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EUROPEAN UNION

EUROPEAN MISSION SOIL WEEK

Event Catalogue

#MissionSoilWeek



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Introduction

The first edition of the European Mission Soil Week is organised by the European Commission [Directorate-General for Agriculture and rural development](#), the [Joint Research Centre](#) and the EU-funded project [PREPSOIL](#). Several other EU-funded projects and EU co-funded programmes have contributed to the organisation of the event.

The European Mission Soil Week 2023 is hosted by INIA-CSIC at the central facilities of the **Spanish National Research Council (CSIC)**, under the **Spanish Presidency** of the EU Council and takes place on **21–23 November 2023 in Madrid**.

This catalogue contains information about the EU Mission '[A Soil Deal for Europe](#)' (Mission Soil), the European Mission Soil Week, and the projects funded under Horizon Europe that are contributing to achieve the objectives of the Mission Soil.

About the Mission

The goal of the Mission 'A Soil Deal for Europe' is to establish 100 Living Labs and Lighthouses by 2030, leading the transition towards healthy soils. The Mission fosters healthy soils by funding an ambitious research and innovation programme, establishing an effective network of Living Labs and Lighthouses, developing a harmonised framework for soil monitoring throughout Europe in collaboration with the EU Soil Observatory ([EUSO](#)), and by engaging communities in the protection and restoration of soil health.

Its eight specific objectives encompass:

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

The Mission Soil aligns with the EU's commitment to lead on global initiatives, notably the [Sustainable Development Goals \(SDGs\)](#), and contributes to the [European Green Deal](#) targets, focusing on sustainable farming, climate resilience, biodiversity, and zero pollution.

The [Mission Soil](#) is also a key enabler for the implementation of EU Soil Strategy and the [proposed Directive on soil monitoring and resilience](#).

Furthermore, the Mission Soil is inviting regions, municipalities, companies, organisations, educational institutions, and individuals to sign the [Mission Soil Manifesto](#). The Mission Soil Manifesto is a call to action from the Mission Soil, aimed at uniting the soil community in a voluntary commitment to prioritize and actively work towards improving soil health.

The Mission Soil will fund soon new projects to advance on its objectives. In particular, new projects will focus on subsoil research; soil pollution control; desertification prevention; soil-friendly practices in horticulture; spatial planning; cultural and creative initiatives for citizen engagement in soil protection and restoration; and the establishment of the first wave of soil health Living Labs.

More information can be found at mission-soil-platform.ec.europa.eu

About the event

The European Mission Soil Week is an annual event aimed at promoting the Horizon Europe Mission 'A Soil Deal for Europe' (Mission Soil) and other EU relevant initiatives such as the EU Soil Observatory, raising awareness about the importance of soil health, and driving action to protect and restore our soils.

The first edition of European Mission Soil Week, organised by the European Commission, Directorate-General for Agriculture and Rural Development ([DG AGRI](#)) in the context of the Mission Soil together with the EU funded project [PREPSOIL](#) and the Joint Research Centre - EU Soil Observatory ([EUSO](#)) will be held from 21 to 23 November 2023. The conference will be locally hosted by INIA-CSIC at the central facilities of the Spanish National Research Council (CSIC) in Madrid, Spain, under the [Spanish Presidency of the EU Council](#).

The European Mission Soil Week is a major European gathering that brings together the European soil community. Researchers, policymakers, farmers, foresters, spatial planners, landowners and land managers, businesses, and organisations as well as the general public will meet to **discuss the challenges for making and keeping EU soils healthy**.

The event will be an opportunity to communicate and disseminate solutions based on the latest research results

and innovations for healthy soils. Therefore, the European Mission Soil Week will bring together and mobilise communities to protect and restore soil health. This first edition of the European Mission Soil Week is particularly significant in the context of the proposed EU Directive on soil monitoring and resilience. The Commission's proposal was published on 5 July 2023 with the aim to ensure that soils are healthy by 2050. The Mission Soil is a key enabler for the implementation of the EU Soil Strategy and of this new proposed Directive.

Soil health is high on the EU political agenda. The European Green Deal and other policies, such as the Common Agricultural Policy, recognise soil health as an essential element for achieving their objectives such as climate neutrality, stopping desertification and land degradation or reversing biodiversity loss. This first edition of the European Mission Soil Week adds momentum to the ongoing efforts to improve soil health and provides a platform to discuss how soil health, related innovation, experimentation, demonstration, monitoring, increased public awareness and citizen engagement through the Mission Soil can contribute to the green transition.

Additionally, it introduces the Mission Soil Ambassadors, while bringing together signatories of the Mission Soil Manifesto providing visibility for their engagement and offering exchange and networking opportunities.

Agenda

Day 1 – Tuesday 21 November 2023 (09:00 – 19:00 CET)

Time	Agenda item
9:00-9:30	<i>Registration and welcome coffee</i>
9:30-10:15	<p>OPENING SESSION DAY 1 (45 min)</p> <ul style="list-style-type: none"> Welcome speeches by: <ul style="list-style-type: none"> Maciej Golubiewski, Head of Cabinet Wojciechowski, European Commissioner for Agriculture Raquel Yotti, Secretary General for Research, Ministry of Science and Innovation of Spain Jose Antonio Sobrino, Deputy Director General at the Ministry of Agriculture and Food of Spain Francisco Javier Moreno Fuentes, Vice-President for International Affairs at the Spanish National Research Council (CSIC) <p>Moderator: Sasha Twining</p>
10:15-11:00	<p>PLENARY SESSION: Setting the scene for the Mission Soil (45 min)</p> <ul style="list-style-type: none"> Keynote speech: The status of soils in Europe <ul style="list-style-type: none"> Bridget Emmett, Head of Soils and Land Use Science Area at the UK Centre for Ecology and Hydrology <p>Moderator: Sasha Twining</p> <ul style="list-style-type: none"> Q&A session
11:00-11:30	<i>Break and refreshments (30 min)</i>
11:30-13:00	<p>PLENARY SESSION: The Mission Soil in a nutshell (1 h 30 min)</p> <ul style="list-style-type: none"> Policy context and main Mission Soil achievements <ul style="list-style-type: none"> Kerstin Rosenow, Head of the Mission Secretariat ‘A Soil Deal for Europe’ and Head of the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission Testimonies from land managers <ul style="list-style-type: none"> Yanniek Marijn Schoonhoven, Regenerative organic Farmer and Co-founder of Iusthe Regeneration Academy, La Junquera farm and village Theresa Luber, Project Manager at blue! LIFE project Future Forest Sustainabilisation of forests and soils and valorisation of the achieved ecosystem services in the county of Landsberg Jamila Bentrar, Manager of projects of urban soils requalification at Métropole Européenne de Lille <p>Moderator: Sasha Twining</p> <ul style="list-style-type: none"> Q&A session

Time	Agenda item		
13:00-14:00	<i>Lunch break (1 h)</i>		
14:00-16:00	<p>ICA Institute – Building C</p> <p>BREAKOUT SESSION 1 Soil health for climate (2 h)</p> <p>Organised by DG AGRI – Research & Innovation Unit and by EJP SOIL programme</p> <ul style="list-style-type: none"> • Martin Thorsoe, Aarhus University, Coordinator of the EU-co-funded project Road4schemes • Marta Goberna, Research scientist, INIA-CSIC, Coordinator of the EU-co-funded project TRACE-Soils • Saskia Visser, Cluster manager, Resilient and climate neutral regions at Climate - KIC • Christian Holzleitner, Head of Unit for Land Economy and Carbon Removals at Directorate-General for Climate Action (DG CLIMA), European Commission • Tristano Bacchetti De Gregoris, AME owner and director of R+I at SAE Innova, Coordinator of the EU-funded project CREDIBLE • Cristiano Ballabio, Project Office at the Land Resources and Supply Chain Assessments Unit at Joint Research Centre (JRC), European Commission <p>Moderators:</p> <ul style="list-style-type: none"> • Claire Chenu, INRAE, Coordinator of the EU co-funded programme EJP SOIL • Anna Besse-Lototskaya, Wageningen University & Research, Co-coordinator of the EU-co-funded programme EJP SOIL 	<p>Press Room - Building D</p> <p>BREAKOUT SESSION 2 Soil health for food (2 h)</p> <p>Organised by DG RTD – Bioeconomy & Food Systems Unit</p> <ul style="list-style-type: none"> • José Manuel González Vicente, Head of the Spanish Delegation to Horizon Europe Cluster 6 (Bioeconomy and Environment), Soil Mission Mirror Group • Antonella Autino, PRIMA Programme Coordinator • Alfred Grand, Farmer at GRAND FARM, former Member of the Mission Board 'A Soil Deal for Europe' • Pandi Zdruli, Senior Research Scientist, Member of the Mission Board 'A Soil Deal for Europe' • Antonio José Manzaneda Ávila, Universidad de Jaén, Coordinator of the EU-funded project SOIL O-LIVE • Ansa Palojarvi, Natural Resources Institute Finland (Luke), Coordinator of the EU-funded project DeliSoil • Sara Daniotti, Project Manager, Head of Bioeconomy PM Unit at Consorzio Italbiotec, Coordinator of the EU-funded project Bin2Bean <p>Moderator: Giulia Meloni, Policy Officer at the Bioeconomy & Food Systems Unit at the Directorate-General for Research and Innovation (DG RTD) European Commission</p>	<p>Blas Cabrera Institute - Building B</p> <p>BREAKOUT SESSION 3 Farming practices for soil health (2 h)</p> <p>Organised by DG AGRI – Research & Innovation Unit</p> <ul style="list-style-type: none"> • Grzegorz Siebielec, Research scientist at the Institute of Soil Science and Plant Cultivation, Coordinator of the EU-funded project NBSoil • Ulrich Schmutz, Coordinator at Horizon project 'AGROMIX' • Judith Treis, Farmer at the Comunis Projektburo • Heather McKhann, European affairs officer at INRAE <p>Moderator: Luis Sanchez Alvarez, Head of Sector "New Research and Innovation Concepts" at the Research and Innovation Unit, Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission</p>

