



**NATIONAL INFORMATION DAY**

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# **Horizon Europe**

**MISSION BOARD FOR  
SOIL HEALTH AND FOOD**



## **Implementing „A Soil Deal for Europe“**

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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 provide advice for the identification and implementation of missions in the future Horizon Europe programme. 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.

*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

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

## 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

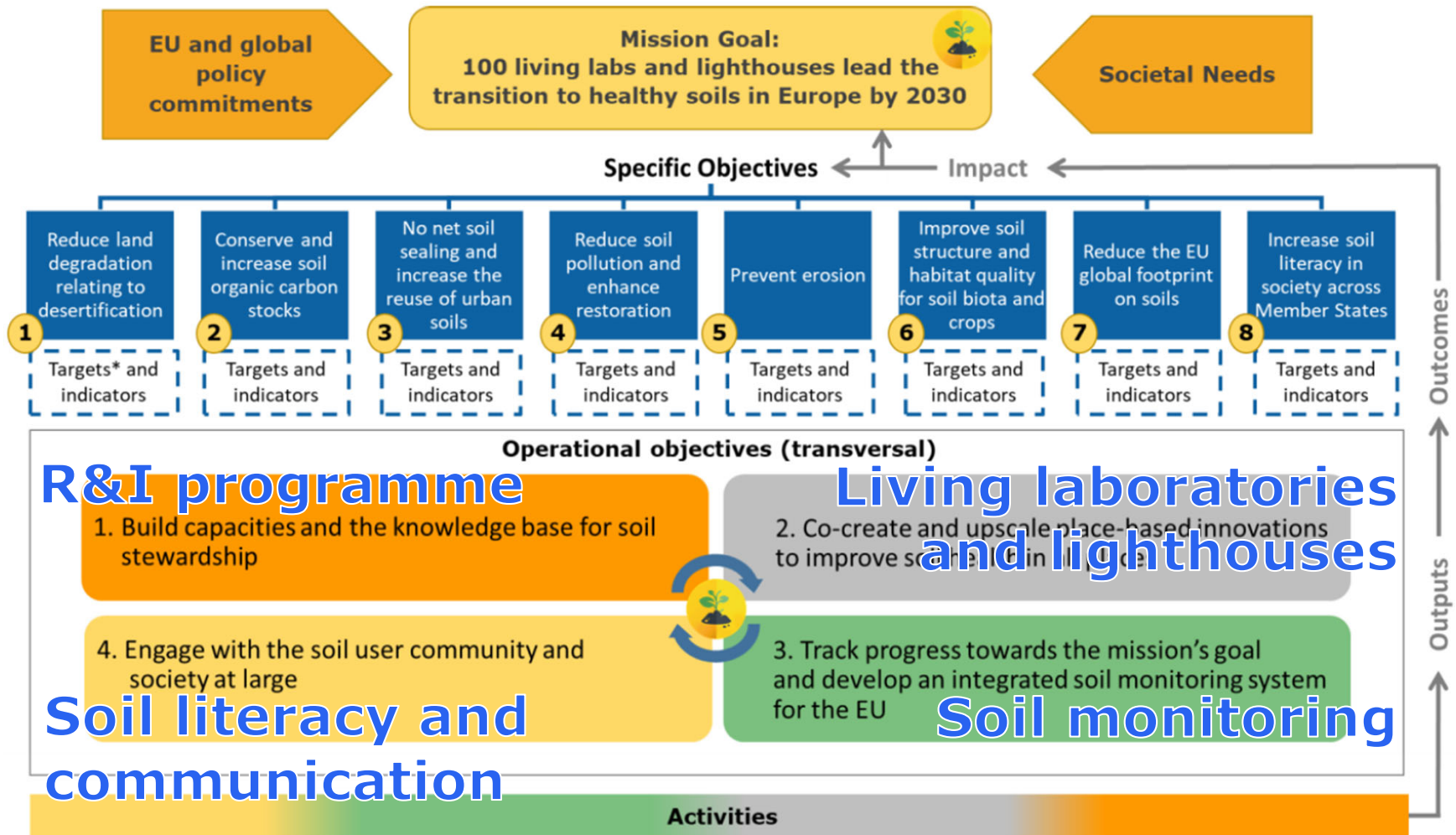
- Impact of food, timber and biomass import in line with international standards

