



EUROPEAN UNION



EU MISSIONS

SOIL DEAL FOR EUROPE

100 living labs and lighthouses to lead the transition towards healthy soils by 2030

Iustina BOAJĂ

This presentation is delivered by a member of a Horizon Europe Mission Board, which is an informal group of experts set up by the European Commission to support the implementation of Horizon Europe Missions. The contents of the presentation do not represent the official views of the European Commission nor do they constitute a commitment of any kind on its behalf

#EUmissions #HorizonEU #MissionSoil





Horizon Europe R&I Missions

Linking EU's research and innovation to major societal needs;
with strong visibility and impact

A mission is a portfolio of actions across disciplines intended to achieve a **bold and inspirational and measurable goal** within a set timeframe, with **impact** for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.

Horizon Europe defines **5 missions areas**:

Adaptation to
Climate Change



Cancer



Climate-neutral
and Smart Cities



Restore our
Ocean and Waters



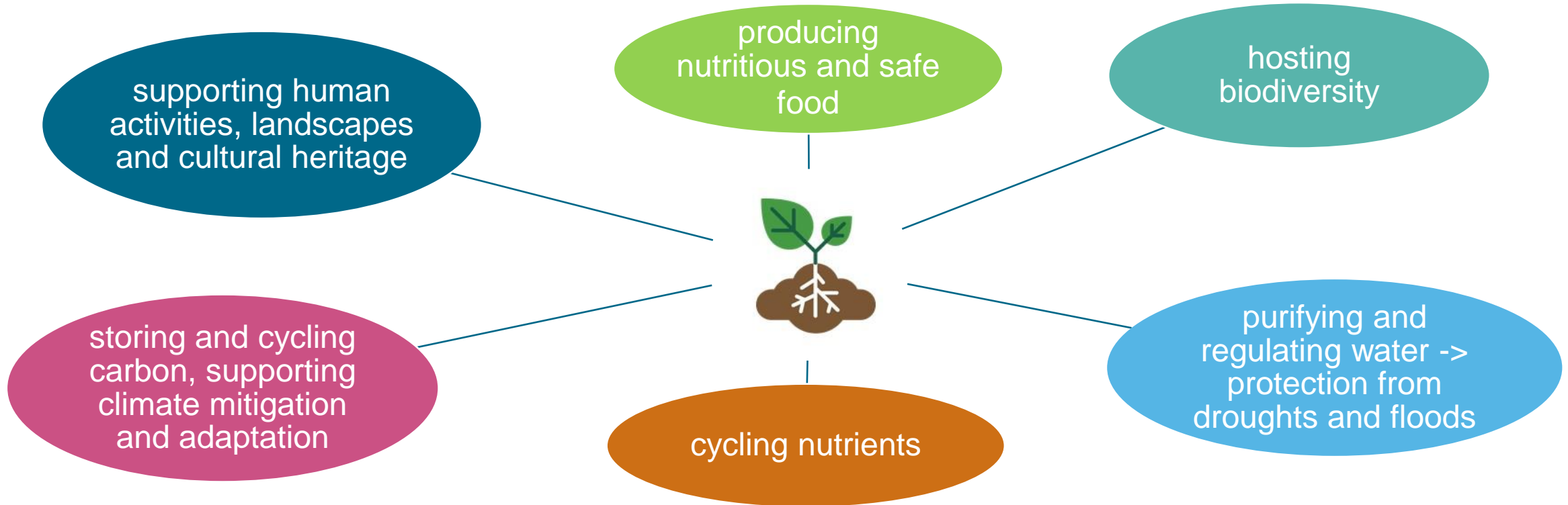
Soil Deal
for Europe





Why a EU Mission on soil?

Soils support ecosystem services and provide vital functions:



- Soil is a finite resource, meaning its loss and degradation is not recoverable within a human timespan.
- Soils are threatened: **60-70% of soils in Europe are considered to be unhealthy** due to current management practices, pollution, urbanisation and the effects of climate change.

