



PRomoting the Governance of Regional Ecosystem ServiceS

Action Plan in Tuscany

February 2022



1 General Information

INTERREG EUROPE PROGRESS PROMoting the Governance of Regional Ecosystem Services

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ANCI Toscana – Association of Tuscan Municipalities

Draft v1, Feb. 2022

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Special thanks:

To the members of the Local Stakeholder Group (LSG) for their valuable contributions during the several workshop sessions developed during this PROGRESS project. To the colleagues of Tuscany Region and ANCI Toscana collaborating for the design and drafting of the Regional Development Plan of the Tuscany Region 2021-2025.

Interreg Europe PROGRESS project
***P*ROmoting the **G**overnance of **R**egional **E**cosystem **S**ervices**
aims to initiate a process of policy change towards the conservation of biodiversity and the maintenance of nature's capacity to deliver the goods and services that we all need.

This Action Plan in Tuscany aims to impact the Policy Instrument “Regional Development Plan of the Tuscany Region 2021-2025” which represents the main policy document in which the Tuscany Region has outlined its strategy for the coming years (2021-2025) to relaunch the economy according to the principles of environmental, economic and social sustainability in line with the missions set out in the National Recovery and Resilience Plan (NRRP). The regional development lines, defined as Areas, in fact follow the six missions proposed by the NRRP: i) digitization, innovation, competitiveness, culture and tourism, ii) green revolution and ecological transition, iii) infrastructures for sustainable mobility, iv) education and research, v) inclusion and cohesion, vi) health.

1.1 PROGRESS project: a summary

Under the global **aim of PROGRESS stated above, the project** develops a series of own activities, and networks with others over its lifespan, as shown on the following diagram.

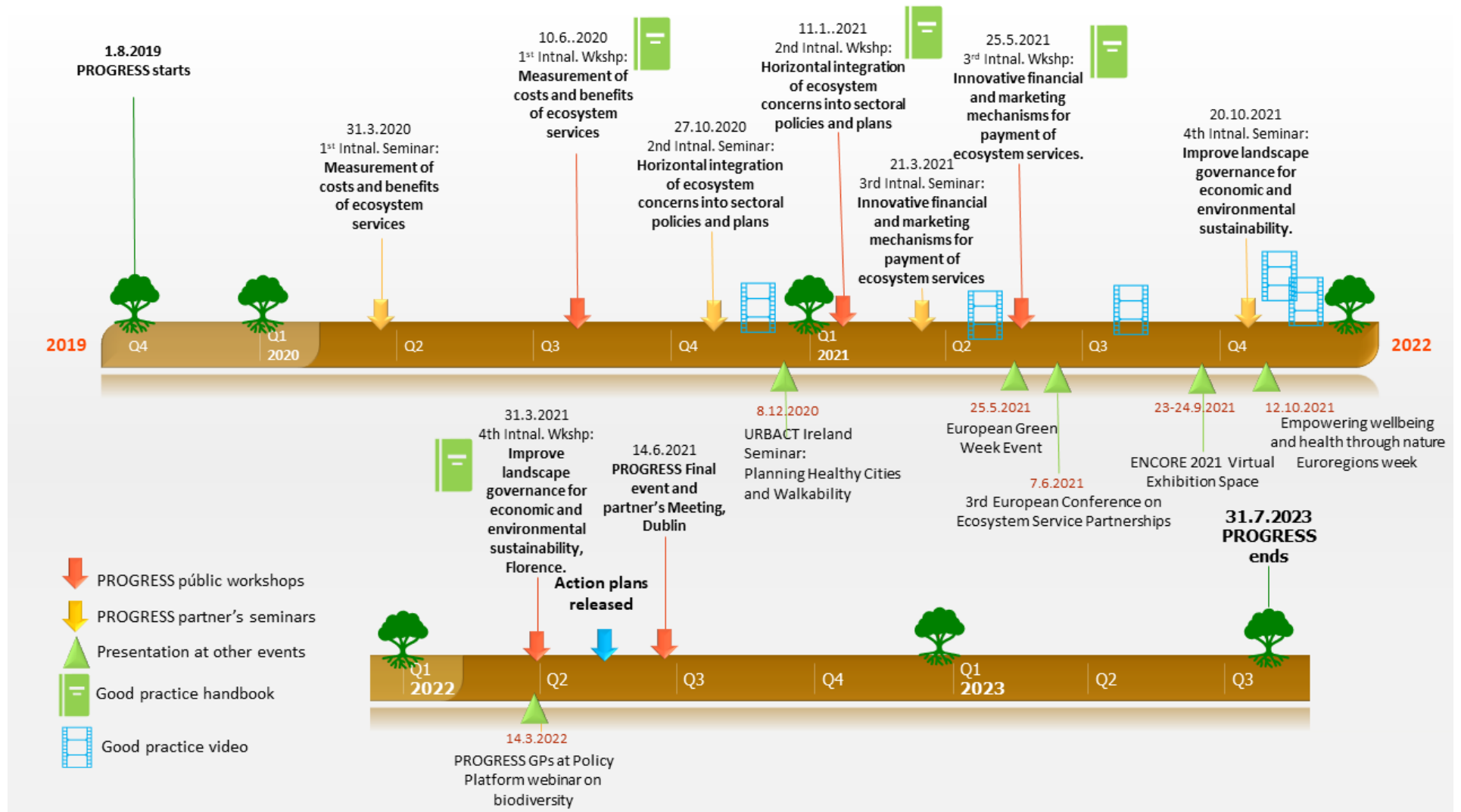
The policy instruments tackled by the project are the ERDF Operational Plans at regional or national level, and other strategies dealing with the protection and valuing of biodiversity and ecosystem services. The approach proposed by the project is based on policy learning and capacity building of the partner organizations and relevant stakeholders of the concerned policy subsystems, as it stimulates a collective multidimensional and dynamic exchange of experience.

