and its support to initiatives that share a focus on energy efficiency and innovation towards increasingly performing systems and compatible with the decarbonisation objectives, the actions presented are having on citizens, on the territory, as well as in

the industrial world, in companies and institutions, economic, social, and environmental benefits of great significance. A meaning consistent with the Sustainable Development Strategy promoted by the Lombardy Region. In fact, the spectrum of action of the initiatives presented by RSE and focused on sustainability is broad. The following are reported here: the development and dissemination of sustainable mobility, in its various forms and meanings, and of an experimental area at the RSE headquarters in Milan; experiences of energy communities; analyses on the correlation between energy poverty and health; the evaluation of the cost-effectiveness and impact of the infrastructure policies and measures that can be implemented to improve the efficiency of buildings (positive energy districts). The conversion of company fleets into electricity and the construction of an experimental area at its headquarters in Milan for the recharging of its electric vehicles, which integrates charging systems from different manufacturers, and which can be managed through a centralized system that optimizes its operation, allows RSE to analyse the main opportunities and criticalities, as well as to develop and test innovative infrastructure management solutions in the field.



**CISL LOMBARDY** represents workers and retirees with the aim of defending their interests and raising their economic and social conditions in a logic of solidarity and is divided into 8 territorial trade unions and 19 trade union federations. The management of the social / occupational risks connected to the transition processes imply an updating of the contractual skills of the trade unionists. On 20-21 February 2020, a Visit Study was organized at the EU Commission in Brussels to deepen the programming tools for the implementation of the European Sustainable Development Strategy, which involved 25 trade unionists. (Project funded by the EU Commission Representation in Milan).

From July to October 2020, in collaboration with ASVIS, a path of 8 meetings was carried out, attended by 25 union leaders of regional federations (of each product sector) and of the territorial trade unions of the Lombard provinces on the objectives of the UN Agenda 2030. (3200 euros the cost of the investment).

Since 2018 we have participated in the national festival organized by ASVIS, offering an annual seminar with which the themes of the trade union agenda in relation to the promotion of the SDGs are explored.

In collaboration with European trade union organizations in Italy, Spain, Bulgaria, and Romania, and with the support of the European trade union, the CAE project, the European pillar of social dialogue, was implemented from 2019 to 2021. The 48 hours of training (+ 8000 indirect users of the website [www.lescee.eu](http://www.lescee.eu)) had the objective of strengthening transnational bargaining on the issue of environmental sustainability. The total cost of the action was € 223,750.97.

The CAE project, carried out in partnership with CGIL UIL Lombardia, UGT and CCOO of Catalonia,



Podkrepa (BG), CSDR (RO) and the CES, involved delegates, workers of multinational companies and citizens, who met and exchanged experiences to increase knowledge about EWC tools. A final guide was prepared (200 printed copies), the creation of a website for the dissemination of the results (www.lescee.eu), 60 documents produced, with over 1000 downloads.



**EFAR EUROPEAN FEDERATION FOR AGRICULTURAL RECYCLING**, Association that brings together the major European operators in the agricultural recovery of organic biomass.

Actions implemented:

Use of 4.0 agriculture equipment for the agricultural use of biomass from waste in agriculture

- Recipients: EFAR and Farmers; Investment: € 70,000
- Communication: Press releases, demonstrations in the field
- Employ tractors and distributor wagons equipped with automations that apply robotics concepts and other technologies useful for the proposed objectives.

Scientific studies for the evaluation of the impacts generated by the recovery of biomass from waste in agriculture

- Recipients: EFAR, Bodies, Scientific world, Farmers, Public; Investment: € 300,000.
- Communication: Conferences and transmission of documents
- Completed all studies.

Evaluation of the environmental impact and potential eco-toxicity of "fertilizer matrices" and soils treated with such matrices

- Recipients: EFAR, Bodies, Scientific world, Farmers, Public; Investment: € 110,000
- Communication: Report, Conference
- The experimentation involved the eco-toxicological characterization not only of different fertilizer matrices such as Urea, Compost, Zootechnical digestate, Pork Waste, Sludge digestate, R10 Mud and Sludge defecation gypsum, but also of soil samples treated with the same. A scientific report collects the results of the tests carried out on the different matrices and on the treated soils, before distribution, after 15 days and 1 month after its execution.

Development of a technology for the use of CO<sub>2</sub> starting from sludge and digestates to obtain a corrective for soils

- Recipients: EFAR, Farmers, Authorities; Investment: € 2,000,000
- Product the corrective proposed at an industrial level, even if the technology is awaiting further regulatory clarifications.

Integrated digital platform for the enhancement of biosolids and corrective agents

- Recipients: EFAR, Farmers, Authorities, Scientific world, Public; Investment: € 500,000
- Communication: Presentations to Bodies, Demonstrations in the field, Conferences
- The first integrated digital platform for the traceability of the agricultural recovery chain was created and made operational. The tool will also be accessible to control institution.



**INTEGRATED IENERGY COMPANY** involved in the energy transition with concrete actions to achieve total decarbonisation of products and processes by 2050. In mid-July 2019 the Oilà project landed at the Eni site (refinery) in Sannazzaro de 'Burgondi, for the recovery of used cooking oils and of frying (so-called UCO, Used Cooking Oil) produced by employees in their homes. Yellow containers have been allocated inside the refinery, in which Eni employees will deliver the used cooking oils. Thanks to the agreement signed by Eni with CLIR, a public company that also carries out the activities relating to the management of the municipal solid waste cycle for the Municipality of Sannazzaro, the latter will deal

with the periodic emptying of the containers, through an operator adhering to the CONOE (National consortium for the collection and treatment of used vegetable and animal oils and fats) with which Eni has signed a collaboration agreement.

1200 people have been involved since July 2019 for a collection of about 1000L of used oil to be sent for recovery. The intent of the project is to give value to a waste, transforming it from a material that is potentially harmful to the environment into a new energy resource, applying the principles of the circular economy. Waste edible oils represent a valid raw material for the processing process of Eni's biorefineries, which use proprietary Ecofining™ technology to produce biofuels, with a reduction in the environmental impacts linked to both the biorefinery process and the raw material.



**GI GROUP HOLDING** is a global ecosystem of HR services and consultancy that supports the development of the job market by creating sustainable economic and social value, promoting a positive work culture, and helping to change people's lives. The project created by the Group

to help make Work Sustainable took the form of a series of initiatives dedicated to people, companies, and institutions.

Academy 100% Employability: we have started a training project - through Academy - which ensures the participants a permanent job. Find out more: <https://academy100.gigroup.it/>.

Women4: We promote the employability of women in sectors considered typically male. We are committed to debunking false myths and stereotypes: there are no jobs for men or women, but only opportunities to be caught Site visits from December 2021 to March 2022: over 22,000. Find out more: <https://women4.gigroup.it/>.

Gi Group Training Hub: professional and managerial training as well as the qualification and re-qualification of people has become a key element for the survival and evolution of every organization and must be pursued and supported with specific processes and tools capable of motivating and facilitating learning continuous not only on a personal level but also on an organizational level. Over 50 companies and interested partners and over 500 candidates have received or are receiving guidance services and "tailor-made" courses. All the initiatives implemented are communicated to the Gi Group Holding stakeholders through e-mails, social media, websites, and ad events *ad hoc*. Find out more: <https://traininghub.gigroup.it/>.



In **ELMEC SOLAR** we work with renewable energy, design, and installation of photovoltaic solar systems. We have chosen to dedicate ourselves to alternative energies because we are convinced that they are a necessary and conscious choice for the future. In 2021 we concretely supported companies in the province of Varese in the

construction of photovoltaic systems serving their production sites. 35 companies decided to cover their energy consumption with renewable sources. Total installed power of 4 MWp (average power 114 KW). Our company has decided to invest heavily in the internal training of its employees, in communication and in the creation of specific skills to achieve a common goal.



**CONFCOOPERATIVE OF LOMBARDY** is the regional structure of the Confederation of Italian Cooperatives, the main organization of representation, assistance and protection of the cooperative movement and social enterprises. It associates about 2,700 cooperatives. In the first phase, data collection (assessment) and related reprocessing actions were initiated, which made it possible to identify the sustainable "health" of



our offices and to have an eye on the project KPIs. The sustainability actions then contributed to implementing the guidelines identified during the planning stage:

**WASTE MANAGEMENT:** oriented towards an overall reorganization of the separate collection of offices (with guidelines, information signs, meaning of these actions, reflection on environmental sustainability).

**PURCHASING POLICY:** particular attention was paid to the choice of materials and their characteristics, including by way of example the type of paper to be purchased, snacks and drinks, the virtuous management of water use, the reduction the use of plastic and its recycling.

**GOOD PRACTICES POLICY:** training and awareness-raising policies have been implemented on the correct way to proceed with document printing, on energy saving on consumption attentive to contrasting waste in water management in meetings and offices. There were no training moments in the "traditional" sense, also given the pandemic context, but sharing in specific moments of coordination was important to follow up on what was planned. The main actions were monitored approximately every four months.



**TOURIST CONSORTIUM OF MIDDLE VALTELLINA** is a public body for tourism promotion that carries out actions in the sports, food and wine, trade fair and hotel sectors aimed at safeguarding and developing the territory in all

its aspects. We are achieving the first results with interventions on accommodation facilities, on the eco-mobility holiday proposal and on the distribution of green energy in strategic points of the area for the supply of electric cars, bicycles and means of transport.



**INSTM** is a consortium of 50 Italian universities in which research on advanced materials and related technologies is carried out. It promotes the research activity of the consortium universities by providing adequate organizational, technical, and financial support.

As regards the two proposed actions, the recipients were the industrial, production and research system and civil society. The

following indicators were chosen to quantify the effectiveness of the activities carried out in the last year aimed at the academic and industrial world: n. of projects managed: 95 (13 European, 9 national, 73 INSTM); n. of publications: 245; n. of scientific events sponsored or supported: 11; n. of prizes for young researchers: 5; n. of industrial orders and contracts: 138; n. of patents filed: 13. The Consortium organized, in January 2022, the conference "Advanced Materials and Green Processes for a Sustainable Society". Among the dissemination initiatives we recall the event "CIG-2020: catalysis at stake", the participation in the "2nd Regional Forum for Sustainable Development" and the Bioeconomy Day. On that occasion, a Digital Talk for research was broadcast and the Italian industrial development in the circular economy sector during which some of our projects were presented. INSTM gives visibility to its activities thanks to the INSTM website, which is registered, as a newspaper, in the Register of Communication Operators, on LinkedIn and with a bimonthly newsletter addressed to about 2000 subscribers. INSTM carried out press office activities in case of events / results (eg GASIFORMING patent). Lastly, work has begun for the preparation of a Sustainability Report for INSTM activities.



**UIL MILANO E LOMBARDIA:** reduction of consumption and CO<sub>2</sub> emissions through maintenance and installation of LED lighting systems, elimination of single-use plastics, installation of water dispensers connected to the water network for employees, operators and users of services, activation of training courses on sustainable development and sustainability for its employees and operators.

Actions which are intended to be promoted in all the offices in Lombardy by 2025.



**FINLOMBARDA S.P.A.** is a financial company of the Lombardy Region and a financial intermediary supervised by the Bank of Italy. Its institutional task is to contribute to implementation of Lombardy's economic development programs.

Finlombarda participates in the thematic working groups of the European Association of Public Banks and the National Association of Regional Financials. It supports the Lombardy Region in the selection of local projects in response to the Sustainable Development Goals of the UN Agenda 2030 for the Lombardy 2030 section (Open Innovation): in 2021, 54 initiatives were published, 12 of which on the education goal. It also coordinates the Simpler consortium (EEN - Enterprise Europe Network) which offers free support services to improve the level of maturity in the management of innovation and sustainability of SMEs. Finlombarda has reserved a plafond of 50 million euros to finance companies that adopt sustainable action as part of the "Minibond" initiative under management. It signed an agreement with SACE for the financial support of Lombard companies in strategic areas, including green investments: energy transition, pollution reduction emissions, freight transport efficiency, circular economy.

It promotes the culture of sustainability with publications of studies and insights. In 2021, around 80 sustainability-themed posts were published on the company's digital channels.



**COLDIRETTI LOMBARDIA** is a trade union organization representing people and companies operating in agriculture. It represents the rural world by enhancing agriculture as an economic, human, social and environmental resource. Coldiretti Lombardia is committed to the regional, political, and administrative authorities in the preparation of proposals oriented towards actions that intend to improve the economic and social conditions of the member companies in compliance with the objectives of the 2030 Agenda. It carried out actions of information and training for companies through the Lombard territorial structures on technologies for the containment of atmospheric emissions in the ordinary activities

of distributing effluents on agricultural surfaces, accompanying companies to new technological approaches, also supported by public funding. The aspects of circular economy also apply to the agronomic use of the maintenance of public and private green areas. In addition, to enhance the enterprises run by young entrepreneurs, an exhibition is promoted in which the enterprises that work and produce in an eco-sustainable way are rewarded in a specific category dedicated to "energy for the future and sustainability". Alongside its activity of a strategic-political-technical nature, Coldiretti has supported actions aimed at the consumer to transfer the technological and entrepreneurial choices adopted. It has done so through the education project for "Campagna Amica" and a publication dedicated to workshops inspired by the 17 objectives of the 2030 agenda by companies offering educational farm services. Information and dissemination of environmental impact improvement actions related to the distribution and burying strategies of livestock manure for proper agronomic management.



**NORDCOM** is a Digital Company with customized solutions that has been operating for more than 15 years alongside Transport Companies and Public Administration Bodies to win the challenge of digitization. The "Acqua in Borraccia"

project aimed at company employees, launched in December 2019, is aimed at discouraging the consumption and purchase of disposable plastic water bottles. An opportunity for everyone to adopt virtuous, responsible, and sustainable behaviour daily that has led to savings in a year of 26,000 bottles, equal to 242 kg of PET and more than 1.5 tons of CO2. The project was made public to employees with a personal internal communication, together with the distribution of the water bottles with the name and the company logo, to everyone.



The **NATIONAL CONFEDERATION OF CRAFT TRADE** of Small and Medium companies is a trade association. The CNA (National Confederation of Crafts and Small and Medium Enterprises) is an autonomous and democratic association.

Qualification, professional growth, and business development: training to compete. ACCADEMIA DEGLI IMPIANTISTI CNA / TTR Institute Busto Arsizio - VA - In a single laboratory all the best plant technologies available for practical corporate and individual courses.

The CNA project aims to give value to the professionalism of operators to increase their competitiveness on the market and equip them with the tools necessary to address new critical issues and consequently guarantee quality, efficiency, and safety to their customers.

The legislative choices related to the environmental emergency, energy saving, and safety and the continuous technological evolution require an ever higher and above all diversified level of skills and professionalism. The progressive use of systems powered by renewable energy sources and the overall rethinking around the building / envelope represent a real technological and cultural revolution. However, the actual construction of the system remains crucial, which - if of quality - returns standards of comfort, eco-compatibility, and efficiency. Considering two years of restrictions due to the pandemic period linked to Covid, 49 courses were held, involving 321 participants employed by plant installation companies for a total of 640 course hours provided.



**CONFCOMMERCIO OF LOMBARDY** created, through the 10 Lombard territorial associations that compose it, the regional representation of the associations of enterprises of the Lombardy service sector. Already in 2019, Confcommercio Lombardia has started a process for raising awareness and disseminating good practices in the field of environmental sustainability of tertiary companies, called "Obiettivo Sostenibilità". This project integrates with the actions

planned by our Organization in partnership with A2A Energia, which provide for an approach to green issues with a first questionnaire of 20 questions, to be completed independently to assess one's level of sustainability, at the address [www.cresciamosostenibili.it](http://www.cresciamosostenibili.it) . One of the scopes of "Obiettivo Sostenibilità" is the improvement of available energy costs, which can be achieved through the favourable agreement stipulated by Confcommercio Lombardia with A2A. Coherently, Confcommercio created the "Imprendigreen" entrepreneurial initiative, which is divided into a set of actions aimed both at raising awareness, training, and guide companies in the transition from a linear-economy model to a circular one, while seizing all the opportunities that European and national programs and funds will introduce in the coming years to innovate production, distribution and service offer models. The provided self-assessment tool, made up of 20 simple questions, allows entrepreneurs to evaluate the sustainability of their businesses and to obtain useful advice to improve the environmental impact.



**LOMBARDY ENERGY CLEANTECH CLUSTER (LE2C)** was founded in 2009 to support growth, innovation and regional competitiveness in the Energy and Environment sector. A "place" in which to develop research, innovation and business projects: [www.energycluster.it](http://www.energycluster.it)

1. The project VIDA, which ended in September 2021, financed 62 innovative projects of European SMEs; of these, 9 Italian projects were financed, for a total of approximately € 440,000. Project ideas and impacts were disseminated in an event that saw the participation of 60 stakeholders, companies and policymakers from the regions involved.
2. As part of the R-ACES project, 3 IT tools have been developed to facilitate energy cooperation

between energy-intensive industries, which promote the Lombard Ecoregion that reduces CO<sub>2</sub> by at least 10%. In the Bergamo area, a paper mill was put in contact with A2A for the recovery of excess heat and to feed it into the current district heating network. In 2021 the results of the project were disseminated in 7 European conferences, reaching 590 stakeholders from 13 countries.

3. "Emerging and priority micropollutants" Working Group (GdL-MIE) was set up by the LE2C Cluster in 2018, with the support of the Region. In 2020 LE2C publishes the "Emerging Pollutants" Report (over 700 downloads) which contributes to strategies for water protection and is aimed at public administration, integrated water service managers, companies to get to citizenship. The results were presented in 3 international fairs, 3 sector conferences and dozens of dissemination events. Furthermore, the work of the WG-MIE was collected in the "Emerging Pollutants" Report (2020) <https://tinyurl.com/bdezdpbh>. Today the GdL-MIE has started the second phase of the project to address in more detail the problem of the diffusion of micropollutants and microplastics in Lombard waters.



**CONFINDUSTRIA OF LOMBARDY** is the regional representation of Confindustria which brings together the 9 Lombard territorial associations, 13 thousand companies and about 700 thousand employees. Confindustria Lombardia, together with the local

associations, the Digital Innovation Hub Lombardia (DIH), the Enterprise Europe Network (EEN) has achieved the objectives of the "Confindustria Lombardia for Sustainable Development" program of commitments:

- Collecting over 50 sustainability best practices, with reference to the SDGs, with specific projects, such as: Confindustria Lombardia for sustainable development, EEN, AlplinkBioeco, DIH Experience Blog 4.0, World Manufacturing Forum.
- Proposing, in collaboration with institutional entities, formal agreements, scientific research, in-depth and training meetings in support of the Lombard industrial system, such as: the collaboration agreement with banks; the research "Climate change and business strategies" with the Bank of Italy; seminars on topics related to the environment (e.g. on waste management and cycle, on ESG - Sustainability and Finance), training, internationalization, innovation, projects related to PNRR.
- Supporting Lombard companies in the scouting and pre-feasibility analysis with respect to European, national and regional tenders, calls and funding projects through a) awareness actions (eg webinars on the LIFE program); b) participation in supply-demand matching platforms; c) assistance in over 200 ad hoc assessment paths proposed by the EEN network and the Lombardy DIH, on the subject of innovation, sustainability and digitization.

Despite the difficulty due to the emergency period due to the pandemic, the most relevant and significant action was the communication campaign on YOUTUBE "#GlobalGoals - Confindustria Lombardia for the UN Agenda 2030 - Sustainable Development" which saw the testimony of 12 companies, one or more representing the Global Goals identified by the program of commitments (3-4-5-6-7-8-9-11-12), as best practices of the 360-degree sustainability process of the Lombard Confindustria system, which have made it possible to highlight the competitive advantages deriving from the adoption of sustainable practices and to sensitize companies to adopt practices that meet the needs of the present while protecting future generations.





**UNINSUBRIA:** Public university founded in 1998 with headquarters in Varese, Como and Busto Arsizio, 7 departments in various subject areas, 12,000 students, 38 bachelor's and master's degree courses, 20 medical specialization schools, 8 doctoral schools and 10 masters. Uninsubria has included the pursuit of the Sustainable Development Goals (SVS) among the most relevant missions indicated in the University Strategic Plan 2019-2024. This mission is carried out in four different areas: making the university more sustainable as a structure, that is, decreasing its carbon footprint (eg, energy consumption, sustainable mobility, etc.), doing interdisciplinary research on the issues of sustainable development and climate change; innovating the training offer and with the Third Mission, organizing cycles of seminars, events and applied projects and involving local stakeholders and schools. Starting from 2019, a specific Rectoral Delegation was created on these issues and an office dedicated to sustainability was set up; an Antarctic office was created for scientific research on global climate change. The aforementioned are only examples of the work carried out, which, depending on the specific area of reference, involved different subjects and investments. For communication, the dedicated page "Sustainable Uninsubria", social networks and news on the site are used. Regarding reporting, some qualitative / quantitative indicators have been created for monitoring the objectives defined by the University Strategic Plan, which are periodically updated. We actively participate in the RUS (Sustainable Development University Network), also in the indicators table. Of particular relevance is the Green School Project (GS), aimed at education and awareness of schools and citizenship in schools and citizenship with good CO<sub>2</sub> reduction practices; born in VA in 2009, it was extended to Lombardy in the school year 2019-20, thanks to the 2-year funding from AICS. The project is still active in 8 Lombard provinces with its own resources. Uninsubria is its founder and member of the Technical Scientific Committee (with the Varese Province, CAST, Agenda 21 Laghi, JRC Ispra).



**ALTROCONSUMO:** is an independent consumer organization, whose mission is to inform, assist, defend and represent consumers and their rights in dialogue with institutions and businesses. The actions to implement the commitments undertaken with the Sustainable Development Protocol, in part aimed at making the association's activity more sustainable, reducing its environmental impact and the use of resources, and in part were aimed at raising public awareness of its own affiliates and more. Covid obviously influenced the results estimated at the beginning, at least in some of the actions described, while it was irrelevant on others, which provided the expected results. Thus, the reduction in water consumption, resulting from the renovations and innovations introduced, counts 12,000 m<sup>3</sup> / year of H<sub>2</sub>O saved in the 3 years preceding Covid. Then smart working was introduced, and the offices remained practically empty. The "green commitment" to produce magazines sent exclusively by subscription has instead made it possible to save the equivalent of 6 t / year of plastic even during the years of Covid, for a total of 17 tons of plastic from June 2019 to the end April 2022. The Altroconsumo Forest has exceeded 10,000 trees for a total avoided CO<sub>2</sub>, in the first 10 years of plant life, equal to 1,605 t (calculated with the GlobAllomeTree database). Less Plastic in the Municipality was affected by the Covid lock-down, but still reached students and citizens of the 5 municipalities involved. The project produced information materials available to all and a handbook to reproduce the initiative in other territories.



**LOMBARDY FOUNDATION FOR THE ENVIRONMENT (FLA)** s(FLA) supports governmental and all other kinds of local actors in taking care the environment.

It offers scientific and projecting skills useful for activating sustainability choices and policies. Reported actions:

A Restoration project of a green belt in Viale Fulvio Testi in Milan, within the scope of making cities and human settlements inclusive, safe, durable, and sustainable by adopting urgent measures to combat climate change and its consequences.

Preparation of the adaptation plan of the Municipality of Varese, as part of the Action Plan for Sustainable Energy and Climate (SECAP) of the Municipality of Varese.

REC – Rete Ecologica Ca' Granda: the project's goal is creating a system of ecological connections in a West-East direction in the south of Milan, connecting the main natural reservoirs linked to the major waterways (Ticino, Southern Lambro). ERMES- Educational Remote Multi-Experiential Science Flabs @ home, a new and creative way to bring the educational scientific laboratories of the Lombardia per l'Ambiente Foundation directly into the classroom.

CLIMADA Project - The climatic and environmental reconstruction of the Adamello area and the Central Alps. The activity consists in the reconstruction of the climatic evolution of the last centuries with reference to the effects of climate change in high mountain areas.

Of prominent importance is the "PIANTALI" project: THE NEW REGIONAL ECOLOGICAL NETWORK STARTS FROM CORMANO TO JOIN THE TRENORD RAILWAY NETWORK. With over 1200 essences planted in Cormano, the project created for Trenord by the Lombardy Foundation for the Environment in the broader "FILI" context of FNM enters into operation. A green area of 41 thousand hectares that will grow along the Lombard railway network, making the railway ecosystem even more sustainable. This is the heart of the "Piantalali" initiative, born and implemented thanks to the collaboration of FNM, Trenord and the Lombardy Foundation for the Environment as part of the FILI urban and extra-urban regeneration project. The first seed of the project - which will bring thousands of new trees and shrubs in 24 municipalities crossed by the FERROVIENORD network - was sown in Cormano, where reforestation and cleaning of uncultivated green areas were started in March.



**POLITECNICO**  
MILANO 1863

**POLYTECHNIC OF MILAN** is a public science-technology university that trains engineers, architects, and designers. It has an innovative vocation in teaching and research, with a strong link with industries and the international context.

Reported actions:

Drafting of programmatic documents and action plans on the most urgent issues (Gender Equality Plan, CO<sub>2</sub> Emissions Mitigation Plan, Home-Work Travel Plan). Development of reports for monitoring and communication purposes (Environmental Sustainability Report, SDGs Report @Polimi). Implementation of communication and awareness raising initiatives and events, within the Sustainable Campus project. Financing and development of over 50 responsible research projects over the 8 editions of the Polisocial Award. Opening of two Off Campus spaces in the city of Milan, where services were provided to the public and educational initiatives for the inhabitants. Implementation of innovative building interventions characterized by attention to energy saving, sustainability and liveability of spaces as part of the VIVIPOLIMI. The project recipients of the actions of the Politecnico di Milano for Sustainable Development are primarily the University community (students, professors, researchers, administrative staff); to these are added the inhabitants of the city of Milan (Campus and Off Campus), and of the Municipalities that host the Territorial Poles. The training and dissemination events are open to everyone. The communication of the activities and the results took place through the institutional website of the University, the sites dedicated to the various initiatives and the respective social channels.

The most important action is the Sustainable Campus project, due to the variety of activities and projects proposed on the relevant issues and in particular water, mobility, and circular



economy, which have made it possible to reach a very large number of recipients; for the large number of communication and awareness-raising initiatives (social channels, Sustainability Days, participation in all the reviews of the ASVIS Sustainable Development Festival, Weeks European Mobility).



**ENEA:** national agency for new technologies, energy, and sustainable economic development, is a public law body aimed at research, technological innovation, and the provision of advanced services to businesses, public administrations and citizens: <https://www.enea.it/en>. Working with Lombard stakeholders, the actions have allowed the transfer and dissemination of technologies and knowledge to the Lombardy production system (ATELIER - Technical and training activities for the development of entrepreneurship on the circular economy; CREIAMO - Circular economy of the olive and wine supply chains), to the PA (PECC - Point for Energy and the Climate for Municipalities), to citizens (Construction of a metropolitan One Stop Shop to support energy redevelopment of buildings) as well as to doctoral students (Collaboration agreement for the development and strengthening of laboratories of ENEA research and for the enhancement of human capital) in the general framework of the transition towards sustainable production and consumption models. Actions took the form of 10 webinars for SMEs, 6 training meetings in municipalities, creation of the "Energy Wall", opening of 1 Energy Desk (Monza) and 3 ENEA Laboratories, co-financing with infrastructures in the advanced R&D sectors, as well as co-tutoring of 20 doctorates and 60 scientific publications. All actions were promoted through the ENEA information channels (news, website, social network) as well as on the Open Innovation platform of the Lombardy Region, during the Ecomondo Fair and during the Forum for Sustainable Development as well as in national and international conferences.



Founded 40 years ago, the **UNIVERSITY OF BRESCIA** is a "free learning community" that expresses its social responsibility through inclusion and integration. The purpose of the University Plan for Sustainable Development is to transversally promote the application of the principle of sustainability in the processes, functions, and activities of the University, from teaching to research and the third mission. At the same time, the University promotes social cohesion and inclusion, the reduction of inequalities, the promotion of cultural growth and sustainable economic progress of the society. The University Plan makes the 17 Sustainable Development Goals of the 2030 Agenda its own, declining them into six thematic areas. For each area, a specific long-term strategy and an annual action plan are defined, as well as a manager within the University Commission, articulated on four levels. The working and analysis method applied with the Plan then inspired other relevant initiatives for the sustainable development of the territory, such as the elaboration of the Sustainable Development Strategy for the province of Brescia.



**ANCE LOMBARDY** is the regional representative body of building contractors. It examines, deals with, and coordinates the issues of interest in the sector in agreement with the Lombard Territorial Associations, maintaining a constant relationship with the National ANCE.

1-ANCE internal communication: numerous webinars were organized on various topics concerning sustainability: urban regeneration (30), energy efficiency (40), environment (60), technology and innovation (30), safety (50+). Numerous updates disseminated through websites and associative magazines. Organized continuous and professional training activities for professionals and promoted digitization initiatives (eg "Check").

2-ANCE external communication: dedicated columns were launched in the context of local television programs, newspapers / magazines and industry websites. Taken part in local work and discussion tables (eg "There is Milan to be done" and "Restructuring Como") and entered into agreements with the Chamber of Commerce. Two competitions aimed at lower secondary schools were organized.

3-Collaboration with credit institutions: agreements have been signed that provide support branches for access to credit and observers for analysing the sustainability of the real estate market.

4-Home value +: agreement to promote energy efficiency (beneficiaries to date about 50 condominiums). Agreements signed for the use of energy from renewable sources on site.

5-Aggregate Market: project launched and available throughout Italy through the O.R.So.

6-Research activities: five Lombard universities research activities on circular economy, C&D waste recovery and digitalisation have been funded; participation in: two university researches, three international projects and numerous working groups.

The "Market Inerti" is a project promoted by ANCE Lombardy and Lombardy region. It concerns a platform for the dissemination of information on the availability of recycled aggregates on the market (with CE, DOP, transfer test and other possible certifications) to be used in place of the natural quarry material. The use of the platform is free and voluntary for all users (producers and users) of the Regions who use the O.R.So.



**ACQUE BRESCIANE** is the company that deals with the integrated water cycle in the province of Brescia and manages the service in 95 municipalities.

1. Reduction of water losses, with the aim of reducing current network losses by 50%. In 2021 Acque Bresciane reached and exceeded the target relating to its annual KPI linked to this action, replacing 28 km of obsolete networks (KPI 2021 equal to 23 km).
2. Improvement of water quality, with the aim of reducing non-potability to 0%. To act on this problem, Acque Bresciane undertakes to implement the Water Safety Plan (PSA) for each drinking water system managed. In 2021, the reference KPI for this action and relative to the percentage of the population involved in PSAs grew to 15% of the total users, reaching 81,807 citizens.
3. Reuse of water and purification, with the aim of eliminating infringements. In 2021 Acque Bresciane resolved 4 out of 15 remaining infringements, moving towards the resolution of all of them.
4. Promotion of sustainability, with the aim of further integrating sustainability into one's business. In 2021, in Acque Bresciane, sustainable purchases increased from 50% to 80% of the total value of orders and contracts entered by the company, exceeding the annual growth target linked to the KPI of 70% overall.
5. Reduction of emissions, with the aim of achieving 100% green vehicles. In 2021, Acque Bresciane's fleet of green vehicles increased from 14% to 18% of the total company fleet, reaching the annual growth target linked to the KPI.

Among the actions developed by Acque Bresciane, the improvement of water quality (objective 2, *see above*) has a role of primary importance, aimed at reducing the purchase of plastic bottles and encouraging the consumption of water for food use. In fact, Italy, while relying on high quality water from the water supply network, remains the first country in the world for consumption of bottled mineral water.

Acque Bresciane considers the PSA a fundamental tool, as it not only allows to improve the safety and quality of the water, but also to predict risks in the long term.

# Deloitte.

**DELOITTE** is one of the largest companies in professional services for businesses, settled in over 150 countries and territories. The Deloitte network brings high quality knowledge and services to its customers and today employs over 9,000 people in Italy. Deloitte has launched a training and awareness program on the environment and climate change globally, which is mandatory for all its employees. The course developed together with WWF is delivered online and is an opportunity to learn about the risks deriving from climate change and a guide for adopting responsible behaviour, at work and at home. This initiative is part of the World Climate environmental strategy, aimed at addressing sustainable choices inside and outside the organization.

Deloitte people also could join Smart Working, a useful facility for their well-being and the reduction of the environmental impact of local mobility, with the same objective a 100% green company car list (hybrid and electrical cars).

Thanks to the Volunteer Hub, the volunteer program of the companies of the Deloitte network in Italy and the Deloitte Foundation, the Deloitte people can also personally engage in social responsibility and environmental sustainability activities to contribute to a better future for all. The activity is carried out in collaboration with Third Mission entities such as Worldrise (raising awareness on environmental issues), Recup (recovery of food surpluses) and Equoevento (support for organizational processes).

In addition, Deloitte distributed company smartphones that are linked to a charity initiative that supports the healthcare system. The climate change course was attended by over 4,500 Deloitte people in Lombardy, more informed and aware citizens who live and work in the Region and can raise awareness of other people inside and outside the organization. Smart Working is open to around 5,000 Deloitte employees in Lombardy. The company mobile phones listed above are approximately 2,000 units.



**TERCHIMICA S.P.A.** is a company based in Bergamo's province, leader in the production of high-tech additives for asphalts and technologies with reduced environmental impact. For every km of road built with Gipave® we recover 20 tons of recycled plastic, we save 70% of CO<sub>2</sub>eq and we do not release microplastics. Furthermore, the floors made with Gipave® are 100% recyclable, limiting the waste of non-renewable natural resources and eliminating energy consumption. We contribute to developing an infrastructural system that guarantees environmental, social, and economic benefits.



**WAY2GLOBAL** is a woman start-up born as a Benefit Company that helps companies to enter in the international market throughout translation services.

"Sustainable reborn" after 30 years of traditional business, we combine social impact and profit by generating inclusive prosperity.

Below are the main results of the various actions taken:

## Way2Academy

- Results: 60+ retrained translators with digital skills.
- Investment: 5200 euros (platform and video).
- Recipients: translators who have lost their jobs with the pandemic.
- Communication: Way2Global online channels, STEM in the City Municipality of Milan, STEAMiamoci di AssoLombarda / Confindustria, Constructive Journalism (Italy) and Constructive Network (USA).

## Made in B Italy

- Results: Co-founding of AssoBenefit, launch of the Made in B Italy book on the Italian Stock Exchange for Bookcity, mission to EXPO Dubai to export Benefit Companies as sustainable

companies, viaticum of female empowerment.

- **Investment:** 8000 euros (book and events organization).
- **Recipients:** Entrepreneurs to convert businesses into Benefit Companies and do business with a social impact.
- **Communication:** Way2Global and AssoBenefit online channels, Bookcity review, media. Reporting: DNF Way2Global.

#### **Green Translations**

- **Results:** Decarbonisation of our business 30 years ahead of EU targets, a Climate Positive company from December 2021.
- **Investment:** € 8500 (emissions inventory, certification, forestation, and carbon credit)
- **Recipients:** Environmental capital and the supply chain we involve in good green practices.
- **Communication:** Online channels Way2Global, interview, conferences and testimonials.



**PLENITUDE** is the company 100% owned by Eni SpA. The company is involved in the renewable energy production; it provides the sale of gas, electricity and energy services and integrates a network of charging points for electric vehicles.

Plenitude is also a Benefit Company. With reference to the residential customer segment, Plenitude offers solutions for the energy and anti-seismic requalification of both condominiums and single-family buildings and villas, through the product called "CappottoMio". This solution, which can benefit from the current tax incentives related to energy class improvements (Superbonus 110%, Ecobonus and Sismabonus), provides for the implementation of different types of intervention, such as: thermal insulation of facades and roofs with "external insulation" systems", In particular compliance with the CAM requirements, that is the certification that requires the use of materials containing a minimum percentage of recycled materials, and the insulation of the walls; the requalification or replacement of heating systems with "hybrid" systems consisting of a heat pump integrated with a condensing thermal module or only with centralized and autonomous condensing boilers; replacement of fixtures; the anti-seismic consolidation. The interventions carried out in 2020 and 2021 made it possible to redevelop the buildings making them more performing by significantly reducing primary energy consumption, even over 30% -40%.

## Acronyms used in the document

ANCI – Associazione Nazionale dei Comuni Italiani (National Municipalities Associations in Italy)

AQST – Accordo quadro di sviluppo territoriale (Framework Agreement for Territorial Development)

ARPA – Agenzia Regionale per la Protezione dell’Ambiente (Regional Environmental Protection Agency)

ATS – Agenzia di Tutela della Salute (Healthcare Protection Agency)

CAM – Criteri ambientali minimi (Minimum Environmental Criteria, the environmental requirements applied to public purchases)

CER – Comunità dell’energia rinnovabile (Renewable Energy Community)

CERL – Comunità Energetica Regionale Lombarda (Lombard Electrical Community, a tool for promotion and coordination of CERs in the region)

CIP – Comitato Italiano Paralimpico (Italian Paralympic Committee)

DASU – Dipartimento di Architettura e Studi Urbani presso il Politecnico di Milano (Architecture and Urban Studies Department of Milan’s Technical School)

DEFER – Documento di economia e finanza regionale (Regional financial-economic document, which contains the guidelines for annual planning of the Region’s expenses)

ERSAF – Ente regionale per i servizi all’agricoltura e alle foreste (Regional body for agricultural and forestry services)

ESG – Environmental, Social and Governance

FLA – Fondazione Lombardia per l’ambiente (Lombardy’s Foundation for the Environment)

GPP – Green Public Procurement

leFP – istruzione e formazione professionale (Education and vocational training)

ISPRA - Istituto superiore per la protezione e la ricerca ambientale (Higher institute for environmental protection and research)

ISTAT – Istituto nazionale di statistica (National Statistics Institute)

ITS – Istituti Tecnici Superiori (Technical high schools)

MiTE – Ministero della Transizione Ecologica (Ministry of the Ecological Transition)

MiSE – Ministero dello Sviluppo Economico (Ministry of Economic Development)

Move-In – Monitoraggio dei veicoli inquinanti (Monitoring of polluting vehicles, an experimental project for controlling vehicles’ emissions)

NADEFER – Nota di aggiornamento al documento di economia e finanza regionale (Update draft of the regional financial-economic document)

NEET – Neither employed nor in education or training

OCSE – Organizzazione per la cooperazione e lo sviluppo economico (OECD)

OSN – Obiettivi strategici nazionali (National strategic goals, the goals of the National SD Strategy)

OSR – Obiettivi strategici regionali (Regional strategic goals, the goals of the Regional SD Strategy)

P\_I, P\_II... – Reference to the e 5 Ps of Agenda 2030: Planet, People, Prosperity, Partnership

PA – Pubblica Amministrazione (Public Administration)

PAR – Piano d’Azione Regionale (Regional action plan)

PLIS – Parco locale di interesse sovracomunale (Local plan of multi-municipal interest)  
PNRR – Piano Nazionale di Ripresa e Resilienza (National Recovery and Resilience Plan)  
POR FESR – Regional Operative Plan for the European Regional Development Fund, defining the guidelines for allocation of the European resources assigned to regions for the local development  
PRIA – Piano Regionale degli Interventi per la qualità dell’Aria (Regional plan for air-quality measures)  
PRS – Programma Regionale di Sviluppo (Regional Development Plan, the main tool for regional policy programming)  
RUS – Rete delle Università per lo sviluppo sostenibile (Network of universities for SD)  
SDG – Sustainable Development Goal  
SILC – Statistiche su reddito e condizioni di vita (Statistics on Income and Living Conditions)  
SNSvS - Strategia nazionale per lo sviluppo sostenibile (National Strategy for Sustainable Development)  
SRSvS - Strategia regionale per lo sviluppo sostenibile (Regional Strategy for Sustainable Development)  
UPL – Unione delle Province Lombarde (Union of Lombard Provinces)  
VAS – Valutazione Ambientale Strategica (Strategic Environmental Assessment – SEA)



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Si ringraziano i colleghi della DG Ambiente e Clima, della Presidenza e delle altre Direzioni Generali e degli Enti del Sistema Regionale che hanno fornito contributi sulle attività di loro competenza, in particolare a PoliS Lombardia per i dati sul posizionamento.

Si ringraziano, inoltre, i referenti dei soggetti sottoscrittori del Protocollo regionale per lo sviluppo sostenibile, per la rendicontazione delle azioni compiute in seno al Protocollo.

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Lombardia



# VOLUNTARY LOCAL REVIEW 2022

Regione Piemonte  
Città metropolitana di Torino





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## PREFACE

The development process of the Regional Sustainable Development Strategy (RSDS) and of the Metropolitan Sustainable Development Agenda (MSDA) started within the framework of the activities implemented by the Italian Ministry for Ecological Transition (MET), and involving all the Italian Regions and Metropolitan Cities, to ensure the territorialization of the National Sustainable Development Strategy (NSDS). MET is supporting the work for the preparation of the regional and metropolitan documents through a process that, at the regional level, guarantees the coherence of sustainability policies among the different territorial levels, within the framework of the different competences.

The processes started at the regional and metropolitan scale are not fully paired in terms of time: the Piemonte Region started its activities in the last quarter of 2018, while the Metropolitan City of Turin at the beginning of June 2020. From an operational point of view, this allowed the Metropolitan City to start its work when the main elements of the Regional Strategy were already available to be used as reference points.

Both Bodies concretely work with the Piedmontese research system in order to support the territories and local communities in the transition path towards sustainable development. For the elaboration of strategic documents, IRES Piemonte (Institute for Economic and Social Research) was involved from the outset with specific collaboration agreements. In addition to IRES, the Regional Agency for the Environment (ARPA Piemonte) and the Piedmontese University system are involved; other important stakeholders in the research sector will be involved in the future.

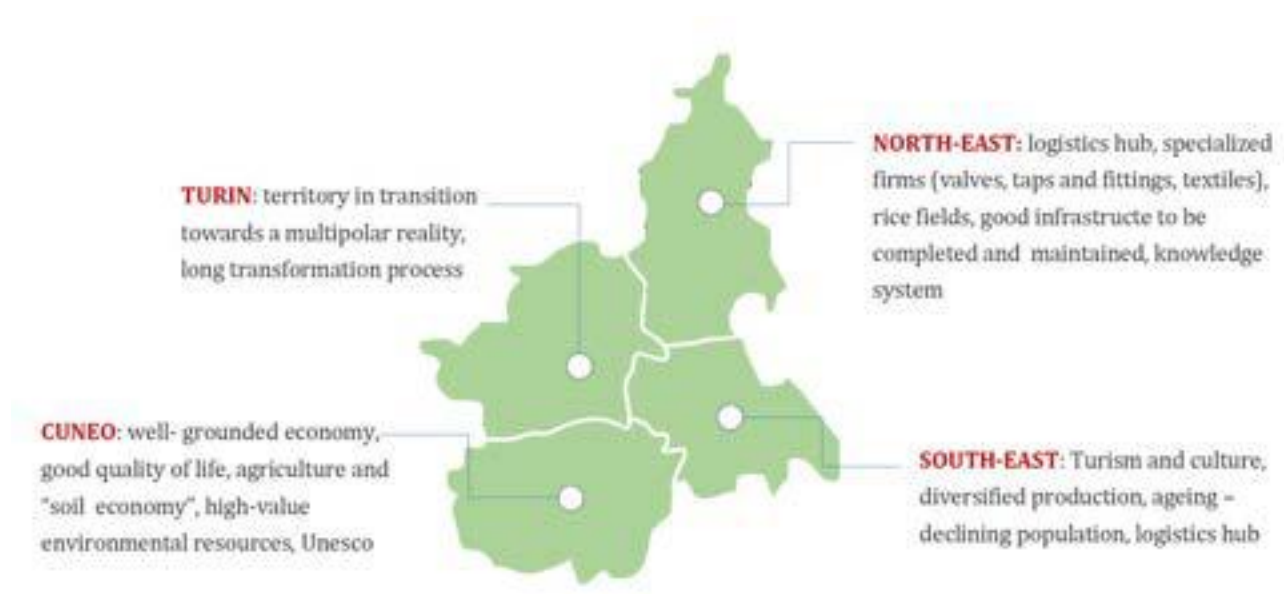
The Voluntary Local Review was designed and drafted jointly by the Piemonte Region and the Metropolitan City of Turin to highlight and develop connections for guaranteeing the coherence necessary to successfully territorialize, at all levels, the objectives of the 2030 Agenda for sustainable development.

# 1

## The Piemonte Region and the Metropolitan City of Turin: the context

### 1.1 Territorial context

The Piedmontese landscape is very heterogeneous not only from morphological point of view (43,2% of the territorial surface is covered by mountains, 30,3% by hills and 26,5% by plain), but also in relation to its socio-economic traits and its environmental features. It is a diversified territory, including urban (with medium and large cities), mountain and rural areas. To allow the analysis of such a complex reality, the main regional territorial features are synthetically described in the picture below, showing a partition of the regional territory in Quarters.



**FIG. 1 - The Piedmontese Quarters**

Source: IRES Piemonte<sup>1</sup>, Progetto Antenne

The **Turin Quarter** (corresponding to the territory of the Metropolitan area of Turin) is a territory in transition which is strongly characterised by the presence of Turin, its capital city. The long transformation, which started in Turin at the beginning of the '80s (in relation to means of transport and consumption, lifestyle, demography), created the preconditions for the cultural transformation policies of the '90s and 2000s. However, it appears that these transformations have reached a turning point, in which positive results and the achievement of a high point in the "product cycle" need a new phase in the implementation of strategies. It is necessary to consider not only the polycentrism typical of the metropolitan area (including Turin as a central point, where services and "rare" and specialized activities such as universities, research, health services concentrate, and small and medium towns organised in two rings - the valley floor one and the medium-valley one), but also the territorial differences between the capital city, the metropolitan area, and the mountain, hill and plain/rural

<sup>1</sup> [Piemonte Institute for Socio-Economic Research](#)



areas. The territory and its development therefore need to be reconsidered in relation to the possible exchanges between the metropolitan area and the mountain/rural areas, without forgetting the periurban contexts which surround cities and merge with the rural landscape.

The **Cuneo Quarter** (corresponding to the Province of Cuneo) features a high quality of life; the productive system is among the most solid at the regional level, with high territorial, sectorial and dimensional diversification. Within the productive system, the tourism-agricultural-food value chain stands out. The development process underwent by the Quarter suggests that a new “soil economy” is growing: it is a value chain which starts from agriculture and expands into other fields, behind what has been defined as the “taste economy”, linking the primary sector to the industrial one (in relation not only to food) and the tertiary one, with clear benefits in terms of local development processes. The Quarter plays an important role as a binder between two main routes: the South of France and the Ligurian port system.

The **North-East Quarter** (corresponding to the Provinces of Verbania, Vercelli, Biella and Novara) has a polycentric nature. Its strong manufacturing legacy (household, taps and fittings, textile districts) with high international profile has recently started to undergo a process of productive reorganization looking for new opportunities for its market, penalised by an inadequate development of the business service sector. The knowledge system is strong and shows a good development potential: from Città Studi in Biella to the medical-pharmaceutical hub in Novara and Vercelli. A strategic element of the territory linked to its location is its role as a logistics hub (on the Suez-Genoa-Rotterdam axis, well-connected to Genoa port and to Alessandria dry port, close to Malpensa International hub and to the high-speed train station).

The **South-East Quarter** (corresponding to the Provinces of Asti and Alessandria) shows strong agricultural features and a substantial development of the manufacturing sector, penalised by the small size of the firms. While the Alessandria area is still partly dealing with her manufacturing past, undergoing a process of gradual decline/transformation, the Asti territory is more projected towards a development model based on tourism and environment, joining efforts with other initiatives in the Langhe and Roero area which has been recognised as Unesco site. There are development opportunities in relation to the large European and trans-continental transport lines, via the Genoa port; moreover, there is a good potential for the setting up of a logistics hub at the European level, which could be strategically linked to the Novara logistics hub<sup>2</sup>.

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<sup>2</sup> The analysis done for the Quarters derives from the studies carried out by IRES Piemonte within the framework of [Progetto Antenne](#) (Rapporti di Quadrante Sud-Est, Sud-Ovest, Nord-Est e Nord-Ovest, IRES Piemonte 2018-2021)

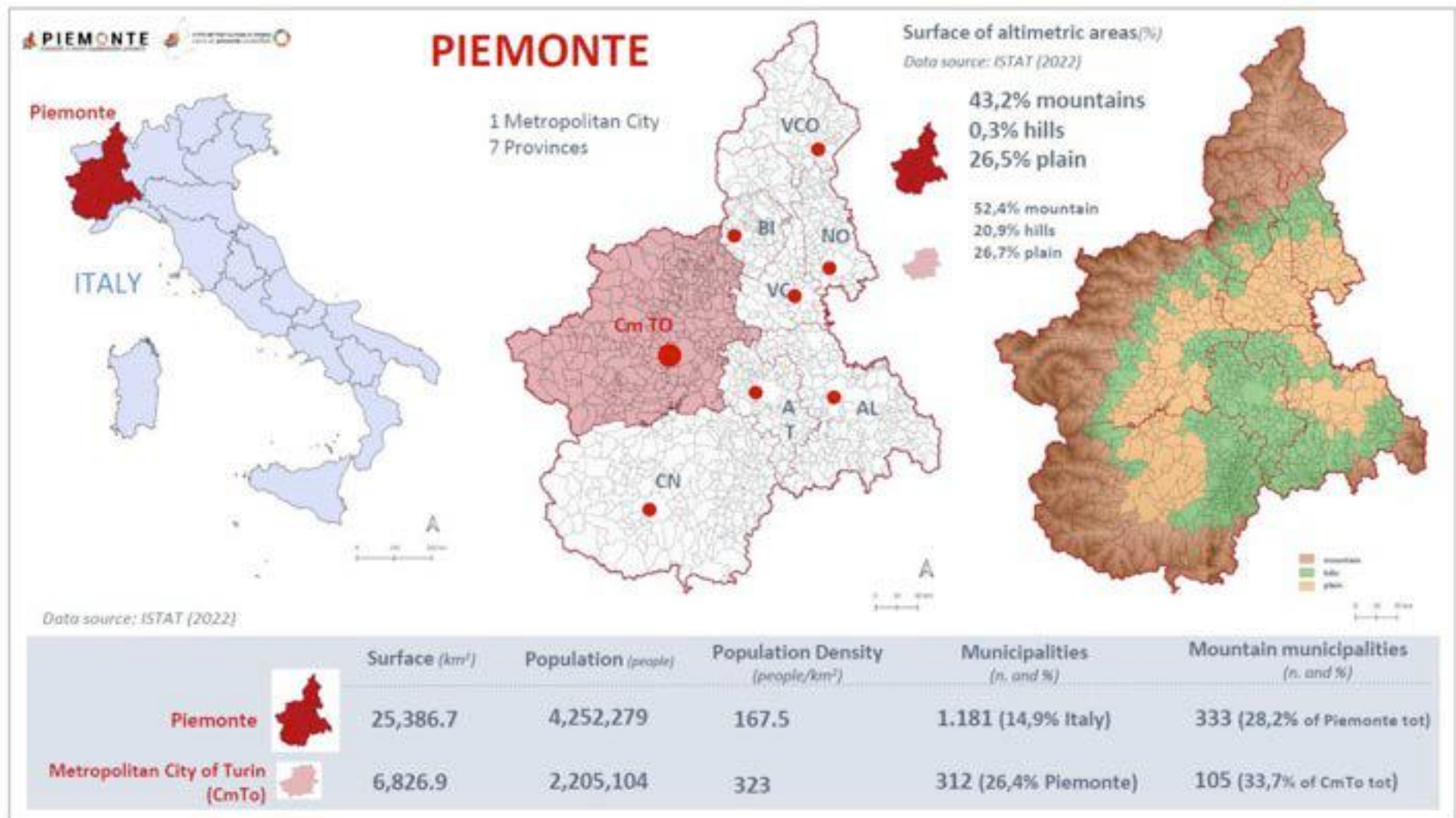


FIG. 2 - The territorial context of the Piemonte Region and of the Metropolitan City of Turin

## 1.2 The processes to set up the Regional Sustainable Development Strategy and the Metropolitan Sustainable Development Agenda

The development process of the Regional Sustainable Development Strategy (RSDS) and of the Metropolitan Sustainable Development Agenda (MSDA) started within the framework of the activities implemented by the Italian Ministry for Ecological Transition (MET), and involving all the Italian Regions and Metropolitan Cities, to ensure the territorialization of the National Sustainable Development Strategy (NSDS). MET is supporting the work for the preparation of the regional and metropolitan documents through the subscription of Collaboration Agreements.

The processes started at the regional and metropolitan scale are not fully paired in terms of time: the Piemonte Region started its activities in the last quarter of 2018, while the Metropolitan City of Turin at the beginning of June 2020. From an operational point of view, this allowed the Metropolitan City to start its work when the main elements of the Regional Strategy were already available to be used as reference points.

The **Regional Sustainable Development Strategy** (RSDS) was prepared after a long and complex process, which involved all the Departments of the Piemonte Region authority –the implementation of multiple tools, context analyses and survey methods - and the engagement of several stakeholders from the institutional context, the production system and more generally civil society. The document is therefore the result of a “collective” work.

Looking ahead, the engagement of the production system and of civil society for the RSDS will take place in a formal way through the Pact for Sustainable Development of Piemonte. The Pact is voluntarily subscribed by those stakeholders who intend to contribute with their commitment to the sustainable transition of Piemonte.

The **Metropolitan Sustainable Development Agenda** (MSDA) is being defined through an articulated process that is transversally involving not only the structures of the Metropolitan City authority, but also the territory (through the engagement of institutional stakeholders, actors from the goods and services production sector, organized associations and local stakeholders involved in the transition processes of the metropolitan territory).

The governance for the preparation of the Agenda is internal to the structures Metropolitan City authority, but features important and functional external relations, including the involvement of the Piemonte Region, universities and research actors. It is a type of flexible governance, which is continuously re-defined and will functionally evolve in relation to the implementation of the MSDA.

Figures 3 to 6 outline the process carried out to understand the complexity of the work carried out by integrating different levels and approaches.

In particular, the work undertaken is presented and analyzed from the points of view of:

- the reference contexts – at the national, international and regional level (Fig. 3 State - Regions and International contexts; Fig. 4 The Piemonte Region context; Fig. 5 State - Metropolitan City and International contexts; Fig. 6 The Metropolitan City of Turin context);
- the methods for implementing the institutional process, which combined in an innovative way paired formal processes (with the subscription of official agreements by the authorities involved) with participatory processes;
- the timing (from 2018 to 2022).

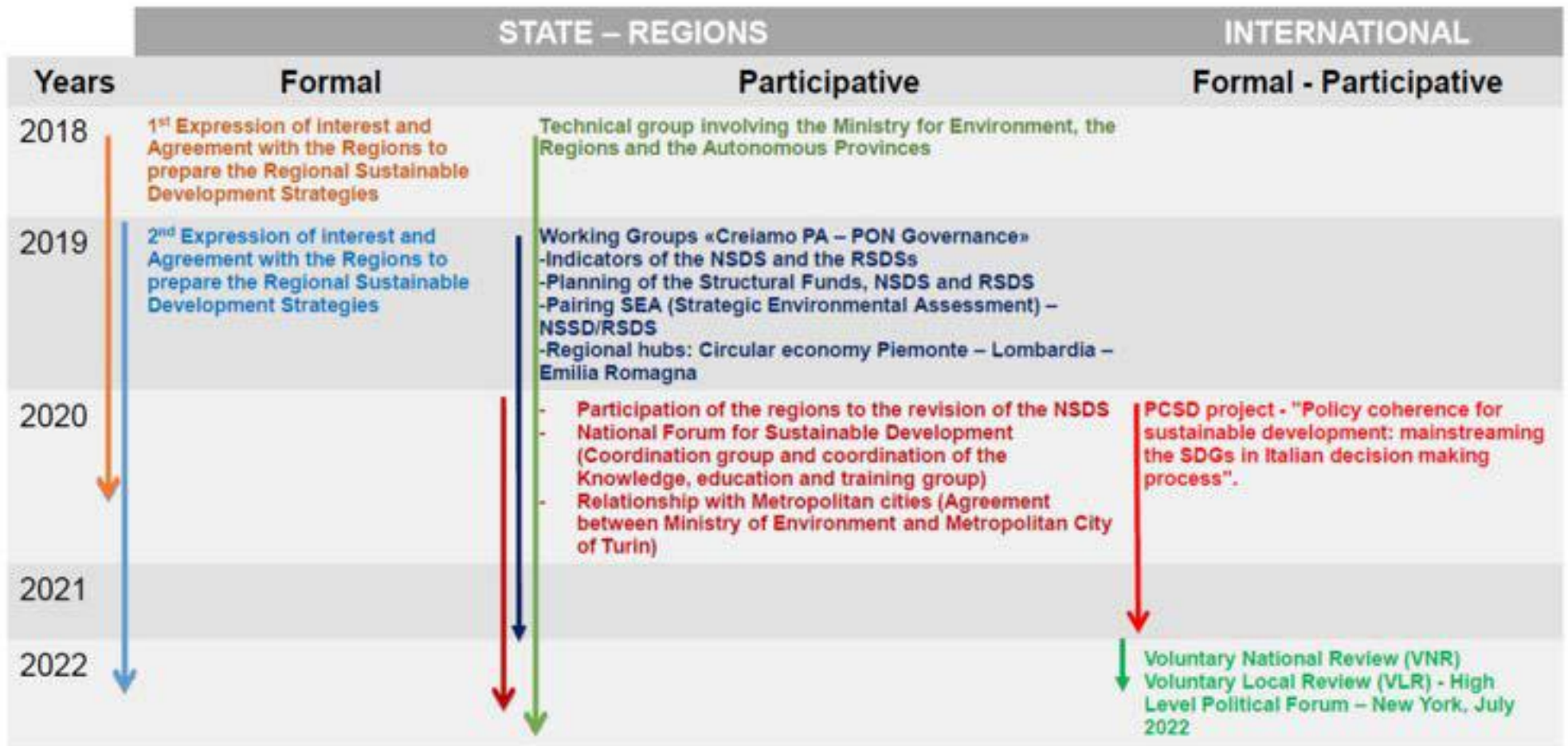
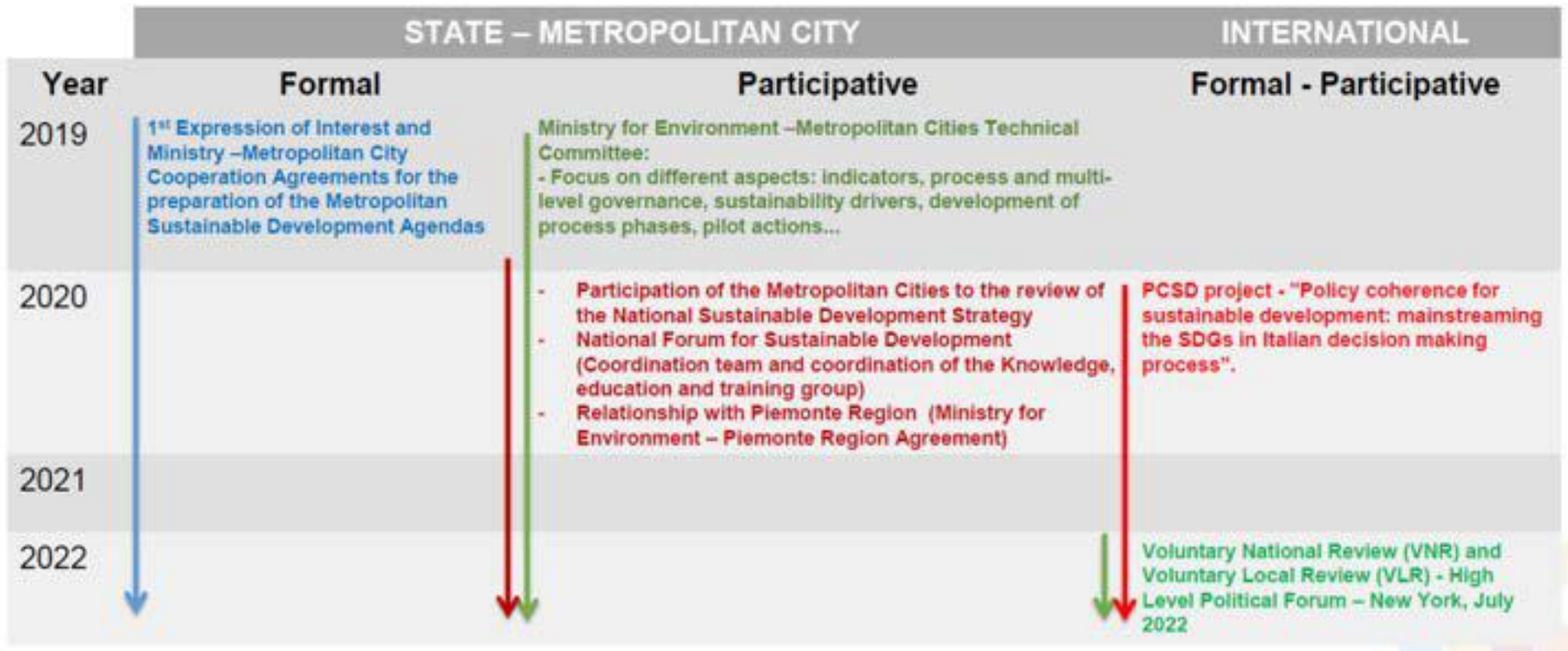


FIG. 3 – The institutional process – State-Regions and international level



years	Participative, Internal to the Region	Participative with other Stakeholders	Formal
2018	<ul style="list-style-type: none"> <li>- Preparation of the Piemonte Region project to start collaborating with the Ministry for Environment and the other regions</li> </ul>		Decree of the Regional Council n. 3-7576, 09/28/2018
2019	<ul style="list-style-type: none"> <li>- Skills Analysis within Departments /NSDS</li> <li>- Interviews with directors (or directors' delegates)</li> <li>- Preparation and submission of the <b>Technical document with initial guidelines for the setting up of the RSDS of the Piemonte Region</b></li> <li>- Positioning analysis of Piemonte in relation to the Agenda 2030 goals</li> </ul>	<ul style="list-style-type: none"> <li>- The Protocol «Piemonte Region for Green education» supports RSDS – Strategic Macro-Areas n. 4 and 5 (workshops and questionnaires)</li> </ul>	<ul style="list-style-type: none"> <li>- Decree of the Managing Director n. 443, 12/04/2018</li> <li>- Agreement with the Ministry for Environment n. 11952, 12/05/2018</li> <li>- Decree of the Regional Council n. 98-9007.05/16/2019</li> <li>- Decree of the Managing Director n. 597, 12/04/2019</li> <li>- Agreement with the Ministry for Environment n.11382, 12/06/2019</li> </ul>
2020	<ul style="list-style-type: none"> <li>- n. 2 questionnaires for the Directors: review of the Strategic Macro-Areas and identification of strategic goals</li> <li>- Co-designing with officers and managers to fine-tune the RSDS's structure</li> <li>- Drafting and submission of the <b>Draft of the Regional Sustainable Development Strategy of the Piemonte Region</b></li> </ul>	<ul style="list-style-type: none"> <li>- Sharing guidelines with Stakeholders located in the Quarters of the Piedmontese territory (webinars and questionnaires)</li> <li>- <b>Role and function of the utilities for the territorialization of the RSDS (interviews and workshops)</b></li> <li>- <b>Networks in the governance of the RSDS. The role of the Innovation hubs (Social Network analysis, workshop and inter-sectoral working group)</b></li> <li>- Project "Piemonte and Academia for Sustainable Development" – Ministry for Environment– University Network for Sustainable Development – Piemonte Region</li> </ul>	2020 Inter-departmental goal "Coordinator of the drafting of the RSDS"
2021	<ul style="list-style-type: none"> <li>- Sectoral Focus with officers and managers of the Departments</li> <li>- Co-designing guidelines with officers and managers</li> <li>- Co-designing with IRES Departments and database Observatories</li> <li>- Drafting of the <b>Monitoring and Assessment Dashboard for the RSDS</b></li> <li>- Drafting and submission of the <b>RSDS draft of the Piemonte Region</b></li> <li>- Inter-sectoral Focus groups for the Strategic Macro-Areas and interaction with the Departments to modify/integrate the draft</li> <li>- Fine-tuning of the RSDS structure in relation to national and EU documents</li> <li>- Drafting and submission of the <b>the Regional Sustainable Development Strategy of the Piemonte Region</b></li> </ul>	<ul style="list-style-type: none"> <li>- The point of view of Young People - age18-35 (collective brainstorming)</li> </ul>	<ul style="list-style-type: none"> <li>- European funds and Strategic Document - Decree of the Regional Council n. 41-1814 07/31/2020</li> <li>- Reporting of the activities included in the Collaboration Agreement dated 12/05/2018 to the Ministry for Environment</li> <li>- Presenting the RSSD document to the Regional President and to all the Directors with doc. n 153473, 12/29/2021</li> </ul>
2022	<ul style="list-style-type: none"> <li>- Pairing the document with the <b>Regional Financial Economic Document</b></li> <li>- Starting the setting up of the <b>Sustainability Observatory of Piemonte</b></li> </ul>		

FIG. 4 – The institutional process – Piemonte Region



*FIG. 5- The institutional process –State – Metropolitan Cities and International level*



Year	Participative within the Metropolitan City of Turin	Participative with other stakeholders	Formal
2019	<ul style="list-style-type: none"> <li>- Drafting of the Metropolitan City of Turin project within the framework of the collaboration with the Ministry for Environment and through cooperation with other Metropolitan Cities and Piemonte Region</li> </ul>	<ul style="list-style-type: none"> <li>- Collaboration with Piemonte Region for the Protocol "Piemonte Region for Green education" (workshop and questionnaires)</li> </ul>	
2020	<ul style="list-style-type: none"> <li>- Signing of the Cooperation Agreement with the Ministry for Environment</li> <li>- Drafting of the <b>Guidelines for the setting up of the Sustainable Development Agenda of the Metropolitan City of Turin and its territory</b></li> <li>- Planning of the Metropolitan City of Turin (first of all the Metropolitan Strategic Plan)</li> <li>- <b>Internal governance</b></li> <li>- Competence analysis and Departmental priority areas in relation to the National Strategy for Sustainable Development (documents and interviews)</li> <li>- <b>Pilot actions</b></li> <li>- Intranet</li> </ul>	<ul style="list-style-type: none"> <li>- Identification of functional relationships to "open up" governance:</li> <li>- Scientific Technical Support Group (Universities, Research bodies, National associations)</li> <li>- Piemonte Region</li> <li>- <b>Pilot Actions</b></li> <li>- <b>Collaboration with the Metropolitan Cities of Milano-Venice-Genoa</b></li> <li>- Participation into the activities of Piemonte Region in relation to the territorialisation of the Regional Sustainable Development Strategy (utilities and innovation hubs)</li> <li>- Communication</li> </ul>	<ul style="list-style-type: none"> <li>- Decree of the Managing Director n. 29 dated 03.25.2020 (Agreement with the Ministry for Environment)</li> <li>- Deliberation of the Metropolitan Council n.30/2020 (guidelines)</li> <li>- Agreement for collaboration with the Metropolitan Cities dated 09.01.2020</li> <li>- Start of internal activities, 04.11.20</li> </ul>
2021	<ul style="list-style-type: none"> <li>- Plenary Workshop and 4 Intersectoral Thematic Focus groups for the identification of the main features of the Agenda (structure, themes, stakeholder involvement models)</li> <li>- <b>Main lines of the Sustainable Development Agenda of the Metropolitan City of Turin and its territory: themes, tools, structure, governance, stakeholders</b></li> <li>- <b>Better focus on internal – external governance</b></li> </ul>	<ul style="list-style-type: none"> <li>- 4 Intersectoral Thematic Focus groups to identify the main lines of the Agenda (structure, themes, stakeholder involvement models) – Piemonte Region and Universities</li> <li>- Setting up of a territorial stakeholder involvement model</li> <li>- <b>10 Intersectoral Thematic Focus groups with the Stakeholders of the area for the identification of the Missions</b></li> </ul>	<ul style="list-style-type: none"> <li>- Formal setting up of the Intersectoral Thematic Focus groups (03.22.021)</li> <li>- Session of the Metropolitan Council 07.28.2021 (Approval of the main lines)</li> </ul>
2022	<ul style="list-style-type: none"> <li>- Identification of the Missions</li> <li>- Analysis of the Missions and identification of the Focus areas -of the Agenda (interviews, focus groups and internal working groups)</li> <li>- Relationship with the annual update of the Metropolitan Strategic Plan</li> <li>- Relationship with the planning activities of the Metropolitan City (Metropolitan General Territorial Plan and Urban Plan for Sustainable Mobility)</li> <li>- Preparation of the Sustainable Development Agenda of the Metropolitan City of Turin and its territory</li> </ul>	<ul style="list-style-type: none"> <li>- Analysis of the Missions and identification of the Intervention Areas of the Agenda (Focus groups and working groups; interviews)</li> <li>- Relationships with the project "Piemonte and Academia for Sustainable Development" – Ministry for Environment– University Network for Sustainable Development –Piemonte Region</li> <li>- <b>Pilot Actions:</b></li> <li>- <b>Inter-institutional working group Metropolitan City of Turin- Piemonte Region- Piemonte Regional School Office</b></li> <li>- <b>Involvement of 33 Upper Secondary Schools and Vocational training Agencies</b></li> <li>- <b>Social Network Analysis</b></li> <li>- <b>Collaboration with Academia</b></li> <li>- Events for the involvement of territories and for dissemination</li> </ul>	<ul style="list-style-type: none"> <li>- Collaboration agreement with universities (12.16.2021)</li> </ul>

FIG 6 – The institutional process –Metropolitan City of Turin

# 2

## Multi-level and multi-actor governance

### 2.1 Tools and guidelines for the governance of the Sustainable Development Strategies of the Piemonte Region and the Metropolitan City of Turin

The two processes of preparation and implementation of the strategies are at a different level of evolution.

The Piemonte Region is in the process of approving its own Strategy, has a formally recognised internal governance, and has identified the need for a territorial governance covering also the strategies and actors of the Wide Area<sup>3</sup>. The Metropolitan City of Turin is currently sharing with the territorial actors its strategic orientation and hypothesized, in the Guidelines for the setting up of the Agenda (approved in July 2021), an internal governance allowing for a structured interaction with the Piemonte Region. This link is essential for both authorities: the Sustainable Development Agenda of the Metropolitan City of Turin and its territory is set to make a contribution to the achievement of the goals of the Regional Strategy.

