



EUROPEAN UNION



EU MISSIONS

SOIL DEAL FOR EUROPE



July 2023

European Research Executive Agency contributing to the Mission

100 LIVING LABS AND LIGHTHOUSES TO LEAD THE TRANSITION TOWARDS HEALTHY SOILS BY 2030

[EU Missions](#) are a new way to bring concrete solutions to some of our greatest challenges. A novelty of the Horizon Europe research and innovation programme, five EU Missions were launched in 2021. One of them is the [EU Mission: A Soil Deal for Europe](#).

Soil is key to food security, clean water and biodiversity, as well as for increasing resilience against natural disasters such as wildfires and floods. However up to 70% of EU soils are unhealthy. For the benefit of the environment and citizens, [Mission Soil](#) leads the transition to restore and protect soils by 2030 through:

- Establishing an effective network of 100 living labs and lighthouses (real-life settings where actors from multiple sectors co-design, test, monitor, and showcase innovative or existing solutions to common soil health challenges)
- Funding an ambitious research and innovation programme with a strong social science component
- Developing a harmonised framework for soil monitoring in Europe
- Raising people's awareness on the vital importance of soils

The European Research Executive Agency ([REA](#)) is responsible for implementing the Mission Soil calls for proposals for EU funding and, with the help of independent experts, selecting the best ideas for EU funding to deliver on the Mission's objectives.

EU-funded projects managed by REA in different domains have supported the objectives of all five Missions. Since 2014, REA has managed 2,478 projects relevant to the Missions under the Horizon 2020 and Horizon Europe research & innovation programmes, with a total EU contribution of €5.7 billion. Some projects contribute to more than one Mission.

REA SUPPORTING THE MISSION'S OBJECTIVES

- Since 2021, REA has launched three Mission Soil calls and evaluated 120 proposals, resulting in 28 projects. Another [call](#), as well as [two joint calls](#) with the Climate Adaptation and Ocean Missions are open for proposals.
- The already funded projects under the Mission are preparing the ground for the transition towards healthy soils by developing structures and coordination bodies to support the creation of the living labs, advancing societal appreciation, pooling existing resources and boosting innovation capacity across Member States, regions and relevant sectors.
- Besides the Mission, over 300 projects have been funded to advance in a more sustainable management of soil in agriculture, forestry, cities and rural areas.
- Many projects that support the careers of researchers in the Marie Skłodowska-Curie Actions (MSCA) deal with soil research.

28
projects in
Mission calls
€161 million

311
related projects
€872 million

REA-PROJECTS RESTORING AND PROTECTING SOIL

Since 2014, REA has managed 311 projects relevant to Mission Soil under the Horizon 2020 and Horizon Europe programmes, with a total EU contribution of €872 million. Under the Mission itself, REA is managing 28 projects with a total EU contribution of €161 million.

127 projects

Research
and innovation

69 projects

Coordination
and support

143 projects

Skilled
researchers

PROJECT EXAMPLES

● **Macro and Microplastic in Agricultural Soil Systems** ([SOPLAS](#))

A multidisciplinary team in the project advances our knowledge about sustainable use of plastics in agriculture while simultaneously training a new generation of leading experts responsible for environmental policies.

● **RECOVERY of degraded and transformed ecosystems in coal mining-affected areas**

The project focuses on land rehabilitation and the ecological restoration of coal mining-affected areas. This aims to accelerate the recovery of degraded and transformed ecosystems, positively impacting public welfare and the environment.

● **Preparing for the 'Soil Deal for Europe' Mission** ([PREPSOIL](#))

The project is facilitating the deployment of the Mission by helping key players to reduce soil degradation and increasing awareness on soil health. It promotes living labs as a vehicle for engaging stakeholders in soil improvements in agriculture, forestry, urban planning, etc.

● **Transforming Unsustainable management of soils in key agricultural systems in EU and China. Developing an integrated platform of alternatives to reverse soil degradation** ([TUDi](#))

The project develops soil restoring strategies for different types of farms and environmental conditions.

● **Holistic management practices, modelling and monitoring for European forest soils** ([HoliSoils](#))

The project aims to improve, integrate and harmonise how European forest soils are managed for climate change mitigation, biodiversity and ecosystem services.

● **Demonstration of circular bio-fertilisers and implementation of optimized fertiliser strategies and value chains in rural communities** ([RUSTICA](#))

The project converts organic residues from the fruit and vegetable sector into novel bio-based fertiliser products as a sustainable alternative to mineral fertilisers.

● **Centre of Excellence for Advanced Technologies in Sustainable Agriculture and Food Security** ([ANTARES](#))

This new European Centre of Excellence develops smart tools for farmers to monitor soil conditions and other parameters, helping to make agriculture sustainable.

EU programmes funding these projects

- Horizon 2020 Marie Skłodowska-Curie Actions
- Horizon 2020 'Teaming of excellent research institutions and low performing RDI regions'
- Horizon Europe EU Mission 'A Soil Deal for Europe'
- Research Fund for Coal and Steel
- Horizon 2020 'Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy'

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