

As Missões do Horizonte Europa

Maria João Fernandes

More info [here](#)



95,5 b€

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+ Missions
+ European Partnerships

Pillar 1 **25,01 b€**
EXCELLENT SCIENCE



European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures

Pillar 2 **53,5 b€**
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS



Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

Pillar 3 **13,6 b€**
INNOVATIVE EUROPE



European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

FCT Fundação para a Ciência e a Tecnologia **3,39 b€**
WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Five EU Missions

Adaptation to
Climate Change



Cancer



Climate-neutral
and Smart Cities

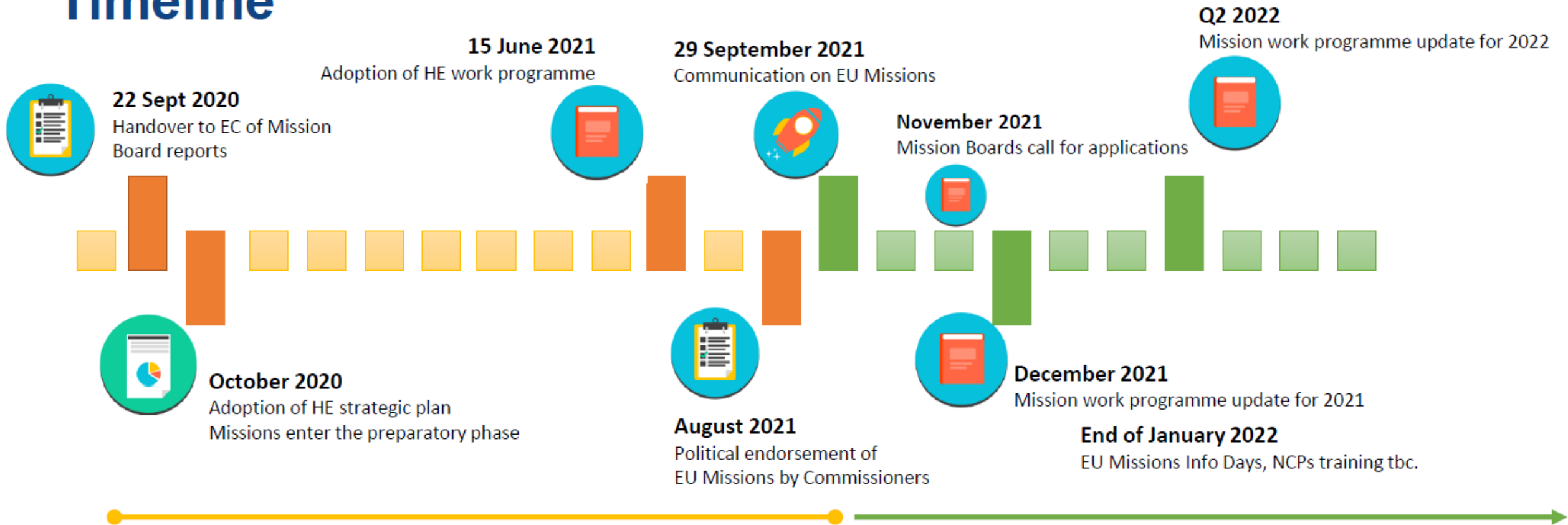


Restore our
Ocean and Waters



Soil Deal
for Europe

Timeline



Missions' preparatory phase:

Preparation of solid implementation plans
Preparatory actions in the WP to lay foundation for missions' implementation

Missions' implementation phase:

Two Missions work programme amendments (Q4 2021, Q2 2022) to start missions implementation on the ground.