There is a shared need to implement a **multi-level governance** of the strategic and operational processes. It should ensure the **consistency of sustainability policies** at the regional and metropolitan levels through the integration of skills.

In defining the implementation processes of the Regional Strategy, territorialization functions and tools that consider the relationship with the Metropolitan City are being set up. These tools support the dialogue among the Regional and Metropolitan Authorities and the territory in order to guarantee the coherence of policies and, at the same time, the promotion of a culture for sustainability.

The tools and methods of this joint effort are under elaboration and will ensure strategic and operational coherence between the regional and metropolitan level. This coherence will have to be built at both the political and technical level.

In the process of setting up the Regional Strategy and the Metropolitan Agenda, this coherence has been pursued only at the technical level through:

1. The creation of contacts between the offices of the two institutions in order to integrate processes and support the coordination of the strategies, with the collaboration of the [Piemonte Institute for Socio-Economic Research](#) (IRES Piemonte);
2. The mutual involvement - at a technical level - in the construction processes of the strategies in relation to specific topics of common interest (focus groups, seminars, conferences, participation in technical-scientific support groups).

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<sup>3</sup> In the Italian legal system, a Wide Area refers to the administrative level of the provinces and metropolitan cities, which is a level of management of the territory, the resources and the relations among local authorities; this level is intermediate between the municipalities and the region.

TAB 1			
TOOLS			
Piemonte Observatory for Sustainability	Pact for the sustainability of Piemonte	Online platform	#Vettoridisostenibilità Festival
GOAL			
Setting up a knowledge system to support sustainable development policies	Establish alliances among public and private stakeholders who commit to meet sustainability goals	Show an “evaluation” of the sustainability policies which are active on the regional territory	Support the establishment of sustainability culture
GOVERNANCE GUIDELINES			
Strengthening the relationship with the Metropolitan City of Turin to support the integration of knowledge useful to produce policies which are coherent at both the regional and metropolitan level	Managing alliances with the Metropolitan City of Turin according to territorial criteria	Including in the platform a section devoted to those policies which refer to the territory of the Metropolitan City of Turin	Implementing an annual programme of public events in agreement with the Metropolitan City of Turin

**TAB. 1 - The tools of the multi-level governance**

## 2.2 Territorial systems and networks

In order to implement a type of governance able to produce sustainable development effects on the territory, the regional and metropolitan strategies intended and intend to act:

1. through existing territorial socio-economic networks and subsystems, to be oriented in relation to new development objectives;
2. to guide the setting up of new networks and territorial systems which are functional to the transition towards sustainable development;
3. aligning regional and metropolitan tools.

The territorialization of the strategies requires understanding of which co-evolutionary have to be addressed in the regional and metropolitan territory, identifying subsystems that operate and that, with their dynamics, transform the context.

Territorialization takes place in a plurality of ways and with multiple tools, analysing and intervening on different organizational and territorial settings.

In the experience of the Piemonte Region and of the Metropolitan City of Turin, these settings concern:

TAB 2		
ORGANIZATIONAL AND TERRITORIAL SETTINGS, GUIDING ANALYSES AND INTERVENTIONS	PIEMONTE REGIONAL SUSTAINABLE DEVELOPMENT STRATEGY	SUSTAINABLE DEVELOPMENT AGENDA OF THE METROPOLITAN CITY OF TURIN AND ITS TERRITORY
TERRITORIAL PLANNING	Review of the Regional Territorial Plan (33 Areas of territorial integration); Preparation of the Socio-economic Plan of the Parks	Alignment/coherence: General Territorial Plan (11 Homogeneous Zones); Metropolitan Strategic Plan; Urban Plan for Sustainable Mobility
GEOGRAPHICAL DIFFERENCES / SOCIO-ECONOMIC- ENVIRONMENTAL CHARACTERISTICS	The Sustainable Development Strategy of the Mountains and their territories; the suburban area - Green infrastructures - Corona Verde project	Green infrastructures - Corona Verde project  <i>(metropolis; cities working as a hinge between mountains, hills and plain; mountains; plains ...)</i>
SYSTEMS AND NETWORKS: PLACES/COMMUNITIES/LOCAL DEVELOPMENT	“Imprese rur@li” initiative: young entrepreneurs and sustainable rural development;	Food districts; 2030 AGENDA. The educational success of the territories for the transition (Educational and training

	Food districts	territorial agreements)
<b>SYSTEMS AND NETWORKS: DEVELOPMENT «OBJECTIVES»</b>	Circular economy in the Piedmontese agro-food system	
<b>SYSTEMS AND NETWORK: FUNCTIONS</b>	The role and functions of utilities in the territorialisation of the Regional Sustainable Development Strategy; the role of innovation hubs for the sustainable transition of Piemonte	2030 AGENDA. Education and training (E&T) in transition

***TAB. 2 - The organizational and territorial areas as subjects of analysis and intervention***

## 2.3 Relationship with the research system

In order to facilitate changes in the territorial socio-economic system, it is necessary to establish a permanent and structured relationship with the research bodies.

As highlighted in the following table, the Piemonte Region and the Metropolitan City of Turin, in the process of preparing both strategies, have addressed the establishment of this relationship in an articulated way, developing contacts and processes with public and private research bodies and with universities.

<b>TAB 3</b>	
<b>FACILITATING THE SETTING UP AND IMPLEMENTATION OF THE STRATEGIES—CO-GENERATION OF KNOWLEDGE BY THE REGION, THE METROPOLITAN CITY, RESEARCH BODIES, UNIVERSITIES AND OTHER PUBLIC AND PRIVATE STAKEHOLDERS</b>	<p><b>RESEARCH – ACTION</b>  <b>QUALITATIVE RESEARCH</b>  <b>EMPOWERMENT EVALUATION</b>  <b>COMMUNITY OF PRACTICE</b>  <b>NETWORK ANALYSIS</b></p> <p>A mix of methodologies, methods and tools is used for the co-generation of knowledge to be transposed into policies and actions</p>
<b>MONITORING OF THE STRATEGIES—«QUANTITATIVE» KNOWLEDGE FOR THE SETTING UP AND IMPLEMENTATION OF THE STRATEGIES</b>	<p>1) <b>POSITIONNING</b> of Piemonte in relation to the 2030 Agenda Goals - IAEG-SDGs Istat-Sistan indicators</p> <p>2) <b>INTERPRETING</b> Piemonte in relation to the RSDS strategic goals, the 2030 Agenda and the 2030/2050 European goals – specific indicators (IRES and ARPA Piemonte Observatories)</p> <p>3) <b>INTERPRETING THE METROPOLITAN CITY OF TURIN</b> in relation to the Missions of the MSDA, the 2030 Agenda and the 2030/2050 European goals– specific indicators</p> <p>4) <b>INTERPRETING BY AREA OF TERRITORIAL DEVELOPMENT</b> (regional and metropolitan) – specific indicators at the inter-municipality scale</p> <p>5) <b>INTERPRETING THE SUBSYSTEMS</b> – specific indicators at the municipality level for mountain territories; local subsystems (Periurban; local rural systems; ...)</p> <p>Monitoring allows to place the Region and the Metropolitan City of Turin in the context of the National, European and global challenges. At the same time, it help sto understand local phenomena – Knowledge for the setting up of policies for the implementationof the Strategies</p>

***TAB. 3 – Relationship with research: a mix of methodologies and processes***



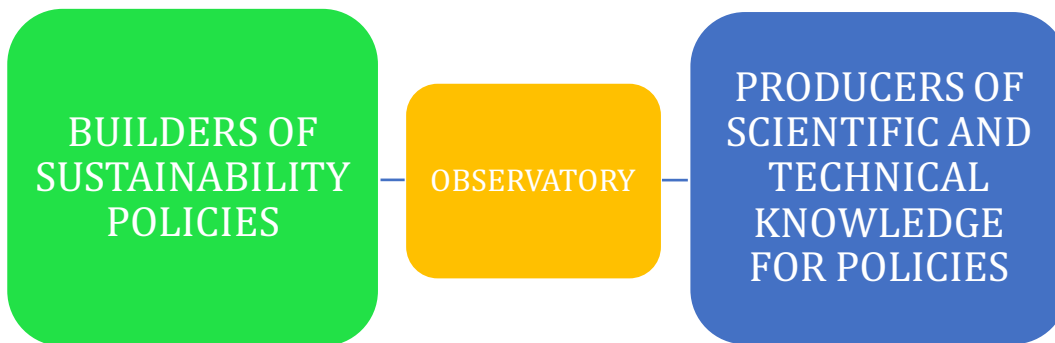
From this experience we intend to develop a system in which the relationship with research institutions and universities is fundamental.

For this reason, within the Piemonte Region, a decision-making process is being carried out for the identification of an implementation tool – called "Observatory" in this first phase - which structures and settles relations with research.

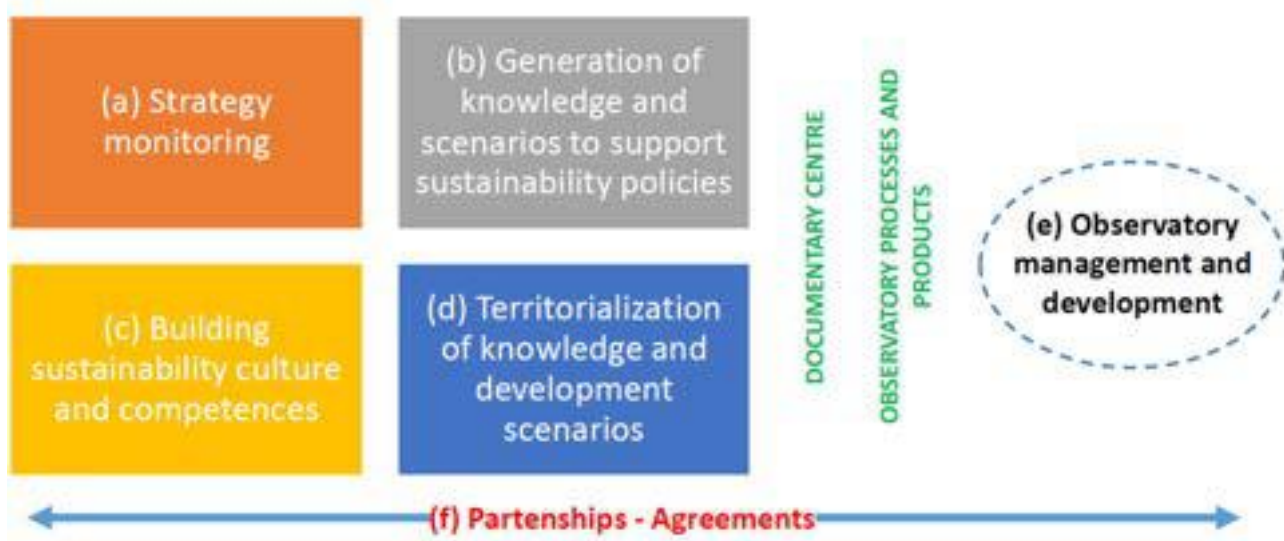
With this tool we intend to:

- **organize, produce and disseminate knowledge** that takes into account **economic, social and environmental aspects** in the analysis of phenomena;
- **feed and support the regional system** in defining **sustainability policies** through the formulation of **development scenarios**.

The Observatory will have to be built between the following subjects, to answer to the needs of policy makers with knowledge responses, by understanding phenomena in terms of sustainability and building scenarios to support decisions.



**FIG. 7 - Positioning of the Observatory in the knowledge process**



**FIG. 8 - The functions and tools of the Observatory**

The functions, tools and processes to be established concern:

***a) Strategy monitoring***

In the setting up of the Observatory, solutions (partnerships, work processes and tools, products) must be sought for meeting the following needs:

- Finalizing and **standardising the monitoring process** elaborated and tested during the preparation phase of the Strategy by IRES Piemonte and ARPA Piemonte in collaboration with the regional Observatories;
- **Making more dynamic the use of data**, in order to facilitate their consultation and use by decision makers;
- Producing, through multi-disciplinary contributions, **integrated interpretations** of economic, social and environmental realities, which allow to identify problems and possible scenarios of new development on an annual base and in view of three-year reviews of the Strategy;
- Making **public and private decision makers** aware of the monitoring results.

***b) Production of knowledge and scenarios to support sustainability policies***

In the setting up of the Observatory, solutions (partnerships, work processes and tools, products) must be sought for the following needs:

- **Identifying the research subjects** in Piemonte (universities and other research bodies) who are already producing knowledge (analysis of phenomena and scenarios) in terms of sustainability or can be oriented in this sense or can give contribution, even if sectoral, to be related to the other parts; verifying the effective contribution of these bodies and the added value that could be produced by making them active parts of the Observatory;
- **Identifying the knowledge needs** within the Piemonte Region and / or within other entities developing sustainability policies in Piemonte;
- **Facilitating interaction and exchange** between research bodies and public and private decision makers;
- **Systematizing and enhancing** those knowledge processes that link research bodies and public and private decision makers for sustainability policies;
- **Support the construction and evaluation** of policies;
- Guaranteeing **openness to other national and international knowledge subjects and systems**.

***c) Building culture and skills for sustainability***

In the setting up of the Observatory, solutions (partnerships, work processes and tools, products) must be sought for the following needs:

- Establishing a **permanent interaction with the formal systems** of Education and Vocational Training to encourage innovation processes for skills - professional and of active citizenship - in relation to the knowledge produced by the Observatory;
- **Identifying and systematizing the subjects** who carry out or who could carry out production / dissemination of knowledge and training actions related to the activities of the Observatory;
- Promoting, as Observatory, **training actions and production / dissemination of knowledge** (seminars, conferences,...);

- Developing / supporting **learning processes in multi-actor projects and processes.**

***d) Territorialization of knowledge and development scenarios of wide and local area***

In the setting up of the Observatory, solutions (partnerships, work processes and tools, products) must be sought for the following needs:

- Structuring the **relationship with the Metropolitan City of Turin** to facilitate the integration of knowledge useful for producing **coherent policies** between the regional and metropolitan levels;
- Structuring the relationship with the **Observatory for the mountains** so as to be able to understand **phenomena and development scenarios** for the mountains consistent with the dynamics that characterize the other parts and the whole of Piemonte;
- Identifying, while carrying out the activities, specific knowledge needs for **other types of processes** of this type.

# 3

## Policy coherence

### 3.1 A Regional Strategy consistent with the National Strategy, with European guidelines and the 2030 Agenda

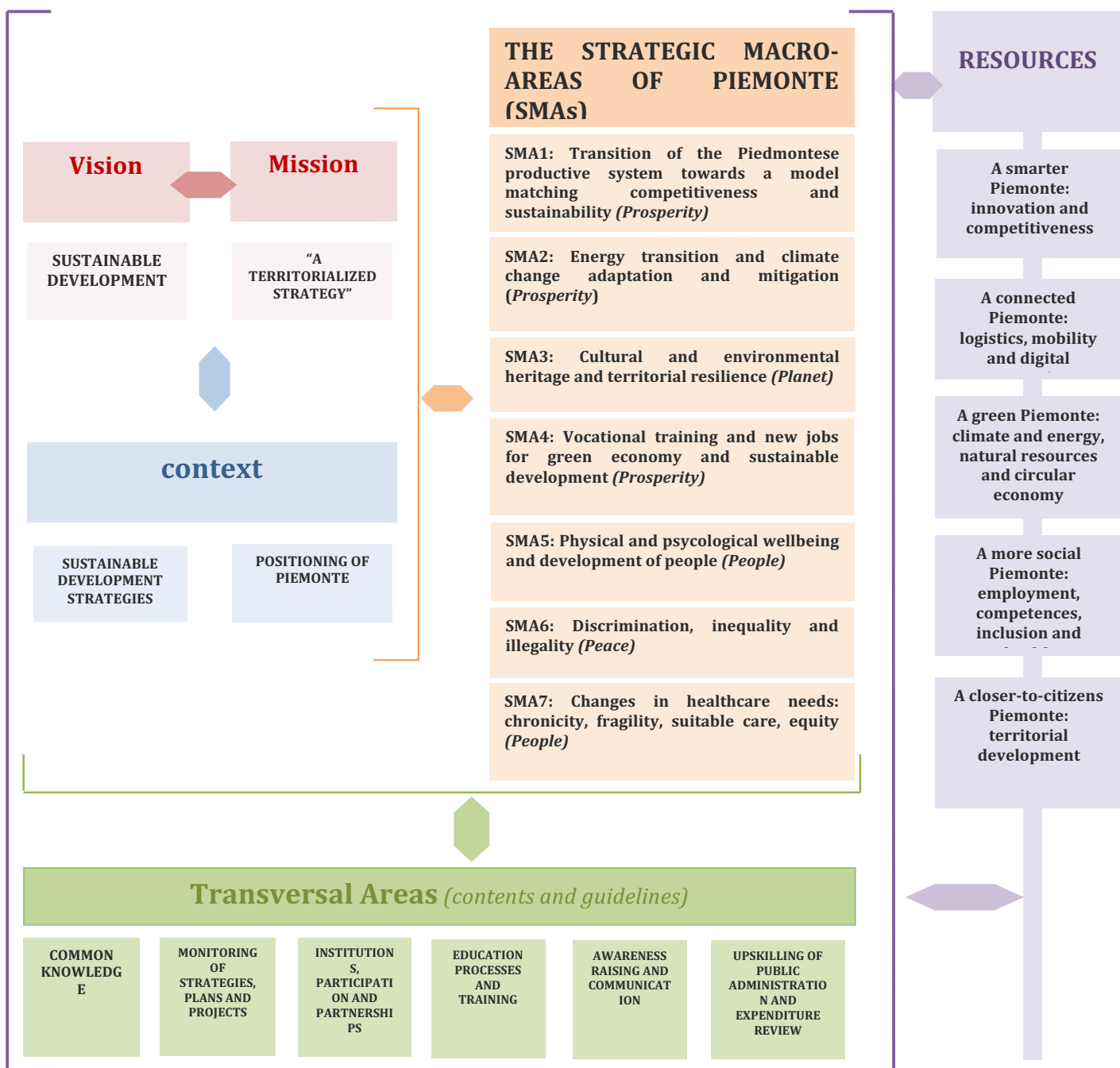
The setting up of the regional document was carried out within a clear and structured strategic framework, which refers to the **2030 Agenda** and its **European and national reach**.

From the regional point of view, the **National Sustainable Development Strategy** (NSDS) has represented and represents the translation at the Italian level of the objectives of the 2030 Agenda and, as such, is considered as the reference document.

The **Piemonte Region**, in undertaking the process to prepare the RSDS, has chosen to play an active role in the transition process towards more sustainable economies, operating to **territorialize the Strategic Choices** already made by the NSDS. This is done to guarantee not only the coherence of the local action towards national indications, but also and above all a strong coordination of the territorial policies.





In order to give substance to this vision, the Region was engaged at the institutional level to build a strategic document which, in its structure and contents, would allow **a real adaptation of the choices to the appropriate territorial scales**, with the **setting up of networks and systems** (geographical and relational) able to activate **concrete actions for the transition** of the territories.

The regional-scale structure identifies 7 **Strategic Macro-Areas** (SMA) and 6 **Transversal Areas** of intervention that orientate the processes of governance, knowledge, development of a sustainability culture and the setting up of collaborations and partnerships, which are necessary to make the implementation of the Strategy effective. It also operates in coherence with the European programming guidelines to ensure that resources are allocated in relation to the objectives set by the strategy.











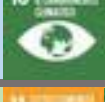

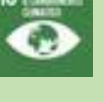


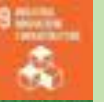






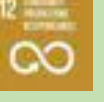







**FIG. 9 – The structure of the Regional Sustainable Development Strategy**






In the elaboration of the Strategy, **strategic Priorities and Objectives** were defined for each **Strategic Macro-Area** and constant reference was made to the **Areas, Choices and Objectives of the National Strategy**, which is in line with the Goals of the 2030 Agenda, as shown in the following table.

TAB 4			
RSDS - STRATEGIC MACRO-AREAS (SMAs)	RSDS STRATEGIC PRIORITIES	NSDS AREAS, CHOICES AND STRATEGIC OBJECTIVES	2030 AGENDA GOALS
SMA1: SUPPORTING THE TRANSITION OF THE PIEDMONTSE PRODUCTIVE SYSTEM TOWARDS A MODEL MATCHING COMPETITIVENESS AND SUSTAINABILITY	1.A. DEVELOPING ECONOMIC SKILLS/SUSTAINABILITY FIRMS	<p><b>PROSPERITY</b></p> <p><b>I. Funding and promoting sustainable research and innovation</b></p> <p>I.1 Increasing investment in research and development</p> <p>I.3 Adding novelty in processes and products and promoting technology transfer</p> <p><b>IV. Decarbonizing economy</b></p> <p>IV.3 Reducing greenhouse gas emissions in non-ETS sectors</p>	
	1.B. FINDING A BALANCE BETWEEN ECONOMIC SUSTAINABILITY, SAVING ENERGY AND MATERIALS, SUPPORTING THE CONVERSION OF THE PRODUCTIVE SYSTEM	<p><b>PROSPERITY</b></p> <p><b>III. Establishing sustainable production and consumption models</b></p> <p>III.1 Dematerializing the economy, improving efficiency in the use of resources and promoting circular economy mechanisms</p> <p>III.3 Ensuring fair access to financial resources</p> <p>III.5 Limiting waste production and promoting the market for secondary raw materials</p> <p><b>IV. Decarbonizing economy</b></p> <p>IV.3 Reducing greenhouse gas emissions in non-ETS sectors</p>	
	1.C. NURTURING AND SUPPORTING THE POTENTIAL OF TERRITORIES	<p><b>PROSPERITY</b></p> <p><b>III. Establishing sustainable production and consumption models</b></p> <p>III.6 Promoting demand and increasing the supply of sustainable tourism</p> <p>III.9 Promoting Italian excellence</p>	
	1.D. CONVERTING AGRICULTURAL PRACTICES THROUGH THE IMPROVEMENT OF ECONOMIC AND ENVIRONMENTAL PERFORMANCES OF FARMS AND ED AGRO-INDUSTRIAL FIRMS, SUPPORTING SUSTAINABLE COMPETITIVENESS	<p><b>PROSPERITY</b></p> <p><b>III. Establishing sustainable production and consumption models</b></p> <p>III.7 Ensuring the sustainability of agriculture and forestry along the entire supply chain</p> <p><b>IV. Decarbonizing economy</b></p> <p>IV.3 Reducing greenhouse gas emissions in non-ETS sectors</p>	



<b>SMA2: ENERGY TRANSITION AND CLIMATE CHANGE ADAPTATION AND MITIGATION</b>	<b>2.A. PROMOTING ENERGY EFFICIENCY MEASURES</b>	<b>PROSPERITY</b> <b>IV. Decarbonizing economy</b> IV.1 Increasing energy efficiency and the production of energy from renewable sources, avoiding or reducing impact on cultural heritage and the landscape	   
	<b>2.B. PROMOTING RENEWABLE ENERGIES AND DEVELOPING INTELLIGENT ENERGY STORAGE SYSTEMS, NETWORKS AND PLANTS AT LOCAL LEVEL</b>	<b>PROSPERITY</b> <b>IV. Decarbonizing economy</b> IV.1 Increasing energy efficiency and the production of energy from renewable sources, avoiding or reducing impact on cultural heritage and the landscape	   
	<b>2.C. MAKING MOBILITY MORE SUSTAINABLE</b>	<b>PROSPERITY</b> <b>IV. Decarbonizing economy</b> IV.2 Increasing the sustainable mobility of people and goods IV.3 Reducing greenhouse gas emissions in non-ETS sectors	  
<b>MAS 3: CULTURAL AND ENVIRONMENTAL HERITAGE AND TERRITORIAL RESILIENCE</b>	<b>3.A. REDUCING HYDROGEOLOGICAL DAMAGE AND ENVIRONMENTAL DEGRADATION</b>	<b>PLANET</b> <b>II. Ensuring sustainable management of natural resources</b> II.2 Stop land consumption and fight desertification II.6 Minimizing emissions and reducing concentrations of pollutants in the atmosphere	  
	<b>3.B. REDUCING TERRITORIAL MARGINALITIES</b>	<b>PLANET</b> <b>III. Creating resilient communities and territories, preserving landscapes and cultural heritage</b> III.1 Preventing natural and anthropogenic risks and strengthening the resilience capacities of communities and territories III.2 Ensuring high environmental performance of buildings, infrastructures and open spaces III.3 Regenerating cities, ensuring accessibility and the sustainability of connections	   
	<b>3.C. ENHANCING THE CULTURAL AND ENVIRONMENTAL HERITAGE</b>	<b>PLANET</b> <b>III. Creating resilient communities and territories, preserving landscapes and cultural heritage</b> III.5 Ensuring the development of potential, the sustainable management of territories, landscapes and cultural heritage	  
	<b>3.D. PROTECTING WATER AND SOILS</b>	<b>PLANET</b> <b>II. Ensuring sustainable management of natural resources</b> II.3 Minimizing pollutant loads in soils, water bodies and aquifers, taking into account the level of good ecological status of the natural	  

		<p>systems</p> <p>II.4 Implementing integrated water management at all planning levels</p> <p>II.5 Maximizing water efficiency and adapting withdrawals to water scarcity</p>	
	<p><b>3.E. PRESERVING BIODIVERSITY</b></p>	<p><b>PLANET</b></p> <p><b>I. Stopping the loss of biodiversity</b></p> <p>I.1 Safeguarding and improving the conservation status of species and habitats for terrestrial and aquatic ecosystems</p> <p>I.2 Stopping the spread of invasive alien species</p> <p>I.3 Increasing land and sea protected area and ensuring effective management</p> <p>I.4 Protecting and restoring genetic resources and natural ecosystems related to agriculture, forestry and aquaculture</p> <p>I.5 Integrating the value of natural capital (ecosystems and biodiversity) into plans, policies and accounting systems</p> <p><b>II. Ensuring sustainable management of natural resources</b></p> <p>II.7 Ensuring sustainable forestry management and fighting abandonment and degradation</p> <p><b>III. Creating resilient communities and territories, preserving landscapes and cultural heritage</b></p> <p>III.4 Ensuring the restoration and defragmentation of ecosystems and fostering urban / rural ecological connections</p>	
<p><b>MAS 4: VOCATIONAL TRAINING AND NEW JOBS FOR GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT</b></p>	<p><b>4. DEVELOPING SUSTAINABLE DEVELOPMENT SKILLS</b></p>	<p><b>PROSPERITY</b></p> <p><b>II. Ensuring full employment and quality training</b></p> <p>II.1 Ensuring accessibility, quality and continuity of training</p>	
	<p><b>4.B SUPPORTING THE QUALIFICATION OF WORKERS AND STEERING THE PRODUCTION SYSTEM</b></p>	<p><b>PROSPERITY</b></p> <p><b>II. Ensuring full employment and quality training</b></p> <p>II.1 Ensuring accessibility, quality and continuity of training</p>	
	<p><b>4.C DEVELOPING NEW ENTREPRENEURSHIP IN EMPOWERMENT PROCESSES</b></p>	<p><b>PROSPERITY</b></p> <p><b>II. Ensuring full employment and quality training</b></p> <p>II.2 Increasing sustainable and quality employment</p>	
	<p><b>4.D IMPLEMENTING THE TRANSVERSALITY OF "CULTURE" TO INCREASE THE COMPETITIVENESS OF THE REGIONAL SYSTEM AND OF</b></p>		

	ENTERPRISES		
	4.E SUSTAINABILITY TRAINING WITHIN THE REGION		
MAS 5: SUPPORTING THE DEVELOPMENT AND THE PHYSICAL AND PSYCHOLOGICAL WELL-BEING OF PEOPLE	5.A. REDUCING POVERTY	<p><b>PEOPLE</b></p> <p><b>I. Tackling poverty and social exclusion by eliminating territorial gaps</b></p> <p>I.1 Reducing the intensity of poverty I.2 Fighting material and food deprivation I.3 Reducing housing discomfort</p>	
	5.B. FACING GROWING PSYCHOLOGICAL DISEASES	<p><b>PEOPLE</b></p> <p><b>II. Guaranteeing the conditions for the development of human potential</b></p> <p>II.1 Reducing unemployment for the weakest parts of the population II.2 Ensuring the full functionality of the social protection and welfare system II.4 Fighting deviance through prevention and social integration of those at risk</p>	
	5.C. IMPLEMENT PERMANENT EDUCATION IN SUSTAINABILITY AND PROMOTING HEALTHY LIFESTYLES	<p><b>PEOPLE</b></p> <p><b>II. Guaranteeing the conditions for the development of human potential</b></p> <p>II.3 Reducing the school dropout rate and improving the education system</p>	
MAS 6: REDUCING DISCRIMINATION, INEQUALITIES AND ILLEGALITY	6.A. REDUCING DEVIANCE AND CRIME	<p><b>PEACE</b></p> <p><b>I. Promoting a non-violent and inclusive society</b></p> <p>I.1 Preventing violence against women and children and ensuring appropriate assistance to victims II.2 Guaranteeing the reception of migrants seeking asylum and the inclusion of ethnic and religious minorities</p>	
	6.B. REDUCING DISCRIMINATION AND SOCIAL MARGINALIZATION	<p><b>PEACE</b></p> <p><b>II. Eliminating all forms of discrimination</b></p> <p>II.1 Eliminating all forms of labor exploitation and guarantee workers' rights II.2 Ensuring gender equality II.3 Fighting all discrimination and promoting respect for diversity</p>	

	6.C. FACILITATING ACCESS TO JUSTICE	PEACE III. Ensuring legality and justice III.3 Ensuring the efficiency and quality of the judicial system	
	6.D. DEVELOPING AND PROMOTING INTERNATIONAL COOPERATION		
MAS 7: ADDRESSING CHANGES IN HEALTHCARE DEMAND: CHRONICITY, FRAGILITY, APPROPRIATE PERFORMANCE, EQUITY OF DISTRIBUTION	7.A. DEVELOPING AN INTEGRATED APPROACH AND MULTI-SPECIALIST INTERACTION BETWEEN HOSPITAL AND TERRITORIAL STRUCTURES	PEOPLE III. Promoting health and well-being III.3 Ensuring access to effective health and care services, counteracting territorial gaps	 
	7.B. DEVELOPING AN APPROACH AIMED TO UNDERSTAND HOW DEMAND CHANGES	PEOPLE III. Promoting health and well-being III.2 Promoting healthy lifestyles and strengthening prevention systems	   
	7.C. CREATING A BALANCE BETWEEN INNOVATION, INCREASED DEMAND AND COSTS	PEOPLE III. Promoting health and well-being III.1 Decreasing population exposure to environmental and anthropogenic risk factors	      

**TAB. 4 – Relationships among the Strategic Macro-Areas (SMAs), the RSDS priorities of Piemonte, the NSDS and the 2030 Agenda goals**

## 3.2 Setting up of a coherent multi-level and multi-dimensional strategic orientation

In order to give substance to a vision that produces, when implemented, effects on the territory, the **Metropolitan Agenda** was designed as a tool to pursue the objectives of the Regional Strategy, which is in turn coherent with the national, European and worldwide approaches, as described in paragraph 3.1.

The methodology adopted, to achieve this consistency, involved a change in the way of operating: from addressing goals, we shifted to addressing (measurable) results to be achieved.

The metropolitan strategic approach is structured by **Missions**<sup>4</sup>, intended as a tool for socio-economic transformation aimed at **solving economic, social and environmental challenges**. It features achievable targets (the results), which must be identified with the help of public and private sectors, public institutions, social organizations (trade unions, trade associations, etc.) and citizens.

Adopting this approach as a reference framework for defining the contents of the Metropolitan Agenda means identifying, in relation to the global challenges posed by sustainability (de-carbonization, climate change, Common Agricultural Policy - CAP targets, CO<sub>2</sub> reduction, reduction of inequalities, ...), what are the Missions that the Metropolitan City of Turin and its territory intend to pursue, identifying for each of them the problems to be addressed and the results to aim for with respect to the targets set at national, European and global level, and transposed in the Regional Strategy.

The **multi-level governance** of the targeted processes and results is considered in the identification of the Missions, within the framework of the relationship with the Piemonte Region and with the territories of the metropolitan city. Multilevel governance will allow the Metropolitan City of Turin not to be limited by its own narrow competences, but to create synergies with the regional reference framework and to examine the needs of an extremely diverse area with specific problems to be addressed.

The Missions pursue the goals identified by the Piemonte Region in its Strategic Macro-Areas. Within each Mission, **specific Areas of intervention** are identified to **guide territorial policies**.

The structuring of the Strategy into Missions is under construction, as institutional participation processes and involvement of the civil society is ongoing. The following table shows the Missions identified to date, which are susceptible to changes, and some examples of Areas of intervention.

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<sup>4</sup> [Mazzucato\\_report\\_2018.pdf \(europa.eu\)](#)

# GOALS → RESULTS

REGIONAL SUSTAINABLE DEVELOPMENT STRATEGY OF PIEMONTE		SUSTAINABLE DEVELOPMENT AGENDA OF THE METROPOLITAN CITY OF TURIN AND ITS TERRITORY		
STRATEGIC MACRO-AREAS		MISSIONS		AREAS OF INTERVENTION
1	SUPPORTING THE TRANSITION OF THE PIEDMONTESE PRODUCTIVE SYSTEM TOWARDS A MODEL MATCHING COMPETITIVENESS AND SUSTAINABILITY	1.1	CREATING NEW PRODUCTION CHAINS OR CONVERTING THE EXISTING ONES IN RELATION TO RECYCLING, REUSE AND REDUCTION OF WASTE	Construction supply chains WEEE supply chains Textile supply chains (...)
		1.2	CONVERTING PRODUCTION PROCESSES AND PRODUCTS FOR THE GREEN ECONOMY	Supply chains for energy efficiency Green public Procurement (...)
		1.3	MANAGING AND ENHANCING FORESTS FOR RURAL AND MOUNTAIN DEVELOPMENT	Wood-energy supply chain (...)
		1.4	IMPLEMENTING THE TRANSITION TOWARDS AN ENVIRONMENTALLY REGENERATIVE, HEALTHY, INCLUSIVE AND ACCESSIBLE FOOD SYSTEM FOR PEOPLE	Food districts Food community
		1.5	BUILDING A METROPOLITAN OUTDOOR TOURIST SYSTEM	
		1.6	DEVELOPING SUSTAINABLE DIGITAL INFRASTRUCTURE	
		1.7	IMPLEMENTING A TRADING SYSTEM SERVING PEOPLE AND THE COMMUNITY	Business districts Multiservice proximity shops (...)
2	ENERGY TRANSITION AND CLIMATE CHANGE ADAPTATION AND MITIGATION	2.1	INCREASING ENERGY PRODUCTION FROM RENEWABLE SOURCES AND ADAPTING ENERGY PRODUCTION AND CONSUMPTION SYSTEMS TO TERRITORIAL SPECIFICITIES	RES: bio-gas and green hydrogen from organic supply chains  Energy communities (...)
		2.2	REDUCING ENERGY CONSUMPTION AND EMISSIONS RELATED TO BUILDING ASSETS AND INFRASTRUCTURE	Energy efficiency in the use of biomass  School infrastructure (...)



		2.3	REDUCE ENERGY POVERTY	
		2.4	IMPLEMENT MOBILITY TRANSITION AND TRANSPORT CONVERSION	
3	CULTURAL AND ENVIRONMENTAL HERITAGE AND TERRITORIAL RESILIENCE	3.1	SAFEGUARDING AND REGENERATING THE NATURAL CAPITAL OF THE METROPOLITAN TERRITORIAL SYSTEM	Ecological connections for biodiversity Nature-based green infrastructure (...)
		3.2	PRODUCING ADAPTATION FOR THE IMPACTS OF CLIMATE CHANGE	Urban and peri-urban forestation Re-allocation or conversion of crops (...)
		3.3	DECREASING THE EXPOSURE OF PEOPLE, ASSETS AND NATURAL CAPITAL TO HYDROGEOLOGICAL RISK	
		3.4	REDUCING THE CONSUMPTION AND DETERIORATION OF SOIL AND INCREASING ITS PRODUCTION CAPACITY	Conversion of abandoned buildings (...)
		3.5	IMPROVING THE COLLECTION OF MUNICIPAL WASTE AND REDUCING THE IMPACTS OF WASTE PRODUCTION	
		3.6	REGENERATING THE TERRITORY THROUGH THE SYNERGY BETWEEN NATURAL, HISTORICAL AND CULTURAL HERITAGE	
4	VOCATIONAL TRAINING AND NEW JOBS FOR THE GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT	4.1	IMPLEMENTING / IMPROVING THE SCHOOL AND VOCATIONAL TRAINING INFRASTRUCTURE ACCORDING TO SUSTAINABILITY OBJECTIVES	Schools and vocational training agencies in "transition" (...)
		4.2	PROMOTING THE "TRAINING SUCCESS" FOR SUSTAINABILITY CHALLENGES	The educational success of the territories (...)
5	SUPPORTING THE DEVELOPMENT AND PHYSICAL AND PSYCHOLOGICAL WELL-BEING OF PEOPLE	5.1	GUARANTEEING SERVICES TO ALL CITIZENS	
		5.2	PROMOTING NEW LIFESTYLES AND INDIVIDUAL RESPONSIBILITY IN THE PROCESSES OF SOCIAL TRANSFORMATION	
6	REDUCING DISCRIMINATION, INEQUALITIES AND ILLEGALITY	6.1	ENABLING AND FAVORING INCLUSION AND REDUCING SOCIAL FRAGILITIES	
		6.2	IMPLEMENTING DECENTRALIZED AND INTERNATIONAL DEVELOPMENT	

			COOPERATION	
7	ADDRESSING CHANGES IN HEALTHCARE DEMAND: CHRONICITY, FRAGILITY, APPROPRIATE PERFORMANCE, EQUITY OF DISTRIBUTION	7.1	RESPONDING TO THE HEALTH NEEDS OF LOCAL COMMUNITIES	
		7.2	PROMOTING HEALTH IN EARLY CHILDHOOD	

***TAB. 5 - The methodology providing coherence to policies***

# 4

## Sustainability culture: participation and awareness raising

### 4.1 Forum, Pact, Civic Social Network, Young People

To support the transition towards a Piedmontese economy which is both competitive and sustainable, the **involvement** and contribution of the various **components of the territorial socio-economic system** is necessary. The contribution of territorial stakeholders is essential, because they hold the necessary political, economic, organizational and cultural resources to transform the guidelines and objectives of the Regional Sustainable Development Strategy and of the Metropolitan Agenda into real processes and projects of change. The **Forum** is the virtual container that collects various tools and actions for sustainable development in Piemonte. The involvement process implemented by the Regional Forum is **part of the governance system** that **accompanies the development and implementation phases** of the Strategy.

Forum tools are:

- The **Pact for the Sustainable Development of Piemonte** is the tool for engaging and sharing objectives and commitments in relation to the transition to a new development model. The Pact, which can be subscribed by public and private organizations of the Piedmontese socio-economic system, is a valuable background context that feeds the social imaginary and the strategic framework guiding actions for concrete and effective challenges (not only mere "greenwashing") in which the actors can feel represented. The Pact systematizes the commitment (already active or to be started) of the subscribers not in relation to unrealistic goals but towards measurable and concrete challenges to be monitored over time.
- The **Civic Social Network**, which is the platform supporting the Pact, is useful for comparing results and for building a "balance sheet" of Piemonte's sustainability policies.

Given the value of the vision **Young** (age 18-35) and **Very Young People** (under 18) have about their future, a process to involve young generations has been initiated, with the use of suitable and dedicated tools and languages. The framework of events **Piemonte 2027 - NextGen for sustainability** is the first development element of the Youth Forum (1<sup>st</sup> event held on the 11<sup>th</sup> of December 2021 and involving more than 300 young people). It will support the implementation of the Strategy by providing regular occasions for consultation and discussion.

## 4.2 Educational success and schools in transition. A common experiment for policy coherence

The two pilot actions<sup>5</sup> “2030 AGENDA. The educational success of the territories towards transition” and “2030 AGENDA. School and Vocational Training (VET) in transition”, which are closely interrelated, focus on the identification of strategic policies and organizational innovations enabling territories to cooperate and address the challenges set by the 2030 Agenda in relation to the establishment of a culture and skills for sustainability. They constitute a common testfield and an example of the territorialization of Strategic Macro-Area n. 4 "Supporting professional qualification and new professional skills for the green economy and sustainable development".

Addressing these challenges - territorialized in the Regional Sustainable Development Strategy and in the Metropolitan Sustainable Development Agenda – does not only depend on the individual subjects but also on the relationships and forms of collaboration among the territorial stakeholders, in a view to implement a learning community of practice<sup>6</sup> from which to draw knowledge, stimuli and resources to share in order to support change.

In this sense, upper secondary schools and Education and Vocational Training Agencies are strategic players on the territory; it is therefore fundamental that they:

- improve/increase relations with other territorial stakeholders, to link training subjects to the territorial needs and to the implementation of projects related to territorial sustainability policies,
- “equip themselves”, from a cultural and organizational point of view, to respond to change and re-locate in a new context.

Withing the framework of the coherence of policies and inter-institutional governance described above, the Metropolitan City of Turin, the Piemonte Region and IRES Piemonte, together with the Piemonte Regional School Office, universities, other research bodies and associations<sup>7</sup>, are therefore collaborating for the identification of **new forms of governance** (which **facilitate relationships** among the stakeholders of the territory) and of **tools** able to have an impact on the daily activities of **schools and professional training agencies**, while guiding investments for wide-ranging planning and project designing.

With the Action "**2030 AGENDA. The educational success of the territories towards transition**" we intend to equip ourselves with a territorial *governance* able to create "educational success"

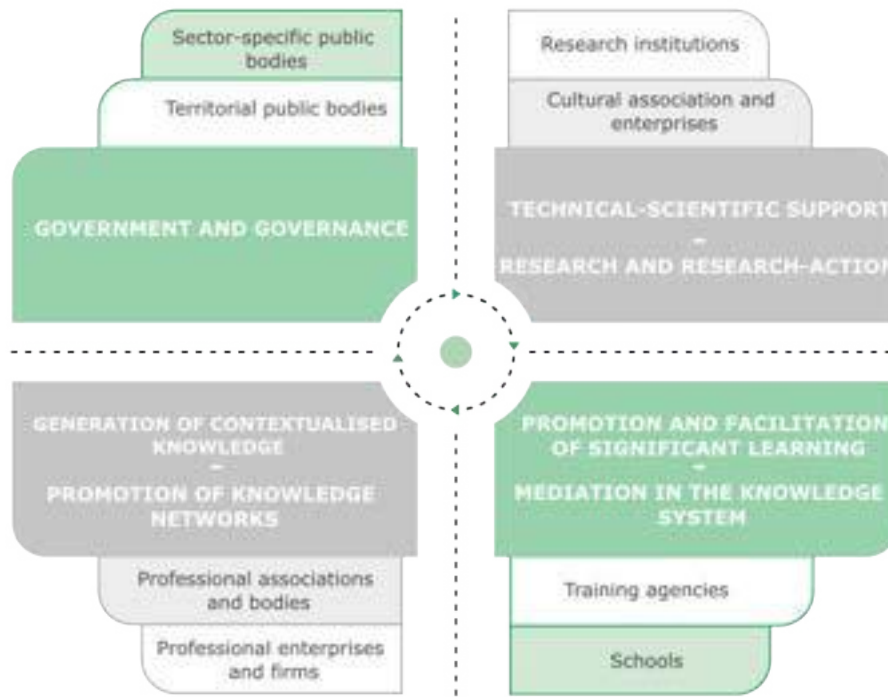
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<sup>5</sup> The collaboration agreement between the Ministry for Environmental Transition and the Metropolitan City of Turin foresees the development of Pilot actions. They are both implemented at the local and metropolitan scale and will be then transposed at the regional scale as part of the territorialisation of the Strategic Macro-Area n. 4 "Supporting professional qualification and new professional skills for the green economy and sustainable development".

<sup>6</sup> The community of practice, as defined by Etienne Wenger, consists of “a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly”. A community of practice is created and develops with constant attention towards thos processes which support its goals, action and results. E. Wenger, E. (1998). Communities of practice: Learning, meaning, and identity.

<sup>7</sup> Turin Polytechnic University and University of Turin, School of Management of the University of Turin, Legambiente (NGO at the national level), [Avanzi- sustainability in action](#).

towards sustainability challenges<sup>8</sup> and to accompany the transition to face them, focusing on education and training in the territorial system, with the aim of building skills for sustainable development.



**FIG. 10 - Main functions of the stakeholders involved in governance issues**

Source: IRES Piemonte

The hypotheses on which our action is based are supported by previous cross-border cooperation project experiences (see Box 1) and show the need to adapt skills starting from the identification of **new training needs for the transition**. Experience has shown, however, that only little information is available on what are the tools, the territorial organizations and the existing processes supporting and promoting, in the area of the metropolitan city (at the "pilot" level), the flows of knowledge between ongoing changes and the educational and training offer available. For this reason, in the development of the Action, investigations are being carried out to understand the current dynamics among the territorial actors. We used innovative methodologies (such as the Social Network Analysis) that allow to describe the networks, to identify the typology of the relationships, nodes and dynamics, to be able to address the issue of professional qualification for sustainable development from a territorial point of view and in close relationship with the changes in production systems.

<sup>8</sup> Educational success is not only an issue to be considered internally by formal education and training bodies, but a shared responsibility for all territorial stakeholders. It concerns the possibility for all Youth, without exclusion, to set up those culture and skills which will enable them to face a complex reality.

## BOX 1 – The A.P.P. VER. Project



A.P.P. VER. - LEARNING TO PRODUCE GREEN is a project funded by the European Territorial Cooperation Program Interreg V-A Italy - France (ALCOTRA) 2014-2020, led by Metropolitan City of Turin, with Ires Piemonte as the Implementing body and the City of Pinerolo, the Consortium for Training, Innovation and Quality (CFIQ) and GIP FIPAN-Académie de Nice as partners. All information and materials from the project are available [here](#):

- The [Green Textbook](#) is the tool to learn about green economy and sustainable development in the cross-border territory and to encourage dialogue between the actors;
- The “[Green Spin](#)” is a set of guidelines, methods and contents to give a green direction to curricula and competence profiles;
- The [Green Education](#) contains guidelines, methods and content for adult education.

The cross-border project A.P.P.VER. directly involved hundreds of people including teachers, staff of territorial organizations and institutions, as well as researchers. It made possible, after almost four years of work, to understand that **the gap between ongoing changes in the socio-economic system and the offer of schools or vocational training agencies, can be addressed** by establishing:

- **Stakeholders’ networks** in the form of communities of practice featuring effective knowledge exchanges (networks generating social capital);
- **Dynamic skills**, grounded in a new way to conceive development, which enables people to understand complex and constantly changing realities and act accordingly;
- **Training needs**, through permanent interaction among stakeholders concerning **knowledge** about new dynamics and plans for new development objectives;
- Educational research processes promoting **methodological and content innovations** in curricula;
- **Learning processes for adults** in training experiences, workshops, educational research processes and organizations.





**FIG. 11 - The six “dimensions” of the interaction among school, vocational training and territorial productive system (at the institutional, goods and services, public and private levels)**

*Source: IRES Piemonte*

The "2030 AGENDA. School and Vocational Training (VET) in transition" Action is integrated into the governance constitution process described in the previous Pilot Action but focuses on the setting up of a tool that gives to the activities of **schools and vocational training agencies** a sustainability direction, in order to plan, guide, support and enhance experiences that contribute to the educational success at the local level.

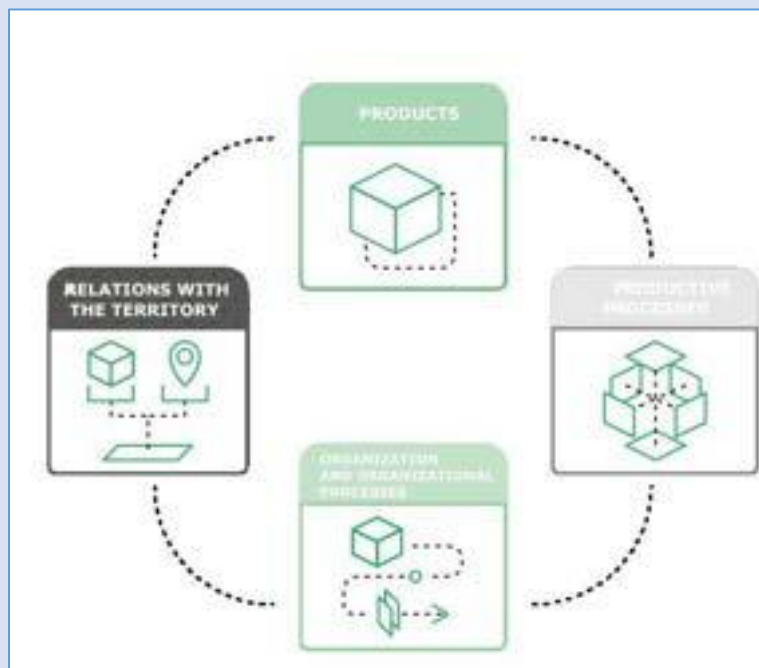
In order to be active parts in the transition, schools and training agencies must indeed **understand** and be able to assess **how sustainable and green-oriented they are**. It is then necessary that they develop processes of change both as subjects in charge to deliver education and training, and from the point of view of the quality of learning environments (physical and relational). This will allow them to play an active and coherent role within the social stakeholder network and the territorial dynamics.

In this case as well, the results of the A.P.P.VER. project can provide some ideas for the actions to be undertaken, especially in relation to the Green Textbook and the model identified (see Box 2): the sustainability of a secondary school or a vocational training agency is measured in terms of consistency between the four dimensions of the model and refers to specific descriptive keys (see Box 2).

## BOX 2 – The A.P.P. VER. Ideas



In A.P.P.VER., to foster dialogue among the parties - schools, training agencies, institutions, research bodies, businesses and professionals – we established a common approach to investigate changes in the goods and services production system. It allowed to highlight the three dimensions of sustainability (economic, social and environmental) **through the products and the productive, organizational and relational processes with the territory** of the organizations of the territorial system.



**FIG. 12 – The four analysis dimensions of the organizations**

Source: IRES Piemonte

According to the model, organizations of different nature can be analyzed through descriptive keys<sup>9</sup> ("lenses" to read and interpret sustainability), identified for each of the four analysis dimensions, designed, with the help of trade associations and professional associations, on the basis of European national or regional indicators for green economy and sustainable development.

This knowledge model has been used for some production sectors to describe the work and innovations of some public and private organizations, case studies and good practices (even if only partial) in the fields of green economy and sustainable development (see [the "GREEN TEXTBOOK. A tool to learn about territorial green economy and sustainable development"](#)).

<sup>9</sup> The descriptive keys help understanding organizations representing, at least for some aspects, the change towards a model of sustainable development and allow to study complex realities. They derive from indicators recognized at European and national level, as well as from knowledge produced by recent research activities. They must be modified in relation to the knowledge of each user, the gathering of new knowledge and the evolution of changes.

We are building on the results of the A.P.P.VER. Model, integrating them with the analysis of other "sustainable schools" models, the contribution of experts from Turin universities and a constant interaction with schools and vocational training agencies. Our goal is to identify **new ways** able to guide changes in the activities of schools and agencies located in the area of the metropolitan city (at the "pilot" level). Such changes will promote education and training effectiveness in relation to the development needs of the territory and, more generally, of society.



Strategia per  
lo sviluppo sostenibile  
**REGIONE PUGLIA**



# VOLUNTARY LOCAL REVIEW 2022

Puglia Region  
Metropolitan City of Bari





## INTRODUCTION

The programmatic and strategic document "Transforming our world: the 2030 Agenda for Sustainable Development", better known as the 2030 Agenda, was adopted on the 25th of September 2015 by the heads of state and government of 193 countries during a special summit of the United Nations. It sets 17 goals (SDGs) and 169 sub-goals for the achievement of which the logic is based on a multilevel dimension.

Italy approved with CIPE Resolution no. 108/2017 the National Sustainable Development Strategy (SNSvS), in order to move from a sectoral governance approach to an integrated approach based on the three dimensions of sustainability (economic, social, environmental).

Consistently with national provisions (Legislative Decree 152/2006), the Puglia Region has started the process of building its Regional Sustainable Development Strategy (RSvS), indicating the regional Department of Mobility, Urban Quality, Public Works, Ecology and Landscape, as the person in charge of defining the RSvS (ref. n. MATTM n. 2802/2018).

The project of constructing Puglia's RSvS benefits from the following support and confrontation initiatives *promoted* by the central government:

- collaboration agreements with which the MATTM supports, also financially, the construction process of the Regional Strategy (Agreement pursuant to Article 15 of Law 241/90 and subsequent amendments between the Ministry of the Environment and the Puglia Region for collaboration activities to support the fulfilment of the obligations provided for by art. 34 of Legislative Decree n.152 / 2006 and subsequent amendments in relation to the implementation of the Regional Strategies for Sustainable Development - ref. n.12540 of 21/12/2018 and ref. n. 40094 of 29/05/2020);
- support within the line of action supported by the PON Governance and Institutional Capacity 2014/2020 devoted to the issue of improving the efficiency of the public administration - We create PA (Line of intervention L2 WPI).

Document by the Department of Environment, Landscape and Urban Quality - Puglia Region

### **Coordination structure of the Regional Sustainable Development Strategy**

Ing. Paolo Garofoli - Department Director

Dr. Serena Scorrano - official

Dr. Claudia De Robertis - official

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With the support of the **IPRES Foundation - Apulian Institute of Economic and Social Research**



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*Attachment n. 1* – **Regional Sustainable Development Objectives**

*Attachment n. 2* – **Puglia positioning tables - adj. September 2021**



# 1

## Territorial framework

The territorial classification refers to data sourced by Istat (National Institute of Statistics), last updated in August-September 2021 and to the annual report "Territories and sustainable development goals" published by the Italian Alliance for Sustainable Development (ASviS) in December 2020.

Istat periodically updates the list and values of indicators "identical" or "similar" to those defined at the international level by the 2030 Agenda working group, integrating them with other "context" ones, linked to specific territorial actions.

In the annual report, the ASviS processes Istat data, producing the regional analysis of a composite indicator for each SDG, built with the same methodology adopted by Istat for the analogue composites of the Equitable and Sustainable Well-being (SWB/BES)<sup>1</sup> framework. Furthermore, in 2020, the ASviS proposed 22 target indicators quantified by 2030, selected according to certain criteria, and evaluated in terms of distance from the current 22 values. The Statistical Office of the Puglia Region processes the Istat data and makes the trends over time of the individual Apulian indicators available on the official website, comparing them with the national and Southern ones <https://www.regione.puglia.it/web/ufficio-statistics/activities-and-reports/goal-agenda-2030>. The office has published the following updates so far: July 2019, January 2020, June 2021, March 2021, August-September 2021.

In Appendix 1 of the document the values of these indicators for Puglia, Southern Italy and Italy referring to the year of the last update are shown by the tabs. 1-17. The green colour highlights a favourable positioning for Puglia with respect to Southern Italy and Italy, considering the direction of the indicator's polarity. The updated Apulian data is then compared with that of the previous year and is green-coloured if the indicator shows an improvement.

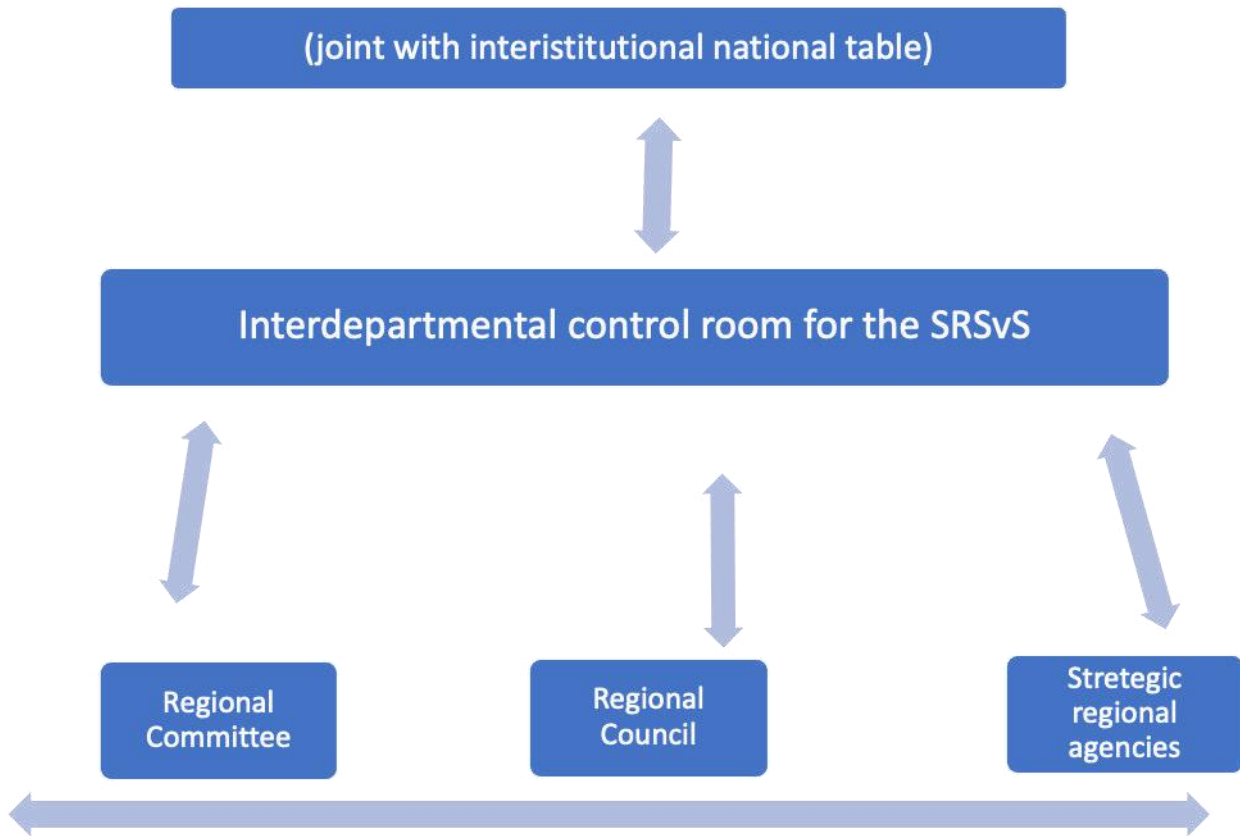
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<sup>1</sup> Law n. 163/2016 reformed the budget law, the main instrument of the public finance maneuver together with the stability law. With Law n. 163/2016 Sustainable well-being enters for the first time in the process of defining economic policies, bringing attention to some fundamental dimensions for the quality of life in their effect. The Puglia Region approved the regional law n. 47 31 October 2019 "Fair and sustainable well-being (SWB/BES) in support of regional budget and financial planning".

# 2

## Governance of implementation and monitoring

The Interdepartmental Control Room (CdR/ICR), established for the Governance of the SRsvS construction process, started operational activities in April 2019, and then was implemented with the Control Room of the Regional Development Plan. The latter in 2018 had already laid the foundations of a reflection on the design of a regional strategy focused on sustainability. The Control Room, composed as follows, performs coordination and direction functions in order to guarantee support for decision-making processes, as well as linkups with the National Inter-institutional Table, representing the place responsible for the collaboration and coordination of the various sections of the Regional Council, of the Regional Council and of the Regional Strategic Agencies.



The Interdepartmental Control Room in the period between June 2019 and January 2020, promoted a participatory process marked by three macro phases below:

period	aim	Activity	Participants
2019 June/July	<b>A. Strategic lines</b>	<b>Town Meeting</b>	Mayors and local administrators
	Identification of a first address		

	system		
2019 September	<b>B. Political themes</b>	<b>8 Focus group</b>	Local Mayors and Administrators, Economic-Social Partnership, Regional Departments and Agencies, Universities, Third Sector, Individual Citizens
	Collection of participatory contributions around the solicitations presented by thematic position paper		
2020 January	<b>C. The 2030 Agenda Global Goals</b>	<b>First Regional Forum on sustainable development</b>	Local Mayors and Administrators, Economic-Social Partnership, Regional Departments and Agencies, Universities, Third Sector, Individual Citizens
	Deepening of the vision and strategies in relation to the 2030 Agenda Goals		

In order to promote informed participation, the website <http://manoamano.regione.puglia.it/> was set up in June 2019. The website is the result of a complex and important survey of the administrative actions of regional councils, departments and agencies. It is useful to point out that the portal also represents an effective monitoring tool for both "internal" and "external" use, thanks to a constant updating and enrichment of the published contents. Alongside the events in attendance, the participatory path was parallel by the collection of contributions and online debates, through the regional platform *Pugliapartecipa*. The launch of four areas specifically dedicated to the themes and contents of the strategic plan followed. Through the Town Meeting with Mayors and Administrators from all over the regional territory, a discussion was promoted starting from the specific local needs useful for defining actions and measures for the completion of the regional government program. This was done in order to bring out an initial system of guidelines on which to orient the strategic development to 2030 in relation to 8 areas of discussion:

1. Agriculture
2. Environment, energy and waste
3. Institutional re-organization and participation
4. Health, sport and well-being
5. Economic development, innovation and infrastructure
6. Territory, beauty and landscape
7. Tourism and culture
8. Welfare, work, training and youth policies

In addition, as part of the 2019 edition of the Fiera del Levante in Bari, 8 thematic participatory focuses were promoted through which the contents of the implemented position papers were proposed for comparison with the institutional and social economic partnership, universities, associations and citizens. The contents of position papers are implemented by Regional Departments and Agencies assisted by the Evaluation and Verification Unit of Public Investments and by the IPRES (Apulian Regional Institute of Economic and Social Research) Foundation, in order to collect ideas and proposals for the definition of the vision and strategic guidelines for sustainable development:

- 1. Towards the Social and Gender Report of Puglia Region**  
area: Istitutional and participation
- 2. For a law of Beauty**

area: Environment, territory and landscape

**3. Destination Puglia: nature, culture and innovation, levers of tourism development**

area: Economic development and competitiveness

**4. Welfare perspective in Puglia: protection, inclusion, investment and social innovation**

area: welfare

**5. Sustainable Puglia: strategies for safeguarding the natural capital**

area: Environment, territory and landscape

**6. Health in the regional development plan**

area: Health, sport and well-being

**7. Experimenting the future: young people, ideas and policies for social innovation**

area: Human capital

**8. Infrastructure as factors of territorial competitiveness**

area: Economic development and competitiveness

In January 2020, the first part of the participation process for the drafting of the vision document was concluded with the launch of the First Regional Forum on Sustainable Development entitled “Act for climate”, aimed at collecting contributions with the aim of deepening and verifying the strategic vision with respect to their declination of global goals for sustainable development, specifically to SDG 13 “Promote actions, at all levels, to combat climate change”. The participatory debate started with the contents outlined in the motion for the Climate Emergency Declaration approved by the Regional Council in November 2019 and from what emerged in the Opinion presented in June 2019 in Brussels at the Committee of the Regions “A clean planet for all - Strategic vision long-term European economy for a prosperous, modern, competitive and climate-neutral economy”, where President Michele Emiliano was speaker. The development levers articulated in the position papers of the 20/30 Strategic Plan represent further thematic in-depth contributions placed for discussion in the Forum Tables.

The participation activities were organized in 5 thematic working groups:

table 1 – sustainable development and industrial innovation

table 2 – agriculture and sustainable use of natural resources

table 3 –resilient and sustainable urban environments

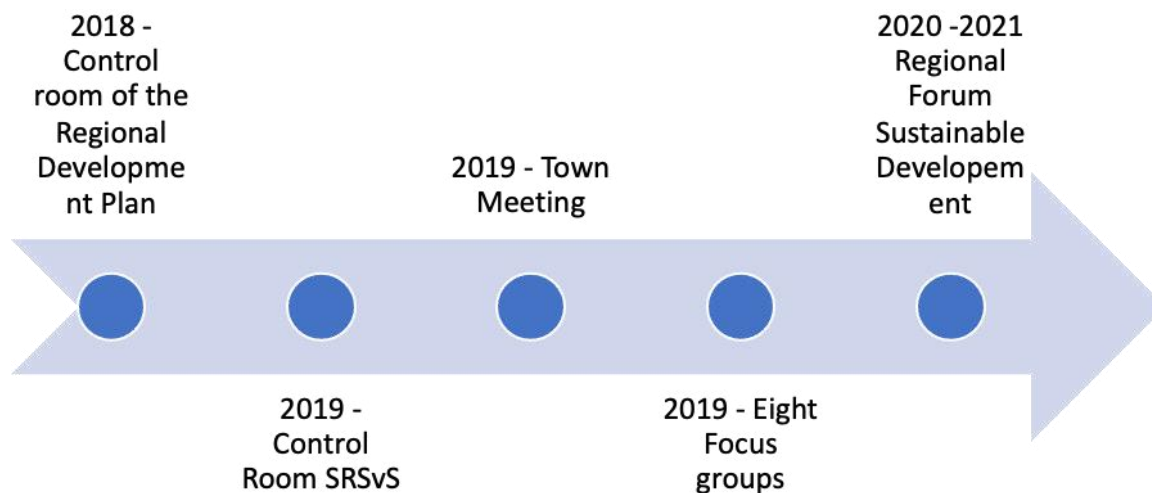
table 4 – lifestyles and responsible consumption

table 5 – training, communication and partnership

The methodology was based on an initial experimentation of the hybridization between offline participation and online participation, with the instant publication of the contributions collected at the tables on the *pugliapartecipa* platform, as a form and opportunity for strengthening and widening the public debate.

The meetings for the drafting of the vision document saw the active participation of about 2000 people.

The reports of the meetings, available for public consultation on the *pugliapartecipa* platform, were delivered to the Control Room for the analysis and integration of the contents collected in a final document at the last drafting stage. The document will provide the analysis of the regional context, propaedeutic for the definition of the sustainable development objectives of the Puglia Region.



As for the monitoring of the regional strategy, a specific plan has been drawn up - defined in accordance with the Monitoring Plan of the National Strategy, with the indicators of the Cohesion Policy 2021-2027 and with the document for the Impact Assessment of Gender (VIG) provided for by the Regional Council Resolution no. 365/2021 - and is currently being prepared. The process of defining this plan, however, is still underway also at the national level, in line with the definition of the indicators of the 2030 Agenda

The UN Statistical Commission has formed a working group to define a set of indicators for monitoring the implementation of the 2030 Agenda at a global level, called the Inter Agency Expert Group on SDGs (IAEG-SDGs). Istat, a member of this agency, has developed the Istat-Sistan SDGs indicators which are updated twice a year and are published in the "SDGs Report" every year to provide an overview of the progress made by Italy towards the objectives of the 2030 Agenda.

In Italy, the "Working Table on indicators for the implementation of the national sustainable development strategy" has been operational since March 2018, composed of the Ministry of the Environment and the Protection of the Territory and the Sea, the Ministry of Economy and Finance, the Ministry of Foreign Affairs and International Cooperation, ISTAT and ISPRA which has currently identified a first list of 43 indicators chosen from the indicators developed by the Inter Agency Expert Group on SDGs and the indicators of Fair and Sustainable Wellbeing (BES).

The Gender Impact Assessment, which is being introduced on a pivotal basis in the Puglia Region, is a valid model for all phases of the evaluation activity during the programming period, with the aim of implementing, monitoring and evaluating the effectiveness and the control of the measures and actions outlined in community, national and regional policy documents, in order to pursue the principle of equal opportunities taking into account gender transversality.

The VIG of the Puglia Region starts from the 5 strategic objectives to tend towards when planning measures and interventions and aims to define:

- ✓ indicators for context analysis and scenario assessment
- ✓ "gender" criteria for the drafting of directives and calls for tenders and gender criteria for the selection of projects
- ✓ a minimum set of gender-sensitive indicators for evaluating the effects (output and result indicators) valid for mid-term and ongoing evaluation

- ✓ A focus for deepening thematic analysis related to areas considered significant for the evaluation representing a source of reflection for the definition of impactful indicators in terms of gender which are useful for ex post evaluation. These investigations have the aim of identifying a system of indicators useful for assessing the impact of equal opportunity policies.
- ✓

This model will allow the definition of:

1. Actions that have as their primary objective the achievement of equal opportunities, as they are specifically and primarily aimed at gender equity (Gender positive)
2. Actions that are not aimed primarily at equal opportunities, but which provide a contribution to reducing inequalities and promoting gender equity (Gender-oriented)
3. Neutral actions, which do not contribute to reducing inequalities or improving gender equity (Gender neutral).

The adoption of this evaluation model will allow the construction of a data collection system suitable for defining a "gender indicator" at the regional level that can be the basis for monitoring the implemented interventions and supplement the strategic decisions of the administration, called GENDER INDEX.



# 3

## Territorial strategy and policy coherence

The definition of the system of Regional Sustainable Development Goals ORSS (RSDGs) of Puglia moves within the framework defined by the Regional Government Program, adopted on the 26th of November 2020, with which the Council outlined the strategies and policies to be implemented over the legislature, to be able to combine competitiveness, attractiveness and solidarity as desired by the 2030 Agenda and the National Strategy for Sustainable Development.

The ORSS (RSDGs) coherently cross the goals of the 2030 Agenda and the Policies defined by the 2021-2027 Community programming, the regional Gender Agenda and the strategy of adaptation to Climate Change, targeting regional choices in the field of environmental, social and economic sustainability. From the coherence analysis that has been carried out, it results those the regional development choices show a high permeability to the programming devices, providing the region with effective and shared guidance tools.

The list of Regional Sustainable Development Goals defined in the preliminary guidance document approved with DGR n.687 / 2021 is shown in Appendix 2, divided into 10 areas of intervention.

Cohesion policy for the 2021-2027 programming period provides for the pursuit of five policy objectives (POs). Based on these objectives, the European Commission has identified the investment priorities concerning funds for the effective implementation of the 2021-2027 cohesion policy for Italy in Annex D of the 2019 Country Report, including the in-depth examination on the prevention and adjustment of macroeconomic imbalances. This is a document drawn up in the context of the 2019 European Semester. The aforementioned Annex D constitutes the basis for a dialogue between Italy and the Commission services with regards to the programming of cohesion policy funds. The Commission suggests that Italy concentrates resources for each thematic objective on the following priorities:

- ✓ PO 1
  - strengthen research and innovation capacities and the spreading of advanced technologies
  - promote the digitization of citizens, businesses and public administrations
  - improve digital connectivity
  - improve growth and competitiveness
- ✓ PO2
  - Promote energy efficiency measures and priority investments in favour of renewable energies
  - promoting climate change adaptation, risk prevention and disaster resilience
  - promoting sustainable water and waste management and the circular economy
  - promote the actions included in the sustainable urban mobility plans
- ✓ PO3
  - develop a sustainable, climate resilient, smart, safe and intermodal trans-European transport network
  - develop sustainable, climate resilient, smart and intermodal regional mobility
- ✓ PO4

- improve access to employment, modernize labour market institutions and promote the participation of women in the labour market
- to improve the quality, accessibility, effectiveness and relevance for the labour market of education and training and in order to promote lifelong learning
- enhance active inclusion, promote socio-economic integration of people at risk of poverty or social exclusion, tackle material deprivation, improve the accessibility, effectiveness and resilience of health care and long-term care to reduce health inequalities

✓ P05

Territorial strategies must be implemented in synergy with other political objectives, with the primary aim of promoting the economic and social development of the areas most affected by poverty.

