EUROPEAN UNION

17 - 18 JANUARY 2023

INFO DAYS

EU MISSIONS

SOIL DEAL FOR EUROPE

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The 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 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

POLICY CONTEXT

- **European Green Deal strategies**
- International level: the **UN Sustainable Development Goals**

Our soils are threatened due to current management practices, pollution, urbanization, effects of climate change, etc.

24% of land with unsustainable water erosion rates

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

60-70% of soils in Europe are considered to be unhealthy

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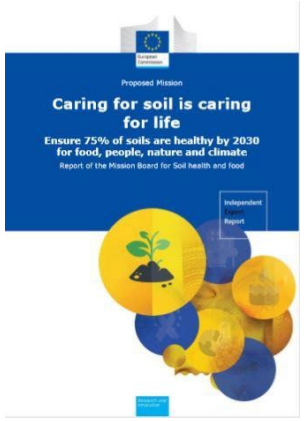
Mission roll-out

Mission Board's report
Sept. 2020



Implementation Plan
Sept. 2021

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
Budget: 126 M€
Open: 17 January 2023
Deadline: 20 September 2023

Started in October 2022: **Soil Mission Board 2022-2025**

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Living Labs and Lighthouses

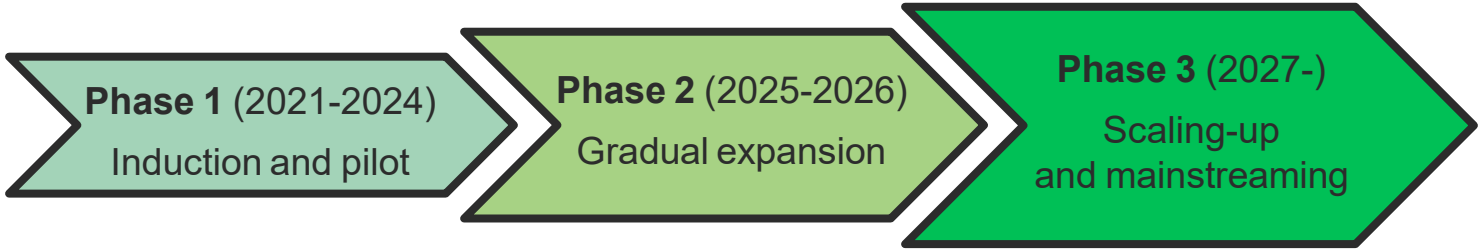
Living labs are a core element of the mission

- 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.

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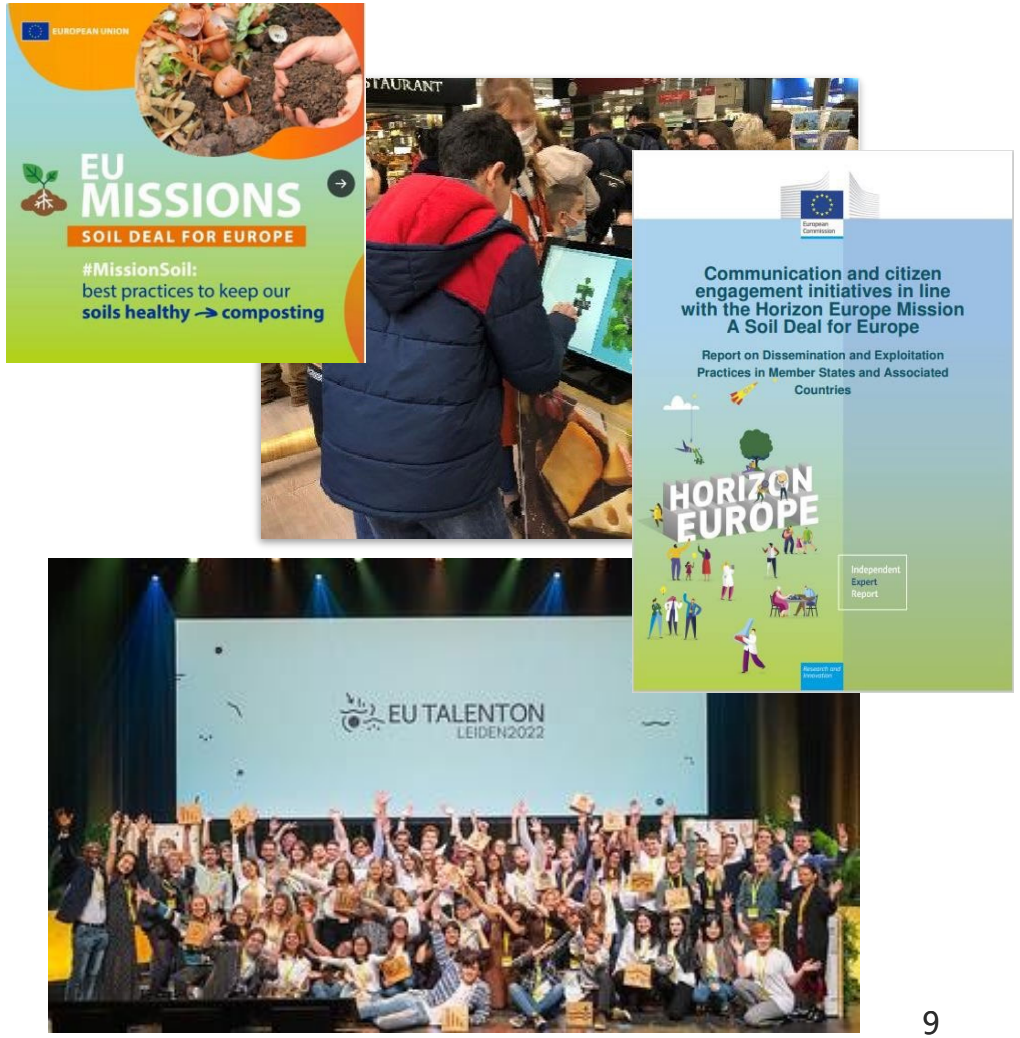
Communication and engagement beyond the Work Programme

