Waste4Soil Project

From Food Waste to Fertile Soil: Boosting Soil Health, Strengthening Food Systems.

Learn more

Waste4Soil Newsletter #2

Building Project Synergies: Collaboration Between Waste4Soil and DeliSoil

The **Waste4Soil** and **DeliSoil** projects are actively strengthening their collaboration by participating in each other's project meetings and technical workshops. Funded under the same Horizon Europe framework and aligned under the **EU Mission "A Soil Deal for Europe"**, both initiatives share a common ambition: to improve soil health through circular bioeconomy solutions and sustainable nutrient management.

A Shared Commitment to Europe's Soil Health

Through mutual participation in meetings, co-organisation of workshops and joint technical exchanges, **Waste4Soil** and **DeliSoil** are building a strong collaborative network that bridges research, policy, and practice.

Together, the two projects are advancing innovative, bio-based solutions that support farmers, protect natural resources, and contribute to the long-term resilience of Europe's agricultural systems.

Joint Internal Workshop on Soil Health Indicators & Soil Improvers

In April 2025, **DeliSoil**, **Waste4Soil**, and **Bin2Bean** co-organised a Joint Internal Workshop on *"Soil Health Indicators & Soil Improvers"*. The online event brought together researchers and project partners to address key technical and practical challenges linked to soil improvement strategies.

Discussions focused on:

- Current challenges, problems, and on-farm needs, including experiences from Living Labs
- Existing protocols and indicators, such as those linked to the Soil Health Law and EU Fertilising Products Regulation
- Practical and scalable solutions, explored through interactive group sessions

Felipe Bastida (**CEBAS - CSIC**) presented an overview of **Waste4Soil**, highlighting the project's approach to transforming bio-based waste into high-quality soil improvers and its strong connection to measurable soil health indicators.

The workshop reinforced collaboration among EU Mission Soil projects and laid the groundwork for deeper technical alignment, joint dissemination actions, and coordinated contributions to policy and practice.

Collaboration in Action: The Catalan Living Lab Workshop

In May 2025, **Waste4Soil** participated in the **DeliSoil**-organised Catalan Living Lab Workshop in Vic (Barcelona, Spain), held within the framework of the Agricultural Innovation Conference for the Health of the Soil – Solutions for a Productive Future.

Victor Riau Arenas, representing IRTA, presented the work of **Waste4Soil** and the Catalan Living Lab, a regional hub actively promoting sustainable soil management practices. The workshop brought together farmers, researchers, and agricultural professionals, offering a dynamic platform to exchange experiences, strengthen cooperation, and define concrete actions to improve soil health.

The event demonstrated how Living Labs can serve as powerful engines of co-creation, ensuring that innovative soil solutions respond directly to farmers' needs and local conditions.

Joint Workshop at the Natural Resources Institute Finland (LUKE)

The collaboration continued in June 2025 with a joint workshop hosted by the **Natural Resources Institute Finland (LUKE)** in Jokioinen. **Waste4Soil** partners visited LUKE for an in-person exchange with **DeliSoil** colleagues, beginning with brief project updates followed by an interactive World Café session.

The thematic discussion tables focused on:

- Investment needs and value propositions for soil improvers
- Soil health indicators and harmonised assessment approaches
- The role and development of Living Labs

The workshop promoted sustainable, bio-based agricultural systems across Europe and included:

- Knowledge exchange on soil health indicators and assessment protocols
- Presentations of innovative soil improvers and organic amendments
- Strategic discussions to further strengthen synergies between the two projects

Participants also visited **Biopaja – Solutions for the Circular Bioeconomy and Elonkierto**, gaining first-hand insight into the practical implementation of circular bioeconomy solutions.

Waste4Soil and DeliSoil Showcase Circular Solutions for Soil Health at Mission Soil Week 2025

Waste4Soil and **DeliSoil** took part in the European Mission Soil Week 2025 in Aarhus, Denmark, joining researchers, policymakers, and innovators from across Europe to share progress and exchange ideas on soil health.

As part of the **Mission Soil Project Trail**, the two sister projects contributed to the Circular Economy theme, presenting complementary work on how organic waste streams can be safely and efficiently returned to the soil. From food waste valorisation to improved digestate management, the projects highlighted practical approaches to closing nutrient loops and enhancing resource efficiency.

At the exhibition, **DeliSoil** showcased solutions for converting biowaste into soil-improving products, while **Waste4Soil** presented strategies for nutrient recovery and safe digestate use. Together, they demonstrated how innovative treatment processes can transform waste into valuable agricultural inputs, supporting more sustainable and resilient soil systems.

Mission Soil Week once again offered a valuable platform for collaboration and visibility within Europe's soil community, reinforcing both projects' contribution to the **EU Mission "A Soil Deal for Europe"**.

