Hydrogen TCP

IEA Hydrogen Technology Collaboration Programme Task 52 "Hydrogen for Iron and Steelmaking" Oxford Workshop Agenda

Economic Competitiveness of Hydrogen-Based Iron and Steelmaking

Date: Friday, 25 September 2026
Time: 09:00–17:30 British Summer Time (BST)
Location: Department of Engineering Science, University of Oxford, Parks Road, Oxford OX1 3PJ, United Kingdom
Format: Hybrid (in-person and virtual participation; **by invitation** only)
Online meeting link: To be circulated to registered participants only (**3 days** before the workshop)

Workshop Objective:
To convene international industry, research, policy, finance and standard-setting leaders to assess the economic competitiveness of hydrogen-based iron and steelmaking, share evidence from projects and Task 52 analysis, identify barriers to scale-up and investment, and define practical priorities for future Task 52 work and international collaboration.

This workshop is hosted by the Department of Engineering Science, University of Oxford, convened through IEA Hydrogen TCP Task 52, and supported by the University of Oxford's EPSRC Impact Acceleration Account.

09:00–09:30 | Opening Session: Welcome, Task 52 Progress and Workshop Framing

09:00–09:05 | Welcome and Host Remarks

Prof Aidong Yang, Workshop Host, University of Oxford; Subtask A Lead, IEA Hydrogen TCP Task 52

- Welcome to the University of Oxford and acknowledgement of participating organisations

09:05–09:15 | Task 52 Progress, Expert Network and Upcoming Activities

Dr Changlong Wang, Task Manager, IEA Hydrogen TCP Task 52; Associate Director, Monash Energy Institute, Monash University

- Task 52 progress, website and growth of the global expert network
- Preview of the *Global Green Iron and Steel Atlas*, in collaboration with Global Energy Monitor (GEM)

09:15–09:30 | From Melbourne to Oxford: Framing the H2-DRI Competitiveness Challenge

A/Prof Stuart Walsh, Co-Task Manager, IEA Hydrogen TCP Task 52; Deputy Director of Research, Civil and Environmental Engineering, Monash University

- Melbourne Workshop findings
- Priority evidence gaps for industry, investors and policymakers
- Brief agenda overview and expectations for participant contributions

09:30–09:45 | Opening Industry Perspective

Ian Nachemson, Head of Technology Business Development, **Stegra**

What will it take to move hydrogen-based iron and steelmaking from demonstration to commercial scale?

09:45–10:00 | Global Outlook: Hydrogen and Heavy Industry

Dr Matthildi Apostolou, Energy Analyst (Presenter),

Dr Andrew Ruttinger, Clean Energy Technology Analyst (Q&A)

Richard Simon, Industry Sector Lead, (Q&A) **International Energy Agency (IEA)**

Global hydrogen outlook: implications for low-emission iron and steelmaking

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10:00–11:00 | Plenary Session: Task 52 Evidence Briefing

10:00–10:20 | Prof Aidong Yang, Subtask A Lead, University of Oxford
How ready are we technically? Findings from the Task 52 technology-readiness assessment

10:20–10:40 | Dr Changlong Wang, Subtask B Lead, Monash University
What will it cost? Technoeconomic evidence, iron ore requirements, and future trade

10:40–11:00 | Prof Falko Ueckerdt, Subtask C Lead, Interdisciplinary Transformation University Austria
Global steel transformation pathways: robust insights, key determinants, and uncertainties

11:00–11:30 | Morning Tea and Networking

11:30–12:30 | Panel Discussion 1 – Industry: Technology Readiness and Process Integration

Discussion focus: hydrogen and reductant supply, iron ore quality, DRI and furnace technologies, EAF/ESF integration, plant flexibility and scale-up risk.

Panel Chair: Dr Rizwan Janjua, Head of Technology, World Steel Association

Panellists:

Dr Matt Boot-Handford, Chief Scientist, **Calix**
Marco Lapasin, Vice President, **Danieli Centro Metallics**
Volker Schollmann, Head of Technology & IP, **HYBRIT Development AB**
David Osborne, Blast Furnace Technology Director, **Primetals Technologies**
Dr Katia Papalia, Business Development & Project Manager, **SMS Group**
Dr Vincent Chevrier, General Manager - Technical Sales & Marketing**, Midrex Technologies**

12:30–13:30 | Panel Discussion 2 – Industry: Global Value Chains, bankability and resources

Discussion focus: ore and feedstock security, scale-up challenges, resource and capacity constraints, first-of-a-kind risks, project location, DRI handling, customer demand and long-term offtake, bankability.

Panel Chair: Prof Max Åhman, Task 52 Lead; Head of Division, Environmental and Energy Systems Studies, Lund University

Panellists:

Guilherme Defendi, Senior Manager, Green Metal Marketing and Sales, **Fortescue**
Dr Amaury de Melo Souza, Head of Department, Energy Transition in Steelmaking, **Vale**
Göran Nyström, Partner, **FerroSilva AB and Material Logic AB**
Dr Hans-Jörn Weddige, Head of Green Transformation & Funding, **thyssenkrupp Steel**
Ian Nachemson, Head of Technology Business Development, **Stegra**

13:30–14:30 | Lunch and Networking

14:30–14:45 | Technical Spotlight: EAF-Based Steelmaking – Feedstock, Process and Technology Challenges

Prof Zushu Li, Warwick Manufacturing Group, **University of Warwick and IGNITE representative**

Insights from the IGNITE programme on EAF process performance, feedstock quality and technology development

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14:45–15:45 | Panel Discussion 3 – Enabling Projects: Supply Chains, Infrastructure and Policy Support

Discussion focus: supply-chain economics and resilience, infrastructure sequencing, electricity system integration, market outlooks, trade rules, support measures

Panel Chair: Dr Wolf-Peter Schill, Task 52 Lead; Head of Division, Transformation of the Energy Economy, DIW Berlin

Panellists:

Eleonora Moro, Policy Analyst, **OECD**
Elliot Mari, Technical Lead, Industrial Transition Accelerator, **Mission Possible Partnership**
Dr Paul Butterworth, Research Manager, **CRU Sustainability**
A/Prof Tianduo Peng, Deputy Director, Climate Change and Carbon Neutrality Research Centre, **Tsinghua University**
Prof Lenny Koh, Director, Advanced Resource Efficiency Centre, **University of Sheffield**

15:45–16:15 | Afternoon Tea and Networking

16:15–17:15 | Panel Discussion 4 – Enabling Markets: Emissions Accounting, Procurement, Standards and Certification

Discussion focus: definitions and product-level emissions accounting, certification and chain of custody, data interoperability, green public procurement and international policy coordination.

Panel Chair: Will Hall, Advisor, Pooled Fund on International Energy (PIE)

Panellists:

Isabel Geppert, **Climate Club** Secretariat at the **International Energy Agency (IEA)**
Annie Heaton, CEO, **ResponsibleSteel**
Dr Abdul'Aziz A. Aliyu, Technology Analyst, Hydrogen and Industrial Carbon Capture, **IEAGHG**
Dr Samuel Bartlett, Director, Green Hydrogen Standard, **Green Hydrogen Organisation**
Jack Fraser, GHG standards specialist**, Industrial Deep Decarbonization Initiative (IDDI), UNIDO**

17:15–17:25 | Task 52 Synthesis and Next Steps

- Priority findings and follow-up responsibilities
- Research, data, and collaboration priorities
- Forthcoming activities, including plans for COP31
- Forthcoming Task 52 outputs, expert participation letters, and the 2027 China workshop

17:25–17:30 | Closing Remarks