



NATIONAL INFORMATION DAY

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# Horizon Europe

MISSION BOARD FOR  
SOIL HEALTH AND FOOD



## Implementing „A Soil Deal for Europe“

Emil Cienciala

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Research and  
Innovation

*Moving from the proposal..*

*..to the implementation:*

## A Soil Deal for Europe:

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





In the context of this mission, **Soil Health** is defined as

**“the continued capacity of soils to support essential ecosystem services”**

(assessed through a set of proposed measurable indicators)

## CHALLENGES

- **60-70% of EU soils** are considered “unhealthy”;
- About **70% of agricultural land** in the EU uses **excessive nutrients** with a negative impact on water quality and biodiversity;
- About **25% of land** in Southern, Central and Eastern Europe is at high or very high risk of **desertification**;
- Soil degradation in the EU costs more than **€50 billion** per year.

## OPPORTUNITIES

- Create effective partnerships for **soil protection and soil restoration**;
- Contribute to sustainable farming and forestry, healthy and safe food systems, climate resilience, biodiversity and other **Green Deal ambitions**;
- Support the EU's ambition to lead on the **Sustainable Development Goals**.

## GOAL

**Create 100 living labs and lighthouses to lead the transition towards healthy soils**

# Specific objectives and targets



## 1. Reduce land degradation relating to desertification

- Halt desertification and move beyond land degradation neutrality

## 2. Conserve and increase soil organic carbon stocks

- Increase carbon concentration on cultivated land by 0.1-0.4%/year;
- Area of managed peatlands losing carbon is significantly reduced