Communication on European Missions

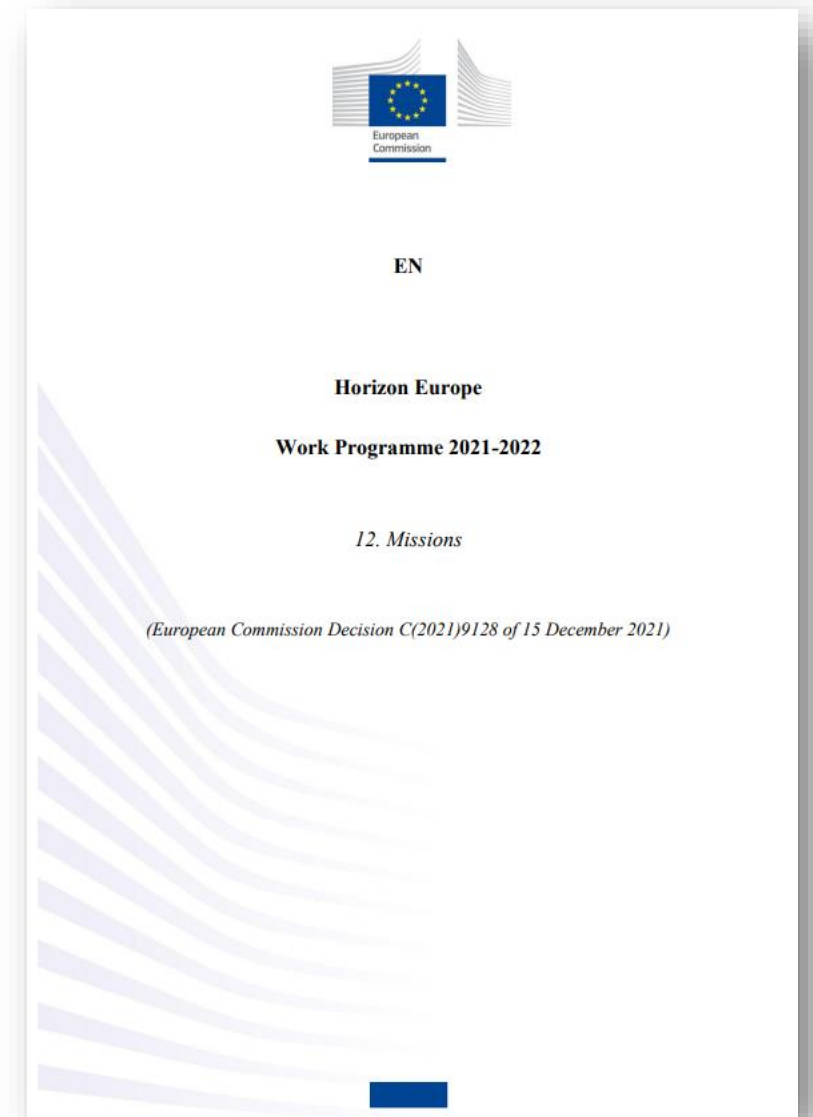
- On 29 September the Commission adopted a **Communication on EU Missions** that officially launched missions into their implementation phase
- The **implementation plans** set the grounds to make missions a reality
- EU Missions have ambitious goals and will deliver concrete **results by 2030**



Mission's Work Programme

- Contains actions for each of the five missions
- Preparatory phase (2021) establish foundations for the missions
- Implementation phase (2022): R&I actions

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-12-missions_horizon-2021-2022_en.pdf





EUROPEAN UNION



EU MISSIONS

SOIL DEAL FOR EUROPE



Video: <https://www.youtube.com/watch?v=53bbzE2lpKc>

More info [here](#)



EU
MISSIONS

The mission's implementation plan

- A blueprint for the roll-out of the mission, in particular in the first three years 2021-2024.
- Builds on recommendations from the Mission Board and provides details on:
 - **the policy context;**
 - **the intervention logic, phases and timeline of activities;**
 - **R&I priorities incl. innovation “hotspots”:** carbon farming, soil pollution and restoration, soil biodiversity, circular economy solutions;
 - **cross-cutting dimensions:** digital, business, territorial, global;
 - **expected outputs, outcomes and monitoring;**
 - **resources and synergies** with other programmes;
 - **supporting structures.**
- A living document, to be continuously updated.