Time	Agenda item
16:00-16:30	<i>Coffee break (30 min)</i>
16:30-16:45	PLENARY SESSION: Reporting from breakout sessions (15 min)
16:45-17:45	<p>PLENARY SESSION: The Mission's international dimension (1 h)</p> <p>Organised by the EU-funded project ORCaSa</p> <ul style="list-style-type: none"> The Mission's international dimension <ul style="list-style-type: none"> Kerstin Rosenow, Head of the Mission Secretariat 'A Soil Deal for Europe' and Head of the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission Launch of the Soil Carbon IRC <ul style="list-style-type: none"> Jean-François Soussana, Vice-Chair for international affairs at INRAE Fenny Van Egmond, Soil sensing specialist at ISRIC Christian Holzleitner, Head of Unit for Land Economy and Carbon Removals at the Directorate-General for Climate Action (DG CLIMA), European Commission Members of the International Research Consortium (video-message) <p>Moderator: Suzanne Reynders, Head of International Priority Program Soil and Climate at INRAE, Coordinator of the EU-funded project ORCaSa</p>
17:45-18:15	<p>CLOSING SESSION (30 min)</p> <ul style="list-style-type: none"> Mission Soil photo competition award ceremony <ul style="list-style-type: none"> Diego Canga Fano, Director of Quality policy, Research & Innovation, Outreach at the Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission Carmen Vela Olmo, Director of Collaborative Projects at Gold Standard Diagnostics <p>Winners of the photo competition:</p> <ul style="list-style-type: none"> Dominika Koszowska Sergio Ibáñez Pascual Božidar Grgošić <p>Moderator: Sasha Twining</p>
18:15-19:00	<i>Cocktail & Networking (45 min)</i>

Day 2 – Wednesday 22 November 2023 (09:00 – 19:00 CET)

Time	Agenda item
9:00-9:30	<i>Registration and welcome coffee</i>
9:30-10:00	<p>OPENING SESSION DAY 2 (30 min)</p> <ul style="list-style-type: none"> Keynote speech: Social, economic, and cultural transformations for soil health Anna Krzywoszynska, Professor of History, Culture and Communications Studies - University of Oulu, Finland, and member of the Mission Board 'A Soil Deal for Europe' <p>Moderator: Sasha Twining</p>
10:00-11:00	<p>PREPSOIL PROJECT: Supporting the Mission Soil (1 h)</p> <ul style="list-style-type: none"> PREPSOIL and its work to support the Mission Soil <ul style="list-style-type: none"> Line Friis Lindner on behalf of Niels Halberg, Director at the Danish Centre for Food and Agriculture (DCA), Aarhus University, Coordinator of the EU-funded project PREPSOIL Identifying soil needs: the PREPSOIL regional approach <ul style="list-style-type: none"> Saskia Keesstra, Senior Researcher at the Wageningen Environmental Research (WUR) Soil needs assessment in 20 European regions: method and key results <ul style="list-style-type: none"> Katharina Helming, Co-Head Research Area 3, Agricultural Landscape Systems at the Leibniz Centre for Agricultural Landscape Research (ZALF) Implications for stakeholder interaction, living labs, monitoring, science-policy <ul style="list-style-type: none"> Line Friis Lindner, Danish Centre for Food and Agriculture (DCA), Aarhus University, PREPSOIL Project Manager <p>Moderator: Sasha Twining</p>
11:00-11:30	<i>Break and refreshments (30 min)</i>

Time	Agenda item	
11:30-13:00	<p style="text-align: center;">Main hall - Building A</p> <p style="text-align: center;">BREAKOUT SESSION 4 <i>Soil needs in PREPSOIL regions: engaging with multiple actors (1 h 30 min)</i></p> <p>Organised by PREPSOIL project</p> <ul style="list-style-type: none"> • Thijs Vlaar, Soil policy advisor at the City of Amsterdam • Anna-Helena Purre, Member of the Board at Elige LLC • Manuel Pulido Fernandez, Associate Professor at University of Extremadura • Judit Berényi Üveges, Ph.D., Lead Researcher at the Hungarian Research Institute of Organic Agriculture <p>Moderators:</p> <ul style="list-style-type: none"> • Saskia Keesstra, Senior Researcher at the Wageningen Environmental Research (WUR) • Linda Maring, DELTARES <p>PREPSOIL engagement with multiple actors:</p> <ul style="list-style-type: none"> • Christina Lundström, Researcher at the Swedish University of Agriculture (SLU) • Sara Guerrini, Re Soil Foundation 	<p style="text-align: center;">ICA Institute - Building C</p> <p style="text-align: center;">BREAKOUT SESSION 5 <i>Knowledge transfer to farm advisors (1 h 30 min)</i></p> <p>Organised by EJP SOIL project</p> <ul style="list-style-type: none"> • Luis Orcaray Echeverría, Farmer advisor at INTIA • Javier Montellano Lopez, EU-funded project NBSOIL • Maria Mendonça, Junior Consultant, Research and Innovation in CONSULAI and leader of EU-level cooperation in Climate Smart Advisors • Diogo Moniz, Advisor in Climate Smart Advisors • Juan Pedro Romero Trueba, Head of training & tech and ambassador of EU-FarmBook. <p>Moderators:</p> <ul style="list-style-type: none"> • Amanda Matson, Senior researcher at Wageningen University • Anna Besse-Lototskaya, Wageningen University & Research, Co-coordinator of the EU-co-funded programme EJP SOIL
13:00-14:00	Lunch break (1 h)	

Time	Agenda item		
14:00-16:00	<p data-bbox="373 286 707 315">Blas Cabrera Institute - Building B</p> <p data-bbox="408 342 675 465">BREAKOUT SESSION 6 <i>Living Labs and other experiences from placed-based innovation (2 h)</i></p> <p data-bbox="373 495 651 551">Organised by DG AGRI – Research & Innovation Unit</p> <ul data-bbox="373 580 703 1731" style="list-style-type: none"> <li data-bbox="373 580 703 703">• Muriel Mambrini Doudet, Member of the Mission Board ‘A Soil Deal for Europe’ <li data-bbox="373 732 703 949">• Jelena Vidovic, Research Programme Officer at the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission <li data-bbox="373 978 703 1070">• Dolinda Cavallo, Project Manager at ENOLL, EU-funded project SOILL <li data-bbox="373 1099 703 1249">• Antonio José Manzaneda Avila, Professor at Universidad de Jaén, Coordinator of the EU-funded project SOIL O-LIVE <li data-bbox="373 1279 703 1429">• Judit Berenyi Uveges, Lead Researcher at the Hungarian Research Institute of Organic Agriculture <li data-bbox="373 1458 703 1581">• Christophe Schwartz, Advisor at the French Ministry of Higher Education and Research <li data-bbox="373 1610 703 1731">• John Gilliland, Agriculture and Environmental Advisor at Brook Hall Estate & Gardens <p data-bbox="373 1760 501 1789">Moderators:</p> <ul data-bbox="373 1818 703 2116" style="list-style-type: none"> <li data-bbox="373 1818 703 1968">• Rachel Creamer, Professor at Wageningen University, Coordinator of the EU-funded project BENCHMARKS <li data-bbox="373 1998 703 2116">• Fabio Volkmann, EU Multi-Stakeholder Process Coordinator at Climate Farmers 	<p data-bbox="780 286 1046 315">ICA Institute - Building C</p> <p data-bbox="788 342 1035 405">BREAKOUT SESSION 7 <i>Soil biodiversity (2 h)</i></p> <p data-bbox="780 434 978 517">Organised by DG AGRI – Research & Innovation Unit</p> <ul data-bbox="780 546 1038 1406" style="list-style-type: none"> <li data-bbox="780 546 1038 864">• Alberto Orgiazzi, Research consultant at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission <li data-bbox="780 893 1038 976">• John Jacob Parnell, Senior researcher at FAO <li data-bbox="780 1005 1038 1196">• Maria J. I. Briones, Professor of Zoology at Universidad de Vigo, Coordinator of the EU-funded project SOB4ES <li data-bbox="780 1225 1038 1406">• Gerard Rass, General Secretary at the Association for the Promotion of Sustainable Agriculture <p data-bbox="780 1435 1007 1626">Moderator: Wim van der Putten, Head of the Department of Terrestrial Ecology at the Netherlands Institute of Ecology</p>	<p data-bbox="1123 286 1374 315">Press Room - Building D</p> <p data-bbox="1131 342 1366 434">BREAKOUT SESSION 8 <i>Business models for soil health (2 h)</i></p> <p data-bbox="1110 463 1308 546">Organised by DG AGRI – Research & Innovation Unit</p> <ul data-bbox="1110 575 1385 1771" style="list-style-type: none"> <li data-bbox="1110 575 1385 958">• Luis Sanchez Alvarez, Head of Sector “New Research and Innovation Concepts” at the Research and Innovation Unit, Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission <li data-bbox="1110 987 1385 1205">• Diego Soto Gomez, Postdoctoral researcher at Universidad de Vigo, Coordinator of the EU-funded project InBestSoil <li data-bbox="1110 1234 1385 1290">• Oliver Phipps, Partner at ERM <li data-bbox="1110 1319 1385 1509">• Anne-Sophie Leroy, Global Lead Regenerative Agriculture at Earthworm Foundation <li data-bbox="1110 1538 1385 1653">• Thomas de Bang, Senior Scientific Manager at Novo Nordisk Foundation <li data-bbox="1110 1682 1385 1771">• Matteo Vanzini, Associate at KOIS Invest <p data-bbox="1110 1800 1350 1951">Moderator: Johan De Fraye, Member of the Mission Board ‘A Soil Deal for Europe’, Chair of NICOLE Foundation</p>