## 3. No net soil sealing and increased re-use of urban soils

- Urban land recycling is increased beyond 13%
- Achieve no net soil sealing

# Specific objectives and targets



## 4. Reduce soil pollution and enhance restoration

- 25% land under organic farming
- Reduce fertilization use and nutrient loss

## 5. Prevent erosion

- reducing 25% land affected by water erosion

## 6. Improve soil structure

- ..reducing 23-33% of affected soils

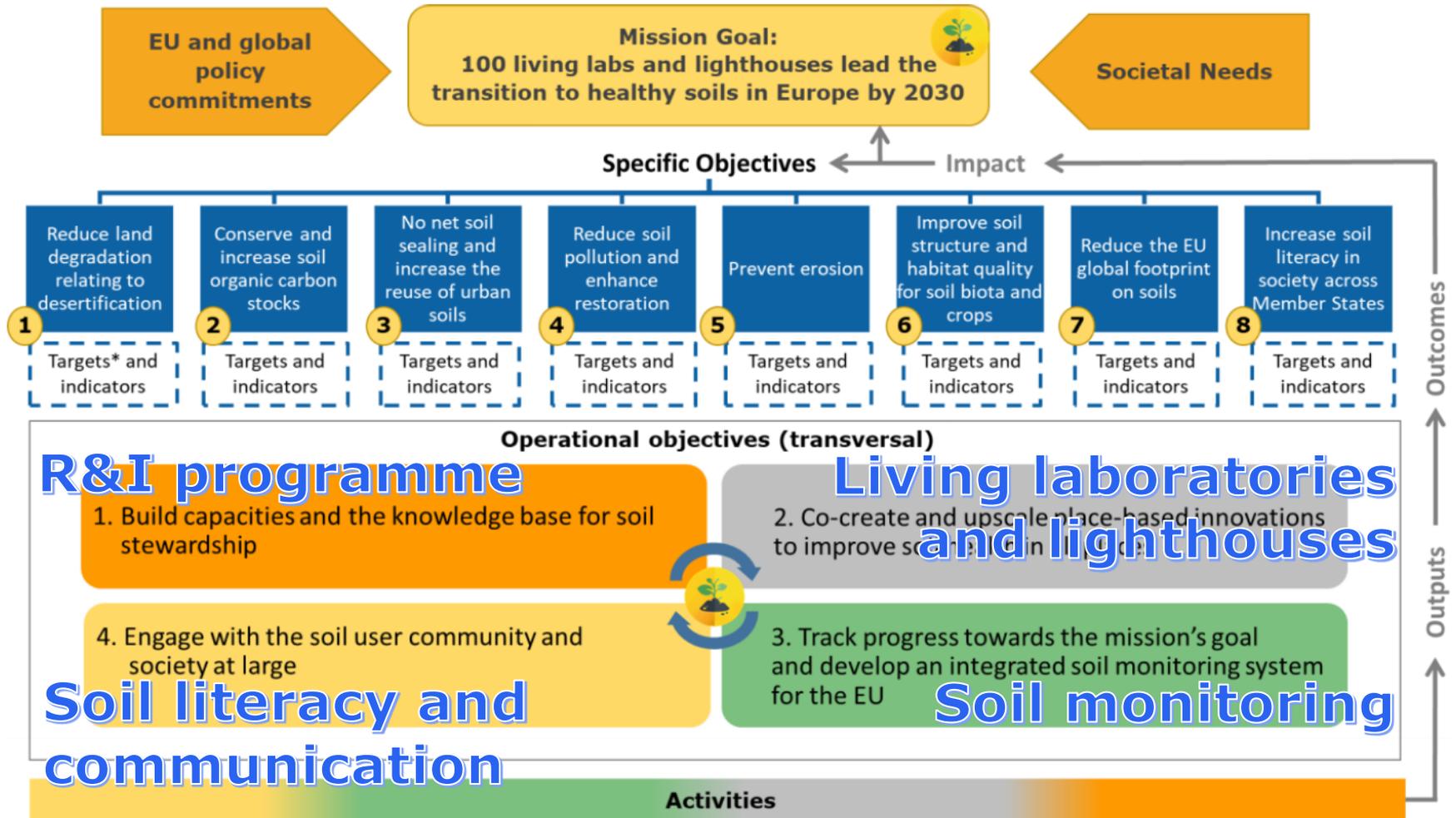
## 7. Reduce EU global footprint on soils

