







# CATMED Genoa Green Apple and shared solutions for air quality







# **CAT-MED** Change Around Time

Develop territorial resilience to natural risks linked to climate change

Limit the environmental impact of urbanization

- definition of an urban model (Green Apple);
- common system of transnational indicators to follow up these model;
- experimentation on real scenarios called "Green Apple" with Metropolitan Groups.
- Methodological Guide for sustainable urban development
- political Commitment: Malaga Charter and a permanent Platform to give durability to the actions.

*Partners:* Seville, Málaga, Valencia, Barcelona, Marseille, Genoa, Rome, Turin, Thessaloniki, the Communité du Pays d'Aix, the Prefecture of Athens (now Atica Region) & the Mediterranean Institute (now Avitem)





# Main stages of the project

# IDENTIFYING COMMON INDICATORS OF URBAN SUSTAINABILITY:

definition of sustainable urban model;
evaluation of examples and experiences of sustainability all over Europe;
selection of a panel of 20 indicators; indicators and qualitative assessment, methodological definition of indicators

# **ANALYSIS and RESEARCH**

# APPLYING THE INDICATORS EXPERIMENTATION WITH A TRANSNATIONAL OBSERVATION SYSTEM:

•Collecting information and measuring the indicators in each partnercity;

- •setting up a common GIS platform to share the results;
- •defining the reference intervals for each indicators

# **EXPERIMENTATION and SHARING**





- The Municipality of Genoa was working to the new **Municipal Urban Masterplan**, a general and comprehensive **framework** for urban planning for the city as a whole.
- A huge work of definition of rules and regulations valid and effective for every sector connected with urban planning
- EU suggestion (Strategy 2020, Covenant of Mayors Declaration)
- Catmed helped with the experience of other cities and the project work to create a new method that starting with a specific area (CATMed Green Apple) could be transferred to other areas of the city.





- In the '50 a huge part of the west zone of Genoese territory was progressively dedicated at the industrial development, particularly on steel production, so this part of the city became an industrial suburb. With the fall of industrial production at the end of last century most of the firms were abandoned so it's needed a solution to re-use all these neglected areas.
- The section of the Voltri coastline between the mouth of the Leiro torrent and the San Giuliano River is distinguished by haphazard city planning functions and a **congested local traffic** system.
- In addition to a residual amount of residential and a block destined for commercial activities and vehicle mobility assistance, the area also includes: the railway facilities, the local Carabinieri barracks, a mid-sized commercial activity, a hotel with a parking area, some sporting facilities, a ship yard, various buildings for sports clubs and associations, beach clubs and other businesses, activities connected to the port.
- The area addressed by this framework occupies a surface area equal to approx. **30 hectares, mostly public**: RFI (Italian railway Network) areas and buildings, predominately Port Authority land in concession to associations and operators, private residential buildings located on the margins.















# Genoa Green Apple: Voltri





# Genoa Green Apple: Voltri













### MOBILITY

One of the biggest problems that affect the area and its inhabitants is the huge congested traffic in the road Aurelia, the only existing infrastructure which connects the area to the city centre. The traffic makes difficult and very long the public transport (buses) and this increases the sense of distance and separation with the citycentre.

•To relieve the traffic in the Aurelia road by moving some next to the montains and near the sea;

•To **improve the public transport** with the realization of a **new railway station** that will allow to divide the train traffic in local and metropolitan one to the high speed one;

•To **foster the sustainable mobility** it is also foreseen the creation of a new parking area close to the railway station and a **car sharing** point (not existing yet in the area).

