

## **EU-funded MaDiTraCe project develops and combines technical solutions to promote transparent ESG-standards for critical raw material supply chains**

In January 2023 MaDiTraCe, a research and innovation project funded by the Horizon Europe programme, started with the goal of developing digital and geo-based approaches for Environment, Social and Governance (ESG) standards for critical raw materials (CRM) and to integrate them with a generic certification scheme for CRMs. The purpose of the project is to ensure sustainable and transparent mineral supply chains based on generally accepted ESG-standards. The project will be focused on materials essential to energy transition: lithium, cobalt and natural graphite for batteries, and rare earth (magnets).

CRMs are highly significant for the green and digital transformation. Europe heavily relies on imports from third country suppliers but seeks to shape both resilient and sustainable supply chains. With the recently presented Critical Raw Materials Act in particular, the EU defines both requirements and measures. However, CRM extraction in itself is often unsustainable. Therefore, the EU supports projects which work on establishing these resilient and more sustainable CRM supply chains. The project will run for three years, until December 2025, and has a budget of €11,024,752.50.

Due diligence in the sustainable sourcing, extraction and processing of minerals is driven by societal and regulatory factors that put increasing pressure on the industry's supply chain control. As a result, the industry needs efficient, standardized certification systems that guarantee transparent insights into their supply chains. For example, meeting the requirements of the Critical Raw Materials Act.

The MaDiTraCe digital approach seeks to consider the particularities and complexities of mineral supply chains while minimizing the environmental impact and costs. Indeed, the existence of numerous aggregation points (mixing of ores of different origins, including artisanal small-scale mining) and transformation (processing refining) along the mineral supply chains have been recognised as challenges for their digitalisation.

MaDiTraCe's fundament is a strong stakeholder process with upstream and downstream industrials, from mining to manufacturing industry and large networks involved via the consortia and clusters participating in the project. Continuous interaction with this industrial and policy-oriented stakeholder community on the traceability technology and certification schemes developed in the project will remain in line with industrial needs and expectations concerning regulatory compliance. It will also facilitate implementation and usage of the project outcomes.

“MaDiTraCe – Material and digital traceability for the certification of critical raw materials” is a three-year research project, funded by Horizon Europe. An international team of universities, institutes and industry partners works to enlarge and integrate the portfolio of technological solutions reinforcing the reliability of critical raw material tracking. The goal is to ensure sustainable and transparent mineral supply chains based on generally accepted ESG-standards. The project will run until December 2025. It is coordinated by the French geological survey BRGM and 13 European partners: DMT GmbH & CO. KG – DMT (DE), Geological Survey of Finland (FI), Montanuniversitaet Leoben (AT), Universiteit Gent (BE), EIT Raw Materials GmbH (DE), LGI Sustainable Innovation (FR),

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