Time	Agenda item
16:00-16:30	<i>Coffee break (30 min)</i>
16:30-16:45	PLENARY SESSION: Reporting from breakout sessions (15 min)
16:45-17:30	<p>PLENARY SESSION: The Mission's regional and local dimension (45 min)</p> <ul style="list-style-type: none"> Panel discussion <ul style="list-style-type: none"> Francesco Molinari, Project Manager of the EU-funded project HuMUS Raquel Bravo Rubio, Chief of Communication and Institutional Relations Department at the City of Madrid Angèle Liaigre, EU Project Advisor Cities, ERRIN Bioeconomy Working Group Leader at Northern Netherlands <p>Moderator: Sasha Twining</p>
17:30-18:15	<p>CLOSING SESSION (45 min)</p> <ul style="list-style-type: none"> Mission Ambassadors and Mission Soil Manifesto signatories <ul style="list-style-type: none"> Kerstin Rosenow, Head of the Mission Secretariat 'A Soil Deal for Europe' and Head of the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission Mission Soil Manifesto signatories: <ul style="list-style-type: none"> José Miguel de Paz Bécares, Researcher at Instituto valenciano de investigaciones agrarias Maria Cruz Ferreira Costa, Director general of the Regional Secretariat on Energy, Sustainability and Climate Action of the Region of Murcia, EU Climate Pact Ambassador Frida Nilsson, European Committee of the Regions, Lidköping Municipality (video message) Livia Lazzarotto, Policy Officer at the Directorate for Agriculture and Rural Development of the Tuscany Region (video message) Mission Ambassadors: <ul style="list-style-type: none"> Yanniek Marijn Schoonhoven, Regenerative organic Farmer and Co-founder of the Regeneration Academy, La Junquera farm and village Alfred Grand, Farmer at GRAND FARM, former Member of the Mission Board 'A Soil Deal for Europe' Moderator: Sasha Twining
18:15-19:00	<i>Cocktail & Networking (45 min)</i>

Day 3 – Thursday 23 November 2023 (09:00 – 17:15 CET)

Time	Agenda item
9:00-9:30	<i>Registration and welcome coffee</i>
9:30-10:00	<p style="text-align: center;">OPENING SESSION DAY 3 (30 min)</p> <ul style="list-style-type: none"> • Welcome by the Joint Research Centre (JRC), EU Soil Observatory (EUSO): State of play, developments, and achievements • Arwyn Jones, Deputy Head of Unit - Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • Panos Panagos, Project Officer - Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission
10:00-11:00	<p style="text-align: center;">PLENARY SESSION: Assessing soil health at different scales across Europe (1 h)</p> <ul style="list-style-type: none"> • Teresa Pinto Correia, Professor at University of Evora, Member of the Mission Board 'A Soil Deal for Europe' • Rachel Creamer, Professor at Wageningen University, Coordinator of the EU-funded project BENCHMARKS • Mogens H. Greve, Head of Research Section at Aarhus University <p>Moderator: Paolo di Lonardo, Scientific project manager at Wageningen University</p>
11:00-11:30	<i>Break and refreshments (30 min)</i>

Time	Agenda item
11:30-13:00	<p style="text-align: center;"><i>PLENARY SESSION: Soil monitoring and indicators (1 h 30 min)</i></p> <ul style="list-style-type: none"> • Panel discussion <ul style="list-style-type: none"> • Diego Soto Gomez, Postdoctoral researcher at Universidad de Vigo, Coordinator of the EU-funded project InBestSoil • Maria J. I. Briones, Professor of Zoology at Universidad de Vigo, Coordinator of the EU-funded project SOB4ES • Bridget Emmett, Head of Soils and Land Use Science Area at the UK Centre for Ecology and Hydrology • Arwyn Jones, Deputy Head of Unit at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • Anne-Catherine Dalcq, Farmer representative at the European Council of Young Farmers • Teresa Pinto Correia, Professor at University of Evora, Member of the Mission Board 'A Soil Deal for Europe' • Luis Sanchez Alvarez, Head of Sector "New Research and Innovation Concepts" at the Research and Innovation Unit, Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission • Erwin Szlezak, Head of Unit at the Soil Protection & Landscape Planning Section at the Agricultural District Authority, Lower Austria • Nina Koele, Senior soil scientist at the Ministry for the Environment of New Zealand • Reflections with the audience <p>Moderators:</p> <ul style="list-style-type: none"> • Carmen Vazquez Martin, Researcher at Wageningen University • Paolo Di Lonardo, Scientific project manager at Wageningen University
13:00-14:00	<i>Lunch break (1 h)</i>

Time	Agenda item
14:00-15:30	<p style="text-align: center;">PLENARY SESSION: Outcomes of the EUSO Working Groups (WG) (1 h 30 min)</p> <ul style="list-style-type: none"> • EUSO WG on Soil monitoring <ul style="list-style-type: none"> • Arwyn Jones, Deputy Head of Unit at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • EUSO WG on Soil erosion <ul style="list-style-type: none"> • Panos Panagos, Project Officer at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • EUSO WG on Soil pollution <ul style="list-style-type: none"> • Piotr Wojda, Project Officer at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • EUSO WG on Data sharing and integration <ul style="list-style-type: none"> • Cristiano Ballabio, Project Officer at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • EUSO WG on Soil Biodiversity <ul style="list-style-type: none"> • Alberto Orgiazzi, Research consultant at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission • EUSO WG on Carbon Monitoring, reporting and verification <ul style="list-style-type: none"> • Cristina Arias Navarro, Scientific Officer at Joint Research Centre (JRC), European Commission
15:30-16:15	<p style="text-align: center;">CLOSING CEREMONY (45 min)</p> <p style="text-align: center;">Closing words by:</p> <ul style="list-style-type: none"> • Sala Saastamoinen, Deputy Director-General at Joint Research Centre (JRC), European Commission (video-message) • Diego Canga Fano, Director of Quality policy, Research & Innovation, Outreach at DG AGRI (video-message) • Jose Antonio Sobrino, Deputy Director General at the Ministry of Agriculture and Food of Spain • Maria Jesus Rodríguez de Sancho, Director General of Biodiversity, Forests and Desertification at the Ministry of Ecological transition of Spain • Elena Cartea Gonzalez, Vice-president of Scientific and Technical Areas at the Spanish National Research Council <p>Moderator: Kerstin Rosenow, Head of the Mission Secretariat 'A Soil Deal for Europe' and Head of the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission</p>
16:15-17:15	<p style="text-align: center;">Cocktail & Networking (1 h)</p>

SIDE ACTIVITIES

- **Photo Exhibition (all days)**
- **Meet the Project (all days)**
 - **Day 1** – ORCaSa and CREDIBLE
 - **Day 2** – HuMUS and ECHO
 - **Day 3** – LOESS and ISLANDR
- **Poster Exhibition: Soil needs in PREPSOIL regions (day 2 and day 3)**

Breakout sessions

BOS 1 - Soil health for climate

(Organised by DG AGRI – Research & Innovation Unit and by EJP SOIL programme)

Carbon farming is high on the political agenda in the EU and Member States, as a potential key contribution to achieving climate neutrality. In addition to carbon sequestration and storage, healthy soils also provide other important ecosystem services – from the provision of food, feed and fibre, to the cycling of nutrients and other regulatory services, and as a habitat for diverse forms of life.

The session will tackle some of the linkages -synergetic or conflictual- between carbon sequestration and other ecosystem services. It will be analysed and discussed in terms of trade-offs and synergies to identify policy options, in particular for future EU carbon farming schemes, and research needs.

Speakers:

- **Martin Thorsoe**, Aarhus University, Coordinator of the EU-co-funded project Road4schemes
- **Marta Goberna**, Research scientist, INIA-CSIC, Coordinator of the EU-co-funded project TRACE-Soils
- **Saskia Visser**, Cluster manager, Resilient and climate neutral regions at Climate - KIC
- **Christian Holzleitner**, Head of Unit for Land Economy and Carbon Removals at Directorate-General for Climate Action (DG CLIMA), European Commission
- **Tristano Bacchetti De Gregoris**, AME owner and director of R+I at SAE Innova, Coordinator of the EU-funded project CREDIBLE
- **Cristiano Ballabio**, Project Office at the Land Resources and Supply Chain Assessments Unit at Joint Research Centre (JRC), European Commission

Moderators:

- **Claire Chenu**, INRAE, Coordinator of the EU co-funded programme EJP SOIL
- **Anna Besse-Lototskaya**, Wageningen University & Research, Co-coordinator of the EU-co-funded programme EJP SOIL

BOS 2 - Soil health and food (Organised by DG RTD – Bioeconomy & Food Systems Unit)

Soils are the foundation of agri-food systems. Exploring the connection between healthy soil and food production as well as the potential of waste valorisation is important for the achievement of the objectives of the European Green Deal and the Farm to Fork strategy for a fair, healthy and environment-friendly food system.

