**Turning food waste into sustainable soil improvers for better soil health and improved food systems (Waste4Soil)**

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Waste4Soil envisions the development of 10 technological and methodological solutions for recycling food processing residues from the food industry into local, biobased circular soil improvers for improved soil health. A user-driven standardised Evaluation Framework will support stakeholders from the food value chain, including waste managers, to assess their status towards food processing residues circularity and take action for recycling suitable waste streams into beneficial soil improvers. To ensure co-innovation and collaborative research, Waste4Soil will setup 7 Soil Health Living Labs across Europe, in Greece, Finland, Spain, Poland, Hungary, Italy and Slovenia, to study the valorisation of 8 types of food processing residues (i.e. meat, fish, dairy, cereals, olive oil, beverages (wine), fruits and vegetables, and processed food). The project focuses on assessing and improving the effectiveness of existing routes of food waste management to soil improver components, formulation and application methods by focusing on:
1) Anaerobic digestion residues by employing novel nutrient separation including Selective Electrodialysis, bio-electrochemical and membrane systems

2) Novel efficient Biochar production from food processing wastes and digestates

3) BioPhosphate processing

4) Effective composting process of solid residues

5) Protein hydrolysates acting as soil improvers and AD-Microalgae combined processes for soil biostimulants

and
6) An enabling management platform applied in all living labs, with a growing database of data analytics, route optimisation applications, soil health evaluations and application recipe’s, commercial aspects, and the capacity to use IoT devices in logistics.
The 27 partners and 1 associated partner supporting this project proposal are forming a transdisciplinary partnership accross 10 European countries.

The project started on 1 June 2023.

*Source: CORDIS,* [*https://cordis.europa.eu/project/id/101112708*](https://cordis.europa.eu/project/id/101112708)