Investments are therefore necessary at a territorial level, in terms of functional areas:

1. Metropolitan functional areas face the challenges related to poverty, also caused by the "agglomeration" effect and demographic trends;
2. medium-sized urban areas need to develop innovative ways of cooperation for improving their economic, social and environmental potential, taking into account the most vulnerable groups;
3. In-land areas facing demographic challenges and poverty need to improve the quality of general interest services.

The Governmental Program of the Puglia Region provides for a specific commitment to reducing the gender democracy gap and a strong boost to gender policies in all sectors. This finds further foundation in the UN 2030 Agenda for sustainable development, identified as an essential cornerstone for the declination of regional development strategies within the programming processes.

Despite a particularly advanced regulatory context and the sustained investments, as a matter of fact, the Puglia Region is still characterized by particularly critical levels of gender gap affecting women in all dimensions: political, social, cultural and economic. Furthermore, territorial inequality between the North and South of the country which naturally exacerbates gender inequality even more.

The regional law n. 7 of 8 March 2007 "Regulations for gender policies and services for the reconciliation of life - work in Puglia" had already identified gender equality as an objective of economic and social equality capable of producing positive and circular effects not only on the lives of women and men of Puglia but also for the community as a whole.

Therefore, with resolution no. 365 of 8 March 2021, an impetus was given to the drafting of a Gender Agenda as a systematic, articulated and multidisciplinary intervention capable of radically reversing the guidelines of development so that the gender gap is bridged and the conditions for a real equal access of women to the constitutionally guaranteed rights of work and quality of life, most importantly, by guaranteeing the conditions so that the gender perspective and the needs of women are fully integrated in the decision-making tables and in the planning processes.

This resolution provides that the Gender Agenda is translated into a strategic vision document integrated with the regional Sustainability Strategy that outlines indications in terms of global, specific and operational objectives to be integrated into all regional policies having in this regard the following priority axes, deriving from the analysis of the main socio-economic indicators.

The strategic objectives identified are the following:

#### QUALITY OF LIFE FOR WOMEN AND MEN

1. To improve the living conditions of women and to promote active participation

(Contrasting stereotypes, urban agenda, gender medicine, social infrastructure, transport, associations, consultative and representative bodies)

#### EDUCATION TRAINING AND WORK

##### 2. Female empowerment in strategic education/training/work sectors

(Fight against educational poverties, incentives for access to the labour market, work-life balance, leave for men)

#### COMPETITIVENESS, SUSTAINABILITY AND INNOVATION

##### 3. Promote the participation of women in sustainable development processes and innovation

(Entrepreneurship, self-employment, stem disciplines, digital empowerment, research and innovation)

#### QUALITY WORK

##### 4. Improve working conditions for women

(Fight against job insecurity, fight against undeclared work and harassment in the workplace, flexibility, career paths and professional retraining, wage gaps, equal leave for all)

#### FIGHT AGAINST MARGINALITIES and GENDER VIOLENCE

##### 5. Tackle violence and discrimination motivated by sexual orientation and gender identity, combat all forms of marginalization and discrimination

(Fight against poverty, income support, social inclusion of immigrants, anti-violence centres, training interventions in schools, economic support for women victims).

The Gender Agenda, therefore, constitutes an integral and substantial part of the Regional Strategy for Sustainable Development and a reference document for specific planning documents, also with reference to the monitoring and evaluation systems of the interventions.

Finally, for the implementation of the SRSvS, the implementation of a Regional Strategy for Adaptation to Climate Change (SRACC), a path initiated by the Puglia Region with DGR n. 1575 of 17/09/2020, in order to systematize the experiences and information currently available on the climate phenomenon and identify adequate measures capable of strengthening the resilience of territories.

To enrich the framework of the regional strategy for the achievement of the SDGs 4 objective is added to the Regional Plan for tackling educational poverty which, as shared by the Regional Council in the session of the 15th of March 2021, Communication SUR / COM / 2021/00010, identifies access to knowledge, intended both as a contrast to educational poverty and as an extraordinary plan for training and research, as one of its fundamental pillars. In the belief that only a large investment in the human and social capital of children and young people can be the strongest lever to counter social marginality and to reduce inequalities, as well as to increase the competitiveness of Apulian production systems and the attractiveness of the Puglia Region.



# 4

## Participation and promotion of a culture for sustainability

The Puglia Region is among the few Italian regions to have adopted a Law on Participation (L.R. 28/2017) which promotes the culture of participation as an ordinary form of government.

In this context, the SRSvS is a dynamic participatory process which is also fed by the results of the [Regional Sustainable Development Forum](#).



The governance of the process is supported by moments of sharing and participation by civil society in its various representations, through the **Regional Sustainable Development Forum**. The objective of the Forum is to side the definition and subsequent implementation of the regional strategy

for sustainable development (and the 2030 Agenda) through the effective contribution of the actors who promote actions and policies in favour of sustainability. The Forum also qualifies as the space in which to bring out and affirm the subjects and practices of sustainability, according to a process of encounter between public policies and social energies. Returning the contribution of civil society to the monitoring document of the implementation of the SRSvS annually is among the objectives.

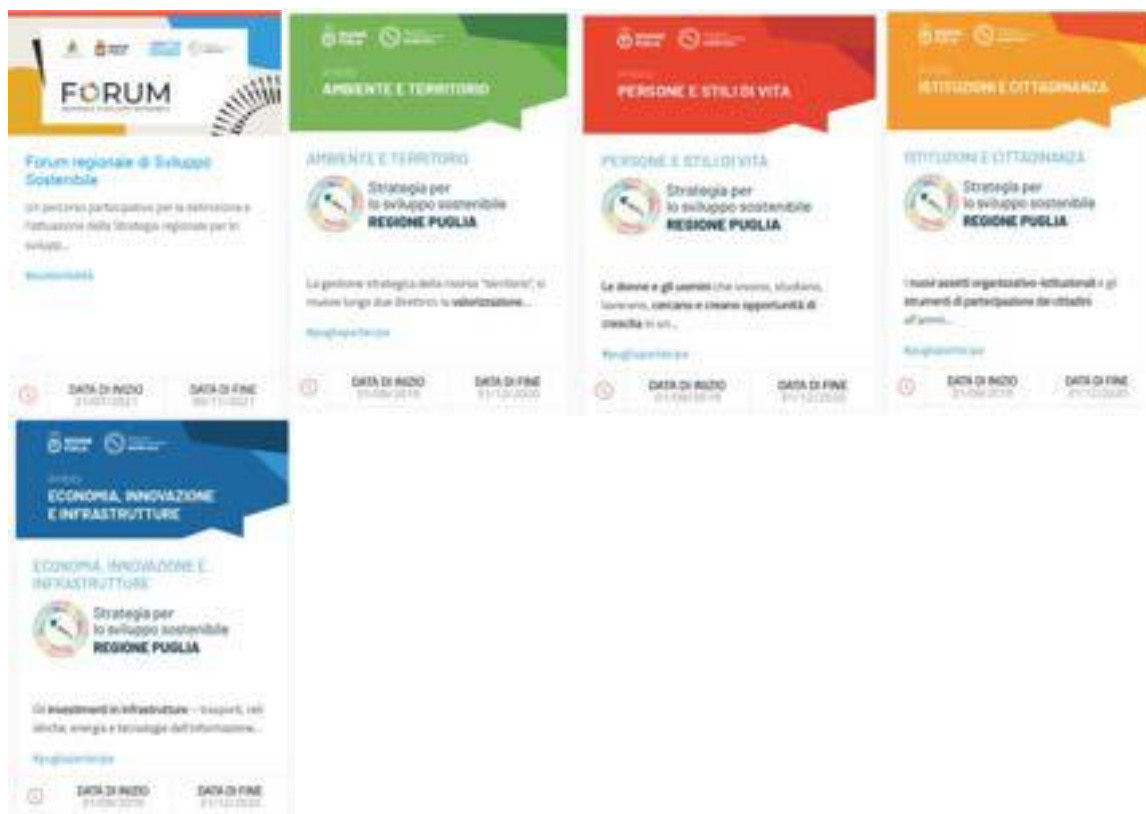
The task of the Forum is to guarantee the MiTE and the Regions involved in the formulation and implementation of their regional strategies, a contribution in terms of operational indications. This is for the effective implementation of the Strategy and the actions connected to it, as well as the recommendations and opinions on how to deal with critical issues, communicate the Strategy, consolidate its results, encourage the exchange of information and networking between the actors of sustainability at all levels.

The first meeting of the Forum was held on 23th of January 2020 entitled "**Agire per il Clima (Act for the Climate)**" which saw the presence of the President of the Region, the various regional structures represented by officials and managers and by representatives of civil society made up of associations, agencies, research institutions, students and teachers involved in participatory discussions on 5 thematic tables. The meeting's goal has been to collect in this event on the climate theme contributions aimed at defining a strategic vision based on sustainable development objectives to guide and permeate regional policies, programs and planning in the environmental social and economic field. Due to the Covid-19 pandemic health crisis, in-person activities were suspended and were reactivated only in July 2021. In the year 2021, therefore, another four meetings of the Forum for Sustainable Development were held as summarized below:

- **Governance of sustainability: comparing experiences**, held in Bari on the 21st of July 2021, at the "Casa della Partecipazione" (Participation home) in the Fiera del Levante exhibition centre.
- **The ecological transition and the strategy for gender equality**, held in Bari, on the 21st of July 2021, at the "Casa della Partecipazione" in the Fiera del Levante exhibition centre.

- **Circular economy and sustainable development for Puglia**, held in Bari on 22nd of September 2021, at Villa Romanazzi Carducci.
- **Sustainable development in protected areas: towards a strategy for biodiversity**, held in Otranto, on 24th of September 2021, at the Aragonese Castle.

All the details of the aforementioned meetings and the related reports are available on the [Pugliapartecipa](https://partecipazione.regione.puglia.it/processes/ForumSviluppoSostenibile/f/451/) platform (<https://partecipazione.regione.puglia.it/processes/ForumSviluppoSostenibile/f/451/>).



## SUSTAINABILITY EDUCATION

Another instrument of fundamental importance for raising awareness of local communities on Sustainable Development and, linked to that, the implementation of the Strategy is represented by the In.F.E.A. (Network of Information, Training and Environmental Education), which has been organized on a national and regional scale since its launch.

The Conference of Regions and Autonomous Provinces in the session of the 1<sup>st</sup> of August 2019 approved the final document of the Cagliari Conference which relaunches the In.F.E.A. on a national scale and promotes "the commitment of the Regions and Autonomous Provinces to enhance and innovate their IN.F.E.A. systems regional in the view of greater openness to all social and productive components (open and inclusive systems), development of exchanges of experiences at national and international level (networks of relations and cooperation), improvement of external communication skills, involvement of the media and use of the WEB, greater listening to the real needs of sustainability and social cohesion of the various territorial realities (territoriality), the promotion of



experimentation and research in the educational field towards experiential and systemic approaches, the acquisition of greater professional skills and the improvement of the quality of the offered services, also through the development of systems of quality indicators, guaranteeing third parties in the animation of participatory processes for sustainability".

It is in this perspective that Education for Sustainability becomes an implementing pillar of the SRSvS, through the definition of a "Regional Sustainability Education Program" which will be defined and implemented by the Puglia Region as part of the agreements signed with the MiTE.

# 5

## Metropolitan Agenda City Bari

### MANAGEMENT AND GOVERNANCE METHODS

Following the public notice intended for metropolitan cities about the candidature of interest manifestations in activities "referred to in art. 34 of the legislative decree n. 152/2006 and subsequent amendments.", CM of Bari has obtained funds for Metropolitan Agenda for Sustainable Development drafting. The candidate project aimed to define a Metropolitan Agenda for Sustainable Development integrated with the drafting of the Bari 2030 Metropolitan Strategic Plan in a multilevel metropolitan framework. This working methodology will make it possible to implement integrated urban and territorial policy interventions, creating a form of territorial governance more efficient, shared, and able to enhance planning tools, also through monitoring and reporting on local policies. For the Agenda drafting, a multidisciplinary control room working group has been set up, composed of technical and political figures from the Metropolitan City of Bari, scientific figures from the academic world, involving the Department of Civil Engineering and Architecture of the Polytechnic University of Bari and the University Center of Excellence for Sustainability of the University of Bari "A. Moro", and by external figures of support identified by a public tender procedure, made by economic operator ASVIS" Italian Alliance for Sustainable Development "as technical assistance subject for the necessary activities for Agenda drawing.

The work for the elaboration of the Agenda continues at a rapid pace, to date we have come to the definition of a draft of a Sustainable Metropolitan Agenda, composed of a broad framework of knowledge, which starts from a recognition of the objectives for sustainable development and related indicators in current legislation at the international and national level. Subsequently, steps were taken to descend from the Regional and Metropolitan levels, ultimately analyzing the data of the City of Bari. The picture of knowledge is also rich in comparisons between Italian metropolitan cities, thanks to which it is possible to identify the position of the CM of Bari in the panorama of Sustainable Development and the policies and actions implemented in recent years.

An open and shared work plan has been defined, allowing the identification of the "core" indicators; monitoring the progress of the 2030 agenda in the metropolitan city with the "core" sustainable development indicators; the presentation and discussion with the local administrations, the recognition of the actions already in place or planned relating to the metropolitan objectives; the inclusion of indicators related to the specificity of the reality under analysis; the definition of metropolitan objectives and identification of the related indicators; the definition of new policies for the achievement of the identified objectives and the monitoring of the impact of the policies concerning the achievement of the objectives.

### COHERENCE WITH PUBLIC POLICIES

The Metropolitan Agenda for Sustainable Development is consistent with the Strategy of the Puglia Region for Sustainable Development, currently being drawn up, and with the National Strategy for Sustainable Development (SNSvS) as a declination of the UN Agenda 2030. The "Città Metropolitana di Bari" is defining the Bari Metropolitan Strategic Plan (PSM) through active participation paths, already launched in September 2019, of which Sustainable Development is the founding element and with which the Agenda will have to measure and integrate. The constant and continuous action of co-planning and co-planning with the 41 metropolitan municipalities will allow them to implement their

development programs through the use of the programming tools of the Puglia Region, the National Government Institutions, and the European Community.

The speed of changes during the Covid-19 emergency and the collapse of certainties occurs very drastically, changing priorities in everyday life. The necessary restrictions on the mobility of people and the performance of economic activities assisted in providing interesting insights into the priorities and references to the UN 2030 Agenda for sustainable development. In light of the pandemic and to make the territories of the CM more resilient, it was necessary to turn on a beacon to counter the increase in inequalities (through the reduction of disparities in the municipalities of the metropolitan area of access to the health service, the creation of an innovative and more digitally inclusive school system, the relaunch production sectors in a way compatible with environmental protection, the protection of the weakest with effective structural measures). The structural actions to be implemented have the ambition to "cure Italy of today, to look at Italy of tomorrow", thanks to short and long-term measures, capable of also rebalancing the balance between the South and the North metropolitan area, enhancing the environmental and cultural characteristics of the identifying places of the metropolitan area.

To re-establish contexts capable of formulating objectives and actions that can bring out existing potential and new opportunities, it is necessary to share the choices with the best knowledge and professionalism, to convey common and specialized knowledge into the planning process. The drafting of the Metropolitan Strategic Plan is incorporating problems such as social isolation, digital divide, lack of green space and infrastructures to transform them through new impulses deriving in particular from the new perception of people, into opportunities to raise the quality of life, re-establish the priorities that they care about climate, health, water, food, and resilient cities. It incorporates an everyday life the positive effects of smart working, the discussed distance learning, the redevelopment of abandoned spaces, and the conservation and protection of the landscape, safeguarding and guaranteeing not the dignity of the individual, but the community.

## CIVIL COMPANY INVESTMENT

COVID 19 has caused a severe humanitarian crisis at a global level, and it is not be addressed in a univocal and diversified way, between individual Metropolitan Cities, Regions, or States. A more supportive approach is needed between developing states and states with more fragile economic conditions. All the Goals of the 2030 Agenda are linked by the common thread of Sustainable Development and only with a concrete improvement of all 17 Goals could we improve the living conditions on the planet. As highlighted by the UN 2030 Report published in July 2020, it appears necessary to mitigate the effects of the pandemic and avoid a retreat on the various sides of sustainable development, starting from that relating to Health and well-being (Goal 3), Defeating poverty in the world (Goal 1) and inequality within and between Nations (Goal 10). The policies linked to the post-Covid recovery are influencing the near future and the intervention priorities, identifying short and long-term scenarios, with effects on Metropolitan Strategic Planning; but in substance, the ambitious and concrete aims of Bari20> 30 remain unchanged. Experimenting with innovative collaborative governance processes and the development of widespread skills; the digitalization of services and the strengthening of infrastructures to reduce the digital divide; the important issue of sustainable mobility, fundamental for urban travel, work connections, and the positive change in lifestyles; the enhancement of natural and cultural attractions, which requires reflection on alternative forms of use to mass tourism; the current housing schemes that need a thorough review, as well as the organization of proximity services must be rethought; the role of public green, to be understood not as an element of urban decoration but as a reserve of naturalness to ensure healthiness to inhabited contexts and continuity to ecosystems. These issues, partly addressed in the drafting of the Metropolitan Single Programming Document, constitute important elements for reflection, more carefully and highlighted by the pandemic, given their strategic importance in the "new restoration of

priorities". The European Commission has issued guidelines for the preparation of National Recovery and Resilience Plans, a historic opportunity to guide public policies in favor of Sustainable Development, helping to promote the economic, social, and territorial cohesion of the Union; strengthening economic and social resilience and adaptability; mitigate the social and economic impact of the crisis and support green and digital transitions.

The Metropolitan Agenda for Sustainable Development of the CM of Bari was born in the same historical context, representing an operational tool to achieve the Sustainability Goals of the 2030 Agenda, consequently linking the recovery policies to the Sustainable Development Goals of the United Nations, the metropolitan area could represent an interesting field of experimentation, considering the size and commitment undertaken to date.

## Attachment n. 1

Thematic area	Development goals
<b>A PACT FOR THE CLIMATE AND FOR A GREEN AND SUSTAINABLE ECONOMY</b>	Circular economy law
	Encouragement of environmental taxation, support of businesses in order to promote sustainable and innovative industrial processes
	Greener cities to reduce CO2 emissions, urban reforestation
	Energy efficiency of all public structures and photovoltaic roof systems
	Energy communities in municipalities and implementation of energy income
	General states of agriculture for the writing of the new RDP
	Closure of the waste cycle of public plants and enhancement of recyclable fractions
	Closure of the water cycle and reuse in agriculture and industry
	Investments in sustainable mobility and in strengthening the public transport and rail network
	Centrality of urban regeneration, in terms of social inclusion and proximity services
	Support for Municipalities that implement large area plans to adapt to changes
	Re-organization of the regional system of parks and protected areas
	Coastal monitoring plan useful for updating the data of the Regional Coastal Plan
	Redevelop degraded areas linked to unauthorized building to restore new opportunities for regeneration of degraded landscapes
	Update of the air quality plan and enhancement of the monitoring network
Contrast to xylella, continuing the containment policies undertaken, intensifying constant monitoring, replanting of resistant cultivars in the preservation of the landscape and monumental olive trees, disseminating of good agricultural practices and research	
Implementation of the landscape and agricultural plan of Salento (Puglia)	
Thematic area	Development goals
<b>MORE COMPETITIVE WITH PUGLIA IN THE WORLD</b>	Great boost to research and innovation with the establishment of the register of research organizations and focus on the digital and ecological transition
	Strategic infrastructure works
	Broadband enhancement
	Digitization for businesses
	Farms aggregation
	Single portal for agriculture
	Promote the participation of women in the creation of economic activities
	Digital ecosystem of tourism
	Integration of vocational education and training paths linked to strategic sectors
	Sustainability and innovation in the field of the blue economy for the enhancement of the territory and the overcoming of industrial monoculture
	Orienting female entrepreneurship and self-employment towards expanding and/or innovative production sectors

	Strengthening of financial instruments, with specific tools to support female entrepreneurs
	Integration of facilitation tools to support businesses
<b>Thematic area</b>	<b>Development goals</b>
<b>A REGION WHERE NO ONE IS BEHIND</b>	Strengthening of the health and social care area, to increase the integrated and dynamic capacity to take charge of non-self-sufficient people
	Integration between socio-welfare, socio-health and socio-labour policies
	Prevention and contrast of all forms of discrimination, mistreatment and violence, through the strengthening of the network of services and anti-violence centres and shelters
	Investments for the digital divide between families, with a focus on female skills
	Consolidation of the network of services for the care of minors, people with disabilities and the elderly and the experimentation of complementary and innovative services
	Combating poverty through a path of active social inclusion with planning and monitoring of the results achieved
	Combating educational poverty
	Fight against gender-based violence, through active collaboration with the regional school office, universities, schools, training institutions - as a fundamental lever for social change, also necessary for the prevention and contrast of all forms of sexist violence and discrimination
	Fight against stereotypes through public communication and cultural change initiatives
	Generative and enhancement paths of immigrants in local communities
	Adoption of correct lifestyles and habits, promotion of sport
	<b>Thematic area</b>
<b>I WANT TO LIVE IN PUGLIA</b>	Research and study centre on cultural heritage that can offer a return opportunity to young scholars of the region
	Support for post-graduate training
	Support for youth start-ups, observers and accompaniment
	Enhancement of training and work orientation measures and coordination with employment centres
	Culture card for poor young people
	Creation of clusters of companies to finance the attraction of talent, recruiting
	Promotion of social innovation paths, community animation and urban regeneration with the collaboration of the third sector
	PugliaWiFi to guarantee free connection in public places
	Promote STEM disciplines
	Promote corporate welfare interventions and investments in the network of local services
	Support for youth enterprises capable of impacting structural development gaps
	Streamlining of bureaucratic procedures relating to factories
Creation of a public and/or private SEED fund (funds for start-ups starting a path)	
<b>Thematic area</b>	<b>Development goals</b>



<b>RIGHTS TO THE FUTURE STARTING FROM KNOWLEDGE</b>	"Peer to peer orientation": a program that sees the two-year university students tutor high school students to guide them in orientation and thus increase the number of students who enrol at the university and complete the path
	Strengthening of early childhood services to combat educational poverty
	Introduction of the hour of beauty: art becomes a study program for all ages
	Specific post-graduate training courses in the training of sectors that help to implement new skills in strategic sectors such as tourism and culture;
	Strengthening of the right to study and gratuities
	Training income
<b>Thematic area</b>	<b>Development goals</b>
<b>SUSTAINABLE CITIES FOR A EUROPEAN MODEL</b>	Reduce by half the consumption of public buildings and of our networks - starting from that of public lighting
	Realize in our Municipalities, with the support of European funds, at least one NZEB building - Almost Zero Energy Building
	Plans of times and spaces
	Promote, in concert with national institutions, energy autonomy, by committing ourselves to experimenting with at least one model of local energy community in each regional territory that has not so far been affected by energy communities
	Introduce public green management plans that primarily include the use of native plant species, promoting the widespread distribution of green areas and ecological corridors across our territories
	Promote the development of skills in the sector
	Enhance women's skills in sustainable development
	Urban mobility and accessibility to services
	Supporting investments for the modernization of the water supply, collection and purification network
<b>Thematic area</b>	<b>Development goals</b>
<b>AN ALWAYS EVOLVING CULTURAL GOAL</b>	Proximity tourism
	Tourism of the paths, of the pilgrimages, the "Nicolaian" way
	Calls for aid to businesses and support for start-ups
	Tenders for business development and networking
	More governance between public and private
	Hospitality master plan with the help of businesses
	Training and exchanges with foreign countries, projection to the east and to the Mediterranean
	Promotion of cultural welfare in generative communities, to support active aging, generational and cultural integration, and to combat educational poverty
	Build and strengthen the supply chain of education services, socio-educational services and educational services in places of culture
	Contributions to accommodation facilities for environmental sustainability
	Family Friendly tourism
	Digitization of tourism services
Enhance the skills of women in the tourism and culture sectors	

	Encouragement of educational activities between schools and cultural centres, schools and theatres
	Encourage the musical training of young people and the promotion of music with a special fund named after Nino Rota
	Implementation of Cineports in real centres serving the film and audio-visual industry, by structuring service networks
	Permanent program of artistic residencies and training and involvement of the public, especially younger ones
	Apulia Theatre Fund, aimed at supporting co-productions of original shows (adult prose, children's theatre, dance, dance-theatre combined).
<b>Thematic area</b>	<b>Development goals</b>
<b>PUGLIA 4.0, READY FOR THE CHALLENGE</b>	Strengthen and make more effective the processes of technology transfer or transfer of scientific knowledge, and those of industrial enhancement of scientific research
	Promote the growth of digital transformation processes both in businesses, especially in micro and small businesses, and in the Public Administration.
	Promote and intensify innovative entrepreneurship in the Apulian territories, especially by encouraging the birth and development of "knowledge intensive" innovative start-ups
	Overcoming the digital divide through literacy courses and local services
	Enhance women's skills on digital development
	Guarantee the financing of innovation projects that meet the social challenges defined both at the global level (Agenda 2030 for Sustainable Development), and in Europe (Green Deal and Horizon 2021-2027), and in Italy (full employment and quality services for citizens, smart cities) and both regional (gender agenda, fight against Xylella, decarbonisation).
<b>Thematic area</b>	<b>Development goals</b>
<b>ALL FOR HEALTH, HEALTH FOR ALL</b>	Activation of an intersectoral approach for the promotion of the health strategy in all policies, linked to the co-benefits
	Environment and health integration for the prevention and promotion of environmental and health protection
	Strengthening of territorial medicine
	Strengthening of screening programs
	Territory hospital integration
	Enhancement of integrated territorial assistance
	Investments for the promotion of health and healthy lifestyles
	Organization of hospital and territorial services for gender medicine
	Strategic control for the appropriateness and safety of drug use
	Reorganization of the maternal and child area
	Strengthening of interventions for psychological well-being and the prevention of psychopathologies
	Organization of local health services and social and health integration for the management and treatment of frailties and chronic conditions
	Investments for territorial medicine
	Gender medicine
Enhancement of digital health services and telemedicine	
Humanization of care	
<b>Thematic area</b>	<b>Development goals</b>

**THE IMPORTANT  
IS TO  
PARTICIPATE,  
EQUAL**

Regional protocol for gender language in administrative documents of the region, in correspondence and communication
Gender equality in the declination of administrative and political positions and functions
Overcoming the gender pay gap
Reduce the gaps between male and female workers in professional and career paths
Promote support actions in favour of women employed with atypical and / or discontinuous contractual methods
Revision of the electoral law and the Statute for gender equality
Network of all proximity institutions (for example schools) to get closer to the territories and create a collective information / training dimension on gender equality issues
Regional Law on homotransphobia
Investments for the reconciliation of home / family / work times
Calls that make the Consultations open and mandatory
Promote the culture of participation

## Attachment n. 2

### Puglia's positioning within Southern Italy and Italy and his comparison with the previous year's indicators

(Update february 2022)

*Istat data, processed by the Statistical Office of the Puglia Region*



#### Goal 1 - End poverty in all its forms everywhere

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Rischio di poverta' o di esclusione sociale	37,4	42,2	25,6	-4,8	11,8	1,7	2019	-	Valori percentuali
Grave deprivazione materiale	11,9	13,6	7,4	-1,7	4,5	-0,9	2019	-	Valori percentuali
Bassa intensità di lavoro	13,2	17,3	10	-4,1	3,2	-0,2	2019	-	Valori percentuali
Rischio di povertà	30,4	34,7	20,1	-4,3	10,3	3,6	2019	-	Valori percentuali
Rinuncia a prestazioni sanitarie	10,8	9	9,6	1,8	1,2	3,6	2020	-	Valori percentuali
Sovraccarico del costo dell'abitazione	8,3	11,7	8,7	-3,4	-0,4	1,9	2019	-	Valori percentuali

Famiglie molto o abbastanza soddisfatte per la continuita' del servizio elettrico	93,4	92,1	94,2	1,3	-0,8	0,6	2020	+	Valori percentuali
Famiglie che dichiarano difficolta' di collegamento con mezzi pubblici nella zona in cui risiedono	30	36,4	30,2	-6,4	-0,2	-0,6	2020	-	Valori percentuali
Conferimento dei rifiuti urbani in discarica	33,7	29,2	20,1	4,5	13,6	-2,3	2020	-	Valori percentuali
Irregolarita' nella distribuzione dell'acqua	7,6	17,6	8,9	-10	-1,3	-0,2	2020	-	Valori percentuali
Famiglie con connessione a banda larga fissa e/o mobile	70,5	72,5	77,8	-2	-7,3	2,1	2020	+	Valori percentuali
Persone di 6 anni e più che usano il cellulare almeno tutti i giorni, per 100 persone con le stesse caratteristiche	85,1	82,8	82,6	2,3	2,5	1,8	2020	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>9</b>	<b>4</b>	<b>8 su 12</b>			



## Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Eccesso di peso o obesità tra i minori da 3 a 17 anni di età	33,8	33	26,3	0,8	7,5	2,6	2020	-	Valori percentuali
Produzione per unità di lavoro delle aziende agricole	35.258	39.439	53.228	-4.181	-17.970	-8.877	2015	+	Euro (prezzi correnti)
Quota di superficie agricola utilizzata (SAU) investita da coltivazioni biologiche	18,4	20,1	16,4	-1,7	2	-2,3	2020	+	Valori percentuali
Tasso di crescita delle coltivazioni biologiche	1,2	2,6	5,1	-1,4	-3,9	0,2	2020	+	Valori percentuali
Fertilizzanti distribuiti in agricoltura	221,3	240,2	558,5	-18,9	-337,2	5,7	2020	-	Kg per ettaro
Prodotti fitosanitari distribuiti in agricoltura	10	9,2	12,4	0,8	-2,4	-0,7	2019	-	Kg per ettaro
Emissioni di ammoniaca prodotte dal settore agricolo	9,7	74,8	334,6	-65,1	-324,9		2019	-	Migliaia di tonnellate
Occupati non regolari in agricoltura, silvicoltura e pesca	29,6	31,5	24,1	-1,9	5,5	-0,7	2019	-	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>3 su 7</b>			





### Goal 3 - Ensure healthy lives and promote well-being for all at all ages

INDICATORE	Puglia	Mezzo	Italia	PvSM	Posita	Puglia vs. An opre	Ufr Anno P	Polarità	Unità di misura
Probabilità di morte sotto i 5 anni	3,44	3,88	3,3	-0,44	0,14	0,02	2020	-	Per 1.000 nati vivi
Tasso di mortalità neonatale	2,49	2,74	1,92	-0,25	0,57	0,66	2018	-	Per 1.000 nati vivi
Incidenza delle infezioni da HIV per 100.000 residenti (per regione di residenza)	4,2	3	4	1,2	0,2	0,1	2019	-	Per 100.000 abitanti
Probabilità di morire tra i 30 ed i 69 anni per tumori, diabete, malattie cardiovascolari e respiratorie	8,74	9,83	8,96	-1,09	-0,22	-0,12	2018	-	Valori percentuali
Speranza di vita in buona salute alla nascita	61,7	58,9	61	2,8	0,7	3,9	2020	+	Numero medio di anni
Eccesso di peso	48,6	50,7	45,9	-2,1	2,7	-2,4	2020	-	Tassi standardizzati per 100 persone
Tasso standardizzato di mortalità per suicidio	4,8	4,5	5,7	0,3	-0,9	0,2	2018	-	Per 100.000 abitanti
Alcol	16,2	13,7	16,7	2,5	-0,5	1,7	2020	-	Tassi standardizzati per 100 persone
Tasso di mortalità per incidente stradale	4	3,7	3,9	0,3	0,1	-1,2	2020	-	Per 100.000 abitanti
Numero morti in incidente stradale	160	755	2395			-47	2020	-	Numero

Tasso di lesività grave in incidente stradale	25,6	22,4	23,7	3,2	1,9	-7	2020	-	Per 100.000 abitanti
Domanda di contraccezione soddisfatta con metodi moderni	55,2	60,4	67,2	-5,2	-12		2013	+	Valori percentuali
Quozienti specifici di fecondità per età per 1.000 donne tra i 10 e i 14 anni	0,053	0,021	0,015	0,032	0,038	0	2020	-	Per 1.000 abitanti
Quozienti specifici di fecondita' per eta' per 1000 donne tra i 15 e i 19 anni	21,8	24,5	16,2	-2,7	5,6	-3,1	2020	-	Per 1.000 abitanti
Posti letto in degenza ordinaria in istituti di cura pubblici e privati	29,2	27,8	31,3	1,4	-2,1	0,3	2019	+	Per 10.000 abitanti
Posti letto in day-Hospital negli istituti di cura pubblici e privati	2,1	3,7	3,4	-1,6	-1,3	0	2019	+	Per 10.000 abitanti
Posti letto nei presidi residenziali socio-assistenziali e socio-sanitari	36,4	38,6	69,6	-2,2	-33,2	-0,1	2018	+	Per 10.000 abitanti
Percentuale dei parti con piu' di 4 visite di controllo effettuate in gravidanza	90,2		89,4		1,5	2,5	2020	+	Valori percentuali
Ipertensione arteriosa (tassi standardizzati)	20,7	21,5	19,4	-0,8	1,3	0,2	2020	-	Tassi standardizzati per 100 persone
Diabete (tassi standardizzati)	6,4	7,6	6,2	-1,2	0,2	-1,1	2020	-	Tassi standardizzati per 100 persone
Tasso standardizzato di mortalità per avvelenamento accidentale	0,51	0,39	0,5	0,12	0,01	0,24	2018	-	Per 100.000 abitanti
Persone che dichiarano di fumare attualmente (15 anni e piu')	16,8	18,6	19,1	-1,8	-2,3	-0,6	2020	-	Valori percentuali
Copertura vaccinale antinfluenzale età 65+	61,1		66,5		-5,4	9,7	2021	+	Per 100 abitanti
Copertura vaccinale in età pediatrica: polio	93,7		94		-0,3	-0,8	202	+	Per 100 abitanti

							0		
Copertura vaccinale in età pediatrica: morbillo	93,3		92,7		0,6	-1,1	2019	+	Per 100 abitanti
Copertura vaccinale in età pediatrica: rosolia	93,3		92,2		1,1	-1,1	2019	+	Per 100 abitanti
Medici	3,8	4	4	-0,2	-0,2	0	2020	+	Per 1.000 abitanti
Infermieri e ostetriche	6,9	6,2	6,5	0,7	0,4	0,8	2019	+	Per 1.000 abitanti
Dentisti	0,8	0,8	0,9	0	-0,1	0	2019	+	Per 1.000 abitanti
Farmacisti	1,1	1,2	1,3	-0,1	-0,2	0	2019	+	Per 1.000 abitanti
<b>Totale indicatori confrontabili</b>	<b>30</b>	<b>25</b>	<b>30</b>	<b>12</b>	<b>8</b>	<b>14 su 29</b>			



#### Goal 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

INDICATORE	Puglia	Mezzo	Italia	PvSM	PvStta	PugliavsAnnoPre	Ult Anno P	Polarità	Unità di misura
Competenza alfabetica non adeguata (studenti classi III scuola secondaria primo grado)	42,7	47,1	39,2	-4,4	3,5	7,5	2021	-	Valori percentuali
Competenza numerica non adeguata (studenti classi III scuola secondaria primo grado)	50	57	45,2	-7	4,8	8,7	2021	-	Valori percentuali
Comprensione all'ascolto (listening) della lingua inglese non adeguata (studenti classi III scuola secondaria primo grado)	51,6	56,7	40,9	-5,1	10,7	0,2	2021	-	Valori percentuali
Comprensione della lettura (reading) della lingua inglese non adeguata (studenti classi III scuola secondaria primo grado)	31,3	35	24,1	-3,7	7,2	5,1	2021	-	Valori percentuali
Competenza alfabetica non adeguata (studenti classi II scuola secondaria secondo grado)	39,6	41,9	30,4	-2,3	9,2	-1,7	2019	-	Valori percentuali
Competenza numerica non adeguata (studenti classi II scuola secondaria secondo grado)	47,8	53,5	37,8	-5,7	10	-4,4	2019	-	Valori percentuali
Competenza alfabetica non adeguata (studenti classi V scuola secondaria secondo grado)	59,3	59,5	43,9	-0,2	15,4	17,3	2021	-	Valori percentuali
Competenza numerica non adeguata (studenti classi V scuola secondaria secondo grado)	69,2	69,3	51	-0,1	18,2	21,1	2021	-	Valori percentuali
Comprensione all'ascolto (listening) della lingua inglese non adeguata (studenti classi V scuola secondaria secondo grado)	41,6	42,4	25,2	-0,8	16,4	6,3	2021	-	Valori percentuali
Comprensione della lettura (reading) della lingua inglese non adeguata (studenti classi V scuola secondaria secondo grado)	20,9	21,8	12,9	-0,9	8	6,3	2021	-	Valori percentuali
Uscita precoce dal sistema di istruzione e formazione	15,6	16,3	13,1	-0,7	2,5	-2,3	2020	-	Valori percentuali
Posti autorizzati nei servizi socio educativi (asili nido e servizi integrativi per la prima infanzia) per 100 bambini di 0-2 anni	18,9	14,9	26,9	4	-8	2,1	2019	+	Valori percentuali

Tasso di partecipazione alle attività educative (scuola dell'infanzia e primo anno della primaria) per i 5-enni	99,6	99,5	96,5	0,1	3,1	0,3	2019	+	Valori percentuali
Partecipazione alla formazione continua	5,5	5,7	7,2	-0,2	-1,7	-0,3	2020	+	Valori percentuali
Persone di 25-64 anni che hanno partecipato ad attività di istruzione e formazione nei 12 mesi precedenti	31,9	32,2	41,5	-0,3	-9,6		2016	+	Valori percentuali
Alunni con disabilità: scuola dell'infanzia	2,2		2,4		-0,2	0,3	2019	+	Valori percentuali
Alunni con disabilità: scuola primaria	3,6		3,8		-0,2	0,3	2019	+	Valori percentuali
Alunni con disabilità: scuola secondaria di primo grado	4		4,2		-0,2	0,1	2019	+	Valori percentuali
Alunni con disabilità: scuola secondaria di secondo grado	3		2,7		0,3	0,1	2019	+	Valori percentuali
Competenze digitali almeno di base	33,9		41,5		-7,6	2	2019	+	Valori percentuali
Competenze digitali elevate	18	17,2	22	0,8	-4	5	2019	+	Valori percentuali
Laureati e altri titoli terziari (30-34 anni)	19,8	21,3	27,8	-1,5	-8	-0,2	2020	+	Valori percentuali
Laureati in discipline tecnico-scientifiche (STEM)	14,5	14,2	15,1	0,3	-0,6	0,9	2018	+	Per 1.000 residenti di 20-29 anni
Scuole accessibili dal punto di vista fisico	32,4	27,4	32,3	5	0,1	-2,4	2020	+	Valori percentuali
Scuole non accessibili dal punto di vista fisico	47,1	49,9	46,8	-2,8	0,3	-2,5	2020	-	Valori percentuali
Scuole con alunni con disabilità per presenza postazioni informatiche adattate: scuola primaria	76,4		75,1		1,3	-0,4	2020	+	Valori percentuali
Scuole con alunni con disabilità per presenza postazioni informatiche adattate: scuola secondaria di primo grado	79,9		79,2		0,7	1	2020	+	Valori percentuali
Scuole con alunni con disabilità per presenza postazioni informatiche adattate: scuola secondaria di secondo grado	76,7		78,1		-1,4	2,3	2020	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>34</b>	<b>24</b>	<b>34</b>	<b>19</b>	<b>9</b>	<b>21 su 34</b>			



## Goal 5 - Achieve gender equality and empower all women and girls

INDICATORE	Puglia	Mezzo	Italia	PvSM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Violenza nella coppia	4,6	4,9	4,9	-0,3	-0,3		201	-	Valori
Donne vittime di violenze segnalate al numero di pubblica utilità contro la violenza e lo stalking 1522	40,5 3		49,6 1		- 9,08	17,7 3	202 0	-	Per 100.000 donne
Centri antiviolenza e case rifugio: tasso per 100.000 donne di 14 anni e più	1,72	1,41	1,98	0,31	-	-	201	+	Per 100.000
Centri antiviolenza: tasso per 100.000 donne di 14 anni e più	1,05	0,96	1,04	0,09	0,01	-	201	+	Per 100.000
Case rifugio: tasso per 100.000 donne di 14 anni e più	0,66	0,45	0,95	0,21	-	0,22	201	+	Per 100.000
Proporzione di donne dai 16 ai 70 anni che hanno subito violenza fisica o sessuale da un uomo non partner negli ultimi 5 anni	7,2		7,7		-0,5		201 4	-	Valori percentuali
Rapporto tra i tassi di occupazione (25-49 anni) delle donne con figli in età prescolare e delle donne senza figli	69,2	67,5	73,4	1,7	-4,2	-5,3	202	+	Valori
Quota di tempo dedicato al lavoro non retribuito, domestico e di cura	13,6	14	13,5	-0,4	0,1		201	-	Valori
Donne e rappresentanza politica in Parlamento	41,3	37,4	35,4	3,9	5,9	21,9	201	+	Valori
Donne e rappresentanza politica a livello locale	13,7	16,7	22,3	-3	-8,6	0	202	+	Valori
Tasso di abortivita' volontaria delle donne di 15-49 anni per 1.000 donne	6,2	4,8	5,1	1,4	1,1	-1	202	-	Per 1.000 donne
Persone di 6 anni e più che usano il cellulare almeno tutti i giorni, per 100 persone con le stesse caratteristiche	85,1	82,8	82,6	2,3	2,5	1,8	202 0	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>12</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>6</b>	<b>4 su 9</b>			





## Goal 6 - Ensure availability and sustainable management of water and sanitation for all

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Acqua erogata pro capite	152	199	215	-47	-63	-3	2018	+	Lt pro capite per giorno
Famiglie che non si fidano di bere l'acqua del rubinetto	33,2	40,4	28,4	-7,2	4,8	5,7	2020	-	Valori percentuali
Irregolarità nella distribuzione dell'acqua	7,6	17,6	8,9	-10	-1,3	-0,2	2020	-	Valori percentuali
Trattamento delle acque reflue	68,3	56,7	59,6	11,6	8,7	2	2015	+	Valori percentuali
<i>Acque reflue urbane con trattamento secondario o avanzato</i>	182					-2	2018	+	N.
Copertura del servizio pubblico di fognatura	92,3	86,3	87,8	6	4,5		2018	+	Valori percentuali
Coste marine balneabili	74,7	65,8	65,5	8,9	9,2	0	2019	+	Valori percentuali
Percentuale di corpi idrici che hanno raggiunto l'obiettivo di qualità ecologica (elevata o buona) sul totale dei corpi idrici delle acque superficiali (fiumi e laghi)	6,4		41,7		-35,3		2015	+	Valori percentuali
Efficienza delle reti di distribuzione dell'acqua potabile	54,9	52,1	58	2,8	-3,1	0,8	2018	+	Valori percentuali
<i>Prelievi di acqua per uso potabile</i>	171,5					-2,3	2018	+	Milioni di m <sup>3</sup>
Zone umide di importanza internazionale	5431					0	2018	+	Ha
<b>Totale indicatori confrontabili</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>6</b>	<b>4</b>	<b>7 su 11</b>			



## Goal 7 - Ensure access to affordable, reliable, sustainable and modern energy for all

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Famiglie molto o abbastanza soddisfatte per la continuità del servizio elettrico	93,4	92,1	94,2	1,3	-0,8	0,6	2020	+	Valori percentuali
Quota di energia da fonti rinnovabili sul consumo finale lordo di energia	18		18,2		-0,2	0,5	2019	+	Valori percentuali
Consumi di energia da fonti rinnovabili (escluso settore trasporti) in percentuale del consumo finale lordo di energia	16,9		17,1		-0,2	0,4	2019	+	Valori percentuali
Consumi di energia da fonti rinnovabili nel settore termico (in percentuale del consumo finale lordo di energia)	10,5		19,7		-9,2	0,5	2019	+	Valori percentuali
Energia elettrica da fonti rinnovabili	54,7	45,6	37,4	9,1	17,3	2,7	2020	+	Valori percentuali
Consumi di energia da fonti rinnovabili nel settore trasporti (in percentuale del consumo finale lordo di energia)	8,8		9		-0,2	1,4	2019	+	Valori percentuali
Intensità energetica	153,29		91,51		61,78	-6,73	2019	-	TEP per milione di euro
Intensità energetica del settore Industria	153,29		92,13		61,16	-40,04	2019	-	TEP per milione di euro
<b>Totale indicatori confrontabili</b>	<b>8</b>	<b>2</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>8 su 8</b>			



## Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	Puglia vs Anni e	Ult Anno P	Polarità	Unità di misura
Tasso di crescita annuo del Pil reale per abitante	-7,8	-7,7	-8,5	-0,1	0,7	-8,3	2020	+	Valori percentuali
Tasso di crescita annuo del Pil reale per occupato	-7,1	-6,5	-7	-0,6	-0,1	-6,6	2020	+	Valori percentuali
Tasso di crescita annuo del valore aggiunto in volume per occupato	-6,9	-6,2	-6,8	-0,7	-0,1	-6,4	2020	+	Valori percentuali
Tasso di crescita annuo del valore aggiunto in volume per ora lavorata	0,9	0,3	0,4	0,6	0,5	-0,4	2019	+	Valori percentuali
Occupati non regolari	15,9	17,5	12,6	-1,6	3,3	-0,2	2019	-	Valori percentuali
Consumo materiale interno pro capite	10,5	7,3	8,1	3,2	2,4	0	2018	-	Tonnellate per abitante
Consumo materiale interno per unità di Pil	0,58	0,39	0,28	0,19	0,3	0	2018	-	Tonnellate per 1.000 euro
Consumo materiale interno	41,9	149,7	487,8	-107,8	-445,9	0	2018	-	Milioni di tonnellate
Dipendenti con bassa paga	17,6	15,3	10,1	2,3	7,5	0,6	2020	-	Valori percentuali
Tasso di disoccupazione	14,1	15,9	9,2	-1,8	4,9	-0,8	2020	-	Valori percentuali
Tasso di mancata partecipazione al lavoro	29,9	33,5	19	-3,6	10,9	-0,2	2020	-	Valori percentuali
Tasso di occupazione (20-64 anni)	50	48	62,6	2	-12,6	-0,2	2020	+	Valori percentuali
Part time involontario	13,5	14,5	11,9	-1	1,6	0,2	2020	-	Valori percentuali
Occupati in lavori a termine da almeno 5 anni	24,6	24,5	18,2	0,1	6,4	-1,3	2020	-	Valori percentuali
Giovani che non lavorano e non studiano (NEET) (15-24 anni)	22,7	25,7	19	-3	3,7	-0,9	2020	-	Valori percentuali
Giovani che non lavorano e non studiano (NEET)	29,4	32,6	23,3	-3,2	6,1	-0,3	2020	-	Valori percentuali

Tasso di infortuni mortali e inabilità permanente	12	12,9	10,8	-0,9	1,2	-0,9	2019	-	Per 10.000 occupati
Numero di sportelli operativi per 100.000 abitanti	27,1	26,1	40,6	1	-13,5	-1,4	2019	+	Per 100.000 abitanti
Numero di ATM per 100.000 abitanti	45,2	43,1	66	2,1	-20,8	0	2019	+	Per 100.000 abitanti
Numero di banche per 100.000 abitanti	0,7	0,5	0,8	0,2	-0,1	0	2019	+	Per 100.000 abitanti
<b>Totale indicatori confrontabili</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>13</b>	<b>3</b>	<b>7 su 20</b>			



## Goal 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	PugliavsAnnopre	Ult Anno P	Polarità	Unità di misura
Valore aggiunto dell'industria manifatturiera per abitante	1615,79	1504,03	4300,71	111,76	-2684,92	-69,97	2019	+	Euro (valori concatenati) x ab
Valore aggiunto dell'industria manifatturiera rispetto al totale economia	9,6	8,9	16,6	0,7	-7	-0,5	2019	+	Valori percentuali
Occupazione nell'industria manifatturiera rispetto al totale economia	11,5	9,8	15,5	1,7	-4	0	2019	+	Valori percentuali
Quota di valore aggiunto delle piccole imprese manifatturiere sul valore aggiunto manifatturiero totale	50,5	48,8	41,9	1,7	8,6	1,6	2018	+	Valori percentuali
Percentuale di piccole imprese con almeno un rapporto creditizio	47						2018	+	Valori percentuali
Intensità di ricerca	0,82	0,96	1,46	-0,14	-0,64	0,03	2019	+	Valori percentuali
Imprese con attività innovative di prodotto e/o processo (per 100 imprese)	49,1	48,1	55,6	1	-6,5	18,5	2018	+	Valori percentuali
Ricercatori (in equivalente tempo pieno)	13,1	14,6	26,9	-1,5	-13,8	1,1	2019	+	Per 10.000 abitanti
Lavoratori della conoscenza	16,4	17,4	18,2	-1	-1,8	0,2	2020	+	Per 100 occupati
Percentuale di valore aggiunto delle imprese MHT rispetto al valore aggiunto manifatturiero	22,7	23,5	32,1	-0,8	-9,4	1,9	2018	+	Valori percentuali
Famiglie con connessione a banda larga fissa e/o mobile	70,5	72,5	77,8	-2	-7,3	2,1	2020	+	Valori percentuali
Imprese con almeno 10 addetti con vendite via web a clienti finali	13,1	15,5	14	-2,4	-0,9	3,2	2021	+	Valori percentuali
Imprese con almeno 10 addetti con vendite via web alle imprese e alle istituzioni pubbliche	10,8	10,4	8,6	0,4	2,2	3,2	2021	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>9 su 12</b>			



## Goal 10: Reduce inequality within and among countries

INDICATORE	Puglia	Mezzo	Italia	Pvsm	Pvsita	Puglia vs Annapr e	Ult Anno P	Polarità	Unità di misura
Tasso di variazione del reddito familiare pro capite per il 40% piu' povero della popolazione	-4,56	0,34	1,87	-4,9	-6,43	-2,63	2018	-	Valori percentuali
Tasso di variazione del reddito familiare pro capite per il totale della popolazione	-2,1	1,74	0,27	-3,84	-2,37	0,39	2018	-	Valori percentuali
Disuguaglianza del reddito netto (s80/s20)	6,2	7,2	6	-1	0,2	0,6	2018	-	Numero puro
Reddito disponibile lordo pro capite	14620,2	14328,9	18804,5	291,3	-4184,3	-86,2	2020	+	Euro (prezzi correnti)
Rischio di povertà	30,4	34,7	20,1	-4,3	10,3	3,6	2019	-	Valori percentuali
<i>Permessi emessi per cittadini non Ue</i>	<i>82268</i>					<i>-6452</i>	<i>2020</i>	<i>+</i>	<i>N.</i>
Quota di permessi di lungo periodo	56	54,6	63,1	1,4	-7,1	3,9	2020	+	Valori percentuali
<i>Nuovi permessi rilasciati</i>	<i>4909</i>					<i>-2900</i>	<i>2019</i>	<i>+</i>	<i>N.</i>
Quota di permessi rilasciati per asilo politico e motivi umanitari	19,1	25,5	15,6	-6,4	3,5	-30,7	2019	+	Valori percentuali
<i>Acquisizioni di cittadinanza</i>	<i>2419</i>					<i>858</i>	<i>2019</i>	<i>+</i>	<i>N.</i>
<b>Totale indicatori confrontabili</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>3 su 10</b>			





## Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	Puglia vs A nno pre	Ult Anno P	Polarità	Unità di misura
Percentuale di persone che vivono in abitazioni con problemi strutturali o problemi di umidità	13	15,5	14	-2,5	-1	0,9	2019	-	Valori percentuali
Percentuale di persone che vivono in abitazioni sovraffollate	23,6	28	28,3	-4,4	-4,7	-2,9	2019	-	Valori percentuali
Percentuale di persone che vivono in abitazioni con rumore dai vicini o dalla strada	14,5	11,4	11,9	3,1	2,6	3,9	2019	-	Valori percentuali
Famiglie che dichiarano difficoltà di collegamento con mezzi pubblici nella zona in cui risiedono	30	36,4	30,2	-6,4	-0,2	-0,6	2020	-	Valori percentuali
Studenti che si spostano abitualmente per raggiungere il luogo di studio solo con mezzi pubblici	19,9	23,1	26,8	-3,2	-6,9	-7	2020	+	Valori percentuali
Persone che si spostano abitualmente per raggiungere il luogo di lavoro solo con mezzi privati	77,4	76,2	75	1,2	2,4	3,5	2020	-	Valori percentuali
Posti-km offerti dal Tpl	1952	1946	4624	6	-2672	-171	2019	+	Valori per abitante
Utenti assidui dei mezzi pubblici	8,4	9,1	12,5	-0,7	-4,1	-1,1	2020	+	Valori percentuali
Impermeabilizzazione e consumo di suolo pro capite	399		359		40	4	2020	-	M2 per abitante
Abusivismo edilizio	33,7	38,4	15,1	-4,7	18,6	-4,6	2021	-	Per 100 costruzioni autorizzate
Popolazione esposta al rischio di alluvioni	3,4	5,2	11,4	-1,8	-8	0,7	2020	-	Valori percentuali
Popolazione esposta al rischio di frane	1,5	3,2	2,2	-1,7	-0,7	0,2	2020	-	Valori percentuali

Conferimento dei rifiuti urbani in discarica	33,7	29,2	20,1	4,5	13,6	-2,3	2020	-	Valori percentuali
Rifiuti urbani raccolti	469	442	487	27	-18	-3	2020	-	Kg per abitante
Qualità dell'aria - PM2.5	83	61,8	77,4	21,2	5,6	-9	2020	-	Valori percentuali
Incidenza delle aree di verde urbano sulla superficie urbanizzata delle città	3,3	5,5	8,5	-2,2	-5,2	0	2020	+	M2 per 100 m2 di superficie urbanizzata
Persone di 14-65 anni che hanno subito almeno una molestia a sfondo sessuale negli ultimi 12 mesi	5		5,1		-0,1		2016	-	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>17</b>	<b>15</b>	<b>17</b>	<b>7</b>	<b>7</b>	<b>5 su 16</b>			



## Goal 12: Ensure sustainable consumption and production patterns

INDICATORE	Puglia	Mezzo	Italia	PvSM	PvsIta	Puglia vs Annopr e	Ult Anno P	Polarità	Unità di misura
Consumo materiale interno pro capite	10,5	7,3	7,7	3,2	2,8	0	2018	-	Tonnellate per abitante
Consumo materiale interno per unità di Pil	0,58	0,39	0,29	0,19	0,29	0	2018	-	Tonnellate per 1.000 euro
Consumo materiale interno	41,9					0	2018	-	Milioni di tonnellate
Produzione di rifiuti speciali pericolosi	386.684					18.421	2019	-	Tonnellate
Rifiuti speciali pericolosi avviati alle operazioni di recupero	194.111					23.871	2019	+	Tonnellate
Rifiuti pericolosi avviati a operazioni di smaltimento	60.382					-11.746	2019	-	Tonnellate
Ammontare di rifiuti urbani oggetto di raccolta differenziata	1.008.424					61.601	2020	+	Tonnellate
Raccolta differenziata dei rifiuti urbani	54,5	53,6	63	0,9	-8,5	3,9	2020	+	Valori percentuali
Rifiuti urbani raccolti	469	442	487	27	-18	-3	2020	-	Kg per abitante
Percentuale di imprese con almeno 3 addetti che redigono bilanci e/o rendicontazioni ambientali e di sostenibilità	3,2	3,4	2,5	-0,2	0,7		2018	+	Valori percentuali
Percentuale di imprese con almeno 3 addetti che acquisiscono certificazioni ambientali volontarie di prodotto o di processo	9,1	9,9	8,2	-0,8	0,9		2018	+	Valori percentuali
Istituzioni pubbliche che adottano forme di rendicontazione sociale e/o ambientale	21,2		16,1		5,1	-4,3	2017	+	Valori percentuali
Numero di organizzazioni/imprese registrate EMAS	40					2	2020	+	N.

Numero di unità locali con Certificazione di sistemi di gestione ambientale UNI EN ISO 14001	877					55	2019	+	N.
Numero di unità locali con Certificazione di gestione dell'energia UNI CEI EN ISO 50001	34					-15	2019	+	N.
Percentuale di istituzioni pubbliche che acquistano beni e/o servizi adottando criteri ambientali minimi (CAM), in almeno una procedura di acquisto (Acquisti verdi o Green Public Procurement)	59,9		63,2		-3,3		2015	+	Valori percentuali
Incidenza del turismo sui rifiuti	4,88		9,71		-4,83	0,06	2019	-	Kg per abitante equivalente
Indice di intensità turistica	2.563	2.010	3.495	553	-932	-1.321	2020	-	Per 1.000 abitanti
Presenze in esercizi ricettivi open air, agriturismi e rifugi montani sul totale delle presenze in esercizi ricettivi	26,3	19,6	22,6	6,7	3,7	3	2020	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>19</b>	<b>8</b>	<b>11</b>	<b>1</b>	<b>7</b>	<b>8 su 16</b>			



### Goal 13: Take urgent action to combat climate change and its impacts

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	Puglia vs Anno precedente	Ult Anno P	Polarità	Unità di misura
Popolazione esposta al rischio di alluvioni	3,4	5,2	11,4	-1,8	-8	0,7	2020	-	Valori percentuali
Popolazione esposta al rischio di frane	1,5	3,2	2,2	-1,7	-0,7	0,2	2020	-	Valori percentuali
Popolazione residente in aree di rischio alluvioni per kmq	6,96	8,42	22,57	-1,46	-15,61	1,44	2020	-	Abitanti per kmq
Popolazione residente in aree di rischio frane per kmq	2,95	5,28	4,24	-2,33	-1,29	0,16	2020	-	Abitanti per kmq
Impatto degli incendi boschivi	1,8	3,9	1,8	-2,1	0	0,4	2020	-	Per 1.000 kmq
Preoccupazione per i cambiamenti climatici	64,5	67,3	70	-2,8	-5,5	-4	2020	-	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>1 su 6</b>			



## Goal 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development

INDICATORE	Puglia	Mezzo	Italia	Pvsm	PvsIta	Puglia vs Annopr e	Ult Anno P	Polarità	Unità di misura
Rifiuti marini spiaggiati	387					22	2020	-	N.
Coste marine balneabili	74,7	65,8	65,5	8,9	9,2	0	2019	+	Valori percentuali
Aree marine protette EUAP	203,5						2019	+	Km2
Aree marine comprese nella rete Natura 2000 (Il calcolo delle superfici è stato effettuato attribuendo a ciascuna regione la parte di sito effettivamente ricadente nel proprio territorio. L'estensione dei siti Natura 2000 per regione sono stati calcolati escludendo le sovrapposizioni fra i Sic-Zsc e le Zps.)	3.344					2.541	2020	+	Km2
<b>Totale indicatori confrontabili</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1 su 3</b>			





**Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

INDICATORE	Puglia	Mezzo	Italia	PvSM	PvsIta	PugliavsAnno pre	Ult Anno P	Polarità	Unità di misura
Aree forestali in rapporto alla superficie terrestre	7,9	22,8	30,8	-14,9	-22,9		2015	+	valori percentuali
Coefficiente di boscosità	9,7	32,4	36,8	-22,7	-27,1		2015	+	valori percentuali
Aree protette	24,5	25,2	21,6	-0,7	2,9	0	2017	+	valori percentuali
Impermeabilizzazione del suolo da copertura artificiale	8,15	5,88	7,11	2,27	1,04	0,03	2020	-	valori percentuali
Frammentazione del territorio naturale e agricolo	67	43,3	44,4	23,7	22,6	0,3	2020	-	Valori percentuali
Indice di copertura vegetale montana	97,3	94	88,8	3,3	8,5	0,6	2020	+	valori percentuali
<b>Totale indicatori confrontabili</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>0 su 6</b>			



**Goal 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

INDICATORE	Puglia	Mezzo	Italia	PvsM	PvsIta	Puglia vs Ann opre	Ult Anno P	Polarità	Unità di misura
Omicidi volontari	0,6	0,6	0,5	0	0,1	-0,1	2020	-	Per 100.000 abitanti
Percezione di sicurezza camminando da soli quando è buio	61,8	61,3	61,4	0,5	0,4	0,8	2020	+	Valori percentuali
Percentuale di detenuti adulti in attesa di primo giudizio sul totale dei detenuti adulti	19	17,4	16,3	1,6	2,7	-2	2020	-	Valori percentuali
Affollamento degli istituti di pena	129,3	101,7	106,5	27,6	22,8	-1	2021	-	Valori percentuali
Famiglie che hanno ricevuto richieste di denaro, favori o altro in cambio di facilitazioni o servizi negli ultimi 12 mesi	1,1		1,2		-0,1		2016	-	Valori percentuali
Famiglie che hanno ricevuto richieste di denaro, favori o altro in cambio di facilitazioni o servizi negli ultimi tre anni	4,9		2,7		2,2		2016	-	Valori percentuali
Famiglie che hanno ricevuto richieste di denaro, favori o altro in cambio di facilitazioni o servizi nel corso della vita	11		7,9		3,1		2016	-	Valori percentuali
Fiducia nel sistema giudiziario	4,9	4,9	4,8	0	0,1	-0,1	2020	+	Valore medio
Fiducia nelle Forze dell'ordine e nei Vigili del fuoco	7,4	7,3	7,5	0,1	-0,1	-0,1	2020	+	Valore medio
Difficoltà di accesso ad alcuni servizi	8,8	9,2	6,2	-0,4	2,6	-0,7	2019	-	Valori percentuali
Durata dei procedimenti civili	572	584	419	-12	153	-55	2020	-	In giorni
Donne e rappresentanza politica in Parlamento	41,3	37,4	35,4	3,9	5,9	21,9	2018	+	Valori percentuali

Giovani e rappresentanza politica in Parlamento	52,4	49,7	42,2	2,7	10,2		2018	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>13</b>	<b>10</b>	<b>13</b>	<b>6</b>	<b>5</b>	<b>7 su 9</b>			



## Goal 17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development

INDICATORE	Puglia	Mezzo	Italia	PvSM	PvsIta	Puglia vs Ann opre	Ult Anno P	Polarità	Unità di misura
Rimesse verso l'estero degli immigrati in Italia	232,7					32,5	2020	+	Milioni di euro (prezzi correnti)
Rimesse verso l'estero degli immigrati in Italia	3,4						2020	+	Incidenza su Italia 100
Famiglie con connessione a banda larga fissa e/o mobile	70,5	72,5	77,8	-2	-7,3	2,1	2020	+	Valori percentuali
Persone di 6 anni e più che hanno usato Internet negli ultimi 3 mesi	63,6	64,7	70,5	-1,1	-6,9	3,9	2020	+	Valori percentuali
Persone che hanno ordinato/acquistato beni o servizi per uso privato su internet negli ultimi 3 mesi	23,3	22,3	31,4	1	-8,1	3,5	2020	+	Valori percentuali
Persone che hanno effettuato operazioni bancarie on line (internet banking) negli ultimi 3 mesi	28,7	27,4	39,5	1,3	-10,8	4,1	2020	+	Valori percentuali
<b>Totale indicatori confrontabili</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>5 su 5</b>			



# VOLUNTARY LOCAL REVIEW

# 2022

Autonomous Region of  
SARDINIA





REGIONE AUTONOMA DE SARDIGNA  
REGIONE AUTONOMA DELLA SARDEGNA



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## Preface

The Regional Sustainable Development Strategy (RSDS) for a more sustainable Sardinia by 2030, that in Italian it is named “Sardegna2030”, has been designed, under the coordination of the Regional Department of Environmental Defence, following four main principles: participatory approach, design by objectives, integration between policies, and integration with adaptation to climate change. These pillars have oriented, and continue to do so, the jointly building process of a multi-level governance system of sustainable development, coherent and integrated in the dimensions of sustainability: environmental, economic, social, and cultural.

The Sardegna2030 Strategy pivots around the creation of a strong governance IN and OUT the regional structure, looking at the territory as a whole and based on a multi-stakeholder participatory process that aims at strengthening the capacity building and empowerment of the regional workers as well as the civil society. The drafting process activities of the Strategy registered 3300 presences, engaging more than 1600 people coming from public administration, enterprises, third sector and civil society. During approximately 2 years, the involved parties have improved their awareness and skills about the 2030 Agenda commitments and the National Sustainable Development Strategy (NSDS), becoming able to implement them in their areas of expertise.

The NSDS and the agreements signed between the Autonomous Region of Sardinia and the Italian Ministry for Ecological Transition were an impressive push for the launch of the Regional Strategy and for the supervision of its concrete and effective elaboration. Coordination mechanisms established between central and regional authorities have been crucial to the regional and local planning processes.

Sardegna2030 is meant to be a learning process, an ongoing integrated thinking system, and a significant framework able to shape the culture of relations. It has also applied the system of reference values, becoming an indispensable support in decision-making processes managed by the public decision-makers, the private sector, and the citizens. Moreover, the health emergency caused by Covid-19 forced all of us to a radical change of our working way. Accordingly, we reorganise the entire participatory process, involving local stakeholders through online events and webinars. For this reason, the working activities that supported the Interdepartmental working group and the Regional Forum for Sustainable Development were adapted to the new requirements, reinforcing smart and remote working skills. We promoted a new approach to sustainable development strategies during a major organisational and work change: so, change is possible if it is driven under a clear, transparent, and co-responsible process where sustainability is a common achievement, even during hard times.

The need for a strong policy integration and coherence is another key point raised by Sardegna2030, that it is reported in this document. We addressed this issue by integrating the Sardegna2030 process with the planning of the Implementation Programmes of the European Funds, thanks to the direct involvement of the regional structures in charge of programming the European Funds within the Interdepartmental Working Group set for Sardegna2030. This result was ensured thanks also to the use of the same terminology for the five European policy objectives.



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## List of abbreviation and acronyms

CF	Cohesion Fund
EMFF	European Maritime and Fisheries Fund
ERDF	European Regional Development Fund
ESF+	European Social Fund Plus
ESIFs	European Structural and Investment Funds
EU	European Union
FSC	Fund for Development and Cohesion
ISF	Internal Security Fund
ISTAT	Istituto Nazionale di Statistica (Italian National Institute of Statistics)
JTF	Just Transition Fund
MFF	Multiannual Financial Framework
NSDS	National Sustainable Development Strategy
RSDS	Regional Sustainable Development Strategy
ROPs	Regional Operational Programmes
SD	Sustainable Development
SDGs	Sustainable Development Goals
SEA	Strategic Environmental Assessment



## Introduction

The Voluntary Local Review (VLR) is a process in which Local and Regional Governments (LRGs) voluntarily initiate an assessment of their progress of implementation of the 2030 Agenda and its SDGs. This makes it possible for LRGs to share experiences, challenges, and lessons learnt and, at the same time, to open their door to new partnerships, filling the gap of implementation tools for their local view, ensuring the effectiveness of regional and local strategies.

This report focuses on the aspects that we consider crucial for the progressive assessment in the implementation of the SDGs and on the strategic objectives of the regional strategy for sustainable development.

In addition, this document wants to highlight the importance of the strategy elaboration process and its innovative value, rather than on its specific contents. Therefore, we have decided to emphasise the governance system underlying the Strategy, both in the drafting and in the implementation phases.

In Chapter 1 we present an overview of the Sardegna2030 Regional Sustainable Development Strategy, its structure, its objectives, and its targets.

In Chapter 2 we describe and analyse the governance system we have structured to engage and coordinate regional and local stakeholders. We also present the Regional Forum for Sustainable Development and its crucial role as a meeting and working point for Institutions, enterprises, and the third sector, highlighting their role for the territorialisation of the strategy.

In Chapter 3 we focus on the integration between Regional Sustainable Development Strategy and Regional Operational Programmes of European cohesion policy, and we show the first outcomes as the result of the activated integration path.

Finally, in Chapter 4 we outline what we consider to be the main achievements and the aspects we are focusing on for future actions.

# 1

## Sardegna2030: an overall view

The Sardegna2030 Regional Strategy is the long-term vision for the Sardinia we want by 2030. An agenda of goals to be achieved and actions to be taken. It has been developed through a participatory process rooted in documents, plans and programmes, primary and secondary source data, and extensive information shared during the activities carried out in the framework of a governance that involves public and private stakeholders - as described in Chapter 2. Right now, the governance is working for the implementation of the Strategy with the same participatory, open, inclusive, and transparent approach.

Following the sustainable development method according to the 2030 Agenda and its SDGs<sup>1</sup>, the Strategic Regional Goals of the Sardegna2030 Strategy are based on environmental protection, well-being and social inclusion, and prosperity and economic equity. All these elements are interlinked and cannot be compartmentalised, they definitely share the transverse focus of the education and the governance culture.

The Regional Strategy, coordinated by the Regional Department of Environmental Defence has been approved on 6<sup>th</sup> October 2021 and it is available in our [institutional website](https://www.regione.sardegna.it/argomenti/strategiaregionalevilupposostenibile/).  
<https://www.regione.sardegna.it/argomenti/strategiaregionalevilupposostenibile/>

Human well-being is intrinsically linked to the health of the natural ecosystems to which it belongs, just as Sardinia is a constituent element of the global environment. Moreover, the climate crisis and the growing awareness of the effects of climate change, calls us to the need of economic and social models in terms of sustainable development. The Regional Strategy for Sustainable Development Strategy represents an important opportunity to integrate aspects of climate change mitigation and adaptation into the regional programming and planning. The Regional Climate Change Adaptation Strategy (adopted by the Autonomous Region of Sardinia on 5<sup>th</sup> February 2019), was drawn up based on a specific study on future climate scenarios of Sardinia to 2050. Then, the Objectives of the Regional Strategy for Sustainable Development have been developed within this specific regional framework.