The four objective areas towards **change** in policy areas related to biodiversity conservation and ecosystem services are as follows. These themes have also structured the shared and compared analysis between partners and stakeholders, as well as the four international workshops organised by the project.

OBJECTIVE AREAS OF PROGRESS

1. Promote the **measurement of the costs and benefits of ecosystem services** derived from land use.
2. Support the **horizontal integration of the ecosystem concerns into the sectoral policies** and plans .
3. Explore innovative financial and marketing **mechanisms for payment for ecosystem services**.
4. Improve **landscape governance** for economic and environmental sustainability.

PROGRESS Time frame



2 ACTION 1

1. **The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

The territorial information systems and the GIS tools are used to acquire, catalog, elaborate and display information, including cartographic information, to support the policies of territorial planning and management. On a national level, many regional administrations, including the Tuscany Region, have developed webgis systems. The cartographic Geoportal (Geoscope) included in the Geographic Service of the Tuscany Region, while containing information of a territorial nature that is important for users, is lacking a function such as that of quantifying and evaluating ecosystem services. This function is important since the accounting of natural capital and ecosystem services is one of the priorities of governance strategies at the European and international level.

As part of the exchange of experience within the Progress project, our partner CREA presented how the Good Practice SITxell is implemented by the Province of Barcelona. SITxell is a Territorial Information System that contains a 1:50,000 scale cartographic and alphanumeric database, developed in the ArcGis environment, organized into two thematic modules (Environmental Modules and Land Use Modules) which use complex parameters and indicators to define and characterize the open areas. The information contained in SITxell is used to create thematic maps in some areas (Habitats, Flora, Fauna, Socioeconomic, Landscape Ecology, Geology) and to estimate the supply of various ecosystem services (Food, Forest biomass, Carbon absorption, Control of erosion, Potential recreational opportunities, Habitat for species). The typology and nature of the cartographic database and the ability to estimate the ecosystem services of agricultural and natural landscapes make SITxell an innovative tool for territorial planning of non-urban areas at regional, municipal and protected area levels. SITxell supported the implementation of the Barcelona Metropolitan Plan and the Strategic Environmental Assessment and is suitable for use in large infrastructure projects. The information system also provides ecological indications for measuring the costs and benefits of ecosystem services deriving from land use. In addition to being used by local administrators (full version), SITxell can also be used by citizens (limited version) who can view interactive maps.