- 250+ communication, co-creation and engagement events since Sept 2019
- Social media campaigns including 2 campaigns #EIPAgriSoil; **on-going 2022-2023 on best practices**
- Several articles, press releases, newsletters, 4+ videos, 2 factsheets
- 2 Podcast episodes
- 1 Soil health results pack – **new publication on Soil, communication&citizen engagement**
- Interactive games for kids and adults, including composting training, Soil Panorama
- Survey sent to **7000+** contacts across Europe and 2500+ contributions received



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Soil Mission 2023 Calls for proposals topics:

- 01: Discovering the **subsoil**
- 02: **Soil pollution processes** – modelling and inclusion in advanced digital decision-support tools
- 03: **Onsite digital technologies to monitor** nutrients and chemical or biological stressors in soil and plants with relevance for food safety and nutrition
- 04: Innovations to prevent and combat **desertification**
- 05: Soil-friendly practices in **horticulture**, including alternative growing media
- 06: Soils in **spatial planning**
- 07: Back to earth: bringing **communities and citizens** closer to soil
- 08: **Co-creating solutions for soil health in Living Labs**
- 09: **Carbon farming** in living labs
- **Joint topic:** Mission **Climate** adaptation, Mission **Ocean** & waters and Mission **Soil** Deal for Europe - Joint demonstration of an integrated approach to increasing landscape water retention capacity at regional scale
- **Joint Topic:** Mission **Ocean** and Waters and Mission A **Soil** Deal for Europe - Joint demonstration of approaches and solutions to address nutrient pollution in the landscape-river-sea system in the Mediterranean sea basin

Mission Soil
Calls for proposals 2023

Opening date: **17 January 2023**

Closing date: **20 September 2023**

Apply in the Funding and Tenders Portal in the official EU website: https://ec.europa.eu/

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HORIZON-MISS-2023-SOIL-01-01

Discovering the subsoil

Type of Action: *Research and Innovation Action (RIA)*

Indicative budget: *12 M€ in total*
(6 M€ per project)

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HORIZON-MISS-2023-SOIL-01-01

POLICY CONTEXT

- European Green Deal, in particular:
  - Soil Strategy
  - Farm to fork
- Europe fit for the digital age
- Fit for 55
- Bioeconomy strategy

EXPECTED OUTCOMES

- Improved access to data and knowledge on the conditions and dynamics of processes in subsoils.
- Support the development of sustainable soil management practices as well as financial and policy incentives.
- Accelerated deployment of sustainable management practices for protecting and restoring subsoils, while increasing relevant soil-dependent ecosystem services.
- Improved understanding of the role of the subsoil in climate change adaptation and mitigation, e.g. regarding carbon and water storage.

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HORIZON-MISS-2023-SOIL-01-01

SCOPE

- **Increase knowledge on the properties** as well as the chemical, physical and biological process dynamics and their relationships in subsoils, and how these contribute to overall soil health and the delivery of ecosystem services. **Explore the potential of modelling subsoil processes** and dynamics.
- **Identify pressures on the subsoil** that impair soil functions and ecosystem services.
- **Identify indicators** to assess subsoil driven changes in soil functioning.
- **Identify the potential of subsoils** to store and maintain carbon, and to contribute to mitigating other GHG, accounting for potential barriers and the synergies and trade-offs between **climate regulation and other ecosystem services**. Consideration of existing and future land use options.

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HORIZON-MISS-2023-SOIL-01-01

SCOPE

- **Identify and test sustainable management practices** to improve the conditions and functions of subsoils in close **cooperation with land managers** and allow for wide demonstration and dissemination of practices.

- **Develop tools/methods for risk assessment** as regards **subsoil degradation**, reflecting diverse soil uses. Demonstrate practical approaches for the use of these tools and methods by land managers and policy-decision makers.

- Establish robust **methods to improve data collection and monitor** the chemical, physical and biological characteristics of subsoils. Sampling methods for subsoil should be harmonised in order to provide comparable and reliable data.

KEEP IN MIND

- The term “subsoil” refers to the horizons immediately below the topsoil.
- Topsoil is defined as the uppermost layer of natural soil, generally 10-30 cm thick, although this can vary according to soil type.

