# ReMFra

## Newsletter March 2023 #1

#### The ReMFra project start

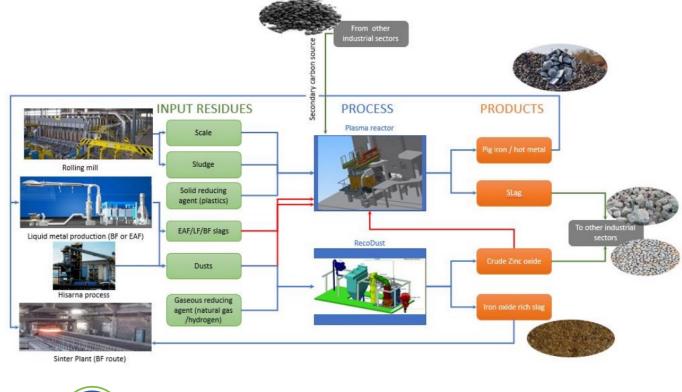
The project started on the 1<sup>st</sup> of Dezember 2022 with the full project name "Recovering Metals and Mineral FRAction from steelmaking residues"

### Objectives

The **<u>objectives</u>** of the ReMFra project is to demonstrate and qualify a system for the recovery and the valorization of the metal and mineral fractions contained in steel making processing residues, to improve the metal recovery yield, to reach the full circularity and to **<u>reduce</u>** the **<u>environmental impact</u>** of the steel sector all over Europe.

The EU production in 2020 was about 140 million tons: 57% BF/BOF route and 43% from the EAF route. This process produced several million tons of residues containing iron, zinc, and other valuable metals.

The **<u>ReMFra concept</u>** is based on 2 processes, a plasma reactor for the treatment of coarse- grain residues such as scale, sludge, and secondary metallurgical slag, and the RecoDust process for fine-grain residues.





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#### Innovation

The proposed **innovation** is to achieve a high recycling rate for residues from the steel production:

>80% specific product recovery efficiency; >90% iron recovery (Plasma)

>>>>% FeO recovery (RecoDust); >95% ZnO extraction (RecoDust)





The Kick-Off in Bergamo took place from the  $14^{th} - 15^{th}$  of February 2023

All the eight work packages of the ReMFra project were presented by the partners

After the meeting there was a plant visit at Tenaris Dalmine







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### FUNDING SCHEME

Call: Horizon Europe Clean Steel Partnership (HORIZON-CL4-2021-TWIN-TRANSITION-01-19) Type of action: Innovation Action (IA) Granting authority: European Health and Digital Executive Agency The ReMFra project receives funding by the European Union (Grant Agreement no. 101058362).

### PROJECT PARTNERS:

Starting with the project coordinator, the consortium is composed as follows:

- Tenaris Dalmine SPA (Italy, Coordinator)
- Tenova SPA (Italy)
- RINA Consulting Centro Sviluppo Materiali (Italy)
- European Steel Technology Platform (Belgium)
- voestalpine Stahl (Austria)
- University of Leoben, Chair of Thermal Processing Technology (Austria)
- FEhS Institut fuer Baustoffforschung e.V. (Germany)
- <u>thyssenkrupp Steel Europe</u> (Germany)
- Tata Steel Netherland Technology BV (The Netherlands)
- Barna Steel SA (Celsa Group) (Spain)
- K1-MET (Austria)



