



## « SOILCON –Ground for future cooperation in Europe »

### Part I: « Mission-oriented policies: Addressing societal challenges and driving positive change »

## Horizon Europe Mission : A Soil Deal for Europe

18 September 2023

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## 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 **mission characteristics** and **elements of governance**, and **5 missions areas**.



# Missions: a new instrument under Horizon Europe to address major societal challenges

Adaptation to  
Climate Change



Mission Manager  
DG CLIMA

Cancer



Mission Manager  
DG RTD

Climate-neutral  
and Smart Cities



Mission Manager  
DG MOVE

Restore our  
Ocean and Waters



Mission Manager  
DG MARE

Soil Deal  
for Europe



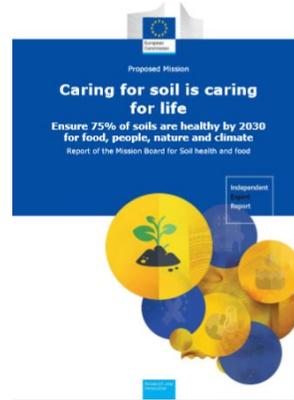
Mission Manager  
DG AGRI

❑ Launching a new EU Mission on New European Bauhaus



# Developing the mission

## Mission Board “Soil health and food”



R&I days 2020  
the Mission Board hands over its report “Caring for soil is caring for life”



September 2019

R&I days 2019  
creation of the Mission Board  
Soil health and food

until September 2020

Mission board develops its recommendation for a mission.  
More than 60 events to promote and co-create the mission

September 2020

Commission services prepare the mission implementation plan

until June 2021

29 Sept 2021

Official launch of the missions through a Commission Communication



# Urgency: We need to act now!

## Baselines for specific objectives - examples



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



2.8 million potentially **contaminated sites** posing major health risks

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



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





## A supportive framework for soil protection in the EU





# Goal of mission “A Soil Deal for Europe”: 100 living labs and lighthouses to lead the transition towards healthy soils by 2030

## Specific objectives

1. Reduce desertification

2. Conserve and increase soil organic carbon stocks

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

4. Reduce soil pollution and enhance restoration

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



Each specific objective is backed by **one or more quantified targets** and **measurable indicators**. Objectives apply to **all types of land use**.



# How will the Mission be implemented?

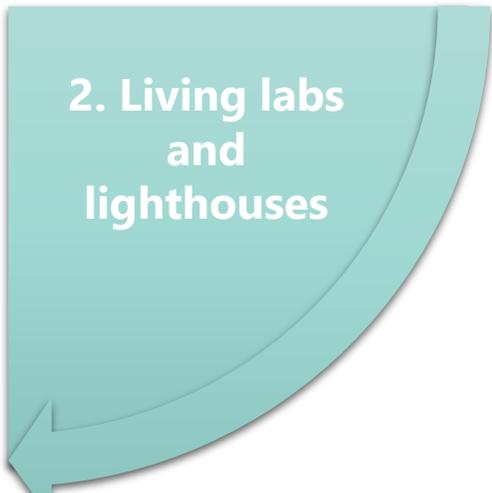
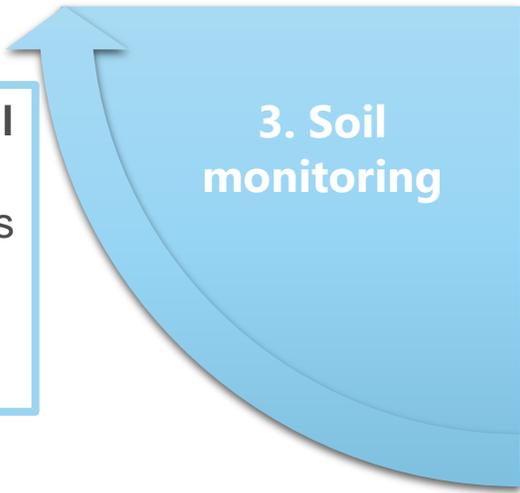
Communication, training and advice targeted to different target groups; specialised “soil advisors”



Knowledge, data, technologies and infrastructures to support practices and business models for soil health

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

Harmonization of soil health monitoring and reporting across Europe; contribution to European Soil Observatory



A comprehensive network of real-life sites for co-creating, testing, demonstrating and upscaling of solutions



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



# 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 contains a cluster of 10 – 20 sites (e.g. farms) working together at regional or sub-regional level.
  - Specific criteria for living labs have been developed under the mission to ensure common approach and comparability of data and experiences.
- **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.