The session will explore how the Mission Soil aims to bolster soil health and the nutritional quality and safety of the food we consume; and how it can increase the valorisation of food waste for bio-based fertilizer production to contribute to more circular and sustainable food systems.

Speakers:

- **José Manuel González Vicente**, Head of the Spanish Delegation to Horizon Europe Cluster 6 (Bioeconomy and Environment), Soil Mission Mirror Group
- **Antonella Autino**, PRIMA Programme Coordinator
- **Alfred Grand**, Farmer at GRAND FARM, former Member of the Mission Board 'A Soil Deal for Europe'
- **Pandi Zdruli**, Senior Research Scientist, Member of the Mission Board 'A Soil Deal for Europe'
- **Antonio José Manzaneda Ávila**, Universidad de Jaén, Coordinator of the EU-funded project SOIL O-LIVE
- **Ansa Palojarvi**, Natural Resources Institute Finland (Luke), Coordinator of the EU-funded project DeliSoil
- **Sara Daniotti**, Project Manager, Head of Bioeconomy PM Unit at Consorzio Italbiotec, Coordinator of the EU-funded project Bin2Bean

Moderator:

- **Giulia Meloni**, Policy Officer at the Bioeconomy & Food Systems Unit at the Directorate-General for Research and Innovation (DG RTD) European Commission

BOS 3 - Farming practices for soil health (Organised by DG AGRI – Research & Innovation Unit)

There is a pressing need to accelerate the transition towards more sustainable farming systems, approaches and practices that restore soil health to soils and its functions. Farming approaches such as agroecology, organic farming or agroforestry are known for their contribution to soil health, among several other ecosystem services.

The session will explore what farming approaches and practices best contribute to maintaining, improving or re-establishing soil health while triggering the provision of other ecosystem services. It will allow to showcase how EU-funded research and other initiatives at EU, national or regional level are supporting the development of tools and innovations in this area.

Speakers:

- **Grzegorz Siebielec**, Research scientist at the Institute of Soil Science and Plant Cultivation, Coordinator of the EU-funded project NBSoil
- **Ulrich Schmutz**, Coordinator at Horizon project 'AGROMIX'
- **Judith Treis**, Farmer at the Comunis Projektburo
- **Heather McKhann**, European affairs officer at INRAE

Moderator:

- **Luis Sanchez Alvarez**, Head of Sector "New Research and Innovation Concepts" at the Research and Innovation Unit, Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission

BOS 4 - Soil needs in PREPSOIL regions: engaging with multiple actors (Organised by PREPSOIL project)

Regional and local stakeholders are key to achieve the objectives of the Mission Soil. The Mission project PREPSOIL has performed regional soil need assessments addressing different types on land use (urban area, forest, agricultural land, and mixed land use). In this session, the project team will present more in details the methodology applied and the results of the assessment. PREPSOIL will raise awareness on the regional soil health needs and collect feedback from the audience during the session. In particular, the project will engage with participants that could bring experiences from their regions with the same or similar challenges.

Speakers:

- **Thijs Vlaar**, Soil policy advisor at the City of Amsterdam
- **Anna-Helena Purre**, Member of the Board at Elige LLC
- **Manuel Pulido Fernandez**, Associate Professor at University of Extremadura
- **Judit Berényi Üveges**, Ph.D., Lead Researcher at the Hungarian Research Institute of Organic Agriculture

Moderators:

- **Saskia Keesstra**, Senior Researcher at the Wageningen Environmental Research (WUR)
- **Linda Maring**, DELTARES

PREPSOIL engagement with multiple actors:

- **Christina Lundström**, Researcher at the Swedish University of Agriculture (SLU)
- **Sara Guerrini**, Re Soil Foundation

BOS 5 - Knowledge transfer to farm advisors (Organised by EJP SOIL project)

Farm advisors play a key role in disseminating research and facilitating the uptake of innovative soil management practices. To do this successfully, advisors need to be closely involved in the R&I process. This session will explore approaches for knowledge transfer to farm advisors and alignment of activities between European projects through a combination of presentations and interaction with participants. Key objectives are to: (1) consider the challenges associated with knowledge transfer to such a diverse group, (2) understand the current landscape of farm-advisor-specific research, and (3) gather input from the stakeholder community regarding knowledge gaps, success stories and areas for improvement.

Speakers:

- **Luis Orcaray Echeverría**, Farmer advisor at INTIA
- **Javier Montellano Lopez**, EU-funded project NBSOIL
- **Maria Mendonça**, Junior Consultant, Research and Innovation in CONSULAI and leader of EU-level cooperation in Climate Smart Advisors
- **Diogo Moniz**, Advisor in Climate Smart Advisors
- **Juan Pedro Romero Trueba**, Head of training & tech and ambassador of EU-FarmBook.

Moderators:

- **Amanda Matson**, Senior researcher at Wageningen University
- **Anna Besse-Lototskaya**, Wageningen University & Research, Co-coordinator of the EU-co-funded programme EJP SOIL

BOS 6 - Living Labs for soil health in motion (Organised by DG AGRI – Research & Innovation Unit)

Research and innovation are key enablers for the transition to healthy soils. Living Labs, as innovative approach to do research and innovation, bring experimentations in real-life conditions, operating with end-users, with researchers, farmers, foresters, spatial planners, land managers and citizens who come together to co-create innovations for a jointly agreed objective.

The session will address Living Labs (LLs) as the Mission Soil's main instrument foreseen to close the knowledge – practice divide, thereby spurring the uptake of beneficial practices and innovations for soil health across land uses. The session will present existing experiences that show some of the characteristics of LLs and open up a discussion with the audience on expectations, opportunities and main practical challenges for the set up and implementation of Mission Soil LLs.

Speakers:

- **Muriel Mambrini Doudet**, Member of the Mission Board 'A Soil Deal for Europe'
- **Jelena Vidovic**, Research Programme Officer at the Research and Innovation Unit at Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission
- **Dolinda Cavallo**, Project Manager at ENoLL, EU-funded project SOILL
- **Antonio José Manzaneda Avila**, Professor at Universidad de Jaén, Coordinator of the EU-funded project SOIL O-LIVE
- **Judit Berenyi Uveges**, Lead Researcher at the Hungarian Research Institute of Organic Agriculture
- **Christophe Schwartz**, Advisor at the French Ministry of Higher Education and Research
- **John Gilliland**, Agriculture and Environmental Advisor at Brook Hall Estate & Gardens

Moderators:

- **Rachel Creamer**, Professor at Wageningen University, Coordinator of the EU-funded project BENCHMARKS
- **Fabio Volkmann**, EU Multi-Stakeholder Process Coordinator at Climate Farmers

BOS 7 - Soil biodiversity

(Organised by **DG AGRI – Research & Innovation Unit**)

To remain healthy and fertile soil requires a large community of living organisms. Given the ecosystem services that soil biodiversity provides, the EU Biodiversity Strategy, Farm to Fork strategy, Green Deal, and major Sustainable Development Goals all recognise its decline as a major issue. We rely on soil biodiversity not only for food security, but also for improving water purification, climate stability, and plant resistance to pests and diseases to name a few.

The session aims to identify the many interconnected problems caused by soil biodiversity loss. It will be discussed how to address these issues and debate on potential research solutions.

Speakers:

- **Alberto Orgiazzi**, Research consultant at the Land Resources and Supply Chain Assessments Unit, Joint Research Centre (JRC), European Commission
- **John Jacob Parnell**, Senior researcher at FAO
- **Maria J. I. Briones**, Professor of Zoology at Universidad de Vigo, Coordinator of the EU-funded project SOB4ES
- **Gerard Rass**, General Secretary at the Association for the Promotion of Sustainable Agriculture

Moderator:

- **Wim van der Putten**, Head of the Department of Terrestrial Ecology at the Netherlands Institute of Ecology

BOS 8 - Business models

(Organised by **DG AGRI – Research & Innovation Unit**)

Investments across the value chain are vital to enable a transition to healthy soils. However, investing in sustainable soil management and restoration can be a long-term endeavour and the financing of an accelerated adoption of sustainable practices may still be facing significant challenges and barriers.

The session will show the multiple dimensions of business cases for investing in soil health for different land uses; highlight current challenges and barriers for investing in soil health; present success business cases and investment experiences for soil health in Europe; and explain how the Mission Soil is taking steps to tackling these challenges.

Speakers:

- **Luis Sanchez Alvarez**, Head of Sector “New Research and Innovation Concepts” at the Research and Innovation Unit, Directorate-General for Agriculture and Rural Development (DG AGRI), European Commission
- **Diego Soto Gomez**, Postdoctoral researcher at Universidad de Vigo, Coordinator of the EU-funded project InBestSoil
- **Oliver Phipps**, Partner at ERM
- **Anne-Sophie Leroy**, Global Lead Regenerative Agriculture at Earthworm Foundation
- **Thomas de Bang**, Senior Scientific Manager at Novo Nordisk Foundation
- **Matteo Vanzini**, Associate at KOIS Invest

Moderator:

- **Johan De Fraye**, Member of the Mission Board ‘A Soil Deal for Europe’, Chair of NICOLE Foundation

Meet the Projects

The European Mission Soil Week will feature the 'Meet the Projects' activity. On site participants will have the opportunity to meet the representatives of the following projects: ORCaSA, CREDIBLE (day 1), HuMUS, ECHO (day 2), LOESS, ISLANDR (day 3). In addition, information about the 28 Mission-funded projects dedicated to

advancing the Mission Soil objectives will be available onsite and online.