Sardegna2030 should be seen with an open eye on our territory but also on the rest of the planet, where the cultural element and the collaboration between institutions and citizenship promote and support policies focused on integration and the wellbeing for all, *leaving no-one behind*.

The central role of the Sustainable Development Goals (SDGs) of the 2030 Agenda within the European Cohesion Policy for the period 2021–2027 has been the lighthouse of Sardegna2030 to the extent that the 5 EU policy objectives coincide with the 5 Strategic Themes of the Regional Strategy, with a specific declination:

1. A SMARTER SARDINIA with a strengthened administrative capacity, a greater competitiveness of the production system oriented towards innovation.
2. A GREENER SARDINIA, for the conservation, management, and enhancement of resources and land for an ecological and resilient transition and climate change.
3. A MORE CONNECTED SARDINIA, for an inclusive connectivity based on sustainable mobility and digital accessibility.
4. A MORE SOCIAL SARDINIA, for a widespread well-being based on health, training, skills and work, social inclusion, equality, and culture.

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<sup>1</sup> See Miola A., Borchardt S., Neher F., Buscaglia D., "Interlinkages and policy coherence for the Sustainable Development Goals implementation: An operational method to identify trade-offs and co-benefits in a systemic way", EUR 29646 EN, Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92- 79-99556-9, doi:10.2760/472928, JRC115163

5. A SARDINIA CLOSER TO CITIZEN, that invests in the governance for territorial development plans.

The Strategic Objectives of Sardegna2030 are inevitably multidimensional, synergic, and complementary. This means that each Strategic Theme, Strategic Objective, Line of Intervention, or Action should not be read individually or be considered self-supporting (see Fig.1). Therefore, Sardinian Sustainable Development Strategy can only find the right implementation in the intersection of the 5 Themes, in the governance, and in the continuation of the participatory process with its constant updating, sharing, dialogue openness, and creation of culture.

The Regional Sustainable Strategy Development Sardegna2030 consists of:

- 5 Strategic Themes
- 34 Strategic Objectives
- 104 Lines of Action
- 571 Actions
- 102 Indicators
- 41 Targets

The descriptive framework of each Strategic Theme is correlated by a matrix reporting the Indicators and the Targets for Sardegna2030. In fact, The Strategy is also supported by a monitoring system composed of a specific set of indicators that can support and drive the implementation of the Actions and the Policies. The achievement degree of Sardegna2030 is measured through a set of defined targets, the revision of the initial context analysis, and any re-evaluation and redirection of the strategic action lines.

The monitoring system consists of:

- A set of 102 indicators providing a detailed, complete, and comparable graphic representation with data from other Italian regions and with Italian national averages.
- A set of 41 targets representing the desired value in 2030: which is the goal to be achieved by Sardegna2030. The target value evaluation process was based on the comparison of different methodologies: especially on the evaluation of regional experts that worked in cooperation with the Interdepartmental Working Group, taking into account the identification of quantitative targets defined by regional, national or international plans and programmes.





Fig. 1 – The Regional Sustainable Development Strategy Sardegna2030: an overall view

Sardegna2030 is consistent with the Goal 17 of the 2030 Agenda, “Partnership for Goals”, that reinforces the principle of promoting inclusive collaborations built on universally valid principles and values, a common vision and shared goals, considering that the regional development policies must be integrated, must dialogue and create synergies that enhance public actions to be truly effective (see Fig. 2).



**Fig. 2 - The integration between strategies and programs**

The result of this work is displayed in the official document of the Strategy through a correlation matrix where each Strategic Objective is linked with the 2030 Agenda, with the National Strategy for Sustainable Development, and with all the opportunities available at regional level offered by European, national and regional plans, programmes and funds such as the ERDF and the ESF+ Programmes, the Regional Development Programme, the European Maritime and Fisheries Fund (EMFF), the European Regional Development Fund (ERDF), the Smart Specialisation Strategy (S3) and many more (see Chapter 3).

## 2 The governance system and the co-design process

### 2.1 The governance system for Sardegna2030

The Autonomous Region of Sardinia has activated a governance system aimed at creating an effective team building system, through a multi-stakeholder, learning-by-doing, empowerment process.

The **Sardegna2030 governance** is organised into four different integrated levels:

- External-international level, which consists of the UN/EU commitment to the 2030 Agenda and other players, including the Regional Network for International Cooperation.
- External-national level, which belongs to the collaboration between the Ministry for the Ecological Transition and the interregional governance for the development of climate change adaptation and ecological transition tools.
- Regional-local level, which involves the local institutional actors, the entrepreneurs, the third sector, and the civil society and plays a central role in operationalising the sustainable development vision, contributing to the SDGs achievement.
- Regional-internal level, which can be associated with the internal governance of the regional system (departments, bodies, regional agencies), which ensures the activation of all the levels of the public administration and the balance among them.

The governance system for the implementation of the Strategy Sardegna2030 is outlined in Fig. 3.

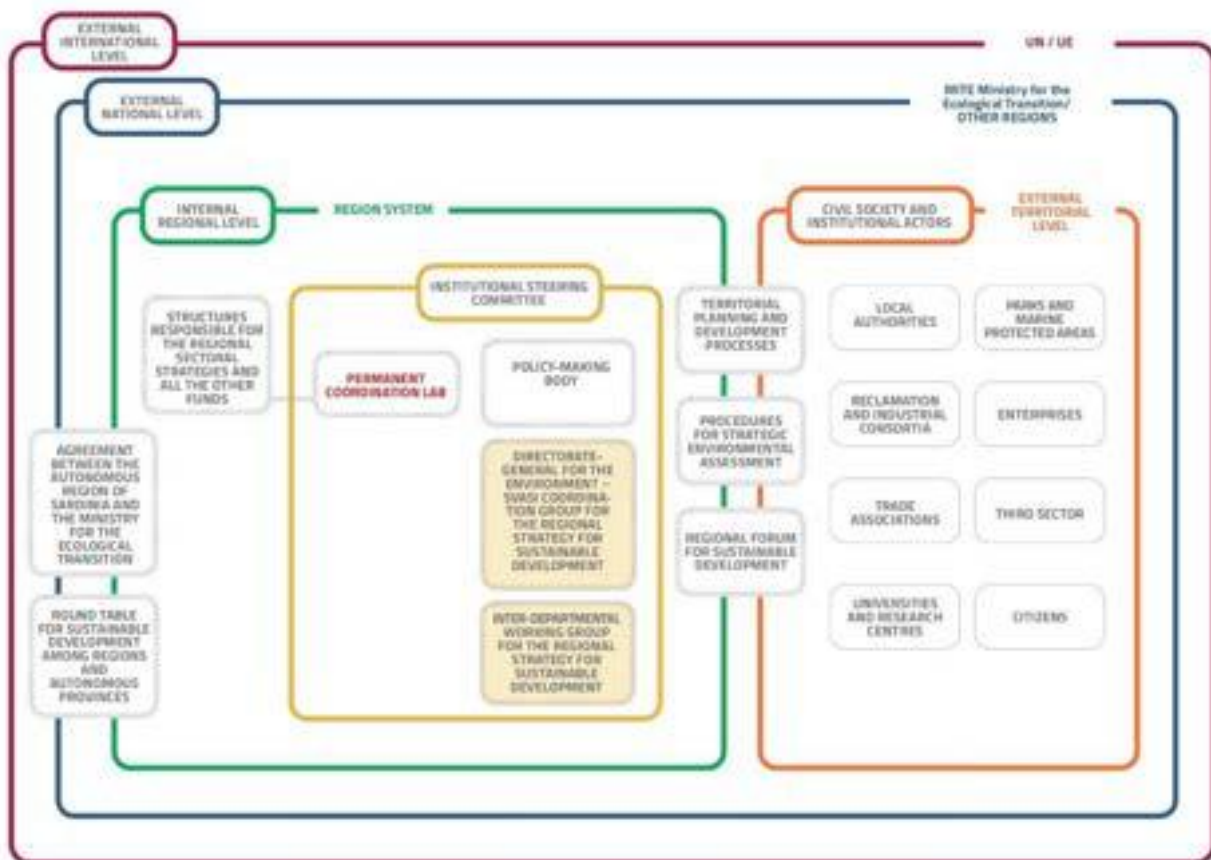


Fig. 3 - The governance system for the implementation of the Sardegna2030 Strategy

The regional governance is coordinated by the Directorate general for the Regional Department of Environmental Defence developed within the reference frame represented by the National sustainable development strategy and the ongoing collaborative relationships with the Ministry for Ecological Transition and the stimuli/prompts of the interregional table.

As we can see in Fig. 3, the regional governance is composed of the internal level, the local level, and the interconnecting venues formed by the Regional Forum for Sustainable Development, the spatial planning and development processes, and the strategic environmental assessment procedures.

The **Regional Forum for Sustainable Development** is composed of local authorities, enterprises, associations, and the whole of civil society. The Forum is a permanent platform, created for the Strategy design process and now the implementation process is ongoing. It has experienced dozens of collective moments of thematic analysis and territorial insight, profiting from the rich participation and valuable input offered by the stakeholders. It is a permanent laboratory that has helped to understand the local reality through a choral/comprehensive process involving the entire administration and civil society in cross-sectoral working groups with a wide range of skills, approaches, and experiences.

The **process of spatial planning and development** is carried out basically through the ERDF. This process, for the period 2021-2027, has been closely interrelated with that of Sardegna2030, as we will describe more in the next chapter.

The **Strategic Environmental Assessment procedures** (SEA) procedure is undergoing a phase of evolution driven precisely by the evolution of the sustainability approach and the NSDS. At the regional level, some territories and local authorities are experimenting with procedures that allow the interconnections between environmental, social, and economic sustainability to be included in the strategic assessment.

The **Institutional Steering Committee** was established, at regional level, to ensure a direct engagement in the Strategy design and implementation process, between the Departments and Regional Agencies coordinated by the Regional Directorate for Environmental Protection. Its main operational tool is the **Interdepartmental Working Group**, coordinated by a small working group of the Environment department (Coordination Group). The Interdepartmental Working Group is composed of more than 100 civil servants, delegated representatives of the Directorates-General of each regional department and of the various Bodies and Agencies of the regional system. It has generated a lifelong learning laboratory, a perfect place that has tested the collective thinking power, where traditional paradigms have been constantly questioned by problem analysis and the identification of potential solution, following integrated approach of the 2030 Agenda, converging in the Sardegna2030 Strategy.

The Interdepartmental Working Group has been working assiduously since the setting phase of the Sardegna2030 Strategy by the reconnaissance of regional policies and their ranking against the goals of the 2030 Agenda; the analysis of statistical data and positioning of the Region, identification of the main critical issues to be addressed; the in-depth analysis, in thematic groups, to define objectives and lines to be acted upon; the identification of the targets to be reached by 2030.

The work led to the first version of the Sardegna2030 Strategy (called Preliminary Document, adopted in 2020), submitted to the Forum for the integration and revision process.

Then, the Interdepartmental Working Group worked at the integration of the contributions of the Forum and the interconnections with European funds and target setting, leading to the final version of the strategy adopted in 2021.

Since then, the Group has been working on implementation. The group's meetings, which are still frequent, are aimed at incorporating the implementation of the actions of the strategy into day-to-day administration and overseeing its pursuit. We have held some monitoring meetings and we will soon hold training sessions on cross-cutting topics of common interest.

With the aim of overseeing the implementation of the strategy and giving continuity to the collaboration initiated during the drafting phase, we set up the Permanent Coordination Lab. It is a transversal organisational space for liaison, discussion and decision-making specifically dedicated to the integration between Sardegna2030 and the Programming of European-driven development funds.

The Lab is a body that operates in a flexible and lightweight manner, and it is composed by:

- The Sardegna2030 Coordination Group.
- The Managing Authorities of Regional Operational Programmes for the European Funds.
- The Environmental Authorities and the Rights and Equal Opportunities Authority.

What is new, beyond its composition, is how this system operates, based on sharing goals, searching for solutions through continuous dialogues. The dialogue is its main nourishment. The implementation of the strategy is an ongoing process based on the capability of integration among policies.

At the centre of the regional governance, within the bodies and procedures created, there are the dialogue, the care, and the attention of the collaboration process, especially between the Permanent Coordination Lab and the Interdepartmental Working Group.



## 2.2 Engaging local stakeholders: the Regional Forum for Sustainable Development

The Regional Forum for Sustainable Development is a meeting point for Institutions, enterprises, and third sector, that aims to define strategic priorities and concrete actions on different aspects on the economic, social, cultural, and environmental dimensions at regional scale, coherently with the 17 SDGs and the 169 targets of the 2030 Agenda.

The Forum is meant to be a space to inform, listen, share, and consult other participant to define the strategic vision and the regional objectives, to implement and monitor them, and to assure the dialogue and the exchange among all the social parties involved. The participatory process has been structured based on specific participatory methodologies and software for digital interaction and co-design. It has stimulated the contribution of the research world and the civil society, including associative, economic, environmental, cultural, and social realities, citizens, and the local institutions through the Territorial Tables.

The process was run under the banner of values such as participation and inclusion, responsibility, transparency, coherence, effectiveness, ethics and justice, and circularity.

The Charter of Values, shared among all participants, had the purpose of enhancing the culture of sustainability and spreading the dissemination of values, common basic principles, which could create the conditions to ideate, design and act while remembering different aspects such as the quality of life, the social inclusion, the economic growth, never forgetting the biosphere vulnerability and the protection need.

During the drafting period of the Sardegna2030 Strategy, it has been adopted an approach able to activate and promote the learning process and the empowerment among the local actors (public authorities and civil society), to co-build new content and values, and to stimulate the local actors to become active partners drafting and implementing the Strategy. From March to October 2021, during 14 laboratories, the Forum reached and engaged a broad number of stakeholders (more than 3300 registered visitors) with a high attendance rate. The Forum (14 laboratories/events organised from March to October 2021) was structured in the following way:



Fig. 4 - A Roadmap for the Regional Forum for Sustainable Development

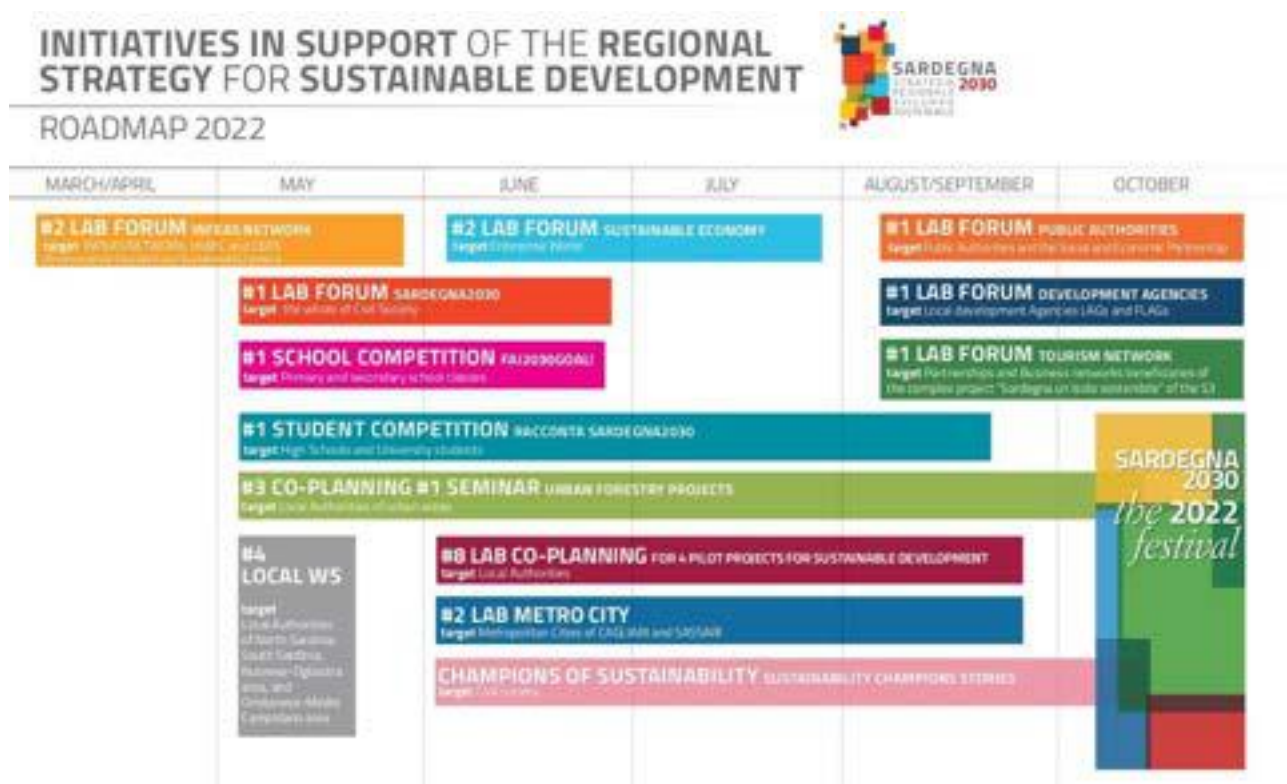
All the events of the Forum were attended by the rapporteurs from the Managing Authorities of the ESIF (European structural and investment funds) funds (ERDF, ESF, EAFRD), the Directorate-General of the main Departments engaged, and also some Councillors. Every event was preceded by one or more pre-meetings with the rapporteurs to stimulate the capacity building of the working group and guarantee coordination, shared approach, and objectives. All the events/laboratories of the Forum were conducted with the support of professional facilitators.

The Forum sessions enabled the exchange of information and the collaboration among approximately 1600 people involved (belonging to institutions, enterprises, and third sector), who worked together using structured and shared platforms, on the Strategic Themes identified to achieve a more sustainable Sardinia by 2030. This method allowed us to listen and collect more than 20.000 formal and informal contributions that were indispensable to completing the design of the Regional Strategy.

The broad participation of all the interested actors in the Forum and in the analysis process generated a lot of contributions and punctual suggestions that have been integrated in the Strategy within the Strategic Objectives, Lines of Intervention, and Actions.

Thanks to the participation of the Managing Authorities of the ERDF and the ESF in the co-design of the Thematic Laboratories, the contributions were also useful for integrating the Strategic Document and the following Operational Programmes 2021-2027.

Since its approval, we have focused on the dissemination of the Sardegna2030 Strategy and on giving continuity to the spirit of collaboration that has been activated. In particular, the activities of the Forum are now continuing through workshops aimed at specific targets. This choice was guided by the desire to focus attention on a capillary adaptation of the lines of intervention to individual specificities. In addition, there are call-to-action initiatives addressed to young people and citizenship, as well as larger initiatives such as the Sardegna2030 Festival, as shown in Fig. 5 that you can find below.



**Fig. 5 - A Roadmap for the implementation of the Strategy**



# 3

## Integration and policy coherence

### 3.1 From the 2030 Agenda to Sardegna2030 through the European Cohesion Policy

The Interdepartmental working group and the Forum has raised up a relevant point: the policy integration and coherence among all the tools and the Programmes available at all levels, from global to local.

We addressed this issue by integrating the Sardegna2030 process with the planning of the Implementation Programmes of the European Funds, thanks to the direct involvement of the Regional structures in charge of programming the European Funds within the Interdepartmental Working Group.

The territorial workshops on strategic issues, activated in the framework of the Forum, have been jointly implemented and have been instrumental in the drafting of both the Sardegna2030 strategy and the Regional Operational Programmes (ROPs) financed by the ERDF.

As just mentioned and as reported in Chapter 2, the Sardegna2030 Interdepartmental Working Group includes the representatives of the Managing Authorities of the Regional Operational Programmes financed by the European Regional Development Fund, European Social Fund Plus, Fund for Development and Cohesion, and European Agricultural Fund for Rural Development. Moreover, civil society and local institutions are involved in spaces for discussion and information through Territorial Boards and the Regional Forum for Sustainable Development.

It must be emphasised that the European institutions has defined the Cohesion Policy for the period 2021–2027 highlighting the central role of the sustainable development goals (SDGs) of the 2030 Agenda and their strategic relevance for the future of the EU itself, and for the definition of the Multiannual Financial Framework (MFF).

#### ***FOCUS - The European Cohesion Policy 2021–2027***

The Cohesion Policy is the EU's main investment policy aimed at strengthening its economic, social, and territorial cohesion by providing benefits for all the regions and the cities in the EU.

The Article 174 of the Treaty on the Functioning of the EU ([Official Journal of the European Union 2012](#)) is the foundation of the European social, economic, and territorial Cohesion Policy and makes explicit that the EU intends to strengthen its economic, social, and territorial cohesion and to reduce disparities of development between the various regions. Therefore, particular attention should be paid to the regions suffering the most from severe and permanent natural or demographic difficulties.

The EU Cohesion Policy is one of the most transversal and cross-cutting policies, which contributes to most of the 17 SDGs, if not all. In addition, the key cross-cutting principles and objectives, such as sustainable development, elimination of inequalities, promotion of equality between men and women, integration of gender perspective, as well as combatting discrimination, are mainstreamed at all stages of implementation of the policy. Priority granted to the partnership principle makes sure that national and subnational actors are engaged and take ownership on delivering EU priorities through co-financed projects' ([EC 2019a](#)).

The Cohesion Policy 2021–2027 will focus its resources on five policy objectives :

- A Smarter Europe, through innovation, digitalisation, economic transformation, and support to small and medium-sized businesses.
- A Greener, carbon free Europe, implementing the Paris Agreement and investing in energy transition, renewables, and the fight against climate change.

- A more Connected Europe, with strategic transport and digital networks.
- A more Social Europe, delivering on the European Pillar of Social Rights and supporting quality employment, education, skills, social inclusion, and equal access to healthcare.
- A Europe closer to citizens, by supporting locally led development strategies and sustainable urban development across the EU.

The EU has been fully committed towards the implementation of the 2030 Agenda and the SDGs, as stated in the conclusions of the Council of the EU 'A sustainable European future: The EU response to the 2030 Agenda for Sustainable Development' (Council of the European Union 2017) and in the European Commission's reflection paper 'Towards a Sustainable Europe by 2030' (EC 2019a). The latter affirms the centrality of the Union in the definition of the 2030 Agenda and sets itself the goal of fully integrating the SDGs in the EU policy and strategic framework. Moreover, as stated in the EC Staff Working Document 'Delivering on the UN's SDGs—a comprehensive approach', under the leadership of President von der Leyen, the Commission has presented an ambitious policy programme to deliver on sustainability goals in the EU and beyond. The SDGs are an intrinsic part of the President's political programme and lie at the heart of the policymaking on internal and external action across all sectors.

The issue of integration between Sardegna2030 and the Operational Programmes financed by the ERDF and ESF, was the subject of a parallel study carried out by a team formed by the Regional Department of Environmental Defence, the Department of Planning, and the research institute FEEM. This joint research project specifically aimed at developing and implementing a model for assessing the sustainability of the Regional Operational Programmes. The project took inspiration from the model developed by the Autonomous Region of Sardinia in the Strategic Environmental Assessment (SEA) procedure of the 2014–2020 ROPs, in line with the methodology introduced by the European Commission<sup>2</sup>.

The methodology is intended to be a valuable tool to assist the decision-makers in identifying the most effective programming options regarding the 2030 Agenda SDGs. The authors investigated the interconnections between the 169 targets of the 2030 Agenda and the 182 intervention fields of the CPR funds.

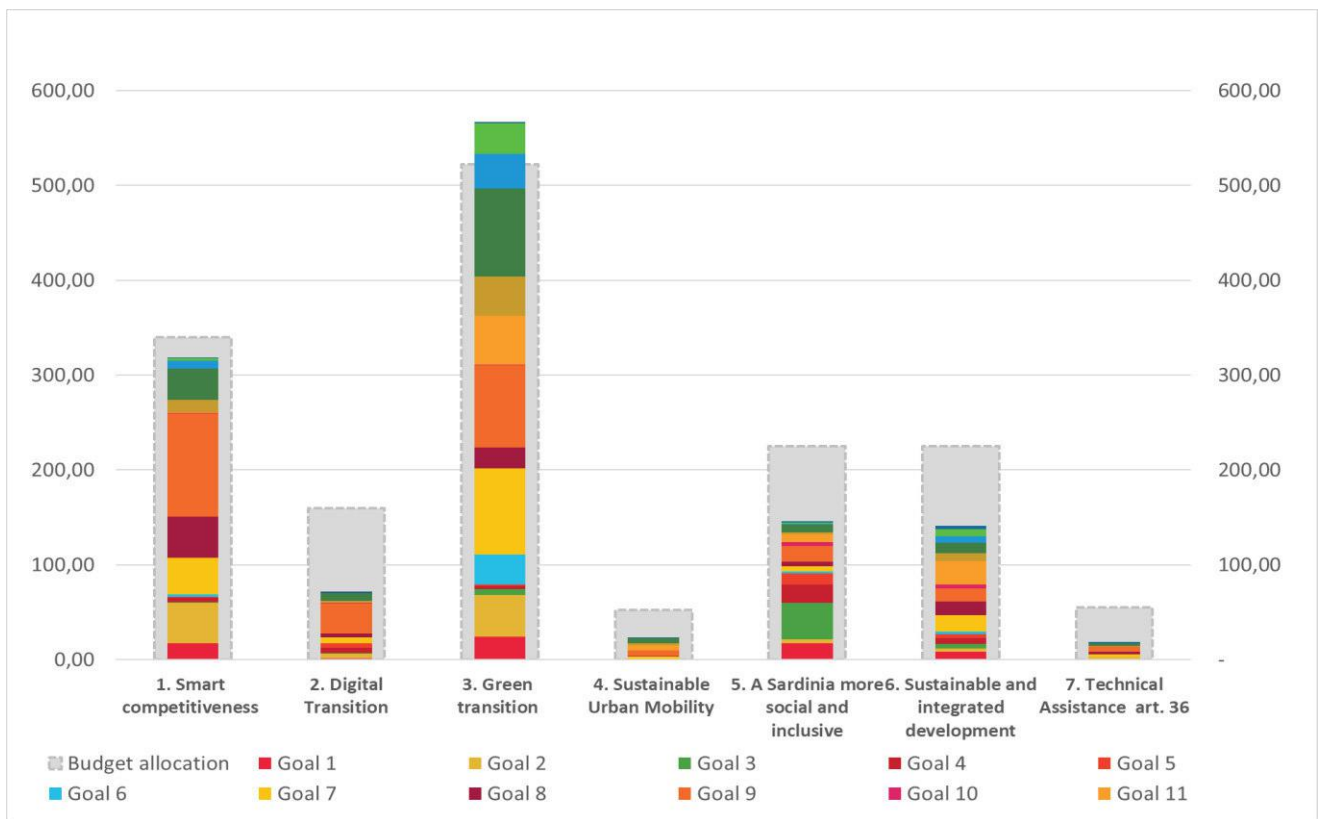
The environmental assessment model can be replicated and adapted to support the Regional Administration in the evaluation of the contribution of the Sardinia European Regional Development Fund (ERDF) ROP to the National Strategy for Sustainable Development. This methodology can surely provide important elements of evaluation for the implementation of the Regional Sustainable Development Strategy, and it represents a valid tool to assess the contribution of the ESIFs to the achievement of the new SDGs at the base of the 2021–2027 programming<sup>3</sup>.

In particular, the application of the model to the 2021-2027 ERDF ROPs overall shows a good level of reliability in terms of assessments and compliance with the needs investigated. The Fig. 6-7 below<sup>4</sup> show that more than 80% of the actions, identified by the ERDF ROPs proposal, contribute directly or indirectly to the achievement at regional level of the Global Goals of the 2030 Agenda.

<sup>2</sup> European Commission. Commission Implementing Regulation (EU) No 215/2014 of 7 March 2014 Laying Down Rules for Implementing Regulation (EU) No 1303/2013 of the European Parliament and of the Council Laying Down Common Provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and Laying Down General Provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund with Regard to Methodologies for Climate Change Support, the Determination of Milestones and Targets in the Performance Framework and the Nomenclature of Categories of Intervention for the European Structural and Investment Funds; European Commission: Brussels, Belgium, 2014.

<sup>3</sup> L. Cavalli; S. Sanna; M. Alibegovic; F. Arras; S. Boe; G. Cocco; E. Cruickshank; L. Farnia; E. Manca; L. Mulas; M. Onnis; S. Ortu; I. Romani; M. Testa - Localizing the 2030 Agenda at the Regional Level through the European Cohesion Policy: An Application to the Region of Sardinia - Environmental Sciences Proceedings, 2022, 15 (1), 51

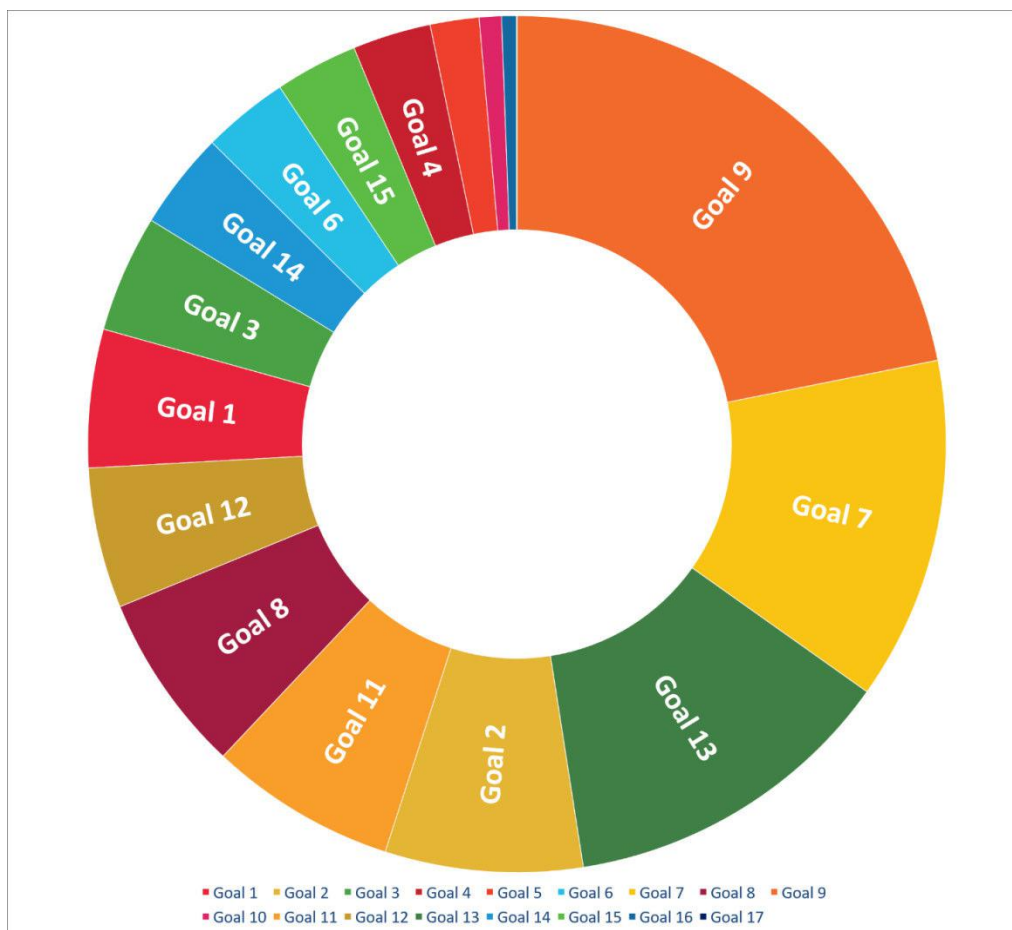
<sup>4</sup> Environmental report proposal of the ERDF Regional Program 2021 - 2027 in the Strategic Environmental Assessment procedure - Regional Programming Center RAS, May 2022



**Fig. 6 – The EAFRD Sardinia 2021-2027 contribution to the SDGs (April 2022 proposal)**

Moreover, it can be noted that priorities "1 - Smart competitiveness" and "3 - Green transition" are those that provide the greatest contribution to the SDGs, with Priority 2 able to intercept the sustainable development goals more than proportionally to the financial envelope. This result expresses the multi-objective nature of the green transition, able to contribute in an integrated and cumulative way to different SDGs such as Goal 9, Goal 13, and Goal 7.

The joint FEEM-Region research was developed notably with the objective of an exploration of the 2030 Agenda targets and its interconnections, and after an inquiry of the potential that the regional-level Cohesion Policy could have on the SDGs achievement. This work is bringing in significant results, especially when trying to understand to what extent the SDGs can be localised at the regional or sub-regional level and whether they can be achieved through the ERDF or the ESF: the Cohesion Policy funding does not allow to reach indistinctly and equally each 2030 Agenda target. This is a finding which validates the narrowness and incompleteness of any 'one-size-fits-all' type of solution for the achievement of the SDGs. Therefore, the conjunction and the cooperation of different financial sources, as well as the implementation of non-economic policies, such as regulations and partnerships, are essential for the realisation of the 2030 Agenda both at global and local levels.



**Fig. 7 – The EAFRD Sardinia 2021-2027 contribution to the SDGs (April 2022 proposal)**

### 3.2 Sardegna2030 within the Regional Operational Programmes

We have seen that the Regional Operational Programmes (ROTs) play a key role in Sardinia for achieving the goals of 2030 Agenda. It is possible to observe as far as the Regional Strategy can be implemented through ROTs and, above all, whether the planning activity, for some phases carried out jointly, has been translated into effectively coherent operational documents.

The first step undertaken for the elaboration of the Regional Strategy for Sustainable Development was to explore the consistency level between the National Sustainable Development Strategy and the regional policies of the last 5 years (for the period 2015-2020). As detailed in the focus below, we found a high level of coherence, but also of correlation with European funds.

#### ***FOCUS - COHERENCE BETWEEN THE NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY AND THE REGIONAL PLANNING ACTS AND PROJECTS 2015-2020***

The path began surveying all the regional policies of the past 5 years, in order to assess to what extent they can serve as a coherent and functional tool for the achievement of the National Sustainable Development Strategy (NSDS). What was shown by the survey is that several of the regional policies analysed belong to the EU Cohesion Policies. This finding certainly calls for an extensive analysis and identification of the interconnections between the Sustainable Development Strategy and the new 2021–2027 Cohesion Policy programming.

The in-depth study, carried out by the interdepartmental working group, aimed to integrate the 2030 Agenda and the National Sustainable Development Strategy into the everyday regional administration, guaranteeing the sustainable development especially in highly critical situations, identifying the emergency issues in the Region thanks to the expertise of the representatives in the working group, but also through the monitoring of the SDGs indicators yearly published by ISTAT. The survey research showed that many aspects of 2030 Agenda and SNS were already included in the regional policies. Moreover, the survey allowed us to identify certain priority issues for the Regional Strategy.

In this background, it was a consequential choice on behalf of the Interdepartmental working group to pursue activities strictly connected with the 5 strategic objectives of European policy: so that our working groups have been named: a smarter Sardinia, a greener Sardinia, a more connected Sardinia, a more social Sardinia, a Sardinia closer to citizens. These 5 topics addressed in the working groups then became the main 5 strategic themes of our Regional Strategy for Sustainable Development.

Such a thematic breakdown has enabled a common language and vocabulary being spoken between the Cohesion and the Sustainable Development policies within the working groups. The result was facilitating an effective and constructive approach towards the Strategy, as well as promoting mutual learning for an integrated and three-dimensional sustainability perspective across the entire regional administration.

Starting from these hypotheses, the elaboration of the Strategy, through the Forum and the participatory laboratories, was carried out with some joint workshops with the writing process of the new programming of European funds: the ERDF and the ESF+.

To show the first results obtained from the described connection path between the elaboration of the Strategy and cohesion policies, we represent below two coherence tables. The tables show that there is a strong external coherence between the objectives of the ERDF Program and the objectives of Sardegna2030, not only along the diagonal of maximum consistency, but also across all the other strategic themes and for all the priority axes of the Program.

Sardegna2030 strategic themes	Operational Programmes financed by the ERDF 2021-2027					
	Priority 1: Smart competitiveness	Priority 2: Digital Transition	Priority 3: Green transition	Priority 4: Sustainable Urban Mobility	Priority 5: A Sardinia more social and inclusive	Priority 6: Sustainable and integrated development
A smarter Sardinia	Full coherence	Full coherence	Potential conditional coherence	Neutrality	Potential conditional coherence	Neutrality
A greener Sardinia	Potential conditional coherence	Neutrality	Full coherence	Potential conditional coherence	Neutrality	Potential conditional coherence
A more connected Sardinia	Potential conditional coherence	Neutrality	Potential conditional coherence	Full coherence	Potential conditional coherence	Neutrality
A more social Sardinia	Potential conditional coherence	Potential conditional coherence	Neutrality	Neutrality	Full coherence	Full coherence
A Sardinia closer to citizen	Neutrality	Neutrality	Full coherence	Neutrality	Potential conditional coherence	Full coherence

neutrality

potential conditional coherence

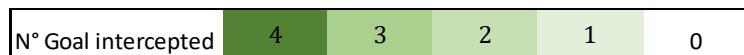
full coherence



**TAB. 1 - Coherence with the ERDF 2021-2027 (source: elaboration RAS from the environmental report proposal of the ERDF Regional Program 2021-2027)**

Furthermore, as regards the ESF+, coherence is present not only along the strategic theme "a more social Sardinia", but also along the other themes: "a more connected Sardinia", "a smarter Sardinia", "a Sardinia closer to citizens".

Sardegna2030 strategic themes	Operational Programmes financed by the ESF+ 2021-2027												
	OS I:	OS II:	OS III:	OS IIIbis:	OS IV:	OS V:	OS VI:	OS VII:	OS VIII:	OS VIIIa:	OS IX:	OS X:	OS XI:
	Improve access to employment	Modernising institutions and services of the job market	Promote a participation in the balanced job market	Promote the adaptation of workers, companies, and entrepreneurs to change	Improve the quality of the job market in education and training systems	Promote equal access e completion to an instruction e quality and inclusive training	promote Lifelong Learning	Encourage active inclusion	Promote integration socio-economic background of third-country nationals	Promote the socio-economic integration of marginalised communities such as Roms	Improve equal access e timely to quality services	Promote the integration of people at risk of poverty or social exclusion	Tackling material deprivation through food and material assistance
A smarter Sardinia													
A more connected Sardinia													
A more social Sardinia													
A Sardinia closer to citizen													



TAB.2 - Coherence with the ESF+ 2021-2027 (source: elaboration RAS from the steering document of the ESF+ 2021-2027)



# 4

## From Strategy to action: the lesson learnt and the future perspectives

Usually, the implementation of an ambitious Strategy, such as Sardegna2030, is closely linked to the availability of adequate allocated financial resources. Currently, as previously described, at least in Europe the resources are available and consistent, coherently programmed (surely from a formal point of view) with the principles of Sardegna2030 and all the national and international strategic documents linked to it.

After more than 2 years of participatory process we believe, and we learnt, that the central point is something else.

Facts show us that the pivot point is the governance of the multitude of plans and stakeholders involved. The governance of the Strategy - and thus the ability to hold together the actions and needs of local authorities and stakeholders involved, the dialogue between different institutional and territorial levels, funding programs, and policy coherence - assume a crucial role.

It seems appropriate to emphasise that Sardegna2030 is simultaneously an agenda of things to do and a process of perspective change. Even if the Sardinia Strategy has been formally adopted, the cultural change on which it is based is still ongoing.

The implementation of the Strategy, in order to be coherent and effective, must nourish itself with the active cooperation that has been developed during the writing process. We therefore intend to give continuity and enhance the virtuous experience that led us to the approval of Sardegna2030.

We are currently continuing to work with the Interdepartmental working group and the Forum for Sustainable Development, as reported in Cap 2. In addition, we have created a Permanent Coordination Laboratory to strengthen the integration and the policy coherence. This working method is quite innovative and generally not adopted in the traditional regional administrative practice.

The way ahead is still long, but we are very satisfied with the path taken after the long walk we have done together, learning from each other. The empowerment generated has turned the sustainable development process of Sardinia into a working method for a lot of people, even before the Strategy was approved. From now on, in the implementation phase, we will have to be able to improve the achieved results and increase those aware, responsible, and participatory citizenship skills capable of supporting our enlarged community.



# VOLUNTARY LOCAL REVIEW

# 22

CITTÀ METROPOLITANA  
DI GENOVA





## Premise

The U.N. 2030 Agenda for Sustainable Development is an action program for people, planet and prosperity signed in September 2015 by the governments of the 193 countries members of the U.N., including Italy, to share the commitment to ensure a better present and future for our Planet and the people who inhabit it.

The 2030 Agenda brings with it a great innovation: for the first time a clear judgment is expressed about the unsustainability of the current development model, not only on the environmental level, but also on economic and social ones, thus definitively overcoming the idea that sustainability is exclusively an environmental issue and affirming an integrated vision of the different dimensions of development.

The 2030 Agenda is based on five key concepts (the 5 P's):

- People. Eliminate hunger and all forms of poverty, ensure dignity and equality.
- Prosperity. Ensuring prosperous and full lives in harmony with nature.
- Peace. Promoting peaceful, righteous and inclusive societies.
- Partnership. Implement the Agenda through strong partnerships.
- Planet. Protect the planet's natural resources and climate for future generations.

With the adoption of the 2030 Agenda, UN member states committed to work closely with local and regional governments to implement the Sustainable Development Goals (SDGs).

As part of the follow-up and review mechanisms, the 2030 Agenda for Sustainable Development encourages Member States to "conduct regular and inclusive country-led and country-driven reviews of progress at the national and sub-national levels" (para. 79). Paragraph 89 of the 2030 Agenda invites major groups and other stakeholders, including local governments, to report on their contribution to the implementation of the Agenda.

According to this spirit, local and regional governments are increasingly committed in subnational reviews of SDGs implementation, called Voluntary Local Reviews (VLRs). The process of carrying out these local reviews is providing multiple benefits to the entities involved and to the implementation of the SDGs at wide scale. VLRs can also help to strengthen vertical coherence and contribute to Voluntary National Reviews in the implementation of the SDGs.



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## INTRODUCTION

Metropolitan City of Genoa (CMGe), through the Metropolitan Mayor Marco Bucci's determination No. 71/2019, responded to the notice received by MITE expressing the intention to collaborate with metropolitan cities to define Metropolitan Agendas for Sustainable Development and, therefore, submitted a proposal for an intervention entitled **"The Sustainable Metropolitan Agenda of Genoa: toward sustainable metropolitan spaces."**

The project included:

- the construction of a metropolitan governance – both horizontal and vertical - for sustainable development (metropolitan sustainability “control room”, coordination of metropolitan cities);
- the involvement of civil society (activities for involvement, information and awareness about sustainable development thanks also to the network of "metropolitan sustainability schools");
- the definition of the metropolitan sustainable development agenda for its integration with the Genoa Metropolitan City Strategic Plan;
- the design and activation of integrated pilot actions for the implementation of CMGe's sustainable development goals (A replicable sustainable urban space model with experimentation in the Tigullio Park in Lavagna).

The ambition was to :

- strengthen and qualify the attention on sustainable development in order to integrate all dimensions of sustainability in metropolitan planning, programming and management tools;
- promote, in partnership with local institutions and metropolitan stakeholders, integrated actions for sustainable development;
- spread awareness and promote social and business activation on sustainability issues, also through a wider involvement of citizens and civil society.

The Ministry of Environment positively evaluated the proposal and therefore signed on 11/29/2019 the Collaboration Agreement with CMGe for the drafting of Agenda 2030 - "Genoa's sustainable metropolitan agenda: towards sustainable metropolitan spaces." allocating the related resources.

Below are indicated the experiences and best practices implemented by the Metropolitan City of Genoa.

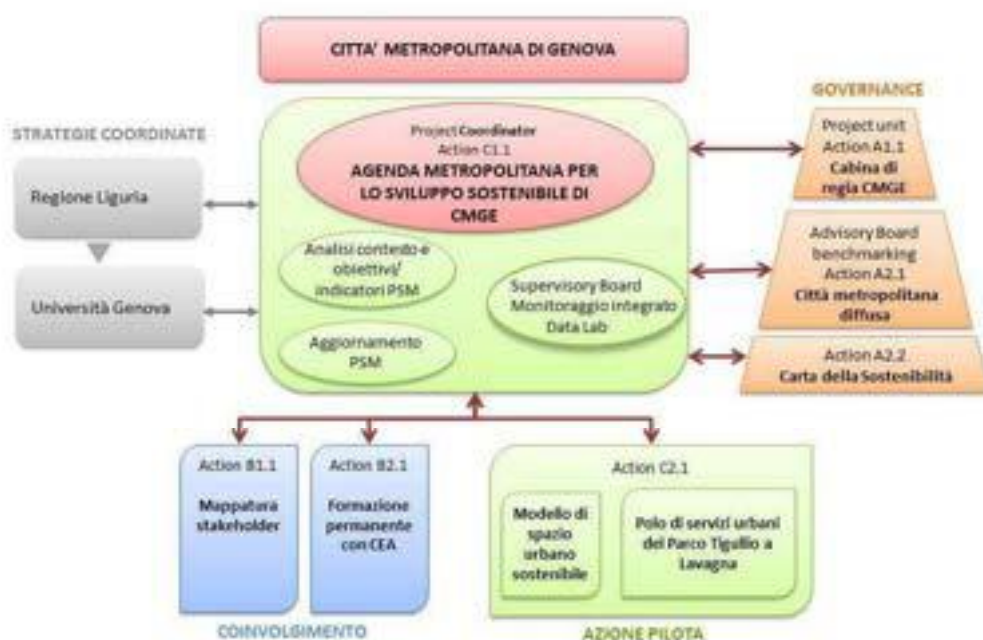
[Piano Strategico Città Metropolitana di Genova | Costruiamo insieme il territorio metropolitano \(cittametropolitana.genova.it\)](http://cittametropolitana.genova.it)

# 1 TERRITORIAL GOVERNANCE

## 1.1 Territorial control cabins: the Metropolitan City of Genoa

### CMGe's control cabin and task force

The project "Sustainable Metropolitan Agenda of Genoa: toward sustainable metropolitan spaces" was initiated by the **Institutional Steering Cabin of Metropolitan City of Genoa (CMGe)**, the technical and administrative figure coordinating the different key players in the administration, which gave impulse to the execution of the various project activities, established by Executive Act No. 462/2020 "Establishment and Operation of the Institutional Steering Cabin of Metropolitan City of Genoa for the Metropolitan Agenda for Sustainable Development - Action A1.1."



In 2021, in order to strengthen in a single coordinating structure the activities aimed at updating the strategic plan from the perspective of sustainability and of the new socio-economic framework of European and national guidance (Next Generation EU - PNRR), has been established, by Executive Act no. 1118/2021 "Organization of Matrix Structure for the Update of the Strategic Plan of Metropolitan City," a "matrix" structure organization (**task force**) to systematize the internal competencies by topic of strategic planning, economic-financial planning, ground and urban planning, economic development and digitalization, infrastructure, mobility and environment.

It has been considered appropriate to establish a single working structure to coordinate activities aimed at updating the strategic plan, according to the new European and national socio-economic and policy framework.

The year 2021 has certainly represented an opportunity for CMGe to rethink all strategic planning, become necessary also after the Covid pandemic, proposing a cross-reading with other planning tools: territorial (PTG), sustainable mobility (PUMS), Waste Plan, ZSC Management Plans etc., in the awareness that only a unified approach could allow the progress of strategic planning for sustainable development.



## 1.2 Multi-level spatial governance

### 1.2.1 TABLES OF COMPARISON BETWEEN MILD AND METROPOLITAN CITIES

SNSvS, as a tool for coordinating the implementation of the 2030 Agenda in Italy, identifies its territorial implementation as highly important. The 2030 Agenda itself encourages member states to "conduct comprehensive and regular reviews of progress, at national and subnational levels," also using inputs from "civil society, private sector and other stakeholders, in line with national conditions, policies and priorities". The SNSvS also pursues this goal basing on a set of national regulations (Art. 34 in Legislative Decree 152/2006 and its updates ), that require, within six months from its approval, Regions and Autonomous Provinces approve their own sustainable development strategy, that must be coherent with the national one, as well as the activation of an integrated monitoring among different territorial levels of the achievement of sustainability goals.

Therefore starting from 2018, a serie of actions aimed at building frameworks for the sustainability of public policies at regional, autonomous province and metropolitan city levels have been activated by MiTE, with the purpose of achieving the targets for sustainable development and demonstrating the contribution of policies, plans and programs to the achievement of the SNSvS objectives, as well as defining the mechanisms and indicators capable of ensuring their integrated monitoring.

To this end, starting from 2018, the MiTE has accompanied the declination and implementation of the strategic framework of the SNSvS and of 2030 Agenda to the different territorial levels by dedicating a specific line of intervention of the CREIAMO PA project - the L2WP1 Implementation and Monitoring of the 2030 Agenda - with the implementation of side-by-side paths addressed to Regions, Autonomous Provinces and Metropolitan Cities that encouraged the creation of working groups and discussions among the various institutional actors and the deep study of aspects related to the implementation and territorialization of the sustainability goals.

To further support this process, the MiTE has, at the same time, signed collaboration agreements with all the Regions, the Autonomous Province of Trento and the 14 Metropolitan Cities to build Metropolitan Agendas for Sustainable Development (AMSvS), a voluntary tool for building strategic visions capable of working on the urban and metropolitan context and capable of leading to the realization of the SRSvS goals. These cities, where the consumption of natural resources and the production of pollutants are concentrated, must become privileged places for the of adoption of suitable strategies for reducing environmental damage and creating renewed climate neutral socioeconomic systems. On this direction, MiTE is working with ANCI to ensure interaction within the complementary processes of defining Metropolitan Strategic Plans. Discussion tables are active at the MiTE as structured mechanisms for permanent and multilevel comparison for sustainable development and policy coherence.

Through the agreements and their accompanying activities, the territorial strategies for sustainable development represent a reference system within which spatial planning and programming tools are being brought into coherence.

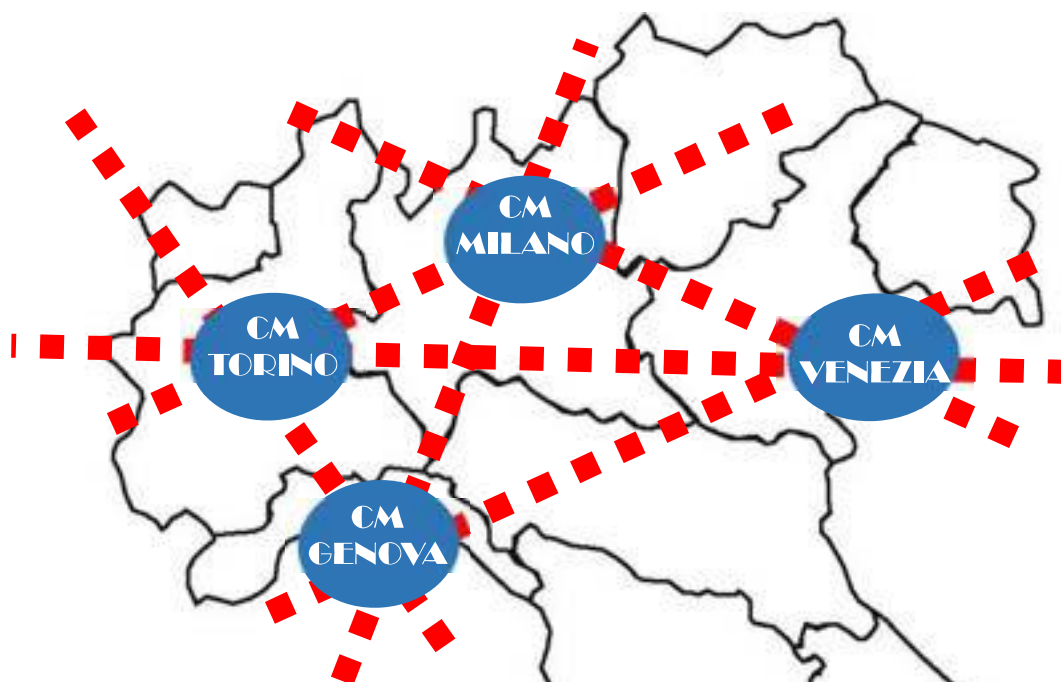
Considering the fundamental implementation role that Metropolitan Cities and Municipalities are called upon to play today, also in relation to the considerable national and European funds currently allocated to them (in particular on PNRR and cohesion policies 2021-2027), SNSvS intends therefore to continue activating and supporting territories in defining sustainable development agendas.



The National Strategy has found in the PNRR a first important source of investment, with the allocation of 140 million euros for the promotion of 3 pilot cases and 30 full-scale cases, to be distributed uniformly throughout the country, as prototypes of a development mode deep-rooted in the territories but coherent with the SNSvS and intended to facilitate the entrenchment of the UN Agenda's SDG's at the local level.

### *The Widespread Metropolitan City*

The Metropolitan City of Genoa has signed a **collaboration** with the Metropolitan Cities of Venice, Milan and Turin (Act No. 937/2020 of 05/19/2020) for the establishment of an inter-institutional working group, aimed at the creation of the sustainability governance integrated between territories, as implementation of the action called "**Widespread metropolitan city**".



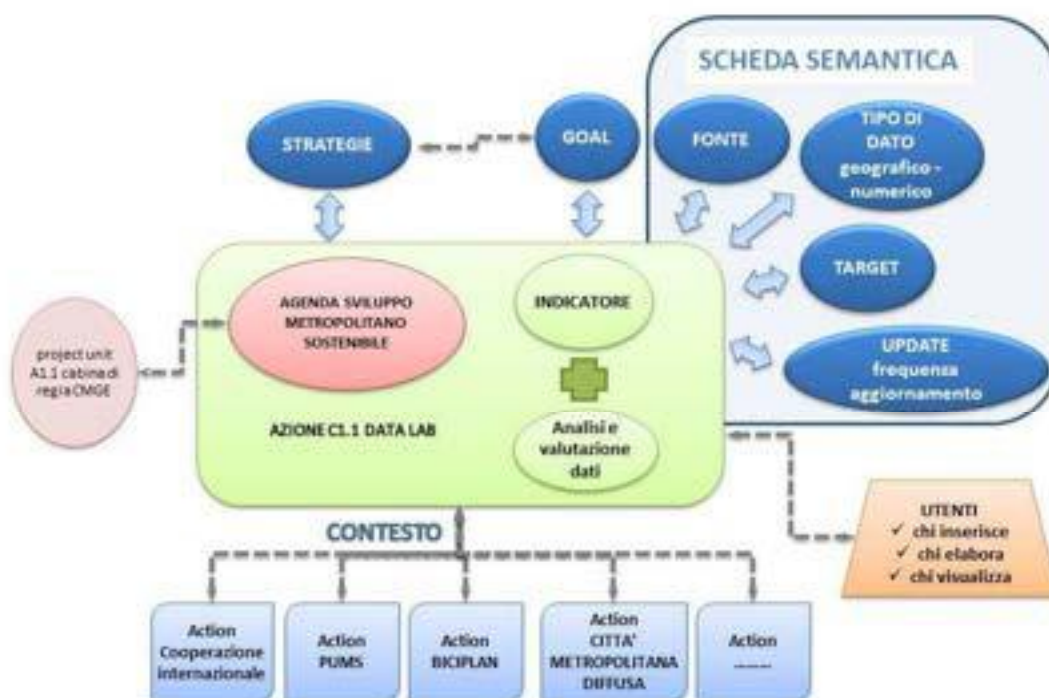
Coordination with Metropolitan Cities of Venice, Milan and Turin constitutes a permanent system of discussion tables between wide-area entities in order to exchange best practices to:

- manage in a coordinated way the goals of the National Strategy;
- share methods to implement national and regional indicators;
- collect and spread good practices;
- organize common informative and communication moments;
- building and feeding an integrated monitoring system (DataLab).

In the inter-institutional working group for coordination among different agencies the following reference offices were identified:

- Città Metropolitana di Genova – Direzione Generale - Ufficio Pianificazione Strategica;
- Città Metropolitana di Milano - Area Ambiente e Tutela del Territorio
- Servizio Programmazione e coordinamento progetti strategici e gestione dei sistemi di supporto alle decisioni;
- Città Metropolitana di Torino - Dipartimento Ambiente e Vigilanza Ambientale - Ufficio Pianificazione, Programmazione e Politiche di Sostenibilità;
- Città Metropolitana di Venezia - Area Ambiente e Protezione Civile – Ufficio Europa.

## MONITORAGGIO INTEGRATO



The **Datalab** is a system of :

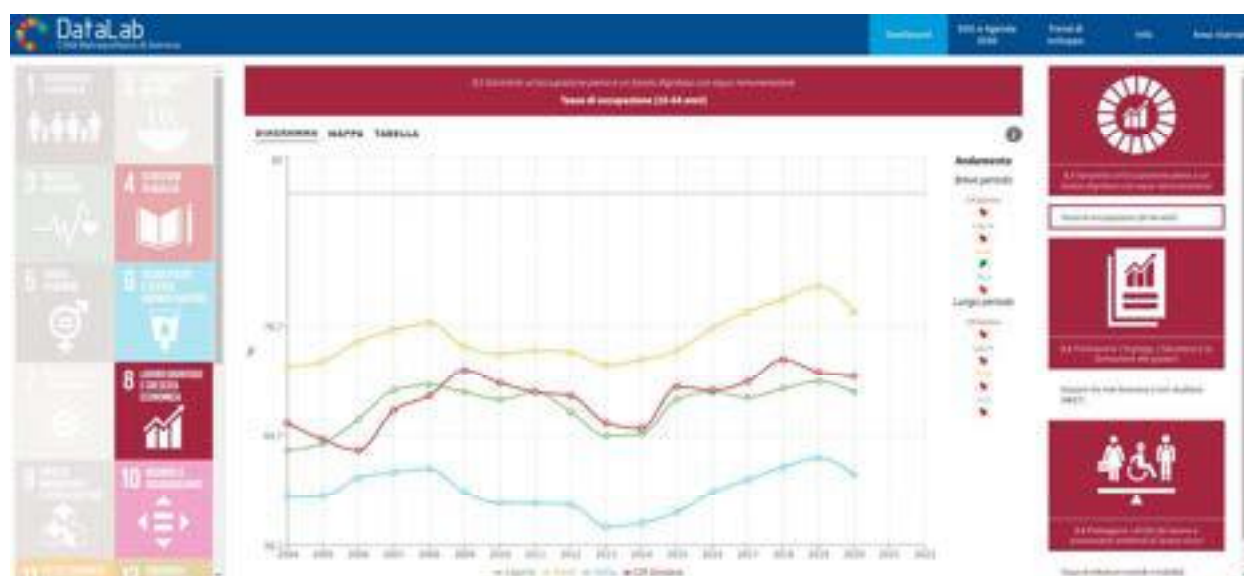
- **structured information and data** for up-to-date analysis of the metropolitan territory;
- **integrated monitoring** to check the level of achievement of sustainability goals.

The platform developed by the Metropolitan City of Genoa also aims to verify the level of achievement of the goals set forth in the Sustainable Mobility Plan (PUMS).

The indicators included in the system refer to the ones of the SNSvS, the national BES project (indicators of equitable and sustainable well-being), the CMGe Dossier (prepared within the ANCI - Strategic Metropolises project), and the Desk project, funded by the PON Gov. from which it uses as a supporting tool the platform also developed together with CM Milan and CM Venice.



DataLab is a system of structured information and data (reports, results, data, metadata, statistics, etc.), also in open format, useful for a constantly updated context analysis of the metropolitan area that can guide policy. This system has been designed as an innovative model of public data management (open data) and can represent a space for sharing, with all municipalities in the metropolitan area, pure data and structured analysis that can be freely used and *redistributed*.



### 1.2.2 ACTIVE INVOLVEMENT OF LOCAL GOVERNMENTS

Città Metropolitana di Genova has signed a master agreement with metropolitan municipalities, better described in Chapter 3.1.2, through which it enacts a network governance system that involves municipalities in co-design activities that develop multiple issues faced from a sustainability perspective, in line with the goals of CMGe's Sustainable Agenda.

The experiences of the National Innovative Program for Housing Quality (PINQua) and the Integrated Urban Plan (PUI) where municipalities have been actively involved in the construction of inclusive and sustainable projects are some important examples.

The project proposals of CMGe's **PINQua** (2021) are the result of a "participatory practice" oriented towards quality and social cohesion to make stronger local "short networks" and also their ability to connect with supra-local "long networks." In the case of the participatory path of the proposal under consideration, the "quality" searched was to ensure "multiple points of view" through the involvement of all relevant actors to enrich the strategy of the project itself and its execution.

The participatory evaluation path already initiated has allowed motivating and empowering all stakeholders towards a common goal: requalify and increase the assets intended for social housing, regenerate the socio-economic structure, increase accessibility, safety of places and the re-functionalization of public and private spaces and properties, as well as to improve social cohesion and the quality of life of citizens, with a view to sustainability and densification, without consumption of new land according to the urban model of the smart, inclusive and sustainable city.

Mostly municipalities and other public entities, such as the Azienda Regionale Territoriale per L'Edilizia (A.R.T.E.) of the metropolitan territory, were invited to attend several meetings planned to share the Genoa Metropolitan City strategy and to identify interventions in the Metropolitan area capable of enhancing the heritage of disused, underutilized, vacant, incomplete or in ruin properties for social or cultural residential purposes and for the benefit of the new generations. In all cases, the criteria underlying the choice of interventions were: contiguity with historic centers, proximity to public transport nodes, supra-municipal value of the intervention and innovative management tools, social inclusion and innovative urban welfare.

In the **"Integrated Urban Plan: from Suburbs to New Urban Centralities: Social Inclusion in the Metropolitan City of Genoa"** (2022), the strategic vision of CMGe has been enacted, based on the priorities for action that are coincident with the missions of the PNRR and that are reflected in previous sectoral and territorial planning documents, both metropolitan and municipal, as well as in the Metropolitan Strategic Plan currently being updated.

In particular, both the multidimensional approach of Genoa Metropolitan City's Agenda 2030 for Sustainable Development and the main planning and programming tools of the Authority (PUMS, Territorial Plan, DUP) and of the municipalities were considered.

These documents, in fact, were adopted as part of their own participatory pathways, with the involvement of all municipalities in the metropolitan territory and all relevant stakeholders. The strategy adopted, therefore, represents the consolidated needs of the territories, and is aimed at effectively improving the quality of life of metropolitan citizens.

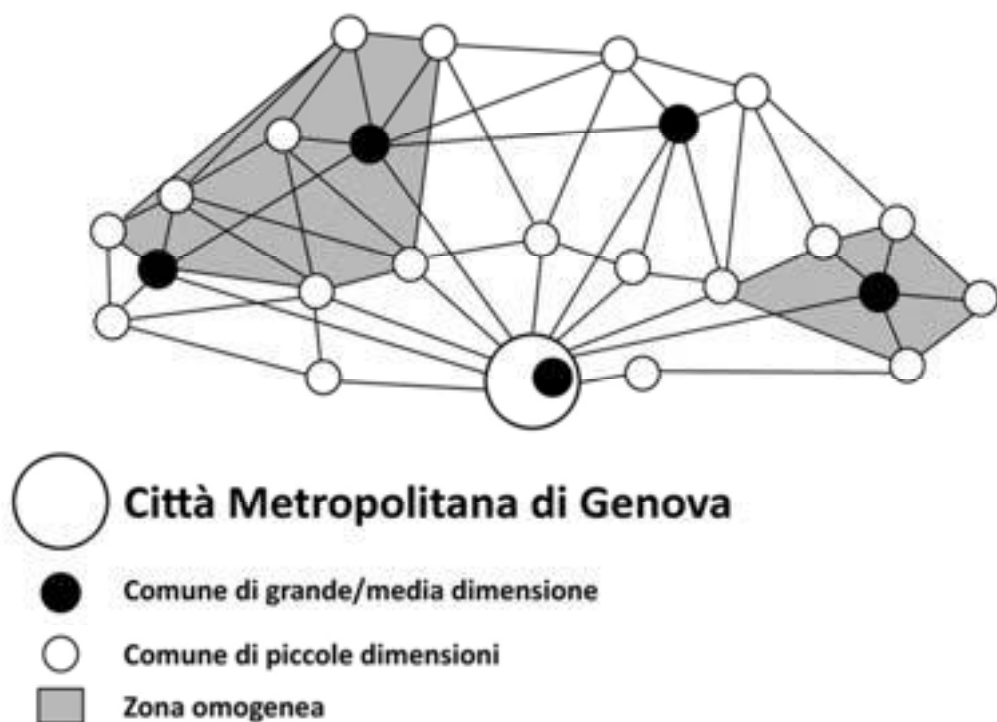
The involvement of Local Authorities in participatory paths is also supported by the dedicated website of Genoa Metropolitan City Strategic Plan, <https://pianostrategico.cittametropolitana.genova.it>, thought as a web space used to spread all information and to gain inputs and contributions.

## 2 TERRITORIAL STRATEGIES AS FRAMEWORKS FOR POLITICS COHERENCE

### 2.1 The accompanying pathways for politics coherence

Law 56/2014 (the so-called Delrio law) marked a fundamental turning point for the governance of the wide area territory because it redraws the boundaries and competencies of local government by implementing metropolitan cities.

With the "Del Rio" reform, the Metropolitan City of Genoa can be identified with a diagrammatic image of strategy the metropolitan territory is developed in: as a network consisting of the Municipality of Genoa and the other municipalities in the territory - which may constitute homogeneous zones - and all participate in the governance of the entire metropolitan territory with the coordination of the Metropolitan City.



*Diagrammatic image of Genoa Metropolitan City strategy: establishment of "network" governance between the City of Genoa and metropolitan municipalities with coordination by the Metropolitan City.*

This is a law that offers a plurality of solutions and interpretation to the administrations themselves, which become the subjects responsible for the choices and, indeed, for the pursued results on the basis of them. In this way, new opportunities are created for the development of the local system, through actions of innovation and differentiation based on the different ambitions of each territory, which can also be articulated by levels and areas suitable for managing strategic functions, as well as proximity services, achieving a new capacity for coordination of the overall action of government of the metropolitan territory.

For this reason, one of the fundamental functions of the Metropolitan City – the economic and social development planning - has been entrusted to the Strategic Plan as a tool, first and foremost, for mobilizing and coordinating the whole territory and the entire metropolitan system.



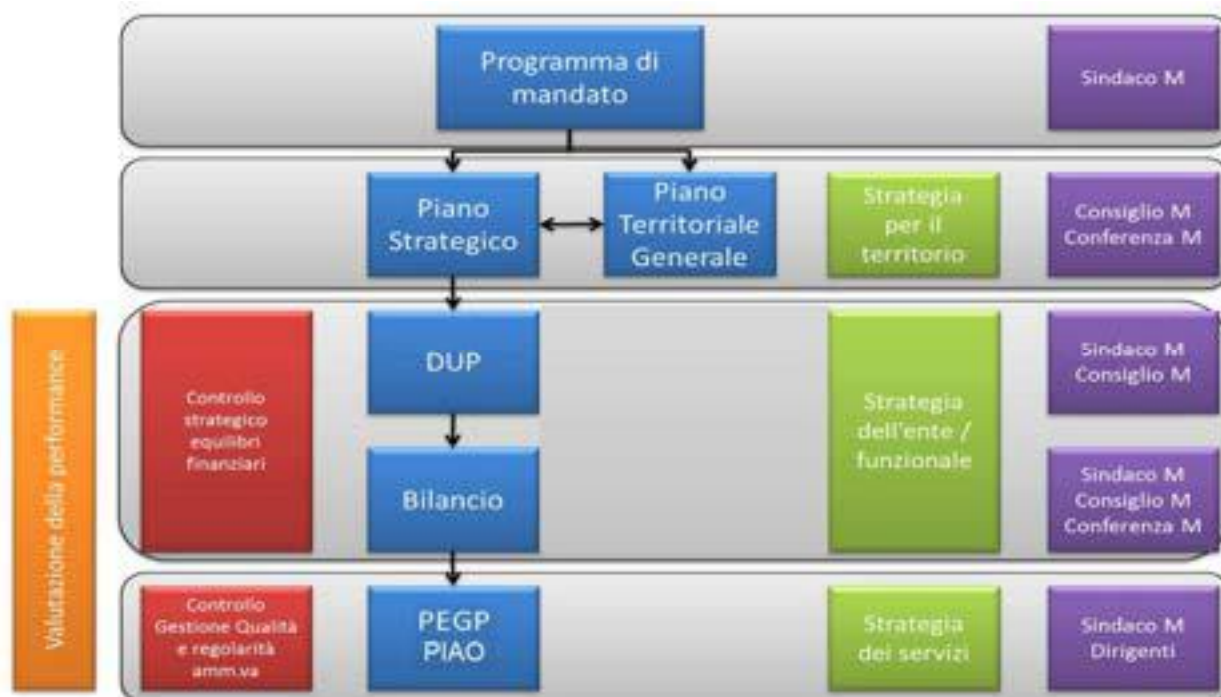
The multidimensional approach of the "Agenda 2030" allows to address the various challenges of the Genoa Metropolitan City Strategic Plan by crossing the lines of intervention with the themes of sustainable development (equality, environment, infrastructure and innovation), which it offers a new key.

<b>TAB 1</b>	<b>Territori urbani</b>	<b>Territori aperti</b>	<b>Transizione ecologica</b>	<b>Health &amp; Wealth</b>
<b>Territorio</b>	Sostenibilità e resilienza dei territori urbani: azioni integrate	Aree interne, parchi e riserve, reti ecologiche, verde urbano e verde provinciale	Riqualficazione energetica (a livello di edificio e di distretto energetico)	Sanità territoriale, servizi per l'educazione e l'istruzione
<b>Mobilità</b>	Sistema mobilità area metropolitana Genova e dei principali centri costieri, integrazione con le altre modalità di trasporto	Servizi di mobilità per i territori interni, ipotesi per nuove forme di mobilità condivisa (shared mobility), viabilità extra-urbana, rete escursionistica	Interventi di riqualficazione del servizio di trasporto pubblico, mobilità condivisa, mobilità dolce	Connessioni con la rete di sanità territoriale ed ospedaliera, integrazione con gli altri servizi territoriali
<b>Assetto urbanistico</b>	Coordinamento previsioni urbanistiche, le grandi aree di trasformazione	Disciplina urbanistica aree agricole e rurali in genere, coordinamento per progetti europei	Modelli urbani di sostenibilità: diffusione rete di servizi, quartieri "eco", mobilità dolce, servizi di prossimità	Welfare territoriale
<b>Ambiente</b>	Reti ecologiche urbane, integrazione dei servizi di gestione con le azioni di tutela ambientale	Servizi ecosistemici: il ruolo dell'acqua tra costa/entroterra e tra urbano/rurale	Azioni nel campo di acqua, rifiuti, energia	Gestione integrata con altri servizi di acqua e rifiuti

## 2.2 Lining up processes with other programming and evaluation tools

### *Lining up with the Metropolitan Strategic Plan.*

Within this complex framework, the Strategic Plan takes on the value of guiding the policies of the territory, including the municipalities of the Metropolitan City of Genoa, ordering and coordinating with other planning tools.