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





# A gradual development of 100 Living Labs across Europe

## Phase 1 (2021-2024)

**Engagement activities** with stakeholders foreseen at regional level to ensure common understanding of the criteria and a balanced coverage of rural and urban areas and across all Member States.

**A network support structure** to be established to cater for the needs of the emerging living labs.

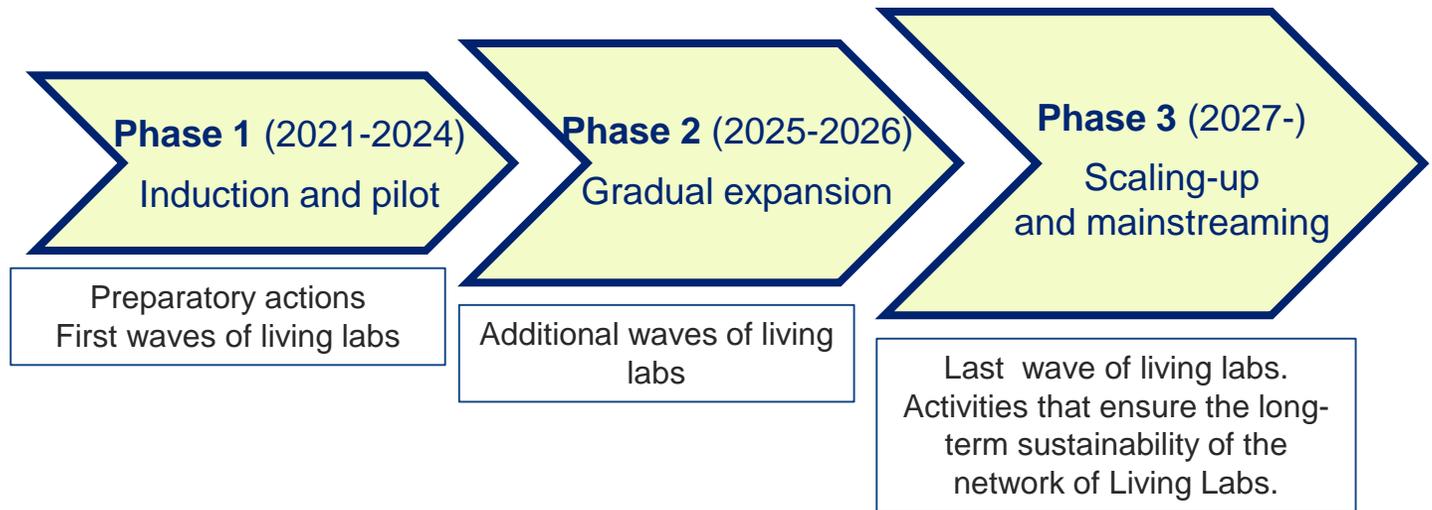
**First waves of Living Labs** to be in place as from 2024.

## Phase 2 (2025-2026)

**Expansion** of living labs all over Europe through additional calls.

## Phase 3 (2027 onwards)

**Further waves of living labs**, along with accompanying measures to facilitate the mainstreaming, continuation and sustainability of the living labs beyond the Mission.



**A network of living labs and lighthouses** will be gradually established through consecutive calls under Horizon Europe.



# Soil literacy, communication and engagement

- Foster **soil education** across society
- **Engage and activate regions and municipalities** to design their own strategies and actions for the protection of soil health
- Engage with the **private sector and consumers** to embed soil health in business practices
- Strengthen soil health advice and **improve access to training for practitioners** in line with Agricultural Knowledge Innovation Systems (AKIS)
- Create **citizen-led soil stewardship** and **citizen science**
- Bring **soils closer to citizens' values**





# Roll-out of Mission Work Programmes

## WP 2021

Topics on e.g. soil monitoring and soil health indicators, businesses models for soil health, link between soil health and food quality and safety

Budget: 67 M€  
**11 projects**



## WP 2022

Topics on e.g. remediation strategies for contaminated sites, soil biodiversity, use of biowaste for soil improvement, carbon farming

