

LIFE Metro Adapt

enhancing climate change adaptation strategies and measures in the Metropolitan City of Milan

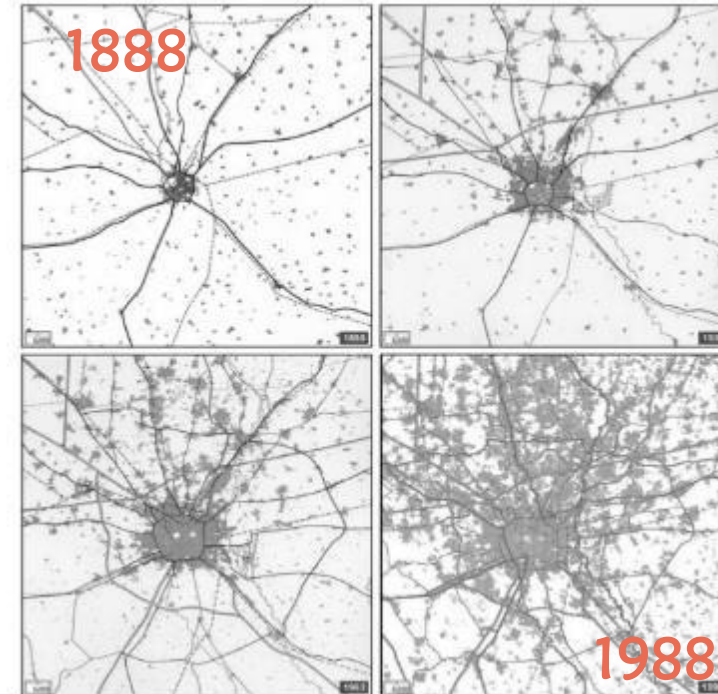
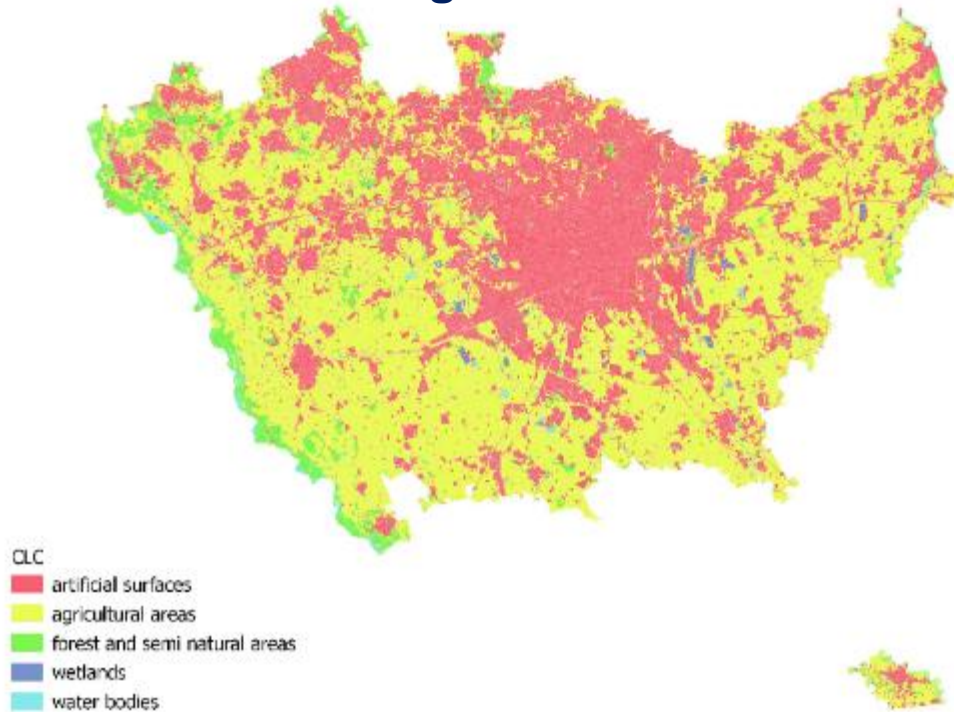
Dr Cinzia Davoli - Metropolitan City of Milan, Italy