The transfer of BP SITxell to Tuscany constitutes the opportunity to create an innovative information system managed at a regional level to support territorial policies and the implementation of the interventions contained in the Regional Development Program and those envisaged at local scale by the National Recovery Plan and Resilience.

SITxell, could be developed starting from the cartographic Geoportal of the Tuscany Region. The nature and format of the data contained in the geoscope would in fact allow the creation of a centralized information system. The union of the two territorial databases would allow, in addition to measure the costs and benefits provided by

ecosystem services, the updating of some planning tools including the N2000 Site Management Plans, Civil Protection Plans, Integrated Park Plans, Water protection plan, Regional forest plan.

2. **Action** (please list and describe the actions to be implemented)

SITxell responds to the following strategic objectives of the Regional Development Plan of the Tuscany Region 2021-2025:

- Strategic objective 5. Making communities and territories resilient, managing natural resources in a sustainable way and enhancing ecosystem services
- Strategic objective 6. Protect the territory and the landscape, in particular to the:
 - Area 2. Ecological transition

As well as to the Transversal Strategies:

- Regional strategy for the green transition
- Regional strategy for equity and cohesion (3.3 Mountains and inland areas)

Within the abovementioned Regional Development Plan, it's consistent with two Regional Projects:

- no. 9 Government of the territory and landscape
- no. 25 Policies for the mountains and inland areas

The transfer of the SITxell good practice is articulated into two actions:

- Data acquisition. The action must be carried out on the basis of the layers, maps and socio-economic data used by SITxell. After having prepared a complete list of the data necessary for the transfer of the good practice, the source of the data will be identified. For the cartographic data, the information contained in the Regional Geographic Service, the National Geoportal, the Cadastral (land registry) Cartographic Geoportal and the Territorial and Environmental Information System of the Tuscany Region could be used. For socio-economic data, the reference is the National Institute of Statistics. On the basis of the specific nature of the requested data, other sources will be identified, also taking as a reference projects and studies carried out by academics and technicians at national and regional level. To carry out this action it is therefore important to identify and create a network with the structures in possession of the data.
- Implementation of the WebGis platform. This action consists in the creation of a cartographic database (Geodatabase) and in the development of the WebGIS architecture. The data collected in the previous action must be organized in the geodatabase according to the SITxell structure which provides for "Environmental Modules" and "Land Use Modules". The geodatabase is important for the GIS application and must contain different information levels such as geology, hydrology, flora, vegetation and habitat, fauna, landscape ecology, cultural heritage) and socio-economic data concerning urban planning, transport infrastructures, technical services etc. To optimize implementation costs, geodatabases, GIS (Geographic Information Systems) and other SW and HW Open source could be used. The reference scales of digital maps will be 1: 50,000-1: 25,000 for plans and projects at a macro-territorial level and 1: 10,000 for urban planning.

3. **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

For the implementation of the SITxell Good Practice, we foresee the involvement of various stakeholders with the following roles:

Administrative coordination: Tuscany Region

Technical coordination: ANCI Toscana;

Data providers (regional bodies): Tuscany Region, Park authorities, Land reclamation consortia, basin authorities, Regional Agency for Environmental Protection of Tuscany (ARPAT), Tuscan Regional Agency for disbursement in agriculture (Artea) - Regional Programming Institute Economics of Tuscany IRPET, Universities of Florence, Pisa and Siena.

Data providers (national bodies): Ministry of Ecological Transition (MiTE), Higher Institute for Environmental Protection and Research (ISPRA), National Institute of Statistics (ISTAT)

4. **Timeframe**

Start: 1st August 2022

End: 31st July 2023

5. **Costs** (if relevant)

The costs for the construction of SITxell in Catalonia were 2 million euros (2003-2010) for the acquisition (stipulation of contracts with universities and research centers) and 50,000 euros a year for updating the data. The construction costs of SITxell in the Tuscany Region could be lower considering that some data are available from Geoscope.

6. **Funding sources** (if relevant):

The following funding sources have been identified:

- Regional Development Program of the Tuscany Region 2021-2025 (Area 1- Digitization, innovation and competitiveness of the Tuscan system, Area 7 - Interinstitutional relations and governance of the regional system
- National Recovery and Resilience Plan (M1C1-Digitization, innovation and safety in the Public Administration).