Noemi Boldrini, Business Development Manager
noemi.boldrini@eitrawmaterials.eu

“Urban Mining: miniere urbane, innovazione e valorizzazione dei materiali strategici nel Veneto”

Panel 2 - **Best practice per la valorizzazione delle Materie Prime Critiche in Italia ed Europa**

Giovedì **27 febbraio 2025**

9.00 - 13.00

Auditorium Cesare De Michelis

M9 – Museo del '900 | Venezia Mestre

Organizzato con

EIT RawMaterials: What we do and who we are

KNOWLEDGE, INNOVATION AND NETWORK

We support and accelerate innovation, connecting policy, industry and research to secure Europe's raw materials supply chain.

ACCESS TO FINANCE & FUNDRAISING

We provide strategic public and private funding solutions, invest and support innovative start-ups, scale-ups and help bring projects to market.

HUMAN CAPITAL & WORKFORCE SOLUTIONS

We partner with universities and industry to skill workforces to meet today's challenges, and educate talent to unlock tomorrow's opportunities.

World's Leading Partner Network

300+
MEMBERS

400+
START-UPS

Entire Value Chain Coverage

Higher Education Initiative

>350
UNIVERSITIES

European Raw Materials Alliance

>750
PARTNERS

Strategic Objectives

SECURING RAW MATERIALS SUPPLY

Support EU exploration activities

Grow European mining sector

Comply with ESG standards

DESIGNING MATERIALS SOLUTIONS

Develop advanced materials

Support circular product design

Develop material efficiency and lightweighting solutions

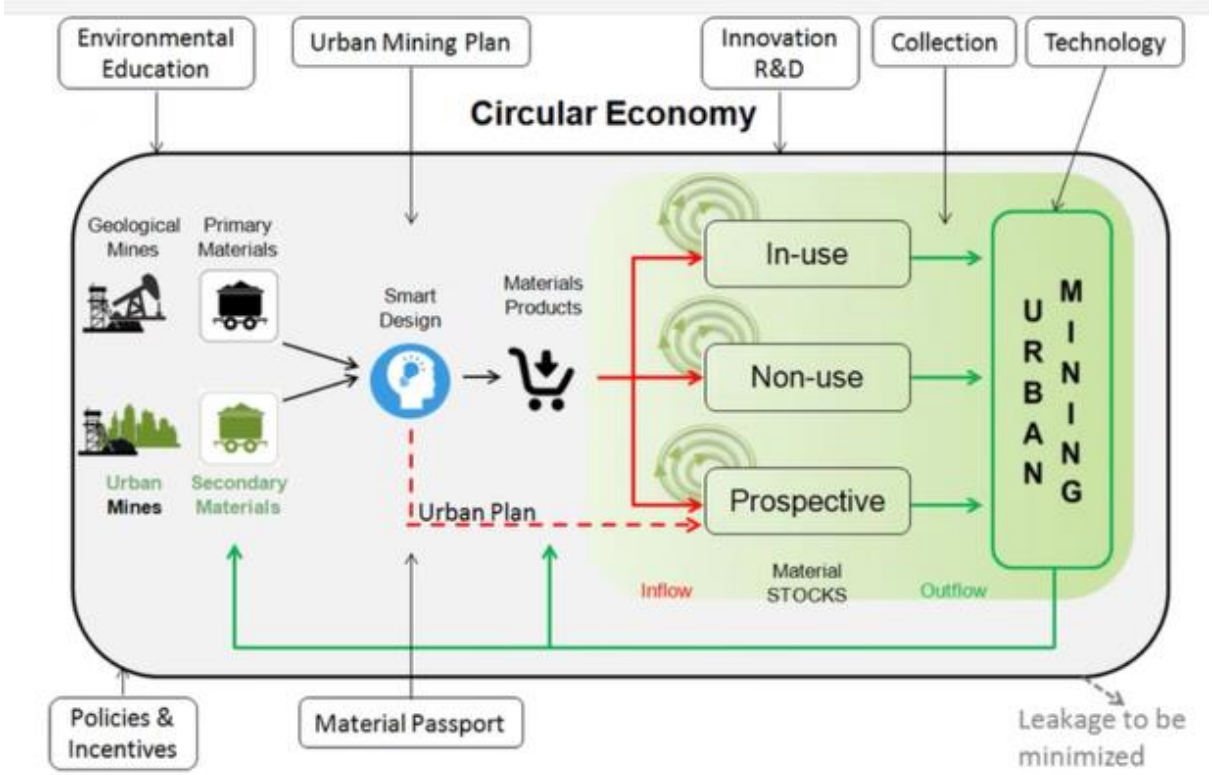
CLOSING MATERIALS LOOPS

Recovery of critical raw materials

Increase recyclability

Waste utilization

Urban Mining



Trilogy on circular economy, Katherina Medkova, 2016

CRM Act | Setting Priorities

Defining Critical and Strategic Raw Materials

CRM

Whole EU economy, based on:

- Supply risk
- Economic importance

SRM

SRM are subset of CRM:

- Key for strategic technologies (green, digital and space)
- Forecast demand risks outstripping supply

2030 Benchmarks

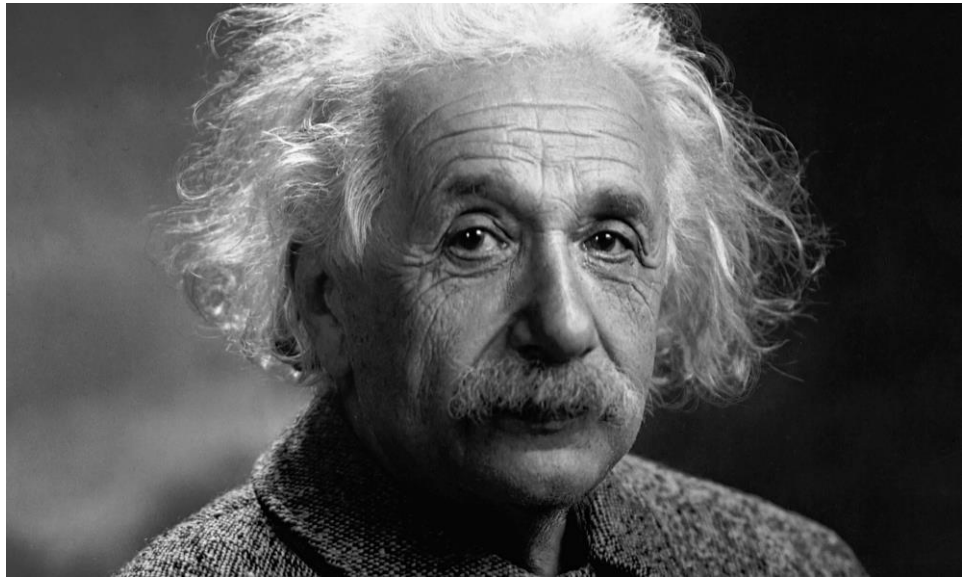
Towards more SRM supply security

- EU's **extraction** capacity cover **at least 10%** of the EU's SRM consumption
- EU's **processing** capacity cover **at least 40%** of the EU's SRM consumption
- EU's **recycling** capacity cover **at least 15%** of the EU's SRM consumption

Towards more diversification of supply

- **Not more than 65%** of the EU consumption of each SRM should come from a single third country.

CALL FOR NEW TECHNOLOGIES!



"We cannot solve our problems with the same thinking that created them." - Albert Einstein

Three examples of projects in the consortium of EIT RawMaterials

Tailings:

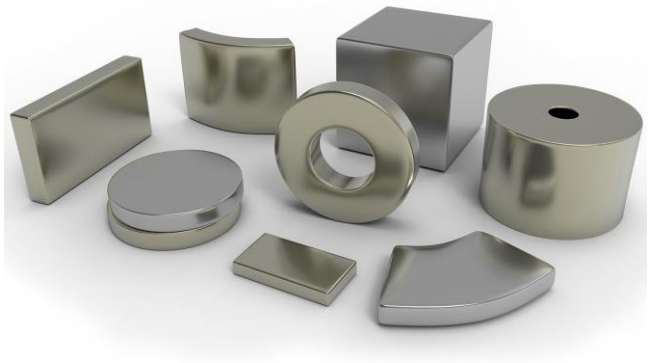
RIS-CuRE: Zero waste recovery of copper tailings in the ESEE region

Batteries:

ReLiFe - Recycling Lithium Ferrophosphate in the RIS Region

Permanent Magnets:

New-RE. Neodymium and Rare Earth from Waste Recycling



Solar Panels - Parsival

NEW-RE: Neodymium and Rare Earth from Waste Recycling

The **New-RE pilot plant**, which has been installed in Ceccano (Italy), will allow to **recover Rare Earths Oxides** from **Permanent Magnets** contained in **Hard Disk Drives (HDDs), motors of Electric Vehicles (EVs),** and other WEEE.