Find out more information about the projects grouped by the following themes:

Innovation hotspot: circular economy

The projects under the thematic grouping 'Innovation hotspot: circular economy' will reflect on the role of soils as a catalyst for the circular economy, e.g. by exploiting the use of bio-waste and residues from the food industry as soil improvers.

[BIN2BEAN](#)



Coordinated by: Wageningen University

BIN2BEAN is a project aimed at assisting cities in transitioning to regenerative soil systems by leveraging innovations in soil improvement through bio-waste. This project plans to establish three Living Labs in different city regions to employ a collaborative and multi-actor approach. Each Living Lab will assess local contexts, evaluate soil improvement methods for safety, environmental impact, and socio-economic performance, and develop a scoring system to aid cities in selecting the most suitable solutions for their specific conditions.

The top-performing solutions will be used to create customised business models that align with stakeholders' willingness to adopt circular implementation packages. The project will also monitor pre-market processes through Techno-Economic Assessment. Ultimately, BIN2BEAN aims to formulate policy roadmaps at local, national, and EU levels, including waste charging policies and citizen awareness campaigns, to support the move towards regenerative soil systems.

DeliSoil



Coordinated by: Natural Resources Institute Finland (LUKE)

DeliSoil is an innovative project focusing on sustainable soil improvement in Europe through the valorisation of food processing waste and by-products. It adopts a multi-actor, transdisciplinary approach involving the entire food value chain. The project's five regional Living Labs (LLs) aim to convert food processing residues into tailored soil improvers using advanced technologies, involving actors from research, industry, and landowners. These soil improvers will be rigorously evaluated for safety, stability and their impact on soil health, agronomy and the environment.

DeliSoil also investigates technological, legislative, financial, and social barriers and enablers for converting food processing waste into organic soil improvers. The project seeks to promote fairness across value chains and foster knowledge sharing through communities and networks. The Living Labs will share solutions for various food industry sectors, and the project's Lighthouses will showcase optimal waste management practices within a circular bioeconomy framework.

DeliSoil collaborates closely with other EU projects and the EU Soil Observatory to align with Soil Mission goals and work towards more sustainable and eco-friendly soil practices.

FENIX



Coordinated by: University of Granada

General contact: info@project-fenix.eu

The FENIX project addresses the EU's bio-waste management challenge, representing 34 % of municipal waste. It aims to contribute to the EU's 65 % municipal waste recycling target by 2035 and promote a circular economy. The project focuses on biochar, a high-carbon charcoal produced from bio-waste known for its soil regeneration properties. However, biochar's potential is hindered by a lack of understanding regarding its agronomic benefits and economic viability.

FENIX also explores the use of biogas produced through anaerobic digestion (AD) as a renewable energy source. It aims to overcome the cost-related barriers associated with digestate disposal, transforming it into a nutrient-rich biofertiliser.

The project will optimise the combination of digestate and biochar to create a biofertiliser that enhances soil fertility and stability. Field tests in three European countries will demonstrate the agronomic and economic advantages of this soil improver.

The successful completion of the FENIX project will lead to improved soil quality, enhanced water retention capacity, climate change mitigation, secure energy supply, and more sustainable bio-waste management, contributing to a circular and eco-friendly economy.

SOILUTIONS



Coordinated by: Agricultures de la Vega de Valencia

SOILUTIONS, a critical project, targets the global emergency of soil degradation, with 60–70 % of EU soils suffering due to unsustainable practices. Collaborating with key consortium partners from prior EU initiatives like WaysTUP!, VALUEWASTE and Scalibur, SOILUTIONS seeks to address this pressing issue.

The project's primary aim is to optimise four bio-waste valorisation routes (blood hydrolysate, frass, N-struvite, K-struvite) to create advanced bio-waste soil improvers. These products enhance nutrient recovery from bio-waste, reducing the reliance on landfilling and incineration.

Through collaboration with three Living Labs in Belgium and Spain, involving various soil sector stakeholders, SOILUTIONS ensures a market-oriented fit for the developed soil improvers, complying with regulatory requirements. Additionally, it designs upscaling roadmaps and circular business models to facilitate commercialisation across the EU.

SOILUTIONS aligns with key EU policies, such as the European Green Deal, and supports UN Sustainable Development Goals 6, 8, 9, 11, 12, 13, 14, and 15. This project strives to combat soil degradation and contribute to a more sustainable future.

Waste4Soil



Coordinated by: Centre for Research and Technology Hellas

General contact: waste4soil@certh.gr

Waste4Soil envisions the creation of 10 innovative solutions for recycling food processing residues from the food industry into local, biobased circular soil enhancers to promote soil health. An Evaluation Framework, driven by user needs, will help stakeholders in the food value chain, including waste managers, assess their progress in achieving circularity with food processing residues and take steps to recycle suitable waste streams into beneficial soil enhancers.

To foster co-innovation and collaborative research, Waste4Soil will establish seven Soil Health Living Labs across Europe. These labs, located in Greece, Finland, Spain, Poland, Hungary, Italy and Slovenia, will focus on the valorisation of eight types of food processing residues, such as meat, fish, dairy, cereals, olive oil, beverages (wine), fruits and vegetables, and processed food.

The project will assess and enhance existing food waste management routes, including anaerobic digestion residues, efficient biochar production, BioPhosphate processing, composting, protein hydrolysates, and AD-Microalgae combined processes. An integrated management platform will be implemented across all Living Labs, incorporating data analytics, route optimisation applications, soil health evaluations, and commercial aspects.

The project comprises a transdisciplinary partnership involving 27 partners across 10 European countries. Waste4Soil aims to create sustainable solutions for food waste recycling and soil health enhancement.

Business models

The projects under the thematic grouping 'Business models' will develop new sustainable business models to foster soil health across Europe. This will be achieved by highlighting the benefits of investments in this field and providing a monetary estimate of soil ecosystem services

InBestSoil



Coordinated by: Universidade de Vigo

Europe's soil is being irreversibly lost and degraded mainly due to natural factors and human activities. While an investment in soils is necessary, soils can take decades to recover. Given this scenario, the EU-funded InBestSoil project will design an economic valuation system of the ecosystem services delivered by a healthy soil, and the impacts of soil interventions, and assess

its incorporation into business models and incentives. This will allow public and private organisations to assign economic value to their actions. Involving 19 partners like farmers and enterprises from 10 countries, InBestSoil will provide data, evidence, tools and models to assess how investment in soil health can contribute to long-term resilient and sustainable use of soil.

NOVASOIL



Coordinated by: EVENOR-TECH SLU

General contact: info@evenor-tech.com

There is no life without soil. If soils are healthy and sustainably managed, they provide food, clean water, habitats for biodiversity and other important services while contributing to climate resilience. In this context, the EU-funded NOVASOIL project will highlight the benefits of investing in soil for society and the environment. It will propose a toolbox of good practices, models and business cases drawn from different parts

of Europe and beyond. The overall aim is to promote sustainable soil management under different land uses and climatic conditions while promoting soil health. The NOVASOIL toolbox will be developed with the guidance of a multidisciplinary team of experts with experience in developing soil health business models based on sustainable crop and soil management.

SoilValues



Coordinated by: KU Leuven

SoilValues seeks to establish effective soil health business models across the EU, emphasising improved soil quality and incentives for land managers. These models revolve around three essential elements: land managers engagement in resource use and practices that enhance desired ecosystem services, demonstrating the positive impact of farming activities on ecosystem services while considering potential trade-offs, and providing

financial compensation for land managers through various incentives like subsidies, premiums, carbon credits, and investments. In essence, SoilValues aims to promote sustainable soil management by creating viable business models that benefit both land managers and the environment.

Awareness and engagement

The projects under the thematic grouping 'Awareness and engagement' aim at engaging with a wide range of stakeholders, from municipalities, schools, citizens, advisors, and international players to raise awareness on the importance of soil health, increase soil literacy, and actively involve citizens in the protection and restoration of soil health.

CREDIBLE



Coordinated by: Sae Innova

The CREDIBLE project aims to promote carbon farming in the EU by establishing and moderating a Network of Networks (NoN) that brings together various initiatives, projects, and stakeholders. This network will focus on enhancing transparency, environmental integrity and standardisation in soil carbon accounting. Over time, the NoN will evolve from a technical and scientific network into a catalyst for policy and business innovation. The project will facilitate open, multi-actor dialogues through three annual European Carbon Farming Summits to build trust and co-create solutions.

CREDIBLE has four specific objectives: 1) create a practical toolbox for promoting carbon farming adaptable to local contexts and multi-actor interests; 2) identify benchmarking standards, certification mechanisms and policy instruments for carbon farming; 3) establish a network of soil carbon data collectors and repositories to improve measurement and monitoring; 4) develop processes and tools to drive conversations for the upscaling of carbon farming. The project aims to support the European Commission and the Expert Group on Carbon Removal in identifying and scaling up soil carbon farming solutions, ultimately contributing to the EU's carbon reduction goals.

ECHO



Coordinated by: Libera Università di Bolzano

General contact: contact@echosoil.eu

The ECHO project's primary goal is to enhance EU citizens' understanding of soil health, raise awareness of its ecological and societal significance and engage them in protecting and restoring soils. This mission is guided by three key principles: 1) motivating citizens to actively care for soils; 2) empowering citizens through knowledge and involvement in data collection; and 3) enabling citizens to participate in decision-making regarding soil-related issues. ECHO will achieve these objectives by co-creating citizen science initiatives tailored to different EU Member States, considering various land uses, soil types, and regions, and addressing challenges related to age, culture, background and language.

