

## The Ecosystem Services for a sustainable multi-level governance. The Project Life SAM4CP

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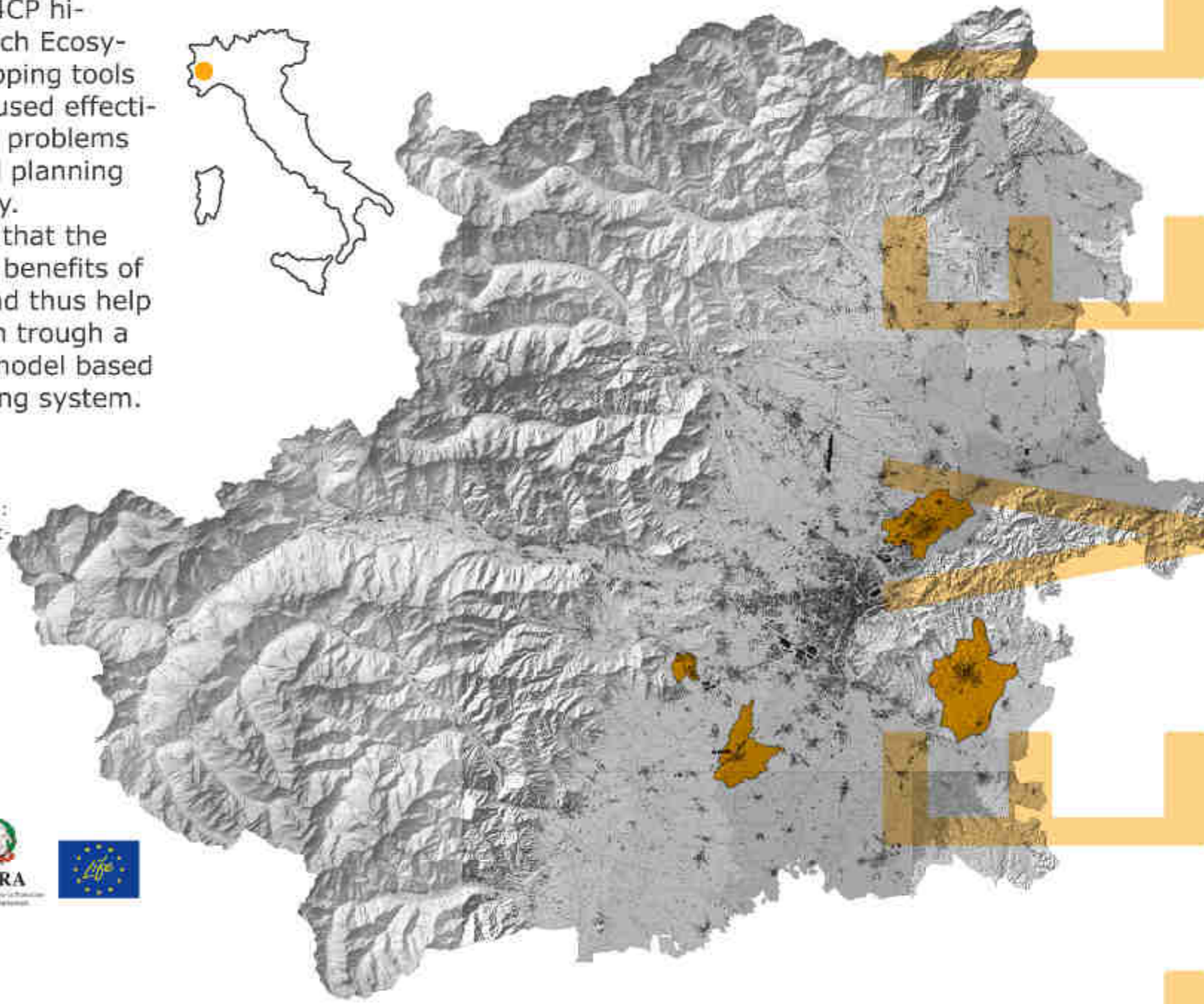


The topics of the Project 'Soil Administration Model 4 Community Profit' (SAM4CP) are: the soil, as measurable value and common good, the strong reduction of its consumption and the good use of it by urban planning, management and assessment of anthropic impacts.

