HYINHEAT

European Hydrogen Week

Switching the Flame: Hydrogen for Energy-Intensive Industry - Steel and Aluminium in the context of the European Hydrogen Week.



in collaboration with

H2AL

The Hydrogen Shift

Steel and aluminium are essential metals for European industry, backed by a longstanding and proud history of production. However, these sectors are highly energy-intensive, requiring conspicuous amounts of energy for their production processes.

To meet the ambitious goals of a greener Europe, the European steel and metal industries are deeply committed to investing in effective decarbonization technologies. The use of low-carbon hydrogen as fuel is one of the viable pathways for heavy industry to drastically cut its carbon footprint.

The HyInHeat Approach

Running from 2023 to 2027, the EU-funded HyInHeat project has placed this ambitious goal at its core by pioneering the integration of hydrogen as a fuel for industrial heating. Over its lifecycle, the project focused on 8 different demonstrators to redesign combustion and induction systems specifically for H2 firing. Beyond technological redesign, HyInHeat has developed vital techno-economic assessments to ensure these systems can transition from pilots to commercially viable industrial solutions. The project consortium bridges the entire value chain, bringing together engineering excellence, scientific research, and major industrial metal producers.

Contacts:

For general queries, contact
deffendi@european-aluminium.eu

For more information about the project, visit the HyInHeat website: **https://hyinheat.eu/**

Want to learn more? Meet the HyInHeat team at the EU Pavilion throughout European Hydrogen Week.

Come and Join Us on October 27th!

As the HyInHeat project concludes, partners invite you to our final event on 27 October 2026 at European Hydrogen Week. This collaborative forum explores the broader ecosystem of hydrogen in metallurgy, combining our results with cross-sector success stories. We will feature the MaxH2DR project on eliminating coal from steel production, the H2AI initiative on aluminium processing, and the Novelis Latchford site's landmark industrial fuel switch.

The day is bookended by two crucial panels: an opening policy dialogue on the regulatory gaps challenging commercial upscaling, and a closing session addressing why natural gas NOx measurement rules cannot simply be transposed to hydrogen without creating regulatory risks.

Who can participate?

Anyone interested in finding out more about the use of hydrogen as a fuel in the steel and aluminium sectors is welcome to attend.

In particular, we invite policy makers, regulatory authorities, heavy industry representatives, energy managers, technical and scientific specialists, and members of the press to join us.

How to register?

The event is **free of charge**, but only registered participants will have access to the session room.

Register here until **22nd October.**

Please note: As this event is part of EU Hydrogen Week, two registrations are required: one for EU Hydrogen Week and another for the HyInHeat Final Event to reserve your seat. You can register using the links provided or the QR code.

HyInHeat Final Event
27 October 2026

9:45-10:00 Opening

Thomas Echterhof and Nico Schmitz
RWTH Aachen, and HyInHeat coordinators

10:00-11:00 Policy Panel - Policy First: Building the Foundation for Hydrogen Investment

Moderator: Emanuele Manigrassi, European Aluminium

- Federico Dona, Eurofer
- Matus Muron, ACER
- Abel Enriquez, ENNOH
- Luca Marsili, Hydrogen Europe

11:00-11:15 Coffee Break

11:15-12:35 Beyond Carbon: Hydrogen's Dual Role in Steel

- General presentation of HyInHeat, Thomas Echterhof, RWTH Aachen
- HyInHeat steel case study, Marc Los, 7Steel
- Overview and preliminary results of the HEU project “MAXimise H2 enrichment in Direct Reduction shaft furnaces” (MaxH2DR) - Thorsten Hauck, BFI/VDEh-Betriebsforschungsinstitut

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12:35-13:40 Lunch break

13:40-15:20 Hydrogen in Aluminium: Testing the Potential for Process Heat

- HyInHeat aluminium case study, Louis Piquard and Pierre-Yves Menet, Constellium
- H2Al case study - Alessandro Parente, ULB
- Hydrogen in Practice: A Novelis Case Study - Robert Madden, Novelis

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15:20-15:45 Key findings common to steel and aluminium (technical, environmental and economic)

Tjerk Wardenaar, PNO Innovation

15:45-16:45 Panel discussion - Managing NOx in the Fuel Switch Presentation

Moderator: Nico Schmitz, RWTH Aachen

- Lighea Speziale, Seeds Consulting
- Sébastien Caillat, Fives Group
- Toon Smets, European Commission, DG Environment

16:45-17:00 Sum-up and closing

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