Through 28 initiatives and the assessment of 16 500 sites, ECHO intends to actively involve citizens, equipping them with the capacity and knowledge to promote soil stewardship across the EU and drive social change through increased trust and understanding of soil. The project will establish ECHOREPO, an open-access data repository, to store citizen science data, making it accessible not only to scientists but also to the public and end users. The ECHO consortium consists of 16 participants, including universities, research centres, SMEs and foundations, ensuring a diverse range of expertise and perspectives to achieve the project's ambitious goals.

HuMUS

Coordinated by: ANCITOSCANA

General contact: info@humus-project.eu



The EU Mission 'A Soil Deal for Europe' (Soil Mission) will pave the way for Europe's transition to healthy soils by 2030. The EU-funded HuMUS project will increase awareness and understanding of the importance and value of soil health in local communities. Its global aim is to engage municipalities and regions by creating spaces for dialogue on soil health with

quadruple-helix stakeholders, including marginalised and vulnerable parts of society. The project will also launch an EUR 600 000-worth call for pilot projects promoting wider co-assessment and transitioning exercises on local soil challenges, going beyond the current partnership. In so doing, it will help accelerate the uptake of the Soil Mission by public and private actors in Europe.

LOESS

Coordinated by: Wissenschaftsladen Bonn – Bonn Science Shop

General contact: loess@wilabonn.de



The LOESS project focuses on advancing soil education by engaging with various communities of practice (CoPs) across educational levels. It assesses current soil-related knowledge and develops educational programmes and materials, including an Atlas of Soil Education. LOESS addresses the educational needs of school pupils (primary and secondary levels), students (tertiary level), young professionals, and society in the European Union and associated countries.

The project identifies why existing materials are not fully utilised and co-creates courses and modules for soil education, including virtual reality and augmented reality applications. These resources tackle global and local challenges like climate change, biodiversity loss and the Sustainable Development Goals.

LOESS promotes effective knowledge transfer between educators and learners, integrating diverse knowledge systems, such as scientific, political and local cultural knowledge. Activities span 15 countries, offering hands-on soil education through community-engaged research and learning.

To bridge awareness gaps, LOESS organises targeted campaigns and events to facilitate knowledge exchange, encouraging deeper engagement with soil education. It also collaborates with public authorities and educational institutions to provide recommendations and resources for enhanced knowledge development. Capacity building, knowledge exchange, and peer-to-peer learning support LOESS's educational and dissemination efforts.

NBSoil

NBSOIL

Coordinated by: Institute of Soil Science and Plant Cultivation – State Research Institute

NBSOIL, a four-year EU-funded project led by the Institute of Soil Science and Plant Cultivation in Poland, aims to train a new wave of soil advisors in the application of nature-based solutions (NBS) to promote holistic soil health. It seeks to address the under prioritisation of soil in policy discussions and supports the EU's Mission to achieve healthier soils by 2030.

The project focuses on six multifunctional NBS practices, testing them in various settings to develop a holistic approach to land management and soil health. NBSOIL will provide a two-year hybrid training course for over 300 participants from eight European countries, featuring both online and field sessions, as well as engagement opportunities with soil-related stakeholders. The goal is to empower advisors with the tools and knowledge to elevate soil health as a core topic in discussions related to food systems and climate change mitigation.

ORCaSa



Coordinated by: Institute of Soil Science and Plant Cultivation – State Research Institute

Soils are an enormous reservoir of carbon. As such, it's important to scale up conservation and increase soil carbon stocks and harness the co-benefits for climate change mitigation and adaptation. In this context, a first coordination action led by the French National Research Institute for Agriculture, Food and the Environment (INRAE), brought together hundreds of stakeholders

who formalised interest in establishing an International Research Consortium (IRC) on Soil Carbon. Now, the EU-funded ORCaSa will launch and roll out the initial operational phases of the IRC on Soil Carbon so that by 2024 the IRC has established an international position as the coordinator of soil carbon research and innovation.

Innovation hotspot: tackling pollution

The projects under the thematic grouping 'Innovation hotspot: pollution' will explore innovative ways to tackle soil pollution, e.g. through remediation strategies for the decontamination of soils.

ARAGORN

Coordinated by: University of Copenhagen (UCPH)

ARAGORN is a comprehensive framework aimed at addressing soil contamination in Europe. It offers a decision-making process to identify remediation and restoration strategies for contaminated sites in alignment with the EU Soil Strategy. ARAGORN emphasises robust mapping and monitoring tools to gain insights into various contaminants and neglected pollution hotspots, moving from regrettable to restorative remediation. It also compiles and tests diverse remediation and

decontamination solutions, including nature-based approaches, fostering biodiversity and providing a step-by-step restoration framework. Engagement with land managers and stakeholders across Europe ensures a sustainable and co-creative approach, and a multidisciplinary team supports this initiative to meet EU and international commitments for environmental protection and restoration.



EDAPHOS

Coordinated by: University of Bourgogne Franche Comté

EDAPHOS seeks to support the EU's 'A Soil Deal for Europe' Mission by focusing on reducing soil pollution and enhancing restoration through innovative land management. The project aims to create a framework for ecological restoration and land rehabilitation, emphasising nature-based solutions (NBS) technologies to expedite the recovery of contaminated areas and make ecological restoration a mainstream practice.

EDAPHOS will enhance soil monitoring and pollution source identification using remote sensing tools and GIS-based methods in selected EU regions. It will develop site-specific risk assessment methods based on the TRIAD concept, considering sources, pathways, exposure and pollution effects, and apply them to seven case studies.

Lab and field studies will validate the readiness and cost-effectiveness of NBS as a remediation strategy across various urban, peri-urban and rural settings. The project will assess the environmental, social and economic impacts of NBS sites and develop quantitative metrics and Key Performance Indicators (KPIs) to gauge socio-environmental performance, economic benefits and cost-reduction potential.

EDAPHOS will employ artificial intelligence techniques to provide data-driven tools for forecasting and analysing multi-scale processes. The ultimate goal is to establish a self-sustained and replicable EU NBS market fostering soil health and ecological restoration and addressing soil pollution within a concise framework.



ISLANDR



Coordinated by: Geological Survey of Finland – GTK

The ISLANDR project is a multidisciplinary initiative aligned with Green Deal objectives, particularly the goal of achieving Zero Pollution by addressing soil contamination and restoration. It offers a toolkit to assist in identifying pollution sources, assessing risks, implementing sustainable land management, considering broader valuations in financial planning and enhancing integration of land contamination into spatial planning decisions. It focuses on delivering insights relevant to the Soil Strategy and related policies.

ISLANDR is designed to be accessible to various stakeholders, including policymakers, planners, regulators, site managers and service providers. It introduces innovations such as cost-benefit analysis for robust valuation and a technical basis for soil health assessment.

The project analyses the operational efficiency of nature-based solutions and low-input remediation methods. Seven real-world test areas across Europe provide practical research settings, including those affected by the green transition.

ISLANDR places a strong emphasis on facilitating soil remediation in economically challenging situations by providing a deeper understanding of low-input approaches and a broader value proposition for investment planning. It encourages local stakeholder engagement and aims to expedite project implementation and expansion through roundtable discussions. The project's ultimate goal is to promote sustainable land management practices and contribute to the Green Deal objectives.

Innovation hotspot: biodiversity

The projects under the thematic grouping 'Innovation hotspot: biodiversity' will focus on soil biodiversity and its role in supporting ecosystem services and combating climate change.

BIOservicES



Coordinated by: Universidad Politécnica de Cartagena

BIOservicES is a project with the primary goal of exploring the intricate relationship between various soil organisms and their impact on soil ecosystem functions and services. It aims to understand how different land uses and climate change affect these organisms and their contribution to ecosystems. The project also focuses on evaluating the economic value of soil organisms in providing ecosystem services. BIOservicES will investigate how these organisms influence soil structure and how this interaction is influenced by land use and management intensity,

aligning with the Soil Mission's objective of improving soil structure. The project will generate new knowledge, indicators based on soil organisms and digital tools to facilitate the development of climate-resilient management practices and conservation programmes suitable for various European environments. Additionally, BIOservicES will emphasise the importance of soil health and the services delivered by soil organisms in influencing EU and national legislation.

SOB4ES



Coordinated by: Universidade de Vigo

SOB4ES is a project aligned with the EU Soil Strategy's vision for healthy soils by 2050. It addresses the critical need for cost-effective indicators and measures to assess soil biodiversity, ecosystem functioning, and services in support of the EU's Mission 'A Soil Deal for Europe'.

This initiative has three primary objectives: first, to clarify soil biodiversity, ecosystem functioning, and services across different land uses and intensities; second, to evaluate the cost-effectiveness of existing indicators; and third, to assess the impact of policy incentives on soil system protection, sustainable management, and restoration.

SOB4ES spans nine major pedoclimatic regions and various land uses, encompassing urban, agricultural, forest, wetland, and industrial areas. It also aims to enhance the Mapping and Assessment of Ecosystem

Services (MAES) approach and compare sustainable agricultural practices with conventional methods.

The project's ultimate goal is to provide validated indicators for soil biodiversity and ecosystem services, applicable in EU-wide soil health monitoring at various scales. It will explore links between soil biodiversity, aboveground biodiversity, and ecosystem services through advanced machine learning techniques, scaling monitoring via remote sensing. SOB4ES will facilitate indicator adoption in large-scale European surveys, contributing to the development of the EUSO dashboard and national soil monitoring programmes.

