



VOLUNTARY LOCAL ITALY 2022 LOCAL REVIEWS

ANNEX 2



Table of contents

ABRUZZO REGION,MARCHE REGION,UMBRIA REGION	PAG 3
EMILIA-ROMAGNA REGION & METROPOLITAN CITY OF BOLOGNA	PAG 27
LAZIO REGION	PAG 72
LIGURIA REGION	PAG 117
LOMBARDY REGION & METROPOLITAN CITY OF MILAN	PAG 146
PIEMONTE REGION & METROPOLITAN CITY OF TORINO	PAG 223
PUGLIA REGION AND METROPOLITAN CITY OF BARI	PAG 260
AUTONOMOUS REGION OF SARDINIA	PAG 309
METROPOLITAN CITY OF GENOVA	PAG 333
METROPOLITAN CITY OF MESSINA	PAG 364
METROPOLITAN CITY OF REGGIO CALABRIA	PAG 401
METROPOLITAN CITY OF ROME-CAPITAL	PAG 443



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.



Index

Summary

Premise..... 2

INTRODUCTION..... 4

1 TERRITORIAL GOVERNANCE..... 5

 1.1 Territorial control cabins: the Metropolitan City of Genoa..... 5

 1.2 Multi-level spatial governance 6

 1.2.1 Tables of comparison between mild and metropolitan cities 6

 1.2.2 Active involvement of local governments..... 9

2 TERRITORIAL STRATEGIES AS FRAMEWORKS FOR POLITICS COHERENCE..... 11

 2.1 The accompanying pathways for politics coherence..... 11

 2.2 Lining up processes with other programming and evaluation tools 12

 2.3 Areas of innovation and the role of research in supporting sustainability policies 14

3 PARTICIPATION AND PROMOTION OF A CULTURE FOR SUSTAINABILITY 22

 3.1 Territorial forums for sustainable development and further engagement actions 22

 3.1.1 Regional, autonomous provinces and metropolitan forums 22

 3.1.2 Protocols, multilevel consultation tables, and other participatory tools..... 22

 3.1.3 Mapping and recognition of a "community" of actors committed to sustainability 24

 3.2 Territories for the promotion of a culture for sustainability 26

 3.2.1 The activities of territories on education, training, information and communication 26

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.

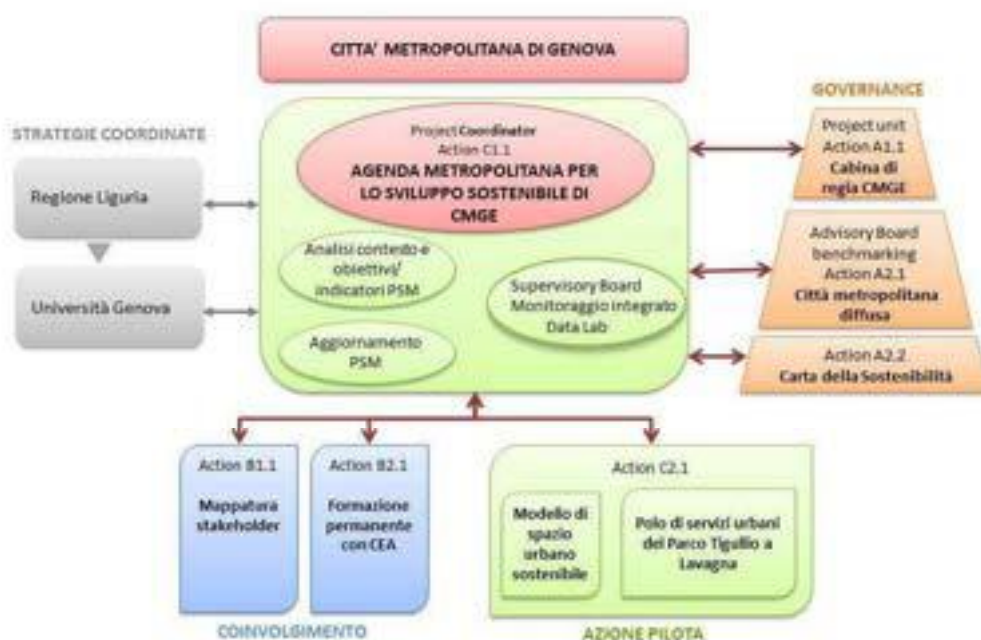
[Piano Strategico Città Metropolitana di Genova | Costruiamo insieme il territorio metropolitano \(cittametropolitana.genova.it\)](http://cittametropolitana.genova.it)

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.