Examples of soil health issues in Europe

2.8 million potential **contaminated sites** (only 24% inventoried) posing major health risks

65-75% of agricultural soils with nutrient inputs at levels risking **eutrophication of soils and water** and affecting biodiversity

Cropland soils **losing carbon** at a rate of **0.5%** per year; **50%** of peatlands drained and losing carbon – this is contributing to the climate crisis

24% of land with **unsustainable water erosion rates**

25% of land at High or Very High risk to **desertification** in Southern, Central and Eastern Europe in 2017

The costs associated with soil degradation in the EU exceed **50 billion €** per year





A supportive framework for soil protection in the EU

Policy framework:
“All soils are
healthy by 2050”



Soil monitoring
and data reservoir



Programme for research and innovation,
citizen engagement and outreach





The Mission supports the Green Deal

By 2030

- 25% of land under organic farming
- Reduce the overall use and risk of chemical pesticides by 50% and the use of more hazardous pesticides by 50%
- Reduce fertilizer use by at least 20%
- Reduce nutrient losses by at least 50%
- Reduce by 30% microplastics released into the environment
- Reduce net greenhouse gas (GHG) emissions by at least 55% compared to 1990 levels.

By 2035

- the EU should aim to reach climate neutrality in the land use, forestry & agriculture sectors

By 2050

- all EU soil ecosystems are in healthy condition
- Europe is the first climate neutral continent

Mission part of:

- Farm to Fork Strategy
- EU Biodiversity Strategy for 2030
- Climate Adaptation Strategy
- Forest Strategy
- Zero Pollution Action Plan for air, water and soil
- Organic Action Plan
- Long term vision for rural areas
- EU Soil Strategy for 2030
- Communication on sustainable carbon cycles



Strategies specify actions to be implemented under the Mission



Mission goal and specific objectives

1. Reduce desertification

2. Conserve soil organic carbon stocks

3. Stop soil sealing and increase re-use of urban soils

4. Reduce soil pollution and enhance restoration

100 living labs and lighthouses to lead the transition towards healthy soils by 2030

5. Prevent erosion

6. Improve soil structure to enhance soil biodiversity

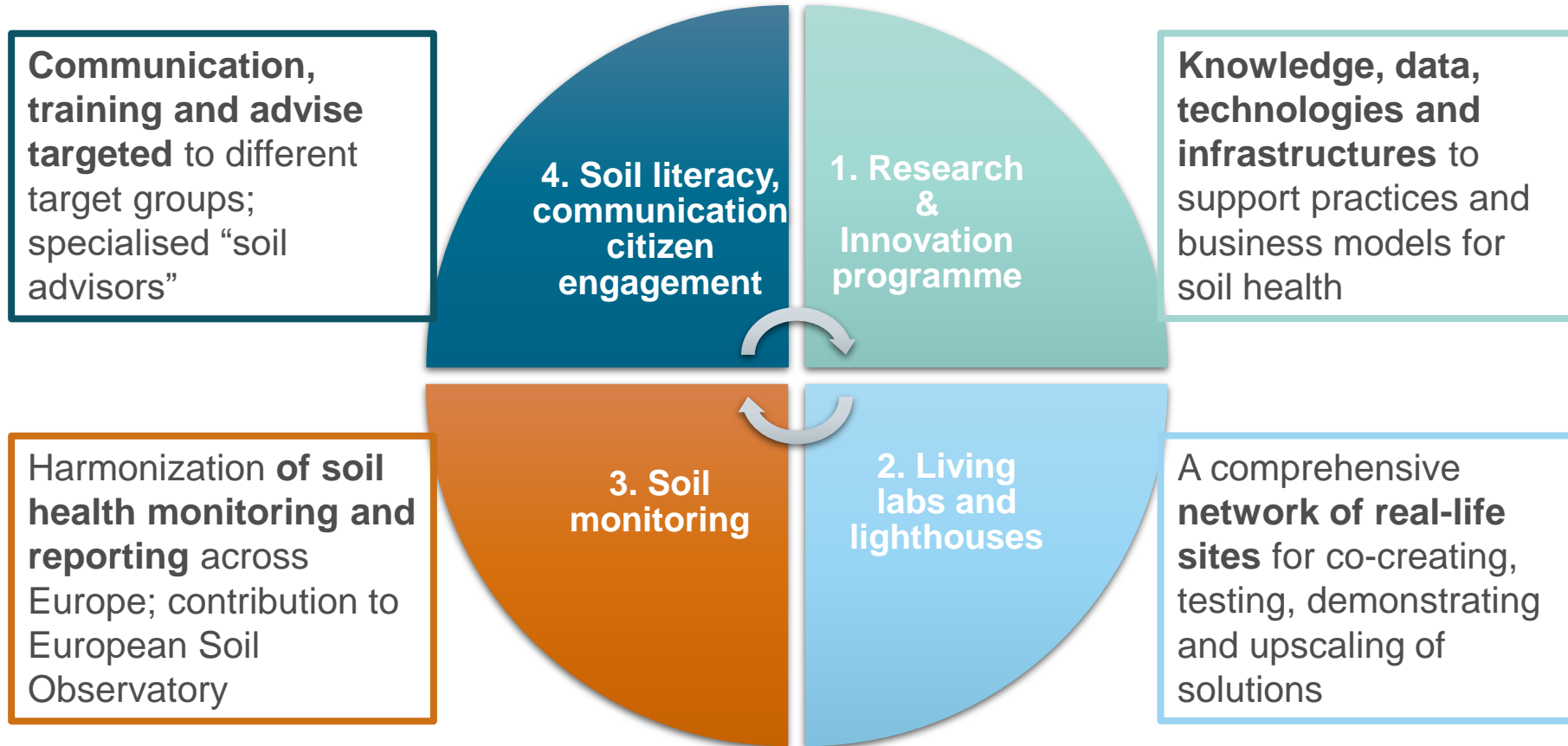
7. Reduce the EU global footprint on soils