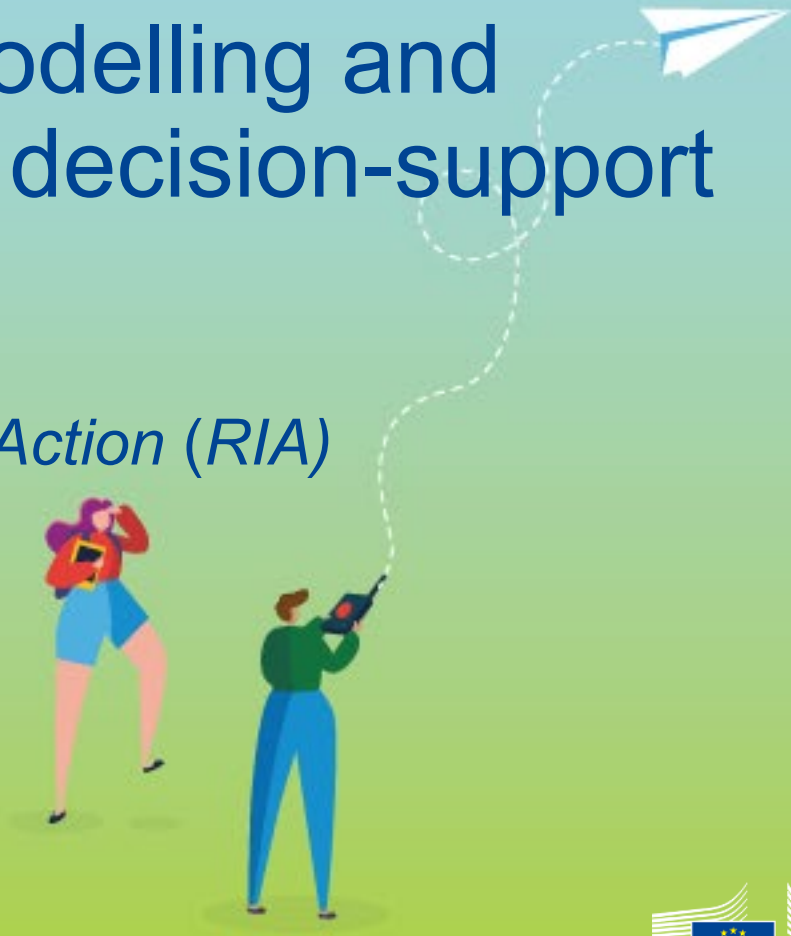
- Contribute to the EU Soil Observatory (EUSO) of the European Commission Joint Research Centre

HORIZON-MISS-2023-SOIL-01-02

Soil pollution processes – modelling and inclusion in advanced digital decision-support tools

Type of Action: *Research and Innovation Action (RIA)*

Indicative budget: *14 M€ in total*
(7 M€ per project)



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HORIZON-MISS-2023-SOIL-01-02

POLICY CONTEXT

- European Green Deal, in particular:
  - Soil Strategy
  - Farm to fork
  - Zero Pollution Action Plan
- Europe fit for the digital age
- Bioeconomy strategy
- Chemical Strategy

EXPECTED OUTCOMES

- Increased understanding of the **impact of pollution on soil processes**, soil functions and related ecosystem services along with responds to land-use dynamics and soil- management practices, restoration mechanisms & climate extremes.
- Enhanced access to knowledge and data for stakeholders that can **inform practices and policies** for reduced levels of pollution and restoration of polluted soils, especially those with high risk to human health and environmental wellbeing.
- Enhanced capacities to integrate diverse data streams (including from Earth Observation) to model and predict soil-related processes and their interactions with soil pollutants to demonstrate the effectiveness of policy measures (for air, water, soils).

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HORIZON-MISS-2023-SOIL-01-02

SCOPE

- **Integrate and improve existing models, develop and test new models of soil processes** that allow for better and easier integration of, and reduced uncertainty about soil-related processes (physical, chemical and biological), on different forms of pollution and with a view to its prevention and reduction.
- **Integrate soil processes modelling** for quantification of soil ecosystem services **with assessments of threats** from diverse pollution sources.
- **Develop use cases for soil modelling on the integration of local soil management practices**. For example, the role of water and wind erosion in the movement of pollutants, nutrient flows in the context of circular economy, interactions between surface-subsurface groundwater-air components, and links with the objectives of the Oceans and Climate Missions.
- **Develop scenarios based on integrated models** that show a) how changes in land management practices can reduce soil pollution (and in consequence air and water pollution) and b) the effects of policies on land management practices that avoid/reduce soil pollution.

KEEP IN MIND

- Data and tools can feed effectively and further advance the "Destination Earth" initiative
- Ensure inter-operability between existing databases and their integration into Destination Earth and the EU Soil Observatory.