- Impact of food, timber and biomass import in line with international standards

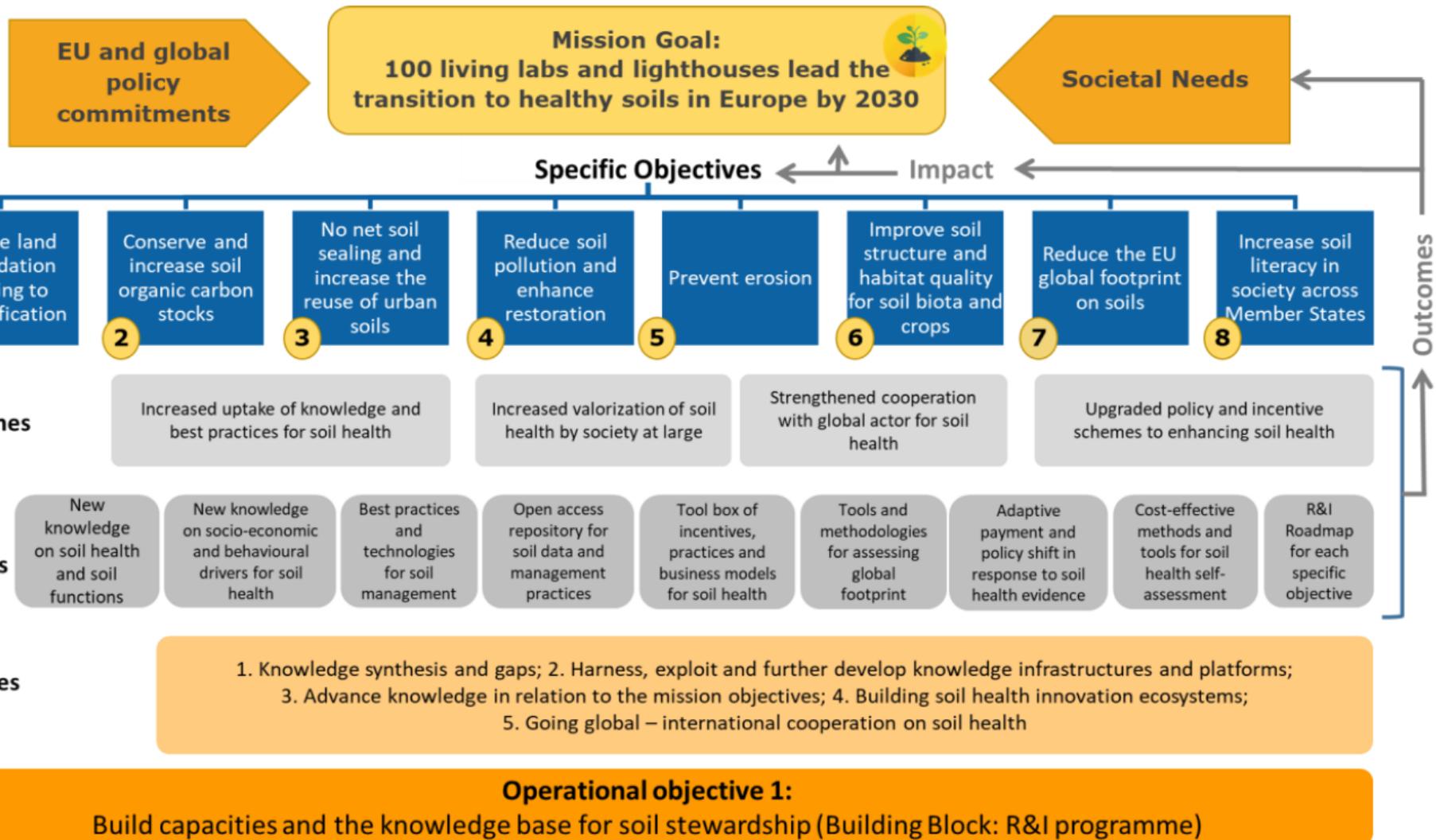
## 8. Increase soil literacy in European society