- ✓ Advanced hydrometallurgical process
- ✓ Automated disassembly system
- ✓ environmentally friendly organic acid solutions, which can be reused up to five times

New-Re

Follow us

New-RE Project | LinkedIn

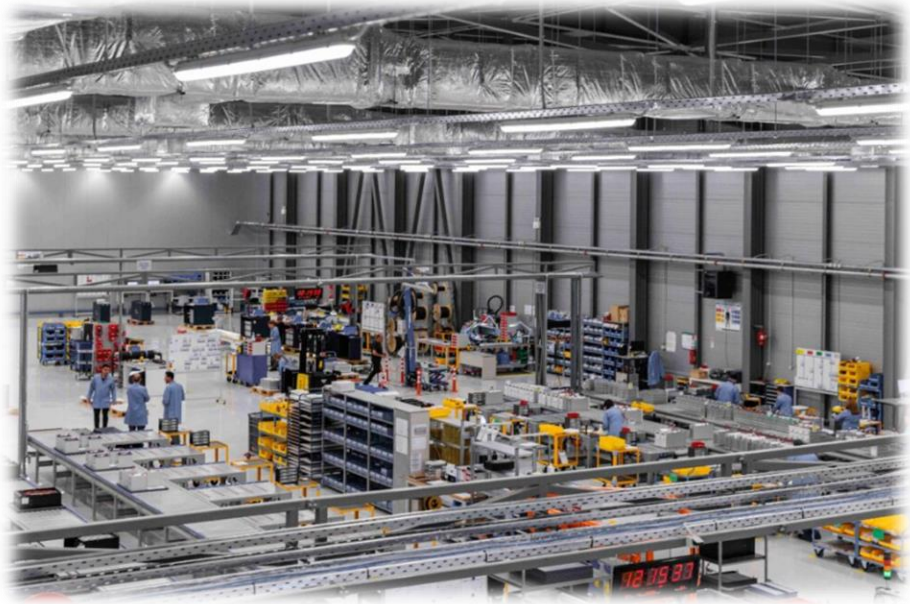
www.erion.it/en/project-new-re/

INSPIREE

ReLiFe - Recycling Lithium Ferrophosphate in the RIS Region

The **ReLiFe (Recycling Lithium Ferrophoshate)** aims to demonstrate, initially at pilot scale, an environmental and cost-effective technology for recycling **lithium ferrous phosphate (LFP) scrap and end of life batteries.**

The pilot plant, with a nominal capacity of **500 tn/year**, will be established **in Xanthi, northeastern Greece**, at the industrial complex of Sunlight Group Energy Storage Systems S.A, the project's Lead Partner.



ReLiFe
RECYCLING LITHIUM FERROPHOSPHATE

Greenhouse Investment GROUP

HATCH KÜTTNER

HZDR HELMHOLTZ ZENTRUM DRESDEN ROSSENDORF

MONOLITHOS CATALYSTS · RECYCLING · INNOVATION

SE&C Your sustainable partner

SUNLIGHT POWER IS KNOWLEDGE

TECHNISCHE UNIVERSITÄT BERGAKADEMIE FREIBERG

eit RawMaterials Connecting matters

VSF VENICE WORLD SUSTAINABILITY CAPITAL FOUNDATION INNOVAZIONE

Organizzato con VERITAS 9-Tech

Co-funded by the European Union

RIS-CuRE: Zero waste recovery of copper tailings in the ESEE region

Serbia and Macedonia have an abundance of **Cu mines** which have been exploited since ancient times, The Bor Mine (Serbia) and the Bučim Mine (Macedonia).
Mining activities at these locations were es-tablished already in **Roman times.**
It is estimated that the tailings at Bor and Buchim together contain approximately 1.3 M tonnes of Cu, 128 tonnes of Ag, 23 tonnes of Au and REE.
Obsolete technologies were used in the past, resulted in **low extraction rates** and the formation of large quantities of different types of tailings, which have caused extreme pollution to the groundwater, soil and air.

The main aim is to find a **new technologies** able to **reprocess the tailings obtaining metals and at the same time reclaim the area.**

Consortium logos

RIS-CuRE


Buchim mine


Tailings in Buchim mine

eit RawMaterials Connecting matters

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