NEWSLETTER

ISSUE 5 | November 2025

InSGeP

NEWS | VIEWS | ANNOUNCEMENTS

InSGeP

INVESTIGATIONS OF SLAGS FROM NEXT GENERATION STEEL MAKING PROCESSES

SNEAKPEEK

Driving Forward

Midpoint milestones | Advancing testing and simulation

Team Spotlight

Leading the way | Introducing our steelworks

Updates & Events

Breaking news | Latest findings and project activities

FROM MODEL TO LAB: PROGRESS ON EXPERIMENTAL AND SIMULATION WORK

As we enter the second half of the project, significant strides are being made to ensure effective progress toward our objectives within the remaining timeframe. One major milestone involves the production and distribution of material samples, which are critical for the upcoming phases of testing and analysis. Partners across the consortium are preparing samples at different scales, which will be shared among all members for coordinated testing. Ten distinct samples were chosen; each assigned a unique code reflecting its composition and manufacturer. Beyond laboratory efforts, substantial progress has also been made on the simulation side of the project. Partners have collaboratively developed robust simulation models equipped with multiple capabilities. These models are designed to generate valuable insights prior to physical implementation or industrial-scale testing, especially in evaluating new operational scenarios, such as varying EAF feed.

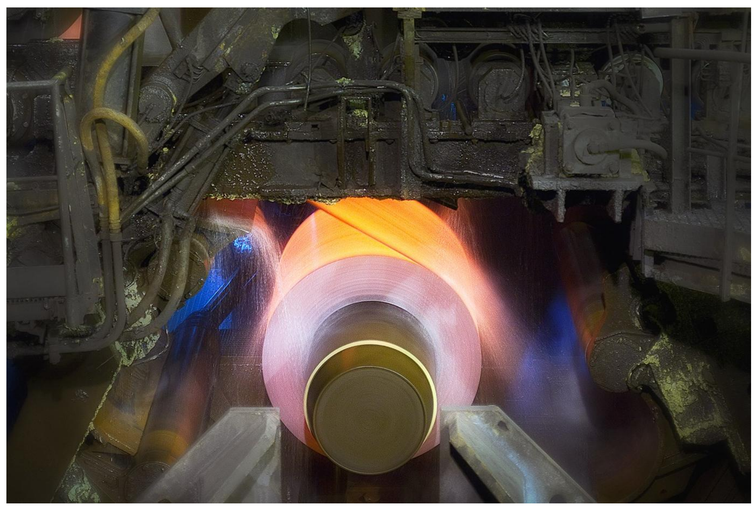
The project receives funding from the European Union's Research Fund for Coal and Steel research program under grant agreement number 101112665.

TEAM SPOTLIGHT

MEET OUR STEELWORKS

- ArcelorMittal Maizieres Research S.A. is an international research center, located in Maizières-lès-Metz, France, belonging to ArcelorMittal group, world leading steel manufacture. With about 700 full time researchers, the Maizières campus is the biggest R&D center of the Group.

The by-products team involved in the project exists since 2006 and has experience in characterization, treatment, modification and usage of all kinds of iron and steel by-products. This team is in close relationship with plants and other R&D units of the group, and it promotes activities in support of the corporate By-Products Sales team and the steelmaking plants deployed in Europe.



- sidenor is a leading European producer of special steel long products, offering a wide portfolio including wire rods, bars, billets, and cold-finished products in various steel grades.

With an annual capacity of over 1 million tons from EAF-based production, Sidenor serves key sectors such as automotive, energy, and machinery and contributes to the development of sustainable, low-impact technologies across the steel value chain. Sidenor supports the UN Sustainable Development Goals (SDGs), with a focus on SDG 13 (Climate Action) through measurable commitments to reduce its carbon footprint, and SDG (Responsible Consumption and Production) by improving material use and increasing the recovery of generated waste.