## 8. Increase soil literacy in European society





# How? Mission's intervention logic



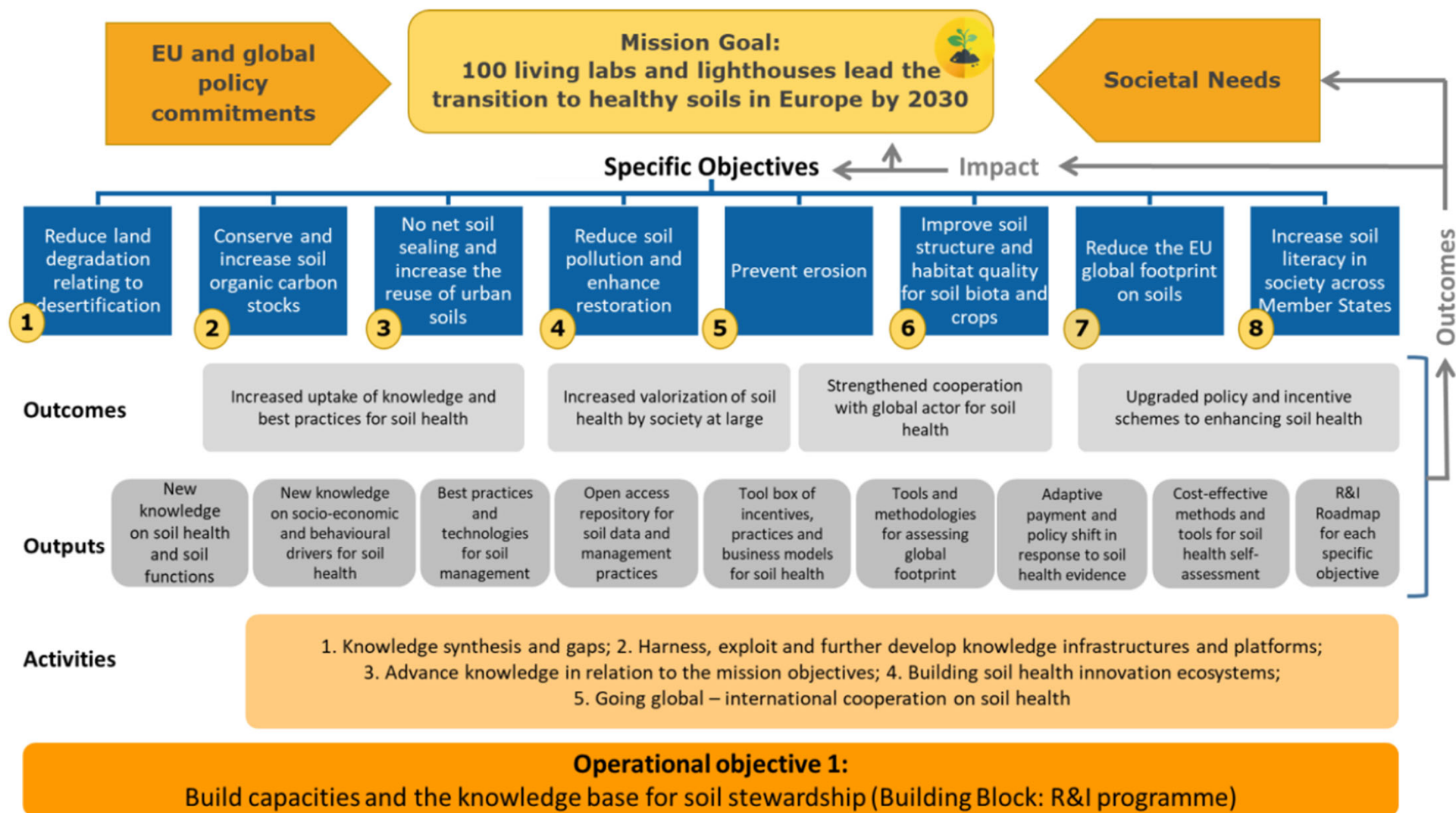
# O1. Research and Innovation



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 1



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

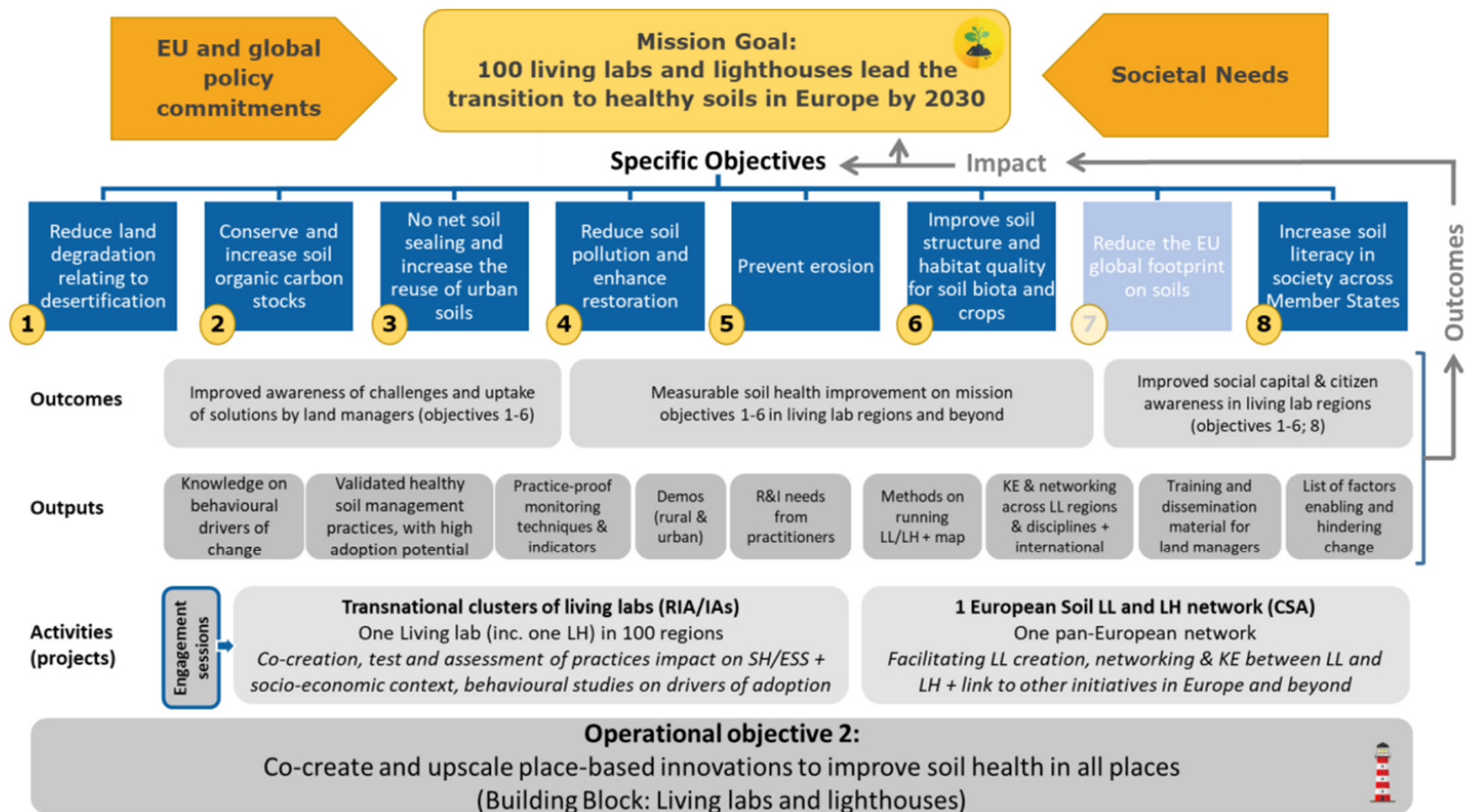


Researchers, land managers, businesses, policy decision makers and citizens working together in

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

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

# Objective 2



# 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



# Objective 3



## 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*

[https://ec.europa.eu/jrc/sites/default/files/concept\\_note\\_euso\\_final\\_sep2021.pdf](https://ec.europa.eu/jrc/sites/default/files/concept_note_euso_final_sep2021.pdf)