SOIL O-LIVE



Coordinated by: Universidad de Jaén

The olive tree is one of the most important oil-producing crops in the Mediterranean region. However, olive growers face many challenges due to intensive agriculture applications, land degradation, biodiversity impoverishment and functionality loss. In this context, the EU-funded SOIL O-LIVE project will implement a set of multidisciplinary and interdisciplinary projects. The aim is to diagnose the environmental situation of olive grove

soils on a broad scale. The project will target the most significant areas of olive production in the Mediterranean region. SOIL O-LIVE will analyse the impact of pollution and land degradation on olive groves' soils, investigate the relationship of soil health status with the quality and safety of olive oil, implement effective soil amendments and ecological restoration practices, and define rigorous ecological thresholds for healthy European olive groves.

Soil monitoring

The projects under the thematic grouping ‘Soil monitoring’ will develop advances towards better monitoring of soil health, e.g. through the development of new sets of indicators, the use of artificial intelligence (AI), and new earth observation techniques.

AI4SoilHealth



Coordinated by: Aarhus University

The EU-funded AI4SoilHealth project will co-design, create and maintain an open-access, Europe-wide digital infrastructure founded on advanced AI methods combined with new and deep soil-health understanding and measures. The AI-based data infrastructure will evolve a Soil Digital Twin. The project will deliver a coherent Soil

Health Index methodology, Rapid Soil Health Assessment Toolbox, AI4SoilHealth Data Cube for Europe, Soil-Health-Soil-Degradation-Monitor, and AI4SoilHealth API and a mobile phone app. AI4SoilHealth will test the tools, collecting feedback from target users.

BENCHMARKS



Coordinated by: Wageningen University

Soils provide food, clean water, habitats for biodiversity and other important services. There is no life without them. In this context, the EU-funded BENCHMARKS project will co-design an Integrated Soil Health Monitoring Framework, which will build upon the assessment of soil-based ecosystem functions to co-develop an interactive soil health dashboard. The aim is to guide the selection of appropriate soil health indicators, soil health assessment

and indexation, and recommendation of management practices to support soil health. The dashboard will be designed for different stakeholders in urban, agricultural and forestry land use systems. Its proposed indicators (sample-based measurements and data, and model-derived statistics), space and citizen science observations will be tested in landscape case studies across Europe.

MARVIC



Coordinated by: Flanders' Research Institute for Agriculture, Fisheries and Food (ILVO)

The MARVIC project addresses the European Commission's ambition to achieve climate neutrality by 2050. It acknowledges that not all greenhouse gas (GHG) emissions can be entirely avoided, especially those arising from biological processes in agriculture. To reach climate neutrality, effective carbon removal strategies are crucial. One significant approach is carbon farming (CF), which involves sequestering carbon in the land-use sector to offset remaining emissions.

To support this initiative, MARVIC focuses on developing and testing a robust Monitoring, Reporting, and Verification (MRV) Framework. This framework is designed to create harmonised, context-specific MRV

systems for assessing carbon stock changes in soils, woody biomass and soil GHG emissions. The ultimate goal is to enable land managers to access verified emission and removal data by 2028, aligning with the EC's vision for widespread CF adoption.

MARVIC's work is essential for building confidence in public and private CF schemes in Europe and plays a critical role in advancing the transition toward climate neutrality. The project seeks to provide reliable and cost-effective MRV systems that will be instrumental in monitoring and rewarding land managers for their contributions to carbon sequestration and GHG emission reduction in the agricultural sector.

MRV4SOC



Coordinated by: GMV Aerospace and Defence SAU

MRV4SOC is dedicated to designing a comprehensive and cost-effective Tier-3 approach for estimating greenhouse gas (GHG) and carbon budgets by accounting for various carbon (C) pools. This project focuses on quantifying Soil Organic Carbon (SOC) accumulation, analysing the effects of climate change and socio-economic pressures and assessing traditional land management practices and carbon farming.

The challenges MRV4SOC addresses include monitoring SOC accumulation, integrating carbon and nitrogen cycles into complete carbon budgets, developing standardised and transparent Tier-3 methodologies, implementing high-quality in-situ and remote sensing data, and establishing standardised Monitoring, Reporting, and Verification (MRV) schemes. Additionally,

it aims to address issues related to trust in Voluntary Carbon Markets.

The project outlines six specific objectives, complete with Key Performance Indicators (KPIs) to measure progress and success. It covers the assessment of C pools in various land use and cover classes within 14 Demonstration Sites, offering solutions for different spatiotemporal scales and climate change scenarios.

MRV4SOC's proposed approach is designed to create reliable and transparent carbon farming credits within a cost-effective MRV methodological framework. It will benefit ecosystems in arid, temperate, and continental climate zones and collaborate with local stakeholders to validate its solutions.

Mission support

The projects under the thematic grouping 'Mission Support' will assist the smooth implementation of the Mission Soil and the fulfilment of its objectives through coordination and support actions. For instance, they are supporting the setting up and the network of 100 living labs and lighthouses.

NATIOONS



Coordinated by: Aarhus University

The EU Mission 'A Soil Deal for Europe' aims at establishing 100 regional Living Labs and Lighthouses as innovation and knowledge beacons that can collaboratively create and test land management practices and solutions. The aim is to improve soil health to lever systemic change in land use so that the European soils health status is substantially restored by 2030, setting course towards 100 % healthy soils by 2050. Through national engagement

events organised in 43 countries (all EU Member States and Horizon Europe Associated Countries), the EU-funded NATIOONS project will reach out to relevant stakeholders seen as potential actors and through individual coaching sessions, capacity building activities and matchmaking sessions prepare them to apply for and implement Soil Health Living Labs.

PREPSOIL



Coordinated by: Aarhus University

The EU Mission 'A Soil Deal for Europe' aims to accelerate Europe's trajectory towards sustainable soil management and restoration. This is considered part of a wider, green transition in rural and urban areas. In this context, the EU-funded PREPSOIL project will adopt a proactive approach to co-create with stakeholders and generate long-lasting interaction spaces. The project will provide first assessments and efforts concerning improved

knowledge base and awareness on soil health and develop its web portal as the European one-stop-shop for all information, resources and digital engagement tools for the Mission stakeholders. PREPSOIL will provide direction to the future national soil health monitoring mechanisms and prepare the implementation of regional Living Labs through model business plan guidance.

SOILL



Coordinated by: ENoLL – European Network of Living Labs

General contact: projects@enoll.org

The 'A Soil Deal for Europe' mission seeks to lead the way in transitioning to healthy soils by 2030, aligning with European and global commitments under the Green Deal and Sustainable Development Goals. It plans to establish 100 Living Labs (LLs) and Lighthouses (LHs) to accelerate the adoption of soil health solutions, enhance social capital, and raise citizen awareness. SOILL, led by ENoLL (the international association of certified LLs), will create a comprehensive support structure, ensuring a coordinated, user-centric and sustainable approach for these LLs and LHs across diverse settings and socio-economic contexts. The SOILL action plan is designed to be flexible and responsive to the unique needs of LLs and LHs, as well as various ecosystem stakeholders.

SOILL's role includes facilitating knowledge exchange, promoting specialised skills, and fostering peer-to-peer relationships among LLs, LHs and regional or national stakeholders. This encourages the sharing of best practices and innovative approaches to scale up implementation. Additionally, SOILL will engage with a broader network of soil-related ecosystems, collaborating with stakeholders at national, European and international levels to support the overall transition towards healthy soils. This project is integral to achieving environmental sustainability and aligning with global climate goals.

SoilWise



Coordinated by: EV ILVO

SoilWise is a critical response to Europe's soil health crisis, as 60–70 % of soils are currently unhealthy. Aligned with the Soil Deal for Europe's goal of achieving 75 % healthy EU soils by 2030, SoilWise focuses on creating a unified, accessible repository for scattered soil data and knowledge while following FAIR principles. It involves multi-stakeholder collaboration in three cycles, enhancing existing workflows and repositories. The project features an open, scalable

repository using artificial intelligence and machine learning to connect data, streamline processes and boost accessibility. With a long-term perspective, it supports the evolving needs of the European Union Soil Observatory (EUSO). This initiative fosters collaboration to steer soil and spatial policy towards the Green Deal's 2030 objectives, attaining healthy soils by 2050 and encouraging broad adoption among land managers, policymakers, researchers, and industry.

SOLO



Coordinated by: German Centre for Integrative Biodiversity Research (iDiv)

SOLO is dedicated to supporting the EU's Mission 'A Soil Deal for Europe' by identifying knowledge gaps and innovation needs for soil health. Healthy soils are essential for food systems, clean water, biodiversity and climate resilience.

Europe's soils are under significant pressures, with 60–70 % considered unhealthy under current practices. The EU Mission aims to address these challenges through research, innovation, and awareness.

SOLO's objectives include engaging stakeholders at different levels to co-design research and innovation roadmaps. It will identify knowledge gaps, assess drivers and barriers to soil health, and develop dynamic research agendas. These roadmaps will integrate various sectors and regions, with Key Performance Indicators to track progress. SOLO promotes a collaborative, multi-perspective approach to enhance soil health and sustainability.

Practical event information

Event dates:

- **Tuesday 21 November 2023**,
from 09.30 to 19.00 CET
- **Wednesday 22 November 2023**,
from 09.30 to 19.00 CET
- **Thursday 23 November 2023**,
from 09.30 to 17.15 CET

Sessions will start at 09.30 CET, but we kindly ask you to be present at **building A** (CSIC headquarters) from 09.00 to complete the onsite registration process. You will be offered a welcome coffee.