UKRAINE GREEN RECOVERY CONFERENCE
КОНФЕРЕНЦІЯ «ЗЕЛЕНЕ ВІДНОВЛЕННЯ УКРАЇНИ»

Metropolitan City of Milan : territory

The Metropolitan City of Milan is among the most densely populated urban areas in Europe with a density of about **2,038 inhabitants/km²** for a total of **3.4 million inhabitants** and a demographic structure composed of **22% over 64 years old**. Its territory is about **1600 Km²** distributed over **133 Municipalities**, and is about **41% formed by built-up areas and infrastructures, 50% agricultural areas and only 8% woodlands**.



Intercommunality!

Starting point: The problems

In MCM we have this situation:

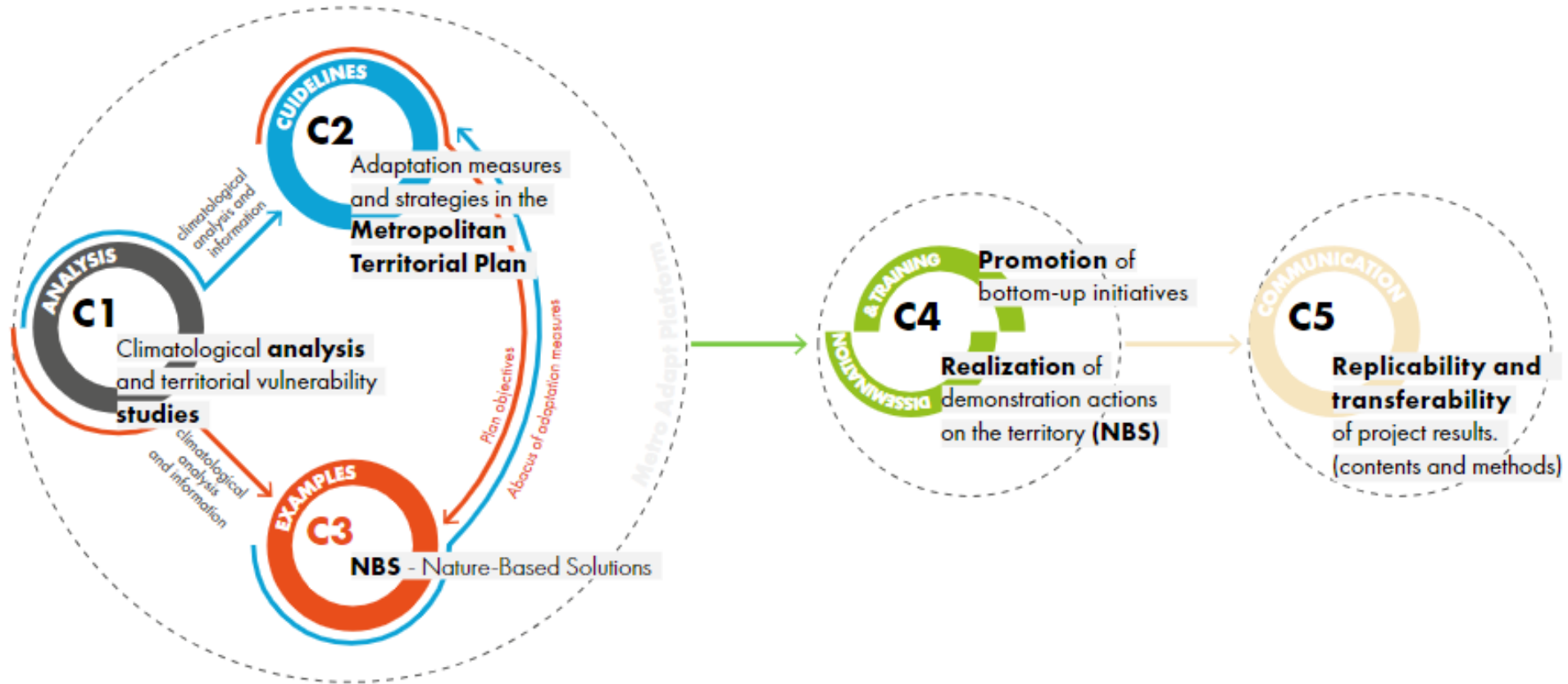
- long dry periods and severe flooding when there are intense rainy weather phenomena
- overheated urban parts with consequent social, health and energy consumption problems
- increasing loss of biodiversity
- high land cover use