Goal: 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 soils

8. Improve soil literacy in society

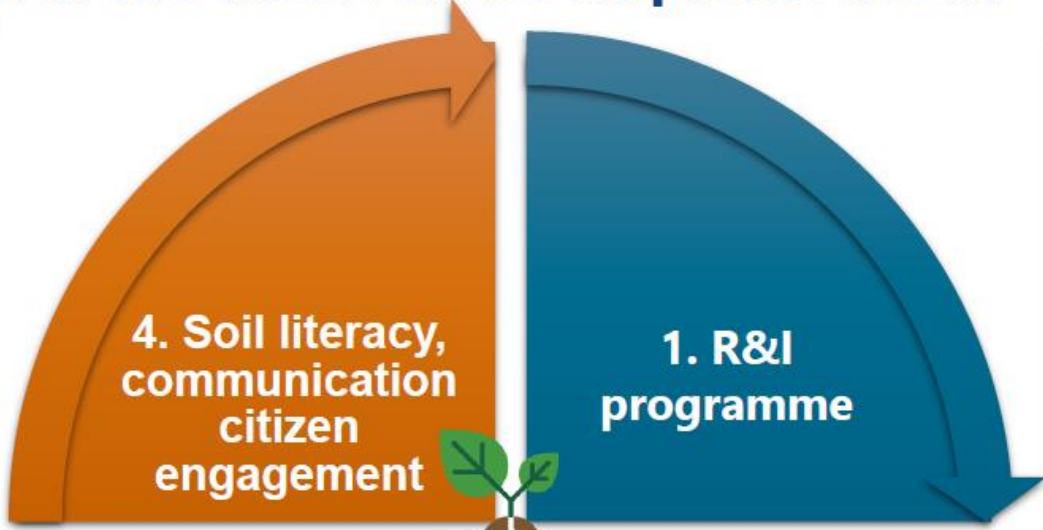


Each specific objective is backed by **one or more quantified targets** and **measurable indicators**. Objectives apply to **all types of land use**.



How will the mission be implemented?

Communication material, training curricula for different target groups and specialised “soil advisors”



Data infrastructures and platforms; knowledge to support management practices, business models, technologies

Harmonisation of indicators, measuring and reporting for soil health across Europe; contribution to European Soil Observatory

A network of real-life sites for testing, demonstrating and upscaling of solutions; due attention to balanced representation across regions

Who will act?

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





Creation of 100 Living Labs and Lighthouses

- **Living labs** are “real-life” places for experiments and innovation. Each living lab corresponds to a cluster of 10 – 20 sites (e.g. farms) working together at regional or sub-regional level.
- **Lighthouses** are individual places to showcase good practices.
- **The network of living labs** will be gradually established through consecutive Work Programme calls under Horizon Europe.
- **Specific criteria for living labs** are in place to ensure common approach.
- **Engagement with stakeholders** at regional level is essential to:
 - create common understanding
 - ensure a balanced coverage of activities in rural and urban areas and across Member States.

Induction and pilot phase (2021 -> 2025)

Engagement sessions in each MS to build ownership and spur process of building LLs (WP 2021)

Establishing and running of the EU coordination and support structure for the network of LLs and LHs (WP 2023)

First wave of living labs cluster projects - 10 living labs each year. (WP2023 & 2024)

Expansion and innovation phase (2025 ->)

2nd wave of living labs cluster projects (WP 2025)

3rd wave of living labs cluster projects. (WP 2026)

Scaling-up and mainstreaming phase (2027 ->)

4th wave of living lab cluster projects (2027)

Activities that facilitate the mainstreaming and continuation and sustainability of the network (2027)

NUMBER OF SOIL HEALTH LIVING LABS (CUMULATED)



Mission ‘Soil Deal for Europe’ | 1st Work Programme

8 tópicos | 62 M€ | Deadline: 24/03/2022

R&I Programme

<u>SOIL-02-01</u> : From knowledge gaps to roadmaps on soil mission objectives	CSA, 1 project
<u>SOIL-02-03</u> : Linking soil health to nutritional and safe food	RIA, 1 project
<u>SOIL-02-04</u> : Social, economic, cultural factors driving land management and land degradation	RIA, 2 projects
<u>SOIL-02-05</u> : Incentives and business models for soil health	RIA, 2 projects

Living labs and lighthouses

<u>SOIL-02-07</u> : National engagement sessions and support to the establishment of soil health living labs	CSA, 1 project
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Soil monitoring

<u>SOIL-02-02</u> : Validating and further developing indicators for soil health and functions	RIA, 1 project
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Soil literacy, communication and citizen engagement

<u>SOIL-02-06</u> : Engage with and activate municipalities and regions to protect and restore soil health	CSA, 3 projects
<u>SOIL-02-08</u> : Next generation soil advisors	RIA, 1 project



VALIDATING AND FURTHER DEVELOPING INDICATORS
FOR SOIL HEALTH AND FUNCTIONS



HORIZON-MISS-2021-SOIL-02-02

RIA, 12 M€, 1 project



POLICY CONTEXT

- ✓ Monitoring the state of soils and changes in soil properties over time is crucial to assess the effectiveness of policy and management measures;
- ✓ currently, only a few countries in Europe have active soil monitoring programmes in place;
- ✓ In general, data for soil health are not sufficiently harmonized;
- ✓ need to develop robust soil health indicators and to harmonise measurement and reporting of soil health.



EXPECTED OUTCOMES

- ✓ Progress towards **more widely accepted and quantifiable definition of soil health**;
- ✓ **improved capacities for soil health monitoring** and for assessing the effects of management practices and policy measures;
- ✓ **support to policy development** and the creation of incentives for sustainable soil management through increased evidence on the link between soil health, soil functions and the support to ecosystem services.

