



EUROPEAN UNION



EU MISSIONS

SOIL DEAL FOR EUROPE



November 2024

The Mission 'A Soil Deal for Europe': 100 living labs and lighthouses to lead the transition towards healthy soils

THE MISSION 'A SOIL DEAL FOR EUROPE' EXPLAINED

Missions are a novelty of the EU research and innovation programme, Horizon Europe. They are a new way of bringing concrete solutions to some of our greatest challenges. Restoring and maintaining soil health is one of these major societal challenges.

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.

Although we take soils for granted, they are a scarce, threatened resource. It is estimated that between 60 and 70% of EU soils are unhealthy. Indeed, one centimeter of soil can take hundreds of years to form, but can be lost in just a single rainstorm or industrial incident.

The Mission '[A Soil Deal for Europe](#)'¹ will support the transition towards healthy soils by 2030 by putting in place an effective

network of 100 living labs and lighthouses in rural and urban areas. In addition to **creating knowledge and solutions for soil health**, the Mission will advance the development of a harmonised framework for **soil monitoring** in Europe and **increase people's awareness** on the vital importance of soils.

The Mission is firmly embedded in the wider EU policy frameworks: it will contribute to Europe's ambition to become the first climate-neutral continent by 2050 and is an integral part of a number of Green Deal strategies². Together with the EU Soil Strategy and the recently launched European Soil Observatory (EUSO), the Mission will carry out comprehensive actions for sustainable soil management and soil restoration across a range of land uses (e.g. agriculture, forestry, urban areas, natural/semi-natural areas). The Mission will be implemented in synergy with the Common Agricultural Policy (CAP) to increase the uptake and the effectiveness of soil related measures funded under the CAP.

¹ <https://europa.eu/!xY9wVF>

² The Farm to Fork strategy, the EU Biodiversity Strategy, the Climate Adaptation Strategy, the Zero Pollution Action Plan for air, water and soil, the new EU Forest Strategy, the Long-term Vision for Rural Areas, the Organic Action Plan, the Commission's recommendations for CAP strategic plans, the Circular Economy Action Plan, the EU Nature Restoration targets.

WHAT ARE LIVING LABS AND LIGHTHOUSES?

Living labs and lighthouses are key to accelerating the adoption of sustainable practices by users and to developing solutions adapted to local conditions.

Living labs

Soil health living labs under the Mission Soil 'A Soil Deal for Europe' are defined as **user-centred, place-based and transdisciplinary research and innovation ecosystems**. They are understood as collaborative initiatives between multiple partners that operate on several real-life sites at regional or sub-regional level, to co-create, test, monitor and evaluate solutions to a common problem. A living lab consists of 10 – 20 individual sites, or less depending on the specific context within which it operates. The Mission Soil targets all types of soils and land uses.

Living labs characteristics

- active involvement of the (end-) users in living lab activities so that they can have a clear impact in 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 (e.g. including the involvement of land managers, technology providers, service providers, relevant institutional actors, professional or residential end users);
- use of multiple methods and tools originating from a range of disciplines and domains.

The set of criteria developed for living labs under the Mission has been published in the [Mission's implementation plan](#).³

Lighthouses

For the purpose of the Mission Soil, lighthouses are defined as key **places for demonstration of solutions, training and communication that are exemplary in their performance in terms of soil health improvement**. They are individual, local sites (one farm, one forest holding, one industrial site, one urban city green area, etc.) that can be included in a living lab area or be located outside it. Ultimately, all experimentation sites within living labs seek to reach the performance of lighthouses and become demonstrators, inspiring and showcasing the practical implementation of innovative solutions for soil health.

Living labs are collaborative initiatives to co-create knowledge and innovations while lighthouses are places for demonstration of solutions and of exemplary achievements.

³ See section 3.2.3 of the Mission implementation plan: <https://europa.eu/!r6Ywwm>

LINK BETWEEN LIVING LABS AND OPERATIONAL GROUPS OF EIP-AGRI

Living labs created under the EU Mission 'A Soil Deal for Europe' will be **multi-actor**: they will involve a diversity of actors⁴ to ensure co-creation across sectors and disciplines and to speed up the take-up of new ideas, approaches and solutions. Likewise, Operational Groups (OGs) funded under the CAP through the [European Innovation Partnership for agricultural productivity and sustainability \(EIP-AGRI\)](#)⁵ are bottom-up

initiatives bringing together multiple actors with common interests to advance innovation in the agricultural and forestry sectors and help building bridges between research and practice.

The OG's under the EIP-AGRI can benefit from the activities of the living labs and will be able to replicate solutions generated by the Mission in regions where no living labs and lighthouses are operating.

A GRADUAL DEVELOPMENT OF LIVING LABS ACROSS EUROPE

The Mission 'A Soil Deal for Europe' has the objective of setting up 100 soil health living labs by 2030. Living labs will be financed through calls under the EU Research Programme Horizon Europe.

The network of living labs will be created in phases to allow all actors involved to learn by doing and to enable adaptations along the mission implementation.

⁴ Multi-actors in the area of agriculture involve e.g. farmers, foresters, advisors, scientists, food processors, businesses, consumer associations, local communities, citizens, civil society, NGOs, government representatives.

⁵ <https://europa.eu/l6g9pbT>



A GRADUAL CREATION OF LIVING LABS ACROSS EUROPE

1 Induction and pilot (2021-2024)

Preparatory actions (engagement activities in each Member State; support structure for living labs).

First waves of living labs.

Good quality living lab projects require prior preparation of the ground and engagement activities with future applicants and partners to explain, share, build capacities and gain ownership of the initiative, concepts and selection criteria. For this reason, two Coordination and Support Actions (CSAs) have been financed under Work Programme 2021: PREPSOIL and NATI00NS.

During this pilot-phase, 25 soil health living labs are launched, operating within five projects, financed under Work Programme 2023. In parallel, a support structure is established (SOILL-Startup) to help with the implementation of these living labs.

2 Gradual expansion (2025-2026)

Additional waves of living labs.

After the creation of the first living labs and the gathering of the initial results, the network will gradually expand through additional calls for living labs in regions all over Europe.

These successive calls will focus on addressing potential gaps in terms of geographical coverage of the living labs, specific objectives, soil health challenges they address as well as land uses.

3 Scaling-up and mainstreaming (2027 onwards)

Last waves of living labs.

Activities that ensure the long-term sustainability of the network of living labs.

This phase includes further waves of living labs, along with accompanying measures to facilitate the mainstreaming, continuation and sustainability of the living labs beyond the Mission Soil funding period.

Altogether, living labs and lighthouses funded under the Mission 'A Soil Deal for Europe' as well as innovations from Operational Groups will contribute to significantly increase the share of currently 30-40% of healthy soils to levels that are in line with Green Deal commitments and targets.



europa.eu/!xY9wVF



prepsoil.eu



nati00ns.eu

Luxembourg: Publications Office of the European Union, 2024

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PDF ISBN 978-92-68-21787-0 doi:10.2777/2272933 KI-01-24-071-EN-N



Publications Office
of the European Union