- The saarstahl Group specializes in wire rod, bar steel, semi-finished, and high-quality forged products. Its innovations support key sectors such as automotive, construction, energy, aerospace, and mechanical engineering. Saarstahl AG is a subsidiary of SHS Group,

whose aim is to strengthen and secure the two large steel companies (Dillinger and Saarstahl) on the Saar. Together with Dillinger, Saarstahl is investing in DRI and EAF technologies to produce low-CO_2 steel. The group recognizes the potential of slags in sustainable steelmaking, using them to reduce natural resource consumption. With numerous subsidiaries, the Saarstahl Group is a full-service provider in the wire rod and bar steel sector, covering the entire steel value chain. It delivers tailored solutions, from high-precision bright steel and drawn wire to forged and rail products.

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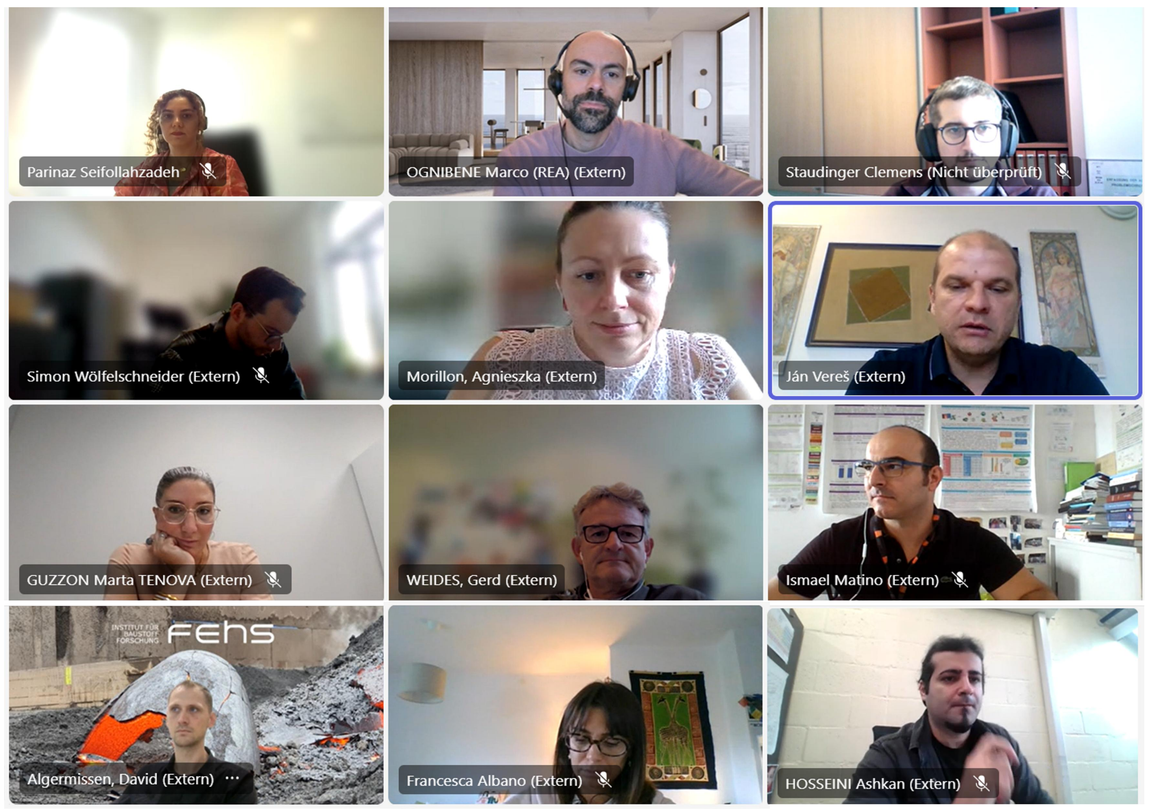
CONTINUING THE CONVERSATION

5th IN-PERSON PROJECT MEETING IN METZ

The 5th in-person project meeting was held on July 2–3, 2025, at ArcelorMittal's R&D campus in Maizières-lès-Metz, France. Over two days, participants engaged in focused discussions, strategic planning, and knowledge exchange. A guided tour of ArcelorMittal's facilities provided valuable operational insights and strengthened the team's collaborative understanding. These productive sessions laid a strong foundation for the next phase of the project with shared insights expected to be translated into impactful actions and continued sustained progress.