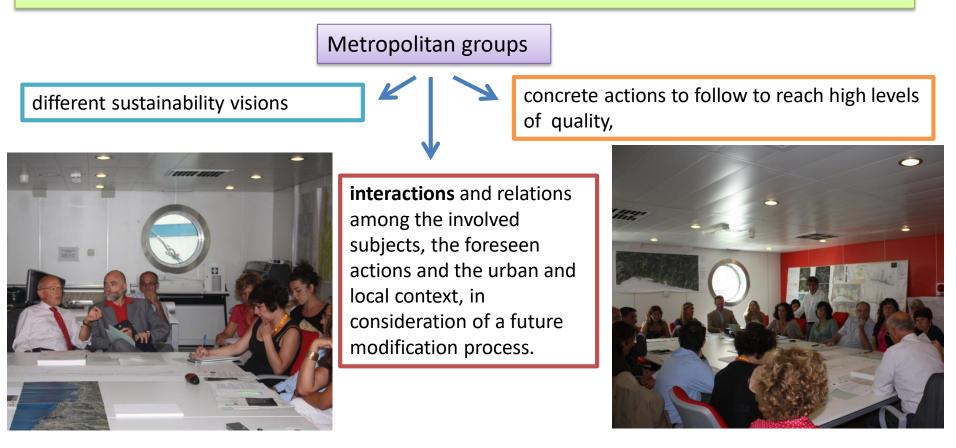




First meeting: official launch of metropolitan groups

# **SUSTAINABILITY**

**Catmed** project starts from the central assumption that a **sustainable planning can't disregard** the involvement and **participation of local communities** and the key actors in the participative process.







- Municipality of Genoa Urban Lab, Energy Office, ...
- West district 7 of Genoa
- Port Authority
- Aster (maintenance of road and green areas)
- Amiu (waste management)
- ARE (energy agency Covenant of Mayors)
- Assedil (builders association)
- University
- Local associations

(Utri mare, Amici del capolinea, Proloco Voltri 2000, ASD volontari e pescatori S. Ambrogio, Pesca Ponente Leira, Ponente che balla, Associazione Nazionale Partigiani Italiani, Agesci)

Local businessmen



# A sustainable neighborhood is.....



... a neighborhood with a strong local identity

... a neighborhood totally integrated with the surrondings

... a participated neighborhood

... a neighborhood where it is foreseen the reduction, re-use and recycle of waste.

... a neighborhood using renewable energies

... a neighborhood which fosters public transportation ... a neighborhood with high levels of social inclusion

... a neighborhood which reduces energy and water consumption

... a neighborhood which fosters environment weelness

... a neighborhood which fosters local economy

... a neighborhood which recovers its relations with the vegetation and the sea





#### GROUP 1 "TERRITORIAL AND URBAN PLANNING MANAGEMENT"

- 1: Build on built-up areas with the reuse of traditional materials and techniques
- 2: Use of permeable pavement and / or photocatalytic
- 3: Reduce the light pollution detected from the sea

#### **GROUP 3 "RESOURCES MANAGEMENT AND ECOLOGICAL FOOTPRINT**

1: energy production from the sea (geothermal and wave energy)

2: mini-hydroelectric

3: rainwater harvesting and construction of a washing center for the public companies vehicles (AMIU, ASTER, AMT).





### **GROUP 4 "ECONOMIC AND SOCIAL COHESION"**

- 1: Promote the 0 km products market.
- 2: Encouraging co-housing experience.
- 3: Facilitating the management of green spaces to the residents (urban gardens)

# **GROUP 5 "MEDITERRANEAN GREEN APPLES' GOVERNANCE/LOCAL CHALLENGES IDENTIFICATION"**

Part 1: Mediterranean challenges

- •Identification of the local Mediterranean challenges within the Green Apple neighbourhood chosen.
- •Pros and cons in the developing of a Green Apple project.
- •Proposals and solutions to make the Green Apple project feasible in each city.

#### Part 2: Governance

- •What kind of solutions have been implemented to ensure the "management" of the project?
- Discussion on how to enhance the governance of the project at the different steps of its implementation
- •Was the actors' net chosen complete enough to pursue the objectives of the project?
- •Conclusions and consultation about the metropolitan group's "future" in each city.







# **MEETING GROUP 2: MOBILITY AND TRANSPORT**

## **1. Public spaces layout:**

•Ranking of the mobility of traffic so the different levels of traffic can be distinguished.

