





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

The European Commission launched the Mission 'A Soil Deal for Europe' -Horizon Europe programme - to create 100 Living Labs and Lighthouses **Commission** 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 (8) Improve soil literacy in society
- (5) Prevent erosion
- (6) Improve soil structure to enhance soil biodiversity



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



Places for demonstration of solutions, training, and communication that are exemplary in their performance in terms of soil health improvement.



Living Labs?

Livings Labs and Lighthouses are key to accelerating the adoption of sustainable practices by users and developing solutions adapted to local

- involvement of the (end-) users in living lab activities so that they can have a clear impact on the innovation process;
 co-creation, co-design, and co-development of solutions;
 testing and experimentation in real-life conditions;
 participation of a multiplicity of stakeholders (land managers, technology providers, service providers, relevant institutional actors, professional or
- use of multiple methods and tools from a range of disciplines and domains.







Join the

Soils Open Calls.

community

the submission of high-quality

We will publish contents and materials

and host training sessions to support

application forms for the EU Mission



















EU Soil Mission Living Labs and Lighthouses for Soil Health:

Funding Opportunities















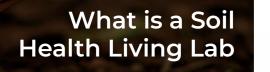


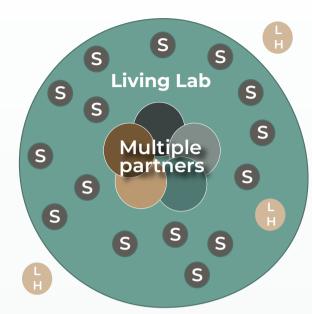


Who can be involved?









LH = Lighthouse S = Living Lab Experimentation Site



Collaborations between multiple partners that operate at the regional or sub-regional level and coordinate experiments on several sites within a regional or sub-regional



Local sites (one farm, one forest exploitation, one industrial site, one urban city green area, etc.) that can be included in a Living Lab area or be situated outside a living lab area.

The Quadruple Helix

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

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.

Academia

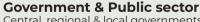
Schools, colleges, universities. research institutes, and innovation labs of all types (the public, private or civil sectors)



ship

Citizens, Civil Society & Users

Non-profit formal organizations -NGOs, charities, foundations, associations, trades unions & social entrepreneurs when not profit-seeking & more informal & loosely organized communities, citizens, interests groups & movements



Central, regional & local governments, intergovernmental organizations, government entities (ministries & agencies, public administrations & other publicly-owned entities

Industry

Firms, companies, entrepreneurs, SMEs, corporates, profit-seeking organizations operating in the market, including commercial ICT & technology sectors, representatives of these stakeholders like employers and trade organizations







Forestry









Criteria to identify: Living Labs 三位的

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
- 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

Criteria to identify:



Lighthouses

As Lighthouses are sites achieving exemplary performance in terms of soil healtl mprovement, the criteria for selecting them will be based on the **mission** bbjectives, indicators, and thresholds as defined by the monitoring programme:

Demonstration, dissemination, and promotion to soil managers, the public, and the policy arena, at the landscape scale and beyond, of land-use systems that satisfy criteria for sustainable development, in particular in terms of soil health and

ching out to the **policy arena** linking results of the Lighthouses t ronmental rules and regulations. This is in line with science-based polic





Research and Innovation and other actions to support the implementation of mission A Soil Deal for Europe

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

Expected Outcomes:

- · Living Labs across Europe are fully operational and have established themselves as places for the co-creation and testing of solutions for soil health in rural and urban areas.
- · Increased capacities for participatory, interdisciplinary, and transdisciplinary R&I approaches, allowing for effective cooperation between research, practice, and policy to tackle soil health challenges.
- · Practice-oriented knowledge and tools are more easily available to land managers and contribute to enhanced uptake of solutions for soil health and related ecosystem services.
- · Strengthened collaborations between actors across territories and sectors and increased consideration of effective solutions for soil health in regions where the selected Living Labs are operating.
- · Policymakers in the EU and Associated Countries are more aware of local needs with regard to soil health and can use this knowledge to design more effective policies.

Budget: 36 M€ (12M€ per project)

Three projects expected to be funded

Carbon farming (0109) HORIZON-MISS-2023-SOIL-01-09: Carbon farming in Living Labs.

Expected Outcomes:

- · Increased carbon sequestration and protection of carbon in soils, living biomass and dead organic matter, with environmental co-benefits safeguarded or enhanced, in different regions within the EU and Associated Countries where the selected Living Labs are operating.
- · Increased capacities for participatory, interdisciplinary and transdisciplinary R&I approaches, allowing for effective cooperation between research, practice and policy, to tackle carbon farming challenges.
- · Practice-oriented knowledge and tools are more easily available to land managers and contribute to an enhanced uptake of carbon farming.
- Strengthened collaborations between actors across territories and sectors as well as increased consideration of effective solutions for carbon farming in regions where the selected Living Labs are operating.
- · Policy-makers in the EU and Associated Countries are more aware of local needs with regard to carbon farming and can use knowledge to design and implement more effective policies.

Budget: 12 M€

One project expected to be funded

Deadline for applications:

- 20 September 2023 17:00 Brussels time
- Single-stage submission via the Funding & Tenders Portal
- Research and Innovation Actions: 100% funding for any actor
- Set up 4 to 5 Living Labs (or more, as applicable to the land use(s) and purpose of the project) for each application in at least three different Member States and/or Associated Countries.



For more information, see the Horizon Europe **Work Programme** 2023-2024 - EU Missions







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- 5 Prevent erosion
- 6) Improve soil structure to enhance soil biodiversity
- Reduce the EU global footprint on soils
- (8) Improve soil literacy in society



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Places for demonstration of solutions, training, and communication that are exemplary in their performance in terms of soil health improvement.



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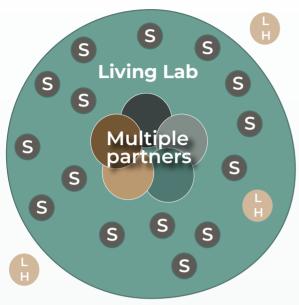
FACTSHEET

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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.

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Schools, colleges, universities, research institutes, and innovation labs of all types (the public, private or civil sectors)

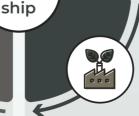


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What is a Soil **Health Living Lab**















(Post) Industrial



Criteria to identify: Living Labs =

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- Reaching out to the **policy arena** linking results of the Lighthouses to environmental rules and regulations. This is in line with science-based policy support and governance.



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