The chart illustrates, briefly, the relationship between the CMGe Strategic Plan, which is the fundamental act of directing the action of the entire Metropolitan territory with the other planning and programming documents.

In particular, there is a connection and coherence between the PSM and PTG, identified in specific actions or projects that are relevant in the medium to long term ; the integration between the two Plans provides a positive response to the ability to value both public and private planning.

The General Territorial Plan (PTG) is oriented towards the strengthening and development of infrastructure networks and public mobility systems, urban regeneration, the improvement and redevelopment of services and public spaces, the construction of the metropolitan ecological network, and the enhancement and protection of the agricultural system, vacant soils and landscape assets.

***"The PTG is the reference background, the synopsis, on which building the PSM."***

The year 2021 constituted an opportunity for rethinking all CMGe strategies following the European and national reprogramming - became necessary after the Covid pandemic -with the NEXT GENERATION EU and the PNRR (Resolution No. 48/2021).

Therefore, this opportunity was taken for rethinking the strategic planning in content, method and documents, with reference to the strategic section of the DUP also in function of the update of the Strategic Plan, proposing a transversal view with other planning tools: territorial (PTG), sustainable mobility (PUMS, Bicipan), Waste Plan, ZSC (special conservation area) Management Plans etc, with the awareness that only a unified approach allows the development of an effective strategic planning.





## 2.3 Areas of innovation and the role of research in supporting sustainability policies

### *Sustainable urban space: the innovative pilot action of the Metropolitan Agenda for Sustainability*

CMGe's Sustainable Metropolitan Agenda project proposes a "**sustainable urban space model**," which integrates multiple lines of action and sustainable interventions that are synergistic with each other and coherent with the Goals of Agenda 2030 (such as the strengthening of assets with historical-architectural value, adaptation to climate change, reduction of atmospheric emissions and energy and water efficiency, sustainable mobility, spaces for co-working student ,receptivity and realization of awareness-raising events on environmental issues, economic and social sustainability) and provides long-lasting solutions for the regeneration of the socioeconomic fabric, improvement of social cohesion, cultural enrichment, quality of places and quality of life of citizens, with a view to innovation and sustainability, with a focus on economic and environmental sustainability, without consumption of new land.

This model has characteristics of repeatability - even in different metropolitan spatial contexts (e.g., homogeneous area, urban, coastal, inland territories)-and scalability at the spatial level.

It faces the different challenges (equality challenge, environmental challenge, challenge on infrastructure, and innovation challenge) underlying the spaces and revolves around three essential points:

- DIFFUSION of urban conditions that decreases imbalances between central and peripheral areas, especially in terms of services;
- CREATION of the spatial basis of sustainable development in a socially and environmentally vulnerable land area that needs greater integration between urban and peri-urban areas from which they can mutually benefit;
- RECONSTRUCTION of environmental balances by introducing in the most densely built-up urban areas green spaces of ecological regeneration, the increase of urban resilience.

This strategy, therefore, answers to the questions about improving the quality and livability in order to enable: the integration of neighborhood services, the experimentation of new management models, the re-functionalization and reuse of areas, spaces and public and private properties, participation and sharing, and the increase of the quality of living.

The redqualification of public space becomes, therefore, an opportunity for social aggregation, helping inhabitants to re-possess it, and activates processes of revitalization including from economic and commercial point of view on the areas of intervention, always with a sustainable perspective.

Metropolitan City of Genoa has identified a number of guiding criteria for creating the sustainable living conditions in the cities and communities of its territory that relate to infrastructure (accessibility), people (usability), space design (quality and naturalness) welfare, innovation by providing the tool through which space can develop in a sustainable way also from a social and economic point of view.

1. **Accessibility** describes distances to/from other public spaces and connection to the public and soft mobility system: the space is, safely, accessible by all, connected to the center, the station, the beach, reachable by major means of transportation, and also safely accessible by light mobility means, including people with reduced mobility/visual impairment;
2. **Usability** describes the functions of this sustainable urban space that is usable by all generations, in all seasons, accommodates specific functions but is flexible to make room for temporary and/or future functions: flexibility of use of open spaces (e.g., educational gardens), flexibility of use of indoor spaces for collective activities and for co-working and smart-working, exhibition activities, events, educational restaurants, etc., flexibility and extension of opening periods;
3. **Quality** describes the quality of the public space, the attention paid to the enhancement of the natural and cultural heritage of the place, the ability of the project to raise awareness of that heritage, the quality of the materials, with a focus on the use of local and recyclable materials, scrap, circular economy, quality of ecological connections: application of green building and circular economy principles (e.g. furniture elements with crash wood, community composting, etc.), quality of indoor and outdoor public spaces (materials, composition, colors, lighting, furnishings), appropriateness of educational spaces to educational needs and aggregation and relationships, safety (lighting, garrison, security and fire safety);
4. **Naturalness** describes blue and green natural areas, spaces dedicated to public outdoor living, and climate adaptation measures. It envisions the use of Nature-based-Solutions to lessen the effects of climate change: more efficient and renewable-fueled energy system, balance between built and green, use of suitable plant species, nature-based technological solutions (e.g., green walls and roofs, infiltrating trenches, rain gardens, etc.) water-saving solutions (stormwater recovery, e-gardens, hydroponic crops, etc.);
5. **Urban welfare**, which describes the design process and management model of urban space; it involves a participatory process to gather ideas and ensure the provision of basic services of public space also to arrive at a model of management of the common good (involvement and presence of active citizens or associations for the management of portions of urban space and enhancement of economic links with local productive realities);
6. **Digital innovation** describes digital technologies and solutions to support design ideas (digital twin, BIM, IoT, etc.) that can ensure predictive maintenance, monitoring, analysis, and evolutionary planning even in distributed mode.

This model was tested with the Technical-Economic Feasibility Project (PFTE) of the Tigullio Park Service Hub in Lavagna, which was the first pilot action.

The pilot action, mobilized actors and expertises from different sectors, was able to integrate different policy areas capable of introducing approaches and fields of intervention low explored so far.



*Framing park Villa Grimaldi Spinola in Lavagna (GE) site of the pilot action of "sustainable urban space"*





Rain Garden master plan in Lavagna (sustainable urban space project)

The sustainable urban space model has also been used by CMGe in the development of the PINQua and Integrated Urban Plan (PNRR) proposals, and has enabled further mechanisms aimed at:

- transform underutilized assets into centers of interest for the territory, even in a gradual way, to allow the birth (or rebirth) of places with strong meanings in terms of identity, participation.
- development of new networks of relationships, of brand new forms of collaboration, to improve inclusion and experience new models of participation and management of public spaces;
- realization of sustainable projects from a cultural and social point of view, as an opportunity to turn spaces into "community places," into "common goods" where it becomes interesting to trigger experiments that produce social, cultural and employment impact, especially in favor of the younger generations.

The three proposals included in the PINQUA program are intended to respond to housing distress through the design of "sustainable urban spaces" of the Sustainable Development Agenda of the Metropolitan City of Genoa that, with its multidimensional approach, integrate multiple lines of action (resilience, zero emissions, circular economy, soft mobility, training and education, and development).

Through the repurposing of public and private areas, spaces and properties, the 3 proposals were outlined:

1. GENOA'S PERIURB AREA: when beauty unites and strengthens urban identity
2. GREEN BLUE HOUSING IN THE METROPOLITAN LEVANT POLICYCLE SYSTEM: the "good living" between city and nature
3. GREEN SMART VILLAGES: new models for living in inland areas

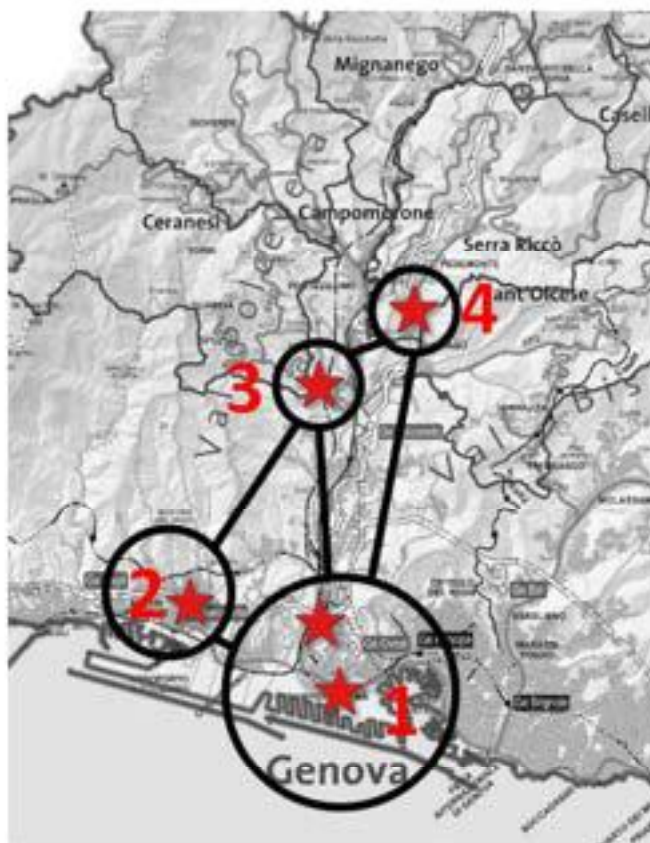




The Integrated Urban Plan (PUI) project "From Suburbs to New Urban Centralities: Social Inclusion in the Metropolitan City of Genoa" aims to regenerate territories through investments pointed at improving large fragile urban areas, economic-social revitalization, with a focus on the creation of new services and the upgrading of accessibility and infrastructure, allowing the evolution of vulnerable territories into smart and sustainable cities.

The interventions selected for the Integrated Urban Plan, which are coherent with the strategic documents and decrease the imbalances between central and suburban areas, especially in terms of services, are grouped into the following areas:

- 1** la rigenerazione del tessuto urbano e sociale di Sampierdarena e bassa val Polcevera nel Comune di Genova (14 interventi)
- 2** la realizzazione del Polo Scolastico del Ponente (Genova - Via Giotto), come spazio polifunzionale aperto anche al quartiere e miglioramento della mobilità/accessibilità nell'area limitrofa (2 interventi)
- 3** il nodo urbano di Geo nell'area periurbana della val Polcevera (Genova-Ceranesi) per il miglioramento dell'accessibilità e l'inclusione sociale grazie alla rigenerazione di un nodo periferico della cintura genovese, anche a vantaggio della città capoluogo (1 intervento)
- 4** il nodo del torrente Secca nell'area periurbana della val Polcevera (Serra Riccò - S. Olcese) per migliorare le interconnessioni con i principali poli di servizi pubblici (1 intervento)



As part of the development of the sustainable urban space model, an important role has been played by research supported by collaboration agreements with the University of Genoa, the National Institute of Urban Planning and ENEA.

### *Collaboration with the University of Genoa*

The master agreement between the Metropolitan City and the University of Genoa (UniGe) - approved by Deliberation No. 39/2020-focuses on the issues of quality of life and economic and social development of the territory, the enhancement of cultural and territorial heritage and urban regeneration, to be faced from a smart city perspective.

The intention is to develop cooperation between the world of research and university education and the Administration, as institution responsible for planning, management and development of the urban area and its services, within the sphere of programs of common interest finalized at:

1. promote and conduct researches of common interest, with a particular focus on the area of environmental economic and social sustainability;

2. spread the culture and good practices of sustainability, contribute to the training and updating of qualified resources on the topics of the master agreement
3. promote and activate curricular and extracurricular internships, specialized seminars.
4. participate in or support, jointly and/or with third parties, to the promotion and conduct of programs and training both national and international.

In the area covered by the sustainable urban space project, the University of Genoa, in particular, carried out internships for the design of green infrastructure (rain garden), with the aim of improving storm water handling, hypothesizing plant species, new lighting systems, and rethinking mobility-serving equipment (e.g., bus shelters in a green and smart way).

The design of the "sustainability charter" was also carried out with the support of the University of Genoa, which defined the operational lines for its implementation (content, technical features of technological support, study of reward/incentive systems, communication). Always in collaboration, the following dedicated article was published in Sustainability magazine

[La carta sostenibilità di CMGE pubblicata sulla rivista Sustainability | Piano Strategico Città Metropolitana di Genova \(cittametropolitana.genova.it\)](http://cittametropolitana.genova.it)

### ***Collaboration with the National Institute of Urban Planning***

The Metropolitan City of Genoa and the National Institute of Urban Planning (INU) - Ligurian Section by Executive Order No. 218/2015 "Approval of the Memorandum of Understanding between the Metropolitan City of Genoa and the National Institute of Urban Planning - INU Ligurian Section, for collaboration in the formation of the General Territorial Plan and the Strategic Plan" signed a collaboration agreement with the purpose of the formation of the planning tools required by the CMGe Statute and Law 56/2014.

The purpose of the collaboration is mainly based on supporting the setting of the constituent documents of the Plans and directing the process for their formation, such as, for example, the activities of animation and involvement of municipalities and all stakeholders of the metropolitan territory for the development of the Metropolitan Strategic Plan.

In addition, INU collaborates with reference to the following contents:

- participation path for the formation of plans, involving municipalities, their Unions, other public and private entities, expression of the social components of the area;
- definition of contents and implementation methods of these instruments on the basis of the most updated criteria defined by the cultural debate;

### ***Collaboration with National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA***

CMGe signed an act of agreement with ENEA-the National Agency for New Technologies, Energy and Sustainable Economic Development-to collaborate with the research community on energy efficiency and Covenant of Mayors issues.

The act of agreement is aimed at activating synergies for planning activities, particularly aimed at:

- Promote the culture of sustainable energy use in end uses and the use of renewable energy sources, including through training/information actions aimed at municipalities, users and professionals in the metropolitan area;



- Promote energy upgrading interventions in public and private real estate, including innovative technologies (such as green walls, green roofs, etc.), including through the "one-stop shop";
- Promote Sustainable Energy and Climate Change Adaptation Action Plans (SEAPs) among municipalities in the metropolitan area that are signatories to the European Covenant of Mayors initiative;
- collaborate in participatory and innovation processes of the territory's institutional network (e.g. through participation in thematic tables and living labs).

## 3 PARTICIPATION AND PROMOTION OF A CULTURE FOR SUSTAINABILITY

### 3.1 Territorial forums for sustainable development and further engagement actions

#### 3.1.1 REGIONAL, AUTONOMOUS PROVINCES AND METROPOLITAN FORUMS

With DGR No. 1075 of Dec. 9, 2019, the Liguria Region of Liguria joined the Liguria 2030 protocol, adhering to ASVIS and giving it a role in carrying out the functions of a regional forum for sustainable development.

The first meeting of the forum was held on December 10, 2020, organized in webinar mode in collaboration with EticLab and Liguria Ricerche, with a morning plenary session and three parallel afternoon thematic tables (People, Planet, Prosperity).

Through the forum, the territorial reconnaissance carried out by the Regional System's Environmental and Sustainability Education Centers (CEAs) among stakeholders regarding current sustainability best practices and ideas for future action was enriched.

Città Metropolitana di Genova participates in the regional forum and shared with Regione Liguria the selection of indicators to be developed at territorial level within the Datalab system.

#### 3.1.2 PROTOCOLS, MULTILEVEL CONSULTATION TABLES, AND OTHER PARTICIPATORY TOOLS

For CMGE's Sustainability Agenda, the involvement of active citizens, whether individual or associated, the third sector, local businesses or strong economic entities, public and private institutions, and - as a result - the consolidation of the network that Metropolitan City has built over time, is crucial.

#### *Liguria 2030*

Metropolitan City of Genoa pursues the construction of a governance marked by sustainable development, through the involvement of civil society, which included, among other actions, joining and signing the act of agreement to the network "**Liguria 2030 - Together towards the Global Goals**" (Resolution No. 73/2020), which the Liguria Region and the City of Genoa are already members of.

Metropolitan City of Genoa has set up its expression of interest to support the initiatives of the "Liguria 2030" network, with the purpose of:

- Strengthen and qualify the focus on sustainable development with a view to fully integrate all dimensions of sustainability in metropolitan planning, programming and management tools;
- Promote, in concert with local institutions and metropolitan stakeholders, integrated sustainable development actions;
- spread awareness and foster social and business activation on sustainability issues, including through the even more wide involvement of citizens and civil society.



**The act of agreement** of the "Liguria 2030 - Together Toward Global Goals" network constitutes the founding document for participation to **the multistakeholder table** aimed at promoting and spreading the UN 2030 Agenda in the Ligurian territory and was created to activate a network between institutions, businesses, educational institutions, academic world and associations aimed at pursuing the goals of Agenda 2030 in the territory of Genoa and the Liguria Region.

Specifically, the operational goals (aligned with those of ASviS) focus on:

- to raise awareness of the Sustainable Development Agenda among public and private stakeholders, the general public and individual citizens at the regional level, including by fostering widespread knowledge of current trends with respect to the SDGs and those expected in the future through the use of all media
- promote training programs on sustainable development, with particular attention to the business world and the younger generation;
- publicize and enhance good sustainable development practices expressed by local actors by strengthening partnerships, including unconventional ones;
- support ASviS in monitoring progresses on the regional level of the SDGs;

In order to systematize all the actors concretely engaged in sustainable development paths, an Act of Intent has been drafted and signed by associations/entities at the local level that adhere to ASviS through their respective national level, together with local actors, institutions, businesses, associations and/or their networks.

Liguria 2030 is supported by ETIClab, which coordinates the activities of a technical working group fomented by the various adherents, which operates on the basis of an annual program financed, without obligation, by funds let available by the signatories to the agreement. The parties involved in this Act commit to pursuing, including through specific implementation agreements, the proposed targets while respecting the singularity of each association/entity.

### ***The Master Agreement between Metropolitan City and the municipalities in the metropolitan area***

The master Agreement between the Metropolitan City and the municipalities of the metropolitan territory represents both a governance tool and an instrument of involvement on issues that also respond to the objectives set forth in CMGe's Sustainable Agenda.

This agreement was prepared in implementation of Art. 1, paragraph 3 of the Statute of the Metropolitan City, which stipulates that the Authority "coordinate its activities with those of the individual or associated municipalities of its territory and inspires its activities to the principles of horizontal and vertical subsidiarity as well as collaboration with the social and economic parts of the metropolitan area," and is aimed to consolidate and develop in a unified and institutional framework the forms of collaboration between the metropolitan city and the municipalities of the metropolitan area provided for in Art. 22 of the statute.

The purpose was to institutionalize and promote collaboration between the Metropolitan City and the municipalities for the exercise of functions, services, activities and the development of projects of metropolitan significance, including the issues regarding the environment, the promotion and coordination of computerization and digitization systems in the metropolitan area, joint participation in community funding programs and calls and support for the development of specific intervention plans that can be necessary.

It is based, therefore, on a welfare model that includes as many local stakeholders as possible, capable of creating engagement on various initiatives by different stakeholders, identifying and developing innovative working methodologies.

On the basis of this Agreement, municipalities - and their Unions - can enter into operational protocols to concretely implement the forms of collaboration, cooperation and rationalization of administrative activities of common interest most suitable for providing citizens with services at decreasing costs but at the same time efficient and effective.

### *Collaboration with Archdiocese*

In order to build a model of metropolitan space that is sustainable over time, aimed at ensuring good social integration and a new synergy has been created with the Metropolitan Archdiocese of Genoa, which is in charge of the environmental and economic social care and development of the territory, thanks to an agreement - signed in 2021 - that enhances collaboration in the context of the regeneration of the territory and the individual in order to develop, mutually benefiting from each other's facilities, innovative models and tools for management, social inclusion and urban welfare.

The Metropolitan Archdiocese of Genoa is, in fact, a key player in co-designing initiatives for territorial regeneration and social inclusion, as on the basis of this agreement it engages all church entities dedicated to charity and service to the person.

This involvement is rooted in the Sustainable Development Goals of Agenda 2030, which are in line with what is proposed by the encyclical "Laudato si'" that underlies the work of the Archdiocese of Genoa, such as the sense of working for the enhancement of the heritage of disused, underutilized, vacant, incomplete or dilapidated properties for social, cultural purposes and for the benefit of the new generations. The network of voluntary and third sector associations that collaborate with the Ecclesiastical Entities is a guarantee for the rebirth of places with strong meanings in terms of identity, participation sharing, and inclusion at the local level.

### **3.1.3 MAPPING AND RECOGNITION OF A "COMMUNITY" OF ACTORS COMMITTED TO SUSTAINABILITY**

Already mentioned was Genoa Metropolitan City's membership in Liguria 2030," the multistakeholder group that promotes, together with ASVIS the UN 2030 Agenda, to the entire metropolitan area and within the regional territory, which has the ETICLab association as its operating structure.

#### *Mapping " Sustainable Stakeholders " - collaboration with ETICLab*

The involvement of the ETIClab Association, as the entity that coordinates the activities of Liguria 2030 and the qualified stakeholders that are part of it, is of particular importance in the process of mapping, engagement and participatory evaluation for the construction of the CMGe Sustainable Development Agenda.

The ETIClab Association brings together companies, associations and professionals who share a strategic vision: "the values of economic, social and environmental sustainability must increasingly characterize the actions of business and its behavior towards all stakeholders."

A number of local virtuous companies have been identified to help shaping the incentive policies of CMGe's Sustainability Charter, which will be discussed in detail in the following section, designed to promote sustainability-oriented synergistic actions by providing rewards for "virtuous" citizens.

This action has enabled the creation of a network of companies operating in the metropolitan area (e.g., Confindustria, Costa Crociere, ERG, Talent Garden Genova, etc., with 500 other entities offering sustainable services/products mainly in the areas of education/culture, tourism, food production, waste, and mobility), with whom a collaborative relationship has been created for the implementation of CMGe's Sustainable Agenda.

These actors have also made themselves available to cooperate in the implementation of the sustainability charter by providing rewards (discounts, training courses, free access to digital resources, free cycle-repair assistance, free volunteer orientation, etc.).

## The Sustainability Charter of Metropolitan City of Genoa.

The Sustainability Charter of Genoa Metropolitan City was created first and foremost to achieve the goals of Agenda 2030, and the aspects of involvement and participation are essential.

Encourages synergistic actions geared toward sustainability (e.g., public transportation, shared mobility, sports facilities, culture, co-working spaces, etc.), using modes attributable to "green nudging"<sup>1</sup>.

Genoa Metropolitan City's "sustainability card" becomes a tool available for municipalities in the Metropolitan Area. In fact, the card is distributed by municipalities taking part to environmental, economic and social sustainability initiatives and becomes a physical support for every citizen who intend use "a points system" similar to the experience of other service cards;

The aim of the Charter is to stimulate its **citizens** and **municipalities** to feel like '**partners** in a common project, to increase their sense of community and responsibility towards their city, encourage the spread of good practices and the formation of a virtuous system that aims at sustainability. Involvement and participation are placed at the center of this new tool that through innovation, technology and society aims to improve the quality of life in urban areas, enhance productive, environmental, landscape and cultural excellence. Infact, the Sustainability Charter connects those who issue services on the metropolitan territory (**Service Provider**) and the **metropolitan member** (i.e., those who use them) thanks to the introduction of a points system (sustainable rules and incentives) that rewards good practices, and thus virtuous consumption and behavior.

After a few months of testing the card (with the support of the ecoactive app) many citizens have signed up. Below are the points accumulated by type of action



Categoria	Azione	Punti	Utenti
<b>Azioni Mobilità</b>	Mobilità	818.421	224
<b>Azioni QR Code</b>	QRCode Autobus	415.000	638
<b>Azioni Quiz</b>	Quiz Ecoattivi	413.850	793
<b>Azioni Foto</b>	Invio foto	130.800	153
<b>Azioni Quiz</b>	Quiz CM Genova	53.570	483
<b>Azioni Foto</b>	Invio foto compostiera	40.200	67
<b>Azioni QR Code</b>	QRCode Biblioteca	33.000	70
<b>Azioni QR Code</b>	QRCode Luogo d'interesse	27.800	36
<b>Azioni Ecoattivi</b>	Invita un amico	13.000	80
<b>Azioni Ecoattivi</b>	Invito di un amico	12.200	122
<b>Azioni QR Code</b>	QRCode Locandina	9.900	97
<b>Azioni Ecoattivi</b>	Sfida/Missione	2.000	2

<sup>1</sup> The theory of "nudge," gentle push, which leads people to make better decisions without compulsion but simply by changing the way choices are presented by acting, for example, on social pressure.





The Genoa Metropolitan City's "Sustainability Charter" can become a tool available for municipalities in the metropolitan area, which, by adhering to it, can promote initiatives on environmental, economic and social sustainability, becoming a support capable of guiding each citizen's choices toward increasingly green forms.

## 3.2 Territories for the promotion of a culture for sustainability

### 3.2.1 THE ACTIVITIES OF TERRITORIES ON EDUCATION, TRAINING, INFORMATION AND COMMUNICATION

#### *Mobility Boot Camp*

Città Metropolitana di Genova and Talent Garden Genova organized "Mobility Bootcamp 2019," a competition of ideas, dedicated to university students, to create a new concept of bicycle mobility for the Genoa metropolitan area.

The goal of the initiative was to find smart and innovative solutions to encourage the integration of this type of mobility with public transport services and other sustainable mobility systems, to encourage the use of bicycles in home-school and home-work trips, and to improve active and passive traffic safety and urban livability.

The students, organized into groups with different expertise (Architecture, Urban Planning and Design, Engineering and Information Technology, Finance and Legal, Business Model and Marketing) and assisted by successful startupper and industry experts who lent their expertise at the different working tables: Liguria Digitale, MSC Austria; Erg, Rina, Axpo, BIP (Business Integration Partners), Gecar, Faculty of Economics, Faculty of Engineering, research team from the University of Genoa, developed original and innovative ideas.

The winning team developed an existing rehabilitation idea that aims to let live again vacant or unused spaces, garages and urban funds by making them available to cyclists through a dedicated QR code.



*The event "Sustainable participatory cycling"*



The Metropolitan City of Genoa with the municipalities of Chiavari and Lavagna and in collaboration with the University of Genoa, the Merchant Marine Academy, Fiab and Eticlub organized the "Sustainable Participatory Cycling," a non-competitive event open to all citizens.

This activity took place in the context of the pilot action concerning the sustainable urban space model.

With this initiative CMGe wanted to stimulate citizens' interest in promoting virtuous behavior. It was a first one-day experiment in converting some of some stretches of road into bicycle routes, as well as the first trial of the Genoa Metropolitan City Sustainability Charter.

Also thanks to this participatory event of "tactical urbanism," also aimed at interacting with citizens to learn about their habits in daily travel, the municipalities involved had the opportunity to evaluate the optimal implementation of bicycle routes on their territory.

In fact, on the basis of this experience, the resources allocated by Mims for the implementation of anti-pandemic measures (urban cilovias, cyclostations, etc.) were used to implement interventions related to the bicycle network that was the subject of the experiment.





### Participation in Genova Smart week

The Metropolitan City of Genoa participated in the 6th and 7th editions of the Genova Smart Week (2020-2021).

The event, promoted by Clickutility Team s.r.l. and the Genoa Smart City Association, is a landmark event at the local, national and international level to talk about **Smart Cities, Livable Cities, Innovation, Resilience and Sustainability.**

Action C1.1 - CMGe's Metropolitan Agenda for Sustainable Development envisages the widest involvement of citizens and civil society to strengthen and qualify the focus on sustainable development and foster social and business activation on sustainability issues in order to orient, thus, the goals and actions of the Strategic Plan (PSM) of Genoa Metropolitan City from the perspective of environmental, social and economic sustainability.

The objective was to disseminate the innovative tools developed by CMGe and to deepen, through qualified discussion, issues of interest to the Institution and obtain networking benefits.

This action represented an important opportunity in the co-design and collaboration between entities in the area with the aim of increasing awareness of its potential at the local, administrative and stakeholder levels, including through a " what if analysis " approach.



## *Information activities, territorial animation and participatory planning for the construction of the sustainable development strategy - Co-design with Environmental Education Centers (CEA)*

The information activity territorial animation and participatory planning was carried out in collaboration with the centers of environmental education (CEA). The objective was to strengthen and qualify the focus on sustainable development with a view to full integration of all dimensions of sustainability in metropolitan planning, programming and management tools. In particular, the project has provided, among the lines of intervention, action B2.1 - The network of "schools of metropolitan sustainability," which consists of: educational activities on environmental, economic and social sustainability issues to spread among the citizens of the metropolitan territory greater awareness of sustainability issues towards the sustainable development strategies provided by the strategic planning - general and sector - of Metropolitan City of Genoa.

To this end, a notice was published in 2021 for CEAs of the regional environmental education system to carry out information, territorial animation and participatory planning activities, and for which the following CEAs expressed interest and presented their project: CEA Parco del Beigua, Labter green Point of Genoa Municipality, CEA Parco dell'Antola, Labter Parco di Portofino; CEA Parco dell'Aveto, Labter Tigullio Municipality of Sestri Levante.



With the project, widespread events were held to actively engage civil society on the following issues of environmental, economic and social sustainability, raising awareness and sensitizing citizens.

**BIODIVERSITY**, in order to improve knowledge of Special Areas of Conservation (Natura 2000 Network) and raise awareness of the relationship between protection and enhancement of protected habitats :

- Training webinar for tour operators and experiential visit to Pratorondanino Mountain Botanical Garden in Beigua Park;
- Photographic trekking among the blooms of Pratorondanino Mountain Botanical Garden in Beigua Park;
- Lecture series on the biodiversity of the Special Areas of Conservation of Tigullio;
- Guided hiking and biking tours to discover the Special Areas of Conservation in the metropolitan area;

**SUSTAINABLE MOBILITY**, for the dissemination of the culture of safety and sustainable mobility through social events and children's activities, the following were carried out

- E-bike excursions in the Antola Park;
- Somatic excursions in the Antola Park;
- Experiential workshop in Aveto Park on the use of donkeys in rural settings.

**RENEWABLE ENERGY**, to stimulate interest in efficient energy use, promote good energy-saving practices and use of renewable energy

- Guided excursions to Aveto Park Refuges : examples of energy self-sufficient facilities.

**ECONOMY**, to promote the prevention of waste production, extending the life of objects and reinventing the use of materials :

- Educational workshops for paper recycling in Aveto Park;
- Artistic-musical workshops for the reuse of discarded objects in the City of Genoa.

**SUSTAINABLE DEVELOPMENT**, to adopt a sustainable and inclusive lifestyle, stimulating virtuous behaviors in everyday life, to safeguard the environment and the land, were implemented:

- Sustainability relay race in Portofino Park.
- Agenda 2030 info point in the Aveto Park

**TAB 2**

	<i>Attendees</i>	<i>Number</i>
<i>Excursions</i>	228	21
<i>Events and info points</i>	450	9
<i>Classes and conferences</i>	174	11
<i>Activities with kids</i>	104	7
<i>Activities with seniors</i>	30	1

### *The Living Lab of «Rissêu»*

During the implementation of the "sustainable urban space model" project under Action C2.1, the need also emerged to deepen a training/information activity on the topic of enhancing the natural, historical, cultural and architectural heritage of the place, paying attention to the quality of materials, where possible local and recyclable, and the ability of an intervention to communicate these values.

Città Metropolitana Di Genova, in collaboration with dell'Ente Scuola e Sicurezza in Edilizia della Citta' Metropolitana di Genova (ESSEG) organized a training course focused on techniques for the recovery of stone mosaic pavements (Rissêu), an artistic craftsmanship of Ligurian historical heritage and which uses materials (river stones) and equipment that are simple and sustainable even from an economic point of view.

The project involved people from the weaker groups in order to foster an integrated path of social and labor inclusion.



This Living Lab was organized as a space of contamination between school and business dedicated to the promotion of training activities for the start-up of technological and cultural entrepreneurship, focused, moreover, on identity recovery for social integration.



The ambitions of the course were many:

- initiate an integrated path of social and labor inclusion of young people, including those from foreign countries, which includes an initial phase of information and training on some technical operating procedures to be adopted in order to carry out the main construction workings, to continue through a professional qualification course or a work experience at artisan companies in the construction sector.
- transfer the basic knowledge referring to an artistic craftsmanship of the historical Ligurian built heritage;
- transfer adequate knowledge to participants to work with awareness in a safe manner.



AGENDA  
METROPOLITANA  
PER LO SVILUPPO  
SOSTENIBILE  
**MESSINA 2030**

# VOLUNTARY LOCAL REVIEW 2022

Metropolitan City of Messina





## PREMISE

As part of its follow-up and review mechanisms, the 2030 Agenda for Sustainable Development encourages member states to "conduct periodic and inclusive country-led and country-driven reviews of progress at the national and subnational levels" (para. 79). These national reviews should serve as the basis for periodic reviews by the High-Level Policy Forum (HLPF), meeting under the auspices of ECOSOC - Economic and Social Council. As stated in paragraph 84 of the 2030 Agenda, periodic reviews by the HLPF should be voluntary, state-led, undertaken by both developed and developing countries, and involve multiple stakeholders. Voluntary national reviews (VNRs) aim to facilitate the sharing of experiences, including successes, challenges, and lessons learned, in order to accelerate the implementation of the 2030 Agenda. VLRs also seek to strengthen government policies and institutions and mobilize multi-stakeholder support and partnerships for the implementation of the SDGs.

Voluntary Local Review (VLR) is an analysis of the Sustainable Development Goals (SDGs) for a specific territory. Consequently, it is a very important monitoring tool for the territorial level implementation of the SDGs. The process of localizing the SDGs, which begins with the VLR precisely, allows local institutions to identify their own priorities and territorial specificities. When it combines a careful analysis of indicators with a participatory process involving citizens and local stakeholders and a coherence analysis of existing policies, it also becomes a strategic planning tool.

The VLR of the Metropolitan City of Messina is intended to be an analytical and technical guiding tool for the Metropolitan Agenda, capable of identifying priorities and providing a framework for the Metropolitan Agenda monitoring system.





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## Introduction

The Metropolitan City of Messina signed on 28/11/2019 a collaboration agreement with the Ministry of the Environment and the Protection of the Territory and the Sea, now the Ministry of Ecological Transition, has undertaken to define its own Metropolitan Agenda for Development Sustainable in order to direct its strategic choices towards sustainable development based on characteristics and the priorities of the Messina metropolitan area.

The Ministry of the Environment and the Protection of the Territory and the Sea, to collaborate with metropolitan cities to define coherent strategic tools capable of contributing to the realization of the objectives of the regional strategies for sustainable development in the implementation of the National Strategy for Sustainable Development, published on the institutional website, section Call sand notices, on 07/30/2019 with deadline 09/30/2019, a "Public notice addressed to metropolitan cities for the presentation of expressions of interest for activities referred to in 'art. 34 of the legislative decree n. 152/2006 and subsequent amendments".

Following the publication of the above Notice, the Metropolitan City of Messina presented, signed by the Metropolitan Mayor, an expression of interest in the candidature for the stipulation of a collaboration agreement for the implementation of activities pursuant to art. 34 of Legislative Decree, n. 152/2006 presenting the project called "Messina, Sustainable Metropolitan City".

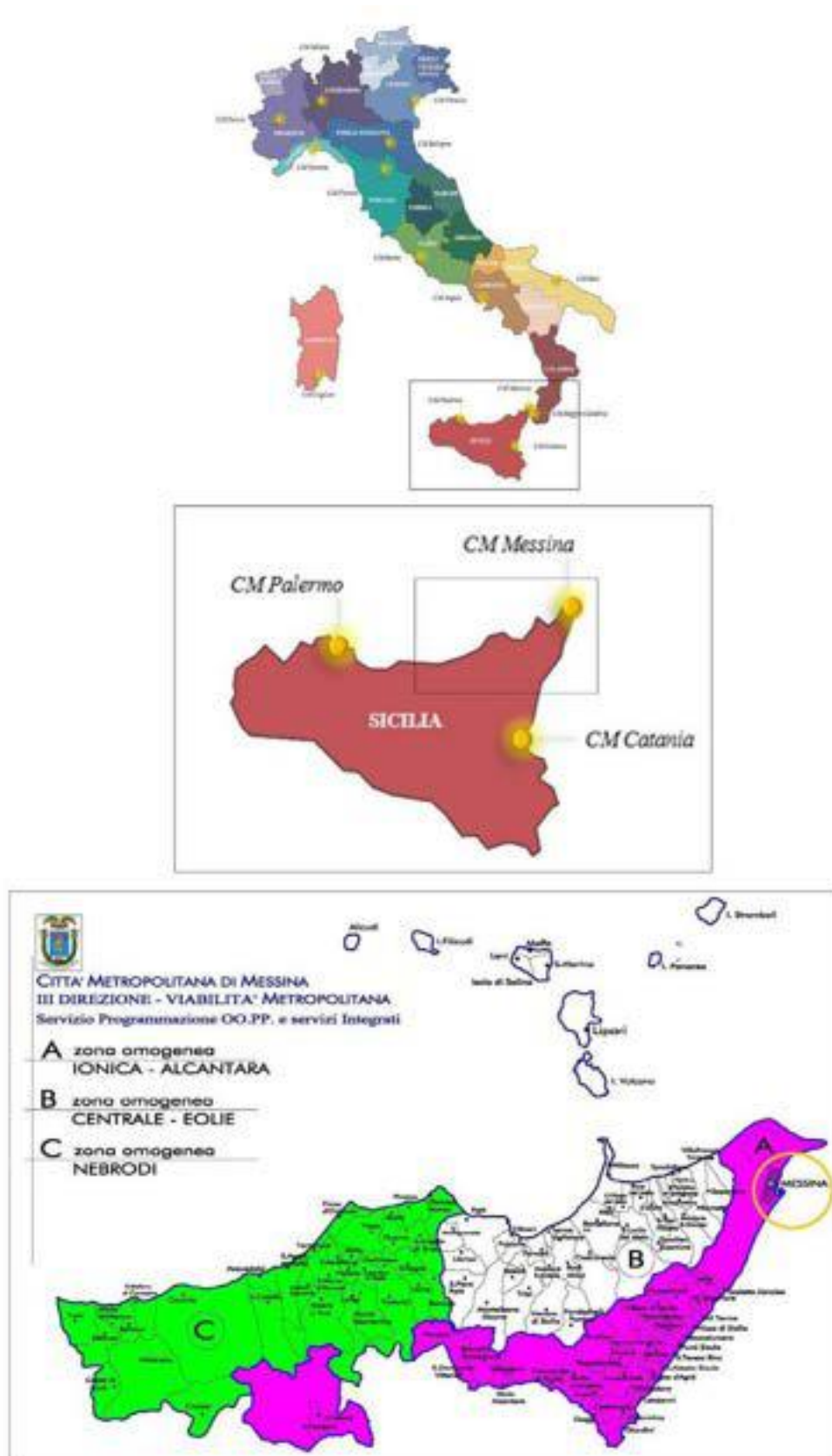
The DDG n. 511 of 02/12/2019 of the Ministry of the Environment and the Protection of the Territory and the Sea, approved and implemented the collaboration agreement signed with digital signature between the MATTM - General Directorate for Sustainable Development and the Metropolitan City of Messina for the realization of the project called "Messina, Sustainable Metropolitan City".

### *Territorial framework*

The territory of the Metropolitan City of Messina covers an area of 3,266.12 km<sup>2</sup> with a population of about 600,000 and a density of 183.7 inhabitants/km<sup>2</sup>, established by Regional Law No. 15 of August 4, 2015, which simultaneously abolished the Regional Province of Messina, with which its territory coincides.

It is bordered to the north by the Tyrrhenian Sea, to the east by the Ionian Sea, to the south by the Metropolitan City of Catania and the Free Consortium of Enna, and to the west by the Metropolitan City of Palermo.

Its territory consists of 108 municipalities, is separated from Calabria by the Strait of Messina and includes the Aeolian Islands archipelago, a UNESCO World Heritage Site.



**IMAGE 1** - Territorial framework (national, regional, metropolitan, homogeneous zones, municipal)

## *The 2030 Agenda for Sustainable Development*

The 2030 Agenda for Sustainable Development is an action program for people, the planet and prosperity signed in September 2015 by the governments of the 193 UN member countries (A/RES/70/1).

It incorporates 17 *Sustainable Development Goals, SDGs* into a large action program for a total of 169 'targets' or milestones. The official launch of the Sustainable Development Goals coincided with the beginning of 2016, guiding the world on the way to go over the next 15 years: the countries, in fact, are committed to achieving them by 2030.

The Development Goals follow up on the results of the *Millennium Development Goals* that preceded them, and represent common goals on a set of important development issues: the fight against poverty, the eradication of hunger and the fight against climate change, to name but a few. 'Common goals' means that they concern all countries and all individuals: no one is excluded, nor should they be left behind on the path necessary to lead the world on the path of sustainability.

## *The National Strategy for Sustainable Development*

The premise of the National Strategy for Sustainable Development (SNSvS) 2017-2030 somehow contains the aims: *"Define a strategic program for the country, a common vision that initiates a structural path of reforms capable of addressing environmental, economic and still unresolved social issues, is a crucial need to lay the foundations for a sustainable future for Italy"*.

In recent years, central administrations, Regions, Metropolitan Cities, civil society, the world of research have, in fact, worked on the document to define a shared path of sustainability, understood in the broadest sense. The result is a set of objectives and possible measures with which we will try to stimulate economic growth by reconciling it with environmental and social needs.

The SNSvS builds on the update of the previous "Environmental action strategy for sustainable development in Italy 2002-2010", but obviously expands its range of action, integrating the objectives contained in the United Nations 2030 Agenda. It defines itself as "the main tool for creating a new circular economic model, with low CO<sub>2</sub> emissions, resilient to climate change and other global changes".

To steer the efforts of this economic-environmental transition in the right direction, the Sustainable Development Strategy defines 5 areas of intervention: People, Planet, Prosperity, Peace, Partnership, each of which is composed of a system of strategic choices expressed in national objectives.

Where possible, objective values have been associated with each of the strategic choices and objectives, identified in existing policies, strategies, programs or standards at national, community and international level.

From this incipit, it therefore appears evident that the SNSvS constitutes the national reference framework for the planning, programming and evaluation processes of an environmental and territorial type, in implementation with the provisions of art. 34 of Legislative Decree. 152/2006 and subsequent amendments

On the basis of the same article, the Ministry supports the Regions, the Autonomous Provinces and the Metropolitan Cities in the territorial declination of the SNSvS, defining their own sustainability strategies.

As established by the Ministry, therefore, to ensure the widest involvement of civil society, the Forum for Sustainable Development was established, which inspired by the principle of inclusion as a key and essential element of the 2030 Agenda is intended as a space open to civil society and experts in various subjects, with multilevel consultations.

The general objective of the Forum is to accompany the implementation of the SNSvS and the 2030 Agenda through the active contribution of the actors who promote actions and policies in favor of sustainability.

Specifically, the purposes can be declined in the following points:

- support for the evaluation of the implementation of the National Strategy and operational indications for the treatment of critical issues encountered, taking into account the monitoring platform of the SDGs prepared by ISTAT (ISTAT SISTAN SDGs platform);
- three-year updating and reprogramming of the National Strategy;
- elaboration of recommendations, suggestions and opinions on how to qualify the impacts of the Strategy on public policies, according to the method indicated by the OECD in the Partnership on "Policy Coherence for Sustainable Development";
- promotion of education for sustainable development, with particular attention to the construction of listening and interaction paths for the younger generations;
- dissemination of the contents of the Strategy;
- support for the exchange of information, mutual knowledge and networking between sustainability actors;
- elaboration of a positioning document of the Forum as its own contribution in preparing the national positions for the main European and international negotiation processes on sustainable development;
- relationship with the activities of the fora activated by the Regions for the elaboration and implementation of their own sustainable development strategies. (Source Ministry of Ecological Transition)

### *Regional Strategies, Agendas and the Metropolitan Strategic Plans and the tools of planning of municipalities in Italy*

The greatest impetus for the territorialization of the SDGs in our country, which sees numerous interesting experiences also in small and medium-sized cities and local communities, came with the Notices of Expression of Interest from the Ministry of the Environment. Two were published addressed to the Regions (3 August 2018 for 4 million euros and 30 July 2019 for 4.2 million euros) to elaborate their own regional strategies for sustainable development (SRSvS) and one aimed at metropolitan cities (30 July 2019 for 2.5 million euros) for their Agendas for sustainable development. Both the regional Strategies and the Metropolitan Agendas must be placed within the SNSvS approved with the CIPE resolution of 22 December 2017, lasting three years and now being updated. On 8 June 2017, the Mayors of Metropolitan Cities had signed the Bologna Charter for the Environment which also provided for the preparation of Agendas and following which only the Metropolitan City of Bologna had done so. Strategic Plans are another important tool of Metropolitan Cities which place particular emphasis on the SDGs. For the Law n. 56 of 2014, the Metropolitan Strategic Plans constitute "(...) an act of guidance for the body and for the exercise of the functions of the Municipalities and Unions of Municipalities". Finally, all municipalities, even those of small and very small size, have by law a single programming document (DUP) by law which contains the guidelines and operating methods of the body starting from those of a financial nature.

## *Towards the Metropolitan Agenda for Sustainable Development (AMSvS) of the Metropolitan City of Messina*

The Metropolitan Agenda is a tool for the sustainable development of the Metropolitan City of Messina and its territory to be built in a participatory manner according to the principles of bottom-up governance. As established by the framework agreements, the newly established Agenda refers to the objectives of the 2030 Agenda, to the SNSvS and must make a contribution to the realization of the objectives of the SRSvS of the Sicily Region, still under construction.

The agenda aim is to identify policies, strategies and lines of action that address, in a coherent and integrated way, the 3 dimensions of sustainability (social, environmental and economic) and whose definition and implementation the territories and local stakeholders contribute to.

According to the activity and actions of the Control Room and the Technical Table, the intention is to create an instrument for the sustainable development of the territory that satisfies the needs of the present without compromising the ability of future generations to satisfy their own needs.

How? By harmonizing three fundamental elements at the basis of every action for green-oriented political governance, namely: economic growth, social inclusion and environmental protection.



The Agenda is the result of an Agreement signed in November 2019 between the Metropolitan City of Messina and the then Ministry of the Environment and the Protection of the Territory and the Sea (MATTM), through which the MATTM and the Metropolitan City, consistently and in compliance with their respective purposes and competences, they intend to pursue, in collaboration, the implementation and promotion of national strategic choices and objectives for sustainable development through:

- their implementation at the level of the Metropolitan City;
- the definition of a discussion table for the sharing of methods and tools for achieving the sustainable development objectives at the various territorial levels;
- the potential definition of pilot actions and experimentation of integrated *policies*;
- the definition of common methods for monitoring the achievement of the SNSvS objectives that take into account the contribution of the Regions, Autonomous Provinces and Metropolitan Cities in this regard;
- the full involvement of civil society.

In 2020 the Metropolitan City of Messina reached Target 16.3 relating to the overcrowding of prisons. Ten Targets highlight a critical situation. There are too little sustained improvements for the use of electricity from renewable sources, for the consumption of electricity and for the consumption of land which, if confirmed, would not allow the City of Messina to get closer to the goal.



Similar assessments are also valid for the gender employment gap. Six Targets have a negative rating because the records a deviation from the goal.

In the last five years, the rate of injuries in road accidents has increased by 21.3%, the share of university graduates has fallen by 2.6 percentage points, and the efficiency of the water system has decreased by 21.2 percentage points.

The per capita production of urban waste, on the other hand, shows a negative trend in the long term, as it increases by 2.2%.

As regards the labor market, the employment rate and the share of NEETs (*Young people Neither in Employment or in Education or Training* - young people who do not study and do not work) have a negative trend both in the short and in the long term.

There is a discordant assessment between the short and long term for two Targets.

The number of per capita places-km offered by LPT in the last five years has increased by 60.2% but in the last 15 years it has decreased by 22.3%.

The opposite phenomenon is found for air quality which in the short term is stable and does not approach the target, while in the long term it shows a consistent positive trend.

Let's say that we are faced with a situation that generally concerns all the Regions of the South but also some realities of Northern Italy.

Therefore, also the Metropolitan City of Messina and its action falls within the average of the development policies of the Metropolitan Cities to achieve the objectives of the 2030 Agenda.

ASSESSMENT 2021 (RIFERITI ALL'ANNO 2020)

ASSESSMENT 2020 (RIFERITI ALL'ANNO 2019)

tratti dal Rapporto ASviS 2020\_2021 / 2019\_2020

GOAL AGENDA 2030	ANNO 2020 (al 2019)	ANNO 2021 (al 2020)
GOAL 1 - SCONFIGGERE LA POVERTÀ - Porre fine ad ogni forma di povertà nel mondo.	ASSESSMENT: 😞	NON VALUTATO
GOAL 3 - SALUTE E BENESSERE Assicurare salute e benessere per tutti e per tutte le età.	ASSESSMENT: 😞	ASSESSMENT: 😐
GOAL 4 - ISTRUZIONE DI QUALITÀ Fornire un'istruzione di qualità, equa ed inclusiva, e promuovere opportunità di apprendimento permanente per tutti	ASSESSMENT: 😞	ASSESSMENT: 😐
GOAL 5 - PARITÀ DI GENERE Raggiungere l'uguaglianza di genere e l'empowerment (maggiore forza, autonomia e consapevolezza) di tutte le donne e le ragazze	ASSESSMENT: 😐	ASSESSMENT: 😐
GOAL 6 - ACQUA PULITA E SERVIZI IGIENICO- SANITARI Garantire a tutti la disponibilità e la gestione sostenibile dell'acqua e delle strutture igienico-sanitarie.	ASSESSMENT: 😞	ASSESSMENT: 😞
GOAL 7 - ENERGIA PULITA E ACCESSIBILE Assicurare a tutti l'accesso a sistemi di energia economici, affidabili, sostenibili e moderni	ASSESSMENT: 😞	ASSESSMENT: 😐
GOAL 8 - LAVORO DIGNITOSO E CRESCITA ECONOMICA Incentivare una crescita economica duratura, inclusiva e sostenibile, un'occupazione piena e produttiva ed un lavoro dignitoso per tutti	ASSESSMENT: 😞	ASSESSMENT: 😞
GOAL 10 - RIDURRE LE DISUGUAGLIANZE Ridurre l'ineguaglianza all'interno di e fra le Nazioni	ASSESSMENT: 😞	ASSESSMENT: 😞
GOAL 11 - CITTÀ E COMUNITÀ SOSTENIBILI - Rendere le città e gli insediamenti umani inclusivi, sicuri, duraturi e sostenibili.	ASSESSMENT: 😞	ASSESSMENT: 😐
GOAL 12 - CONSUMO E PRODUZIONE RESPONSABILI Garantire modelli sostenibili di produzione e di consumo	ASSESSMENT: 😞	NON VALUTATO
GOAL 13 - LOTTA CONTRO IL CAMBIAMENTO CLIMATICO Adottare misure urgenti per combattere il cambiamento climatico e le sue conseguenze	ASSESSMENT: 😞	NON VALUTATO
GOAL 15 - VITA SULLA TERRA Proteggere, ripristinare e favorire un uso sostenibile dell'ecosistema terrestre, gestire sostenibilmente le foreste, contrastare la desertificazione, arrestare e far retrocedere il degrado del terreno, e fermare la perdita di diversità biologica	ASSESSMENT: 😊	ASSESSMENT: 😊
GOAL 16 - PACE, GIUSTIZIA E ISTITUZIONI SOLIDE Promuovere società pacifiche e più inclusive per uno sviluppo sostenibile; offrire l'accesso alla giustizia per tutti e creare organismi efficienti, responsabili e inclusivi a tutti i livelli	ASSESSMENT: 😊	ASSESSMENT: 😊

TAB. 1 - Evaluations 2020 and 2021 taken from the ASviS Report 2019\_20 / 2020\_2021

# 1

## Territorial governance

Almost a year after the publication of the first report "Towards the Metropolitan Agenda for the Sustainable Development of the Metropolitan City of Messina and its territory" in which the foundations were laid for the construction of a sustainable development model of the Metropolitan City of Messina and its territory in a participatory manner according to the principle of bottom-up governance and so as established by the framework agreements with reference to the objectives of the 2030 Agenda, the SNSvS and the SRSvS, aiming to identify policies, strategies and lines of action that address, in a coherent and integrated way, the 3 dimensions of sustainability (social, environmental and economic) and the definition and implementation of which the territories and local stakeholders contributed, the work started in 2021 was deepened and updated to make available to decision-makers and of the general public a tool which, through the activities and actions carried out in recent months, measures and monitors the impact and effectiveness of the actions taken by the metropolitan city, urban areas, municipalities and territories in general in favor of sustainability and with respect to the 17 Sustainable Development Goals of the 2030 Agenda.

This activity was developed in line with the activities envisaged by the collaboration agreement with the MiTE that guide the construction of the Metropolitan Agendas for sustainable development, favoring both the integration of policies and planning and programming tools (Metropolitan Strategic Plan (PSM), Urban Sustainable Mobility Plan (PUMS), Integrated Urban Plan (PUI), Single Programming Document (DUP), both within the same institutional level (between the structures of the Metropolitan City) and in integration and coordination between the different institutional levels, between the Metropolitan City and local institutions.

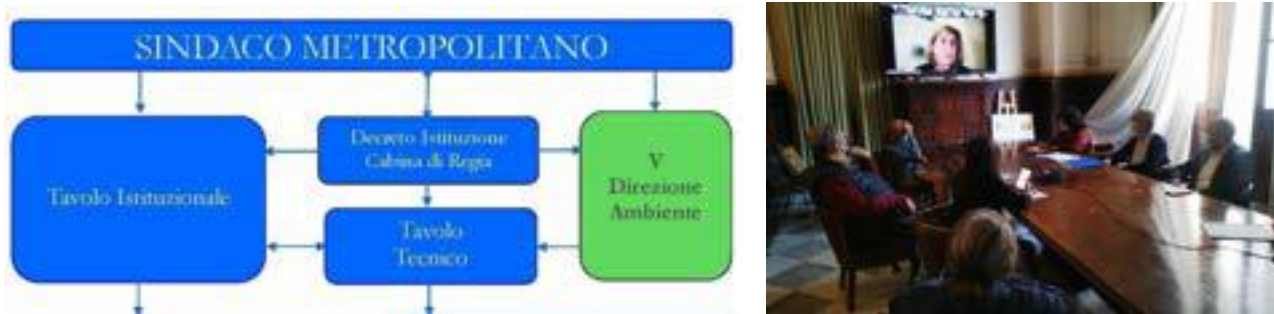
In particular, after the first phase of study of the state of the art of policies and strategies in the field of sustainable development of the Metropolitan City of Messina, the definition and construction of the Actions of the Metropolitan Agenda was developed according to definition of the governance structures of the Metropolitan Agenda for sustainable development or through the methods of consultation and connection with the ongoing Metropolitan Strategic Plan.

The first step in this direction was represented by the establishment of an institutional control room that guided and coordinated the entire process of building Agenda. To this end, it has included the representatives and experts for sustainable development of the Metropolitan City for activities that pertain to all dimensions of sustainable development (environmental, social and economic), with the aim of disseminating, within the body, awareness and knowledge on sustainability issues and orienting the various sector policies and governance tools of the Metropolitan territory towards sustainable development goals. At the same time, the control room, in addition to presiding over the definition activities of the Agenda contents, ensures integration with the Strategic Plan and the other programming and planning tools in place and in programming of the CM Me and also represented the place within which to guarantee the monitoring of the activities carried out to date, the achievement of sustainability objectives in the metropolitan area, the progress of the work and the implementation programs of the Agenda as well as put in place all those support and planning strategies for the achievement of the project goals. The control room itself also promoted the link between the process of elaboration, discussion, implementation and implementation of the specific actions of the AMSvS and the process of defining the strategy for the sustainable development of the reference territory.

## 1.1 The metropolitan controlroom

With the [Trade Union Decree no. 50 of 03/03/2020](#) the Control Room was established for the preparation of the Metropolitan Agenda for Sustainable Development.

The [Trade Union Decree no. 21 of 04/02/2021](#) modified and integrated the Trade Union Decree n. 50 of 03/03/2020.



**IMAGE 2 - Structure and functioning of the control room**

The starting action for the drafting of the AMSvS was attributed to the adoption by the Metropolitan Mayor of the decree establishing the control room. It was envisaged through the establishment of two tables, an Institutional Table and a Technical Table, the latter coordinated by the Environment Department. The Institutional Table was chaired by the Metropolitan Mayor and was made up of representatives of the Institutional Bodies (Institutional Cabinet of the Metropolitan Mayor, Metropolitan Council / Extraordinary Commissioner and General Secretariat) who influenced and determined the choices to be adopted for the definition of the AMSvS. Some representatives of the Technical Table also took part in the table. This represented the representative body of the process actors and of the widespread partnership. It had the task of animating the socio-political and socio-economic components, of interacting with political, scientific and research institutions, with the coordination tables organized by the MiTE, of verifying consent and legitimizing the process. In conjunction with the Technical Roundtable, he also defined the aspects on the methodology and strategies of the AMSvS training and information awareness campaign. The Technical Table, with staff from the Metropolitan City and with external experts, performed the functions of the Technical and Operational Secretariat of the AMSvS set up at the Environment Department and took care of the production and processing of all documentation including the preliminary examination on the state the current art of programming, planning and all the tools in charge of each Office or Direction involved in defining the strategy, with reference to their cogency and/or influence with respect to the 5 areas identified in the SNSvS. In agreement with the Institutional Table, it has developed and managed themes and phases of animation and dissemination of issues of territorial interest and formulated the definitive drafting of the Agenda which will be approved by the Metropolitan Mayor's Decree.

## 1.2 Multilevel territorial governance

The phase of involvement of local institutions has actually started the verification procedure and the effectiveness of the territorial laboratory extended to the entire community. It represented the first operational phase of the AMSvS structuring process within which:

- the strategy and methodology of consultation was implemented through the joint work between the Institutional and Technical Committee;
- the training and information processes of the personnel responsible for the construction and management of the implementation tools of the AMSvS were consolidated;
- workshops have started for the involvement of local authorities.

The activities contemplated in this phase included the following activities:

- launch of the territorial verification procedures and methods;
- dissemination of information material;
- newsletter; videos and commercials;
- sharing of questionnaires, forms, and vademecum of the AMSvS and of sustainable behavior.

The action took place with the transfer of information material to support the information on the tools used and the [time schedule](#), with the aim of preparing the work of consultation and sharing on a consolidated basis of knowledge on the issues to be addressed. An important role was played by the [website dedicated to AMSvS](#) where all the information on the project was reported.



*IMAGE 3 - Timetable May 2021 - April 2022*





**IMAGE 4 - Website dedicated to the metropolitan agenda for sustainable development**



**IMAGE 5 - Timetable April - December 2022**



### 1.3 Comparison table between MiTE and Metropolitan Cities

For an effective implementation of the strategic objectives of the SNSvS, the Ministry considered the involvement and coordinated action of all territorial levels to be fundamental. Metropolitan Cities represent that intermediate level, in terms of size and extension, useful for experimenting an involvement that takes into account the needs of citizens and makes concrete the impact at the local level of the provisions of the ambitious objectives of the 2030 Agenda and the SNSvS.

The Ministry of Ecological Transition, starting from 2019, has launched a path of collaboration and support to Metropolitan Cities, through forms of financial and technical support already operational with the Regions and Autonomous Provinces, aimed at defining and implementing metropolitan Agendas for the sustainable development: [collaboration agreements; the establishment of an institutional discussion table](#); support activities within the [CReIAMO PA Project, funded by the PON Governance and Institutional Capacity Program 2014-2020](#).

In this context, the Ministry has activated a collaboration with ANCI which has supported the metropolitan cities as part of the Strategic Metropolis project in order to create synergies between the two paths.



**IMAGE 6 - Webinar comparison table**

The comparison table represents the place for the exchange of experiences and methodological comparison functional to the implementation of the SNSvS and the elaboration and future implementation of the SRSvS and the metropolitan Agendas.

It was born with the regions in response to the request of the Permanent Conference for relations between the State, the Regions and the Autonomous Provinces of Trento and Bolzano - Interinstitutional table and, in the light of the positive results of the collaboration established, the MiTE has extended the same method of involvement in metropolitan cities, with a twofold objective:

- refinement of the contents of the current SNSvS document, with particular reference to target and their adaptation to the Italian reality;
- activation and stimulation of collaboration between institutions as a working method (vertical and horizontal)
- identification of coordination actions to ensure the alignment of programming tools with the national strategy, which while necessarily taking into account the specific needs of individual territories, guarantees the development of highly interconnected strategies, national and regional plans, promoting their coherence internal

To learn more about the operating methods through which each Metropolitan City is defining its own Metropolitan Agenda for Sustainable Development, it is possible to consult the [Report](#) created by the Ministry in May 2020 and the [interactive map of the Metropolitan Cities](#).

## 1.4 Active involvement of local authorities

Collaboration with institutions and common knowledge, transversal areas of the Strategy, were among the fundamental levers to initiate, guide, manage and monitor the integration of sustainability in the Agenda project.

It represented the start of the activities planned to reach the definition of the objectives of the strategy. The Control Room, on the basis of the documents received from local institutions, have identified the relevant working groups, formed by the representatives of the control room with the support of external experts from TPS Pro Srl and MG Communication, who, through specific moments for comparison, they formulated a sharing proposal to be brought to the larger table, that of the Forum (Action B1.) and to the table with civil society (Action B.2). With local institutions it was felt

It was considered useful to engage in dialogue with local institutions through the applications and information technologies dedicated to the project, not being able to carry it out even through direct confrontation for the pandemic emergency. In fact, it was planned to hold at least three meetings for homogeneous territorial areas. The territorial areas of the local area are believed to be useful in order not to discourage interest in the procedure given the distances and viability that characterize our metropolitan territory and at the same time assume a role of territorial cohesion for the proposals that will be formalized. This obstacle has been overcome with the realization of telematic meetings.

In concrete terms, the action took place through the dissemination of [documents and reports](#) made by the Technical Table of the Control Room published on the dedicated website and thanks to the meetings of the Metropolitan Forum with reference to the 6 areas of interest of the 2030 Agenda and the National Forum, related to the territoriality and planning and management of the Municipalities of the metropolitan area. The 6 meetings were promoted through the [dedicated portal](#) which allowed knowledge, registration, participation and the ability to download video recordings of the meetings and related reports.



**IMAGE 7 - Portal dedicated to participatory laboratories**

# 2

## Territorial strategies as reference frameworks for policy coherence

Policy coherence for development aims to minimize contradictions and create synergies between different EU policies for the benefit of developing countries and to increase the effectiveness of development cooperation. It integrates the economic, social and environmental aspects of sustainable development at all levels of policymaking. It was introduced into EU fundamental law in 1992 with the Maastricht Treaty and was legally strengthened by the Lisbon Treaty in 2009.

The "[Policy coherence for sustainable development: mainstreaming the SDGs in Italian decision making process to enforce the paradigm shift](#)" (PCSD) project, funded by the European Commission under the [Structural Reform Support Program](#) 2017-2020, sees the Ministry of Ecological Transition collaborate with DG Reform of the European Commission and with OECD, chosen by the Commission itself as technical and scientific support to the project, with the aim of verifying the coherence of policies for the pursuit of sustainable development goals.

The project launched in 2020 is part of the revision process of the National Strategy for Sustainable Development (SNSvS), provided for by art. 34 of Legislative Decree. 152/2006 and CIPE Resolution 108/2017.

The listening, participation and proposal process is organized on institutional collaboration arrangements, already established at national and territorial level such as the Table of the Regions of the Autonomous Provinces and Metropolitan Cities, the National Indicators Table, the Forum for Sustainable Development, involving the central and territorial administrations, agencies, research centers, civil society organizations and non-state actors.

The project investigates the coherence of existing instruments, bodies, national governance reforms with the objectives of sustainable development and intends to provide, as an overall result, proposals and recommendations capable of guiding a coherent and effective approach to achieving the sustainable development goals in the Italian decision-making process, thus defining a National Action Plan for Policy Coherence for Sustainable Development (PCSD).

### 2.1 Accompanying paths for policy coherence

To support the process of elaboration of the Strategic Plan and the AMSvS, the Metropolitan City of Messina has involved the metropolitan municipalities in the design of the various metropolitan plans trying to provide a common vision. For the activities of involving local institutions and civil society, the Metropolitan City of Messina has entrusted assignments through public notice of interest to study and research companies: TPS Pro S.r.l., LattanzioKibs S.p.A., MG Communications by Marco Giacponello.



*IMAGE 8 - Logos of study and research companies*

## 2.2 Processes of alignment with other programming and evaluation tools

The Metropolitan City of Messina, from 2019 to date, has been committed to adopting new planning tools: Metropolitan Strategic Plan (PSM), Urban Sustainable Mobility Plan (PUMS), Integrated Urban Plan (PUI). At the same time, the Metropolitan Agenda for Sustainable Development should not be seen as an additional plan but as an integrated reading of existing plans. From the elaboration of the various laboratories, carried out with the formula of focus on key questions, it emerged the need to interconnect territorial areas, production sectors and stakeholders to mend the diversity of territories and to improve the quality of life, social cohesion and inclusiveness, activating a cohesive community towards a future. In addition, for the sustainability of public policies, two workshops were organized in which mayors and technicians of the municipalities and stakeholders concerned on reforestation and PNRR took part.

CITTA' METROPOLITANA DI MESSINA

AGENDA METROPOLITANA PER LO SVILUPPO SOSTENIBILE

PSM 2019 - 2024 del 16/11/2019	PSM 2019 - 2024 del 16/11/2019	PNRR 2021-2026	PUI - Piano Urbano Integrato	AGENDA METROPOLITANA PER LO SVILUPPO SOSTENIBILE	
MISURE (Ricerca di sincretia, linee di coerenza come un futuro migliore)	MISURE	OBIETTIVI (Misure, Programmi)	PIANI STRATEGICI	LABORATORI	
3.1 - Integrazione gli ambiti territoriali	V.1 - Collegare le efficientie compatibili	3.1.1. Strategie Territoriali integrate alle Finalizzazione Territoriali	1 - PSM del 2019/2024	WDR - Osservatorio città di riferimento	Ricerca azione coerenza e integrazione politica "Città del futuro"
3.2 - Integrazione i servizi pubblici	V.2 - Riconfermare servizi (edilizia e mobilità)	3.2.1. Strategie Territoriali integrate alle Finalizzazione Territoriali	2 - Riprogettazione e qualità del centro	WDR - Progetti di sviluppo urbano per creare spazi e servizi pubblici	Ricerca azione coerenza e collegamenti "Città del futuro"
3.3 - Integrazione gli stakeholders del territorio	V.3 - Attivare sinergie (di settore, aziende)	3.3.1. Strategie Territoriali integrate alle Finalizzazione Territoriali	3 - Area urbana e sviluppo sostenibile, rafforzare territorio sociale	WDR - Osservatorio città di riferimento	Ricerca azione coerenza e collegamenti "Città del futuro"
A.1 - Sviluppo	V.4 - Valorizzare risorse generatrici di sviluppo	4 - Sostenibilità ambientale (CNR)		WDR - Osservatorio città di riferimento	
A.2 - Ripristino del Paesaggio	STRATEGIA	5.1.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.3 - Turisticità	5.1 - Ripristinare e valorizzare il patrimonio culturale	5.1.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.4 - Spazi verdi	5.2 - Ripristinare e valorizzare il patrimonio verde	5.2.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.5 - Valorizzazione	5.3 - Ripristinare e valorizzare il patrimonio storico	5.3.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.6 - Transizione	AZIONI	6.1.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.7 - Sviluppo economico	A.1.1. Promuovere lo sviluppo economico del territorio	6.1.1. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
A.8 - Sviluppo urbano	A.1.2. Promuovere e valorizzare le risorse urbane del territorio	6.1.2. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.3. Promuovere la rete urbana per migliorare i servizi urbani e sostenere lo sviluppo del territorio	6.1.3. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.4. Promuovere lo sviluppo urbano	6.1.4. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.5. Promuovere la rete di servizi pubblici per il territorio	6.1.5. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.6. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.6. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.7. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.7. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.8. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.8. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.9. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.9. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.10. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.10. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.11. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.11. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.12. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.12. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.13. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.13. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.14. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.14. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.15. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.15. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.16. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.16. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.17. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.17. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.18. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.18. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.19. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.19. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.20. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.20. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.21. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.21. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.22. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.22. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.23. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.23. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.24. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.24. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.25. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.25. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.26. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.26. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.27. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.27. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.28. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.28. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.29. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.29. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.30. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.30. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.31. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.31. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.32. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.32. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.33. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.33. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.34. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.34. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.35. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.35. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.36. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.36. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.37. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.37. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.38. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.38. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.39. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.39. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	
	A.1.40. Promuovere lo sviluppo di servizi pubblici per il territorio	6.1.40. Strategie Territoriali integrate alle Finalizzazione Territoriali		WDR - Osservatorio città di riferimento	



**Piano Strategico della Città Metropolitana di Messina**



**MESSINA 2030** PIANO URBANO DELLA MOBILITÀ SOSTENIBILE

TAB. 2 - Process of alignment with other programming and evaluation tools



## 2.3 Areas of innovation and the role of research in support of sustainability policies

For the definition of the contents of the AMSvS and for the design and activation of integrated pilot actions, the Metropolitan City of Messina has signed an agreement pursuant to art. 15 Law 7 August 1990, n. 241 and subsequent amendments and ii. with the University of Messina. The University will provide the activities of analysis, study, accompaniment for the coherence of plans, programs, planning and the definition of training paths, studies and accompaniment of behavioural change, lifestyles and methodological approaches to the decision-making and operational processes of public administration for sustainable development.

The Metropolitan City of Messina has also asked the collaboration of the Metropolitan City of Milan for the reuse of DataLab, a dashboard for the analysis and monitoring of the indicators of the Sustainable Development Goals linked to the objectives and targets of the Sustainable Metropolitan Agenda and for the programming of future common actions.



***IMAGE 9 - Logos of the collaborating public bodies***

# 3

## Participation and promotion of a culture for sustainability

Sustainability is not a purely environmental issue. Six years after the signing of the 2030 Agenda, awareness in civil society, the business world, administrations and public opinion is growing more and more about the need to adopt a collaborative approach and concrete measures to face an important change of socio-economic paradigm towards the numerous and complex environmental and institutional challenges that the transition to post-pandemic society requires of us.