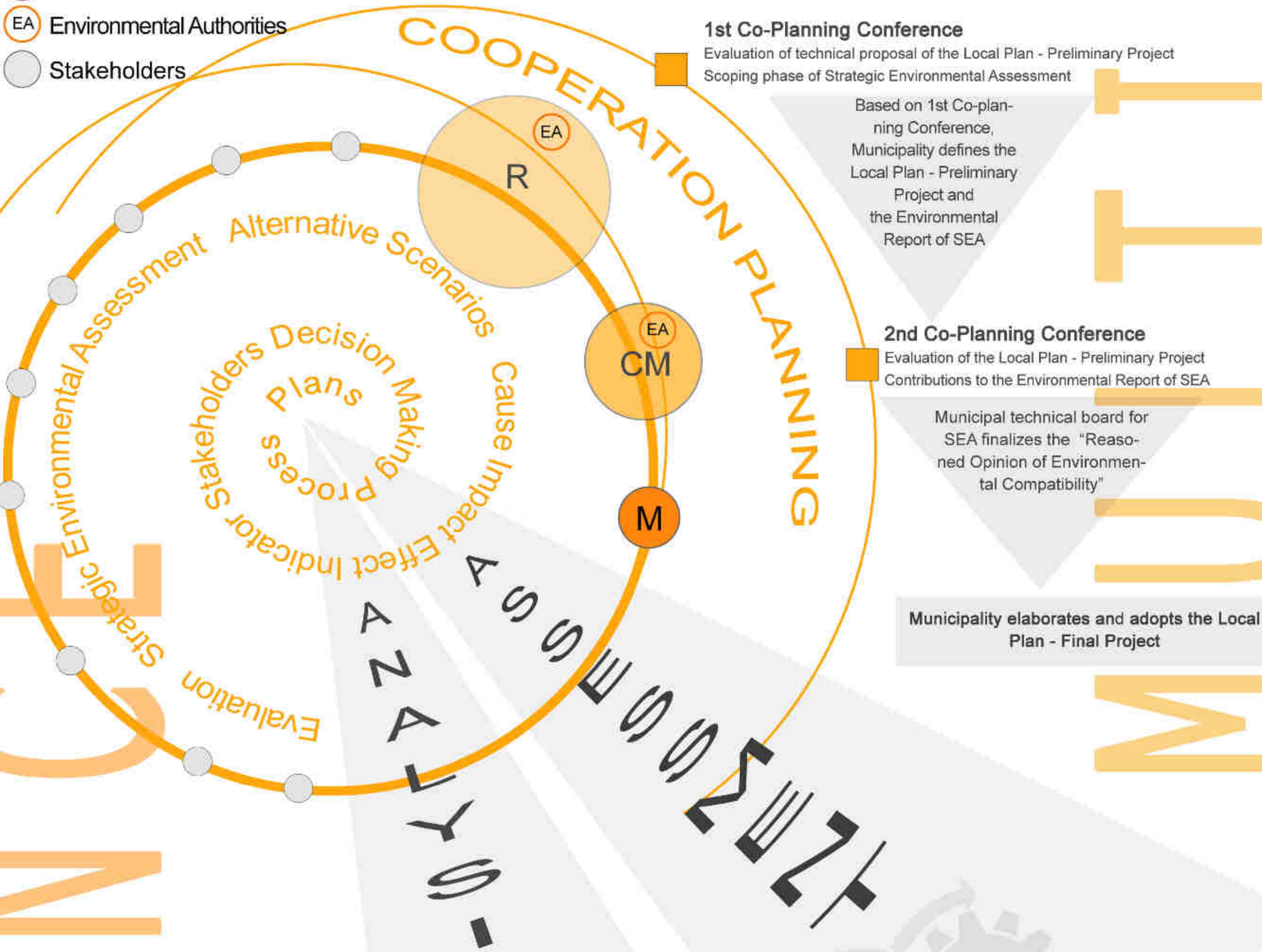
The Project Life SAM4CP aims at deliver (June 2018) new tools for a better planning, management and use of land, including mapping and biophysical and economic assessing of ecosystem services coming from the land as tangible and intangible benefits for humans. It will also experiment, along with 4 Municipalities of the Città metropolitana di Torino (CM-To), a co-planning (with the Region and the CM-To) of new urban plans or a set of their modifications. The aim is to regulate the use of public land in a sustainable and useful way, to ensure the community an 'overall savings' of natural resources and public finances.

On this basis, Life SAM4CP highlight the ways by which Ecosystem Services (ES) mapping tools and techniques can be used effectively in decision-making problems when programming and planning the city and the territory. The supported thesis is that the analysis of ES finds the benefits of each planning option and thus help in deciding the optimum through a multilevel governance model based on a cooperation planning system.

The project is coordinated by the Città Metropolitana di Torino (Ref.: S.Alberico) with the following partners: the Interuniversity Department of Regional and Urban Studies and Planning at the Turin Polytechnic (Ref.: C.A.Barbieri), ISPRA (Ref.: M.Munafò) and INEA (Ref.: F.Altobelli).