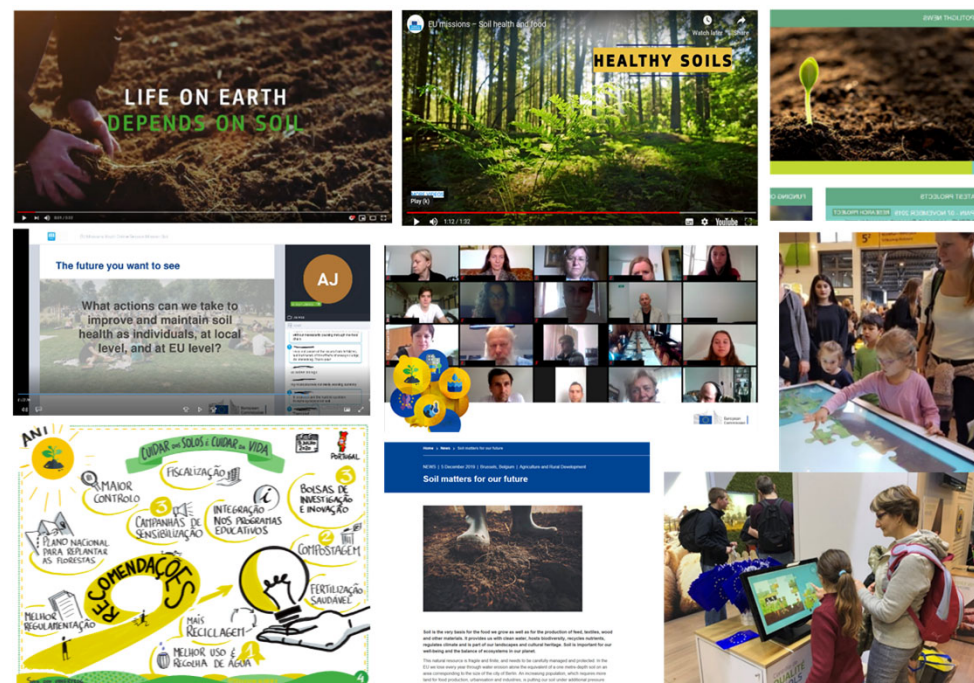


# O4. Engage with the soil user community and society

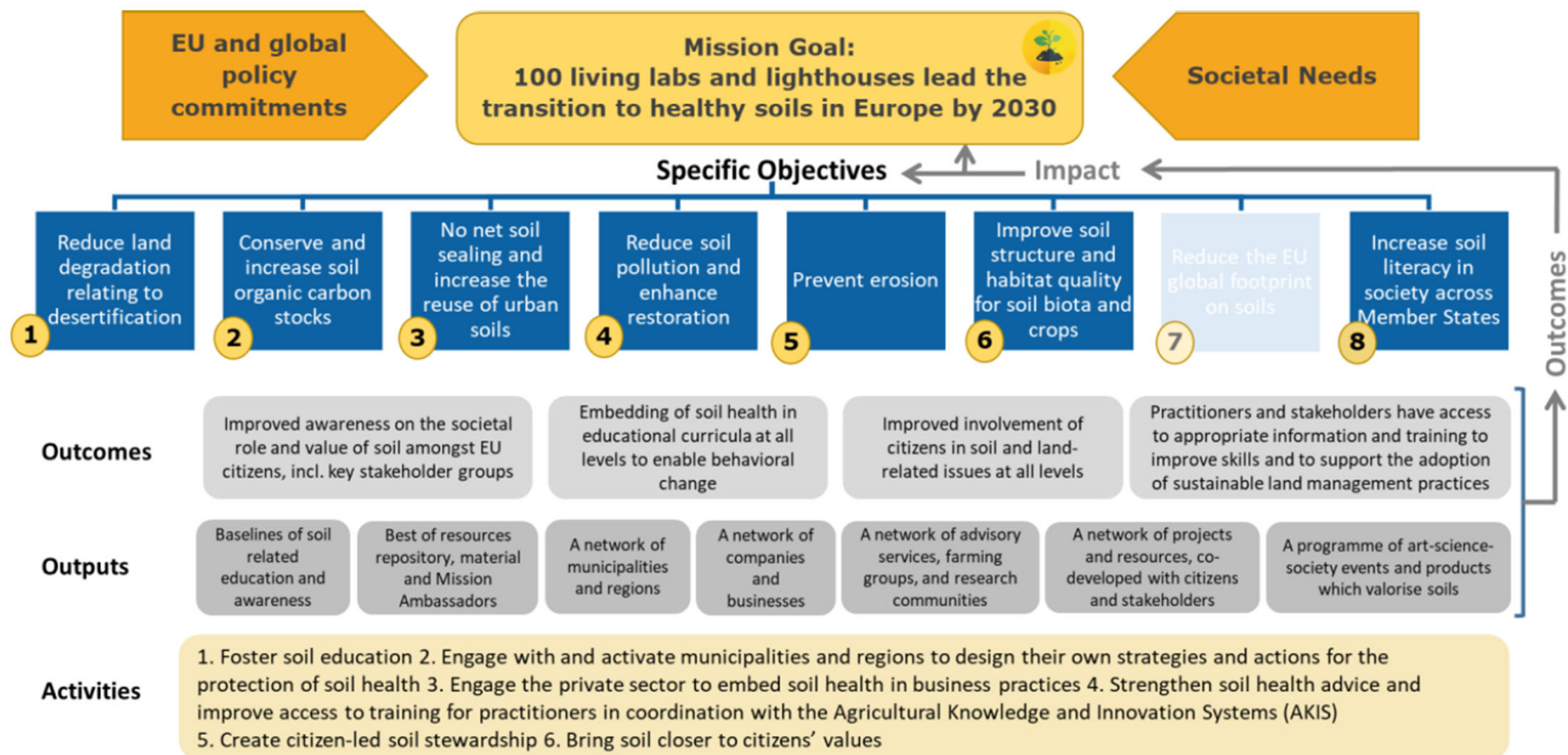


## Stimulus for

- 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



## Operational objective 4:

Engage with the soil user community and society at large (Building Block: Soil literacy, communication and engagement)



European  
Commission

# Soil mission in Horizon Europe



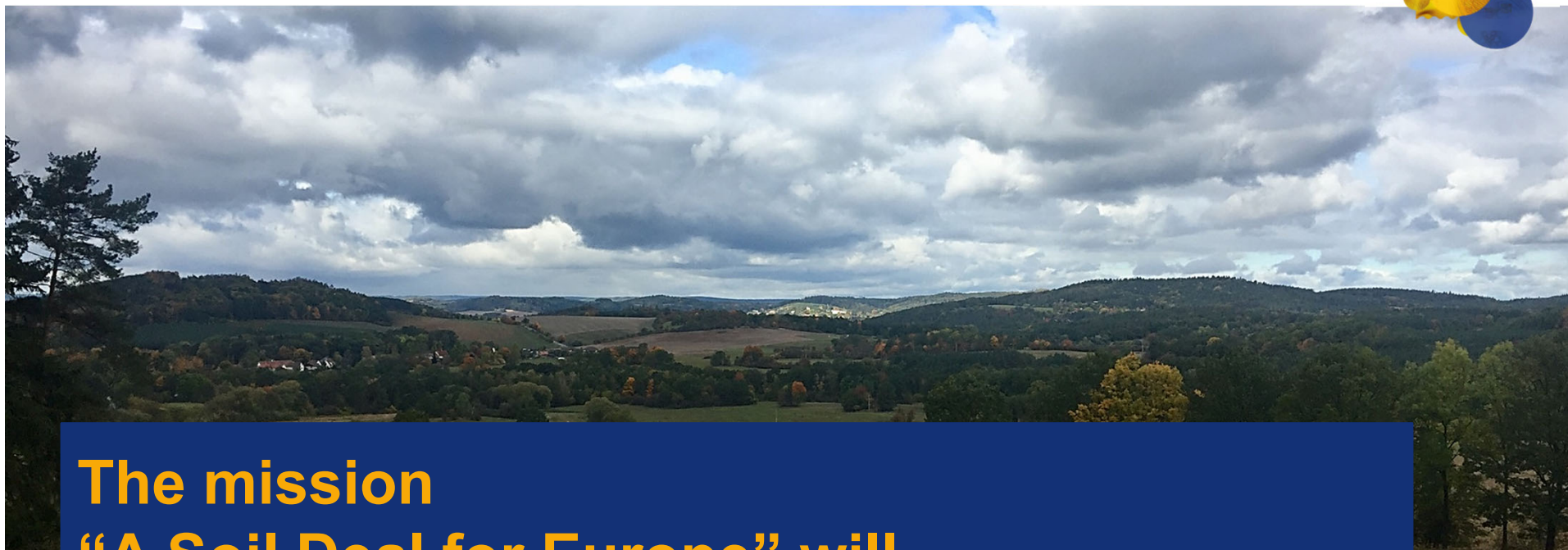
**Work programme 2021-2022 soon to be adopted with a sizable budget for proposals\* contributing to a structured roll-out of mission activities and contributing to the mission's goal and objectives**

\* 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**



European  
Commission

# 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>

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