

COMET PROJECT

GREEN ZINC RECYCLING – CO₂ NEUTRAL ZERO WASTE SOLUTION FOR ZINC RECYCLING

Main location: Leoben, Styria

Other locations: Location (federal state), Location (federal state)

Thematic area: Materials & Production

Thematic focuses

- Recycling of metallurgical Byproducts
- CO₂ neutral metallurgy
- Zero waste solutions for metallurgy



Planned realisation and outcomes

The overall aim of the project is to stabilize or increase the zinc recovery from the by-products steel mill dust and lead slag in future by making potential technologies “green”. This includes the minimization of the CO₂-footprint by replacing the fossil reducing agent and the optimization of the remaining slag in a way that makes it suitable for the building and construction industry.

The final results are sustainable short- to mid-term and long-term concepts that allow Austria and Europe to utilize these potential zinc resources, meeting the environmental requirements of the future.

The outcome will be a clear strategy for the treatment of high zinc containing steel mill dust and slag from the lead industry (primary and secondary). It will be clearly demonstrated by implementing the results in a new, sustainable technology scheme for steel mill dust recycling and the fuming technology for liquid lead slags.

COMET FACTSHEET

Selected company partners (max. 10):

1. ARP GmbH
2. AZR GmbH
3. Ecobat Resources Austria GmbH
4. Goriup Feuerfest GmbH
5. Nordenham Metall GmbH
6. Primetals Technologies Austria GmbH
7. Siotuu GmbH
8. Stahl- und Walzwerk Marienhütte GmbH

Selected international¹ partners (max. 5):

1. Nordenham Metall GmbH

Duration: 01.01.2024 - 31.12.2027 (4 years)

Staff employment: 13,1 FTE, thereof 12,7 scientists

Management: Dr. Jürgen Antrekowitsch
Dr. Gustav Hanke

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¹ Partners with headquarters outside Austria