

ESF25

EUROPEAN STEEL FORUM

2025 Recap

By Jill Liberto

Event Host

IDOM

Organized by



The AIST European Steel Forum 2025, held on 21 and 22 October in Bilbao, Spain, convened nearly 200 executives and technical leaders from around the world. As a cornerstone event of International Steel Week, organized in collaboration with Spain's biennial conference SteelTech, the forum explored key challenges and opportunities facing the steel industry.

Over two days, participants engaged in executive discussions, technical panels and research-driven presentations on carbon neutrality, raw material strategy, digital transformation and large-scale project execution. Hosted by IDOM, the forum highlighted the urgency of industrial decarbonization, strategic resource management and digital innovation amid geopolitical uncertainty and volatile energy markets.



Day one of the conference opened at the Bilbao Exhibition Centre with a Global Economic Panorama presented by Joseba Madariaga, director of studies at Laboral Kutxa and professor of economics and finance at Deusto Business School, highlighting macroeconomic trends that continue to shape European steel demand. This was immediately followed by a session from Leopoldo Rubinacci, deputy director general of DG Trade, providing an international perspective on trade flows, market dynamics and policy considerations impacting steel across the EU and beyond.

The first technical session, “Transformation of the European Steel Industry for Carbon Neutrality,” moderated by Jürgen Cappel, managing director, Cappel Stahl Consulting GmbH, explored the pathways for decarbonization and the strategic role of technology innovation. Panelists from POSCO, ArcelorMittal, K1-Met, Stahl-Holding-Saar, GravitHy and SSAB discussed hydrogen-based solutions, electrification and digital control technologies, emphasizing that true carbon neutrality will require transforming the ironmaking process itself — not just steelmaking.

Energy availability and infrastructure readiness were central themes in the afternoon session, “Carbon-Free Energy Sources for the European Steel Industry,” moderated by Susanne Michelic, Chair of Ferrous Metallurgy,







STEEL
TECH25
CONGRESS & EXPO
21-23 / OCTOBER

INTERNATIONAL
STEEL WEEK

ESF25
EUROPEAN STEEL FORUM

DISCUSSION PANEL 3

Strategic Iron: Balancing Availability, Quality, and Cost for Sustainable Steelmaking



Heddy Ait-Idir
Principal Advisor Steel
Decarbonization
RIO TINTO



Norman Fong
Senior Price Reporter
FARMARKETS



MODERATOR
Felix Firsbach
Vice President
BADISCHE STAHL-ENGINEERING
GMBH



Daniel Carvalho
Director, Metals & Mining
Consulting
WOOD MACKENZIE



Andrew Purvis
Director, Sustainable
Manufacturing
WORLD STEEL ASSOCIATION





Montanuniversität Leoben. Experts from Hydrogen Europe, TotalEnergies, Iberdrola, GE Vernova and Montanuniversität Leoben explored the readiness of Europe's renewable energy ecosystem to support next-generation steelmaking. Discussions emphasized that the timely deployment of both hydrogen production and renewable electricity infrastructure is critical to enabling low-carbon steel operations.

Moderated by Felix Firsbach, vice president, Badische Stahl-Engineering GmbH, the strategic management of iron feedstocks was highlighted in "Strategic Iron: Balancing Availability, Quality and Cost for Sustainable Steelmaking." Panelists from Wood Mackenzie, Rio Tinto, Fastmarkets and the World Steel Association outlined the growing constraints on high-quality direct reduced iron (DRI)-grade pellets and the implications for global supply chains, raw material sourcing and decarbonization strategies. The session underscored that iron availability is not merely a procurement challenge but a lever for both sustainability and competitiveness.

The second day of the forum, held at host company IDOM's headquarters, opened with a presentation on digital transformation across the plant life cycle, from IDOM's head of digital services Arkaitz Etxebarria. He emphasized that brownfield and greenfield sites face distinct challenges in data integration, systems interoperability and operations optimization, with digitalization serving as a critical enabler of efficiency, safety and autonomous manufacturing.

Klaus Peters, secretary general of the European Steel Technology Platform (ESTEP), presented the future of European steel research, underscoring collaborative R&D efforts to advance decarbonization technologies.

The Industry Leader Panel, moderated by AIST's general manager – commercial, John Ball, brought together senior executives from Europe and the United States to examine the challenges and opportunities shaping the global steel industry. The panelists from ArcelorMittal France, Steel Dynamics Inc., SSAB and Tubos Reunidos discussed the impacts of persistent overcapacity, inflationary pressures and elevated energy costs on market conditions. Despite these headwinds, they noted that steel producers continue to advance major long-term investments aimed at achieving carbon reduction and maintaining competitiveness. The discussion highlighted the strategic decisions required for navigating economic volatility, securing reliable energy and raw materials and positioning operations for sustainable growth in a rapidly evolving industry landscape.

The afternoon sessions focused on large-scale steel projects and plant design. Europe's steel industry is undergoing a significant transformation, with major investments in greenfield projects, technological upgrades and decarbonization initiatives. These high-stakes projects face numerous challenges, including political risks, market volatility and technical complexity, which can threaten successful execution.