To understand the severity of these phenomena and to learn about measures to reduce the vulnerability of the area, we resorted to extraordinary projects by seeking extraordinary financial resources



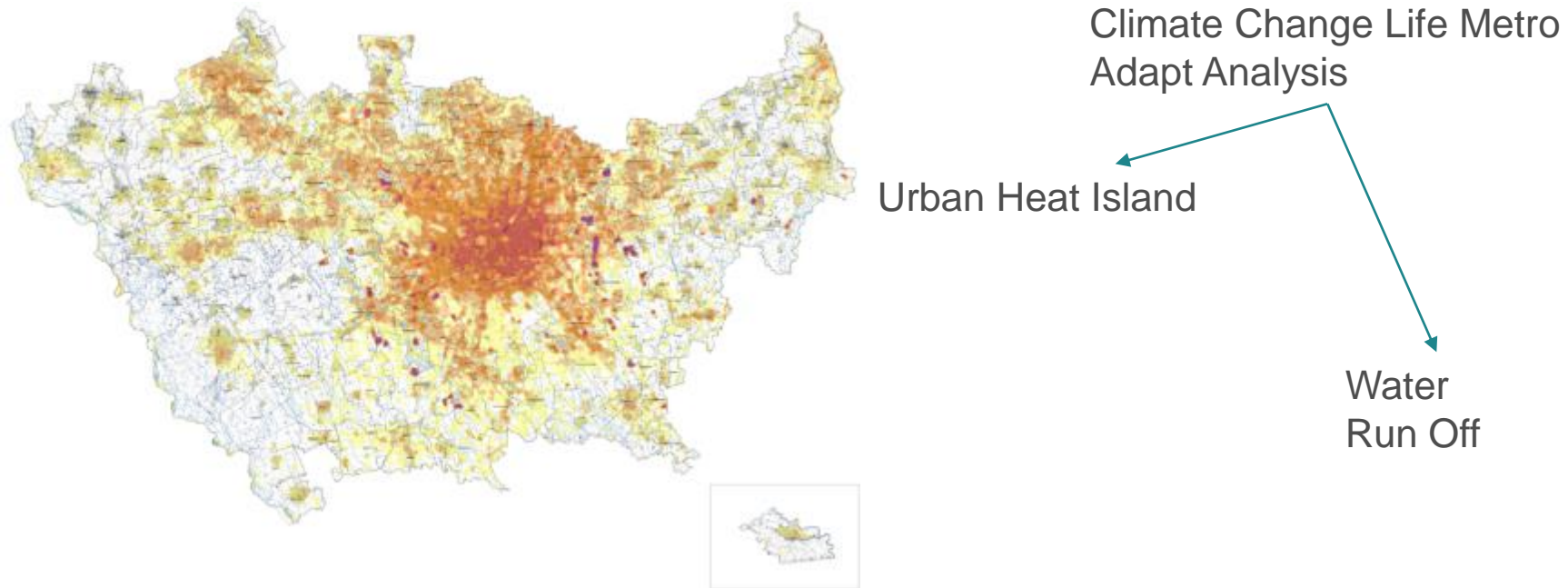
Life METRO ADAPT : outline of project actions



Metropolitan Territorial Plan: what is it?

The MTP is the overall territorial plan of the Metropolitan City of Milan.