# How? Mission's intervention logic



# Objective 1

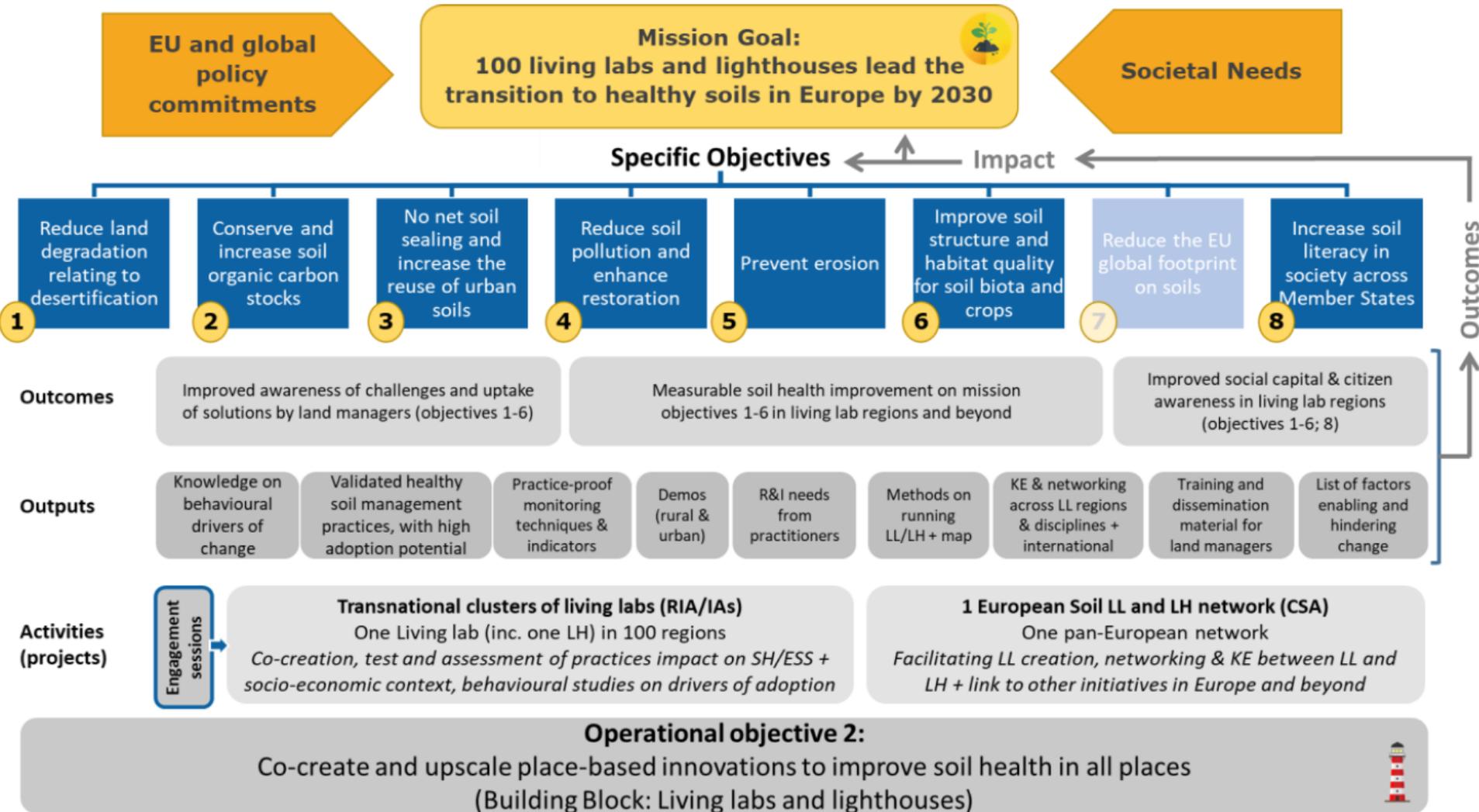


# O1. Research and Innovation



1. Synthesize existing knowledge and gaps
2. Exploit and further develop research infrastructures and platforms
3. **Advance knowledge and capacities in relation to the specific mission objectives**
4. Building the innovation ecosystem to accelerate innovation and deployment in practices, technologies, business models, value chains and policies
5. Going global – international cooperation; reducing the global soil footprint