Budget: 95 M€  
**17 projects**



## WP 2023

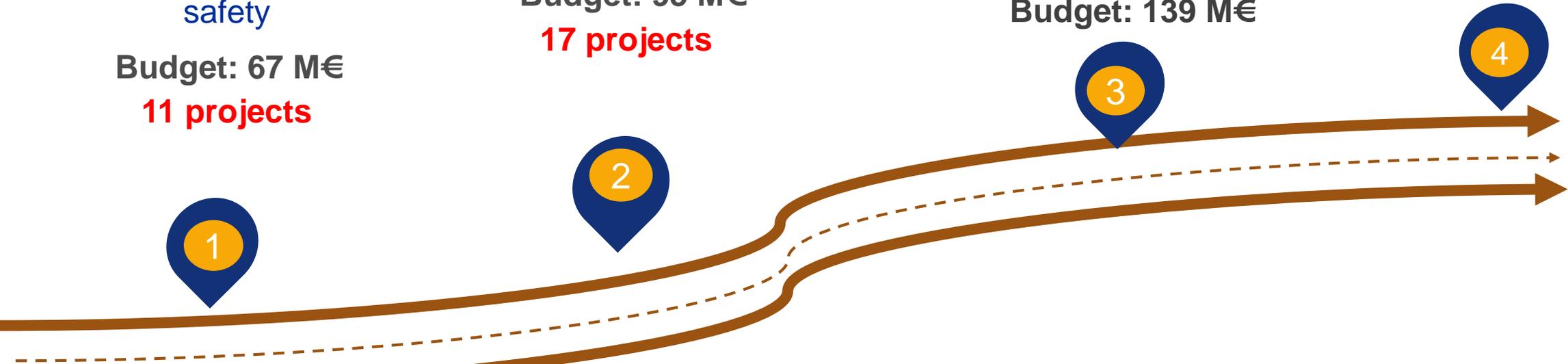
Topics on e.g. Living Labs (incl. carbon farming), on-site digital tech to monitor nutrients/chemical/biological stressors in soil and plants, soil friendly practices in horticulture, combat desertification

Deadline for applications:  
**20 September 2023**  
Budget: 139 M€



## WP 2024

In preparation





# Work Programme 2023 topics of Soil Deal Mission

	Topics	Type of action	Budget
2023-SOIL-01-01	Discovering the <b>subsoil</b>	RIA	12 m€; (2)
2023-SOIL-01-02	<b>Soil pollution processes</b> – modelling and inclusion in advanced digital decision-support tools	RIA	14 m€; (2)
2023-SOIL-01-03	<b>Onsite digital technologies to monitor</b> nutrients and chemical or biological stressors in soil and plants with relevance for food safety and nutrition	IA	12 m€; (2)
2023-SOIL-01-04	Innovations to prevent and combat <b>desertification</b>	IA	14 m€; (2)
2023-SOIL-01-05	Soil-friendly practices in <b>horticulture</b> , incl. alternative growing media	IA	13 m€; (2)
2023-SOIL-01-06	Soils in <b>spatial planning</b>	RIA	7 m€; (1)
2023-SOIL-01-07	Back to earth: bringing <b>communities and citizens</b> closer to soil	CSA	6 m€; (1)
2023-SOIL-01-08	<b>Co-creating solutions for soil health in Living Labs</b>	RIA	36 m€; (3)
2023-SOIL-01-09	<b>Carbon farming</b> in living labs	RIA	12 m€; (1)

+ two joint topics with Missions Oceans and Climate Adaptation

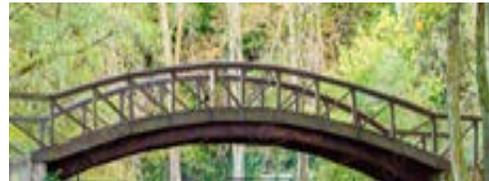


# Building synergies between the Soil Mission and other Instruments (**the leverage effect**) an example: the CAP

Instruments for improving soil management practices of CAP beneficiaries

## Soil Deal Mission

- Generates knowledge and innovations for sustainable soil and land management.
- Engages with farmers and foresters in Living Labs and Lighthouses to co-create test and demonstrate solutions.
- Disseminates, raises awareness and provides training to enhance “soil literacy”.
- Improves methods for assessing and monitoring soil health.