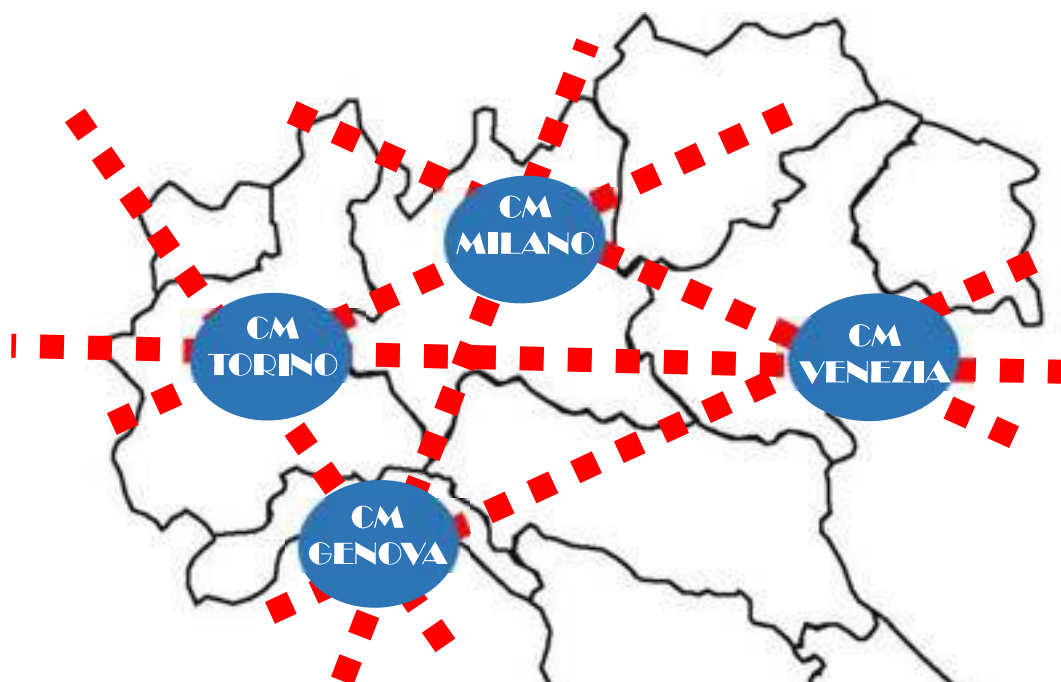
Through the agreements and their accompanying activities, the territorial strategies for sustainable development represent a reference system within which spatial planning and programming tools are being brought into coherence.

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**".



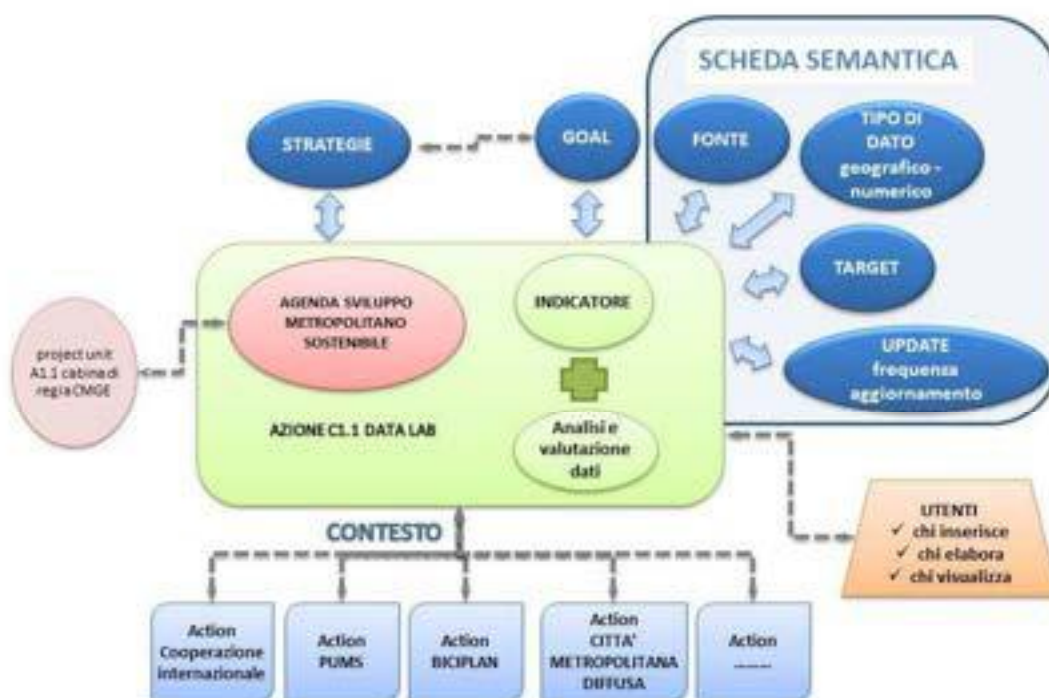
Coordination with Metropolitan Cities of Venice, Milan and Turin constitutes a permanent system of discussion tables between wide-area entities in order to exchange best practices to:

- 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.