# Objective 2



## O2. Co-creation of knowledge and innovation in **living labs** and **lighthouses**

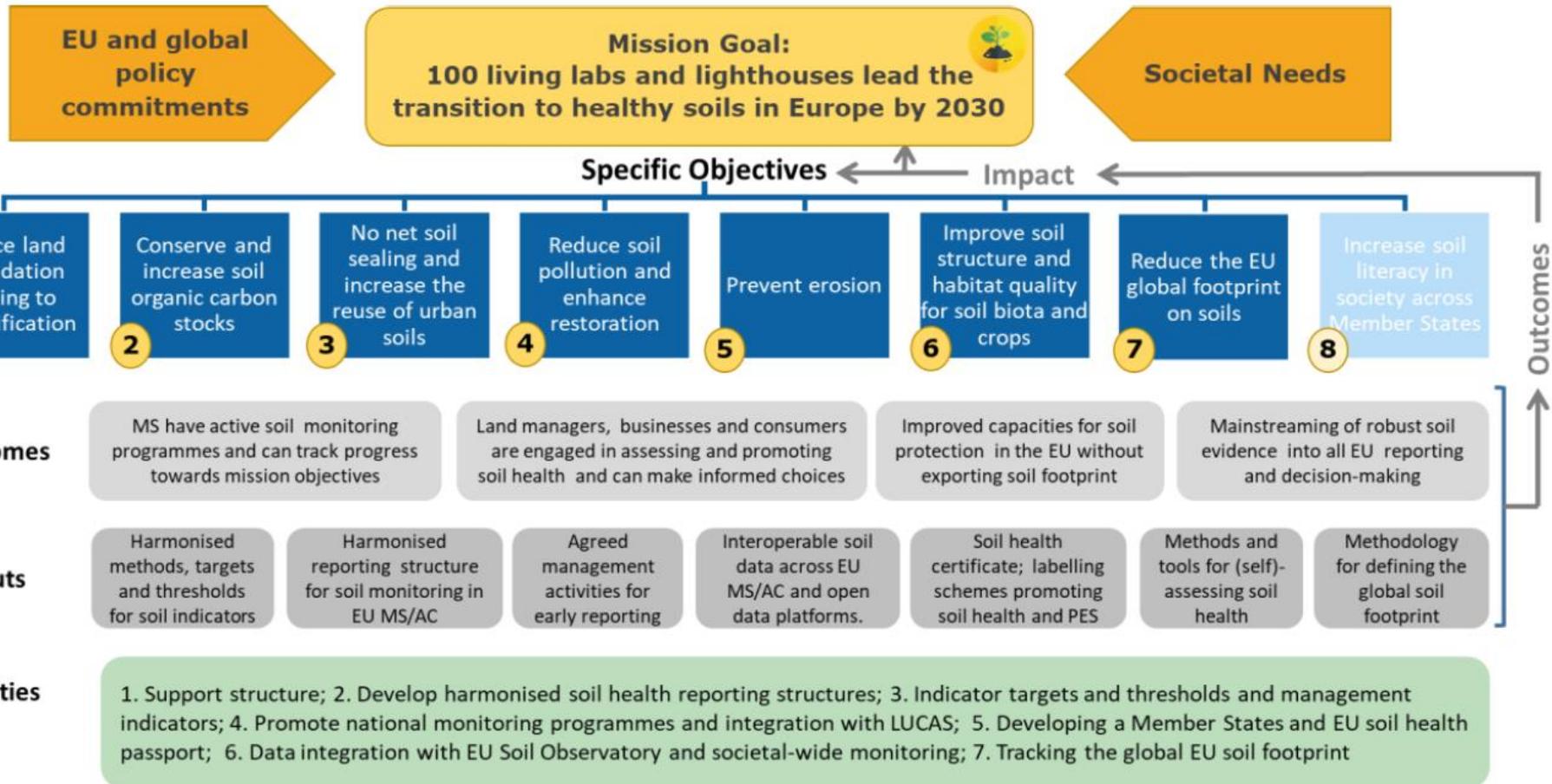


Researchers, land managers, businesses, policy decision makers and citizens working together in

- **Living laboratories** →
  - create knowledge
  - test novel approaches
- **Lighthouses** →
  - show good practice
  - demonstrate solutions

**Ambition: 100 living labs and lighthouses by 2030**

# Objective 3



## Operational objective 3:

Track progress and develop an integrated soil monitoring system for the EU (Building Block: Monitoring and indicators)

# O3. Consistent soil health monitoring



Eight soil health indicators applied at different spatial scales over time.