## Common Agricultural Policy

- **EIP AGRI** Operational Groups replicate solutions in regions where no living labs and lighthouses are operating. **EIP AGRI network** promotes good practices and information on successful mission projects.
- **Agricultural advisory services** support the deployment of best available soil management practices.
- **CAP networks:** foster innovation in agriculture and in rural areas, support interactions...
- Innovations tested under the mission are up-scaled through **investments**.

- ✓ 18 out of 28 **CAP Strategic Plans** make explicit links to the Soil Deal Mission.
- ✓ Soil health is targeted with actions in all CAP SPs.

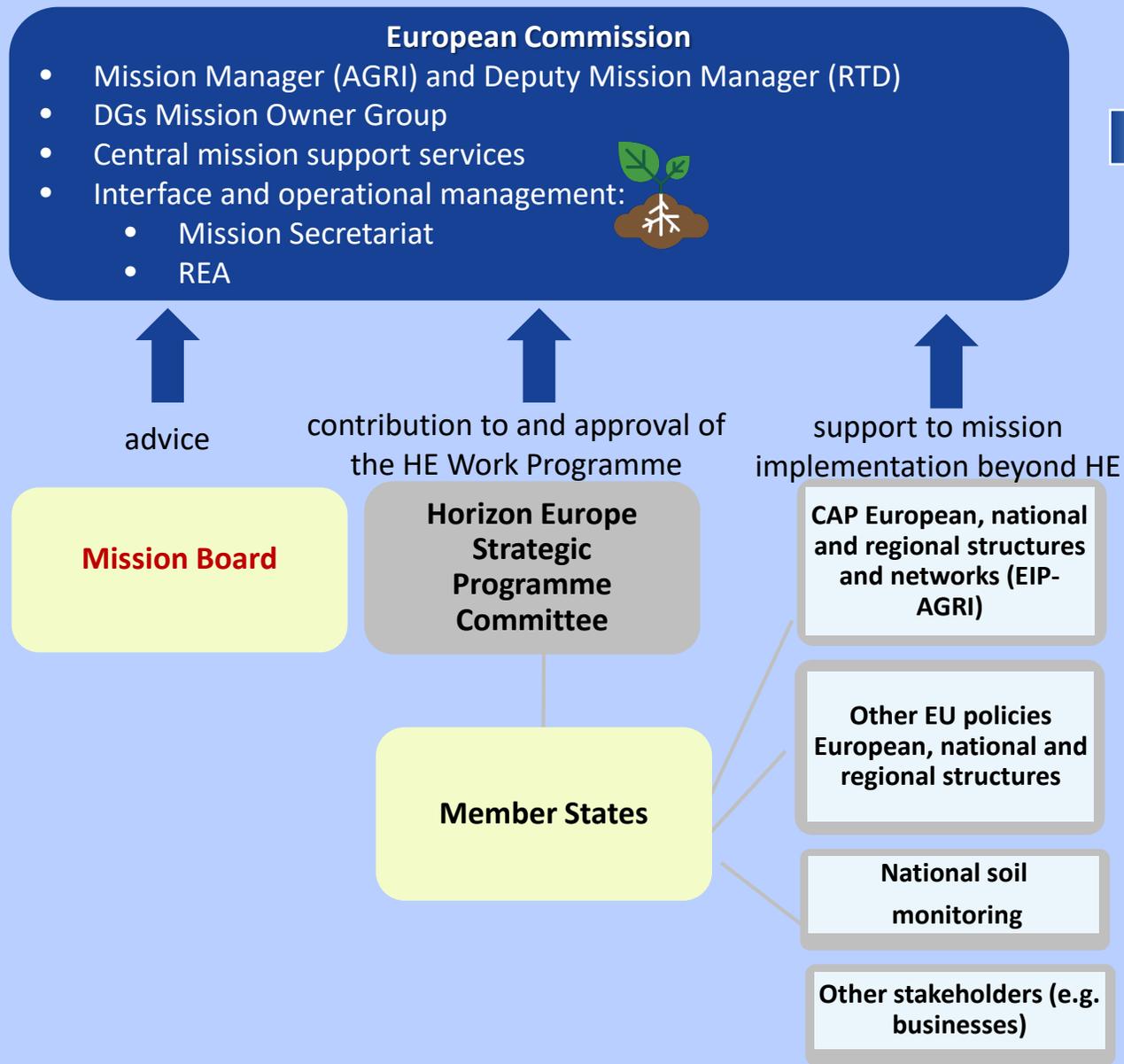


The Mission receives support from other EU sources such as the LIFE programme, the Circular Bioeconomy Europe JU, PRIMA and the EIC