For this reason, the Metropolitan City of Messina is implementing the 2030 Metropolitan Agenda for Sustainable Development, as a tool for the implementation of the UN Agenda and the National and Regional Strategy for Sustainable Development. From this framework, the challenge is to define one's own Agenda capable of grasping the complexity and richness of one's territory, and aligned with national and regional objectives.

The implementation of the 2030 Agenda requires, in fact, a strong involvement of all the components of society, from private companies to the public sector, from civil society to information and culture operators.

### 3.1 Metropolitan Forum for sustainable development and further involvement actions

From November to December 2021, 4 participatory workshops promoted by the Metropolitan City of Messina were held online to discuss, confront and plan joint actions for the future development of the metropolitan area, in terms of social, environmental and economic sustainability.

Two thematic focuses took place in January and February 2022, the first on the management of PNRR funds and the second on the state of health of the Strait of Messina and the Capo Peloro lakes.

The laboratories were built with the intention of laying the foundations for the implementation of the 2030 Agenda for sustainable development of metropolitan Messina, starting with its first 4 pilot projects and its 2 thematic focuses.



## ***FOCUS WS # 1 "Building an active citizenship network for sustainability projects"***

The first workshop was held on Thursday 11 November 2021. The event was an opportunity for meetings and exchanges between the realities active within the Metropolitan City of Messina. After sharing the experiences in progress, the laboratory proposed a comparison on how to build a collaborative network between sustainability projects to help achieve the objectives of the Messina 2030 strategy.

To stimulate discussion, Selena Meli, community manager of the Sicilia che Cambia project, was invited to tell about her experience in building collaborative networks. Her speech can be reviewed [here](#).

Her speech was followed by two focus groups, in which representatives of associations, administration and civil society confronted each other based on key questions.



***IMAGE 10 – WS #1 of 11/11/2021***

## ***FOCUS WS # 2 "Reforestation projects to create resilient communities and territories"***

The second workshop was held on November 18, 2021 and focused on the issue of reforestation, indicating it as one of the most urgent and effective strategies to combat global warming and the loss of biodiversity. The intent of this workshop was to promote a reflection on possible initiatives involving institutions, associations, schools and private citizens in reforestation actions with a strong impact on communities and territories. The discussion led to an initial reflection on the definition of strategies, tools and platforms necessary for the launch of these projects, with particular attention to the promotion of awareness and fundraising campaigns.

The workshop was aimed at citizens, entities and organizations of the metropolitan area, in particular among those affected by the fires of the 2021 summer season.

To start the debate, the opening talk was entrusted to Guido Cencini of ZeroCO2, a B-corp active on reforestation with a high social impact. His speech and supporting slides can be reviewed [here](#).



**IMAGE 11 – WS #2 of 11/18/2021**

### FOCUS WS # 3 "What's the air in the city?"

The third workshop was held on 25 November 2021 and focused on air quality and the defense of citizens' health, which are considered increasingly relevant issues for cities in Europe and around the world. The laboratory wanted to stimulate citizens and associations to imagine their possible active contribution to monitoring pollution and promoting sustainable models for the city of the future.

To animate the third meeting, the opening talk was curated by Paolo Barbato of Wiseair, an innovative start-up that deals with air quality monitoring through *low-cost devices*, with particular attention to the engagement and awareness of society civil.

His speech and supporting slides can be reviewed [here](#).

The image is a composite of three parts. At the top, there are four logos: the Agenda Metropolitana for Sustainable Development in Messina 2030, the City Metropolitan of Messina, the Ministry of Ecological Transition, and the European Union's Sustainable Development Goals. Below these is a screenshot of a Zoom meeting titled "3° laboratorio: Che aria tira in città?" dated 25/11/2021. The meeting grid shows five participants, with the central one being Paolo Barbato from Wiseair. At the bottom is a presentation slide with the title "Le lezioni imparate" (Lessons learned). The slide features a central blue triangle and three key points: **TECNOLOGIA** (Technology), **COLLABORAZIONE** (Collaboration), and **COMMUNITY**. The Technology section emphasizes technical knowledge and scientific analysis. The Collaboration section highlights the role of public administrations and regional agencies. The Community section focuses on citizen awareness and local community support.

IMAGE 12 - WS #3 of 11/25/2021



#### **FOCUS WS # 4 "Less plastic at school"**

The fourth laboratory, held on December 16, 2021, proposed a reflection and a comparison on the possible actions to be taken to reduce single-use plastics (plastic bottles, glasses, etc.) inside school buildings. The intent was to promote a discussion on the possible practical experiences of approaching change and the adoption of more sustainable behavioral models in the daily life of one's actions, even within school life.

The laboratory was aimed at the school communities of the Metropolitan City of Messina: students, teachers, parents, school managers, administrative, technical and auxiliary staff.

The opening talk was entrusted to Elena Lucia, architect, one of the founders of the social promotion association "Urban Interactions", active on sustainability issues and in particular on the promotion and dissemination of recycling and reuse practices in schools.

Her speech and supporting slides can be reviewed [here](#).



**IMAGE 13 – WS #4 of 16/12/2021**

### ***FOCUS WS # 5 "PNRR and projection of development and environmental sustainability"***

The fifth workshop and first thematic focus was held on Wednesday 19 January 2022. The meeting aimed to promote a reflection on the funding provided for in the National Restart and Resilience Plan in terms of environmental and socio-economic sustainability. The reflection focused in particular on contribution of these projects to concrete measures to face an important paradigm shift towards the numerous and complex environmental and institutional challenges that the transition to post-pandemic society requires of us, also for the metropolitan area of Messina.

The speaker of the meeting was Marco Marcatici, economist and development manager of Nomisma with a long experience in territorial development processes.

His speech can be reviewed [here](#).



***IMAGE 14 – WS # 5 of 19/01/2022***

## ***FOCUS WS # 6 "The state of health of the Strait of Messina and the Capo Peloro lakes"***

The sixth workshop and second thematic focus was held on Monday 7 February 2022. The meeting focused on the state of health of an important ecosystem in the area: the Strait of Messina and the lakes of Ganzirri and Torre Faro.

The Capo Peloro nature reserve represents one of the most important sites of ecological interest in the region, with unique and peculiar characteristics such as to make it a center of biodiversity to be safeguarded from the threat of anthropogenic actions that put it at risk.

The speech underlined how environmental sustainability is closely linked to the quality of human life, and consequently a better quality of the environment corresponds hand in hand with greater social and economic sustainability.

The enhancement of the area aims to protect, restore and promote the ecosystem of the Strait and the Lakes, to manage the waters in a sustainable way and stop the loss of biological diversity.

At the same time, the desire to combine scientific research with the study of projects capable of enhancing the area from the point of view of sustainable tourism, culture, and sports activities compatible with the environmental ecosystem of the area, is highlighted. At the same time, awareness-raising work is hoped to promote the importance of environmental education and the involvement of citizens and the new generations in sustainability, promoting sustainable lifestyles.

The issues discussed during the meeting fall within the future actions that converge within the strategies of the Metropolitan Agenda for Sustainable Development Messina 2030.

The technical meeting was organized by the University of Messina, with an introduction by Prof. Nunziacarla Spanò and to follow the intervention of Prof. Serena Savoca, on the theme "The Strait of Messina and its resources" and the intervention of Prof. Gioele Capillo "Oriented Natural Reserve of Capo Peloro: activities and future perspectives". All interventions can be reviewed [here](#).



***IMAGE 15 - WS # 6 of 07/02/2022***



These are the numbers of participation:



**TAB. 3 - The numbers of participation**

At the end of the workshops, the following **questionnaire** was sent to the participants: We would like to know your opinion on the outcome of the workshops and the topics covered. If you want to learn more about the work done during the workshops, retrieve the interventions and download the reports [click here](#).

Have you taken part in at least one of the workshops for sustainable development and participated in the metropolitan city? \*

Yes  No Which of the 6 meetings did you attend? \*

- Building an active citizenship network for sustainability projects
- Reforestation projects to create resilient communities and territories
- Air quality monitoring with the active involvement of citizens
- Less plastics at school: how to reduce single-use plastics in school buildings
- PNRR and projection of development and environmental sustainability
- The state of health of the Strait of Messina and the Capo Peloro lakes

Did you find the training and / or enriching workshops carried out for you? \*

Compared to the topics covered in the workshops, which ones do you think are most interesting for you? \*

- Building an active citizenship network for sustainability projects
- Reforestation projects to create resilient communities and territories
- Air quality monitoring with the active involvement of citizens
- Reduce single-use plastics inside school buildings
- PNRR and projection of development and environmental sustainability
- The state of health of the Strait of Messina and the Capo Peloro lakes

In what capacity did you participate in the meetings? \*

- As a citizen / citizen
- As an association
- As a public administration
- other

Send

## chiusura Messina Agenda 2030

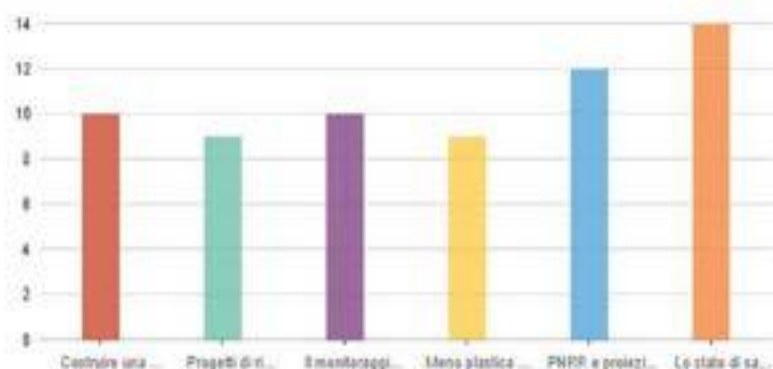
Hai preso parte ad almeno uno dei laboratori per lo sviluppo sostenibile e...



Risposte	Conteggio	Percentuale
Sì	25	92,59%
No	2	7,41%

Con risposte: 27 - Ignorate: 0

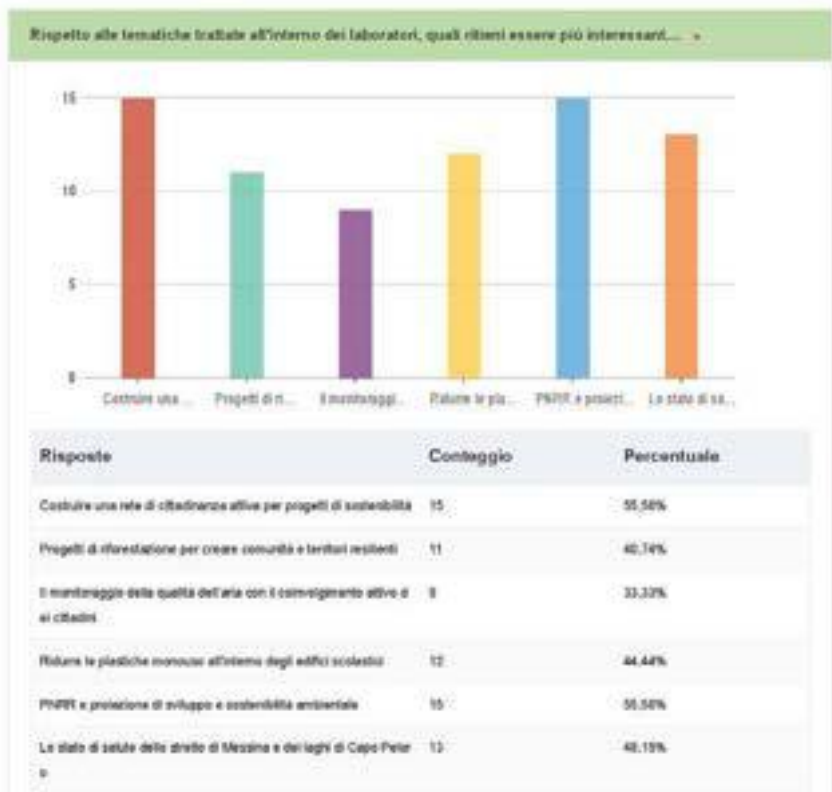
A quali dei 6 incontri hai partecipato? »



Risposte	Conteggio	Percentuale
Costruire una rete di cittadinanza attiva per progetti di sostenibilità	10	37,04%
Progetti di riforestazione per creare comunità e territori resilienti	9	33,33%
Il monitoraggio della qualità dell'aria con il coinvolgimento attivo dei cittadini	10	37,04%
Meno plastica a scuola: come ridurre le plastiche monouso all'interno degli edifici scolastici	9	33,33%
PNRR e proiezione di sviluppo e sostenibilità ambientale	12	44,44%
Lo stato di salute dello stretto di Messina e dei laghi di Capo Peloro	14	51,85%

Con risposte: 24 - Ignorate: 3

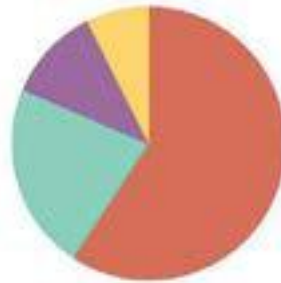
**TAB. 4 - Questionnaire 1 report**



**TAB. 5 - Questionnaire 2 report**

Con risposte: 27 Ignorate: 0

In quale veste hai partecipato agli incontri? >



- In qualità di pubblica amministrazione
- Altra
- In qualità di cittadino/cittadina
- In qualità di associazione

Risposte	Conteggio	Percentuale
In qualità di pubblica amministrazione	16	59,26%
Altra	6	22,22%
In qualità di cittadino/cittadina	3	11,11%
In qualità di associazione	2	7,41%

Con risposte: 27 Ignorate: 0

In rappresentanza di quale PA? >

La nuvola di parole richiede almeno 20 risposte da mostrare.

Risposta	Conteggio
Città metropolitana di Messina	7
Città Metropolitana di Messina	2
Università di Messina	1
Scuola	1
Ministero della Transizione Ecologica	1
IRISAP SICILIA	1
città metropolitana di Messina	1
assessore di un Comune facente parte della città metropolitana di Messina	1
ADITlab d'Arte LHRD	1

Con Risposte: 10 Ignorate: 11

Ci racconti qualcosa della tua realtà associativa? >

La nuvola di parole richiede almeno 20 risposte da mostrare.

Parola	Conteggio
--------	-----------

TAB. 6 - Questionnaire 3 report

## 3.2 Further actions for the involvement of civil society

The aim is to create activities so as to be able to bring young people closer and raise public awareness on the great problem of marine litter to improve the ecological impact that causes lethal or sub-lethal effects on plants and animals, the economic impact that causes reduction of fish tourism and reclamation costs and the social impact that causes a reduction in the aesthetic value and public use of the environment.

1. Organization of days for collecting plastic on the beaches, or for collecting algae and plants such as gracilaria or posidonia, which in autumn lose their leaves which dry up and settle on the coasts.
2. Use of the collected material (plastics and metals) for the creation of objects or (algae and plants) for cosmetics.
3. Organization of a virtual museum to allow everyone to discover the riches of the seabed and not only of the R.N.O.

You can observe at this link: [https://www.youtube.com/watch?v=ulKFqtQ\\_8UI](https://www.youtube.com/watch?v=ulKFqtQ_8UI) a documentary on the Strait of Messina published in May 2022.

## 3.3 The territories and the promotion of a culture for sustainability

The VLR Voluntary Local Review promotes horizontal and vertical alignment between existing development plans and strategies, in order to strengthen the interaction of resources, skills and knowledge between levels and sectors. The process of involvement and empowerment of local territories can contribute to their more proactive, conscious and systematic involvement in sustainable development processes. At the same time, it represents an advantage as it brings young people and vulnerable groups closer to decision-making processes and strengthens a collective vision aimed at promoting sustainable development at the local level. With territorial support, local authorities can identify indicators appropriate to the context, which are also capable of guaranteeing comparability with other contexts and other levels.

# 4

## Pilot actions

Following the workshops and thematic focuses held between November 2021 and February 2022 and the meetings of the Technical Table and the Institutional Table in February 2022, the establishes, together with the managers of the Strategic Plans and Programming documents and the technical contact person for the project "Former City of the Boy", the steps to be follow and it is agreed that the Actions must develop in synergy with the Strategic Plans of the Metropolitan City (PSM, PUMS, P.I.T., DUP) and at the same time think about Actions and indicators that are part of the sustainability policies in place, which lead to their replicability not only in the city but also in the entire metropolitan area. With the Project Group we thus come to two hypotheses:

### *Pilot Action # 1*

Realization of a sustainable urban park model with characteristics of replicability even in different territorial contexts, destined to become a pole and socio-economic and environmental attraction of the Metropolitan City in an eco-sustainable key. The model is based on the environmental redevelopment and urban regeneration project represented by the building compendium "City of the boy" in the Gravitelli district to be used for social inclusion purposes, in line with the "After us" project, within which policies and measures to integrate different lines of action and interventions that are synergistic and consistent with the objectives of the 2030 Agenda such as energy saving (LED lighting of public spaces) and water in all structures, separate waste collection ( plastic free area), accessibility (rest areas, charging stations for electric mobility and soft mobility, integration with the Local Public Transport TPL), the accommodation of people with disabilities from all over the metropolitan area, the recovery of sports facilities , cultural and laboratory, metropolitan co-working spaces.

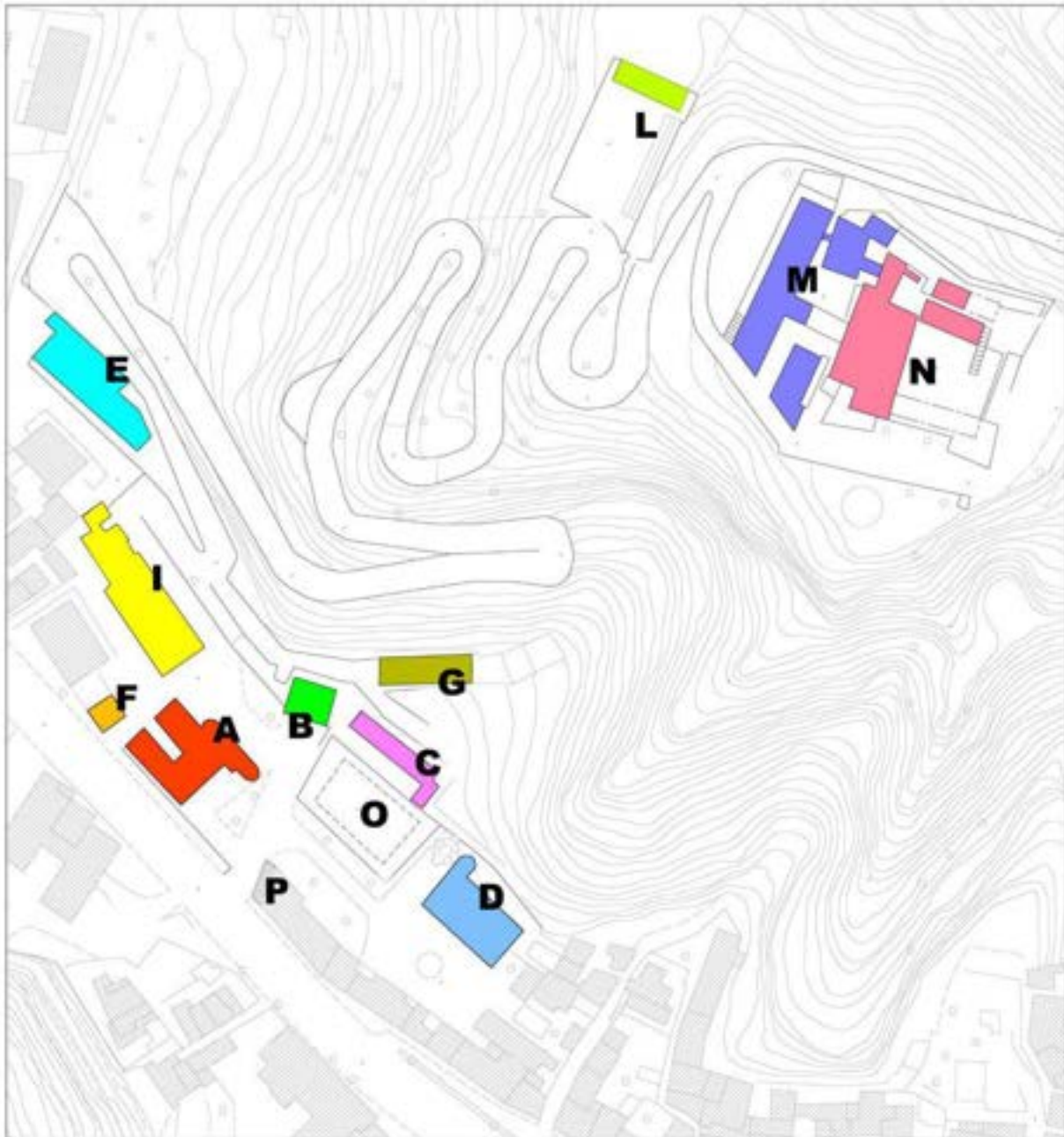
The aim is to create a comfortable and comfortable environment for children with disabilities, organize fun, useful activities and at the same time provide quality education. Several inspections were carried out for this purpose.

Currently the project, which can be financed through PNRR Mission 5, Component C2 Investment 2.2 of the Integrated Urban Plan of the Metropolitan City of Messina "Regeneration and Resilience" proposed by the Municipalities, is at DIP level - Documentation of the Initiation of the Project, being re-elaborated at following a Ministerial Decree.



**IMAGE 16 - Reportage of various environments of the former City of the boy**





**ex Fondazione "Città del Ragazzo"**  
 planimetria compendio di via P. Castelli ME

PREVISIONE - napp. scala 1:500

- |  |  |  |  |
|--|--|--|--|
| <b>A</b> ASSISTENZA SANITARIA<br>DEGENZA<br>RIABILITAZIONE | <b>E</b> FORMAZIONE PROFESSIONALE<br>TEATRO<br>CULTO     | <b>L</b> SPORT/TEMPO LIBERO                                    | <b>O</b> SPORT-TEMPO LIBERO            |
| <b>B</b> VOLONTARIATO SOCIALE                              | <b>F</b> RIABILITAZIONE                                  | <b>M</b> CORPI DI FABBRICA DA DEMOLIRE - RIPRISTINO AMBIENTALE | <b>N</b> "CASTELLACCIO" CULTURA-EVENTI |
| <b>C</b> SPORT- TEMPO LIBERO                               | <b>G</b> DEPOSITO-MANUTENZIONE                           | <b>P</b> PORTINERIA  |  |
| <b>D</b> MUSEO<br>FORMAZIONE PROFESSIONALE<br>CULTURA      | <b>I</b> FORMAZIONE PROFESSIONALE<br>INSERIMENTO SOCIALE |  |  |

*IMAGE 17 - Planimetry of the former City of the boy*

## **Pilot Action # 2**

Implementation of an environmental redevelopment project and development of sustainable tourism activities in the parks falling within the metropolitan area (Nebrodi Park and Alcantara River Park), of the R.N.O. Oriented Natural Reserves (Capo Peloro Lagoon, Marinello Lakes, Felci and Porri Mountains of the Island of Salina) of the Capo Milazzo Marine Protected Area and the Strait of Messina with a view to creating a circular economy through, for example, the use of energy sources (wind, photovoltaic, marine currents, etc.) and renewable materials, the extension of the useful life of a product, reuse and regeneration (design of plants for the use of clam shells and algae to nutraceuticals and cosmetic purposes), rethinking products as services (creation of nature trails, cycle paths and food and wine itineraries using signs, maps and apps, training of local guides dedicated to the park, the reserve, the area or the Strait); the creation of co-working spaces for the promotion of local products (mussels from Ganzirri, black pig from Nebrodi, swordfish from the Strait, etc.), of Slow Food presidia; the promotion of the Ecolabel for accommodation facilities in the metropolitan area and adherence to the Blue Flag Program of coastal resorts.

For the redevelopment of Capo Peloro, 11 points have been identified in the "Pantano Grande" and 6 points in the "Pantano Piccolo" where to apply signs and attractive posters, accompanied by QR-codes in the areas of interest, increase buses and shuttles so as to encourage tourists in transit to Messina on large cruise ships and try to "certify" these routes as environmentally friendly excursions.

Following an analysis on the territory and following meetings with the Project group, 5 objectives have been identified: Sustainable Mobility and Smart Cities, Circular Economy, Ecosystems and Biodiversity, Sport and Sustainable Tourism in Protected Areas and Adaptation to Climate Change and Reduction risk. For each objective, taking into consideration the Istat data, 5 fundamental indicators have been extrapolated for their realization.



**IMAGE 18 - Ganzirri Lakes poster forecast plan**

# 5

## The monitoring system of the SDGs

The monitoring system, reused thanks to the agreement with the Metropolitan City of Milan, is represented by the DataLab, a dashboard of analysis and monitoring of the indicators of the SDGs Sustainable Development Goals related to the objectives and targets of the Sustainable Metropolitan Agenda.

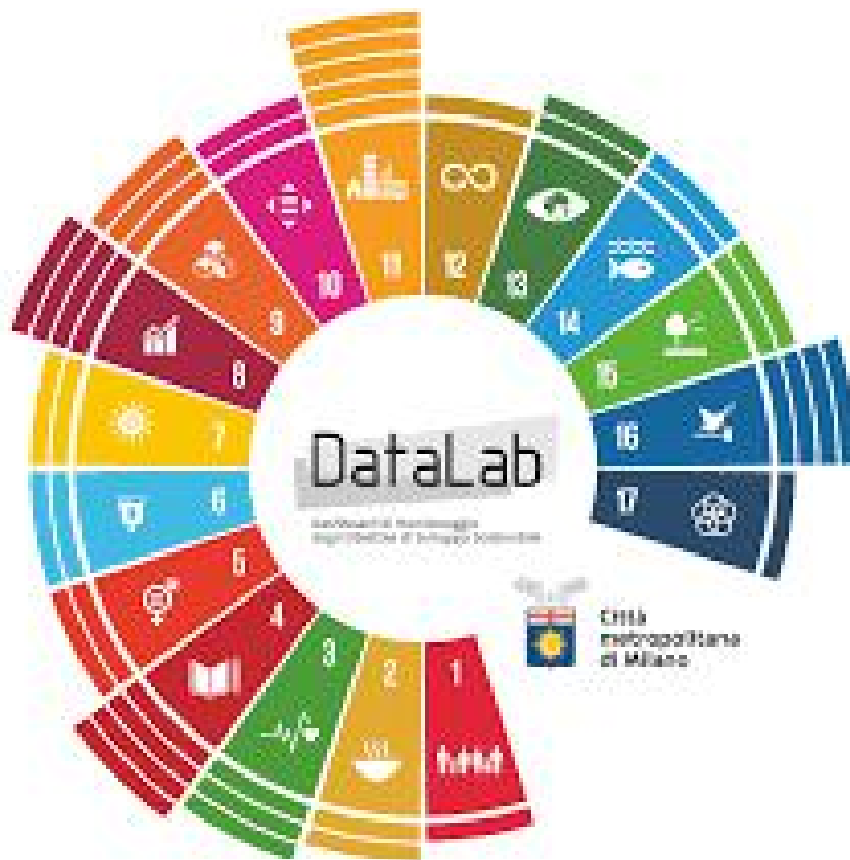
For each of the 16 Goals of the UN Agenda 2030 and for the 5 Targets of Goal 11, a document has been prepared with reference to the Targets that compose them.

By clicking on each Goal you will know the context indicators used to monitor the progress of sustainable development actions in the metropolitan city. [Click here to consult the methodological note of the analysis.](#)

The documents were prepared by ASviS, the Italian Alliance for Sustainable Development, and are updated in February 2022.

The Datalab visualization system was developed by Colouree.

To consult the dashboard: <https://sdgcittametropreste.mi.it/>



**IMAGE 19 - DataLab dashboard**

# 6

## Vision

### *Mending diversity and interconnecting the territory. A cohesive community towards a better future*

The Voluntary Local Review of the Metropolitan City of Messina represents the starting point for a collective renewal and employment towards sustainable development in the metropolitan area. The elaboration of the VLR allowed for a comprehensive program before proceeding with medium-term planning for sustainable development required by the Metropolitan Agenda 2030. In addition, the "Strategic Plan 2030" and other planning tools take into account the main dimensions of social, economic and environmental sustainable development despite the fact that the United Nations 2030 Agenda was not used directly as a framework for the adopted plans.

The Metropolitan City of Messina, at the conclusion of Phase 3 of the Strategic Plan process, is preparing to share what has been analyzed, collected and systematized to guide the development projects that will involve the Municipalities of the Metropolitan City in the next 3 years.

Specifically, the Plan identifies the Strategies that will enhance the strengths of the metropolitan area and minimize critical issues, with the ultimate aim of eradicating them. It focuses on 8 System Actions, containers of planning which, albeit related to different areas, as a whole aim to Mend diversity for a cohesive community towards a sustainable future.

The goal is to move toward a more consolidated, metropolitan-wide model of sustainable development. The next steps, in fact, will require a great commitment not only political, but also civically on the part of all the parties and social groups, to identify and pursue a number of priority objectives on which the Metropolitan City will have to commit itself to act in the coming years. The elaboration and dissemination of the VLR contributes to communicate the objectives, targets and performance of sustainable development both to the Metropolitan City of Messina as a local authority with its different Departments and Offices, and to the different social groups in the territory. Thus, one of the implicit purposes of this document is to raise awareness of the current situation and create a basis for a future vision and to strengthen internal cooperation within the metropolitan administration. It now seems clear to all that only by involving the citizens of the entire metropolitan area and the local society as a whole can we truly identify effective solutions to address the major social, environmental and economic challenges of the current landscape.

### 6.1 – Future work trajectories

In the coming months of 2022, therefore, the elaboration of the Metropolitan Agenda 2030 is foreseen as an instrument of guidance that will have to be closely connected with the other existing strategic planning instruments, namely the Metropolitan Strategic Plan, the Metropolitan Territorial Plan and the Urban Plan of Sustainable mobility. This will also mean that future updates of these plans explicitly take into account the objectives and targets of the Metropolitan Agenda, including defining, if necessary, a new governance model for the promotion of sustainable development in order to ensure its functionality and coherence in the future. The Voluntary Local Review of the Metropolitan City of Messina is a central element to ensure coherence in terms of planning and policies between the different levels of local governance (municipal, metropolitan and regional) and will be updated every three years.

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Project for the Metropolitan Agenda for Sustainable Development in implementation of the National and Regional Strategy 2030

# VOLUNTARY LOCAL REVIEW 2022

Metropolitan City of Reggio Calabria  
Department 5 – Professional Training





## FOREWORD

The VLR report presented stems from the experience of the activities carried out during the implementation of the pilot project "RC Metro Citizens in Transition", for the Metropolitan Agenda for Sustainable Development (AMSvS) of the Metropolitan City of Reggio Calabria (Agreement ex MATTM DG-SVI today MiTe and Metropolitan City of Reggio Calabria). It recounts the impacts in terms of the transfer of the National Strategy, the achievement of the project's objectives and the future trends that have emerged with the advancement of the initiatives that have involved levels of institutional governance, the involvement of citizenship, with different generational and social profiles, in innovative experiences of training and co-design, experimentation on assessment models and the launch of practices for the "policy coherence" on the territorial investments planned through the planning tools, such as the PSM - Metropolitan Strategic Plan.

The project, in the course of the pilot actions and their implementation, lasted about 29 months, from February 2020 to May 2022, including breaks for the pandemic crisis; it was promoted from its inception by Sector 5 of the Metropolitan City of Reggio Calabria - Professional Training and Community Policies, with the technical-scientific assistance in agreement with the ABITAlab laboratory of the Department of Architecture and Territory of the Mediterranean University of Reggio Calabria. With over 80 activities on its agenda, it has implemented the actions of its programme with in-presence and distance initiatives, shared in networks with other sectors of the Metropolitan City, with other local authorities, with the University, with secondary schools, with associations, with active citizenship and interested professionals. The technical-scientific group took part in all the activities promoted by the National SNSvS Table and in the assistance meetings, sharing the strategy paths of other Metropolitan Cities and the VLR preparation path. (see [www.rcmetrocitizensintransition.com](http://www.rcmetrocitizensintransition.com))

*This VLR, shared with the Directorate and Office - Vocational Training of Sector 5 of the Metropolitan City of Reggio Calabria was edited and described in an original way at the direction of the VNR, by the ABITAlab working group:*

Prof. Consuelo Nava (scientific resp. Pilot Project and author and supervisor of the VLR) with Arch. RTdA Giuseppe Mangano (author of the VLR, technical-scientific coordinator of the Pilot Project and responsible for the ECOSISTEMA 2030 codesign activities); Arch. PhD Alessia Leuzzo (author of the VLR, collabor. Technical-scientific Pilot Project and resp. PSM assessment activities).



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of Reggio Calabria \_ Department 5

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Arch.PhD.Alessia Leuzzo, technical-scientific coordinator of Pilot Project and MSP *assessment* activities responsabile)



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# Introduction

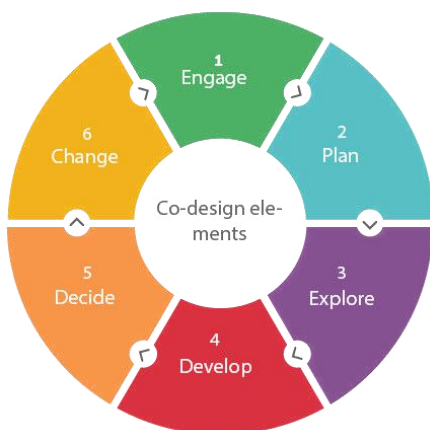
## **Strategy\_ Capability and Community in Transition.**

The approach to the shared work of the National Strategy on Sustainable Development, in its double dimension of a global and national strategy for the local implementation of the Agenda2030 and the national collective pathway with the main actors, has taken on a particular significance in the experience of the Metropolitan City of Reggio Calabria, aimed at constructing direct scenarios on the themes of the quality of training and enabling labour, traced as new paths for the social and economic development of the territory and for the better qualification of «communities in transition», identified in the new generations and in all those stakeholders who, in decision-making processes, can favour such a virtuous path towards «the future».

An innovative and experimental experience of a governance model based on 'capability', as a basic and even radical condition for 'transfer, learning and doing' through 'capable' and 'agile' tools and actions. A new participatory dimension, capable of producing an economy of knowledge and welfare for the territories in the South of the country, such as Calabria region and the Metropolitan City of Reggio Calabria, which in the last 10 years have lost 100,000 inhabitants in the regional territory and about 35,000 in the metropolitan area, respectively. Still in Calabria, according to the latest BES-Eurostat data, the unemployment rate records 4 out of 10 young people in a condition of non-employment, with an increase in NEETs and before that a strong trend of school drop-outs. A condition that leads about 35% of the population aged between 25 and 34 to migrate to the North or abroad.

The choice to adopt, through the actions referable to the pillars "People, Prosperity and Peace" for the implementation of the SDGs\_ goal 4 and goal 8, "quality education" and "decent work (...)", the vectors of sustainability 2. education and training and 3. Participation for Sustainable Development, has further declined the sought-after conditions of capability, towards an idea of territory, community and future as "common good", in which emerges as urgent the need to seek and operate in scenarios of change on environmental issues, capable of producing impacts on the social and economic dimension, in the overriding need to pursue quality of life, widespread well-being, freedom and every level of justice and social security.

## **Tactics\_ Codesign and Assessment**



They become formidable *tactics for action*, all the tools and operations put in place to govern the processes of knowledge transfer, propositions, exchange and visioning, at the service of the implementation of the SNSvS, in its transfer to a Sustainable Metropolitan Agenda built as a "space of new scenario possibilities", through all the actions promoted with the pilot project. The circular model, applied to design and share scenarios of change (the same one used by the civic ecosystem to narrate itself), guided the entire management model of the pathway. *Codesign and Assessment* became the focus, but also the toolkits that could promote, measure and evaluate the impacts of actions, in their internal and external process effectiveness. The codesign

method been used between all the technical and institutional levels to promote governance, promoted between the different operators and stakeholders, as well as users of Ecosystem 2030 and not least for the level activated with new professional experiences aimed at green jobs, directly related to the young experts involved in the Agenda 2030 process, within the Metropolitan City Council and the University. The Assessment levels, are pursued with the monitoring activities of effectiveness and efficiency of the pilot project (traceability of actions, activities and results), with the technical-

scientific activities on the SNSvS for the contribution to the work on the formulation of the SDGs indicators and finally with the conditions matured in the implementation, assessment and traceability process for coherence policies, on territorial investments in the current experience (start-up - April 2022), with the work conducted for the Metropolitan Strategic Plan. This multilevel strategy finalises the tool of the Sustainability Vectors (according to their latest structuring) and nominates them to become a strategic and open system of scenario evaluation, in which it is possible to monitor and measure the level of implementation and impact of territorial investment project interventions, for the competitive period 2021-2027.

### Action Narrative\_ VLR to design change scenarios



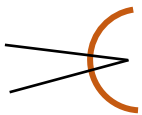
## Voluntary Local Review

The VLR proposal, in its elaborative and descriptive report, preserves the narrative character that has characterised the implementation of the 2030 Agenda, at the local-metropolitan scale. Therefore, according to the "jumping scale" method, it narrates the actions, noting their characteristics, methods, levels of involvement and participation of promoters and

recipients, between "performance" and "impact assessment" indicators, it intends to elect the local level as the leadership of the process. The result is a document that wants to be itself an open dialogue in the more contemporary process of implementation of the National SD Strategy and the Metropolitan Agenda, with the ambition of becoming a tool of "narration of different voices and possibilities of action from their own positions", overcoming the concept of reporting by giving back an authentic picture. The description in its parts follows the guiding structure of the VLN and contributes to it with its own "scale" participation, with respect to the national review and is proposed as a voluntary review at the local level, also to provide a positioning document of civil society, Ecosystem 2030 in the pilot project, returning a lived and surveyed report of the state of implementation of the SDGs in general and in particular on the goals pursued, through the projects focused on a metropolitan scale. The review, following this introduction, organises its contents into 5 chapters, 11 paragraphs and 11 subparagraphs accompanied by original infographics drawn up for the VLR; the boxes report on data and information traceable on the pilot project platform and the 5 annexes return processes, methods and project -*outputs of the actions*. Thus, the VLR itself continues to pursue those characteristics of codesign and assessment that have characterised the entire Agenda2030 process.

### The Futurist Manifesto VLR

*"We are on the extreme promontory of the centuries!"* (M.T. Marinetti, translated)



The proposed Futurist VLR Manifesto, as a reminder of the need for a new and urgent time, in its most avant-garde vision of "overcoming the past, dislodging tradition, overturning canons" (cf. avant-garde futurism and M.T.M.), is the metaphor of meaning and figurability most in keeping with the idea of Agenda2030, in the paths as proposed and practised, together with the communities in transition involved in the RC Metrocitizens in Transition pilot project. It is also a digital and hypertextual manifesto with open and traceable content that makes its information immediate and accessible. *«We believe that the time available has become even shorter after the pandemic crisis and with the worsening climate crisis, and we think that the ecological and digital transition cannot be said to be an effective solution until it is applied to be 'just' and as a 'shared value'. On a par with any sustainable development policy must ensure its most original and authentic implementation, for every place, with every community, through the most participatory levels of governance, in favour of open knowledge as the territory's best ambition for the future, renewable energy to overcome any emerging economic and social gap at national and global level».*

# 1

## Topics, process and methodology for preparing the VLR of Metropolitan City of Reggio Calabria

### 1.1 The thematic focus: Quality Training for Green Jobs

"RC Metro Citizens in Transition", the pilot project for the Metropolitan Agenda for Sustainable Development (AMSvS) of the Metropolitan City of Reggio Calabria (Agreement ex MATTM DG-SVI and CM RC, cf. box 1) has in its mission the will to transfer, through **training and knowledge programmes**, experiences and competences i7 on the topics of "**green jobs**", referable to the Sustainable Development Goals of the UN 2030 Agenda and to the Areas ("5P"), to the Strategic Choices and Goals of the National Sustainable Development Strategy and to the Vectors of Sustainability in their latest revision (05/2022, ed.) (see fig.1).



Fig.1 – The theme of quality education in the targets of the UN Agenda 2030 SDGs and in the national strategic choices of the National Sustainable Development Strategy (NSDS). Source: ABITAlab elaboration

In this era of '**global and local**' transition, it is a matter of wanting to generate a positive impact on the competitiveness rate of metropolitan territories and communities, acting with a view to **overcoming the gaps in the minimum skills of young people**, especially those who come from socio-economically disadvantaged families and live in the regions of Southern Italy, and to enhance the



**training of transversal and digital skills** in the curricula through innovative and inclusive teaching (cf. data from the ISTAT 2021 SDGs Report on Goal 4). In fact, this approach is nourished by "innovative actions and 'knowledge-based' pilot experiences for education, information and collaborative approaches with communities, which can trigger radical changes in people's behaviour and in their ability to act with a view to sustainability" (Mangano G., 2021).

These objectives of the pilot project support the decision to entrust the direction of the Director cabin for the AMSvS of the Metropolitan City of Reggio Calabria to Department 5 "Professional Training", assisted by the technical-scientific assistance of the ABITAlab centre, which takes care of the direction, dissemination and dissemination choices. for the promotion and transfer of training and information on the topics, with the possibility of involving other institutions (e.g. the district School Institutes) and the metropolitan communities of local authorities throughout the territory.

### ***BOX 1 – The 'Metropolitan Agendas for Sustainable Development' public notice***

**About :** "RC Metro Citizens in Transition" is the project for the Metropolitan Agenda for Sustainable Development in implementation of the National and Regional Strategy 2030 promoted by the Ministry for the Environment and Protection of Land and Sea, the Metropolitan City of Reggio Calabria (Sector 5 - Education and Vocational Training) with scientific partner the ABITAlab dArTe Inter-University Centre of the University "Mediterranea" of Reggio Calabria. The proposal responds to the "Public Notice addressed to the Metropolitan Cities for the submission of the expression of Interest for activities under art.34 of Legislative Decree No. 152/2006 and S.S.M.I. concerning the implementation of the National Sustainable Development Strategy". The Agreement between the Metropolitan City of Reggio Calabria and MATTM DG-SVI (Ministry of the Environment and Protection of Land and Sea, Directorate General for Development), Ex art.15 law of 7 August 1990, n.241 and smi 28.11.2019, defines the Collaboration aimed at defining Metropolitan Agendas for Sustainable Development, able to bring a contribution to the realisation of the objectives of the Regional Strategies for Sustainable Development.



Link Pilot project <https://www.rcmetrocitizensintransition.com/il-progetto>

## **1.2 VLR preparation process**

The **Voluntary Local Review (VLR)** is an analysis of the Sustainable Development Goals (SDGs), an effective monitoring tool for their implementation at metropolitan and local level. The SDGs tracking process referred to VLR allows local governments to identify their own priorities and territorial specificities in sustainable development policy and strategic planning. The VLR combines a careful analysis of sustainability indicators and vectors with the impacts of practices and actions implemented at the local level, involving local authorities, citizens and stakeholders. In January 2022, the National SvS Table of the Ministry of Ecological Transition, in view of the path to define the Voluntary National Review (VNR) to be presented at the High Level Political Forum meeting in July 2022, started the discussion and accompanying activities of the Metropolitan Cities aimed at preparing the Voluntary Local Review (VLR). The Metropolitan City of Reggio Calabria, as part of the implementation of the pilot project "RC Metro Citizens in Transition" started its VLR preparation process in January 2022, which will be part of the "territories" chapter in the VNR 2022 Report (see fig.2).





Fig.2 – Scheme of VLR preparation process and main steps. Source: ABITAlab elaboration

### 1.2.1 INTERSTITUTIONAL CO-DESIGN

The accompanying activities of the National SvS Table of the Ministry of Ecological Transition, in which the Metropolitan City Council has been participating since June 2020 in the framework of the pilot project "RC Metro Citizens in Transition" represented by the members of the technical-scientific team of ABITAlab, have contributed to the **process of territorialisation and implementation at local level of the 2030 Agenda** through the National Strategy for Sustainable Development (NSDS). These activities, which involved moments of confrontation and exchange between the Cabina di Regia, the Regions, the Provinces and the Metropolitan Cities, made this path more informed and effective, allowing to transfer to the territory also the information on the co-design activities related to the study of national documents, to the proposal and revision of indicators for the construction of the "national set", to the revision process of the NSDS and the Vectors of Sustainability and, finally, to the contribution to the chapter "Territories" of the VNR Italy. The knowledge paths set up at several levels and the exchange between the participants also make it possible to transfer the ministerial accompaniment activity to both the organisation and civil society, increasing the level of awareness of the common challenge and the strategies and the tools put in place.

#### **BOX 2 – Activities with the SD National Table (MiTe)**

##### **About:**

**Reporting, dialogue and sharing activities at the invitation of MiTe at the National SvS Table with the other Metropolitan Cities:**

- 31 May 2022\_ Third meeting accompanying process to VLR/VNR
- 19 May 2022\_ Accompanying activities MiTE Table - Metropolitan Cities
- 14 April 2022\_ Second meeting accompanying process to VLR/VNR
- 16 March 2022\_ First meeting accompanying process to VLR/VNR - CReIAMO PA L2WP1 with interested Regions and Metropolitan Cities
- 24 January 2022\_ Accompanying process CReIAMO PA - L2WP1 - Voluntary National Review (VNR) preparation with interested Metropolitan Cities
- 16 December 2021\_ Workshop "Public Policy Coherence for Sustainable Development" with the Metropolitan Cities
- 19 October 2021\_ Coordination with Metropolitan Cities for the implementation of SNSvS - CReIAMO PA L2 WP1 project
- 27 September 2021\_ "Towards a culture of sustainability: education and training as levers for change"
- 21-22 July 2021\_ 2nd and 3rd Virtual World Café - National CSR Table
- 7 July 2021\_ Event Forum Regional Sustainable Development Strategy SRSvS - Focus Goal 4
- 28 May-1 June 2021\_ Coaching CReIAMO PA -L2WP1 - Building Metropolitan Agendas for Sustainable Development - Pilot Actions for Urban Sustainability

- 27 April 2021\_Collection of case study contributions for G20 - circular economy and combating climate change - CReIAMO PA L2WP1
- 31 March 2021\_Workshop - 'Metrics and measurements to support the monitoring of national sustainable development goals' - CReIAMO PA L2WP1
- 18 March 2021\_Workshop - CReIAMO PA -L2WP1- 18 March - Metropolitan Cities - The revision of the National Strategy for Sustainable Development
- 25 March 2021\_Table of Discussion on the AMSvS of the Metropolitan Cities of Sicily and Calabria, at the invitation of C.Casano (Metropolitan City of Messina)
- 16/17 December 2020\_OECD Workshop: Simulation of a coherent decision making process around the National Strategy for Sustainable Development: Institutional dialogue for more coherent policies in the area of Prosperity
- 9 December 2020\_CReIAMO PA -L2WP1- Workshop "Sustainability as Integrated Policy: Regional and Provincial Strategies and Metropolitan Agendas for Sustainable Development and Coherence of Public Policies".
- 11 November 2020\_CReIAMO PA -L2WP1- Supporting Metropolitan Cities. Meeting of the Technical Table with MATTM, Poliedra, the Metropolitan Cities and Autonomous Provinces
- 28 October 2020\_CReIAMO PA Line L2WP1 - Metropolitan Cities flanking - Meeting on research projects
- 15 September 2020\_CReIAMO PA L2WP1 Project: Communication of Metropolitan Cities presentation



**20** participated activities



Link Activities Agenda <https://www.rcmetrocitizensintransition.com/agenda>

## 1.2.2 TRANSFER AND CO-DESIGN WITH «2030 ECOSYSTEM»

The "RC Metro Citizens in Transition" proposal is characterised by having aimed to construct and conduct activities responding to category B of the MATTM Agreement for metropolitan cities, "**engagement of civil society**". In this sense, the project has highlighted how pilot actions 3, 4 and 6 are all co-managed with the participation of "an ecosystem" of reference, called "Ecosystem 2030", which sees the users of dedicated paths as protagonists, orienting both the civic and educational ecosystems on the "territorialisation" of the National Strategy for Sustainable Development. Two calls for joining Ecosystem 2030 were activated, one call concerned "an expression of interest" launched by the Authority, addressed to associations, foundations and organisations in the metropolitan area, in order to join the project and participate in the planned pilot actions 3, 4, 6; an invitation with a presentation of the project and the pathway to secondary schools, with a technical-scientific profile, to share a PCTO programme oriented on the themes of the 2030 Agenda and its territorialisation in the metropolitan area" (more info on Ecosystem 2030 at the link <https://www.rcmetrocitizensintransition.com/ecosistema2030>).

## 1.3 Methodology adopted

The methodological approach of the VLR of the Metropolitan City of Reggio Calabria is not intended to be a mere "report" of the actions and results obtained with the pilot project, but rather to make the VLR itself a tool with which to highlight the causal links between activities and the impact they have generated. The methodology follows the approach of the 'Theory of Change' (fig.3), a specific methodology applied to plan and evaluate projects that promote **social change through the participation and engagement** of all stakeholders on an ongoing basis. This implies verifying the conditions necessary for these results to be achieved, "ascertaining their actual realisation (performance measurement) and, finally, collecting qualitative and quantitative data on the change generated and perceived by the beneficiaries (impact measurement)" (Elevati, 2017). From the

outputs it is possible to draw an estimate of the outcomes, calculating to what extent the former are related to the latter (Mangano G., 2021), according to a "**dual strategy**" (Nava C., 2021):

- *one internal to the project itself*, which implements an evaluation system based on indicators of effectiveness (objectives/outcomes) and efficiency (actions/timesheets);
- *an external one*, which reports the social, economic, cognitive benefits for the community involved, with respect to an impact system that takes into account the aforementioned theory of change "Input > Outputs > Outcomes > Impacts" and contains qualitative and quantitative indicators, referring to the project action plan, specific objectives and expected results..

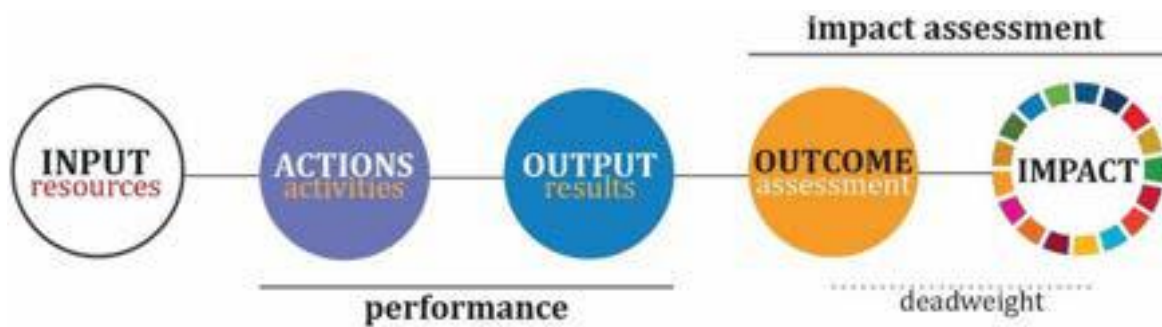


Fig.3 – "Theory of Change" methodology adopted. Source: ABITAlab rielaboration

Monitoring the expected results, the inputs and outputs of the actions and their capacity to produce results, constitutes the assessment of the level of efficiency of the project itself, while the measurement of its effectiveness, sustainability, impact and added value, takes into account not only the products and outputs, but also how they respond, once again, to the achievement of the initial objectives and thus to the satisfaction of a demand expressed at an early stage (European Commission, 2006).

# 2

## The implementation of Agenda 2030 for the Metropolitan City of Reggio Calabria

### 2.1 Forums and methods of involving civil society

With reference to category "B - Civil Society Engagement", the activities started with pilot actions 2 "Learning Metrocity OUT",<sup>3</sup> "Making Metrocity",<sup>4</sup> "Knowledge Metrocity" are all aimed at greater involvement of the metropolitan community by activating the "SvS CM RC Metropolitan Forum" and fostering participation with processes capable of enhancing the resources present on the territory and already active thanks to the work of the Cabina di Regia (see [www.rcmetrocitizensintransition.com/cabina-di-regia-e-team](http://www.rcmetrocitizensintransition.com/cabina-di-regia-e-team)). The programme of activities of the pilot project "RCmetro Citizens in Transition" launched on 9 February 2020, with a public event and the launch of the metropolitan forum for the implementation of the National Strategy for Sustainable Development, has seen the technical working group of the Authority - Metropolitan City of Reggio Calabria - with department 5 leading the Cabina di Regia, assisted by the ABITALab dArTe Mediterranean University of Reggio Calabria, for the technical and scientific activities accompanying its implementation. Civil society is broadened in its direct engagement, with the knowledge paths undertaken and intended for different age and interest targets, from secondary school students to university students, active citizens, professionals and interested technicians. The different forms in which civil society engagement activities can be meaningful for the pilot project are all further opened up through dedicated initiatives such as 'let's create value' (cf. Section 3.1.1).

The Director Cabin is headed by the Director of Department 5-Professional Training of the Metropolitan City of Reggio Calabria.

Other CM RC department members of the Director Cabin are:

- Department 2 - Institutional Affairs - Economic Development - Human Resources
- Department 3 - Digital Innovation
- Department 6 - Education and Sport
- Department 7 - Social policies
- Department 10 - Planning - Territorial Development - Special Laws
- ABITALab dArTe UniRC (scientific partner)
- other institutions: local authorities, professors Scientific Committee Univ. Mediterranea of Reggio Calabria (dArTe and PAU departments), High School Institutes, Professional Orders, local organisations and associations
- Inter-institutional forums: SD Table MiTe, Calabria Regional Forum



Fig.4 – Director cabin and Forum and society engagement activation. Source: ABITAlab elaboration

In this sense, the project highlighted, how pilot actions 3 "Making Metrocity", 4 "Knowledge Metrocity" and 6 "Codesign Metrocity" are capable of initiating processes of co-management by an "ecosystem" (the 2030 ecosystem) for the orientation of the civic and educational ecosystem to the territorialization of SNSvS. Specifically, with reference to the activities carried out: users of dedicated paths, orienting both the civic and educational ecosystem on the "territorialisation" of the National Strategy for Sustainable Development. In particular:

- (August 2020) **Call for proposals "Civic Ecosystem"** for the participation of organisations in training and capacity building paths on Agenda 2030 issues and sustainability activities (no. 30 associations from 15 municipalities), told in the collaborative best practice path "CreiAmo Valore". The same associations, together with the steering committee, animated two presentation and exchange meetings on sustainable development topics on 9 and 30 September 2020;
- (Nov.2020-Jun.2021) **Cycle of Technical Seminars** - Pilot Action 4 "Knowledge Metrocity" with the aim of transferring contents, methodologies and experiences useful for the construction of the Metropolitan Agenda, with reference to the NSDS areas "Planet and Prosperity", with an average duration of 3h each and the average participation of 95 participants among technicians from institutions, associations, university students, individual citizens;
- (a.s. 20/21 and 21/22 in progress), 2 editions of the **Transversal Skills and Orientation Courses** - TSOC "The challenge of Agenda2030" were launched, aimed at students of the province's high schools (no.4 in the 1st edition for no.120 students, no.2 in the 2nd edition for 70 students);
- at university level, at the Mediterranean University of Reggio Calabria - Department of Architecture and Territory, **high-level training activities** were carried out with reference to the "Design of Sustainable Innovation" course and the Thesis Atelier (resp. Scient. Prof. C. Nava), such as a series of seminars on "advanced design for climate neutrality" and on "additive manufacturing and prototyping" and design experiments in the area that involved about 50 students. Further activities aimed at broadening the direct engagement of the civic and educational ecosystem can be found in Pilot Action 6 'Co-Design Metrocity' (see [www.rcmetrocitysintransition.com/ecosistema2030](http://www.rcmetrocitysintransition.com/ecosistema2030)).



## 2.2 Pilot Actions and their Implementation Status

Out of the five areas indicated by the SNSvS (5Ps - People, Planet, Prosperity, Peace, Partnership), the "RC Metro Citizens in Transition" project has identified six pilot actions with activities that find their effectiveness in categories A "Building the governance of metropolitan agendas for sustainable development", B "Civil society involvement" and C "Defining metropolitan agendas for sustainable development and monitoring the sustainability vectors of the Metropolitan Strategic Plan", as listed below

1. "**Learning MetroCity IN**" - cat. A, target audience: institutional network - 2 months (15 Jan-19 Feb - Suspension and resumption: 16 April - 16 May 2020 (concluded) ) ;
2. "Learning MetroCity OUT" - cat. A, addressees: institutional network - 2 months (17 May - 30 June 2020) - concluded
3. Pilot Action 3 "**Making Metrocity**" - cat. B, target group: Civic Ecosystem (associations, committees, groups, etc.) - 3 months (1 Jul.- 31 Oct. 2020 with deviations and resumption: Nov.2021-Feb.2021) - ended
4. "**Knowledge Metrocity**" - cat. B, addressees: Civic Ecosystem, experts and officials of institutions, university students, individual citizens - 5 months for the Cycle of Seminars + PCTO I edition (Nov.2020-Apr. 30, 2021, with deviations: until Jun.2021) + 5 months for PCTO II edition (Feb.-May. 2022)
5. "**Goals Metrocity**" - cat. C, addressees: Public Bodies, Institutional Bodies, Civil Society, National Forum and Regional Forum Agenda - 2 months (monitoring of participatory phase "Strategic Metropolises", Jul.-Aug. 2021 + 3 months (monitoring doc, MSP draft, May-Aug. 2021) - concluded + 9 months (Implementation agreement Sector10-dArTe UniRC, Mar.-Dec. 2022) - ongoing ;
6. "**Co-Design Metrocity**" - cat. B, Civil Society Engagement - 3 months (with deviations for pandemic covid, Jan-May 2022).


For a detailed description of the pilot actions, please refer to the appropriate section of the web platform (  [www.rcmetrocitizensintransition.com/azioni-pilota](http://www.rcmetrocitizensintransition.com/azioni-pilota)) and the figure below.



Fig.5 – Pilot actions of the project. Source: ABITAlab elaboration on the web platform [www.rcmetrocitizensintransition.com](http://www.rcmetrocitizensintransition.com)



By the end of the activities (11 May 2022), **83 activities** had been carried out to implement the pilot actions (see "Activity Agenda" at [www.rcmetrocityzensintransition.com/agenda](http://www.rcmetrocityzensintransition.com/agenda)). Of these, as many as 38 were implemented under Action 4 Knowledge Metrocity, highlighting the centrality of the theme "quality education and training towards green jobs" in the implementation of the Metropolitan Agenda for Sustainable Development of the Metropolitan City of Reggio Calabria. The weight of the activities on the individual pilot actions and compared to the total, is illustrated in the diagram below (fig. 6).

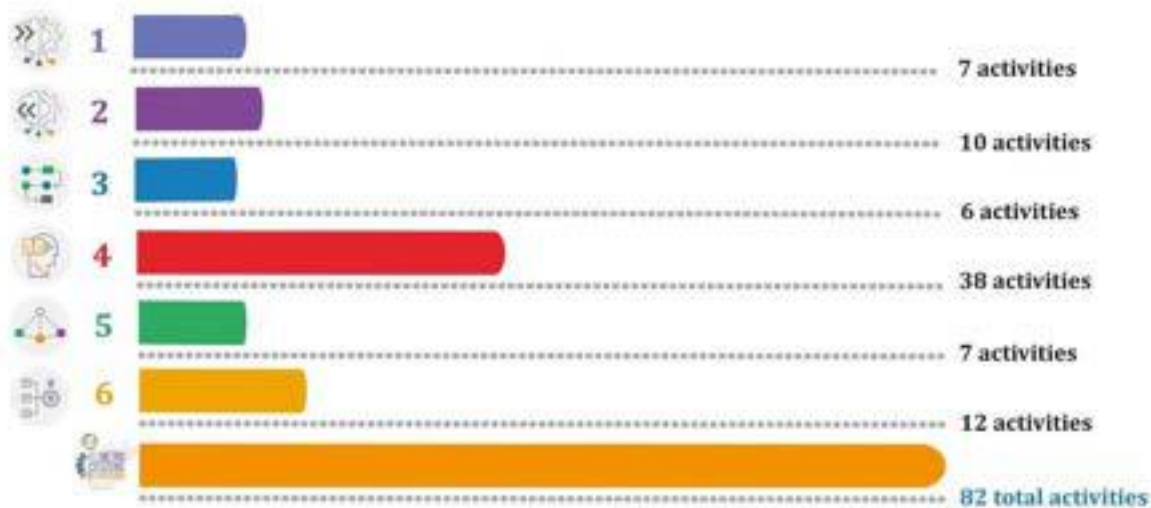
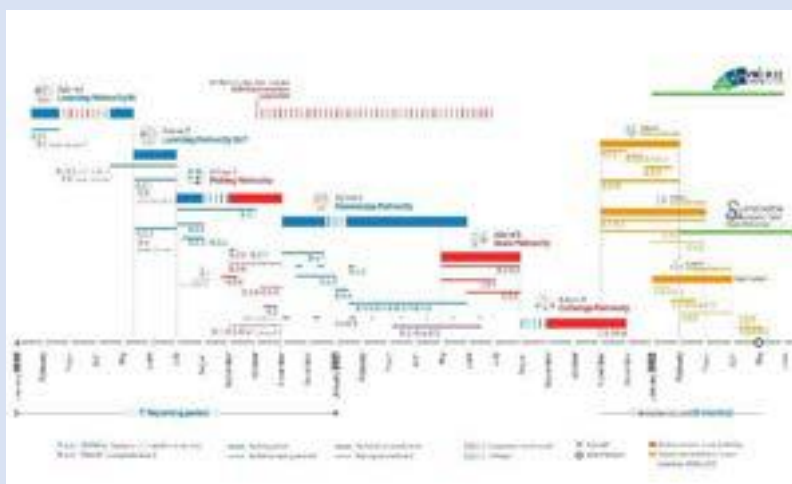


Fig.6 – Impact of the pilot action on the total of activities. Source: ABITAlab elaboration

### BOX 3 – Graphic Timeline of the Pilot Project

**About:** The graphical timetable illustrates the activities and sub-activities for each pilot action during the reference period of the MiTe-CM RC Agreement. This schedule was also used as a tool for monitoring the implementation of the pilot project in relation to:

- the timing of the pilot actions according to the proposal submitted to the MiTe (formerly MATTM);
- the activities and results of each pilot action and sub-activity in the reference period and in relation to the action categories (A, B, C);
- the deviations due to exogenous factors (covid19 pandemic, administrative updates of the CM RC with repercussions on the Cabina di Regia, assimilation and synthesis of identified activities in order to achieve the results of actions subject to deviations) and endogenous factors (changes made on operational and technical aspects of the project by the technical-scientific team).



[CLICK TO EXPAND](#)

 [Link Graphic Timeline https://drive.google.com/file/d/1lq4xDE3a0j9t6ltlilAxbYPhEBQmwor/view?usp=sharing](https://drive.google.com/file/d/1lq4xDE3a0j9t6ltlilAxbYPhEBQmwor/view?usp=sharing)

## 2.3 The state of development of the SvS Metropolitan Agenda

The process of constructing the Metropolitan Agenda for the Sustainable Development of the Metropolitan City of Reggio Calabria began with the launch of the pilot project "RC Metro Citizens in Transition" (Feb.2020), within the framework of the agreement between the Ministry of Ecological Transition and Department 5-Professional Training of the Metropolitan City of Reggio Calabria. The elaboration of the Agenda is currently in progress and is conceived as a device for integrating, guiding and monitoring the planning tools in force and/or in the process of being adopted by the Authority, in particular the Metropolitan Strategic Plan being drafted (see Agreement ABITAlab dArTe-Sector 10 CM RC), but also the territorial investments (PON Metro, Pacts for the South, POR 21-27, etc.) through the sustainability vectors and strategic objectives of the NSDS. The Knowledge, Co-design and Goals Metrocity pilot actions defined the trajectories of interest and the guiding contents of the Agenda document:

1. *Sustainable Territory and Communities in Transition*
2. *Air and Climate*
3. *New Geography of Relations: Commuting (Inner Areas)*
4. *Ecosystem Services. Networks and flows (waste, water, energy)*
5. *Sustainable visions.*

The SD Metropolitan Agenda will be a governance and guiding tool for the Authority's choices in terms of territorial planning and investments in the metropolitan area. The objective of policy coherence for sustainable development is pursued through the transfer and traceability of sustainability vectors and strategic objectives for the NSDS 'prosperity and planet' areas in forthcoming plans, programmes and investments, as well as in spatial planning tools (see Box 4). The Metropolitan Agenda thus becomes a tool for guidance and education on certain issues, with reference to the path of transfer of experience and with the proposition of communities, rightly informed about sustainable development issues and thus with greater awareness, beyond the normal paths of participation in the planning instruments already provided by the MSP.

### **BOX 4 – Metropolitan Agenda for Sustainable Development MetroCity RC and SD Policies**

**About:** The Agenda aims to address and monitor sustainable development policies and governance tools of the entity with the possibility of tracking the visions and strategic choices of the MSP with some identified Missions of the NRP, such as:

- *Mission 1\_ Digitisation, Innovation, Competitiveness, Culture and Tourism*
- *Mission 2\_Green Revolution and Ecological Transition*
- *Mission 3\_Infrastructures for Sustainable Mobility*
- *Mission 4\_Education and Research.*

With reference to pilot action 5 'goals Metrocity' of the pilot project 'RC Metro Citizens in Transition', the Agenda will basically express the possibility of activating a monitoring of sustainability vectors and their traceability on the strategic choices of the MSP. In this regard, on the basis of the activities foreseen by the programme and carried out for the "Category C-Definition of the metropolitan agendas for svcs and integration with the MSP" in the period 2020-2021, on 24 February 2022 the Sector10- Planning - Land Development - Special Laws in the person of the manager. Ing. P.Foti, the Director of dArTe Prof. A.Santini and Prof. C.Nava as scientific resp. of the project and of ABITAlab dArTe, signed a Research Implementation Agreement (duration 9 months), for "Studies aimed at the integration of tools and processes for the implementation of the National Strategy for Sustainable Development (Metropolitan Agenda 2030) in the visions of the Strategic Plan of the Metropolitan City Metropolitan City Strategic Plan".



Link SA Goals Metrocity <https://www.rcmetrocitizensintransition.com/goalsmetrocity>

### 2.3.1 THE METROPOLITAN SUSTAINABLE DEVELOPMENT AGENDA AND THE METROPOLITAN STRATEGIC PLAN

Pilot Actions 4 "Knowledge MetroCity", 5 "Goals MetroCity" and 6 "CoDesign MetroCity" are those that envisage activities aimed at defining trajectories, contents and accompanying tools for the upcoming Agenda.

In May 2021, the phase of constructing the Agenda's reference areas and the document's structure began, through in-depth study activities useful for its drafting and for the activities carried out on the occasion of the planned Knowledge Metrocity, Co-Design and relationship with the Metropolitan Strategic Plan being drafted.

It is a matter of operating according to a "collaborative" and "participatory" dimension of the Agenda, capable of expressing the results assumed by the pilot project and the territorialisation activities as already described. An innovative component to the process, which wants to express and bring to value the experience realised with "RCMetro Citizens in transition", bringing the metropolitan communities closer to the decisions that affect public policies, referring to sustainable development in its three dimensions and implementing the 4 guiding principles that the SNSvS at the national level makes its own, such as integration, universality, inclusion and transformation.

Through dialogue with the Authority's institutional representatives, the possibility was proposed that the Metropolitan Agenda on Sustainable Development itself could be a governance and guiding tool for the Authority's choices, even after the closure of its pilot project. In particular, it is about the possibility that the sustainability vectors and strategic objectives of the SNSvS, transferred to the metropolitan agenda, may find traceability in the next territorial investment plans and programmes (PON Metro, Patti per il SUD, POR 21-27, Recovery Plan, etc.), as well as in the PSM instruments and/or in the PUM, implementing territorial coherence policies and monitoring on the "prosperity and planet" areas.

On 24 February 2022, the Director of the Department of Architecture and Territory - dArTe of the Univ. "Mediterranea" of Reggio Calabria and the Director of Sector 10 - Metropolitan City of Reggio Calabria signed the Convention agreement on the programme of research and transfer activities on the themes of the strategic addresses of Agenda 2030 for the implementation of the SNSvS - National Strategy on Sustainable Development for the addresses and monitoring, through the system of Sustainability Vectors to the vision projects of the MSP and territorial investments from the competitive lines on the metropolitan territory (PNRR, POR Calabria 21-27, ReactEU...).

The document, presented by the scientific resp. Prof. C.Nava, illustrates the project-research called "Sustainable Assessment - Goals Metrocity", activated as a cascade from the activities with which the university laboratory is already present at the national table of MiTe DG VI - Ministry of Ecological Transition with the pilot project "RC Metro Citizens in Transition".

The initiated research-project proposal is organised in two parts: the implementation of the NSSD on the MSP **[1]** and the construction of a mapping architecture for the location and implementation of the MSP "Project Ideas" **[2]**.

**[1]** The revision of the National Strategy for Sustainable Development through the better definition of Sustainability Vectors 1, 2, 3 (October 2021 - February 2022), in fact re-addresses the monitoring activities and therefore needs a better interface with the Metropolitan Strategic Plan projects. Below are the pages extracted from the AMSvS (draft) concerning the trajectories of the Agenda in relation to the visions and project ideas of the MSP (Fig.7a) and the planned activities per phase of the project-research (Tab.1).



Studi indirizzati all'integrazione degli strumenti e dei processi di attuazione della Strategia Nazionale dello Sviluppo Sostenibile (Agenda Metropolitana 2030) nei progetti di visione del Piano Strategico della Città Metropolitana.

Sistema di supporto alle decisioni e al monitoraggio dei progetti e delle azioni in coerenza con le politiche di coesione e di competitività, attrazione e programmazione degli investimenti territoriali (periodo 2021-27: PNRR, POR Calabria, RescEU, Agenda, ...) nella Città Metropolitana di Reggio Calabria, anche attraverso il sistema dei Vettori della SNSvS.