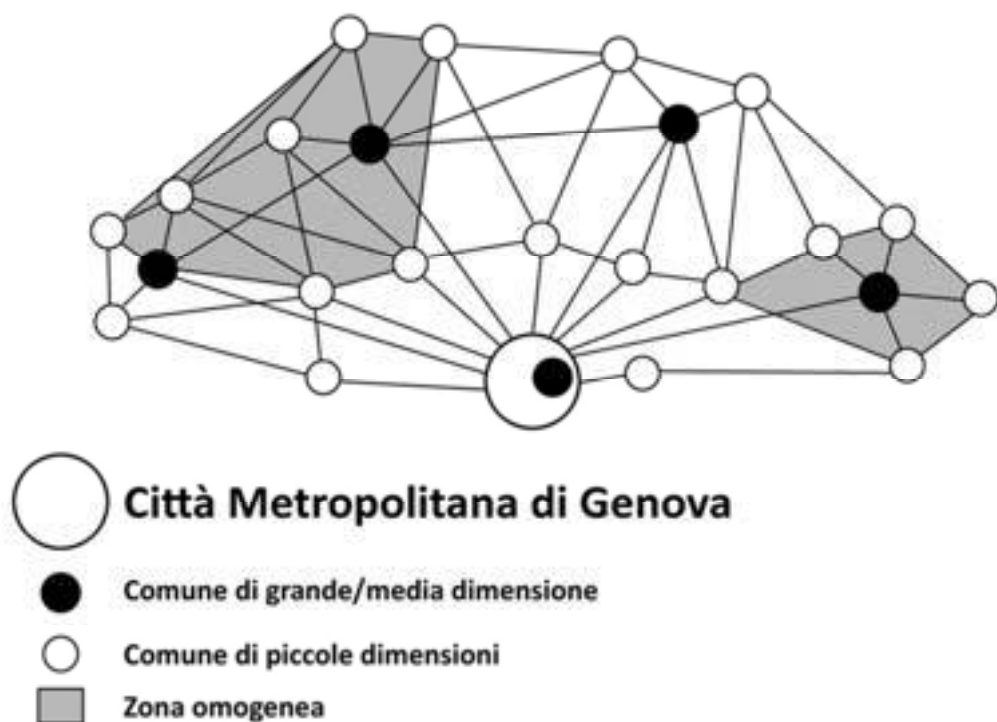
The involvement of Local Authorities in participatory paths is also supported by the dedicated website of Genoa Metropolitan City Strategic Plan, <https://pianostrategico.cittametropolitana.genova.it>, thought as a web space used to spread all information and to gain inputs and contributions.

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 of 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.

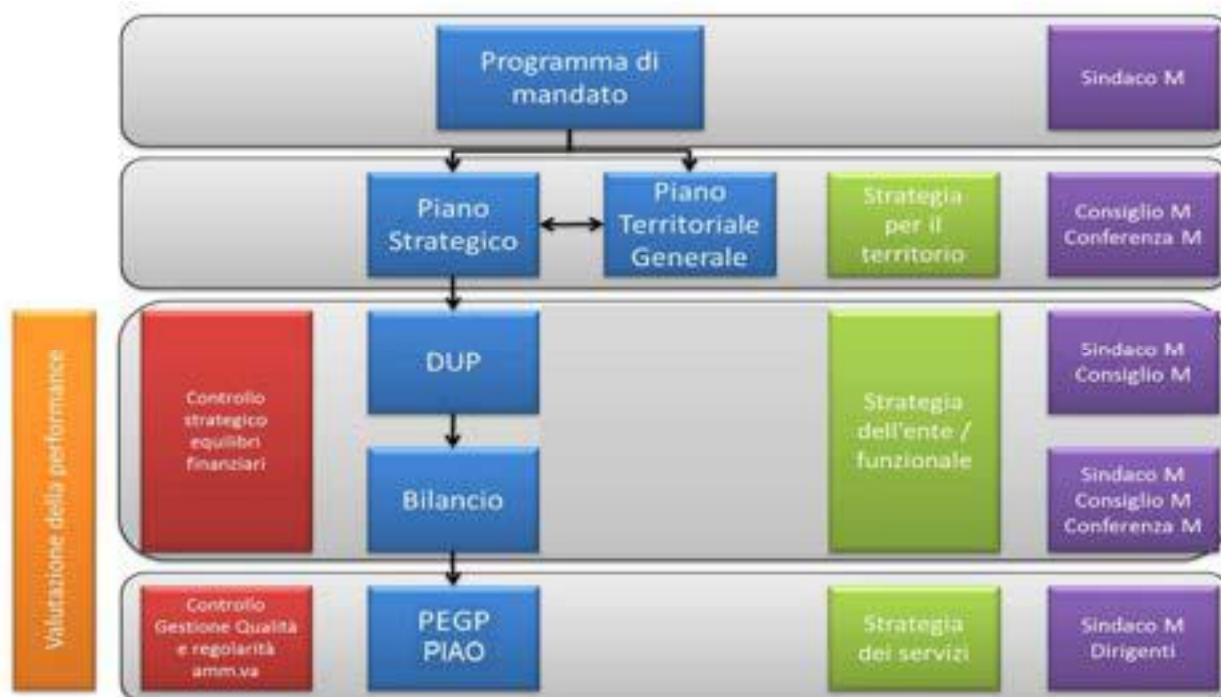
The multidimensional approach of the "Agenda 2030" allows to address the various challenges of the Genoa Metropolitan City Strategic Plan by crossing the lines of intervention with the themes of sustainable development (equality, environment, infrastructure and innovation), which it offers a new key.

