

Efficient direct recycling for low-value LFP battery for circular and sustainable waste management

The ReUse project, short for "Efficient direct recycling for low-value LFP battery for circular and sustainable waste management," is a 36-month research initiative. It is co-funded by the European Union's Horizon Europe research and innovation programme, operating under Grant Agreement No. 101137774, and by the Swiss State Secretariat for Education, Research, and Innovation (SERI). The project commenced in January 2024.

The project aims to enhance the circularity and sustainability of the European Lithium-ion battery (LiB) value chain, aligning with the objectives of the Battery Partnership launched under Horizon Europe. The primary goal is to address the entire low-value Lithium Iron Phosphate (LFP) battery waste stream, ranging from production scrap to end-of-life LiB. This will be achieved by developing new recycling processes that optimize the recovery of input elements and components.

With a focus on maximizing material recovery, energy efficiency and purity, ReUse will develop a robust, flexible, and sustainable direct recycling process for waste streams of varying composition and quality. The goal is to enhance the global competitiveness of the European battery ecosystem, aligning with the European Strategic Plan for a clean and sustainable transition towards climate neutrality. Building on the BATTERY 2030+ Roadmap and the European Partnership on Batteries, ReUse aims to contribute to the policy needs of the European Green Deal and efficient recycling technologies.

The research consortium of 13 partners from 8 different European countries has met for the first time for a Kick-off meeting held on the 31st of January and 1st of February 2024 in Würzburg, Germany. Collectively, they will work on the concept until the end of the project, December 2026.





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