HORIZON-MISS-2023-SOIL-01-03

Onsite digital technologies to monitor nutrients and chemical or biological stressors in soil and plants with relevance for food safety and nutrition

Type of Action: *Innovation Action (IA)*

Indicative budget: *12 M€ in total*
(6 M€ per project)

Questions?
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HORIZON-MISS-2023-SOIL-01-03

POLICY CONTEXT

- European Green Deal, in particular:
  - Farm to fork
- Europe fit for the digital age
- EU FOOD 2030 initiative
- Bioeconomy strategy

EXPECTED OUTCOMES

- Increased scale-up, availability and use of **onsite digital tools** (e.g., light-based technologies, remote sensing, Artificial Intelligence (AI)) to monitor nutrients, micronutrients, chemical and biological stressors in soil, plants and subsequently in food in various stages of the production process (from farm to processing stages).

- Improved capacities for food safety risk mitigation and management throughout the various food production stages.

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HORIZON-MISS-2023-SOIL-01-03

SCOPE

- Advance and/or develop **onsite digital technologies** and applications to analyse nutrients and pollutants that could support appropriate interventions at the various food production stages to enrich soil or remove excess nutrients and micronutrients
- Advance and/or develop innovative digital technologies including exploratory **modelling** for calibration and prediction, to detect nutrients and micronutrients, chemical and biological contaminants which have a bearing on food quality and safety.
- Advance and/or develop digital technologies and applications for **in-field detection of soil parameters** with relevance for food safety and nutrition to improve soil management practices
- Identify challenges to the scale-up of existing digital technologies related to the soil-food nexus.

KEEP IN MIND

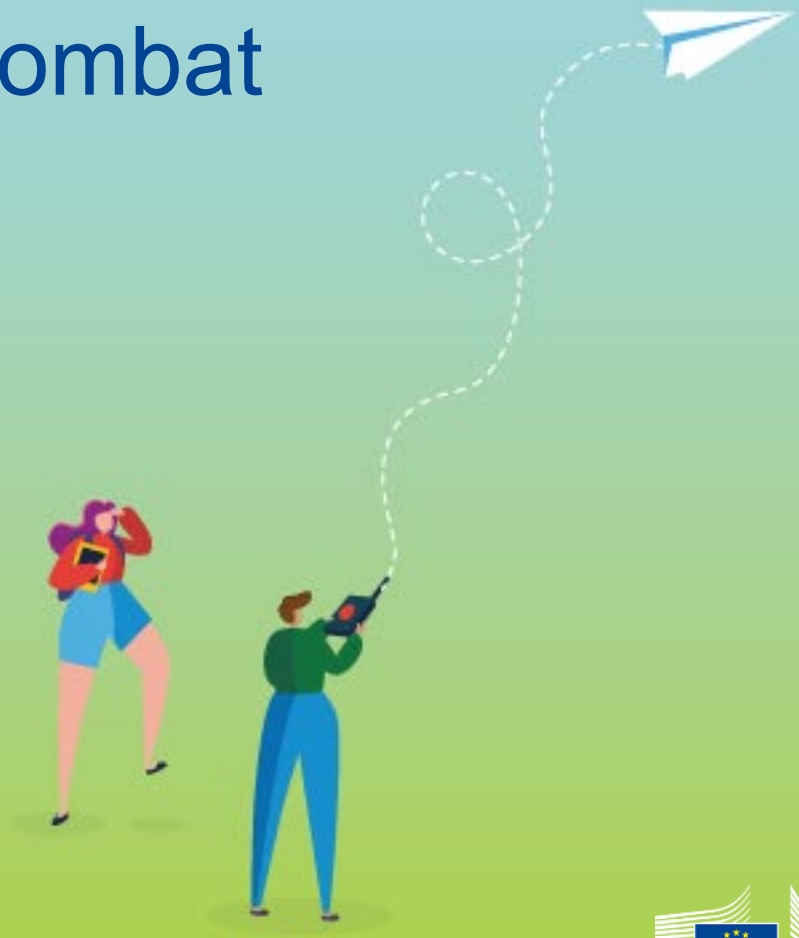
- Use Copernicus and/or Galileo/EGNOS (if projects use satellite-base earth observation)
- Contribute to the EU Soil Observatory (EUSO) of the European Commission Joint Research Centre

HORIZON-MISS-2023-SOIL-01-04

Innovations to prevent and combat desertification

Type of Action: *Innovation Action (IA)*

Indicative budget: *14 M€ in total*
(7 M€ per project)



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HORIZON-MISS-2023-SOIL-01-04

POLICY CONTEXT

- Soil Mission **Implementation Plan**
  - Specific Objective 1, Target 1.1: “Halt desertification to help achieve land degradation neutrality and start restoration”
- At the **science-policy** interface, see also:
  - JRC 2018 World Atlas of Desertification
  - IPCC 2019 Special Report "Climate Change and Land"

EXPECTED OUTCOMES

- **Understanding** and **measurement** of desertification drivers, extent and impacts, in connection with specific land uses; **sharing** of knowledge
- **Demonstration** of solutions for the **prevention** of desertification and for the **restoration** of degraded land, re. economic viability and environmental effectiveness
- Enhanced **access** to effective, context-specific restoration and prevention **solutions** and to information about the **conditions** under which they are effective
- More, bigger **areas** under sustainable soil and water **management**
- Dryland soils become **more resilient** and less vulnerable to drought and desertification

