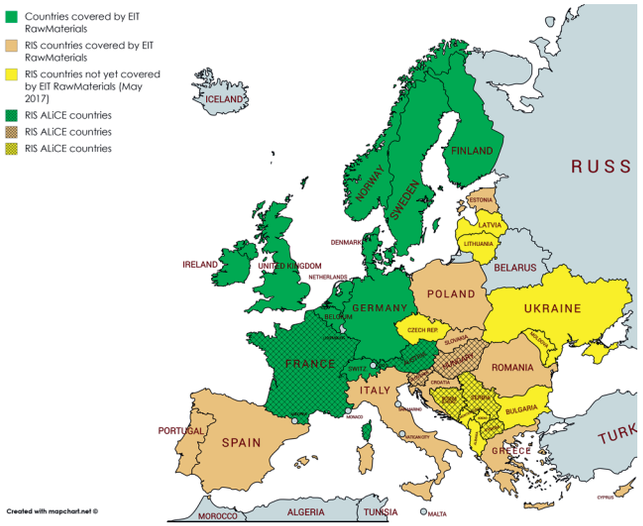
- **establishes a long-term network** between the producers/holders and the end-users of Al-rich industrial residues
- **valorises** the Al-rich residues by the production of environmentally friendly high-Al mineral binder based on data from Slovenia, Hungary, and Bosnia and Herzegovina
- **transfers knowledge** from Slovenia, Hungary, and Bosnia and Herzegovina to the whole ESEE region
- **implements** the circular economy and zero-waste management for Al-rich industrial residues in the ESEE region

Project Data

Project Duration:	**Mar 2019 - Feb 2022**
Project Budget:	**932,355.00 €**
Project Coordinator:	**Slovenian National Building and Civil Engineering Institute (ZAG)**

This activity has received funding from the European Institute of Innovation and Technology (EIT), a body of the European Union, under the Horizon 2020, the EU Framework Programme for Research and Innovation

Consortium Map



Project Partners

ZAG · GeoZS Geološki zavod Slovenije · TEŠ Skupina HSE TERMOELEKTRARNA ŠOŠTANJ · TU WIEN · bay · SALONIT ANHOVO · ceatech · TITAN CEMENTARNICA USJE · AGREGO HALAS Környezetvédelmi és Tanácsadó Kft. · ESM POWER PLANTS OF NORTH MACEDONIA · sij acroni · LUCIS

RIS-ALiCE:
Al-rich industrial residues for mineral binders in the ESEE region

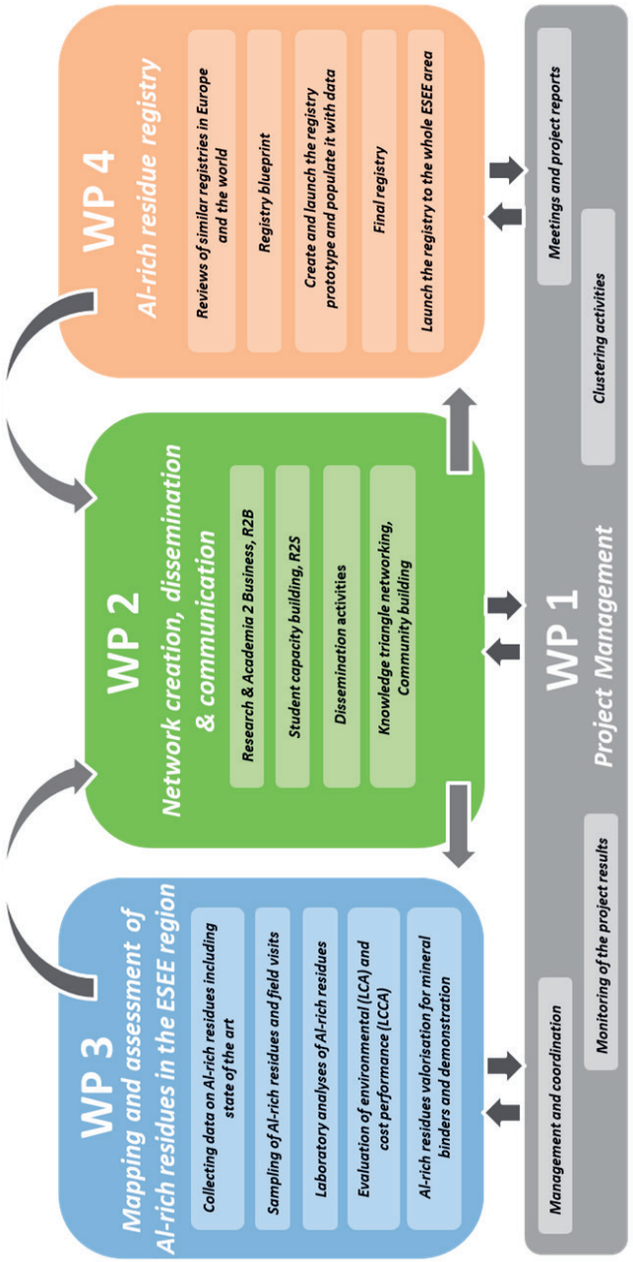
Motivation

Huge amounts of various **Al-rich residues** (steel slag, red mud, ash, landfills of bauxite mines) with a low recycling rate or landfilled in RIS countries present **a high secondary mineral resources potential**. A promising way of **recycling these waste mineral materials** is the **synthesis of sustainable mineral binders with high Al content**, which can be further used as environmentally friendly construction material.

On the other hand, high Al content is the main pain point for the production of Al-rich mineral binders because of the high demand for bauxite, a valuable natural resource. In RIS-ALiCE, this challenge will be **successfully overcome** by **the replacement of bauxite with Al-rich industrial and mining residues**. Moreover, this approach will represent **an innovative recycling case study** for the ESEE region.

Goal

Creation of a **network of relevant stakeholders** in the area of currently unused and landfilled Al-rich industrial residues and contribution to the **increase of the innovation potential and competitiveness** of the ESEE region. By **interlinking local partners**, valorising Al-rich residues for innovative mineral binder and creating an upgradeable online registry, we will help enhance sustainable mineral resource management in the ESEE region will be enhanced.



Impact

- **EU** by **encouraging circular economy** and thus enhancing the raw materials self-sufficiency
- **EIT Raw Materials** through the **implementation and promotion of sustainable raw materials management**, introducing innovative raw materials recycling approaches to the ESEE region and by setting up and strengthening the networks connecting waste producers and mineral end-users
- **RIS-ALiCE consortium** by **creating new business opportunities** with focus on advanced and sustainable solutions with a focus on Al-rich residues in an environmentally friendly way

Contact

http://ris-alice.zag.si
https://eitrawmaterials.eu/

alice.eit@zag.si