8. Improve soil literacy in society



How will the Mission be implemented?

Activities under the **four building blocks** to address **soil health** and the **drivers of soil health**



Co-implementation of mission by: researchers, land managers, regions, businesses, policy makers, citizens and international partners



Living Labs and Lighthouses

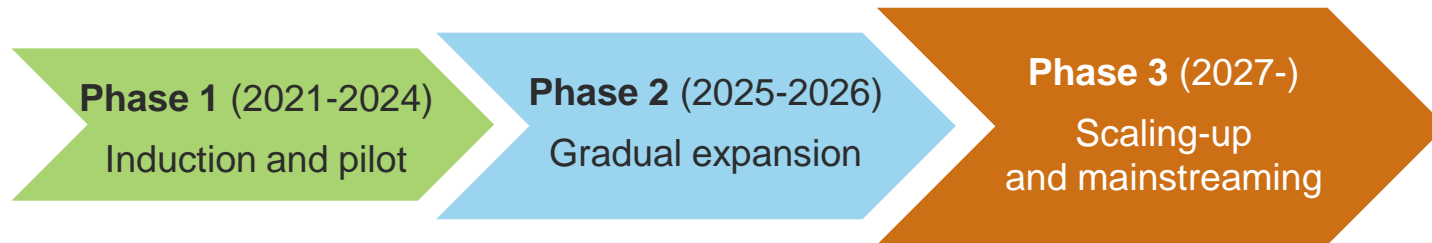
Living labs are a core element of the mission

- They are real-life sites in rural or urban areas in which people from various sectors and backgrounds experiment and test solutions in a co-creative manner.
- Each living lab is composed of a group of sites (e.g. farms, forest stands, urban green areas) working together at regional or sub-regional level.

Lighthouses are sites of exemplary performance with regards to a certain practice

- They are individual sites, such as a single farm, to showcase good practices.
- They are places for demonstrations, training and communication.

Network of 100 Living labs and lighthouses to be built up gradually.



Living labs and lighthouses are key to accelerate the adoption of sustainable practices by users and co-developed methods adapted to the local conditions.



Mission roll-out

1st Call for proposals
e.g. on **soil monitoring indicators, engage businesses, regions and municipalities, soil advisors**

Work Programme 2021
Deadline: 24 March 2022
Budget: 67M€

2nd Call for proposals e.g. on **decontamination and spatial planning, carbon farming, soil education, citizen science**

Work Programme 2022
Deadline: 27 Sept. 2022
Budget: 95M€

3rd Call for proposals for **EU and international partners**
First call for Living labs
Work Programme 2023
Deadline: 20 Sept. 2023