1st REVIEW MEETING

On September 22nd, we successfully held our first formal project review meeting, following the submission of 1st periodic report, a significant milestone as we enter the third year of our four-year journey. With the project now at its midpoint, this review offered a crucial opportunity to take stock of our achievements.



PROJECT DELIVERABLES

The project deliverables are now available for download on the InSGeP website. These documents provide valuable insights for stakeholders, researchers, and policy professionals. We invite you to visit our website and explore the PDF files of our deliverables!

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DEC MOMENTS

PARTNERS‘ CONTRIBUTION AT CONFERENCES

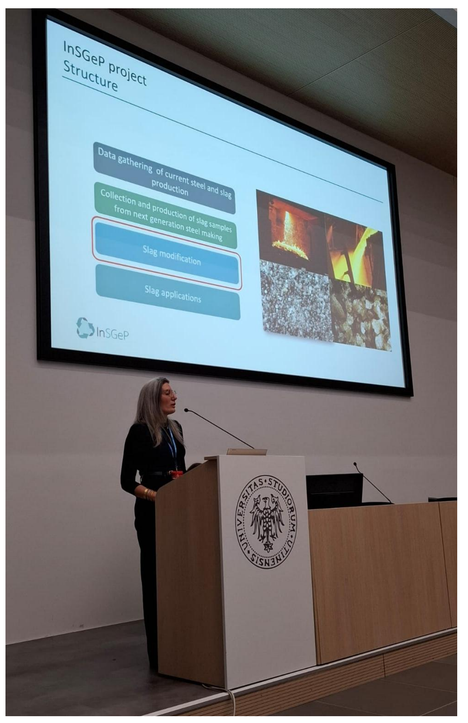
As part of InSGeP’s recent dissemination efforts, partners from SSSA, FEhS, and Tenova shared key research findings at major industry events, and their contributions highlighted innovative approaches to enhancing resource efficiency and sustainability in steelmaking. At 17th Global Slag Conference, Martina Michelle Messuti (Tenova) presented on dry granulation techniques for slags from LF, EAF, and DRI processes, sharing pilot-scale results and their industrial relevance. Her presentation was nominated for Best Presentation and achieved impressive third place. At the 7th ESTAD, Ismael Matino (SSSA) examined how evolving steelmaking processes impact slag behavior, supported by advanced simulations. Meanwhile, at ESTEP 2025, Agnieszka Morillon (FEhS) and Marta Guzzon (Tenova) presented work on data collection and granulation modelling linked to Work packages 2 and 4.

TITLES OF THE PRESENTATIONS

17th Global Slag Conference: Dry granulation of steelmaking slags: production characterization and industrial applications

ESTAD: Slag changes in future steelmaking scenarios: simulation investigation

ESTEP: Insights from Current Steel and Slag Production for Next-Generation Processes



LATEST DEVELOPMENTS

MILESTONE MOMENTS

Dissemination activities

4th Newsletter sent out in June 2025

15 Presentations at events and Conference

Target values

9 deliverables submitted

6 milestones completed

InSGeP Investigations of Slags from Next Generation Steel Making Processes

START DATE | 01-07-2023
PROJECT DURATION | 48 months
TOPIC | RFCS-02-2022-RPJ
COORDINATED BY | FEhS
CONTACT | info@insgep.eu
WEBSITE | insgep.eu

PUBLICATION DATE | November 2025

To be informed about the most recent news and developments, visit our website, follow us on LinkedIn, and sign up for our newsletter on insgep.eu!

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