For the first time in Italy, we designed **a territorial plan for large areas containing an innovative part dedicated specifically to the governance of environmental emergencies** with a specific section reserved to climate change that includes rules enhancing resilience measures in the local planning tools.



Metropolitan Territorial Plan: Participation

The 133 municipalities were involved in the MTP drafting process.

According to the urban planning law of the Lombardy region, we also involved civil society and other institutions in a codified participatory process: Strategic Environmental Assessment (regulated at the European level by Directive 2001/42/EC of the European Parliament and)



Participation of hundreds of institutional actors and stakeholders



Metropolitan Territorial Plan: Participation

There is no real participation without knowledge and training!

Throughout the process of designing the spatial plan, thanks to the Life Metro Adapt project we were able to set up:

Climate Knowledge Network

A board consisting of experts from municipalities, research institutes, qualified professionals from foundations and the third sector.

approximately 3 annual meetings to monitor the project, the MTP, and to help with scenario building.

Training

we involved more than 2,000 people through online training, courses, akathons, workshops, thematic theatre events.

Target:
public administration technicians,
freelancers, orders of engineers,
architects...

Implementation of territorial stakeholder participation



MTP and climate change : legal rules for Municipalities

Municipalities with areas with night values exceeding the reference value considered in the “**map of thermal anomalies**” by at least 3 degrees centigrade are required to develop a specific action to reduce this thermal anomaly.

For these areas the **MTP provides guidance on the actions that Municipalities have to implement to mitigate the thermal anomalies** and to integrate in municipal plans and regulations (such as Municipal Building Regulation, Green Plan, Urban Traffic Plan, Sustainable Urban Mobility Plan, etc.).



MTP and climate change: Metropolitan Green Network project

A **Metropolitan Green Network** project was drawn up in the MTP as the **general climate change adaptation strategy**, with particular reference to meteoric water management and heat island mitigation.



The Metropolitan Green Network project is based on the intrinsic characteristics of the different metropolitan landscapes, their structure and functions

Specific **planning priorities** are defined **for each part of territory**. The planning priorities are articulated in actions to be implemented with the priority use of **Nature based solutions**.



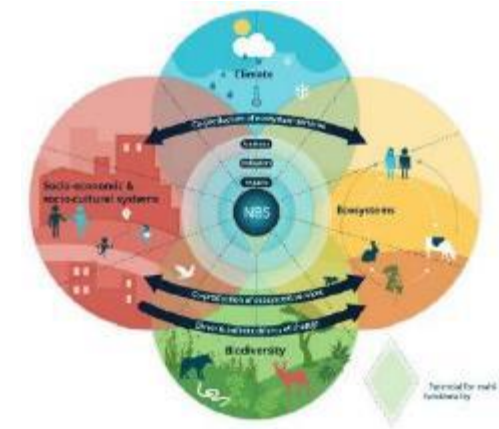
Nature Based Solution in a nutshell

These are solutions with characteristics of **complex ecosystems that use or are inspired by nature's processes.**

They have the ability to bring the characteristics and processes of nature into urbanized environments.

They are **multi-objective solutions: environmental, social, economic.**

Using natural flows of matter and energy, they tend to be low-resource solutions that, if developed properly, can be more efficient than others.