•The pedestrian scale has to be a reference for mobility, as well as the materials and the components

•To take into account the internal and external connectivity between the new urban development and the existing city.

# **3.** Mobility.

•Development of interconnected bike paths safe and comfortable routes.

Placement of speed control devices for vehicles

# 2. Public transport promotion.

Generalization of spaces reserved for public transport spaces devoted to public transport

Bus and metro stops proximity. Placing the bus terminus near the new railway station.

Service frequency. Increasing the frequency of public service.





# **MEETING GROUP 2: MOBILITY AND TRANSPORT**

# 4. Accessibility.

Accessibility for all Solving the problem of pedestrian crossings.

## 6. Parking.

Promotion of parking Rationalizing the parking system of the entire area in relation to activities

# 5. Alternative modes of transportation.

•Proximity to bike lanes design a new walk in continuation of the existing one.

• Carsharing/Bicing Extending to Voltri the car-sharing service,

•Shipbus Increasing the ship's bus service continuing the service until Voltri.

# 7. Reducing CO2 emissions.

Transport strategies adaptation. Promoting initiatives to encourage electric transport vehicles.





# **MEETING GROUP 2: MOBILITY AND TRANSPORT**

- 1: "drin bus" (bus to call for remote areas and hilly)
- 2: "nave bus" (boat bus)
- **3:** areas of logistics warehousing linked to a distribution service by electrical vehicles, in agreement with associations of traders (CIV).





# **NUMER TIME** Metropolitan Groups: evaluation



# **Strong points:**

1) Cohesion: high level of participation strong local identity dialogue with different actors

#### 2) Innovative aspects:

thematic sub-working groups - output diffusion ("restitution") Integration in Transform project (Genoa Smart City Program);

# Weak points:

- 1) Fragmentation of competences and property requiresCity Council's strong commitment,
- 2) Timing : long term decision and agreement process

# What still need to be done

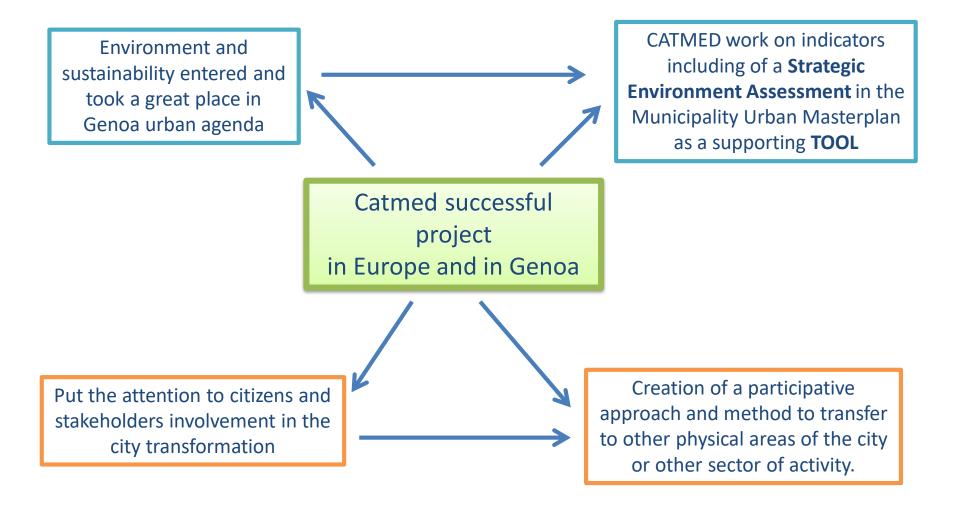
More involvement- awareness and commitment of policy makers

Agreement with owners of the different areas involved in the Green apple

Selection of **feasible projects** (starting with small ones -step by step process) ROP – NOP – Trasnational cooperation, PPP, Bank Foundations













Thank you!

Barbara Poggio International Affairs Office <u>bpoggio@comune·genova·it</u>