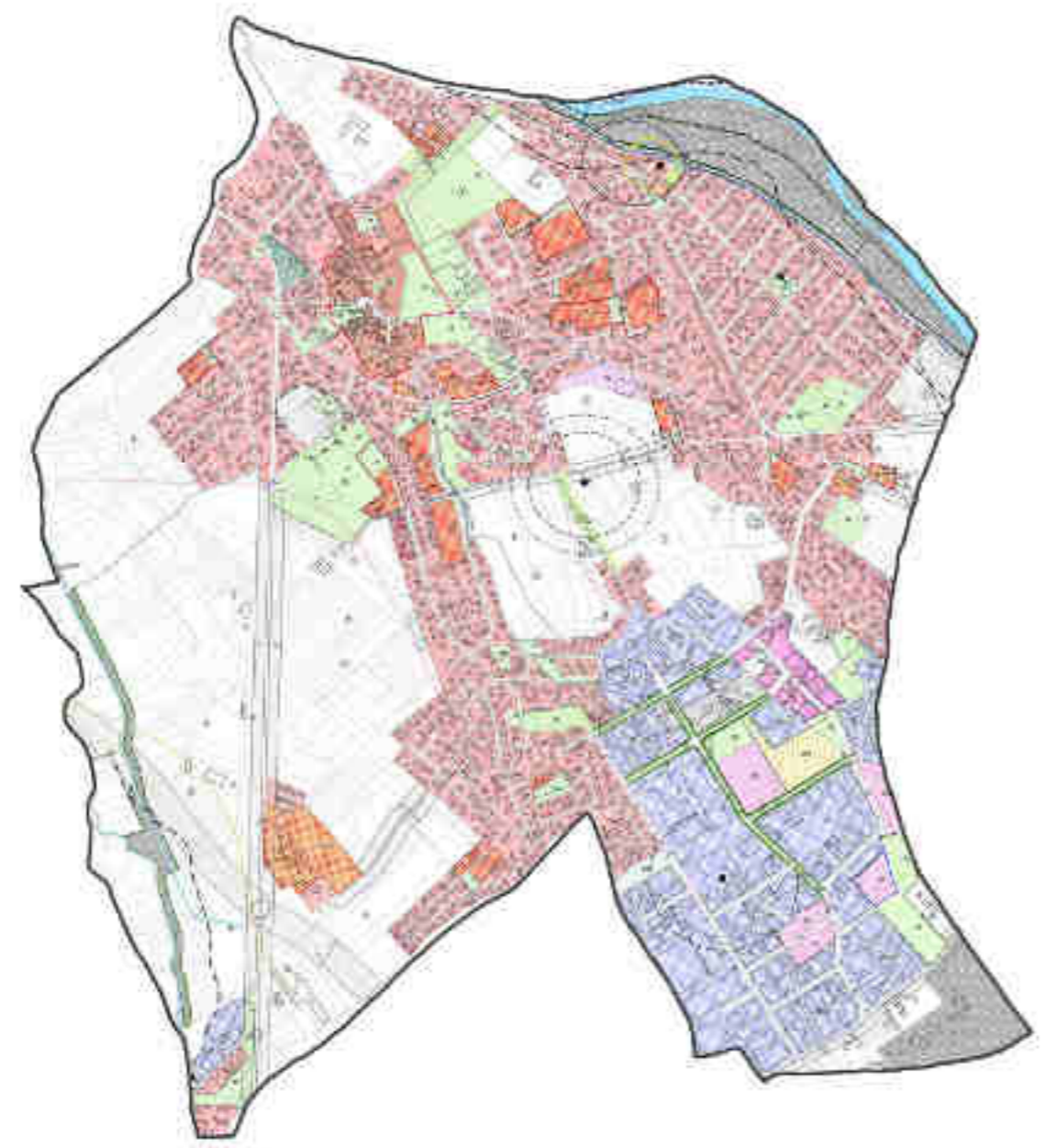
- R Region
- CM Città Metropolitana
- M Municipality
- EA Environmental Authorities
- Stakeholders