Event location & venue:

The Consejo Superior de Investigaciones Científicas (CSIC), also known as the Spanish National Research Council, is a prominent institution due to its rich history and multifaceted mission. Established in 1939, CSIC succeeded the Committee for Extension of Studies and Scientific Research (JAE), founded in 1907 under the leadership of Santiago Ramón y Cajal.

As the main agent responsible for implementing the Spanish System for Science, Technology, and Innovation, CSIC is dedicated to fostering, coordinating, and advancing interdisciplinary scientific and technological research. This commitment contributes significantly to the progress of knowledge and socioeconomic development.



How to arrive to CSIC?

CSIC central headquarters are located in one of the most important and commercial streets of Madrid (between Serrano street, 113 to 123), not far from the downtown,

30 minutes by subway (metro) from Puerta del Sol (downtown centre) and 30 minutes by taxi or metro from Adolfo Suárez Madrid-Barajas airport.

- **Directions from the Madrid Airport**

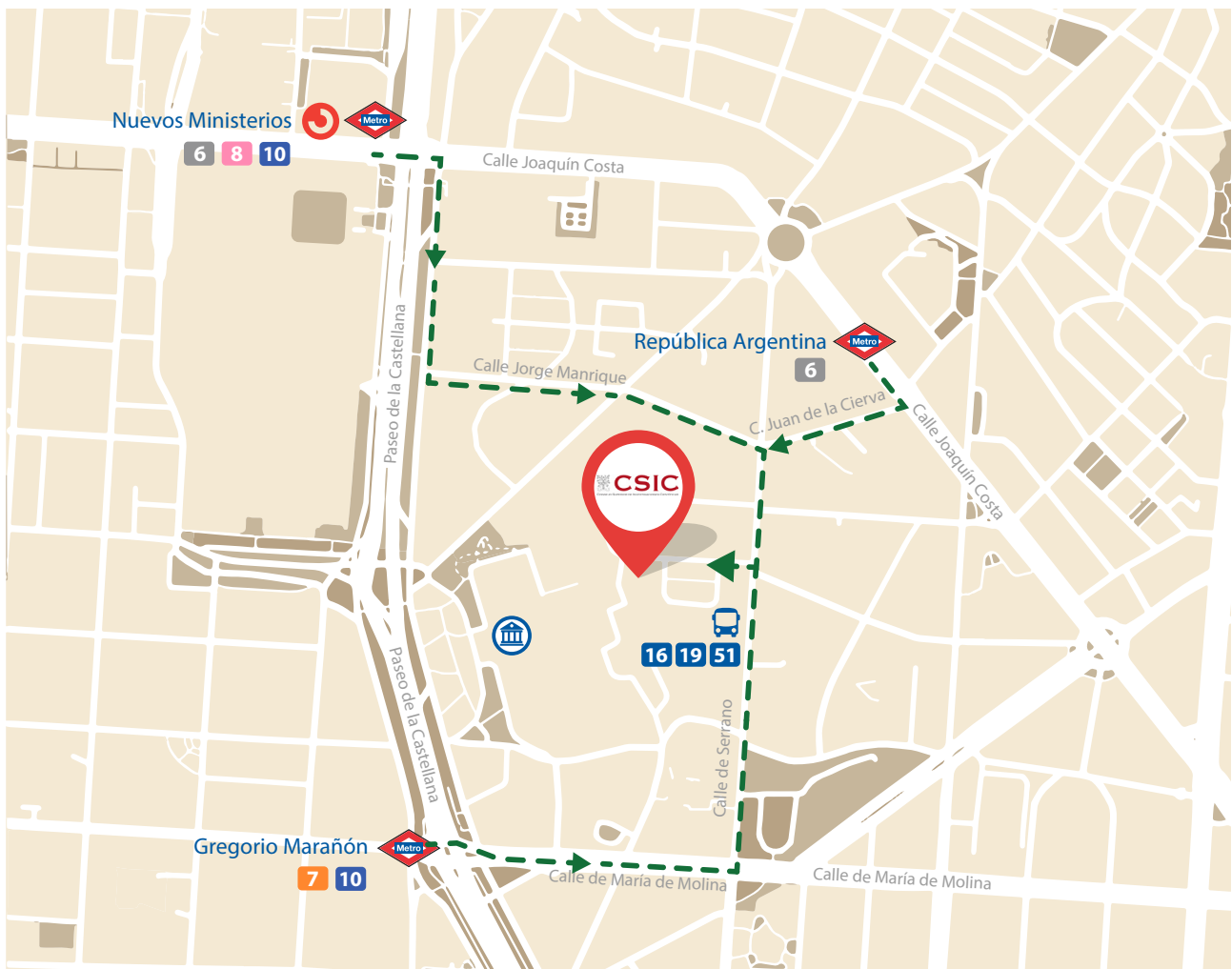
Adolfo Suárez Madrid-Barajas airport has four terminals. All terminals are conveniently connected to the metro subway line 8 (PINK LINE), which ends up at the Nuevos Ministerios station, 10 minutes walking distance from the CSIC central headquarters.

Taxis are also available at the airport. They will take about 30 minutes to CSIC (fixed rate of EUR 30).

- **General directions from metro stations**

CSIC central headquarters can also be conveniently reached by other metro subway lines, such as subway line 6 (GREY LINE) stopping at Nuevos Ministerios station (10 minutes walking distance), stopping at República

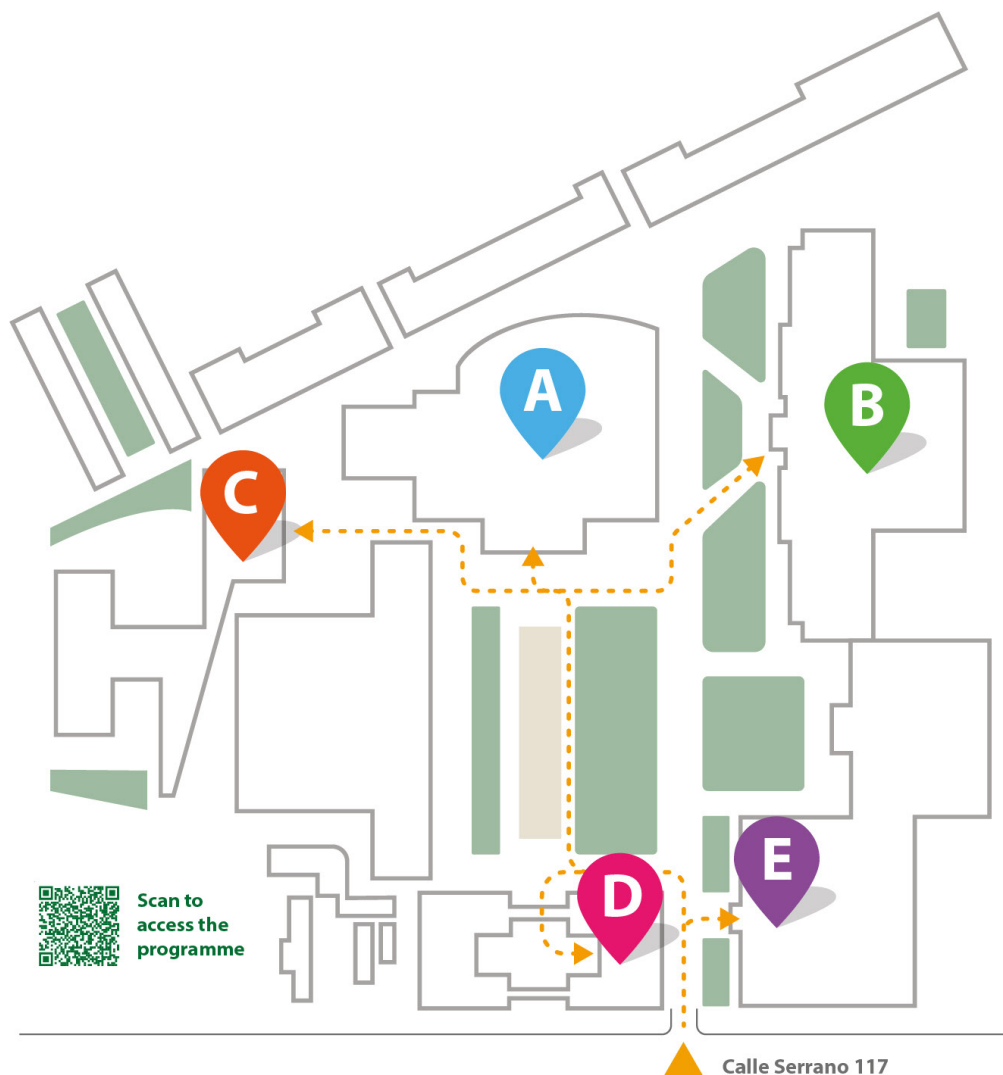
Argentina station (five minutes walking distance), or by line 10 (BLUE LINE) and line 7 (ORANGE LINE) stopping at Gregorio Marañón station (10 minutes walking distance). All these options are shown in the map below.



About the campus

The European Mission Soil Week will take place across four buildings of the CSIC campus (A, B, C, D, E)

Please refer to the agenda to find out which building host which sessions.



- A CSIC headquarters**
- Plenary and breakout sessions
 - Meet the Projects
 - Photo exhibition
 - Catering area

- B Blas Cabrera Institute of Physical Chemistry**
- Breakout sessions

- C ICA Institute**
- Breakout sessions

- D Press Room**
- Breakout sessions

- E Cloister**
- PREPSOIL poster exhibition on regional soil needs (22 to 23 November)



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