The “Execution Strategies for Large-Scale Steel Projects” session, moderated by Thomas Germershausen, managing partner, KLE.GER, brought together experts from Hatch, SSAB, Hyndrum Steel and IDOM to discuss strategies for navigating





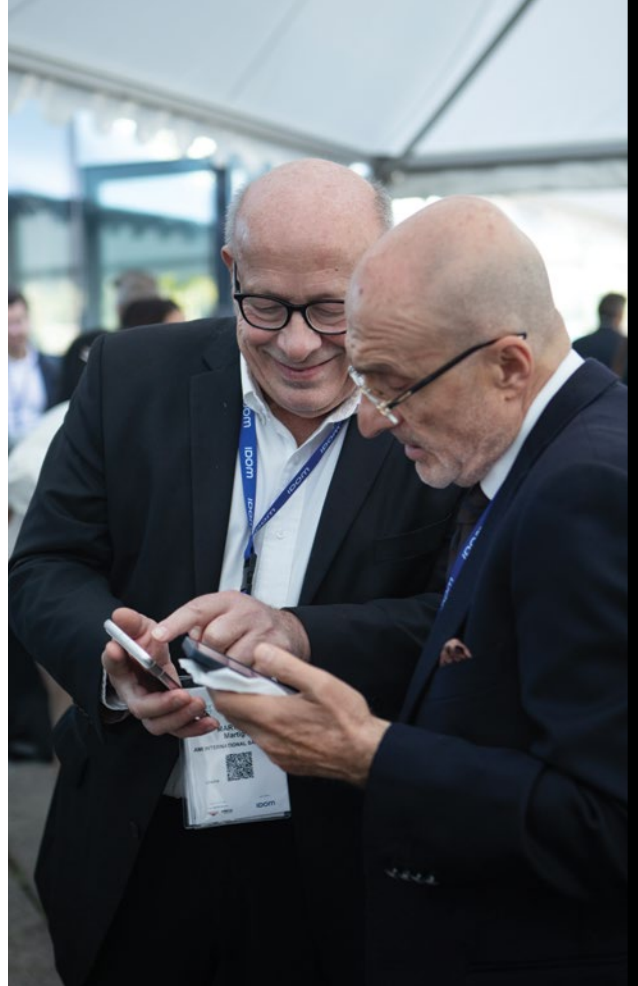




these challenges. Key themes included the importance of thorough project planning, early risk identification and disciplined management. Panelists emphasized flexibility, proactive problem-solving, and alignment with internal and external stakeholders as essential for keeping projects on track.

Overall, the discussion highlighted that successful execution requires a combination of careful planning, operational discipline and adaptive strategies. When applied effectively, these approaches can transform high-risk projects into efficient, safe and environmentally responsible steelmaking operations that deliver long-term competitive advantage.

The final panel, “Innovation in Plant Design,” moderated by Mauro Bianchi Ferri, managing director of Acciarium Srl, brought together technology leaders from Tenova, SMS group, INTECO, Primetals Technologies Austria and Danieli to showcase advancements shaping the next generation of steelmaking facilities. The panel highlighted new approaches in automation, electrical system design, and hydrogen-based processes aimed at improving efficiency, safety and product performance. Ongoing projects presented during the session illustrated how these innovations support both carbon reduction objectives and operational competitiveness, reinforcing their importance in building the steelmaking plants of the future. The forum emphasized that the successful implementation of these innovations requires rigorous project





planning, risk management and strategic alignment with long-term sustainability goals.

Keynotes by AIST executive director Ronald Ashburn and Boston Consulting Group's managing director and partner Nicole Voigt offered overarching perspectives on market transformation and the growing demand for green steel. Voigt noted that willingness to pay for low-carbon steel varies significantly by region and customer segment, reinforcing the complexity of achieving commercially viable decarbonization.

Throughout the forum, recurring themes mirrored those of previous years: the pace of decarbonization hinges on access to critical energy and raw materials, policy clarity and technological maturity. Yet there was an emerging note of optimism — Europe's steelmakers are actively pursuing hydrogen-based ironmaking, innovative project execution and digitalized operations, positioning the continent to maintain a competitive edge in sustainable steel production.

Thank You to Our Sponsors

Corporate Sponsors





The AIST European Steel Forum 2025 concluded with a gala dinner at the Guggenheim Bilbao Museum, celebrating industry collaboration and innovation while reinforcing the vital role of European steel in the global transition toward a low-carbon economy. At the dinner, Siderex presented AIST with the Communication Forum Award in recognition of its significant contribution to the dissemination and promotion of the steel sector. The AIST European Member Chapter wishes to thank IDOM, Siderex, and the Bilbao Exhibition Centre for their support and collaboration in making the inaugural International Steel Week a success.

Mark your calendar for the 2026 European Steel Forum, which will take place 27–29 October 2026, in Udine, Italy, hosted by Danieli. ♦



Event Contributors