In the long term: results may support a **harmonised soil monitoring and reporting in Europe.**



HORIZON-MISS-2021-SOIL-02-02



SCOPE

- ✓ **Test the eight indicators proposed in the mission implementation plan** for their suitability to measure the status and changes in soil health – also in relation to progress towards the mission’s specific objectives;
- ✓ **identify alternative indicators** where the ones proposed do not prove to be appropriate. The indicators recommended should be measurable, realistic (e.g. easy to use in particular for farmers and foresters, urban planners), unambiguous and scalable;
- ✓ **identify proxies for soil health**, which are “easier” to monitor or more reactive to change. These “next generation indicators” could be based on observable land use and soil management rather than direct measurements of soil properties;
- ✓ demonstrate the **link between the proposed soil indicators, soil functions and ecosystems services** supported by soils.



HORIZON-MISS-2021-SOIL-02-02



SCOPE

- ✓ **Harmonize and benchmark the proposed indicators** for a range of soil types, land uses and climate zones in the EU and Associated Countries and define the acceptable limits or thresholds;
- ✓ **update indicators** as a result of feedback following monitoring campaigns or data inputs;
- ✓ develop **recommendations for an integrated sampling framework** to support upcoming LUCAS campaign (2025/2026) and policy implementation;
- ✓ support the development of a **Soil Health Dashboard** under the EU Soil Observatory.



INDICATIVE BUDGET

12 mln EUR per project
(12 mln EUR in total)



IMPORTANT!

Make use of Copernicus and/or Galileo/EGNOS
Close cooperation with the JRC, the European Environmental Agency and the project EJP Soil
EU's Joint Research Centre (JRC) can participate in consortia



HORIZON-MISS-2021-SOIL-02-03

RIA, 7 M€, 1 project



POLICY CONTEXT

- ✓ EU Green Deal and its strategies in particular:
 - ✓ New Soil Strategy
 - ✓ Farm to fork
 - ✓ Zero pollution action plan
 - ✓ Biodiversity
 - ✓ Climate adaptation
- ✓ The European Soil Observatory
- ✓ EU FOOD 2030 initiative
- ✓ Organic Action plan
- ✓ The CAP
- ✓ Digital Age
- ✓ Sustainable Development Goals



EXPECTED OUTCOMES

- ✓ Improved understanding of the **soil health** and **food nexus** to promote the development of a coherent portfolio of food systems R&I activities in line with the FOOD 2030 initiative.
- ✓ Further understanding of the interlinkages between farming practices, soil health and four **food quality dimensions**: nutritional composition, tastiness, safety, technological property
- ✓ Engaged stakeholders throughout the food system, increased public awareness and business interest on the connection of soil health and food quality, via interactive learning/experimentation through living labs throughout Europe.



HORIZON-MISS-2021-SOIL-02-03

SCOPE



- ✓ Further develop and strengthen legitimacy and robustness of the link soil - food quality through an engaged European interdisciplinary community of scientists
- ✓ Develop easy to measure key performance indicators (KPIs) that elicit the connection between soil health, and food quality.
- ✓ List the potential mechanisms for improved food nutritional quality through soil health
- ✓ Proposals should:
 - ✓ Build on available knowledge
 - ✓ Involve a range of actors
 - ✓ Address trade-offs



INDICATIVE BUDGET

7 mln EUR per project
(7 mln EUR in total)



IMPORTANT!

- Build upon existing national and European resources:
- Horizon Results Platform
 - EIT Food initiatives

Project duration minimum of 4 to 5 years



HORIZON-MISS-2021-SOIL-02-07 CSA, 3 M€, 1 project



POLICY CONTEXT

- ✓ The Mission 'A Soil Deal for Europe' and in particular its target to set up 100 soil health living labs by 2027.
- ✓ The EU Green Deal and in particular the its new Soil Strategy for 2030, and the Farm to Fork strategy
- ✓ The Long Term Vision for Rural Areas
- ✓ The Common Agricultural Policy
- ✓ SDGs



EXPECTED OUTCOMES

- ✓ A common understanding of the concept of soil health living labs, and the most pressing soil health challenges;
- ✓ Enhanced awareness and skills of potential applicants on how to setup and run a living lab and improved access to capacity building material;
- ✓ A high-quality, collaborative and multi-actor consortia in place, to prepare and support relevant actors expected to take part in future living labs, bringing them together in joint proposals within each living lab area and across borders to create transnational clusters of living labs.

