NATIOONS

FACTSHEET

EU Soil Mission Living Labs and Lighthouses for Soil Health: **Urban Land Use**

Funded by
the European Union

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** to lead 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
4. Reduce soil pollution and enhance restoration
5. Prevent erosion
6. Improve soil structure to enhance soil biodiversity
7. Reduce the EU global footprint on soils
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.

CHALLENGE

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).

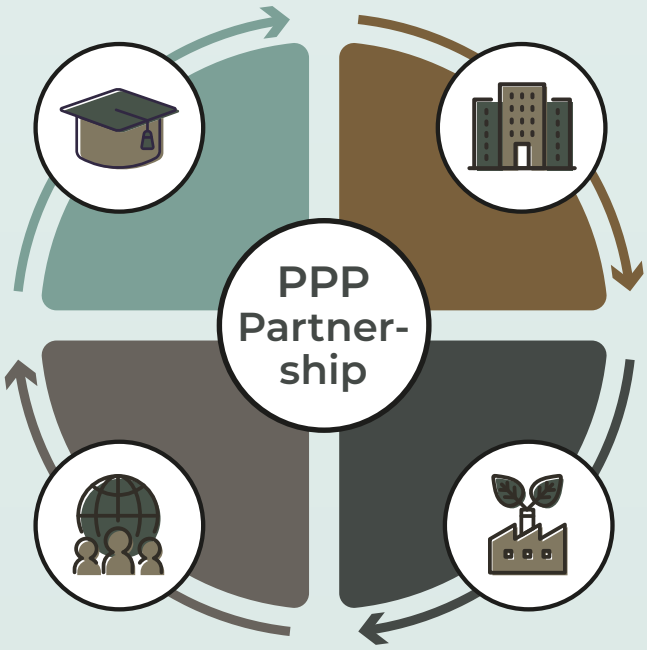
*For more information on the Soil Mission Implementation Plan

Who can be involved?

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 call **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, landowners and land managers, Urban Planners (e.g. landscape, transport).

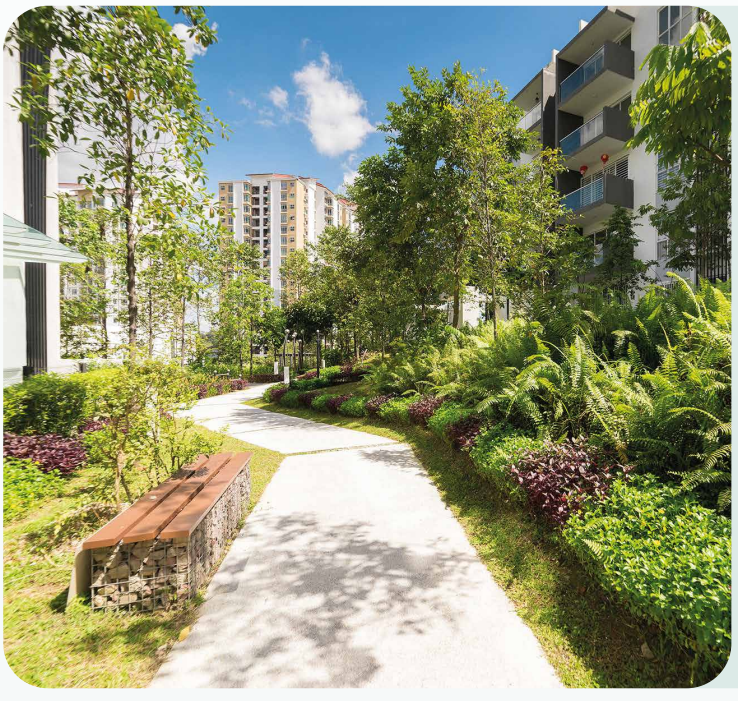
Citizens, Civil Society & Users
Inhabitants (e.g. residents, tenants), Civic groups (e.g. associations, cooperatives, NGOs), Loosely organized groups (e.g. artists, designers, retailers, and local businesses), nature conservation groups, and more informal interest groups of the communities.

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), landowners and land 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 of LLs and LHs & How to Engage in Soil Mission

Criteria to identify

Living Labs*

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

Lighthouses

Criteria based on **exemplary performances** in terms of soil health and related ecosystems services

How to participate? Two topics under the 2024 call for proposals

1 Soil health (0101)
HORIZON-MISS-2024-SOIL-01-01: Co-creating solutions for soil health in Living Labs

2 Urban Areas (0102)
HORIZON-MISS-2024-SOIL-01-02: Living Labs in urban areas for healthy soil

- Deadline for applications: **8 October 2024** 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".

*adapted from McPhee et al. (2021)

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Check out for updates

Join the community

We will publish contents and materials and host training sessions to support the submission of high-quality application forms for the EU Mission Soils Open Calls.