

LUR capabilities for CIRCBIO-03: Advanced recovery of critical raw materials from Waste from Electrical and Electronic Equipment (WEEE) (17/09/2026)

Lurederra works on the recycling and recovery of precious metals from **Batteries, Printed Circuit Boards, PVs, Wind Turbines, Automobile Residues**, among other **scrap and WEEEs**.

Different elements such as **Rare Earths** and **Critical Raw Materials**, even other **precious metals** can be recovered from these wastes and other end of life products.

Lurederra has developed a pilot plant for the **WEEE** metallic fraction recovery including **crushing, sieve conveyor belt** and **magnetic separation** for further leaching and selective recovery.

Lurederra has developed **pilot equipment** for selective recovery of targeted elements. The **pilot plant** is composed of **three reactors of 1.000 litres capacity** including the steps of **leaching-precipitation and solvent extraction**, with different recuperation rates depending on the composition of the wastes and the targeted element to be recovered.



Mixtures of DES for different targeted elements:
 Ag, Au, Co, Cu Fe, Pb, Zn
 Choline Chloride/Lactic Acid (1:2) OR
 Choline Chloride/Etilenglicol (1:2)

Waste treated	CRM recovered	PROCESSES
Catalysts	Pd, Pt, Rh	Acid leaching/Selective Extraction
Printed Circuit Boards (PCBs)	Cu, Sn	Acid leaching
WEEEs connectors	Au	Acid leaching
FPDs (Flat Pannel Display)	Indium, Yttrium	Acid leaching/Selective Extraction/Precipitation
PVs (photovoltaics)	Ag	DES
PCBs	Ag	DES
Capacitors	Nb	Acid leaching