



PRESSRELEASE – FOR IMMEDIATE RELEASE

VA Erzberg and EIT RawMaterials launch the Net-Zero Iron Ore Challenge to transform Europe's steel industry.

- Researchers and startups are invited to apply for the first VA Erzberg Innovation Challenge.
- VA Erzberg Net-Zero Iron Ore Challenge seeks solutions in Innovative Siderite Processing & Carbonate Valorization
- Applications open until 29. September 2024

Berlin, 24.06.2024. VA Erzberg, Europe's largest open-pit iron ore mine, in collaboration with EIT RawMaterials, the leading raw materials innovation and knowledge network and supported by the European Institute of Innovation & Technology (EIT), a body of the European Union (EU), launched the VA Erzberg Net-Zero Iron Ore Challenge – Innovative Siderite Processing & Carbonate Valorization. The initiative is an urgent call for startups, SMEs, research groups, universities and innovators to propose sustainable solutions for reducing CO₂ emissions from carbonate iron ore processing.

The iron and steel industry is a cornerstone of the European economy, supporting 2.6 million jobs and contributing €132 billion annually¹. As the European Union aims for carbon neutrality by 2050 and seeks to reduce its CO₂ emissions by 55% by 2030, the urgent decarbonisation of the iron and steel sector is essential.

Regions like Austria, where VA Erzberg is located, have extensive mineral iron carbonate reserves. However, the traditional carbonate ore reduction process includes a calcination step, which impacts the steelmakers' Scope 3 emissions.²

The Open Innovation Challenge underscores VA Erzberg's dedication to pioneering strategic solutions that support the transition of Europe's steel industry towards a net-zero future. Utilising locally produced iron ore will ensure a stable and sustainable ore supply, strengthen the local economy, and reduce emissions associated with transporting imported ore.

1

[https://www.europarl.europa.eu/RegData/etudes/STUD/2021/695484/IPOL_STU\(2021\)695484_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/695484/IPOL_STU(2021)695484_EN.pdf)

² Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization but that the organization indirectly affects in its value chain. An organization's value chain consists of both its upstream and downstream activities.



PRESSRELEASE – FOR IMMEDIATE RELEASE

The challenge invites submissions from both commercial-ready solutions and early-stage innovations that focus on three areas:

1. **Iron Ore Calcination and Reduction:**
Innovative eco-efficient methods for Erzberg's iron ore calcination and reduction, improving efficiency and reducing emissions
2. **CO₂ Off-Gas Treatment:**
Advanced technologies to capture and utilise CO₂ emissions during the processes
3. **Byproduct Valorization:**
Innovative methods to valorise CO₂ and other byproducts from Erzberg in the steel or other industries

Josef Pappenreiter, CEO of VA Erzberg says: *“Our region in Austria has a rich history of iron ore mining. Finding sustainable solutions for utilising low-grade carbonate iron ore is urgent, not only for our operation but also for the future of the European steel industry. We look forward to collaborating with companies, startups, researchers, and entrepreneurs who share our vision for a sustainable future. We are looking forward to anticipating some exciting innovations they bring to the table.”*

Bernd Schäfer, CEO and Managing Director, EIT RawMaterials: *“It is the mandate of EIT RawMaterials’ to drive innovation and to support projects and partners that create impact on the decarbonization of the raw materials sector. But it takes a global village and great industry leadership and collaboration to look beyond their own boundaries to solve solutions for the greater good – that is, to address the challenges of climate change. VA Erzberg Net-Zero Iron Ore Challenge presents a remarkable opportunity to reduce CO₂ emissions within the steel industry, which accounts for around 2.8 gigatonnes of CO₂ emissions per year, or 8% of global energy system emissions. We’re proud to support this initiative and invite all innovators to join this movement and be at the forefront of leading change.”*

Applications are open until 29 September 2024. Ten candidates will be selected and invited to pitch their ideas at an online event in October. The top three candidates will present their solutions to VA Erzberg experts at the final event in Eisenerz, Austria in early December, where two winners will be selected.

The winners will gain insights into advanced mining operations and receive benefits such as paid proof-of-concept opportunities, funding support for further research, as well as networking and coaching opportunities.



PRESSRELEASE – FOR IMMEDIATE RELEASE

To find out more and to apply for the challenge, visit: <https://eitrawmaterials.eu/open-innovation/va-erzberg-net-zero-iron-ore-challenge-for-startups-and-universities/>

For media enquiries, please contact:

Elisabeth Ippel, Communication Manager, elisabeth.ippel@eitrawmaterials.eu

About EIT RawMaterials:

EIT RawMaterials is the largest and most active raw materials knowledge and innovation network, with 300 partner organisations spanning the entire raw materials value chain and promoting the circular economy. EIT RawMaterials is mandated to lead the European Raw Materials Alliance, with 750 members and an investment pipeline of 30 projects with an investment potential of €10 billion. EIT RawMaterials is part of the [European Institute of Innovation and Technology](#) and was established in 2015 to advance Europe's transition into a sustainable economy, with a mission to secure a sustainable raw materials supply for Europe, close materials loops, and design product solutions to ultimately develop raw materials into a major strength for Europe by driving innovation, education, and entrepreneurship. www.eitrawmaterials.eu

About VA Erzberg

VA Erzberg GmbH is headquartered in the Erzberg region of Austria and operates one of Europe's largest and most significant open-pit iron ore mines. With a history spanning over a millennium, VA Erzberg is a cornerstone of the local economy and the broader European steel industry. The company is committed to sustainability, environmental responsibility, and technological innovation in mining and ore processing, focusing on efficient resource utilization and minimal environmental impact while providing high-quality iron ore to its clients. www.vaerzberg.at