Actions include (i.a.):

- Setting-up technical support for cooperation on monitoring
- Targets and thresholds for indicators of soil health and soil management
- Promoting national soil health monitoring programmes
- Data integration across mission activities and integration of data with **EU Soil Observatory**
- Harmonised Soil Health Report and EU Soil Health Certificate
- Robust approach to track the EU's global soil footprint

## Vision

*The EU Soil Observatory (EUSO) should become the principal provider of reference data and knowledge at EU-level for all matters relating to soil.*

## EU Soil Observatory



*The above figure highlights the five main functions of the EU Soil Observatory*

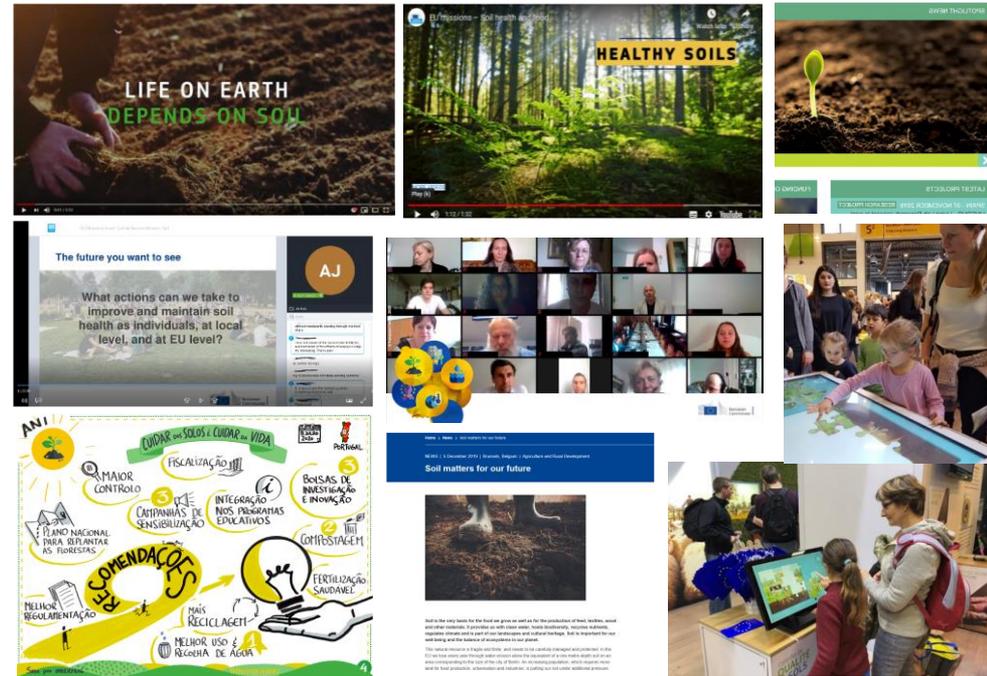
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# O4. Engage with the soil user community and society



## Stimulus for

- Soils in education
- Integrated soil research
- Learning opportunities for society
- Engaging society in Living Labs & Lighthouses
- Workshops with citizens
- Access to advisory services
- Events, fairs, campaigns
- Articles, videos, newsletters



# Objective 4



# Soil mission in Horizon Europe



**Work programme 2021-2022 soon to be adopted with a sizable budget for proposals\* contributing to a structured roll-out of mission activities and contributing to the mission's goal and objectives**

\* Including

- Coordination and Support Actions
- Research and Innovation Actions

# Expected impact



**The mission  
“A Soil Deal for Europe” will  
raise society’s awareness of soils and  
put Europe on a path towards sustainable  
land and soil management.**

# Do you want to know more?

**Join the mission activities, have your say and spread the message**

- Mission soil health and food webpage  
[https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/missions-horizon-europe/soil-health-and-food\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/missions-horizon-europe/soil-health-and-food_en)
- EIP-AGRI news  
<https://ec.europa.eu/eip/agriculture/en/news/launch-eu-mission-soil-deal-europe>
- EU – Soil Health and Food – implementation plan  
[https://ec.europa.eu/info/publications/implementation-plans-eu-missions\\_en](https://ec.europa.eu/info/publications/implementation-plans-eu-missions_en)





Thank you!

**# HorizonEU #EUmissions #MissionSoil**

<http://ec.europa.eu/horizon-europe>

Presented by Emil Cienciala  
([emil.cienciala@gmail.com](mailto:emil.cienciala@gmail.com))



European  
Commission