

FACTSHEET

EU Soil Mission Living Labs and Lighthouses for Soil Health:

Urban Land Use





Soil Health Objectives & Particularities Urban Land Use



EU Mission 'A Soil Deal for Europe'

Life on Earth depends on healthy soils. Soils are not only the foundation of our food systems. They also provide clean water and habitats for biodiversity while contributing to climate resilience. Between 60 and 70% of EU soils are unhealthy; one centimetre of soil can take hundreds of years to form but can be lost in just a single rainstorm or industrial incident.

European Commission The European Commission launched the Mission 'A Soil Deal for Europe' -Horizon Europe programme - to create 100 Living Labs and Lighthouses in rural and urban areas to drive the transition to healthy soils by 2030.

The Mission will

- · Create knowledge and solutions for soil health.
- · Advance the development of a harmonised framework for soil monitoring in Europe,
- · Increase people's awareness of the vital importance of soils,
- · Support the EU's ambition to lead on global commitments, notably the Sustainable Development Goals (SDGs), and contribute to the European Green Deal targets.*

The 8 Mission Objectives

- (1) Reduce desertification
- 2 Conserve soil organic carbon stocks
- (3) Stop soil sealing & increase re-use of urban soils (7) Reduce the EU global footprint on soils
- (4) Reduce soil pollution and enhance restoration
- (5) Prevent erosion
- (6) Improve soil structure to enhance soil biodiversity
- (8) Improve soil literacy in society

The Soil Health Living Labs are...

User-centered, place-based and transdisciplinary research and innovation ecosystems, which involve land managers, scientists and other relevant partners in systemic research and codesign, testing, monitoring, and evaluation of solutions, in real-life settings, to improve their effectiveness for soil health and accelerate adoption.

The main challenges of Urban Soil Health Living Labs can be identified and synthetized as follows: First, to prevent hazards (e.g. presence of toxic and harmful elements) to reduce pollution and improve structure and biodiversity of urban soils (objectives 4,6). Second, to mitigate negative externalities (e.g. pollution, contaminations, emission) to conserve soil organic stocks, stop sealing and reduce global footprint (objectives 2, 3, 7). Third, to incentivize transformations to enhance restoration through infill, reclamation, regeneration, remediation, reuse, upcycle plans and projects (objective 3). Fourth, to improve communication and literacy on urban soils (objective 8).

CHALLENGE











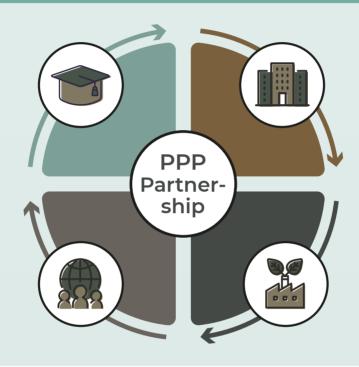




The Quadruple Helix

An essential characteristic of the Living Lab methodology is the **user-centric approach**, with the involvement of all relevant actors and end-users. While the specific actors will differ according to the Living Lab focus, objective, and context, all the actors can be classified according to the Quadruple Helix Model which is an extension of the typical Public Private Partnership.

The Quadruple Helix Model involves representatives from all members of society. These together form what we cal **Public Private People Partnership (PPPP)** that enables real co-creation and impact.



Some examples of stakeholders of Urban Living Labs include:



Industry

Building/construction professionals (e.g. civil engineers, architects, real estate), GIS specialists, and Urban Planners (e.g. landscape, transport).



Citizens, Civil Society & Users

Inhabitants (e.g. residents, tenants), Civic groups (e.g. associations, cooperatives, NGOs), Loosely organized groups (e.g. artists, designers, retailers, and local businesses), and more informal interest groups of the communities.



Academia

Universities and Research institutions - social sciences (e.g. anthropologists, economists, geographers, sociologists), physical sciences (e.g. agronomists, biologists, chemists, climatologists, geologists, epidemiologists, physicians).



Government & Public Sector

Public authorities and Private agencies, Public administrations (e.g. local, county-regional, national, communitarian), Health authorities (e.g. public health, epidemiologists), Environmental managers (e.g. disaster/risk and environmental managers).

Which added value can co-creation bring in this specific field?

- · Reconcile different stakeholders' types and interests around one agenda of soil health actions.
- · Activate different co-design activities related to soil health, while increasing land ownership and sense of belonging.
- Establish co-monitoring communities towards a pro-active role of citizens on soil issues in cities.
- Settle a shared governance model on urban SHLL to be followed in cities for upscaling and further co-creation pathways.





Only tight cooperation between public companies, citizens, industry and local government can lead to successful mutually connected system, which optimizes resources and economic, environmental and social results. This is a long term project of transformation to a different society, which ensures developmentally focused management of resources in local and regional area.

Andrej Fištravec Mayor of Maribor

Which type of activities can an Urban Soil Health Living Lab perform in this field?

- Urban Soil Health Living Lab (ULL) would be the platforms where different expertise can meet and collaborate to support policy decisions and interventions (e.g. identifying and monitoring the presence of toxic and harmful elements).
- ULLs would bridge concrete stakes of urban users with practical solutions of different types of professionals, also in a cross-sectoral perspective.
- · ULLs would create the occasions to grasp emerging demands on land use interventions, guiding both formal and informal practices.
- ULLs would support and enhance communication activities, organizing thematic seminars, meetings, focus groups with professionals and the population.





Criteria to identify

Living Labs* 三贷

Lighthouses

Aims

- · Innovation, co-creation, formal learning
- Contribution to societal challenges
- Improving soil health and related ecosystem services (mission objectives)

Activities

- · Co-creation, co-development & experimentation of innovations improving soil health and related ESS
- Research on the impact of these innovative practices on ecosystems
- Networking and knowledge exchange
- Demonstration (in particular Lighthouses)

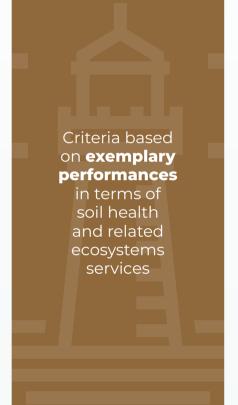
Participants

Public-private people partnership:

- Real soil managers (farmers, advisors, foresters, city greens managers, allotment holders, etc.) to be at the center of the innovation process.
- Other stakeholders: Associations and organizations with interest in soil health, local or regional government, scientists from variety of fields outside soils (natural sciences, social and behavioral sciences), wider public.

Context

- · Multiple disciplines (transdisciplinary, inc. social sciences), methods, dimensions (technical, economic, social)
- Place-based approach and real-life context = real farms/forest/urban sites
- · Robust scientific setup for ecosystem assessment
- Openness, communication, dissemination



How to participate? Two Living Lab Open Calls

Soil health (0108) HORIZON-MISS-2023-SOIL-01-08: Co-creating solutions for soil health in Living Labs.

- Carbon farming (0109) HORIZON-MISS-2023-SOIL-01-09: Carbon farming in living labs
- · Deadline for applications: 20 September 2023 17:00:00 Brussels time
- · Single-stage submission via the Funding & Tenders Portal;
- · Research and Innovation Actions: 100% funding for any actor
- · 4-5 Living Labs for each application in at least three different Member States and/or Associated Countries.
- · More information available in the Factsheet "EU Soil Mission Living Labs and Lighthouses for Soil Health: Funding Opportunities"