Team di lavoro  
 Prof.ssa C. Nava, resp. scientifico e sistemi di soluzione/competitività  
 Prof.ssa A. Sarlo, programmi e strumenti di pianificazione strategica  
 Arch. RT&A G. Mangano, Agenda Metropolitana e indicatori 2030, mappature (secondo con il progetto pilots)  
 Arch. PhD A. Leuzio, politiche di coerenza tra programmi competitivi e matrici di congruenza. Tracciabilità delle idee progetto su programmi, mappature

**FASE 1**  
 (marzo – maggio 2022)

Fig.7a – Cover of Phase I document SA Goals Metrocity. Source: ABITAlab elaboration

## Activities phases

## Sustainable Assessment Goals Metrocity

<b>PHASE 1</b> [Period: 2/3 months] <b>COMPLETED</b>	Activities of verification, traceability and integration between the strategic objectives of the SNSvS and the MSP Guidelines
	Review and redirection activities of the "Strategies" of the draft MSP with the preparation of a congruence and compatibility matrix with the Sustainability Vectors of the SNSvS/ Metropolitan Agenda, useful for monitoring
<b>PHASE 2</b> [Period: 2/3 months]	Assistance activities aimed at drafting the territorialisation and competitiveness of the MSP "project ideas" actions, with the possibility of attracting and competing for Territorial Investments of interest for the pilot actions (period 2021-27)
	Formulation of the Intervention Framework on strategic areas, which can be evaluated and monitored with the SNSvS/Metropolitan Agenda Vector system
<b>PHASE 3</b> [Period: 2/3 months]	Definition and closure of MSP documents related to SNSvS, as per Phase I and Phase II products
	Continuous monitoring activities at all stages of the drafting MSP and programme for possible post-approval MSP monitoring activities

Tab.1 – Sustainable Assessment Goals Metrocity – research activities phases. Source: ABITAlab elaboration

[2] The proposal for the construction of a mapping architecture for the location and implementation of the MSP "Project Ideas", was made with reference to the addresses deriving from the Metropolitan Agenda for Sustainable Development (MSSD) document, the Strategic Choices and National Goals, the Sustainability Vectors of the MSSD and the monitoring of their implementation status and possible supporting competitive lines. The mapping architecture houses two sections:

### [SECTION A] SNSvS Implementation Sheet on the MSP (built on the references found in [1])

- A.1. Reference to the addresses derived from the Metropolitan Agenda;
- A.2. Reference to the Strategic Objectives and Sustainability Vectors of the NSDS.

**[SECTION B] Intervention monitoring sheet**

B.1. Indication of the competitive lines in support of the project (Data, competitiveness, territorial investments traced during the activities in [1])

B.2. Implementation status + identification references (hyperlink to the project) (Fig.7b).

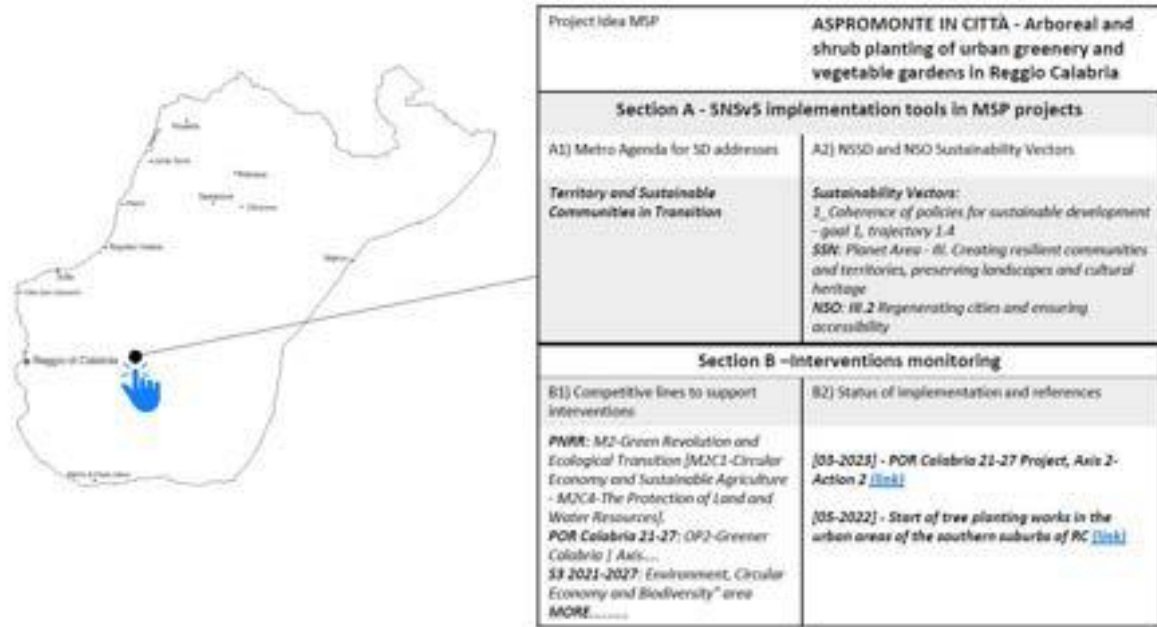


Fig.7b - The proposal for a mapping architecture for the location and implementation of the MSP 'Project-Ideas'. Source: ABITAlab elaborations

**2.3.2 CO-DESIGN METROCITY FOR METROPOLITAN STRATEGIC PLAN VISIONS AND PROJECT IDEAS**

"Co-design Metro City for the Metropolitan Agenda for Sustainable Development - Metropolitan City of Reggio Calabria" is an event of the SvS Metropolitan Forum, held on 6 May 2022 and aimed at the realisation of a participation and co-design initiative on the strategic areas of the National Strategy for Sustainable Development, on the themes and knowledge transferred with the pilot actions of the 'RC Metro Citizens in Transition' project and on the trajectories, visions and project ideas contained in the draft Metropolitan Strategic Plan, with the involvement of the Ecosystem 2030 of the pilot project. The day's work was carried out according to the methodology of co-design workshops, in groups divided into "focus" tables, whose activities were led by one or more identified facilitators (experts jr. Green Jobs, experts from the Scientific Committee, ABITAlab student interns). In this sense, co-design, by opening up to user collaboration in the creative phases of idea generation and application, enables people not to be mere users, but active and, above all, competent participants (Sander, Stopper, 2008). Co-design is a collaborative creative act, aimed at the generation of ideas, processes and open innovation activities: it is an 'envisioning' tool that aims at transparent forms of collaboration led by 'designers', aimed at the realisation of projects and scenarios that have quality of life and collective well-being at their centre (human-centred design). This working methodology takes the form of a pragmatic approach and a thought and operational model for the design of real, everyday contexts of people's lives. The phases and operational tools of the co-design processes constitute the most suitable methodological approach for the conception, implementation, prototyping of actions and the achievement of the expected results of a project with a high rate of "engagement" of communities of young designers, citizens, territorial organisations, educational institutions, public and private bodies.



(Mangano G., 2021). At the MetroCity Co-Design Workshop, each table participant contributed to the work with his or her knowledge and skills on the proposed trajectories, according to a schedule of activities and a timetable shared with all the tables by the facilitators and the initiative's organisers (fig. 8).

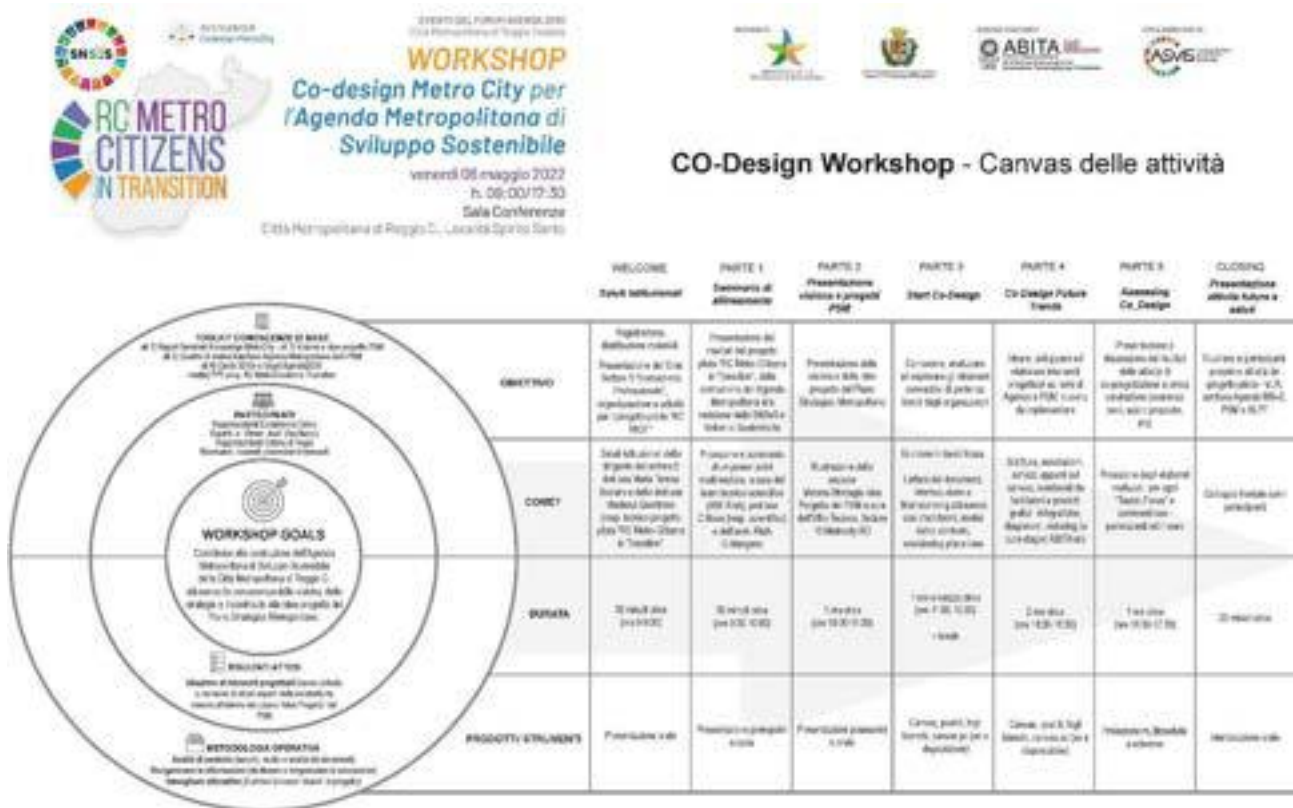


Fig.8 – Co-Design activity program canvas. Source: ABITAlab elaboration, [click to enlarge](#)

The workshop involved all the stakeholders in the project's Ecosystem 2030, namely:

1. Civic Ecosystem: associations, onlus, foundations and groups (already identified through an expression of interest on the pilot project), individual citizens, technicians of the CM bodies and sectors in the Steering Committee, university students (who attended the "Knowledge Metrocity" technical seminars - Action 4)
2. Green Jobs junior experts, selected by the CM - Sector 5
3. Members of the Scientific Committee of the pilot project
4. ABITAlab dArTe student interns
5. PSM Technical Office
6. ABITAlab researchers.



Fig.9 – Co-Design engagement impacts. Source: ABITAlab elaboration



The activities (fig.10) lasted a total of eight hours, divided into:

- a *first phase* of transfer and seminar on the results achieved with the pilot project (by the technical-scientific team of ABITAlab) and the presentation of the Visions and Project Ideas of the Metropolitan Strategic Plan (by the officials and technicians of Sector 10 "Planning, Land Use, Special Laws" Metropolitan City RC);
- a *second phase* of "Future Trends" co-design work with the subdivision into thematic tables coordinated by the junior green jobs experts (see table no. 2), who stimulated those present on the themes of sustainable development and the thematic trajectories acquired with the cycle of seminars of pilot action 4, on which to express themselves in terms of devising intervention strategies and projects of possible integration with the Metropolitan Strategic Plan;
- a final phase of restitution in "public review" and sustainability pre-assessment on the targets of the SDGs Agenda2030 of the project ideas generated at the tables;
- a subsequent phase concerns the systematisation and refinement of the contents, key actions, interventions and other aspects related to the project ideas, with a view to their inclusion in the draft Metropolitan Agenda for Sustainable Development.

Codesign Metrocity	#FutureTrends: Focus tables and project ideas
<p><b>Table 1</b> "Metropolitan Territories for Circular Economy"</p>	<p>Expert jr. Coordinator : Arch. M Festa</p> <hr/> <p>Civic Ecosystem members: Associazione culturale Magnolia (Melito R), Pro Loco Reggio sud APS (Politi G, Romeo C), Arcigay "I Due Mari" Reggio Calabria (Giordano B), Univ. student for graphic output: Filice F, Catalano E</p> <hr/> <p><b>Project Idea Abstract:</b> Regenerate abandoned areas on the coasts and metropolitan rural areas, as places of socio-cultural and environmental connection to rediscover local knowledge and reuse them through the circular economy, promoting sustainable tourism and the critical consumption of natural resources. The added value of this project idea is the contrast to the depopulation of marginal areas, promoting sustainable activities that protect the territory and its agricultural heritage, identity and its natural resources, the landscapes of the Metropolitan City of Reggio Calabria.</p>
<p><b>Table 2</b> "The Smart Way"</p>	<p>Expert jr. Coordinator : PhD Ing. F. Cappellano</p> <hr/> <p>Civic Ecosystem members: APS "Francesco Amendolea" (Saraceno A, Calarco S, Irto G) Associazione Pensando Meridiano (Matranga G, Vitale S), AIGU-Associazione Italiana Giovani per l'Unesco (Bova P), Univ. student for graphic output: Foti L, Porco S.</p> <hr/> <p><b>Project Idea Abstract:</b> The idea revolves around the main objective of increasing public transport services and sustainable mobility, with the target audience being young people. The strategy is to combine good transport planning with agile and efficient service design. In particular, we refer to the model of urban accessibility for the "city of 15 minutes".</p>
<p><b>Table 3</b> "The Mediterranean doors"</p>	<p>Expert jr. Coordinator : PhD. Law. C. Scrufari</p> <hr/> <p>Civic Ecosystem members: Ass. "Amici di Montalto" Reggio Calabria (Musolino G, Musolino E), Ass. Equilibri Pedagogici (Praticò L, Campolo V), Ass. Pensando Meridiano (Leuzzo A), Univ. student for graphic output Labate D. Notaro F</p> <hr/> <p><b>Project Idea Abstract:</b> The project idea focuses on the possibility of regenerating some identified public spaces of the metropolitan city, currently abandoned or in poor condition, so that they can become the subject of urban renewal and new services ("doors", meeting places, opportunities, tourist attractions, social cohesion) and to combine the psychological well-being of the person with the quality of the environment, landscapes and services.</p>
<p><b>Co-design Toolkit</b></p>	<p>Baseline Knowledge Toolkit :</p> <ul style="list-style-type: none"> <li>a) Knowledge Metrocity Seminars Report – <a href="#">click to open file</a></li> <li>b) Documents about SMP, Agenda2030, NSSD – <a href="#">click to open file</a></li> <li>c) Metropolitan Agenda Trajectories – <a href="#">click to open file</a></li> <li>d) SDGs and targets– <a href="#">click to open file</a></li> </ul>

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Co-design toolkit :

- e) Co-design metrocity canvas – [click to open file](#)
  - f) SDGs Social Impact Wheel Canvas – [click to open file](#)
  - g) Idea Sketch – [click to open file](#)
- 

Note: materials elaborated by G.Mangano (ABITAlab)

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*Tab.2 – Co-design Metrocity – project ideas and toolkit. Source: ABITAlab elaboration*



*Fig.10 – Co-Design Metrocity workshop pictures. Source: ph. by P.Bova (dAtTe Unirc)*

# 3

## Knowledge MetroCity: actions for quality training and education towards Green Jobs

### 3.1 Training and information on NSSD Planet and Prosperity Areas for the Civic Ecosystem

#### 3.1.1 «CREIAMO VALORE»: LEARNING GOOD PRACTICES FOR SUSTAINABLE DEVELOPMENT

“Creiamo Valore” is the activity launched within the “RC Metro Citizens in Transition” proposal with the objective of involving the associations of the Civic Ecosystem and the Reggio Calabria metropolitan area in the narration of projects and good practices of sustainable development, in order to monitor their value and contribution to the sustainability vectors of the National Strategy SD (fig.11). All interested bodies, organisations and associations are called upon to contribute in a collaborative manner through the digital space dedicated to “Creiamo Valore” within the civic web platform (see Box n.5). Contributions are published in the digital magazine “Buone Pratiche MetroCity RC 2030”, which can be browsed in the aforementioned web space. A call to associations was launched in September 2020 and is repeated on a monthly basis. There are currently 8 good practices registered (6 associations + 2 authorities) and another 6 are being catalogued as part of Ecosystem 2030.



Fig.11 – Creiamo Valore, engagement and storytelling for actions methodology. Source: elaboration by ABITAlab

#### BOX 5 – “Creiamo Valore” Good SD Practices

**About:** “Creiamo Valore” aims to involve the associations of the Civic Ecosystem and the metropolitan area of Reggio Calabria in the narration of projects and good practices of sustainable development, in order to monitor their value and contribution to the targets of the National SvS Strategy, also through the digital magazine “Good Practices MetroCity RC 2030” browsable in the above-mentioned web space or on Issuu.

**Curators :** Arch. PhD G.Mangano, Prof. Arch. C.Nava (ABITAlab)

**Period :** August 2020 – ongoing



Link Good Practices Digital Magazines at <https://www.rcmetrocitysintransition.com/creiamo-valore>

### 3.1.2 THE SEMINARS CYCLE «KNOWLEDGE METROCITY», PROSPERITY AND PLANET AREAS

The proposed cycle of seminars, under the scientific direction of the ABITAlab centre, provided for 6 thematic seminars open to the Civic Ecosystem that joined the project, associations, interested metropolitan citizens, technicians and professionals in the sector (including those within public bodies), representatives of the steering committee, and university students according to a path offered by the degree course in Architecture and Territory of the Mediterranean University of Reggio Calabria. The seminars were held in the period November 2020 - June 2021 at a rate of one per month within the framework of Pilot Action 4 "Knowledge Metrocity", except for the month of March 2021 when the "SD Preparatory Conference" organised by MiTe was held. The strategic objectives refer to the Prosperity and Planet strategic areas of the NSDS. The proposed path had a threefold purpose: 1. to transfer training and information on the topics to the participants in the cycle of seminars (through the invited discussants); 2. to select topics of interest for the construction of the Metropolitan Agenda of Reggio Calabria; 3. to organise the dedicated focus space in each seminar (entrusted to the discussants) that transfers the issues addressed at the metropolitan level to pursuable processes of territorialisation for the implementation of the 2030 Agenda for the CM of Reggio Calabria.

#### **BOX 6 – The Seminars Cycle “Knowledge Metrocity”**

##### **National Sustainable Development Strategy Areas**

The strategic objectives refer to the strategic areas Prosperity and Planet of NSDS, in particular:

- PLANET

- I. Halting the loss of biodiversity
- II. Ensuring sustainable management of natural resources

PROSPERITY

- I. Funding and promoting sustainable research and innovation
- II. Ensuring full employment and quality training
- III. Affirm sustainable patterns of production and consumption
- IV. Decarbonising the economy

VECTORS OF SUSTAINABILITY

- 2) Culture for Sustainability
- 3) Participation for sustainable development

##### **Thematic trajectories**

1. 1st Technical Seminar "Knowledge MetroCity" - **Presentation of the National Sustainable Development Strategy and the geographical and environmental dimension of the metropolitan territory in transition** (06 nov. 2020)
2. 2nd 'Knowledge MetroCity' Technical Seminar - **'Acting for resilience. Air and climate as a device for urban quality'** (18 dec. 2020)
3. 3rd "Knowledge MetroCity" Technical Seminar - **"Leap into the Neo-Anthropocene: Designing Augmented Cities and Communities"** (29 jan. 2021)
4. Participation to the **Preparatory National Conference of Sustainable Development** (3-4 mar. 2021)
5. 4th "Knowledge MetroCity" Technical Seminar - **The circular metabolism of flows and resources: energy and waste**, with the case of Peccioli (Belvedere S.p.A.) and civic actions (23 apr. 2021)

6. 5th "Knowledge MetroCity" Technical Seminar - "**The 2030 Agenda and the Strategic Plan of the Metropolitan City of Reggio Calabria**. The alliance of sustainable visions for the territory and communities in transition" (28 jun 2021).

The work and contents of the seminars are narrated in the reports drawn up by the technical-scientific team, which portrays the thematic trajectories in relation to the possibility that these are also the guidelines on which to build the metropolitan sustainable development agenda.



Link Knowledge Metrocity actions <https://www.rcmetrocitysintransition.com/knowledge-codesign-greenjobs>

Seminars media gallery : <https://www.rcmetrocitysintransition.com/photo-albums>

The seminars were an important success in terms of participation, also in the "blended" formula that made it possible to operate with great effectiveness even in the period of covid 19 restrictions, out of the time of suspension, and to broaden the direct involvement of civil society, with the knowledge paths undertaken aimed at different targets of age and interest, from secondary school students to university students, active citizens, professionals and interested technicians (fig.12). The training and information activities of pilot action 4 'Knowledge Metrocity', in particular with the cycle of seminars, in terms of importance and impact on the Civic Ecosystem, actually constituted the moment of identification of topics for the growth of knowledge in a 'green jobs' perspective and of trajectories of interest for the construction of the SD metropolitan agenda.

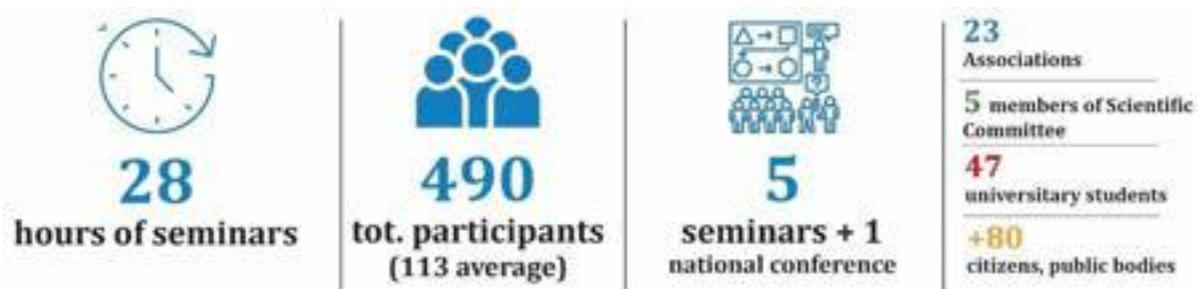


Fig.12 – Results and impact of the seminars cycle – action pilot 4. Source: elaboration by ABITAlab

## 3.2 Quality Education and Training: Goal 4 for the Educational Ecosystem

### 3.2.1 TSOC «THE CHALLENGE OF AGENDA 2030» WITH METROPOLITAN SCHOOLS

In order to involve Secondary School Institutes, the project has opened a space for the transfer of skills and orientation through two editions of TSOC\_ Transversal Skills and Orientation Courses, promoted by the ABITAlab centre of the Department of Architecture and Territory (dArTe) of the Mediterranean University of Reggio Calabria, in agreement with the schools of the metropolitan area of Reggio Calabria. The TSOC aims at transferring knowledge and skills frameworks related to the topics of Sustainable Development on a global and local scale and the implementation of the National Sustainable Development Strategy (SNSvS), ecological and digital transition, with particular reference to issues related to the transformation of the built environment, to the students of High School Institutes of the Metropolitan City of Reggio Calabria. Reference frameworks, experiences and case studies were illustrated on the themes of the challenge to climate change for resilient territories and communities, the conscious use of material resources in the construction sector by activating recycling chains and circular economy processes, the design of integrated 'green' systems for the sustainability



of buildings, and smart devices and networks that consume and produce electricity from renewable sources only, thus contributing to the European 'climate neutrality' objectives. Furthermore, experiences and skills on the topics of integrated design and prototyping with digital manufacturing applied to the architecture and construction sector were transferred. To this end, the Department of Architecture and Territory offered the TSOC member schools a 'green' training course, also through the opening of its advanced and affiliated laboratories, from the world of innovative companies active in the area. The challenge of the 2030 Agenda with Goal 4 - Quality Education, moves through themes and narratives of experiences to be transferred to students, on Goals 7, 9, 11, 12, 13 on the strategic areas of the SNSvS: Planet and Prosperity and on the Sustainability Vector "Culture for Sustainability - Education and Training" (fig.13). At the end of the knowledge transfer activities (lectures and seminars), the Open School 'Agenda2030' was initiated, workshop paths where students practised experimental projects on the topics of digital manufacturing (modelling and 3D printing) and circular design (projects with the use of environmentally friendly materials and from recycling supply chains), which were finally presented in an open public event (fig.14).



Fig.13 – Results and impact of the TCOP “Agenda2030”. Source: elaboration by ABITAlab

The two editions of TSOC "The Challenge of Agenda2030" for High School Institutions took place in two editions (see Box 7):

- I edition (a.s. 2020/2021): 30 h lectures + 20 h workshops (Jan-May 2021)
- Second edition (a.s. 2021/2022): 30 hours, distributed over 10 lessons/seminars of 2 h each (tot. 20 h) + no. 2 outdoor meetings (tot. 4 h) + 6 h Open School + 2 outdoor activities (Feb-May 2022).

### BOX 7 – “The challenge of Agenda2030”. Quality education with schools

#### 1st EDITION – 2020/2021

For the first edition of the TCOP, a 30-hour programme of frontal lectures by dArTe lecturers and junior researchers and experimentation in the Open School, with the participation of the Innovative Start-Up PMopenlab srls, was implemented via webinar in the transfer phase of the seminars and in-presence in the presentation phase of the Open School projects.

**Curators:** Department of Architecture and Territory-dArTe UniRC, ABITAlab dArTe UniRC, PMopenlab srls, ass. Pensando Meridiano

**Duration:** n.30 hours distributed between lecture activities, seminars and experimental application. Preferably 20h of lectures/seminars and 10h of application (Open School).

**Implementation:** n.10 lectures/seminars of 2h each + n. 3 Open School meetings (3h+3h+4h);

**Type of communication:** powerpoint presentations; videos.

**Agenda and themes:** [click here](#)

**Schools involved:** High School Institute "A. Righi"-Reggio Calabria, High School Institute "E. Fermi"-Bagnara (RC), Scientific High School "A. Volta"-Reggio Calabria, Higher School Institute "F. Severi"-Gioia Tauro (RC)

**Media:** [OpenSchool photo-album](#)

#### 2nd EDITION – 2021/2022

After the first edition, the PCTO "The challenge of Agenda 2030 - Green School II edition. Goal 4 for quality education and skills enhancement towards the Ecological and Digital Transition with the "Green Schools" of the Metropolitan City of Reggio Calabria", with the aim of transferring knowledge and skills frameworks related to the themes of Sustainable Development on a global and local scale and to the implementation of the National



Sustainable Development Strategy (SNSvS), Ecological and Digital Transition, with particular reference to issues related to the transformation of the built environment, to the students of High School Institutes of the Metropolitan City of Reggio Calabria.

**Curators:** Department of Architecture and Territory-dArTe UniRC, ABITAlab dArTe UniRC, PMopenlab srls

**Implementation:** For the 2021/2022 school year, a 30-hour course has been set up, distributed over 10 lessons/seminars of 2 hours each (tot. 20 hours) + 2 outdoor meetings (tot. 4 hours) + 6 hours of Open School.

**Type of communication:** powerpoint presentations; videos

**Agenda and themes:** [click here](#)

**Schools involved:** High School Institute "A. Righi"-Reggio Calabria, Scientific High School "A. Volta"-Reggio Calabria

**Media:** [Seminars and OpenSchool 2022 photo-album](#) | [Video storytelling OpenSchool "Agenda 2030" - click here](#)



Link TCOP 2030 web platform space <https://www.rcmetrocitycitizensintransition.com/pcto-agenda2030> - TCOP Activities Presentation: [click here](#)



Fig.14 – Moments of the Open School “Agenda2030” Final Review- 20 may 2022. Source: ph. Courtesy A.Leuzzo

### 3.2.2 ADVANCED TRAINING ON SUSTAINABLE DEVELOPMENT, ECOLOGICAL AND DIGITAL TRANSITION IN UNIVERSITY COURSES

The "RC Metro Citizens in Transition" project supports spaces for the direct transfer of the themes of sustainable development and ecological and digital transition in the didactic and training courses provided by ABITAlab in Workshops and Thesis Ateliers for Architecture degree courses at the Univ. "Mediterranea di Reggio Calabria", which can take place in university courses, in seminar cycles, in dissemination at national and international conferences and in promotional activities and/or presence at Specialisation Schools and Masters. So far, 2 seminar cycles and 1 design workshop (fig.14) have been held within the Thesis Atelier "Architecture of Transition on Climate Change Scenarios. Advanced design and enabling technologies for hybrid buildings' (February-June 2022, a.y. 2021/2022), in particular:

a) *URGES Workshop - Urban Green Shapes "Quality, Efficiency and Neighbourhood Wellbeing"* (9-13 May 2022, Matera) Research project for interregional and transnational cooperation (POR FESR 2014-2020 REGIONE BASILICATA - LINEA A - Axis 4 - Renovation of buildings/ Energy Efficiency (green and digital), with partners DICEM-Unibas, Agenzia Lucana di Sviluppo ed Innovazione in Agricoltura (ALSIA), Universidad de Sevilla, Departamento de Proyectos Arquitectonicos, University of Ljubljana\_ Faculty of Architecture, Unich- Department of Architecture, UniRC - Department of Architecture and Territory, ABITAlab and PMopenlab srls;



**12 students**  
**6 ABITAlab researchers**  
**1 startup**  
**60 hours of workshop activities**

b) the Seminar Cycle '*ADDITIVE MANUFACTURING 4 PROTOTYPING. 3D printing and arduino technologies for the manufacture of prototypes of technological components designed with parametric tools*' (one week - 26/29 April 2022);



**38 students**  
**35 hours of activities (20 theory + 15 workshop)**  
**1 startup**  
**8 projects of advanced design and 3d printing**

c) The Seminar cycle '*Regenerative design for zero-impact buildings towards climate neutrality. Energy-environmental assessment protocols, tools and digital technologies [SDGs, NbS+SUDS, Leed+CAM]*' (three weeks, February-March).



**52** students  
**60** hours of activities (30 seminars + 30 workshop)  
**3** thematic modules  
**3** workshops  
Blended form

The experiences and higher education courses conducted by ABITAlab at dArTe at the Mediterranea University of Reggio Calabria are illustrated on the platform at the link <https://www.rcmetrocitysinttransition.com/alta-formazione>

# 4

## Monitoring the Knowledge Metrocity action with NSDS indicators and Sustainability Vectors

### 4.1 The National Strategic Choices and NSDS Strategic Objectives Indicators for Quality Education and Training Actions

According to the MATTM (2017), the *"Monitoring and evaluation of policies, plans, projects includes the objectives of ensuring the creation and implementation of integrated systems for the monitoring and evaluation of policies, plans and projects. These systems constitute the reference framework for SNSvS evaluations, for the analysis and assessment of the overall effects of the entire decision-making process, making it possible to understand whether and how the dynamics at work in the territories are consistent with the objectives set"*. For action 4 'Knowledge Metrocity', it was possible to propose activities of scientific-university competence for the transfer of knowledge in training events, seminars, courses, etc., targeting not only young people, but also the staff of organisations, professionals in various capacities, and representatives of civil society who can increase their skills on sustainable development issues. This trajectory made it possible to respond to the targets and popular selected indicators of SDS, not only through a rigorous evaluation and monitoring system, but also through a new narrative of SDS, based on the communication of concrete actions of continuous transfer.

Moreover, the accompanying activities of the SD National Table, in which the body has been represented since June 2020, have made the territorialisation process of the national sustainable development strategy more informed and effective, for its transfer to the territory. In fact, exchanges with the other Metropolitan Cities, information on the work related to the study of the selected Indicators and the initiatives proposed by the National Table and competing projects, are of interest and have seen the assiduous participation of representatives of the authority's technical-scientific working group.

The monitoring of the Knowledge Metrocity action concerned the consistency of the action with national strategic planning instruments. Specifically, the classification of the activities carried out according to National Strategic Choices (NSC), National Strategic Objectives (NSSO) and monitoring indicators, associated with the NSSOs and NSOs of the SNSvS 2022, was carried out.

With regard to the PNRR Missions, the Action tracks Missions 1 (Digitalisation, Innovation, Competitiveness, Culture and Tourism), 4 (Education and Research), 5 (Inclusion and Cohesion).

Specifically, Mission 1 is traced in components M1C1 and M1C2, with reference to the impacts obtained on digitisation and innovation in PA and on employment and quality training; Mission 4 is met consistently with component M4C1 through the outputs and outcomes deriving from training and information activities; finally, Mission 5 is traced in component M5C1, consistently with the impacts obtained in terms of labour policies. In addition, the work on the identification of tracked SSNs and OSNs made use of the ISTAT and ISTAT SISTAN SDGs indicator sources (see NSDS 2022) (Fig. 16).



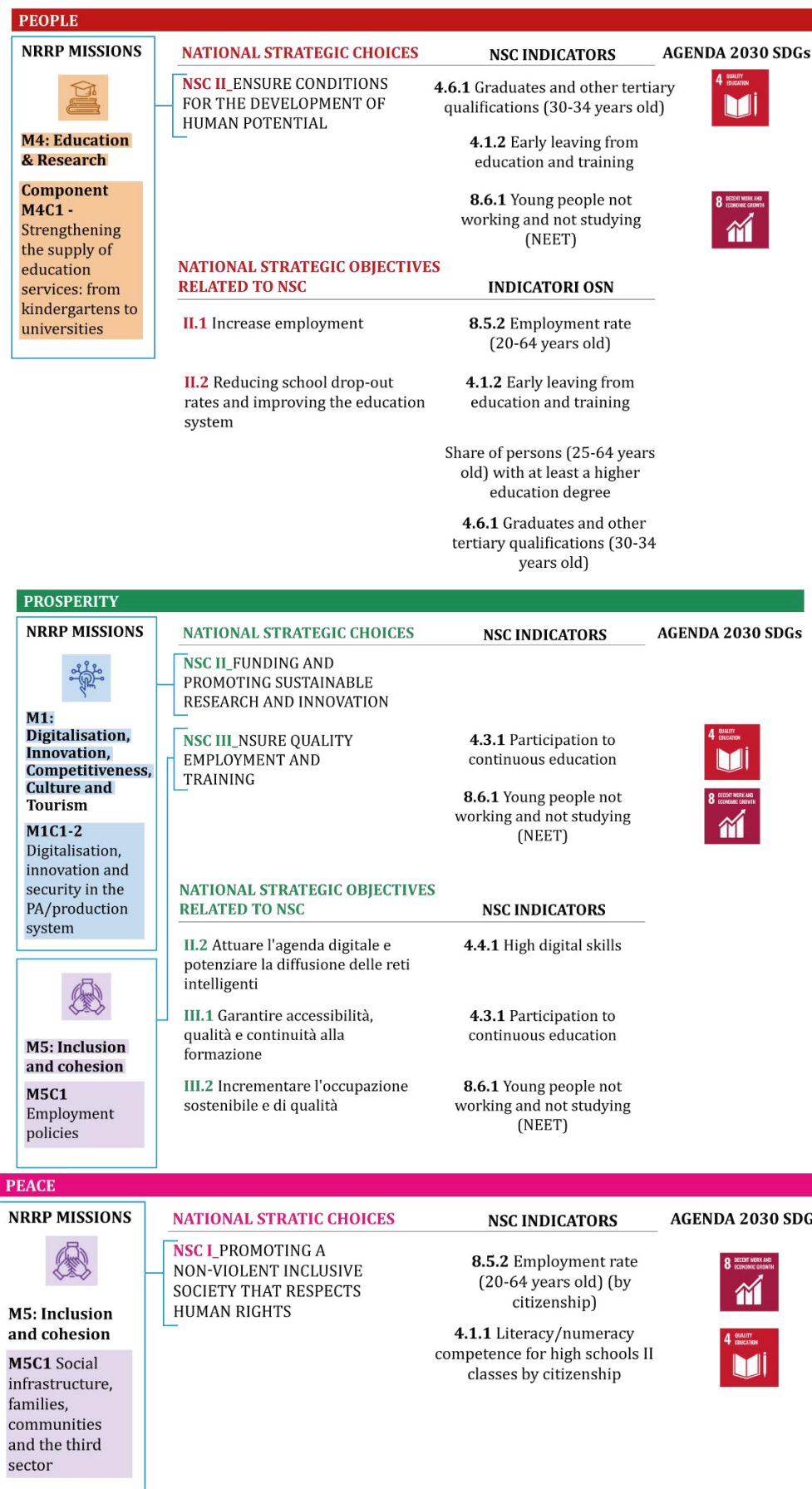


Fig. 16: The monitoring of the Knowledge Metrocity action in terms of the impacts achieved with reference to the Areas, the NSNs, the NSOs of the SNSvS 2022, the Missions and Mission Components of the NRP and the SDGs. Source: ABITAlab elaboration

Finally, each identified SSN shows the achievement of specific targets of the Sustainable Development Goals: targets: 4.1.2, 4.3.1, 4.4.1, 4.6.1 (Goal 4 - Quality Education); targets: 8.5.2, 8.6.1 (Goal 8 - Decent Work and Economic Growth) (Fig. 17).

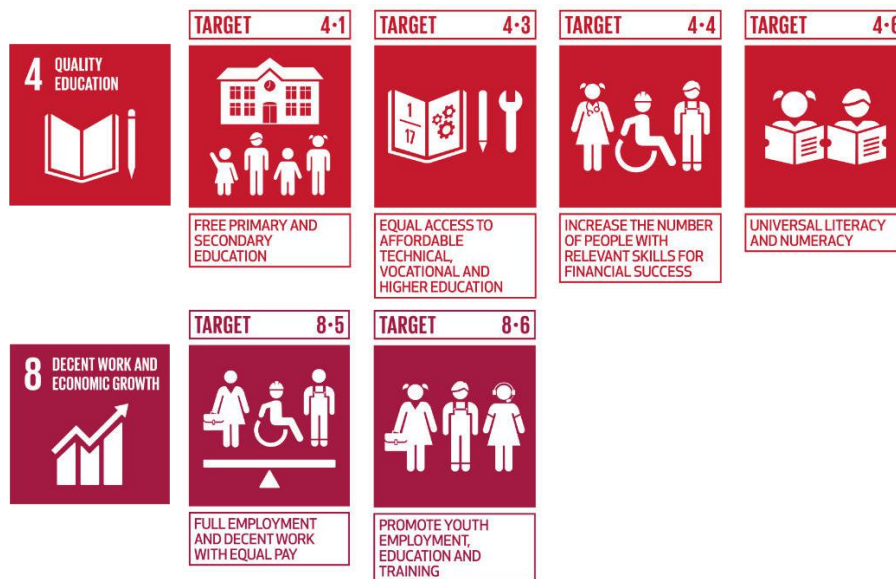


Fig. 17: The Sustainable Development Goals and related targets tracked by the activities carried out. Source: ABITAlab elaboration

In conclusion, with reference to the targets identified, it is possible to consider that the threefold purpose of the "Knowledge Metrocity" action has been achieved: 1. to transfer training and information on the issues to the participants in the series of seminars; 2. to select topics of interest for the construction of the Metropolitan Agenda of Reggio; 3. to organise the dedicated focus space in each seminar that transfers the issues addressed at the metropolitan level to pursuable processes of territorialisation for the implementation of the Agenda 2030 for the CM of Reggio Calabria.

## 4.2 Knowledge MetroCity for Sustainability Vector 2 «Culture for Sustainability»

The knowledge transfer and training activities were conducted with reference to the strategic area "Vectors of Sustainability" of the National Sustainable Development Strategy, on the Monitoring and Evaluation of the Sustainability Goals of all the actions of interest for the construction of the Metropolitan Agenda. Through dialogue with the Authority's institutional representatives, we wanted to propose the possibility that the Metropolitan Agenda on Sustainable Development itself could become a governance and guiding tool for the Authority's choices, even after the closure of its pilot project. In particular, it is about the possibility that the Sustainability Vectors, transferred to the metropolitan agenda, may also find traceability in the next territorial investment plans and programmes (NOP Metro, Pacts for the SOUTH, Recovery Plan, etc.), as well as in the MSP instruments and/or in the MUP, by implementing territorial coherence policies and monitoring the impacts on the SNSvS areas through the selected indicators.

Specifically, consistent with the focus of the action, the activities and impacts achieved responded most to the areas and trajectories of Sustainability Vector 2 "Culture for Sustainability"; however, in the activities of engaging the civic and educational ecosystem and participating in the activities of National Table Vector 3 "Participation for Sustainable Development" (Fig. 18).



# Vector 2

## “Culture for Sustainability”

### Education and Training

#### Objectives

#### 1 INNOVATING THE EDUCATION SYSTEM AND DEVELOPING SKILLS FOR SUSTAINABILITY



#### Activities

- Launch of the Metropolitan Forum + Civic Ecosystem and RCMCiT web platform presentation (9 Sept. 2020)
- Thematic table and update with Civic Ecosystem (30 Sept. 2020)

#### Trajectories

**1.1** *innovate the education system and educational models and orient them towards sustainability and the transformation of knowledge into skills*, in an inter- and trans-disciplinary perspective, favouring research, innovation and the dissemination of a culture based on the values of peace, non-violence and global citizenship

**1.2** *Enhancing learners' skills necessary to promote sustainable development and lifestyles by educating in complexity, critical and systemic thinking, creativity and transformation*

#### Activities

- N.1 working table with "Green Jobs" experts and Civic Ecosystem (Apr. 2022)
- N.1 co-design meeting with Civic Ecosystem and "Green Jobs" junior experts (7 Jul. 2021)

#### 2 PROMOTE TRAINING FOR SUSTAINABLE DEVELOPMENT THROUGHOUT LIFE



#### Activities

- N.6 "Knowledge Metrocity" technical seminars (Pilot Action 4)
- N.1 meeting with civic ecosystem and junior experts "Green Jobs" (jul.2021)
- N.18 meetings ABITAlab group / CM Sector 5 (Feb.2020-Jan.2022)

**2.1** *promote training and institutional capacity-building aimed at strengthening decision-making skills for sustainable development and public policy coherence, including through the use of foresight methodologies*  
turo e riprogrammazione (foresight)

**2.2** *Promoting training courses oriented towards the acquisition of new professional skills related to strategic sectors for sustainable development*

**2.3** *Promoting the training of trainers and educators* and strengthening their skills for sustainable development

*Attività*

PCTO "The Agenda2030 Challenge" for High School Institutions

**a)** I edition (y.s. 2020/2021): 30 hrs of lessons + 20 hrs of workshops (Jan-May 2021)

**b)** 2nd edition (a.s. 2021/2022): 30 hours, distributed in 10 lessons/seminars of 2 hrs each (tot. 20 hrs) + n. 2 meetings outdoors (tot. 4 hrs) + 6 hrs Open School + 2 activities outdoors (Feb-May 2022)

**Higher education activities with ABITAlab dArTe for university students**

**c)** Cycle of Seminars "The regenerative project for zero-impact buildings towards climate neutrality. Energy-environmental assessment protocols, tools and digital technologies [SDGs, NbS+SUDS, Leed+ CAM]" (three weeks (February-March) - a.y. 2021/2022)

**d)** Thesis Atelier 'Architecture of Transition on Climate Change Scenarios.

Advanced design and enabling technologies for hybrid buildings" (February-June 2022 - a.y. 2021/2022)

**3** **STRENGTHENING EDUCATION AND TRAINING FOR SUSTAINABLE DEVELOPMENT BY FOCUSING ON SYNERGIES BETWEEN INSTRUMENTS**



**3.1** *Recognise and strengthen actors, initiatives, contexts and places of education and training, supporting the protagonism of the new generations and promoting active citizenship*

**3.2** *Promote synergy between sustainability education and training initiatives, including at European and international level, and support the creation of educating communities*

*Activities*

- Launch of the Metropolitan Forum + Civic Ecosystem and RCMCiT web platform presentation (9 Sept. 2020)
- Thematic table and update with Civic Ecosystem (30 Sept. 2020)

## Information and Communication

### 4 DEVELOP SHARED LANGUAGES, TOOLS AND VENUES TO INFORM AND COMMUNICATE SUSTAINABILITY



**4.1** Promoting pathways to literacy and the definition of a shared language on SNSvS and Agenda 2030

**4.2** Constructing and testing new storytelling paths on SNSvS and developing effective communication to spread a vision of a future based on sustainability

**4.3** Innovate the places, methods and tools of information and communication, also supporting the role and initiatives of the younger generations to foster widespread knowledge on sustainable development

#### Activities

- N.1 working table with "Green Jobs" experts and Civic Ecosystem (Apr. 2022)
- N.1 co-design meeting with Civic Ecosystem and "Green Jobs" junior experts (7 Jul. 2021)
- N.1 engagement activity with the "Let's create value" best practice call (Sept. 2020)

## Vector 3

# “Participation for Sustainable Development”

## Mapping and Formalisation

### Objectives

#### 1 MAPPING AND EMPOWERING NON-STATE ACTORS



### Trajectories

**1.1** Mapping existing actors and instruments and recognising roles and responsibilities in the context of SNSvS and territorial sustainability strategies

**1.2** Enabling the Forum for Sustainable Development, the National Conference for Sustainable Development and the territorial Fora as structured and permanent spaces for the involvement of non-state actors in the implementation process of the NSSD at different territorial levels

#### Activities

- Launch of the Metropolitan Forum + Presentation of the Civic Ecosystem and RCMCiT web platform (9 Sept. 2020)

**1.3** *Recognising and supporting the role of the younger generation as agents of change for sustainable development*

*Activities*

- N.1 working table with "Green Jobs" experts and Civic Ecosystem (Apr. 2022)
- N.1 co-design meeting with Civic Ecosystem and "Green Jobs" junior experts (7 Jul. 2021)
- N.1 engagement activity with the "Let's create value" best practice call (Sept. 2020)

**2** **MAPPING AND ENABLING THE INSTITUTIONAL ACTORS**



**2.2** *Enabling the Technical Tables between MiTE and the Regions, Autonomous Provinces and Metropolitan Cities as structured mechanisms of permanent and multi-level confrontation for sustainable development and policy coherence*

*Activities*

- N.2 meetings: Civic Ecosystem presentation and web platform - 9 Sept 2020; Thematic table and Civic Ecosystem update - 30 Sept 2020

*Fig. 18: The impacts of knowledge transfer and vocational training activities, in terms of objectives achieved and trajectories followed, with reference to the strategic area "Vectors of Sustainability" of the National Sustainable Development Strategy, for the construction of the Metropolitan Agenda. Source: ABITAlab elaborations*

In fact, the participation activities of the civic and educational 'ecosystems' monitored the trajectories of sustainability vectors with regard to common knowledge, awareness and communication for involvement in public policy processes and transfer on green jobs issues.



**VECTOR 2 "CULTURE FOR SUSTAINABILITY - EDUCATION AND TRAINING"**

**1**

Topics, process and methodology for preparing the VLR of Metropolitan City of Reggio Calabria

**2**

The implementation of Agenda 2030 for the Metropolitan City of Reggio Calabria

**3**

Knowledge MetroCity: actions for quality training and education towards Green Jobs

**4**

Monitoring the Knowledge Metrocity action with NSDS indicators and Sustainability Vectors

**5**

Monitoring the Knowledge Metrocity action with NSDS indicators and Sustainability Vectors



**CAPABILITY AND COMMUNITIES IN TRANSITION**

**VECTOR 3 "PARTICIPATION FOR SUSTAINABLE DEVELOPMENT"**

**FUTURIST VLR MANIFESTO**

"Digital narration", ABITAlab 2022

*Clickable hyperlinks on icons and figures*

# Co-Design



[www.rcmetrocitizensintransition.com/knowledge-codesign-greenjobs](http://www.rcmetrocitizensintransition.com/knowledge-codesign-greenjobs)

VLR



**Ecosystem  
2030**

[www.rcmetrocitizensintransition.com](http://www.rcmetrocitizensintransition.com)

# Assessment



[www.rcmetrocitizensintransition.com/goalsmetrocity](http://www.rcmetrocitizensintransition.com/goalsmetrocity)

*“We are on the extreme promontory of the centuries!”*

M.T. Marinetti



# 5

## Future Trends and Conclusions

### 5.1 Activation of new paths on planning tools, programming and competitive projects

#### 5.1.1 SUSTAINABLE ASSESSMENT GOALS METROCITY

The work on the construction of the Metropolitan Agenda and the active participation in the Ministerial Table on the occasion of the revision of the SNSvS allowed for the activation of the "Sustainable Assessment Goals Metrocity" project, initiated within one of the main aims of the Agendas: to strengthen and qualify the focus on sustainable development within the Metropolitan Strategic Plans, with a view to fully integrating all the dimensions of sustainability in the metropolitan planning, programming and management instruments. This condition defines the Metropolitan Agenda for Sustainable Development not as a new and additional planning instrument, but rather as a device for integrating and orienting existing and/or ongoing instruments.

Specifically, in the framework of Phase I of the Sustainable Assessment Goals Metrocity (March - May 2022), activities were carried out to update and implement the monitoring system "Indicators and Vectors of the NSDS" [1] of the MSP and to update the traceability of territorial investments related to the interventions foreseen within it, in coherence with the NAPCSDP (National Action Plan for Policy Coherence for Sustainable Development) [2].

[1] The activities to update the monitoring system mainly concerned the tracking of the Sustainability Vectors derived from the most recent document of the National Sustainable Development Strategy (SNSvS22 draft 02 - doc in progress). In particular, the activity included the identification of the Sustainability Targets and Trajectories, through which, within the SNSvS02 2022, the Sustainability Vectors of the Strategy are defined as 'enabling factors' of sustainable development; this definition, identifies in the **Sustainability Vectors** a support to the 'enabling actions' already foreseen for each 'Project Idea' of the MSP. Furthermore, the monitoring system was implemented in the context of the expected results, through the classification of each "Idea Project" according to the **National Strategic Choices** (NSS), the **National Strategic Objectives** (NSSO) and the **monitoring indicators**, associated to the NSSO and NSO in the latest draft of the SNSvS revision. Finally, for each 'Project Idea', the MDGs and targets of the related **Sustainable Development Goals** were associated with each SSN (Fig. 13a).

[2] The updating activities of the Policy Coherence Framework of the "Project Ideas" section of the Metropolitan Strategic Plan concerned national and regional strategic planning levels. In particular, the traceability of territorial investments has been updated through the identification of the **Missions** and **Mission Components** of the **National Recovery and Resilience Plan**, of the **Programming Objectives POR Calabria 21-27** (DGR n. 122, 28/03/2022) and of the **Areas of Innovation from S3 Calabria** (DGR n. 121, 28/03/2022) (Fig. 19b).



Fig. 19a: Extract of the MSP implemented and updated with reference to the contribution to the achievement of the Programming Objectives 21-27 (ROP Calabria 21-27 and S3 21-27), to the traceability of the intervention with the Missions and Mission Components of the NRP and to the SNSvS 2022 Sustainability Vectors. Source: ABITAlab elaboration



Fig. 19b: Extract of the implemented and updated MSP with reference to the implementation of the NSSD on MSP (Areas, NSSDs and NSOs with related indicators) and the contribution to the Sustainable Development Goals. Source: ABITAlab elaboration

Finally, by equipping the MSP with a monitoring system of the sustainability (*sustainable assessment*) of the planned interventions, the Sustainable Assessment Goals Metrocity project acts in coherence with Category C of the project proposals envisaged in the public notice addressed to the Metropolitan Cities for the presentation of expressions of interest for activities pursuant to Article 34 of Legislative Decree no. 152/2006 and subsequent amendments and integrations (see Annex 5).


### 5.1.2 SOCIAL AND EMPLOYMENT INCLUSION: THE GREEN JOBS OF THE FUTURE

In addition to the transfer of knowledge (information and training) on all the thematic areas of the National and Regional Strategy, the focus adopted in the construction of the Metropolitan Agenda of Reggio Calabria has been to take a particular interest in implementing the objectives aimed at the Prosperity area (ob.I.1; I.2; I.3; II.1; II.2), regarding quality training and growth in the professions through technology transfer, in order to affect one of the socio-economic weaknesses of the metropolitan territory. The Metropolitan City of Reggio Calabria is implementing, through its sectoral strategies, these priorities contained in the Metropolitan City/M MATTM Agreement, within the framework of the implementation of the National Strategy on Sustainable Development. In particular, the Authority has intended to invest above all in the particular fragile condition of the emigration of the young generations in search of qualified work. For this reason, the social inclusion of young workers through quality education was presented as one of the priorities of the Project "Rcmetrocitizens in Transition" (<http://www.rcmetrocitizensintransition.com>), contributing to the achievement of the objectives of the SNSvS and the SRSvS in the metropolitan area, through actions of knowledge transfer on sustainability, objectives of the SNSvS and the SRSvS in the metropolitan area, on sustainable development issues to the target groups and promoting the professional inclusion of highly qualified profiles on issues related to the fields of interest of the 2030 Agenda, through the selection of "Junior Green Jobs Experts

In this context, the direction of the steering committee of the Pilot Project for the construction of the Agenda entrusted to the Metropolitan City's Sector 5 'Professional Training, Universities and Community Policies' and the technical-scientific assistance of the ABITAlab centre, which took care of its steering, dissemination and dissemination, made it possible to respond to category B of the public notice (MAATM, 2019) 'Involvement of civil society'.

As a result, sector 5, in adherence to its institutional governance framework and in the direction of the policies of reinforcement and inclusion at work, as outlined in the proposed agreement, launched the public selection of no. 6 "Green Jobs" Junior Experts, to be hired for collaborative activities in the project itself. The figures selected by the Reggio Calabria Metropolitan City Authority are:

- No. 1 Junior Assistant in **Territorial Governance**;
- No. 1 Junior Assistant in **Support System and Project Action Monitoring System**;
- no. 1 Junior Assistant in **Technical/Scientific Dissemination**
- 1 Junior Assistant in **Urban Tactics Dissemination**;
- 1 Junior Assistant in **Management and Promotion Hackaton**;
- no. 1 Junior Assistant in **Project Action Monitoring Management**.

A first result of the social and labour inclusion in the construction of the Metropolitan Agenda was the start-up of a collaboration process between the associations and the junior experts for green jobs, during the co-design activities, being able to invest in the possibility of acting on the fragilities of the metropolitan social capital, by focusing on the strength of the civic ecosystem as a catalyst for the dissemination and transfer of values, knowledge, expertise and operativeness in the territories, through the ability of the member associations to co-design and co-produce together with the junior "green jobs" experts selected by the Metropolitan City Authority. Finally, the documents and impacts related to the activities carried out for the green jobs remain available and can be monitored on the pilot project platform .

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Ass. Amici di Montalto: <http://www.amicidimontalto.it/>

APS Francesco Amendolea: <https://www.assamendolea.it/>

Ass. Arcigay – I due mari RC: <https://www.arcigay.it/reggiocalabria/#.YpyQUXZBy3B>

Ass. Culturale Magnolia RC: <https://www.magnoliarc.org/>

Ass. Equilibri Pedagogici: <https://www.associazioneequilibripedagogici.com/>

Pro Logo Reggio Sud – Bocale: [https://www.facebook.com/Pro-LoCo-Reggio-Sud-APS-102463291780027/?ref=page\\_internal](https://www.facebook.com/Pro-LoCo-Reggio-Sud-APS-102463291780027/?ref=page_internal)

AIGU – sez. Reggio Calabria: <https://aiguofficial.it/>

## **ANNEXES (digital hyperlinks)**

*Annex no. 1 - Knowledge MetroCity Technical Seminar Reports* ([click here](#))

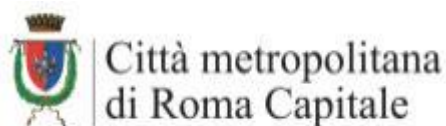
*Annex no. 2 - "Creiamo Valore" digital magazine* ([click here](#))

*Annex no. 3 - TSOC Reports "The Agenda2030 Challenge"* ([click here](#))

*Annex no. 4 - Contribution to the Preliminary Document of the RC Metropolitan City MSP* ([click here](#))

*FUTURIST MANIFESTO of CODESIGN and ASSESSMENT for the VLR* ([click here](#) for large-format graphic-textual work with links)





# VOLUNTARY LOCAL REVIEW 2022

Metropolitan City of  
Rome-Capital (Italy)







## PREMISE

The National Strategy for Sustainable Development (Strategia Nazionale per lo Sviluppo Sostenibile - SNSvS) entrusts an essential implementation role to the Regions, Autonomous Provinces and Metropolitan Cities. This entitlement occurs through the adoption by the Regions of their own Regional Sustainable Development Strategies (Article 34 of Legislative Decree no. Lgs 152/06), which take into account the specificities that each territorial context presents within the framework designed by the national strategy and international agreements.

In July 2019 the MATTM (Ministry of the Environment for the Protection of the Territory and the Sea), now MiTE (Ministry of Ecological Transition), launched a program specifically addressed to Italian Metropolitan Cities (Italian Authorities established in 2015 as a result of the reform of metropolitan cities and provinces pursued by the Law n. 56/2014: the so called "Law Delrio"). This programme provided for the metropolitan cities to define and implement *Metropolitan Agendas for Sustainable Development* (AmSvS).

This initiative has been supported according to a "Collaboration Agreement" between the Ministry and the Metropolitan Cities/Authorities within the CREIAMO PA24 Project funded by the 2014-2020 EU (European Union) Programme called PON Governance and Institutional Capacity Program.

In this context, the Metropolitan City of Rome-Capital (CmRC) presented the project called *Capital Metropolis - Let's support the future* ("Metropoli Capitale - Sosteniamo il futuro"). This project has been accepted and signed in March 2020 in agreement with the MiTE. The project started on June 4, 2020 ending by June 2022. The *Capital Metropolis - Let's support the future* project splits into three specific intervention categories provided for under the Agreement with the Ministry:

- Category A. Building governance of Metropolitan Agendas for Sustainable Development (AmSvS);
- Category B. Involvement of civil society;
- Category C. Definition of Metropolitan Agendas for Sustainable Development (AmSvS) and integration with the Metropolitan Strategic Plan (PSM).

*Capital Metropolis - Let's support the future* is underway. The AmSvS will embed an evaluation of the results of the project. The project develops through a combination of quantitative, comparative and qualitative methodologies pursuing three objectives: (1) the analysis of the "state of the art of the sustainability" of the metropolitan territory; (2) a comparison with other Italian metropolitan cities; (3) the launch of projects aimed at achieving the objectives/targets of the 2030 Agenda anchored on place-based resources and civil society initiatives, existing and potential partnerships, innovations in the field and opportunities for convergence with other strategic policy initiatives in progress.

### **FOCUS – Voluntary Local Review (VLR)**

The Metropolitan City of Rome-Capital (CmRC) has started the process of drafting the Voluntary Local Review (VLR) as a tool for (1) guiding metropolitan policies on Sustainable Development based on actual local performance, (2) monitoring the potential for inversion of the dynamics that have produced the unsustainability of the development model, (3) involvement of the actors of sustainable development and related projects for the achievement of sustainable development objectives and targets in the 2030+ time horizon. The VLR integrates the qualitative and quantitative dimensions of the Metropolitan Agenda for Sustainable Development ("*Capital Metropolis - Let's support the future*") and provides a solid basis for convergence with the Metropolitan Strategic Plan (PSM). The VLR drafting process is in its initiation stages. Therefore, this document will show the working methodology, the policy design process within which the VLR locates, and the convergence between the Metropolitan Agenda for Sustainable Development and the Metropolitan Strategic Plan of which the VLR represents a supporting element.



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## Introduction

The reform of metropolitan cities and provinces launched in Italy with Law 56/2014 marks a fundamental turning point for the governance of large urban regions (called Metropolitan Cities/Authorities). As part of this reform, the Metropolitan City of Rome-Capital initiates a long and complex process of redesigning institutional and territorial governance in line with the provisions of the law, which entrusts the following functions to metropolitan cities: strategic development of the metro area; the promotion and integrated management of services, infrastructures and communication networks of interest to the metro area; the care of institutional relations (at one's level), including those with European cities and metropolitan areas.

The metropolitan agenda for sustainable development and the Metropolitan Strategic Plan represents two pillars of the new Metropolitan City / Authority of Rome-Capital (CmRC) governance. The basic steps of this process are reconstructed below.

In October 2015, the Metropolitan City of Rome-Capital started the strategic planning process by approving the "Guidelines for preparing the Metropolitan Strategic Plan of the Metropolitan City of Rome Capital (Council Resolution no. 29 of 27 October 2015).

In March 2016, the Metropolitan Authority proceeded by establishing the "Central Office for Strategic Development and Coordination of the Metropolitan Territory" and approving a revised version of the previous guidelines: "Policy Addresses Document for the Strategic Plan" (Metropolitan Council Resolution no.48/2016).

In September 2020, the Preliminary Document of the Metropolitan Strategic Plan was approved (Decree of the Metropolitan Mayor n.99 of 1/09/2020). The document clarifies the framework of opportunities within which the Strategic Planning process will develop, i.e. the framework of international and national policies and programs (UN Agenda 2030, Agenda Urbana Europea, ReAct, Next Generation EU / PNRR etc.). The UN Agenda for Sustainable Development 2030 is the pivot of this anchoring to international policies. It is consistent with the Italian government's National Strategy for Sustainable Development, approved by the Interministerial Committee for Economic Planning (CIPE) on 22 December 2017, with a Resolution published in the Official Gazette on 15 May 2018. This national strategy defines the guidelines of the economic, social and environmental policies to achieve sustainable development goals by 2030.

CmRC addresses its governance model by converging and aligning all policy actions on the theme of Sustainable Development. The Metropolitan Agenda for Sustainable Development is where this convergence is made evident. This Agenda was launched as part of the Agreement with the Ministry for Ecological Transition (MiTE) stipulated in 2019 (in line with the Bologna Charter for the Environment - Metropolitan cities for sustainable development, signed by the Metropolitan Mayors on 8 June 2017 on the occasion of the G7 Environment and in March 2018 within the Urban Agenda for sustainable development). The general aim of the Agreement between the Ministry and Metropolitan Cities (with a financial endowment of 2,500,0000 euros) is to develop collaboration channels with the Metropolitan Cities to define coherent strategic tools capable of contributing to the achievement of the regional objectives for sustainable development. In particular, the Agreement promotes a collaboration to define metropolitan agendas for sustainable development, which are oriented toward implementing the 2030 Agenda and national and regional sustainable development strategies concerning the social, environmental and economic dimensions of sustainability.

In 2021, in line with the guidelines and recommendations of the MiTE, CmRC started a process of alignment between the Metropolitan Strategic Plan (PSM) and the Metropolitan Agenda for Sustainable Development (AmSvS) with the collaboration of universities, research centres and consultants. The PSM represents the convergence framework of the various operations and, particularly between

AmSvS and PSM itself, proposing the strategies of the PSM as a way to territorialise (and implement) the Agenda's goals. The coincidence between the start-up times of the Metropolitan Strategic Plan and those of the MiTE Agreement on the 2030 Strategy, which involved metropolitan cities, represented a significant opportunity. The coincidence between the start-up times of the Metropolitan Strategic Plan and those of the MiTE Agreement on the 2030 Strategy, which involved metropolitan cities, represented a significant opportunity.

Concomitantly, CmRC starts the investigation on sustainable development indicators as part of the AmSvS, with the collaboration of ASviS and Urban@it. The objective of this operation is to privilege the overall consistency of the institutional action with: the National Strategy for Sustainable Development 2030; the European strategic guidelines (Next Generation EU, Recovery Fund, REACT-EU); Italian post-pandemic Recovery and Resilience Plan, which specify priorities of actions and investment for territorial resilience, reinforcing the targets of the AmSS.

The decision to introduce the Voluntary Local Review tool in the metropolitan governance process at the convergence between AmSvS and PSM (where the PSM plays the role of implementing the Agenda on the territory) arises from the need to design strategies and actions of both tools to rebalance negative trends. To this end, it recognises the institutional and socio-economic actors of the area as bearers of knowledge on the critical issues in progress, but also key players, protagonists and co-designers of possible change (up to the inversion of trends).

The VLR, of which this document defines the context, methodology, and objectives, allows showing the commitment and aspirations of territory concerning a vision of sustainable development to accelerate and make strategies and actions more coherent.

This document combines methodological aspects, a description of ongoing actions and specific guidelines. It comes in the project's development phase; therefore, it does not report, if not partially, an assessment of the path undertaken. According to the addresses provided within the MiTE Technical Table with Metropolitan Cities (CReIAMO PA L2WP1 project), this document is structured in 5 sections reflecting the structure of the Voluntary National Review's chapter on "Territories". Then, this document contributes to the national experimentation in this field and intends to contribute to the UN survey on Local Voluntary Review with the framework of SDGs related initiatives. The five sections are the followings:

- Portrait of CmRC in the dimensions of Sustainable Development
- Territorial governance
- Territorial strategies and policy coherence
- Participation and promotion of a culture of sustainability
- Conclusions: VLR job prospects and challenges

Particularly relevant for the metropolitan governance has been the participation of CmRC in the Italian "Strategic Metropolis" project, financed in the EU PON Governance and Institutional Capacity 2014-2020 since 2017. This project supported the metropolitan authorities with a methodological orientation for strategic planning within the broader framework of the European and UN-Habitat policies. Moreover, it facilitated a comprehensive reflection on the essential elements of strategic planning, which are most advantageous for coping with the processes of change in the economy and society on a global and local scale. One can say that this project marks a turning point in the metropolitan governance approach under the banner of three dimensions: (1) the integration of policies, programs, plans and actions through strategic planning; (2) the interinstitutional collaborative approach that involves local authorities and civil society; (3) consistency (expressed in terms of policy design, process innovations and training) with the framework of international instruments and policies.

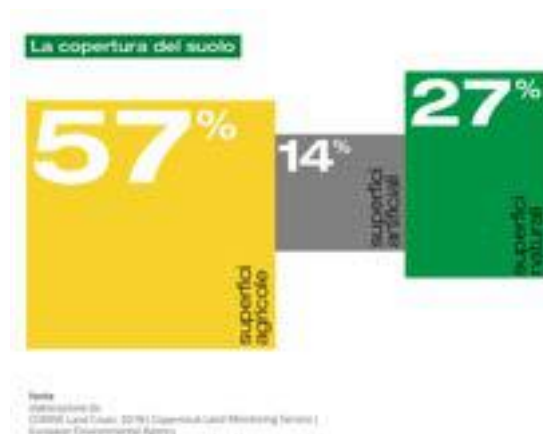
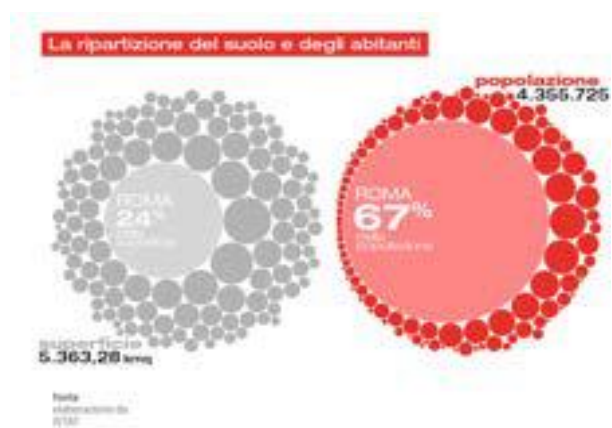
# 1

## Portrait of CmRC in the dimensions of Sustainable Development

### 1.1 Portrait

#### 1.1.1 THE CMRC TERRITORY AND THE NATURAL CAPITAL

The CMRC territory extends for over 5000 square kilometres; artificialised inhabitants and soils concentrate in the municipality of Rome, which occupies 24% of the total area but hosts 67% of the resident population. Most of the artificial surfaces of the CmRC territory concentrate in the Municipality of Rome; on the other hand, they make up only 14% of the entire metropolitan region. The area of CMRC is primarily used for agricultural production (57%). On the other hand, natural resources (27%) occupy the marginal parts of the region. Therefore, the demand for the services provided by natural capital concentrates in the Municipality of Rome, although the offer of these services mainly manifests in the marginal areas.