TAB 1	Territori urbani	Territori aperti	Transizione ecologica	Health & Wealth
Territorio	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
Mobilità	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
Assetto urbanistico	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
Ambiente	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:

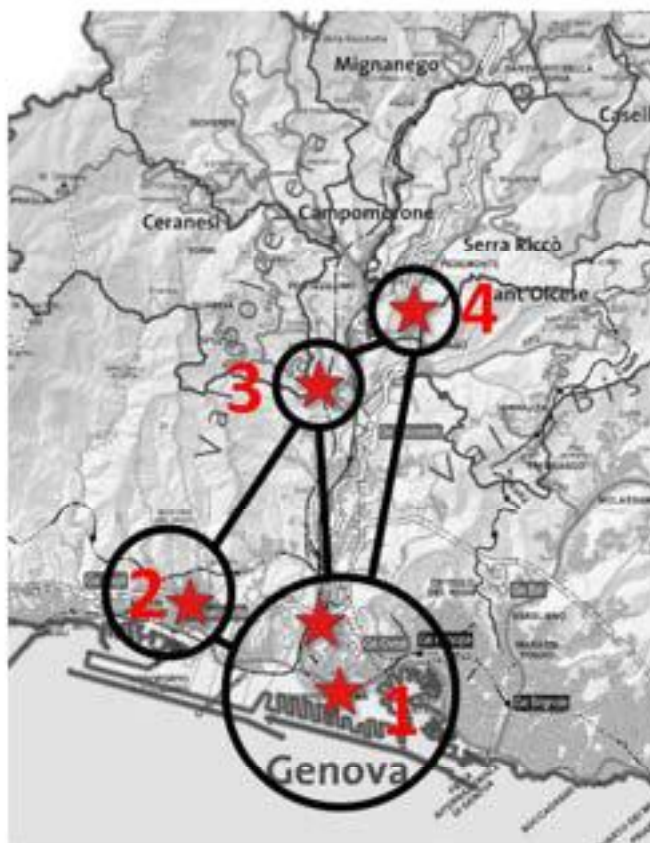
1. GENOA'S PERIURB AREA: when beauty unites and strengthens urban identity
2. GREEN BLUE HOUSING IN THE METROPOLITAN LEVANT POLICYCLE SYSTEM: the "good living" between city and nature
3. GREEN SMART VILLAGES: new models for living in inland areas



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"¹.

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
Azioni Mobilità	Mobilità	818.421	224
Azioni QR Code	QRCode Autobus	415.000	638
Azioni Quiz	Quiz Ecoattivi	413.850	793
Azioni Foto	Invio foto	130.800	153
Azioni Quiz	Quiz CM Genova	53.570	483
Azioni Foto	Invio foto compostiera	40.200	67
Azioni QR Code	QRCode Biblioteca	33.000	70
Azioni QR Code	QRCode Luogo d'interesse	27.800	36
Azioni Ecoattivi	Invita un amico	13.000	80
Azioni Ecoattivi	Invito di un amico	12.200	122
Azioni QR Code	QRCode Locandina	9.900	97
Azioni Ecoattivi	Sfida/Missione	2.000	2

¹ 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 Genoa 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.



. . . . perché non esiste una sola possibilità

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.