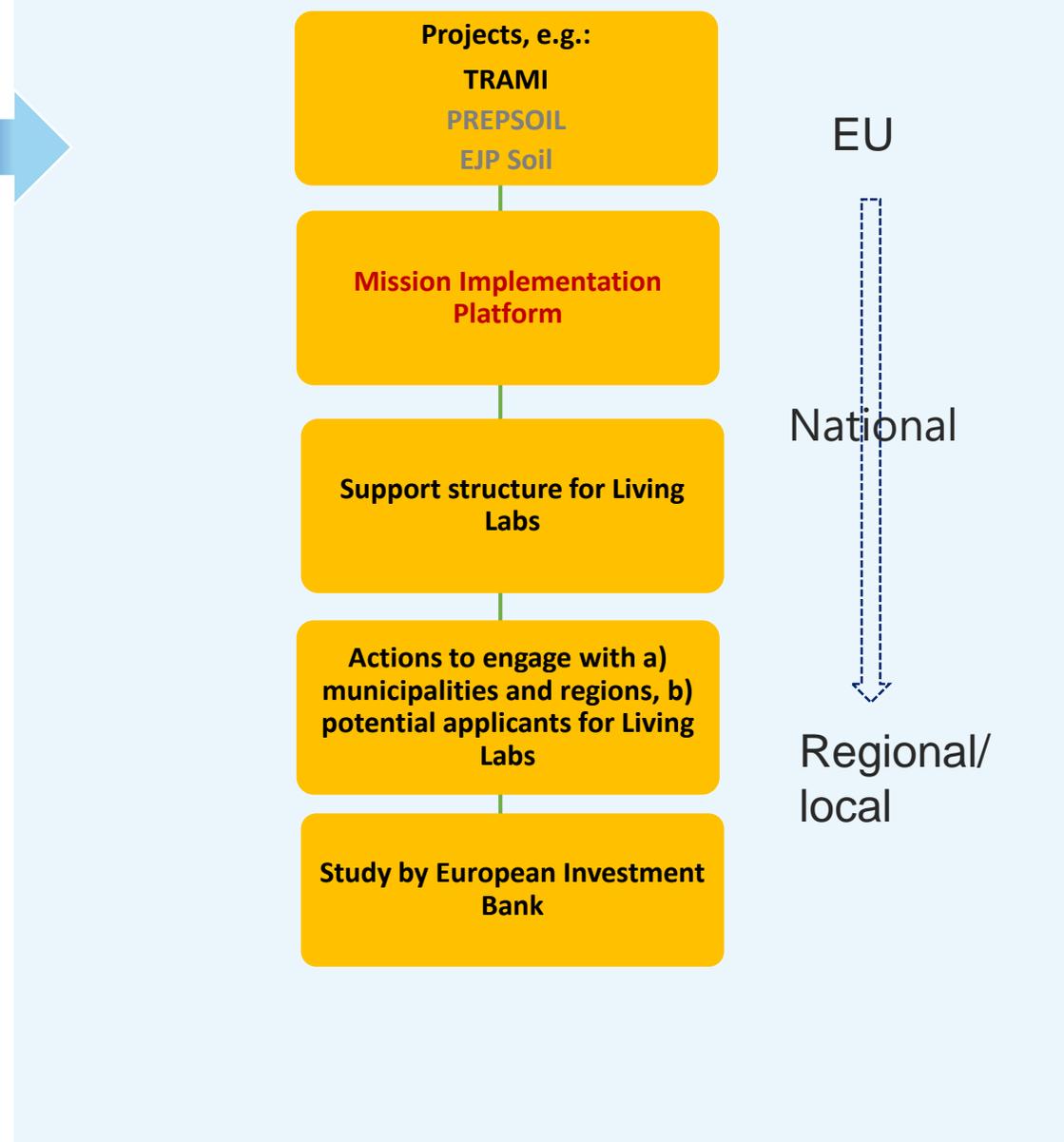
~200 initiatives at national level implementing the Mission goals reported by Member States