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HORIZON-MISS-2023-SOIL-01-04

SCOPE

- Synthesise and gather **evidence** on drivers and impacts of land degradation, using diverse **data** flows and where relevant **models**, with a view to **supporting** alternative land **management** actions (scenarios)
- Identify, **demonstrate** the effectiveness, and promote the **scale-up** of **measures** against desertification, at different scales and addressing various types of land use/land use changes
- **Agricultural** land: identify, demonstrate land-use **practices** which are more resilient and are suitable for combatting desertification while sustaining ecosystem services and preventing land abandonment
- Facilitate **learning** and **exchange** among relevant actors, incl. across sectors, by promoting **various types** of innovations and/or land use
- **Policy recommendations** for creating incentives, overcoming obstacles for widespread **uptake** of measures demonstrated to be effective and suitable for scaling up
- **Awareness-raising** on desertification and for demonstration and dissemination of solutions

KEEP IN MIND

- **Multi-actor** approach
- **TRL** 5-7 by end of project
- **Collaboration** esp. with PRIMA and NewLIFE4Drylands
- **International** cooperation, esp. with non-EU Mediterranean

HORIZON-MISS-2023-SOIL-01-05

Soil-friendly practices in horticulture, including alternative growing media

Type of Action: *Innovation Action (IA)*

Indicative budget: *13 M€ in total*
(6.5 M€ per project)

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HORIZON-MISS-2023-SOIL-01-05

POLICY CONTEXT

- Soil Mission Implementation Plan, specific objectives:
  - 2) “Conserve and increase soil organic carbon stocks”
  - 4) “Reduce soil pollution and enhance restoration”
  - 6) “Improve soil structure to enhance habitat quality for soil biota and crops”
- Other relevant European Green Deal instruments
  - Organic Action Plan
  - Biodiversity Strategy for 2030
  - Proposed Nature Restoration Law

EXPECTED OUTCOMES

- Reduced carbon/environmental **footprint** of the horticultural sector and more sustainable **production systems**, reducing negative impacts on soil health
- Novel **products**, production **processes**, management options developed and tested, with improved environmental, social, health and safety performance
- Sustainable **alternatives to peat** are more widely available and used in horticulture
- Policy **measures** and other **incentives** explored and elaborated to further the uptake of sustainable alternatives to peat

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HORIZON-MISS-2023-SOIL-01-05

SCOPE

- Identify, develop and promote horticultural **practices and production systems** that conserve or improve soil health, incl. **alternative materials** to be used as sustainable substitutes for peat as substrate or soil improver
- Demonstrate **feasibility** and economic **viability** of newly developed alternatives to the use of peat
- Generate **data** to support improved environmental, social, health and safety **performance** of alternative growing media, in a life-cycle perspective and taking into account potential trade-offs and indirect consequences
- Develop and/or improve sustainable management practices in horticulture (including digital technologies and infrastructures) to **reduce the use of inputs** (plant protection products, fertilisers, water, …)
- Identify and analyse **barriers** against uptake of soil-friendly practices; suggest suitable **measures** to overcome them
- Develop and test material for **awareness raising, dissemination** and **training** to promote the uptake of soil-friendly horticultural practices

KEEP IN MIND

- **Multi-actor** approach
- **TRL** 5-7 by end of project
- **SSH** involvement
- **Collaboration** with EU Soil Observatory (EUSO) and with other Mission projects

HORIZON-MISS-2023-SOIL-01-06

Soils in spatial planning

Type of Action: *Research and Innovation Action*

Indicative budget: *7 M€*
(1 project to be funded)

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HORIZON-MISS-2023-SOIL-01-06

POLICY CONTEXT

- Global commitment for land degradation neutrality (LDN) under UNCCD
  - LDN principle 6: “Apply an integrated land use planning principle that embeds the neutrality mechanism in land use planning”
- EU Soil Strategy
  - Roadmap towards no net land take; apply principles of land take hierarchy
- Long Term Vision for Rural Areas
  - Sustain ecosystems in urban and rural areas

Balanced development of the EU territory

EXPECTED OUTCOMES

- More systematic recognition of the value of soil functions in spatial planning and land use decisions
- Improved access to information and planning tools for more adaptive land management
- Promotion of nature based solutions to support soil functions
- Approaches for rezoning, restoration and de-sealing are more widely applied to land infrastructure for reuse.

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HORIZON-MISS-2023-SOIL-01-06

SCOPE

- Undertake a **systematic review and analysis** of how soils, their functions and ecosystem services are considered in the various levels of spatial planning in the EU and Associated Countries.
- **Improve the knowledge on potential trade-offs** between the provision of ecosystem services and the further expansion of urban, peri-urban and rural areas.
- **Identify good planning practices** that integrate soils and their ecosystem services into spatial planning. **Show the impact of these practices** on actual land use in urban and rural areas.
- **Develop strategies to progress towards zero net land take by 2050**. **Provide practical recommendations** and **identify bottlenecks** for a better integration of soils into existing spatial planning practices.
- **Provide opportunities for training and skill development of planners** as well as for the **exchange of experiences** between the various actors involved in planning processes and land use decisions at various levels.