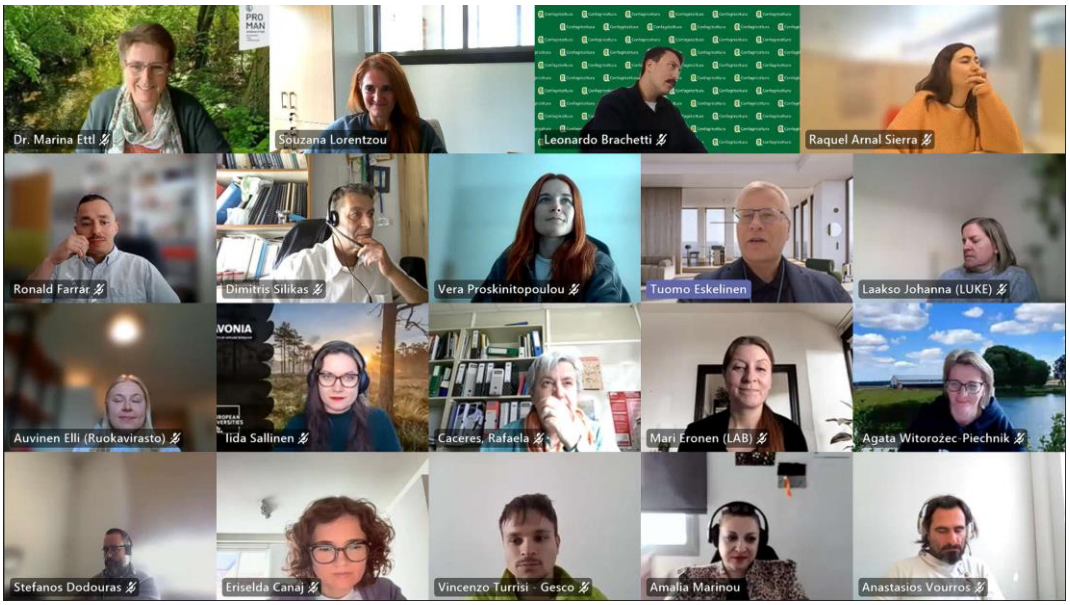
Business models joint workshop

On 24 April 2026, **Waste4Soil** and **DeliSoil** jointly organised an online business model workshop, bringing together around 40 participants from both projects . The session created a space for researchers, practitioners and innovation experts to exchange perspectives on how to bring circular soil solutions closer to real-world application.

The workshop combined **expert insights with practical case studies**, including examples from industry and both projects. Participants explored key aspects shaping the uptake of circular solutions, such as market opportunities, economic feasibility, and lessons learned from existing business models in the bio-based sector.

A central part of the workshop focused on **interactive co-creation**. Participants worked in groups to discuss critical factors influencing implementation, including social acceptance, regulatory frameworks and policy needs at EU level. This collaborative approach helped identify common challenges as well as opportunities to strengthen the impact and scalability of project results.

The session concluded with a synthesis of key findings, highlighting the importance of aligning innovation with market realities and policy frameworks. Te workshop reinforced the value of cross- project collaboration in advancing viable, circular business models for soil health and resource recovery.



Waste4Soil — Publications & Research Outputs

Since its launch in 2023, **Waste4Soil** has built not only practical Living Labs, but also a growing portfolio of publicly accessible research outputs. The project embraces open-science principles: datasets, pilot studies, reviews, and technical reports are being deposited on Zenodo (and where applicable in peer-reviewed journals), allowing practitioners, researchers, and stakeholders across Europe to access, reuse, and build on the knowledge.

Below are some contributions from the first two years, reflecting Waste4Soil's technological and methodological advances.

How food waste can be converted into new products: European legislation and analysis of enzymatic hydrolysis

What it's about: How food waste can be transformed into valuable resources using innovative, eco- friendly technologies. The review highlights enzymatic hydrolysis as a promising method to recover useful compounds—such as proteins, fibres, and antioxidants—under mild conditions, while also exploring how these approaches can be integrated into circular economy models.

Why it matters: Food waste is both an environmental burden and a lost opportunity. By unlocking its value, these technologies can reduce waste, lower emissions, and create new bio-based products. Although still mostly at a laboratory stage, they offer a clear pathway toward more efficient, sustainable, and circular food systems.

Click to read more here!

Integrated digestate management: Contaminant control, valorisation and circular pathways

What it's about: How digestate from biogas plants can be managed more effectively by combining contaminant control with resource recovery. The paper looks at integrated approaches to treat digestate, reduce risks (e.g. pollutants or pathogens), and convert it into valuable products such as fertilizers, soil improvers, or secondary raw materials within circular systems.

Why it matters: Digestate is often underused due to quality and safety concerns. By improving its treatment and valorisation, it can become a reliable resource rather than a waste stream—closing nutrient loops, reducing environmental risks, and supporting more sustainable and circular agricultural practices.

Click to read more here!

Get to know our Living Labs!

Discover the unique approach of the **Waste4Soil Living Lab in Slovenia's Istria region**, where researchers, industry partners, and local farmers collaborate to turn food processing residues into valuable soil improvers. Focusing on olive oil by-products and mixed food - waste digestate, this Living Lab showcases how locally available resources can be transformed into sustainable solutions for soil health.

Waste4Soil Citizen Advisory Board – Second Questionnaire Now Open

As part of the **Waste4Soil** project, the **Citizen Advisory Board** brings together participants to share their perspectives and help ensure that project activities align with societal needs and expectations. We are pleased to announce the launch of the second questionnaire (out of four) in this consultation series. In this round, we invite you to share your views on:

Addressing concerns related to the application of lawfully produced soil improvers on soil health and local soil biodiversity.

Your feedback will directly support us in improving how we communicate project results and engage with both participants and the wider community.

Take a few minutes to share your opinion

Waste4Soil at the Soils for Europe Conference 2026

This September, the **Waste4Soil** project will take an active role in the **Soils for Europe Conference**, contributing to key exchanges on sustainable soil management. The project will present its latest progress, lead a session on *"Quantifying sustainability and impacts of solutions for soil management and health"* and participate in the Living Lab Days alongside practitioners and stakeholders. Through this presence, **Waste4Soil** reinforces its commitment to advancing practical, evidence-based approaches that support soil health and resilience across Europe.

Read more here!

Social media

Follow Waste4Soil on social media and the web to stay informed about activities, events, and publications!

Waste4Soil Newsletter

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