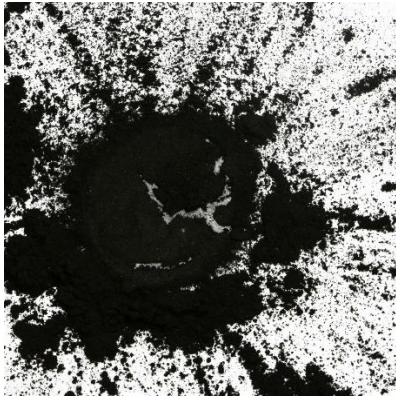


Can one **waste product** become a source of **valuable metals and critical raw materials**, like Li, Co, Ni, Mn, P and C?



Finely shredded material – also known as a **black mass**, is obtained from a mechanical and thermal recycling process of spent lithium-ion batteries (LIBs). It contains several critical raw materials and valuable metals with **tremendous potential** for **recycling**, which has not been fulfilled yet.

The Module FuLIBatteR (Future Lithium-Ion Battery Recycling for Recovery of Critical Raw Materials), which started in July 2022, faces this challenge, and uses a cross-sectorial approach combining **waste management**, **process technology** and **metallurgy** going beyond state of the art to create a **sustainable closed loop LIB recycling** process and **recover** valuable metals. FuLIBatteR comprises three projects dealing with waste technological, pyrometallurgical and bio-hydrometallurgical recycling techniques.

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