

Cu tailings and CRM in the **ESEE region** - RIS CuRE and RIS RECOVER projects -





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RIS CuRE RIS RECOVER RawMaterials Connecting matter **PURPOSE** PURPOSE The project aims at establishing a network of Cu value chain stakeholders in To build a roadmap for zero waste extraction of CRM and metals from mining the ESEE region in order to promote an innovative service for the zero waste tailings and metallurgical heaps in SEE region.

extraction of metals (Cu, Ag, As, Au, and REE) from Cu mining wastes, generated during past mining activities.

MAIN THEME Exploration and raw materials resources assessment

BUDGET – 1.575.429 EU

METHOD

An innovation model merging all relevant stakeholders within the knowledge triangle in the field of industry, research, and education in order to increase regional competitiveness based on a regional scale, taking into account the latest know-how of the RIS-CuRE consortium. This innovative approach is based on the zero waste paradigm, which means that, once valuable raw materials such as CRM and other metals are extracted, the residues can be recycled for the construction sector or other sectors.



MAIN THEME

Increased resource efficiency in mineral and metallurgical processes

BUDGET - 489.512 EU

METHOD

Project's activities are based on a quintuple innovation helix approach merging industry, research/education, government, the general public and environment sectors in order to increase regional competitiveness based on a regional background.

- zero waste paradigm,
- the residues can be recycled for the construction sector,
- development of regional innovation scheme.



LOCATIONS









LOCATIONS



N.Macedonia Romania

Slovakia

WORK PLAN

WP1: To establish and maintain a robust project management structure; WP2: To build up a long-term sustainable and strong network of stakeholders along the Cu-value chain, focusing on the zero waste extraction of valuable metals from the mining and processing of Cu tailings.

WP3: To give detailed information on Cu-tailings in the ESEE region in order to deter-mine the economic prospective for the extraction of Cu, Ag, As, Au, Bi and REE from Cu mining and processing wastes in the region.

WP4: To test up-to-date technologies for extraction of valuable metals on specific samples of tailings from Bor and Bučim mine.

WP5: To test the zero waste approach in the extraction of metals from Cu tailings.

SAMPLING ACTIVITIES



Veles

Sasa

Lojane

Jugohrom

WORK PLAN

WP1: To establish and maintain a robust project management structure, with a clear definition of strategy.

WP2: Evaluation of existing data on mining tailings and processing tailings in N. Macedonia as well as the idenfication of technological and non-technological barriers and opportunities.

WP3: To validate the existing data of the selected secondary deposits. WP4: To find the best combination of extraction technologies and technologies for the utilisation of residues in order to achieve a zero waste approach. WP5: To assess the environmental and socio-economic benefits resulting from a zero waste approach to the extraction of CRM and metals. WP6: Raising awareness especially among professors and students. WP7: To develop a roadmap for sustainable extraticon of CRM and metals from secondary deposits in the region.

SAMPLING ACTIVITIES

IMPACT

The final output of the project will be a strong sustained regional network, based on validated and fact-based data, including a study of the potential economic, technological, organisational (legislative), environmental and social impacts of applying the innovative methodology of the zero waste extraction of valuable materials in Serbia and the N.Macedonia.



IMPACT

- The final output of the project will be:
- a regional innovation scheme based on validated data;
- innovative methodology of zero waste extraction of valuable materials in N.Macedonia;
- to transfer the validated approach to other parts of SEE