KEEP IN MIND

- Selected projects should **liaise with the Joint Research Centre** as relevant to populate the European Soil Observatory with data and information
- **Seek to build synergies** between the integration of soils in planning practices with the **management of other resources such as water**
- Build on **good practices from Third Countries**, as appropriate

HORIZON-MISS-2023-SOIL-01-07

Back to earth: bringing communities and citizens closer to soil

Type of Action: *Coordination and support action*

Indicative budget: *6 M€ in total*
(6 M€ per project)

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HORIZON-MISS-2023-SOIL-01-07

POLICY CONTEXT

- Mission ‘A Soil Deal for Europe’, specific objective 8 “Increase soil literacy across society”

- Education for Climate Coalition

- Long-term vision for EU’s rural areas as the Mission is one of its flagship initiatives

EXPECTED OUTCOMES

- Increased **societal awareness** on the importance of soil and the challenges it faces and of the **impact of individual decisions** on soils >> **increased engagement** in the protection and restoration of soil health.
- **Opportunities for engaging in creative ways in soil protection are widely available** and supported by soil-related arts products and innovative methodologies
- **Cultural and creative industries (CCIs), artists and civil society organisations are mobilised** and work together alongside with universities, research institutes and public institutions and citizens **to increase soil literacy in society**
- **Increased capacity of public and private institutions at different levels to engage with the wide public** in creative ways to promote sustainable soil management

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HORIZON-MISS-2023-SOIL-01-07

SCOPE

- **Establish a network** of relevant actors and projects around art, humanities, cultural and creative industries and carry-out activities and campaigns **to increase people's awareness on soils**, as well as ensure meaningful **citizens' engagement.** -> the network should gradually expand
- **Coordinate, monitor and evaluate** the actions of the projects and initiatives from third parties receiving financial support. Support and **scale up successful initiatives**.
- **Design and provide tools and material** as well as **build capacities and skills** for supporting public and private institutions at different levels to **engage with citizens in creative ways** in the protection and restoration of soil health.
- **Organise regular festivals** (at least two) **open to the public** with the participation of the projects and initiatives financed through the financial support to third parties.

The projects and initiatives financed through the financial support to third parties should:

- **Run innovative communication campaigns** through different tools to raise awareness on the importance of soil; and **organise and promote artistic, soil-related activities and events**
- **Engage citizens in the protection and preservation of soil as well as in tackling soil challenges** (including the ones addressed by the specific objectives of the Soil Deal Mission), **through innovative, participatory and creative methodologies**

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KEEP IN MIND

- **International organisations** with headquarters in a Member State or associated country are exceptionally eligible for funding
- **Legal entities established in non-associated third countries** may exceptionally participate in this CSA
- Must: **multi-actor approach, SSH (social science and humanities)**
- **Financial support to third parties** (grants) max EUR 150 000 each – in total not exceed 40% of the EU funding (approx. 2,4 M euro)
- Should: create synergies with **HuMUS** and **HORIZON-MISS-2022-SOIL-01-07 "Foster soil education across society"**
- Suggestion: Creative Europe programme https://culture.ec.europa.eu/creative-europe/about-the-creative-europe-programme

HORIZON-MISS-2023-SOIL-01-08

Co-creating solutions for soil health in Living Labs

Type of Action: *Research and Innovation Action (RIA)*

Indicative budget: *36 M€ in total*
(12 M€ per project)

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HORIZON-MISS-2023-SOIL-01-08

POLICY CONTEXT

- **European Green Deal and several strategies**, such as those related to soil, food and nutrition security, climate, biodiversity, environment and rural areas:
  - Soil strategy
  - Farm to Fork strategy
  - EU Biodiversity Strategy for 2030
  - Climate Adaptation Strategy
  - Zero Pollution Action Plan
  - Long-term Vision for Rural Areas
  - Forest Strategy
  - Organic Action Plan

- **Soil Deal Mission goal** of setting up 100 living labs to lead the transition to healthy soils by 2030.
- **Soil Deal Mission objectives**, except number 2
- **SDG**

EXPECTED OUTCOMES

- **Fully operational Living labs** (LL) are established, where **co-creation and testing of solutions** for soil health in rural and urban areas takes place;
- Increased capacities for **participatory, interdisciplinary and transdisciplinary** R&I approaches; allowing for effective cooperation between science, practice and policy;
- Practice oriented **knowledge and tools** are **more easily available** to land managers and **contribute to an enhanced uptake of solutions** for soil health and related ecosystem services;
- **Strengthened collaborations** and increased consideration of effective solutions for soil health;
- **Policy makers** are more **aware** of local needs regarding soil health and can use this knowledge to design more effective policies.