Implementation Plan
Sept. 2021



+ 250 outreach and engagement events since 2019



Mission Soil Manifesto

18 April 2023

Mission Soil Manifesto

1. Soil is essential for the life of humans and nature. 95% of our food comes from soil. Healthy soils provide us with clean water, good air, sequester carbon thus mitigating and increasing the ability to adapt to climate change, and support biodiversity. Soils also sustain our landscape and cultural heritage and are the basis of our economy and prosperity. We acknowledge that soil is the basis of our well-being. With this Manifesto, we are creating a community that takes care of soils.
2. We need to protect and restore soils. Soils are a fragile resource that need to be carefully managed and safeguarded for future generations. More than 60% of soils in the EU are considered to be in an unhealthy state due to unsustainable management practices, pollution or sealing. Climate change puts further pressure on soils and accelerates land degradation. All types of soil are concerned. No soil should be left behind.
3. Soil protection and restoration need to be embedded in all human activities that have an impact on land. Protecting and improving soils is crucial to sustain the well-being and prosperity of everyone. We can all contribute to halting soil degradation and building a sustainable future based on healthy soils for food, people, nature, and climate. Actions are encouraged at all levels: global, national, regional and local.
4. We support the Mission 'A Soil Deal for Europe' (Mission Soil) and its goal to create 100 living labs and lighthouses by 2030 to promote soil protection and restoration in Europe. We also welcome activities under the Mission to address its specific objectives: reduce desertification, conserve soil organic carbon stocks, stop soil sealing and increase the re-use of urban soils, reduce soil pollution and enhance soil restoration, prevent erosion, improve soil structure to enhance soil biodiversity, reduce the EU global soil footprint, and improve soil literacy in society.
5. We are committed and motivated to contribute to the protection and restoration of soil health in our capacity, sector, and territory as this is a fundamental resource for the place where we live and for our well-being. We will contribute to raise awareness on the importance of soil and enlarge the community actively involved in caring for this precious resource.

<https://ec.europa.eu/eusurvey/runner/mission-soil-manifesto>



Soil Mission Mirror Group (each Member State)

- ✓ Enhance citizens' involvement in soil protection activities
- ✓ Facilitate consortia forming for future project proposals
- ✓ Increase the number of eligible projects proposals
- ✓ Spread the information regarding the active calls, about the Mission's objectives and about the results obtained in the already implemented projects



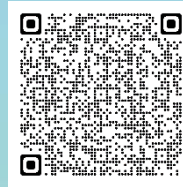
Useful links

- **Official webpage** Mission A Soil Deal for Europe - <http://ec.europa.eu/mission-soil>
- **Implementation Plan** Mission A Soil Deal for Europe - [EU Mission Soil Deal for Europe Implementation Plan \(europa.eu\)](#)
- **Factsheet** Mission A Soil Deal for Europe - [EU missions - Publications Office of the EU \(europa.eu\)](#)
- **Factsheet** Mission A Soil Deal for Europe - Living Labs - [EU mission, soil deal for Europe - Publications Office of the EU \(europa.eu\)](#)
- **Webpage** EU Missions - [EU Missions in Horizon Europe | European Commission \(europa.eu\)](#)
- **Video** EU Mission “A Soil Deal for Europe” - <https://youtu.be/3hPIZqwwhhM>
- **Podcast episode** Food for Europe - Ep. 15 Soils in danger: Europe fights back - [The Food for Europe podcast | \(europa.eu\)](#)
- **Podcast episode** Behind the Scenes - [S02/E05: A blossoming career as a soil keeper | Behind the Scenes on Acast](#)
- **News article** On a mission to save our soils - the EU's plan to rebuild the land - [Futuris episode Euronews](#)



EUROPEAN UNION

EU MISSIONS
SOIL DEAL FOR EUROPE



Thank you!

For further information and questions please contact the Mission Secretariat:

EU-HORIZON-MISSION-SOIL@ec.europa.eu

#MissionSoil #EUmissions #HorizonEU

© European Union, 2021

Reuse is authorised provided the source is acknowledged and the original meaning or message of the document are not distorted. The European Commission shall not be liable for any consequence stemming from the reuse. The reuse policy of the European Commission documents is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39).

All images © European Union, unless otherwise stated. Icons © Flaticon – all rights reserved.
Photos: © Alfred Grand, all right reserved.