



Phoster

PROJECT

PHOSTER - Phosphorus and magnesium recovery from waste streams for production of high-value renewable fertilizers

ABSTRACT

The objective of the PHOSTER project is to develop a sustainable, replicable and scalable solution (TRL 4) for the recovery of critical raw materials (phosphorus and magnesium) from sewage sludge ash and mining by-products with the aim of replacing the same in the production of fertilizers. The technological solution developed is characterized by the integrated assessment of all phases of the circular value chain, starting from the waste treatment up to the end-user of the recovered products, addressed at optimizing the technical, economic, environmental and social performance of the production process and recovered products. Among the Italian project partners, Politecnico di Milano (Department of Civil and Environmental Engineering) deals with the optimization of the wet chemical extraction process of phosphorus from ash and the co-precipitation of phosphorus and magnesium from mining industry by-products, Timac Agro Italia deals with the evaluation of recovered materials as ingredients for the generation of new generation fertilizers and MM deals with the investigation of the thermal treatment of sludge in a dedicated pilot plant.

REFERENCE

<https://phoster-project.eu/>

<https://www.linkedin.com/company/phoster-eu/>

<https://www.era-learn.eu/network-information/networks/era-min3/eu-co-funded-era-min-joint-call-2021/phosphorus-and-magnesium-recovery-from-waste-streams-for-production-of-high-value-renewable-fertilizers?SearchTerm=phoster>