NATIONAL ENGAGEMENT SESSIONS AND SUPPORT TO THE ESTABLISHMENT OF SOIL HEALTH LIVING LABS



HORIZON-MISS-2021-SOIL-02-07

SCOPE



Organize **national engagement sessions** to:

- ✓ Build ownership of the **soil mission's objectives** as well as the definitions, concept and criteria for soil health living labs and lighthouses;
- ✓ Raise awareness on key **soil health challenges** identified in the different regions and steer a conversation on **where to set up the 1st living labs** in each country;
- ✓ Provide key information and **capacity building material** on the living lab approach and how to start and run living labs;
- ✓ Provide **coaching sessions** to potential applicants to start testing and improving their ideas;
- ✓ Identify potential applicants and facilitate matchmaking between applicants in various countries to support the creation of **transnational proposals** for living labs.



INDICATIVE BUDGET

3 mln EUR per project
(3 mln EUR in total)



IMPORTANT!

- Multi-actor and co-creation approach.
- Build on previous projects: H2020 SMS, HORIZON-MISS-2021-SOIL-01-01.
- Engage with relevant innovation networks: EIP-AGRI, EIT.

Useful links for more information

- **Mission A Soil Deal for Europe** webpage: <http://ec.europa.eu/mission-soil>
- **Mission A Soil Deal for Europe Implementation Plan**: https://ec.europa.eu/info/files/eu-mission-soil-deal-europe-implementation-plan_en
- **Mission A Soil Deal for Europe factsheet**: <https://op.europa.eu/en/publication-detail/-/publication/90779d7a-227c-11ec-bd8e-01aa75ed71a1/language-en/format-PDF/source-232536601>
- **Press release –Missions launch**: https://ec.europa.eu/commission/presscorner/detail/en/IP_21_4747
- **EU Missions**: https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/missions-horizon-europe_en
- **Video EU Mission “A Soil Deal for Europe”**: <https://youtu.be/3hPlZqwwhhM>
- **Behind the Scenes** podcast episode *A blossoming career as a soil keeper*: <https://play.acast.com/s/behind-the-scenes-conversations-with-researchers-and-innovat/s02e05-a-blossoming-career-as-a-soil-keeper>
- **On a mission to save our soils -the EU's plan to rebuild the land (Futuriseepisode, euronews)**: <https://www.euronews.com/2020/09/21/on-a-mission-to-save-our-soils-the-eu-s-plan-to-rebuild-the-land>

European Research Executive Agency

Home Funding and grants Working for REA News Events

European Commission > European Research Executive Agency > News > Down to Earth: EU-funded projects that will help save our soil

NEWS ARTICLE | 25 November 2021 | European Research Executive Agency


Down to Earth: EU-funded projects that will help save our soil

The new EU Soil Strategy for 2030 has been adopted. At the European Research Executive Agency, we showcase several recently funded Horizon 2020 projects that will help to improve soil health and foster more sustainable soil management practices.



[Down to Earth: EU-funded projects that will help save our soil \(europa.eu\)](https://europa.eu)

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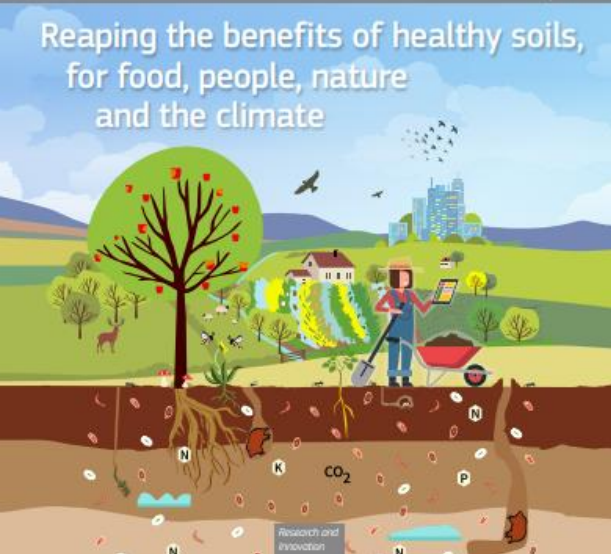


CORDIS Results Pack on soil health

A thematic collection of innovative EU-funded research results

April 2021

Reaping the benefits of healthy soils, for food, people, nature and the climate



[Soil health: Reaping the benefits of healthy soils, for food, people, nature and the climate | Results Pack | CORDIS | European Commission \(europa.eu\)](https://europa.eu)




National Contact Points Mission Soil Deal for Europe




Maria João Fernandes

 mariajoao.fernandes@ani.pt

 939 340 005

Margarida Santos

 margarida.santos@ani.pt

 913 171 041