Rain Gardens



Green walls and roofs

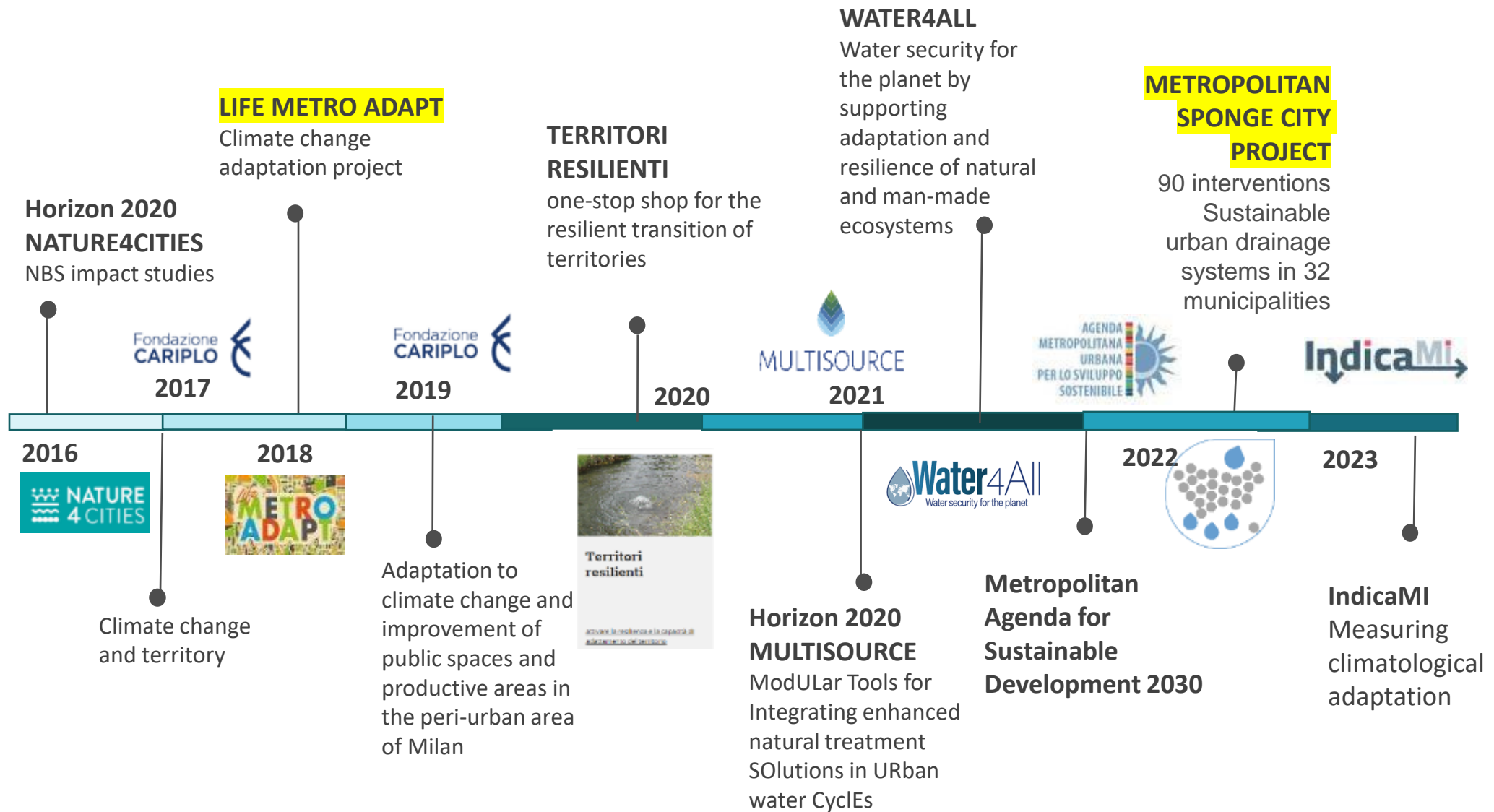


Overcoming uncertainty and barriers to adoption of Nature Based Solution in urban context

Tools:

- Catalog of 20 NBSs that can be used in the urban area
- Analysis and feasibility studies of Nature-Based Solutions
- Construction of 2 demo sites in small municipalities in the metropolitan city in order to make the territory more resilient to storms. Development of these projects with Gruppo CAP, the investee company of municipalities and metropolitan city that manages the Integrated Water System on behalf of the territory.





We have been working on this topic for a long time now, and we need to continue to consistently work in this direction in the future

There is no participation without strong scientific knowledge, training, education and the creation of a stable system of knowledge interchange



Thank you

sviluppo.sostenibile@cittametropolitana.mi.it



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