# Mission governance and levels of implementation

## Horizon Europe (HE) strategy, programming, implementation



## Support to Mission implementation





# Mission Board Members





# Communication 'EU Missions two years on: assessment of progress and way forward'



## Reminder: assessment mandate and process

- Art. 8.5 **HE Regulation** requires the Commission to carry out an assessment of the first Missions and to review the Mission areas by the end of 2023
  - Missions activity, budget beyond 2023 conditional on assessment outcome
- Two main **sources** of input to the assessment and review
  - **Self**-assessment by Mission Secretariats, supported by Mission Boards
  - **External** study, incl. stakeholder consultations, online survey, interviews
- Outcome documents
  - Commission **Communication**: main political conclusions
  - Staff **Working Document**: more detailed, technical assessment of each Mission
  - External **study report** (under finalisation, publication TBD)



## Missions overall: main conclusions

- Existing Missions are **on track** to achieve 2030 goals; implementation will **continue**
- Five Mission **areas** – incl. "soil health and food" – remain **relevant**
- Proposed **budget increase** from 10% to 11% Mission share in Horizon Europe Pillar 2
- Proposed **additional Mission** "New European Bauhaus"



## Challenges identified & *Commission follow-up* (1/2)

- Improving **governance** and **political steer**
  - *Intensify discussions with MS on how to streamline Mission governance*
  - *Invite political actors, incl. MS, to nominate high level representatives to join responsible Commissioners in promoting "their" Missions*
  - *Initiate yearly debate on Mission implementation in thematic Council formations and EP committees*
- More and better **co-investment**, incl. from private sector
  - *Intensify discussions on alignment of MS programming of EU funding with Missions*
  - *Invite recommendations and advice on how to increase private sector involvement*



## Challenges identified & *Commission follow-up* (2/2)

- Enhance **citizen** and **stakeholder engagement**
  - *Targeted actions to support local and national communication efforts*
  - *Further assessment on implementation in 2025*
  - *Organise a public debate on implementation reports to draw lessons, discuss progress, communicate achievements*



# Launch of the Mission Soil photo competition

Mission Soil Photo Competition: 'How do you picture soil?'



## Do you care about the future of our soils?

Show us your creativity by entering the #MissionSoil photo competition and get a chance to join us at the European Mission Soil Week 2023 in Madrid!

The Mission 'A Soil Deal for Europe' (the Mission Soil) is an initiative under Horizon Europe, the EU Research and Innovation Programme. It aims at protecting as well as restoring soils, and promoting sustainable management practices in urban and rural areas. The Mission aims to raise awareness and ensure the long-term health and productivity of soils on all types of land. Moreover, it aims to advance and share knowledge with stakeholders and the general public about sustainable practices related to spatial planning, soil conservation and agricultural techniques aimed at reducing the use of chemical inputs.

The Mission Soil pioneers, showcases, and accelerates the transition to healthy soils through ambitious actions in 100 Living Labs and Lighthouses. It combines these actions with a comprehensive transdisciplinary research and innovation programme, a robust, harmonised soil monitoring framework and increased soil literacy and communication to engage with citizens. Discover more.

We can all be part of the change, join the #MissionSoil!

How do you picture soil?

