



Pioneering Sustainable Recovery in Steelmaking: Hydrogen-Based Technology for Byproduct Management

Fact Sheet

Project Information

Dust2Value

Grant agreement ID: 101138742

DOI

[10.3030/101138742](https://doi.org/10.3030/101138742)

EC signature date

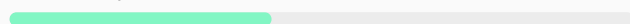
7 December 2023

Start date

1 January 2024

End date

31 December 2026



Funded under

Digital, Industry and Space

Total cost

€ 4 602 250,00

EU contribution

€ 4 602 250,00

Investment in EU policy priorities

- | | | | |
|-------------------------|-----------------------|----------------|----------------------------------|
| Digital agenda | <input type="radio"/> | Clean air | <input type="radio"/> |
| Artificial Intelligence | <input type="radio"/> | Climate action | <input checked="" type="radio"/> |
| Biodiversity | <input type="radio"/> | | |

Coordinated by

MONTANUNIVERSITAET
LEOBEN

 Austria

Project description

Pioneering hydrogen reduction technology for steelmaking

Residue from manufacturing processes presents a significant challenge to the steel industry. When recycling this residue the state-of-the-art Waelz process only focuses on recovering zinc, resulting in the loss of other valuable metals, especially iron. In addition, there is a significant carbon footprint, further exacerbating environmental concerns. To address these challenges, the EU-funded Dust2Value project will introduce an innovative hydrogen reduction technology that efficiently recovers all of the zinc while simultaneously producing an iron-rich material with a high metal content that can be used as a substitute for scrap. This process enhances circularity in steelmaking while slashing greenhouse gas emissions, paving the way for a sustainable future.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [environmental engineering](#) > [waste management](#) > [waste treatment processes](#) > [recycling](#)



Keywords

[Circular Industry](#)

[Hydrogen Reduction Technology](#)

[Heat Recovery](#)

[Hydrogen Recovery](#)

[Steelmaking Residue Recycling](#)

[CO2 Emission Reduction](#)

Programme(s)

[HORIZON.2.4 - Digital, Industry and Space](#)

MAIN PROGRAMME

[HORIZON.2.4.9 - Low-Carbon and Clean Industries](#)

Topic(s)

[HORIZON-CL4-2023-TWIN-TRANSITION-01-45 - Circular economy solutions for the valorisation of low-quality scrap streams, materials recirculation with high recycling rate, and residue valorisation for long term goal towards zero waste \(Clean Steel Partnership\).\(RIA\)](#)

Call for proposal

[HORIZON-CL4-2023-TWIN-TRANSITION-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-RIA - HORIZON Research and Innovation Actions](#)

Coordinator



MONTANUNIVERSITAET LEOBEN

Net EU contribution

€ 1 433 750,00

Total cost

€ 1 433 750,00

Address

FRANZ JOSEF STRASSE 18

8700 Leoben

 **Austria** 

Region

Südösterreich > Steiermark > Östliche Obersteiermark

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (6)



BEFESA STEEL R & D SOCIEDAD LIMITADA

 Spain

Net EU contribution

€ 1 093 000,00

Address

CTRA BILBAO PLENCIA 21
48950 ASUA ERANDIO 

Region

Noreste > País Vasco > Bizkaia

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 1 093 000,00



MAL METALLBAU ANLAGENSERVICE - LEITUNGSBAU GMBH

 Austria

Net EU contribution

€ 922 500,00

Address

INDUSTRIEPARK 11

8682 Murzzuschlag 

SME 

Yes

Region

Südösterreich > Steiermark > Östliche Obersteiermark

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 922 500,00



POLITECNICO DI MILANO



Italy

Net EU contribution

€ 293 750,00

Address

PIAZZA LEONARDO DA VINCI 32

20133 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 293 750,00



GEORGMARIENHUTTE GMBH

 Germany

Net EU contribution

€ 195 000,00

Address

NEUE HUTTENSTRASSE 1

49124 Georgsmarienhutte 

Region

Niedersachsen > Weser-Ems > Osnabrück, Landkreis

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 195 000,00



INSPYRO NV

 Belgium

Net EU contribution

€ 347 000,00

Address

AMBACHTENLAAN 54

3001 Leuven 

SME 

Yes

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 347 000,00



BEFESA STEEL SERVICES

 Germany

Net EU contribution

€ 317 250,00

Address

BALCKE DURR ALLEE 1

40882 RATINGEN 

Region

Nordrhein-Westfalen > Düsseldorf > Mettmann

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

Total cost

€ 317 250,00

Last update: 8 January 2024

Permalink: <https://cordis.europa.eu/project/id/101138742>

European Union, 2025