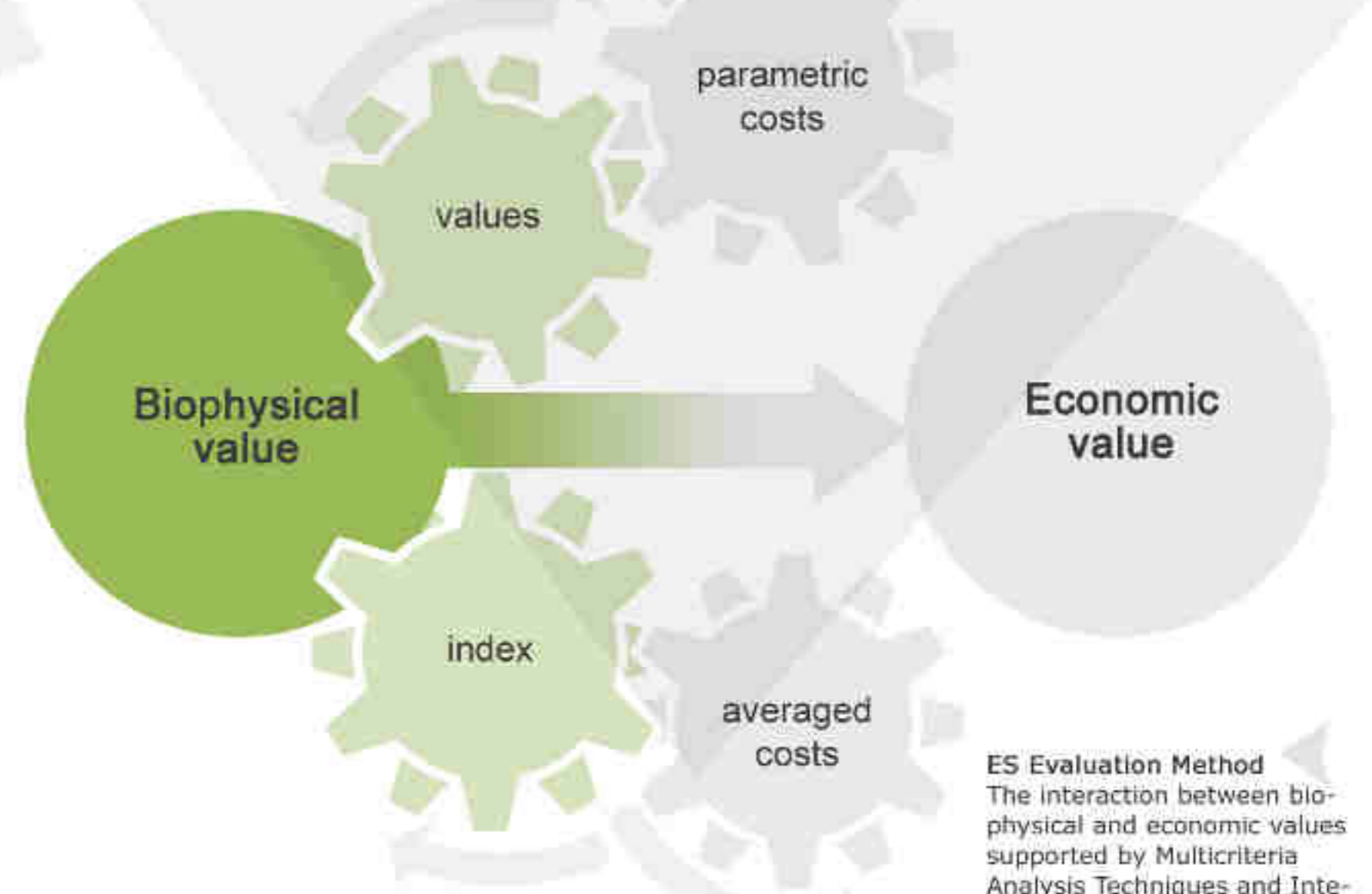
SUSTAINABLE TERRITORIAL MANAGEMENT



Municipality of Bruino (Test Area)  
Example of Mapping: Biophysical Evaluation for Ecosystem Function of Carbon Sequestration.



Municipality of Bruino (Test Area)  
The Local Plan



ES Evaluation Method  
The interaction between biophysical and economic values supported by Multicriteria Analysis Techniques and Integrated Assessment Systems.

**The challenge of resilience: from the ES evaluation to the planning process**  
In the forthcoming years, theories, approaches and practices in territorial management and government will face the evaluation of ES. The analysis of ES improves the knowledge and the ability of politicians, administrators, planners and stakeholders to define strategies of regional and urban regeneration ecologically oriented and sustainable. Furthermore, it allows to reflect about the sustainability of urbanization and construction technologies as environmental issues, bringing attention to social and economic aspects, too. The project Life SAM4CP is able to integrate the process of planning and decision making with analysis and assessments of ES in order to support Municipalities to define policies and monitoring procedures oriented to limit the consumption of high quality soil. The Municipality that has joined the project intends to modify part of the existing local plans in the direction of natural

resources and landscape valorization. The result will be a strong integration of evaluation and planning actions, providing multicriteria analysis techniques and adopting softwares (like InVEST) able to map the outcomes of the evaluation process and the inputs for the planning process. The evaluation process starts by measuring biophysical values generated from urban, suburban, agricultural and natural soils; biophysical values are associated to specific marginal costs that fix economic values for each type of land cover. The methodology has been tested in the Municipality of Bruino, the test area located in Piedmont (Region of North Italy). Testing experience has shown that there are not some optimal configurations of land use for all of the ecosystem functions tested, but that there are some relationship between changes in land use and impacts on ES. The activities carried out in the project provide the technical support to plan and manage the territorial government via a multilevel governance.