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HORIZON-MISS-2023-SOIL-01-08

SCOPE

- Set up **four to five LL** to work together under **one project, sharing related soil health challenges**;
- Establish a detailed **work plan** with the activities to be undertaken ensuring the **co-design, co-development, and co-implementation of solutions**;
- Demonstrate how they do research, considering the relevant **drivers and pressures** as well as the **scaling up** and the **transferability of solutions**;
- **Establish** for each LL **a baseline** for the selected soil health challenge(s), in order to allow **for an accurate assessment and monitoring** of progress towards the objectives of the LL and the objectives of the project overall;
- **Monitor** and carry out an **assessment** of the **effects** of the innovative solutions **on soil health and related ecosystem services.** This should include a **demonstration of the viability** of the proposed solutions;
- Propose **strategies to ensure long-term sustainability** and continuity of the living labs beyond the Horizon Europe (e.g. possible business models);
- **Document** in an easy and accessible way the **developed solutions** in order to facilitate their uptake and transfer to relevant actors.

KEEP IN MIND

- **Multi-actor approach**;
- Beneficiaries may provide **financial support to third parties** (max. EUR 200 K);
- Capitalize from **ongoing projects** such as PREPSOIL, NATI00NS, NBSSOIL and the **future Support Structure** under the SGA;
- Interact with networks active at local level, such as **EIP-AGRI** OG;
- Close collaboration with **EUSO**;
- Agricultural activities should benefit both **conventional and organic farming**.

HORIZON-MISS-2023-SOIL-01-09

Carbon farming in living labs

Type of Action: *Research and Innovation Action (RIA)*

Indicative budget: *12 M€ in total*
(12 M€ per project)

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HORIZON-MISS-2023-SOIL-01-09

POLICY CONTEXT

- **European Green Deal** ambitious and targets,
- Commission's Communication on **Sustainable Carbon Cycle**, and upcoming regulatory proposal on the **certification of carbon removals**;
- **Soil Deal Mission goal** of setting up 100 living labs to lead the transition to healthy soils by 2030.
- **Soil Deal Mission objective 2, "Conserve and increase soil organic carbon stocks".**
- **SDG # 13 on climate action**

EXPECTED OUTCOMES

- **Increased carbon sequestration and protection of carbon in soils, living biomass and dead organic matter**
- Increased capacities for **participatory, interdisciplinary and transdisciplinary** R&I approaches
- Practice-oriented **knowledge and tools** are **more easily available** to land managers and contribute to an enhanced uptake of carbon farming.
- **Strengthened collaborations** and **increased consideration of effective solutions for carbon farming** in regions where the selected LL are operating.
- **Policy makers** are more **aware** of local needs regarding soil health and can use this knowledge to design more effective policies.

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HORIZON-MISS-2023-SOIL-01-09

SCOPE

- Set up **four to five LL** to work together **on carbon farming**, covering one or several land use types. Proposals should **describe the rationale for cooperation** across the various LL.
- Establish a detailed **work plan** with the activities to be undertaken ensuring the **co-design, co-development, and co-implementation of solutions**.
- Carry out **participatory and transdisciplinary** research in LL, considering relevant **drivers and pressures** as well as the **scaling up** and the **transferability of solutions to carbon farming challenges**;
- Establish for each LL a **baseline for carbon farming** to monitor the progress towards the objective of the LL and of the project overall. **Make use of relevant accounting methodologies for quantification of carbon removals.**
- Monitor and carry out an **assessment of the innovative practices for carbon farming,** considering the effects of ongoing climate change on carbon sequestration potential and dynamics.
- Propose **strategies to ensure long-term sustainability** and continuity of the living labs beyond the Horizon Europe (e.g. possible business models).

KEEP IN MIND

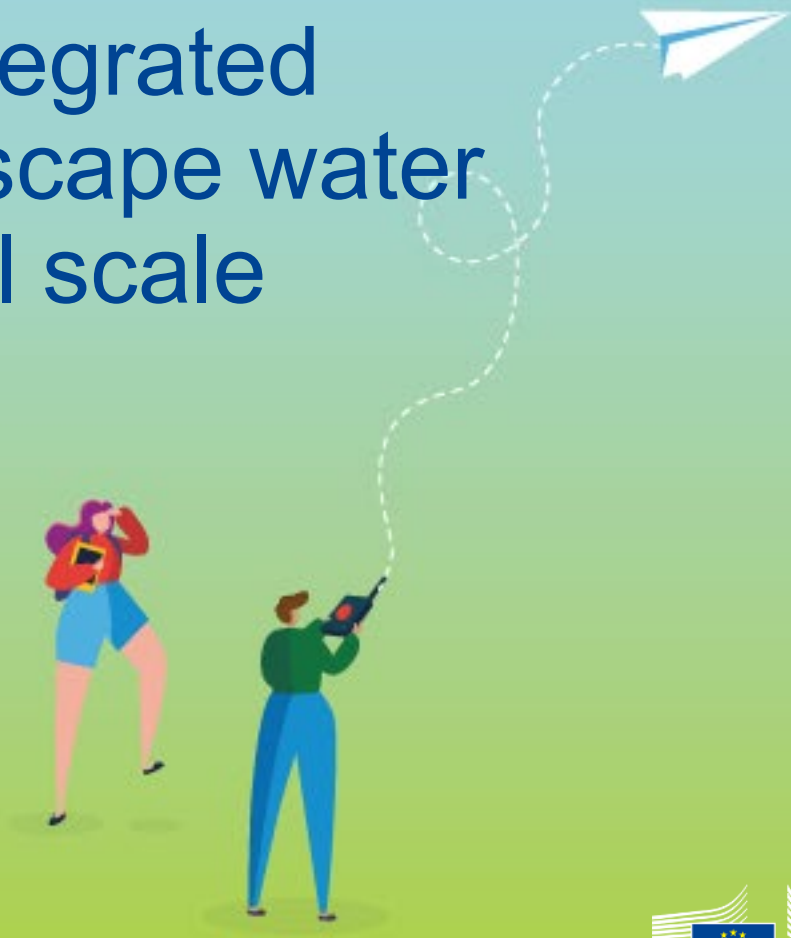
- **Multi-actor approach**;
- Beneficiaries may provide **financial support to third parties** (max. EUR 200 K);
- Capitalize from **ongoing projects** such as PREPSOIL, NATI00NS, NBSSOIL and the **future Support Structure** under the SPECIFIC GRANT AGREEMENT (SGA);
- Interact with networks active at local level, such as **EIP-AGRI** OG;
- Close collaboration with **EUSO**;
- Agricultural activities should benefit both **conventional and organic farming**.