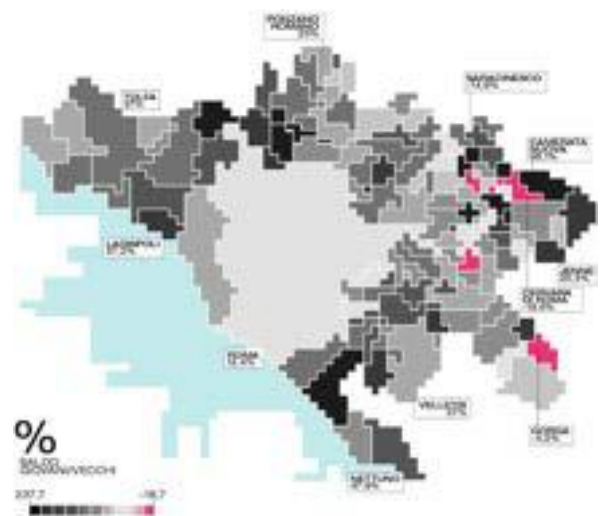
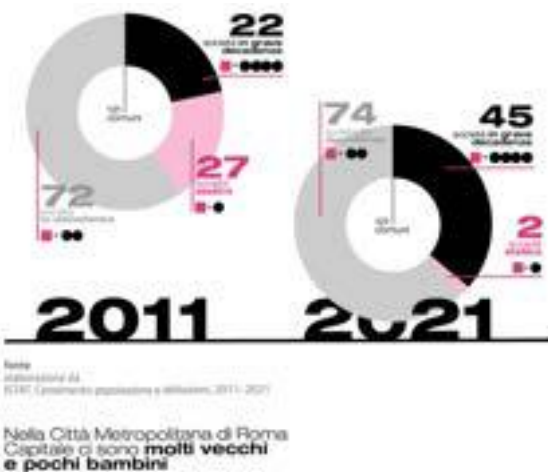
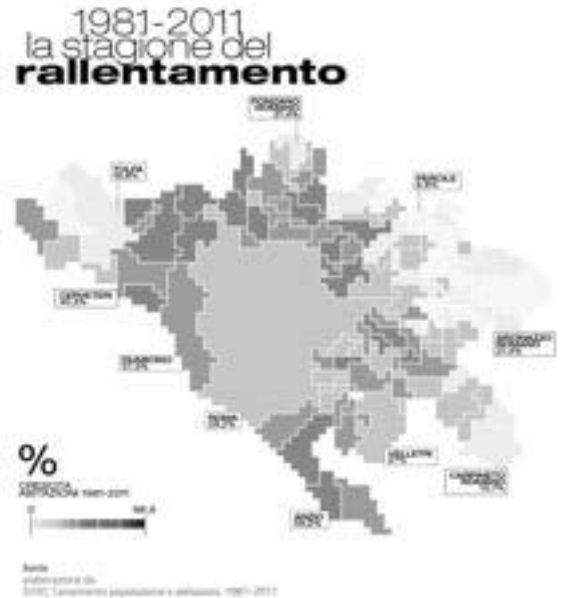




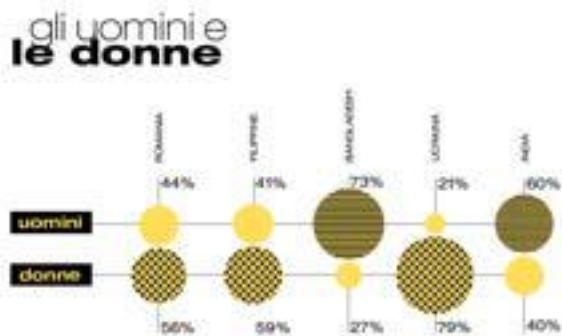
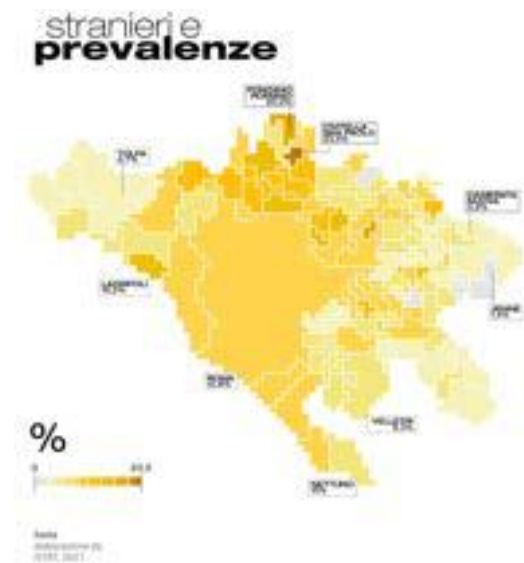
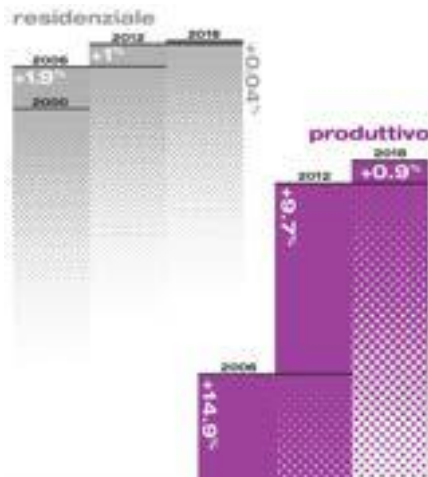
### 1.1.2 RECENT TRENDS IN SETTLEMENTS DYNAMICS AND DEMOGRAPHICS CHARACTERISTIC

The artificialised soils of the CmRC territory consolidated mainly in the twenty years 1961/1981, in which the Rome-Capital grew by over 68%; in the thirty years, 1981/2011 growth slows down (Rome grows further by 28%) and tends to be distributed in the surrounding municipalities. In the 21st century, growth slows down further and is mainly represented by expanding spaces for carrying out economic activities. This season generates new settlement constructions outside Rome: on the coast (north coast, Ostia, and Ardeatine), in the Alban Hills (the Castles), in the Aniene Valley and the Tiber Valley.

Demographic trends show the rapid and progressive ageing of the population. In 2021 119 out of 121 municipalities have an ageing index higher than 100, and 45 out of them have an index higher than 200. The decrease in the working population is only partially compensated by the increase in foreign residents, which is constantly growing and which today represent 12. 2% of the total population. It is a population differentiated by geographical origin and predominantly female.







### 1.1.3 THE PARTIES: A REGION OF REGIONS

Imagining the territory in parts (or regions) with the peculiar geographic characteristics and along the evolutionary directions consolidated over the long and short time of history can help favour planning activities aimed at defining new territorial balances.

The CmRC territory is divided into physiographic regions that identify different environmental resources: the hills of the Roman countryside, the Sabatini Mountains and the Alban Hills; the coastal plain and the Tiber delta; the Tolfa Mountains; the valley bottoms of the Tiber and Aniene; the Sabine Mountains, the upper Aniene valley and the Lepini Mountains; more than  $\frac{3}{4}$  of the territory belongs to the Tiber valley, of which the Aniene is a tributary, whose valley occupies more than  $\frac{1}{3}$  of its entire basin.

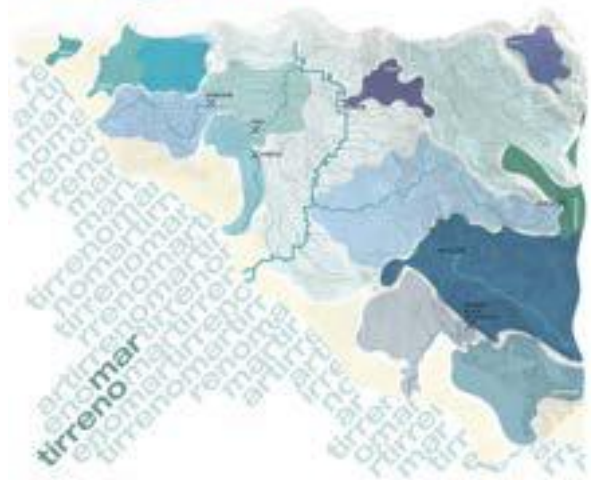
Finally, the consular roads and the physiographic articulation still represent a fundamental ordering element of the CmRC territory. They define the wedges that organise the settlements and arrange the natural and cultural resources in a radius that divides the territorial unit into parts: the woods of the Tolfa, the city of lakes, the Upper Treia Valley, the Tiberina city, the Marcigliana, the Tiburtina city, the Upper Aniene Valley, the Lepini Mountains, the Castles, the Ardeatino Coast, the Pomezia Agro, the Ostiense coast, the North Coast.

## le regioni fisiografiche



Fonte:  
Ministero delle  
Regioni per la Protezione dell'Ambiente e per i Servizi Regionali (2002)  
Carta delle unità fisiografiche d'Italia

## i bacini idrografici



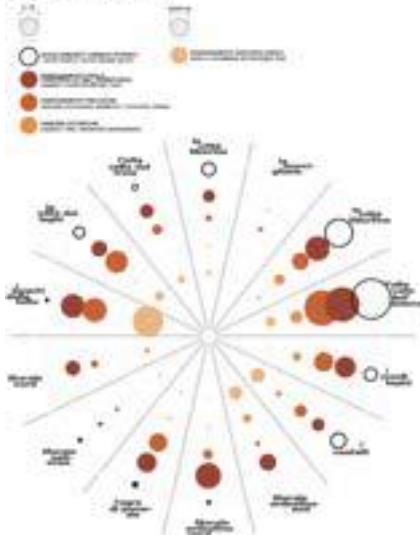
Fonte:  
Ministero delle  
Regioni per la Protezione e la Ricerca Ambientale /  
Patto del Sistema Informativo Nazionale Ambientale, 2002 (bacini idrografici)

## La viabilità storica e gli insediamenti 11



tutte le strade  
portano a roma  
**le consolari**

## le risorse culturali



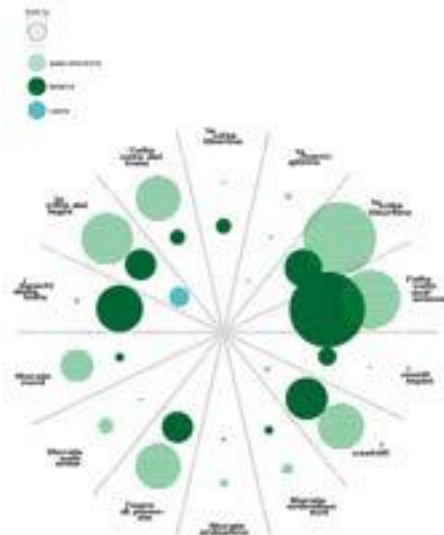
Fonte:  
Ministero delle  
Regioni per la Protezione e la Ricerca Ambientale, 2002

## I cunei una regione di regioni 12



Ogni regione è importante  
perché contribuisce  
all'attività della Unific

## le risorse naturali



Fonte:  
Ministero delle  
Regioni per la Protezione e la Ricerca Ambientale, 2002

## 1.2 CmRC Sustainable Development Trends

The current proposal for the "Sustainable Development Agenda of the Metropolitan City of Rome-Capital" addressed by ASviS and Urban@it, shows the Metropolitan City trends concerning the 17 Sustainable Development Goals of the UN Agenda 2030. This work is based on 77 indicators for analysing the metropolitan context and comparing it with the regional and national one. According to MiTE's addresses, the selection of the indicators to monitor the Metropolitan City's SDGs achieving was made consistent with National Strategic Objectives (OSN) and with the first ASviS Report on the Territories (December 15, 2020).

The related quantitative goals defined by European, national and regional policy programmes have been identified based on the selected indicators. These objectives assess the gap between the current state and the final goals and foresee the evolution over time.

Quantitative objectives are defined according to the following hierarchy:

- A. values defined by institutional levels (UN, European Union, Italian government, Lazio Region);
- B. in the absence of a value defined at an institutional level, the goal was identified through a comparison with the four European countries most similar to Italy (France, Germany, Spain and the United Kingdom), taking the best performer among these countries in the last year available;
- C. if the indicator used did not allow for comparison with European countries, the work was based on the judgment of the experts of the ASviS working groups;
- D. if the indicator did not allow comparison with European countries and an expert assessment was not available, the goal has been identified as the best performer among the Italian regions with ordinary statute;
- E. if none of the above criteria allows for defining the goal, the Eurostat methodology is used to evaluate the trend of the indicators without a goal, using the 1% annual increase compared to the base year 2010 (for example, target 2030 +/- 20% compared to 2010).

The most recent data refer to 2020, and the analysis can only partially consider the effects that the pandemic crisis has had on the performance of indicators related to quantitative objectives. Nonetheless, the study makes it possible to assess the direction of the metropolitan and regional context over time, which is also valuable for calibrating the actions to be taken in the post-crisis Covid-19 crisis.

The Eurostat methodology was used to evaluate the achievement of the quantitative goals. Such methods assess the intensity and direction in which the indicator is moving concerning the target set. It uses the "arrows" method to measure the distance the quantitative objective established or the trend over time (the short term is five years and the long term at least ten years).

Four summary tables on current trends grouped by thematic clusters are shown below.

## 1.2.1 CULTURE, IDENTITY, INNOVATION

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM
1.2	Entro il 2030 ridurre del 20% il numero di persone a rischio di povertà o esclusione sociale rispetto al 2019	Lazio 24,85	↓	↓
		Ra 25,61	↑	↓
3.6	Entro il 2030 dimezzare rispetto al 2020 il numero di feriti derivanti da incidenti stradali	CM 4,8	↓	↑
		Lazio 4,5	↓	↑
		Ra 4,0	↓	↑
4.3	Entro il 2030 raggiungere quota 95% di partecipazione alla scuola dell'infanzia	CM 84,45	↓	-
		Lazio 86,15	↓	-
		Ra 91,15	↓	-
4.3	Entro il 2030 raggiungere la quota del 50% dei laureati tra i 30-34 anni	CM 36,31	↑	↑
		Lazio 33,25	↑	↑
		Ra 27,25	↑	↑

5.3	Entro il 2030 dimezzare il gap occupazionale di genere rispetto al 2020	CM 0,91	↑	↑
		Lazio 0,77	↓	↑
		Ra 0,71	↓	↑
8.5	Entro il 2030 raggiungere la quota del 75% del tasso di occupazione	CM 65,95	↑	↓
		Lazio 65,75	↑	↓
		Ra 61,55	↑	↓
8.4	Ridurre entro il 2030 al di sotto del 1% la quota di giovani che non lavorano e non studiano (NEET)	CM 12,55	↑	↓
		Lazio 20,71	↓	↓
		Ra 22,25	↓	↓
9.5	Entro il 2030 raggiungere quota 2% di incidenza della spesa totale per R&D sul PIL	Lazio 1,745	↓	↓
		Ra 1,425	↓	↓
10.4	Entro il 2030 raggiungere quota 4,2 nel totale di disponibilità del reddito disponibile	Lazio 5,8	↑	↓
		Ra 6,0	↓	↓

## 1.2.2 NATURAL RESOURCES, AGRICULTURE, ENVIRONMENT, BIO-ECONOMY, FOOD

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM
2.4	Entro il 2030 ridurre del 20% l'utilizzo di fertilizzanti distribuiti in agricoltura rispetto al 2018	CM 256,4	↓	↑
		Lazio 274,2	↑	↑
		Ra 310,6	↓	↑
2.4	Entro il 2030 ridurre del 50% l'utilizzo di fitofarmaci distribuiti in agricoltura rispetto al 2018	CM 5,8	↑	↑
		Lazio 8,2	↑	↑
		Ra 9,2	↓	↓
2.4	Entro il 2030 raggiungere il 25% della superficie agricola investita in colture biologiche	Lazio 23,25	↑	-
		Ra 15,85	↑	-
6.3	Entro il 2027 portare tutti i corsi d'acqua al livello buono o eccellente di qualità ecologica	CM 21,05	-	-
6.4	Entro il 2030 raggiungere quota 85% nell'efficienza delle reti di distribuzione dell'acqua potabile	RomaC 61,95	↓	-
		Lazio 46,95	↓	-
		Ra 55,05	↓	-

12.3	Entro il 2030 raggiungere la quota del 70% di raccolta differenziata di rifiuti urbani	CM 50,05	↑	↑
		Lazio 51,45	↑	↑
		Ra 61,35	↑	↑
12.4	Entro il 2025 ridurre la produzione di rifiuti urbani per abitante del 25 rispetto al 2017	CM 536,0	↑	↑
		Lazio 508,5	↑	↑
		Ra 498,4	↓	↑
14.5	Entro il 2027 raggiungere il 50% delle aree marine a tutela forte	Lazio 2,55	-	↓
		Ra 1,75	-	↓
14.5	Entro il 2030 raggiungere la quota del 100% di acque marine costiere in buono stato ecologico	CM 48,45	-	-
15.2	Entro il 2030 azzerare l'aumento del consumo di suolo annuo	CM 4,3	↓	-
		Lazio 7,0	↓	-
		Ra 8,7	↓	-
15.3	Entro il 2030 raggiungere la quota del 30% delle aree terrestri protette	Lazio 12,65	-	-
		Ra 10,55	-	-

## 1.2.3 CLIMATE, ENERGY, MOBILITY

Target	Obiettivi e indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM
7.2	Entro il 2030 raggiungere il 15% di energia elettrica da fonti rinnovabili	CM 6,45	↓	-
		Lazio 15,85	↓	-
		Ra 34,35	↓	-
11.2	Entro il 2030 aumentare del 20% il peso dei per abitanti offerti dai trasporti pubblici locali rispetto al 2016	RomaC 4883,7	↓	↓
		Lazio 6367,8	↓	↓
		Ra 4553,2	↓	↓

11.2	Entro il 2030 raddoppiare l'estensione delle piste ciclabili rispetto al 2020	RomaC 242	↓	-
11.A	Entro il 2030 ridurre i superamenti del limite di PM10 a 3 giorni l'anno	RomaC 22	↑	↑
13.2	Entro il 2030 ridurre del 17% le emissioni di gas climalteranti rispetto al 1990	Lazio 6,5	-	↑
		Ra 7,3	-	↑

## 1.2.4 DIGITAL TRANSITION AND GOVERNANCE

Target	Obiettivi e Indicatori	Dati ultimo anno disponibile per livello	Valutazione di breve periodo CM	Valutazione di lungo periodo CM
7c	Entro il 2025 raggiungere la quota del 100% della banda larga ad almeno 100Mbps	CM 65,0%	↓	↓
		Laz 64,4%	↓	↓
		Ita 66,0%	↓	↓
14.3	Entro il 2030 ridurre l'affollamento degli istituti di pena al 100%	CM 129,2%	↓	↓
		Laz 125,1%	↓	↓
		Ita 119,9%	↓	↑

54.7	Entro il 2030 raggiungere quota 195 giorni di durata dei procedimenti civili	Laz 423	↓	1
		Ita 429	↑	1

### *FOCUS – Localising SDGs: the territory as a ‘chance’*

The territory of the CmRC reveals territorial gaps and socio-demographic and economic inequalities. They are underlined by settlement marginalisation, poverty, unemployment and ageing of the population. However, it is a landing place for international migration. It appears as a highly centralised territory, made up of suburbs. However, it also presents itself as a territory rich in social innovation practices and excellent social planning to which an endogenous economic potential can anchor. It is the territory itself that represents a potential factor for rebalancing the negative trend, creating the conditions for achieving the sustainable development goals in the short and long run concerning the following themes: culture, identity, innovation, natural resources, agriculture, environment, economy, food, climate, energy, mobility, digital transformation and governance. CmRC territory is depicted as a "region of regions" in which each region can contribute to the overall attractiveness, in line with a place-based approach dedicated to sustainable development.



# 2

## Territorial Governance

### 2.1 A Governance Project for ‘Capital Metropolis - Let's support the future’: the VLR role

Metropolitan City of Rome Capital (CmRC) has launched the "Metropoli Capital Metropolis - Let's support the future" project as part of the works for the Metropolitan Agenda for Sustainable Development. This project belongs to the Collaboration Agreement with MiTE (Ministry of Ecological Transition) signed in March 2020.

In line with ministerial guidelines, CmRC's Metropolitan Agenda for Sustainable Development is proposed as a device for integrating and guiding the policy tools and actions currently being adopted. "Metropoli Capital Metropolis - Let's support the future" interprets a metropolitan governance design that leads to convergence of the Metropolitan Strategic Plan (PSM) with the making of the Metropolitan Agenda for Sustainable Development. The intentions of this governance operation are: (1) promoting integrated actions for sustainable development, in concert with local institutions and the actors of the metropolitan territory, (2) teasing the work towards sustainable development within the metropolitan strategic plan-making, with a view to full integration of all dimensions of sustainability in metro planning, programming and management tools, (3) spreading awareness and encouraging social and entrepreneurial activation on sustainability issues, also through the broadest involvement of citizens and civil society.

In this context, the PSM assumes the role of territorialising the Metropolitan Agenda for Sustainable Development (AmSvS). The Agenda performs the dual task of 1) defining the quantitative goals in line with the targets of the National Sustainable Development Strategy (SNSvS) and the Sustainable Development Strategy of the Lazio Region; 2) designing the qualitative monitoring process for the implementation of the SDGs at the metropolitan level through the Voluntary Local Review (VLR). In this context, the VLR works as an analytical and technical tool for the Metropolitan Agenda (AmSvS), capable of identifying the territorial priorities for sustainable development while providing a framework for the monitoring/updating of the Agenda itself.

### 2.2 Governance of the AmSvS implementation: The institutional Agreement (between CmRC and MiTE) and the ongoing actions

Il progetto di governance è definito nell'accordo istituzionale di collaborazione tra CmRC e MiTE. Tale accordo prevede tre categorie di intervento rispetto alle quali sono in corso le azioni integrate per la redazione dell'Agenda Metropolitana per lo Sviluppo Sostenibile (AmSS) – *Metropoli Capitale - sosteniamo il futuro* –, e del Piano Strategico Metropolitan (PSM):

- Categoria A. Costruzione della governance delle agende metropolitane
- Categoria B. Coinvolgimento della società civile
- Categoria C. Definizione delle agende metropolitane per lo sviluppo sostenibile e integrazione con il piano strategico metropolitano

CmRC ha avviato azioni su tutte le categorie indicate. In generale la costruzione della governance dell'agenda si integra (converge) con il PSM attraverso la collaborazione degli attori istituzionali e socioeconomici del territorio in un'ottica di capacitazione e di ancoraggio place-based delle azioni e delle strategie di implementazione dell'AmSS. Gli interventi per le categorie A, B e C sono disegnati in coerenza con la policy di convergenza e integrate sinergicamente con azioni attivate nell'ambito di altri progetti.



Per la *categoria A*, relativa alla costruzione della governance dell'Agenda metropolitana, CmRC istituisce la *Cabina di regia per lo Sviluppo Sostenibile* consolidandola in un organismo misto tecnico e politico, presieduto dal Vice Sindaco metropolitano, con il compito di assicurare l'integrazione dei processi di definizione dell'Agenda metropolitana per lo sviluppo sostenibile e di predisposizione del Piano strategico Metropolitano.

Per la *categoria B*, relativa al coinvolgimento della società civile, CmRC sceglie di far convergere in un unico processo congiunto, il percorso di ascolto, partecipazione e co-progettazione dell'Agenda e del PSM, con una attenzione particolare al tema dei giovani (interessi, consapevolezza e idee rivolte al futuro) e della formazione. A questo riguardo propone infatti una specifica azione di *FormAzione* (Dalla formazione all'azione. Educazione Civica innovativa per lo sviluppo sostenibile rivolta agli studenti degli Istituti Agrari del territorio metropolitano).

La *categoria C* rappresenta la linea di attività più rilevante di CmRC. Questa coincide con la dimensione di governance strategica per lo sviluppo del territorio nel particolare momento di transizione post-pandemica che ha portato a un ridisegno strutturale dell'azione amministrativa in coerenza con programmi europei e nazionali e relativi ambiti di spesa (Next Generation EU, PNRR, React-EU, Programmazione EU 2021-2027; PON Metro, POR). Le attività avviate includono pertanto anche l'Analisi delle condizioni di contesto del territorio metropolitano in riferimento agli obiettivi di sviluppo sostenibile e il suo posizionamento rispetto agli obiettivi di Agenda 2030 e SNSvS, realizzato tramite un set di indicatori del sistema di monitoraggio dell'AmSvS con il supporto di ASVIS-Urban@it. La Categoria C ospita il processo di Voluntary Local Review come elemento di convergenza tra l'AmSS e il PSM. La VLR contribuisce al raccordo tra gli obiettivi dell'Agenda e le azioni (i progetti e le strategie) da introdurre per il perseguimento degli obiettivi e dei target individuati. Attraverso il processo di redazione della VLR gli attori chiave del territorio sono coinvolti nel monitoraggio delle azioni di riequilibrio del gap tra il trend attuali e gli obiettivi di sviluppo sostenibile nel contesto territoriale della CmRC.

L'*Accordo istituzionale con il MiTE* e gli strumenti di governance dell'Agenda rappresentano un efficace dispositivo di capacity building istituzionale che ha sostenuto e orientato il raccordo, la coerenza e la convergenza tra politiche e azioni per la promozione dello sviluppo sostenibile territoriale. Le tabelle che seguono ricompongono il *quadro delle azioni messe in campo nell'ambito dell'Accordo istituzionale*. Alcune di esse sono integrate o completate con altri programmi di investimento o settoriali, attraverso un abile lavoro di policy design integrato e orientato alla promozione strategica dello sviluppo sostenibile.

The governance project is defined in the Collaboration Institutional Agreement between CmRC and MiTE. This agreement provides for three categories of intervention with respect to which integrated actions are underway for the drafting of the Metropolitan Agenda for Sustainable Development (AmSS) - "*Metropoli Capital Metropolis - Let's support the future*" -, and the Metropolitan Strategic Plan (PSM):

- Category A. Building of the governance of Metropolitan Agendas for Sustainable Development (AmSvS);
- Category B. Involvement of civil society;
- Category C. Definition of Metropolitan Agendas for Sustainable Development (AnSvS) and integration with the Metropolitan Strategic Plan (PSM).

CmRC has initiated actions on all the categories indicated. In general, the governance of the Agenda integrates (converges with) the PSM through the collaboration of the institutional and socio-economic actors of the territory under a twofold aim: actors' empowerment and a more robust place-based approach to the actions and implementation strategies of the AmSS. The interventions for categories A,

B and C are designed following this convergence policy and integrated synergistically with activities activated in the context of other projects.

For *category A* (governance of AmSvS), CmRC establishes the Control Room (Cabina di Regia) for Sustainable Development as a technical-political mixed body, chaired by the metropolitan Deputy Mayor. The major Control Room task is to ensure the integration of processes definition of the Metropolitan Agenda for Sustainable Development and the Metropolitan Strategic Plan.

For *category B* (Involvement of civil society), CmRC chooses to make converge on a single joint decision-making process: the path of listening, participation and co-design of the Agenda and the PSM with particular attention to the theme of young people (interests, awareness and ideas aimed at the future) and their training. In this regard, CmRC addresses a targeted action called: "From training to action. Innovative Civic Education for sustainable development aimed at high school students of the Agrarian Institutes of the metropolitan area".

*Category C* represents CmRC's most significant line of work. This coincides with the strategic governance for the development of the territory in the post-pandemic transition, which led to a structural redesign of the administrative action in line with European and national programs and related spending areas (Next Generation EU, PNRR, React-EU, EU Programming Period 2021-2027; PON Metro, POR). The activities launched therefore also include the analysis of the trends of sustainable development in the metropolitan area with reference to the UN Agenda 2030 and SNSvS. This analysis is carried out through a set of indicators described in the AmSvS by ASviS-Urban@it. In addition, category C hosts the Voluntary Local Review as an element of convergence between the AmSS and the PSM. The VLR facilitates the link between the Agenda's goals on the one side and the actions (projects and strategies) needed to pursue such goals and meet the identified targets on the other side. Furthermore, the VLR making allows the key players to monitor the rebalancing of the gap between the actual trend and the SDGs in the territorial region of the CmRC.

The Institutional Agreement with the MiTE and the Agenda governance tools represent an effective institutional capacity building device that has supported and guided the connection, coherence and convergence between policies and actions to promote sustainable territorial development. The following tables recompose the framework of the actions implemented under the Institutional Agreement. Some are integrated or completed with other investment or sectoral programs through a skilful work of integrated policy design oriented towards the strategic promotion of sustainable development.

<b>TAB 1</b>	<b>A. Building of the Governance of AmSvS</b>
	<b>A1.1</b> Establishment of the Control Room of the CmRC
<b>A1.</b>	<b>A1.2</b> The regulation governing the Control Room
	<b>A1.2</b> The establishment of the Coordination Table with the Lazio Region
<b>A2</b>	<b>A2.1</b> The involvement of local institutions through training seminars

***TAB. 1 – A. Building of the Governance of AmSvS***

<b>TAB 2</b>	<b>B. Involvement of Civil Society</b>
<b>B1.</b>	<b>B.1.1</b> Mapping of the metropolitan stakeholders <b>B1.2</b> Organization of thematic laboratory with young people (next generation)
<b>B2</b>	<b>B2.1</b> High School Training on Sustainable Development for CmRC “Agrarian Institutes” <b>B2.2</b> Dissemination of information material

***TAB. 2 – B. Involvement of Civil Society***

<b>TAB 3</b>	<b>C. Definition of Metropolitan AnSvS and integration with PSM</b>
<b>C1.</b>	<b>C.1.1/3</b> The analysis of the metropolitan SDGs trends within the Agenda 2030 and SNSvS. Construction of a set of indicators for the AmSvS monitoring system <b>C1.2</b> Methodology for the PSM according to the metropolitan sustainable development goals set out in the AmSvS
<b>C2</b>	<b>C2.1</b> Design and activation of integrated pilot actions for the implementation of the sustainable development goals

***TAB. 3 – C. Definition of Metropolitan AmSvS and integration with PSM***

### 2.2.1 THE CONTROL ROOM

The control room of CmRC was established as a mixed political-administrative body, with the Metropolitan Mayor's Decree n.99 of 1 September 2020 concerning: "Approval of the Preliminary Document of the Metropolitan Strategic Plan and establishment of the Control Room for Development Sustainability of the Metropolitan City of Rome Capital ". The Control Room groups the followings: the Metropolitan Mayor, the Metropolitan Deputy Mayor, the Managing Directors, the Department Directors, the General Accountant, the Deputy Secretary-General, the Manager and officials of the competent service.

The Control Room represents the governing bodies for the construction of metropolitan governance to implement the AmSvS. It ensures the integration of policies and the correlation between the three dimensions of sustainability, promoting collaboration and transversal dialogue between the various sectors in line with the ministerial objectives.

The tasks and functions of the control room of the CMRC are essentially the following:

1. It promotes awareness and knowledge of sustainability issues within the institution;
2. It orients the various sector policies and the governance arrangements of the metropolitan territory toward sustainable development goals.
3. It promotes the involvement of local authorities and municipalities in their activities on specific issues, also by regulating the modalities of dialogue and participation.
4. It presides over the definition of the contents of the Agenda and ensures its integration with the PSM and with the other governance instruments of the metropolitan area, also evaluating the evolution of significant phenomena of the territory.
5. It guarantees the monitoring of SDGs in the metropolitan area, evaluating the progress and the effects generated by the implementation of the metro agenda, with methods integrated and homogeneous to the monitoring system of the Metropolitan Strategic Plan.
6. It promotes the link between the process of elaboration and implementation of the Metropolitan Agenda for Sustainable development and the process of defining the Lazio region Strategy for Sustainable Development. The members of the Control Room designated for such a role participate in the Coordination Table with the Lazio Region.

7. It ensures the connection with the activities promoted within the CReIAMO PA Project Line of action 2 - WP1 "Implementation and monitoring of the 2030 Agenda", funded by the PON Governance and Institutional Capacity 2014-2020 ".

All in all, the control room of CmRC works as an institutional bridge between the AmSvS and the PSM and facilitates sectoral policies vertical (with local authorities and the superordinate institutions) and horizontal integrations (in the internal structures of the body). The utility of the organism and its ability to guide and coordinate is directly proportional to: the degree of integration of all the activities of the Metropolitan Authority, the degree of institutional and territorial sharing of the vision expressed by the Metropolitan Strategic Plan, the quality of communication and the circulation of information. These conditions progressively improve as the construction process of the PSM and the AMsS matures. It is, therefore, advisable that the body is designed to function with flexibility and speed. The role and functioning of the Control Room are being redefined in line with the guidelines of the new metropolitan Mayor.

## 2.2.2 THE INTERINSTITUTIONAL TABLE FOR THE AMSVS MULTILEVEL AND COORDINATED GOVERNANCE

The Coordination Table between the Metropolitan City of Rome-Capital and the Lazio Region (A1/Action 3) was launched on 4 June 2020. The parties agreed that the table was composed of the managers and officials of the respective structures involved in implementing the activities financed by the MiTE (Public Notice 2019 addressed to CM and Public Notice 2018 addressed to Regions). From June 2020 to September 2020, the CMRC representatives collaborated to create the thematic focuses of the Lazio Region as part of the process of defining the Regional Strategy for Sustainable Development. From May 2021 to July 2021, the regional representatives were involved in the PSM-AmSvS participatory process activated by CmRC. This activity made it possible to integrate the agenda of the CmRC policies for sustainability and to transfer methodologies and innovation in its policy design tested by the diversity of thematic planning and programming opportunities on the themes of sustainable development, ecological and digital transition, forestation and so on.

## 2.3 Areas of innovation

### 2.3.1 RESEARCH AND TRAINING PROJECT «FUTURE GENERATIONS»

In September 2021, CmRC launched the research-intervention and training-action project called: "Creation of a shared culture at the metropolitan level and engagement of the "future generations" stakeholder category in the drafting and implementing the Metropolitan Strategic Plan and the Metropolitan Agenda for Sustainable Development". The University of Tor Vergata coordinates the project. This project fits and develops in an innovative and integrated way within the areas of action provided by the CmRC and MiTE Agreement (in particular categories A and B). In particular, it develops the following activities:

1. FROM TRAINING TO ACTION. Innovative Civic Education for Sustainable Development. This activity was carried out with the Agrarian High School Institutes through, lectures, seminars, social innovation laboratories, classroom games and events. The project involved 150 students from the 5 Institutes in the metropolitan area. 4 Institutes participated, with 132 students proposing projects and ideas that will be incorporated into the studies for the drafting of AmSvS and PSM.
2. "Towards the 2030 Agenda" - Training seminars for local authorities employees. The activity included a cycle of seminars, organised by Master Maris - II Level Master in Reporting,

Innovation and Sustainability - University of Rome "Tor Vergata" in collaboration with the Metropolitan City of Rome-Capital. The path contributes to creating a shared culture of sustainability, in line with current trends at the international, national, regional and metropolitan levels, capable of enhancing the existing potential and stimulating individuals' proactive and collaborative attitudes.

3. *Mapping the interests and awareness* of sustainable development of young people in the CmRC territory. This activity aimed to integrate the participation activities of the construction process of the Metropolitan Strategic Plan with a specific focus on young people. The theme of sustainable development and the 2030 Agenda has a strong connotation linked to intergenerational equity. This is why young people are privileged interlocutors in decision-making processes characterised by socio-economic and environmental consequences. The identification of the relevant issues considered the Metropolitan Strategic Plan and the synergy with the themes of the Regional Strategy for Sustainable Development of the Lazio Region.
4. *Tables with young people.* This activity pursued the following objectives:
  - bring out the point of view of young people on sustainability, their main expectations, interests, needs and the will to cooperate;
  - strengthen dialogue and discussion with young people, encouraging meetings between institutions and young people;
  - making young people protagonists in the process of defining and implementing policies and interventions;
  - stimulate the proactive and collaborative attitude and creativity of young people;
  - enhance good practices and stimulate the creation of collaborations and synergies.

The tables resumed the themes of the PSM around which participatory activities developed (Digital Transformation and Governance, Climate, Energy, and Sustainable Mobility, Green Revolution and Ecological Transition).

5. Interactive poster on the implementation of the 2030 Agenda at local level.



All activities are coordinated and consistent with the Metropolitan Strategic Plan and devoted particular attention to young people, listening to them and guaranteeing the possibility of being protagonists of the transition towards sustainable development.

All in all, the project introduced and experimented with three areas of innovation:



- The focus on the "Future Generation" is the leitmotif of the activities and integrates the research activities and participatory actions activated as part of the preparation of the PSM with this specific point of view oriented towards inter-generational equity.
- The teaching method and dissemination of the culture of sustainability are rooted in the territory and make use of experimental methodologies in the field of training, reaching the goal of making local authorities protagonists in the process of defining and implementing the policies and interventions of the CMRC, as well as promoting the meeting between institutions and good practices, collaborations and synergies and the development of common design and workplaces.
- The matching between institutional policy/planning processes and promoting a culture of sustainability through training, the enhancement of projects and openness to the territory has boosted the repeatability of this experience.

### 2.3.2 «SCHOOL H24» PROJECT

The design and activation of integrated pilot actions to implement the sustainable development goals are developed around the "H24 Schools project - Pilot Action in higher education institutions of competence of the metropolitan city". This project is the heart of the strategic guidelines of the PSM that work on the themes of innovation, inclusion and territorial rebalancing. This pilot action is multidimensional and experimental. It can be modelled to make all schools multifunctional principals in the metro region. The goals are: to identify actions and methods that make schools usable for extra-curricular activities, to promote and experiment with training and aggregation initiatives in synergy with the territory, to build a neighbourhood identity capable of weaving relationships with a view to inclusion and integration, to cultivate respect and care for the common good as a place open to the community.

The first step of the action was carried out by signing a "Community educational pact" entitled "SCHOOLS IN THE MUNICIPALITY - WE GENERATE CHANGE". With this Pact, all the actors involved undertaking to promote a "community school" (in Tor Bella Monaca periphery) in which schools open up to the social and cultural context in which they operate.. The project intends to give life to a "learning community" that expresses all the positive energies of the actors involved. These actors, through their actions, participate in the generation of an authentic learning ecosystem aimed at the harmonious development of the entire community (first of all, the students, but also teachers, families, and local operators). Furthermore, CmRC, by participating in the project, intends to test its role in a collaborative network and identify the elements of an action model that can also be repeated in other contexts of the metropolitan area.

#### *FOCUS – The Governance Project/Model*

CmRC's governance project addresses the transition to sustainable development and brings policies and strategic planning into coherence and convergence. It develops under the priority of rebalancing the metropolitan territory. The opportunity offered by the Agreement with the Ministry for drafting the Metropolitan Agenda for Sustainable Development (resulted in the Metropolis - Let's support the future ' project) marks an institutional and political change. It creates the premises for an interinstitutional and collaborative governance model oriented by the transition towards (social, economic and territorial) sustainability and climate neutrality. The core of the governance model is the connection between (1) strategic planning (as a structural component of the governance of the Metropolitan City of Rome), (2) the Metropolitan Agenda for sustainable development, (3) the implementation of programs and plans for climate adaptation and forestation in the post-pandemic context and under the Green Deal. Within this frame, the Voluntary Local Review assumes a qualitative role of direction in the implementation of actions and sustainable development projects articulated in the various planning, programming, and investment tools.



# 3

## Territorial Strategies and Policy Coherence

### 3.1 The policy coherence system

The need to face the climate crisis and the pandemic emergency has reinforced the importance of considering part of the same problem and the same strategic governance to deal with it, the fight against socio-economic and spatial inequalities, and support for the ecological transition of economies and territories. This need has guided the construction of a coherence framework for internal policies (convergence between AmSvS and PSM as an intersection of actions/programs/plans on regeneration, economy, energy, climate, forestry, waste, etc.) and external (PNRR, EU Programming Period 2021-2027; Regional Sustainable Development Strategy).

In particular, the coherence system measured itself against the need to link plans, programs, territorial strategies and actions with investment lines. Therefore, the priority has been to build a synergy between sustainable urban development strategies and the various investment measures. This way of working aims to attract, access, and rationally use resources. It consists of designing through European, national and regional funds, putting together lines and objectives to more levels, and ensuring that the metropolitan city of Rome plays the role of filter, support, orientation and coordination of the various projects present in its territory.

The policy coherence system included two types of alignment:

The primary financing/investment measures:

- Next Generation EU and the National Recovery and Resilience Plan (PNRR).
- The National and Regional Operational Program (PON METRO and POR) - EU Programming Period 2021-2027.
- REACT-EU.
- Integration of special funds for the Jubilee and the ExPO candidacy 2030.

The major axes of Italian, European and International politics:

- Alignment with the United Nations: 2030 Agenda and Sustainable Development Goals (SDGs).
- Alignment with the major axes of EU policy: Digital Transition, Resilience and Cohesion.
- Alignment with the national level: the National Strategy for Sustainable Development (SNSvS)
- Alignment with the national level: the Regional Strategy for Sustainable Development (SNSvS) and EU Programming Period 2021-2027.
- The New Urban EU Agenda

CmRC promptly built an interface between topics of interest for the metropolitan context in the green and digital transition and investment measures. This interface was aimed at enabling a good spending policy. It initially covered the following thematic areas: 1) culture, identity and innovation; 2) green revolution and ecological transition; 3) climate, energy and sustainable mobility; 4) digital transformation and governance. These thematic areas have then merged into the three main axes/objectives of the PSM (Innovation, Sustainability, Innovation) illustrated below. Overall, the operation has led us to consider the PSM and the AmSvS as "good-spending architecture".

### 3.2 The PSM as an apparatus for territorialising the AmSvS

In the convergence process between the Metropolitan Strategic Plan (PSM) and the Metropolitan Agenda for Sustainable Development (AmSvS), which defines the main line of alignment and integration of territorial policies, the PSM assumes the role of territorialising the Agenda regarding projects, actions and to longer-term strategies. It does so within an implementation horizon that

recognises *three-time thresholds*: the annual update of the PSM in the three years of validity; the timing of implementation of the projects envisaged by the PNRR; the European programming season 2021-2027, and the related programs (PON Metro etc.) through which the implementation of the PSM projects is foreseen.

The urgency, also underlined by the Ministry, to rebalance sustainable development trends in favour of ecological transition carried out also through bottom-up sustainable local projects has prompted the CmRC to provide the Agenda with a catalogue of integrated strategies and actions to promote sustainable development. The PSM represented the most appropriate apparatus to achieve this goal, given the area's strategic, integrated, and place-based dimension of intervention.

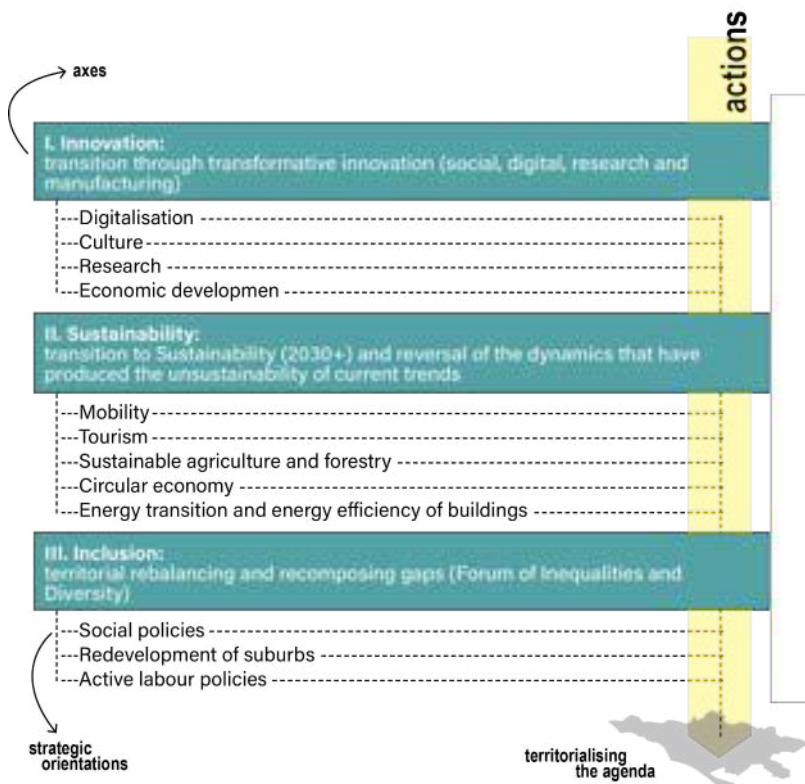
The operation is consistent with the MiTE addresses that consider the Agenda as a device to pursue the following goals: "strengthening and qualifying the attention towards sustainable development within the metropolitan strategic plans; promoting integrated sustainable development actions in concert with local institutions and actors in the metropolitan area; spreading awareness and encourage social and entrepreneurial activation on sustainability issues."

The Agenda is therefore not an additional tool to the PSM. Instead, it is a device that allows structuring the attention of local actors towards sustainability and the promotion of integrated actions and concrete projects.

The PSM is an integrated and incremental process that lays the foundations for implementing (1) policies and strategies, scalable and repeatable actions, and (2) pilot projects in the short, medium, and long run. It works as a trigger for the ecological and digital transition in line with the Agenda and policies for sustainable development. The PSM synergistically integrates this approach by introducing three principal Axes/Objectives around which to structure strategic guidelines for sustainable urban development, direct policies and articulate actions in mutual coherence.

Each Axis includes strategic orientations for sustainable urban development. The orientations are designed according to levels of coherence: thematic coherence with the convergence policy between AmSvS and PSM; methodological coherence with the guidelines of the Joint Research Center (EU) on urban sustainable development strategies (see "Handbook of Sustainable Urban Development Strategies").

The three major axes and their strategic orientations are:



**Image. 1 – Structure of the Strategic Orientations of Sustainable Urban Development**

The strategic orientations split into actions for localising SDGs and territorialising th

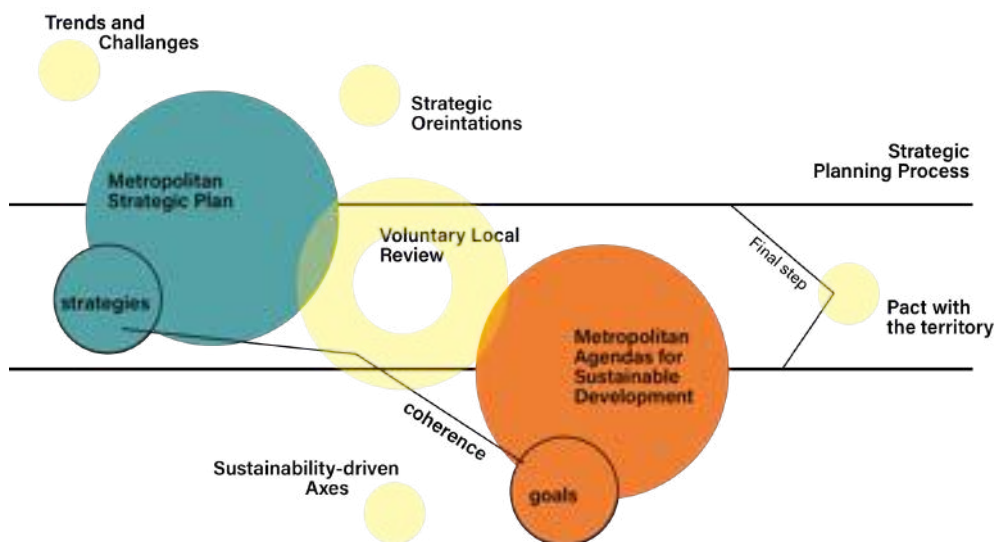
e agenda. For each strategic orientation, the governance model is explained according to the AmSvS and illustrates the connection with the SDGs.

### 3.3 Coherence between PSM e AmSvS: VLR as methodological pivot

The convergence between AmSvS and PSM can be found in the structure of the strategic planning process, confirming the initial intention to develop the two tools in an integrated way. It concerns: the following:

- Identification of trends and challenges
- Thematic axes explicitly dedicated to sustainability
- Strategic orientations for Sustainable Urban Development (localising SDGs)
- Voluntary Local Review
- Pact with the territory (e-land meeting and sustainability labs) as the final moment of the two processes.

The methodological experimentation, inspired by the JRC handbook for Sustainable Urban Development, has reached a certain level of effectiveness. However, the territorialising of AmSvS goals through the implementation of the actions of the PSM will be monitored in the next triennial and will require an ex-post evaluation. However, the VLR drafting process immediately offers the opportunity for a preliminary qualitative assessment relating to the effectiveness of the policy design embraced by CmRC. *The VLR works as the methodological pivot of the convergence between AmSvS and PSM.* In the intertwining of the two tools, the VLR offers the opportunity to test the correspondence between the expectations of the local actors, which feed the Agenda and the strategies of the PSM responsible for territorialising the Agenda.



*Image. 2 – Scheme of convergence between AmSvS and PSM: VLR as a pivot*

#### **FOCUS – VLR as a "litmus test" for the coherence between AmSvS and PSM**

The CmRC's VLR performs as follows: a transparency and accountability mechanism with which to promote greater civic involvement; a tool to strengthen the commitment of a local community in a global effort toward sustainable development goals; a learning and training tool for public officials, private and social actors in all sectors. It represents an internal process evaluation tool in the alignment between the PSM (policies, strategies, actions) and the AmSvS, undertaken by CmRC as a response to the challenges of climate change and pandemic crisis.

# 4

## Participation and Promotion of a Culture for Sustainability

### 4.1 Process and tools

The involvement of territorial actors in planning and design processes is a condition for the correct contextualisation of plans and programs within a framework of constraints, resources and opportunities that varies from place to place. Mainly, it is a condition for the transition from formulating objectives to their implementation into actions.

The link between participation and change is crucial. The strategic nature of a plan or program lies precisely in its ability to take into account: the actions already in place by a plurality of actors; the availability of local actors or the conditions set by other parties, having a role, at least potential, in determining the outcomes of policies in the various sectors. These conditions generally imply the need for constant and methodical work of recognition, contact and engagement of the stakeholders and the opportunity to test some possible fields of collaborative action between promoters and other institutional and non-institutional subjects during the planning process.

More specifically, the connection above is even more stringent for sustainability-related issues. With the synergistic action of several subjects, in variegated sectors, at multiple levels (inside and outside institutions), the ambitious goals of national and international agendas can be locally pursued. Moreover, participation is able to articulate the contents of these documents, making them visible, disclosable, meaningful and usable in practice.

The process addressed by CMRC has put in place multiple opportunities and tools for interaction with external parties. It demonstrated the feasibility of collaborative work both in the planning and implementation phases and the complete legitimacy of the role of the Metropolitan Authority as networker, mediator and activator of processes.

In particular, in the various phases, the participatory process alternates the followings:

- Institutional meetings
- Thematic in-depth meeting open to the wider public
- Focus group
- Interviews
- Online questionnaires
- Land meeting

The following paragraphs are respectively dedicated to each of these methods of involvement and organization, in relation to the issues dealt with from time to time.

#### 4.1.1 INSTITUTIONAL MEETINGS

The initial phase of elaboration of the PSM and the Metropolitan Agenda sees the holding of three online meetings monthly, designed as dialogues between institutions that, at various levels, play an essential role in building sustainability and resilience policies.

- The first meeting allows the meeting of the Metropolitan Mayors with the representatives of all administrative levels competent for the planning and allocation of public resources. The interventions of the ministerial and regional representatives generally look at the coherence between the various programming tools, ranging from the 2030 Agenda to the National

Sustainable Development Strategy, from the National Recovery and Resilience Plan to regional planning to the Metropolitan PSM of the Metropolitan City of Rome-Capital.

- The second meeting is addressed to administrators and stakeholders of the CmRC territory. Participants split into four thematic tables: 1. Culture, identity and innovation; 2. Green revolution and ecological transition; 3. Climate, energy and sustainable mobility; and 4. Digital transformation and governance. Various SDGS connect to each theme. The task of the tables is to identify a framework of objectives, strategies and actions for the sustainable future of the metropolitan area, starting from processes already in place.
- The third meeting sees conspicuous participation of administrative representatives and experts from the metropolitan area with a rich panel of speakers and a final round table. Finally, representatives of institutions and bodies discuss the strategic lines developed so far.
- Finally, another institutional meeting is organised in a more mature phase under an implementation perspective. The focus is on the interrelationships between climate change, anthropic action, and environmental issues. Within the meeting, institutional representatives, local stakeholders and researchers are expected to explore tools and opportunities for the PSM and AmSvS implementation. In particular, they focus on: the potential inherent in regional programming; the guidelines for preparing the Paesc (Sustainable Energy Action Plan); the ecosystem services that could be activated in the metropolitan area.

#### 4.1.2 THEMATIC IN-DEPTH MEETINGS OPEN TO THE WIDER PUBLIC

The objectives of this series of meetings designed to address a more operational and targeted-oriented phase are the followings:

- highlight the spaces for actions that are congruent with the strategies formulated in the previous phase in specific territories and think about the more or less favourable context conditions for triggering sustainability processes;
- return to the actors already consulted a planning-strategic interpretation of the actions and networks that see them as protagonists;
- disseminate knowledge on the actions in progress, on the resources that can be used for similar projects, and more generally on the purposes pursued with the PSM and Metropolitan Agenda for Sustainable Development.

The following meetings designed to deepen and disseminate:

- a meeting to present the Food Atlas/Plan of CmRC. The Food Plan is an economical, social and environmental planning document that, starting from an analysis of the food system, outlines economic and territorial policies to implement sustainable development goals in the production and consumption system. The theme, therefore, lends itself to identifying a terrain for collaborations and partnerships between different actors, institutional and non-institutional, operating at different scales. The relevance of this meeting is strengthened by the fact that CmRC is the only institutional body to have an in-depth knowledge framework on the characteristics, operating dynamics, criticalities and strengths of the metropolitan food system;
- a further meeting, in which some strategic lines based on the food resource are outlined and discussed, for a review of the territorial policies in place, which is entirely consistent with recovery plans and sustainability agendas on a regional and national scale. Representatives of companies, consortia, biodistricts, and trade associations are invited to discuss;
- a meeting in which the salient features of projects that combine agricultural production and territorial welfare are illustrated. Some possible lines of action to be implemented in this sense are discussed with stakeholders and local administrators;
- a meeting dedicated to integrated urban regeneration as a set of possible lines of action supporting local economies, community welfare, involvement, enabling and strengthening networks and collaborative forms between local actors. The invited stakeholders discuss starting from the following questions: Which governance and possible new partnerships to



develop these processes (e.g. the role of foundations, universities, trade unions, PA, etc.)? Which local economies to activate and incentivise in the urban suburbs? What role can the Third Sector play in promoting social cohesion in the processes of integrated urban regeneration?

### 4.1.3 FOCUS GROUPS

The focus groups differ from the thematic meetings due to a more exploratory character of strategies still being defined in the PSM; they are open to a pool of public and private experts and stakeholders. The organisation of the focus groups involves the contact of the various actors and the previous sending to them of illustrative material on the actions considered possible for each thematic area. In carrying out the focus group, priorities, expendable resources and resources to be sought, possible connections with processes or projects already in progress, and conditions of replicability in other areas are also indicated for these actions.

Two meetings are organised in this way and are respectively focused on:

- forme di riconversione in senso adattivo di aree produttive e modalità organizzative secondo principi di sostenibilità, integrazione e resilienza.
- forms of adaptive conversion of production areas and organisational methods according to sustainability, integration and resilience principles.
- the process of public policies design digitalisation covering two dimensions relevant to the formulation of sustainability strategies: interinstitutional relations and relations between local authorities and citizens in the digital transformation process underway. In this case, the focus group aims to define a possible distribution of roles on competent territorial bodies by assessing the available resources, potential collaborations and any complementarities.

### 4.1.4 INTERVIEWS

The selection made among the territorial subjects interviewed in this phase is functional to a policy design process. Therefore, exhaustiveness is not sought, which at the scale of the metropolitan territory would not be credible, but rather the significance of a sampling for the following objectives:

- share the knowledge framework and accept any additions or insights from the subjects involved;
- assess the perceptions of particular thematic categories concerning the criticalities indicated by the 2030 Agenda on a metropolitan scale as well as the practicability of the strategies defined by the Metropolitan Strategic Plan (PSM);
- highlight spaces for action in the various sectors, consistent with the directions traced by the two reference tools (AmSvS and PSM);
- develop opportunities and communication channels for further expanding the sample of active subjects or those that can be activated on the reference issues.

The interlocution with this qualitative selected sample of participants fuels research by providing additional ideas. These ideas are to refine and implement the strategies designed as a result of the studies. This is a policy design operation geared toward the effective engagement of the bearers of innovations and changes under the perspective of the 2030 Agenda and, more particularly, within the *Metropolitan Agenda for Sustainable Development*.

The various actors are interviewed in two rounds: the first focuses on the territorial actors who represent innovative forms of cooperation and collaborative governance, and the second on the actors selected around the so-called *5 Ps* that group the SDGs (People, Planet, Prosperity, Peace, Partnership).

As far as the first series is concerned, these interlocutions show the type of cooperation established, the associated motivations, the organisational forms, and their relevance with the objectives pursued and with the projects in progress. The main operational areas are those of tourism and ecotourism,



territorial marketing, in synergy with the enhancement of natural resources and, in particular, waterways and local supply chains. A picture of specific efficiency and effectiveness emerges in the actions carried out, even in the face of critical issues regarding the centre-periphery relations and between economic actors and public bodies. In particular, a crucial role in *metropolitan governance* is understood by several voices. It relates to recognising and *supporting bottom-up projects and facilitating access to financial tools and other cognitive, organisational and relational resources*.

The second series of in-depth interviews involve key sustainability actors able to deploy resources (knowledge or project) or activate projects to compensate for trends or achieve sustainable development targets. These interviews are the core participatory activity of the Voluntary Local Review.

#### 4.1.5 ONLINE QUESTIONNAIRE

The tool tends to interrogate many actors on issues related to sustainability. In particular, it allows for evaluation of the more or less widespread knowledge to intervene with tools and information contents according to the needs expressed by the various targets. In this sense, two somewhat similar questionnaires have been prepared, one aimed at the newly 18-year-old population (already mentioned in the previous chapter in the context of category B) and one addressed to adult people of the metropolitan area.

In addition to a section dedicated to personal data, the questionnaires ask questions on the preferences for PSM macro-themes and strategic orientations, assess the degree of knowledge concerning the 2030 Agenda Goals and detect the points of view for the strategies to be implemented in the various sectors: digitalisation of the public authorities, support for production processes and conscious consumption; food accessibility; shortening supply chains and reducing waste; sustainable mobility; research and innovation; access to study; reducing land consumption; policies for equal opportunities; road safety; achieving social inclusion and the fight against poverty and demarginalisation; the enhancement of the natural environment; support for peri-urban agriculture; biodiversity; and the reorganisation of relations between urban areas and inner areas. Finally, the questionnaire contains various questions referring to the measures that are considered most valid at the level of the individual Municipalities from an economic, environmental and social point of view. As already mentioned, the response was particularly satisfactory for the youth segment, in which the themes arouse particular interest. Therefore, CmRC is awaiting the results of the second questionnaire.

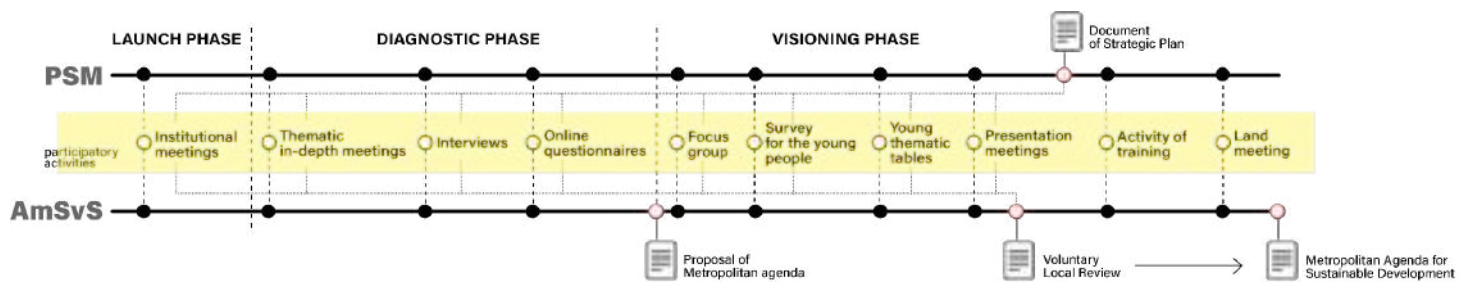
#### 4.1.6 LAND MEETING

Il percorso partecipativo per il PSM, Agenda 2030 e Voluntary Local Review si concluderà con un workshop rivolto a stakeholder e sindaci del territorio metropolitano con l'obiettivo di validare le strategie di sostenibilità elaborate. The participatory path for the PSM, AmSvS and Voluntary Local Review will end with a workshop aimed at stakeholders and mayors of the metropolitan area to validate the sustainability strategies. The last meeting will take place as an Electronic Town Meeting [e-TM] methodology. E-TM consists of methodological devices that allow you to combine the advantages of discussion for small groups with those of a survey aimed at a broad audience. The schedule of the participatory work is also progressively integrated. In fact, the outcome of the discussions produces questions to be immediately submitted to the assembly.

Under the e-TM format, three different work sessions are held in succession, aimed at facilitating the participants in the treatment of the topics under discussion:

- a first information and in-depth session thanks to the contributions of documents (discussion guide, divulgative reports etc.) and the assistance of experts;
- a second discussion session in small groups;
- a third session in which the topics summarised and returned in the form of questions are proposed to the participants, who can therefore be expressed directly by voting individually using polling keypads.

The Land meeting will also give space to the formula of "Sustainability Labs" with the actors present (divided by topic of interest) to discuss the connection between MSP and sustainable development and the methods of implementing strategies and actions.



*Image. 3 – Scheme of the participatory process*

### *FOCUS – Sustainability culture and stakeholder engagement*

The policy of *convergence* among the various CmRC's actions, programs and plans in the name of sustainability supported by an interinstitutional and collaborative governance model represents a challenge on many levels. An effective response to such a *challenge needs the active involvement* of the territories and civil society on issues that represent a possibility for the transition of the development model towards sustainable, innovative, green and just forms.

*Collective intelligence* becomes the key to the success of policies and the governance model. It also allows the flourishing of entrepreneurship and social innovation – at the basis of any transition – and turns to be even the field of opportunity for new public-private partnerships.

However, it is equally important to cultivate the dissemination of a culture of sustainability through opportunities for discussion, training and co-planning with local actors. The way to do this includes porous and open training courses and courses explicitly aimed at institutions with a view to capacity building in policy making and implementation of plans and projects.

The process of building the *CmRC Voluntary Local Review* initiated as part of the drafting of the AmSvS and the PSM is proposed as a synthesis and *meeting point of these various components*.

### 5.1 PSM and AmSvS implementation prospect

The Metropolitan City of Rome-Capital (CmRC) has defined its own Metropolitan Agenda 2030 for Sustainable Development within the agreement stipulated in 2020 with the Ministry of Ecological Transition. By doing so, CmRC intends to direct its strategic policy choices toward sustainable development within a place-based approach. Therefore, the analysis of the characteristics and priorities of the Roman metropolitan territory is crucial and needs an in-depth analysis of the context and its potential for sustainable development

From the outset, the definition of the 2030 Metropolitan Agenda bases on an in-depth analysis of the positioning of the Metropolitan City of Rome Capital concerning sustainable development. To this end, it uses the recent cognitive, strategic and programmatic frameworks already developed for the Metropolitan Strategic Plan.

Therefore, these frameworks are the background to the development of the first Voluntary Local Review (VLR) of the Metropolitan City of Rome, as part of a comprehensive approach to the localising SDGs, in line with the institutional framework of the United Nations.

The Voluntary Local Review is a document that consists of the diagnostic analysis of the positioning and progress of the territory concerning the Sustainable Development Goals.

Mainly, the VLR allows you to show the commitment and aspirations of the territory for a vision of sustainable development to accelerate and make strategies and actions more coherent.

Although there is no single definition or format of VLR, it is clear that there are some common elements that still respect and reflect the diversity of the territorial and national contexts of reference. In particular, they regard the VLR's primary purpose: to evaluate and present progress in pursuing the SDGs at the local level and strengthen a local vision and commitment to sustainable development.

Overall, the VLR is more than a simple monitoring and evaluation mechanism: it is a lever for achieving local transformation towards sustainable development; learning and training tool for public officials, private and social actors in all areas; transparency and accountability mechanism with which to promote greater civic involvement; a tool to strengthen the commitment of a local community in a global effort towards sustainable development goals.

Specifically, the Voluntary Local Review of the Metropolitan City of Roma Capitale carries out the following functions:

- Provides a metropolitan diagnostic regarding all the SDGs that allows the CmRC to identify its sustainable development priorities for the definition of the 2030 Metropolitan Agenda.
- Analyses the consistency of the strategic planning tools with the SDGs to strengthen their alignment with the reference frameworks at global, European, national and regional levels.
- Strengthens collective awareness of sustainable development and the related goals and targets, involving local actors and citizens in the analysis and diagnostics process of the metropolitan area.
- It creates a monitoring system based on periodic progress analysis of metropolitan performance concerning the goals and targets for sustainable development identified,

including updated indicators, policies and initiatives undertaken (both by local authorities and by the private sector and social organisations) and results achieved.

- Strengthen communication and transparency by local governments regarding sustainable development priorities and performances.
- Allows the revision of goals and targets based on the evolution of social, environmental and economic dynamics that will characterise the metropolitan area from now to 2030 and influence future decision-making processes on new priorities and policies.

## 5.2 Voluntary Local Review: a method, a process, a product

### 5.2.1 VLR DRAFTING METHODOLOGY

The VLR process intends to enhance the extensive efforts carried out by the metropolitan administration and the working groups, systematising the outcomes and results of the strategic planning processes and the research and involvement of citizens in progress.

The editorial staff of the VLR of the Metropolitan City of Rome will draw qualitative and quantitative information from the following sources:

- Concluding report coordinated by ASviS concerning the “Proposed agenda for the sustainable development of the metropolitan city of Rome Capital”;
- Databases for the collection of information at a territorial / sub-metropolitan level;
- Activities and outcomes of the participatory process conducted by UNIFI and Tor Vergata (Mapping the actors' relevance, in-depth interviews, participatory tables, citizenship questionnaire, youth involvement).

In particular, this information base will make it possible to obtain an analysis sheet for each SDG consisting of:

- infographics, tables and graphs on metropolitan level indicators and interpretation;
- analysis of opinions and information deriving from the participatory process;
- cartographic representation of indicators at territorial level and interpretation;
- metropolitan policies and strategic orientations;
- highlights on the situation, priorities and lines of action.

The entire process will occur in close synergy with the path of definition and approval of the PSM and the Metropolitan Agenda through continuous dialogue with all the working groups and with the relevant offices of the CmRC.

### 5.2.2 VLR EFFECTIVENESS WITHIN CmRC GOVERNANCE MODEL

The Metropolitan City of Roma Capitale intends to build its Voluntary Local Review following a path divided into three stages.

1. *Analysis of indicators:* The design and selection of indicators must combine the need to grasp local specificities and to harmonise key indicators at the local level with national and supranational measurement frameworks. Furthermore, the information base must contain quantitative and qualitative data collected through the participation and involvement of the actors. This stage is supported through a structured analysis work carried out by Asvis-Urban@it.
2. *Participation of local authorities:* the process of involving and empowering local communities through the development of VLRs can contribute to their more proactive, conscious and systematic involvement in sustainable development processes. This stage was developed as

part of the actions of categories B and C of the Agreement with the Ministry (see section 2). It will be integrated into the activities with stakeholders and the local community for the identification of the priority goals of sustainable development of the Metropolitan City (carried out by the University of Florence).

3. *Coherence analysis*: the VLR can favour horizontal and vertical alignment between existing development plans and strategies, thus strengthening the interaction of resources, skills and knowledge between levels (e.g. municipal, inter-municipal, metropolitan, regional, national, supranational and global) and sectors (e.g. public, private and social).
4. *Strategic planning*: the VLR also contributes to identifying the areas in which it is necessary to act and suggest strategies and investment priorities in line with the SDGs. The VLR can become not only monitoring and reporting tool but also a process that guides local governance towards sustainable development. To this end, VLR is particularly effective for the Metropolitan City of Rome Capital. It is carrying out an experimental strategic planning process, aimed at keeping together the drafting of the Metropolitan Strategic Plan and the 2030 Urban Agenda for sustainable development

### 5.3 The CmRC territorial sustainability challenges

Developing the VLR highlights the importance of having a complete diagnostic framework and medium-term planning for sustainable development as required by the Metropolitan Agenda 2030. The VLR provides a starting analytical framework to systematically monitor performance and progress in the future, evaluate the effectiveness of the initiatives undertaken at various levels, and design new ones, thus adjusting the collective path toward the vision of sustainable development. Furthermore, the VLR wants to represent a stimulus to adopt the SDGs as a framework for planning other local authorities at the municipal and inter-municipal levels. Therefore, it results to be a central element in ensuring coherence in planning and policies between the different levels of local governance (municipal, metropolitan and regional). The collective elaboration and future dissemination of the VLR also want to communicate the objectives, targets and performance of sustainable development both to the metropolitan city and to the various actors and social groups in the area. Only by involving the citizens of the entire metro area and the local society can effective solutions be identified to face the current scenario's significant social, environmental, and economic challenges.

The challenges of sustainability for the CmRC territory highlight the urgency of addressing the issues of ecological transition, technological and social innovation and inclusion for the rebalancing of territorial gaps and forms of socio-economic marginalisation.

The policy agenda for the sustainable development of the metropolitan area of Rome must therefore include the following: interventions for the rebalancing of the socio-economic system; the overcoming of marginalisation (from the suburbs to the constellations of widespread urbanity); the achievement of territorial climate neutrality and the start of an urban forestry process rooted in the agroforestry and natural resources local system; investment in the circular economy and the treatment of the waste problem; the promotion of energy communities and energy efficiency actions for buildings; the efficiency of the mobility system, the rebalancing of ecosystem services; sustainable economic management of agronomic resources and food; the development of the institutional capacity building; the promotion of innovative and ecological forms of enterprise with a view to sustainability; the promotion of local development.

The dimension of territorial cohesion expressed in the promotion of place-based strategies represents an opportunity to compensate for injuries and forms of territorial devaluation and address the course of institutional strategic action toward the transition to sustainable development.

Social and territorial innovation constitutes a recovery strategy in the short and medium-term. Digital innovation in the territory and public administrations is a trigger for the digital transition for a sustainable economy and effective operation of interinstitutional governance.

L'innovazione sociale e territoriale costituisce una strategia di ripresa nel breve e medio periodo. L'innovazione digitale nel territorio e nelle pubbliche amministrazioni lavora come innesco della transizione digitale per una economia sostenibile e una operatività efficace della governance interistituzionale.

### ***FOCUS – Coherence and convergence between AmSvS, VLR e PSM***

The 2030 Metropolitan Agenda for the Sustainable Development of the Metropolitan City of Rome-Capital intends to represent an instrument of coordination, strategic orientation and political direction for the commitment of all the actors of the Roman metropolitan area towards sustainable development and implementation at the metro level of the United Nations 2030 Agenda and the National Strategy for Sustainable Development. The 2030 Metropolitan Agenda systematises the Metropolitan Strategic Plan in line with the Sustainable Development Goals. It guarantees its implementation in a strategic and programmatic framework at global, European, national and regional levels, based on the Roman metropolitan area's social, economic, environmental and cultural specificities. The VLR is a crucial component of the Agenda drafting process that strengthens the synergy and coherence between it and the PSM. Overall, the VLR is more than just a monitoring and evaluation mechanism. The VLR can be understood as a lever to direct local transformation towards sustainable development. As a result, the definition paths of the Metropolitan Strategic Plan and the Metropolitan Agenda 2030 will proceed in close synergy while reaching completion with different indicative timelines, thus avoiding possible misalignments.



# Index of Abbreviations

**ASviS:** Italian Alliance for Sustainable Development - Alleanza Italiana per lo Sviluppo Sostenibile (IT)

**CmRC:** Metropolitan City of Rome-Capital - Città metropolitana di Roma Capitale (IT)

**EU:** European Union

**JRC-EU:** Joint Research Center - EU

**MiTE:** Ministry of the Ecological Transition - Ministero per la Transizione Ecologica (IT)

**PNRR:** National Recovery and Resilience Plan - Piano Nazionale di Ripresa e Resilienza (IT)

**PON METRO:** National Operational Programme for Metropolitan Cities - Programma Operativo Nazionale per le Città Metropolitane (IT)

**PSM:** Metropolitan Strategic Plan - Piano Strategico Metropolitan (IT)

**SDGs:** Sustainable Development Goals

**AmSvS:** Metropolitan Agenda for Sustainable Development - Agenda Metropolitana per lo Sviluppo Sostenibile (IT)

**SNSvS:** National Strategy for Sustainable Development - Strategia Nazionale per lo Sviluppo Sostenibile (IT)

**SRSvS:** Regional Strategy for Sustainable Development - Strategia Nazionale per lo Sviluppo Sostenibile (IT)

**SvS:** Sustainable Development - Sviluppo Sostenibile (IT)

**UE:** European Union

**UniFI:** University of Florence

**Urban@it:** National Studies Centre for Urban Policies

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