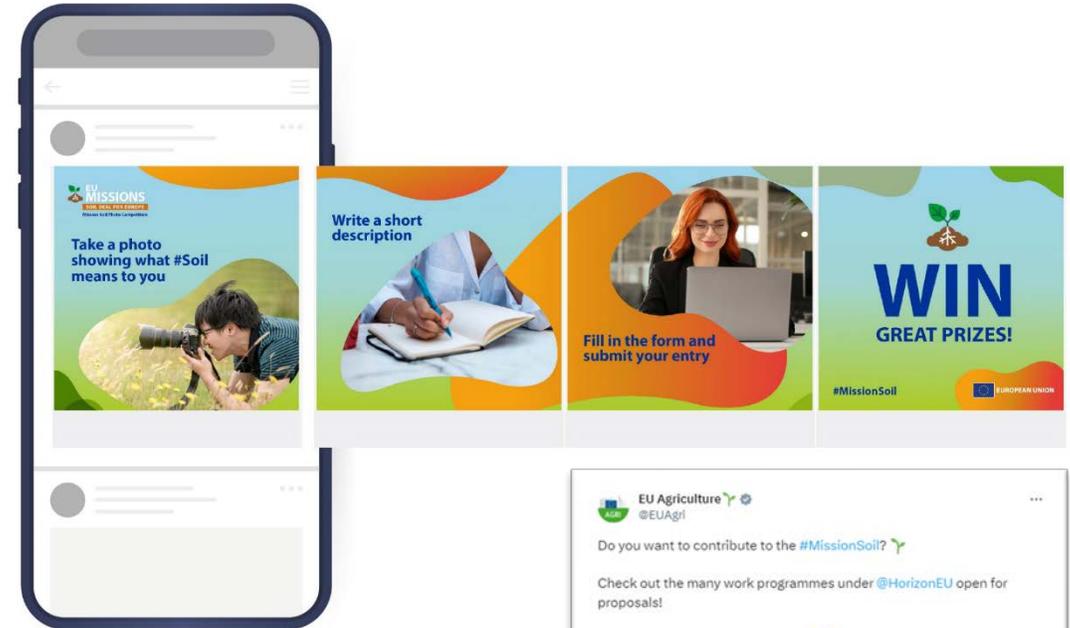
- 12 best pictures will be exhibited at the European Mission Soil Week
- 12 best pictures will be printed into a calendar
- 3 main winners will be invited to attend the event
- 9 winners will receive a gardening kit





# Social media coverage

- Monthly promotion of Mission Soil activities / latest updates:
  - Example of September content: website launch, newsletter publication, info on open call for proposals, Mission Manifesto
- Ad-hoc **campaign for the European Mission Soil Week** (currently running till November 2023)
- Ad-hoc **campaign for the social media photo competition (01/09 - 01/10/2023)**



Follow the latest progress and learn more about getting involved.

Facebook
 Instagram
 Twitter
 YouTube
 LinkedIn



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SOIL DEAL FOR EUROPE



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# EUROPEAN MISSION SOIL WEEK

Leading the transition towards healthy soils

Madrid, Spain  
21-23 November 2023

© European Commission



# The Mission Soil Manifesto

*Launched in April 2023*

**Objective:** non-legally binding document to formalize stakeholder and citizen participation in and support to Mission activities

➔ **Protecting soils is a societal undertaking**

## Who can sign it?

Regional and local public authorities, private and public organisations, NGOs, philanthropic organisations, schools, universities, research institutes, associations, individuals

## Why to sign it?

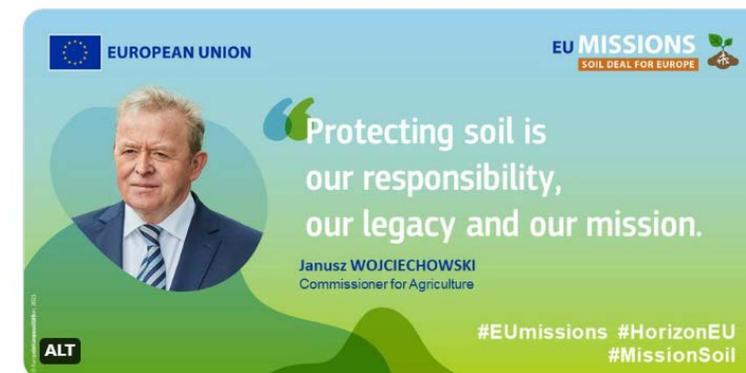
become part of a community, gain visibility, access to Mission-led knowledge, involvement in Mission activities beyond Horizon Europe calls



Today we launch the #MissionSoil Manifesto.

All organisations and citizens that want to become part of a community of practice that cares for #soil health are invited to sign the manifesto

Sign here: [ec.europa.eu/eusurvey/runne...](https://ec.europa.eu/eusurvey/runne...)





# Join the fast-growing Mission Soil community

A Manifesto in **5 points** to:

1. remind the **importance of soils** for people and the planet
2. **acknowledge the status** of soils
3. **recognise the urgency** to act
4. **support the Mission** and its objectives
5. **take action** as policy makers, organisations or individuals

**Everyone can contribute to protect and restore our soils**

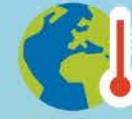
**+1,600 signatories**  
**15% organisations**  
**81% based in Europe**  
**34% R&I**

**Sign it!**





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# Thank you!

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