HORIZON-MISS-2023-CLIMA-OCEAN-SOIL-01-01

Joint demonstration of an integrated approach to increasing landscape water retention capacity at regional scale

Type of Action: *Innovation Action (IA)*

Indicative budget: *15 M€ in total (one project)*



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POLICY CONTEXT

- European **Green Deal** (EGD) and related policies/strategies
- **Soil Mission** Implementation Plan: Specific Objectives
  - 3) No net soil sealing
  - 5) Prevent erosion

EXPECTED OUTCOMES

- Increased **resilience** to climate change impacts on soils, waters, habitats and biodiversity
- Increased landscape/soil **water retention capacity**
- Enhanced **mobilization** of relevant **actors** (local/regional authorities, planning bodies, farmers, foresters, land owners, economic operators, citizens)
- Enhanced **implementation** of EU legislation/policies: EGD, Adaptation Strategy, Biodiversity Strategy, Water Framework and Groundwater Directives, Soil Strategy

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SCOPE

- Full-scale **demonstration** of socio-ecological approaches and nature-based solutions to increase the landscape and soil water retention capacity, resilience to climate change, surface and ground water quality, soil health, and biodiversity protection/conservation
  - At least 75 demonstrations
  - In at least three Member States or Associated Countries
- Demonstration activities at the level of socio-ecological **territorial units** large enough to comprise different living/non-living systems (soil, waters, vegetation/biota, human communities)
- **Planning, implementation** and management of effective measures with the **involvement** of relevant authorities, stakeholder and local communities

KEEP IN MIND

- **TRL** 6-7 by end of project
- **Multi-actor** approach
- Third-party cascaded grants to **'associated regions'** (at least five)
- **Dissemination** of best practices to end-users as well as action plan for replication/scalability

HORIZON-MISS-2023-OCEAN-SOIL-01-01

Joint demonstration of approaches and solutions to address nutrient pollution in the landscape-river-sea system in the Mediterranean sea basin

Type of Action: *Innovation Action (IA)*

Indicative budget: *16 M€ in total*
(8 M€ per project)

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POLICY CONTEXT

- European **Green Deal** and related policies/strategies
- **Soil Mission** Implementation Plan, Specific Objective 4: "Reduce soil pollution and enhance restoration"
  - Target 4.2 – reduce fertiliser use by at least 20%
  - Target 4.3 – reduce nutrient losses by at least 50%

EXPECTED OUTCOMES

- **Uptake** of innovative and reproducible approaches to:
  - Prevent/minimize/remediate soil and water **pollution** from excess nutrients
    - Reduce **use of fertilisers**, inland water and ocean **eutrophication**
- Empowerment of **citizens** to take action against pollution
- Support to **implementation** of Marine Strategy Framework, Water Framework and Maritime Spatial Planning **Directives**

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SCOPE

- **Demonstration** activities addressing the landscape-river catchment-sea system, including coastal ecosystems, in the **Mediterranean** sea basin
  - Upstream prevention and reduction of **nutrient losses** from soil
  - Prevention/reduction of **entry of nutrients** in rivers, catchment areas and estuary/sea
  - Measures to **reduce/eliminate excess** nutrients in/from the estuary/sea
- Demonstration activities at the level of **territorial units** (rural areas, urban communities, region, river basin, estuary) and considering local conditions
- **Involvement** of users (land owners, soil/water managers, river manager authorities)

KEEP IN MIND

- **TRL** 6-7 by end of project
- **Multi-actor** approach
- Third-party cascaded grants to **'associated regions'** (at least five)
- **Dissemination** and **training/communication** activities for potential users
- Cooperation with European Soil Observatory (JRC-**EUSO**)

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Thank you!

For further information and questions please contact:

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OR

Research Enquiry Service

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