



IEA Hydrogen Technology Collaboration Programme Inter-Task 52 "Hydrogen for Iron and Steelmaking" Berlin Workshop

Date: Tuesday, 1 July 2025

Location: German Institute for Economic Research (DIW Berlin), Mohrenstraße 58, 10117 Berlin, Germany

Format: Hybrid (in-person and virtual participation)

Meeting join link: Meeting ID: 383 252 939 534 0, Password 4LZ7rL96.

Please note that the meeting will be recorded for internal documentation.

Workshop Objective:

To finalise the structure and scope of Inter-Task 52: *Hydrogen for Iron and Steelmaking*; connect international expertise; launch coordinated knowledge mapping, gap identification, and collaborative activities for research, industry, and policy engagement.

This workshop is supported by the German Federal Ministry of Research, Technology, and Space via the project "Australian-German Green Commodity Research" (Fkz 01DR24008) and by the Australian Government through the DCCEEW-CSIRO International Hydrogen Research Collaboration Programme.

08:00 – 08:40 | Opening Session – Welcome and Framing

Speakers:

- Introduction by **Dr. Changlong Wang** and **Associate Professor Stuart Walsh** (Monash University, Australia), Task Managers, Inter-Task 52
- Remarks by **Dr. Marcel Weeda**, Vice Chair of IEA Hydrogen TCP
- Moderation by **Dr. Wolf-Peter Schill** (DIW Berlin)

Overview:

- Introduction to Inter-Task 52 and its relevance to the decarbonisation of iron and steel
- Overview of participating institutions and interested parties
- Workshop objectives and strategic priorities
- Agenda walkthrough and expected outcomes (including **joint white paper**)

08:40 – 09:45 | Plenary Session Part 1 – Global Leadership on Industrial Decarbonisation

Lightning Presentations (5 minutes each plus brief Q&A):

- **International Energy Agency (IEA)**
Speakers: Mr. Richard Simon and Dr. Martin Kueppers (Industry Decarbonization Team Lead)
Focus: Global Iron and Steel Decarbonisation Pathways
- **United Nations Industrial Development Organization (UNIDO)**
Speaker: Mr. Hugo Thomas Salamanca Dejour (Steel Breakthrough Facilitator)
Focus: The Steel Breakthrough Agenda - Global Coordination and Policy Frameworks



- **Clean Energy Ministerial – Industrial Deep Decarbonisation Initiative (CEM-IDDI)**
Speaker: Mr. Andrew Swanson (Partnerships Manager)
Focus: Green Public Procurement and Global Demand Signals
- **World Steel Association**
Speakers: Dr. Rizwan Janjua (Head of Technology)
Focus: Low-Carbon Iron and Steelmaking – Global Efforts
- **World Bank**
Speakers: Dr. Dolf Jean Gielen (Hydrogen Programme Lead)
Focus: Future Iron and Steel Industry Location Choice – The Hydrogen Factor
- **Mission Possible Partnership / Energy Transitions Commission**
Speaker: Ms. Rachel Howard (Director for Industrial Decarbonisation)
Focus: Private Sector Investment and First-Mover Leadership

Panel Q&A: All speakers address questions from audience

09:45 – 10:15 | Morning Tea and Informal Networking

10:15 – 11:00 | Plenary Session Part 2 – Regional Drivers of Green Steel: Policy & Research

Lightning Presentations (5 minutes each plus brief Q&A):

- **Heavy Industry Low-carbon Transition Cooperative Research Centre (HILT CRC)**
Speaker: Ms. Jenny Selway (CEO)
Focus: Green Steel Research and Innovation in Australia
- **European Commission**
Speaker: Dr. Alessandra Colli (Program Manager in the European Commission's DG-RTD for the Clean Steel programmes under Horizon Europe)
Focus: EU Support for Steel Decarbonisation
- **OECD**
Speaker: Mr. Gianpiero Mattera (Economist) and Ms. Anna Lockwood (Analyst)
Focus: OECD Global Green Iron Revolution Project—Australian Case Study
- **Geoscience Australia**
Speaker: Dr. Andrew Feitz (Director of Low Carbon Geoscience and Advice)
Focus: Advancing Green Steel through Geoscience

Panel Q&A: All speakers address questions from the audience

11:00 – 12:30 | Subtask Presentations and Collaborative Input

Each Subtask Lead presents the objectives, methodologies, and international collaboration strategy for their stream, followed by partner input.

- **11:00 Subtask A - Technology Mapping and Readiness**
Lead Organization: University of Oxford
Speaker: Professor Aidong Yang
Scope: Assessment of hydrogen-based iron and steelmaking technologies, technology readiness levels, and process energy/material requirements



- **11:30 Subtask B - Green Iron and Steel Supply Chains and Infrastructure**
Lead Organization: Monash University
Speaker: Dr. Changlong Wang
Scope: Comparative analysis of supply chain options, infrastructure requirements, and regional business relocation scenarios
- **11:50 Subtask C - Global Steel Pathways, Competitiveness, and Power System Integration**
Lead Organization: Potsdam Institute for Climate Impact Research (PIK)
Co-Lead: German Institute for Economic Research, DIW Berlin
Speaker: Dr. Falko Ueckerdt
Scope: The steel transformation in global scenario modelling, competitiveness of hydrogen-based routes, implications for global steel production and trade pattern, grid integration of industrial hydrogen demand, and power system impacts
- **12:20 Joint white paper** - Short intro on Purpose, Scope and Process - Dr. Falko Ueckerdt (there is more time at the last session of the day)
- **Allocation of breakout rooms** for afternoon session

Partner Input & Discussion:

- Identification of priority areas of exploration and knowledge gaps
- Mapping of institutional capabilities and interests
- Collaboration mechanisms (data, models, publications)
- Anticipated outputs and their relevance to global policy and industry

12:30 – 13:45 | Lunch Break

13:45 – 15:15 | Parallel Breakout Sessions – Deep Dive Collaboration

Participants self-select into parallel groups aligned with individual subtasks or cross-cutting themes

Breakout Objectives:

- Define shared objectives and pressing gaps of knowledge for achieving the objectives
- Identify synergies and complementary expertise across institutions
- Discuss mechanisms for collaborative outputs, including white papers, datasets, models, and policy briefs
- Explore how knowledge mapping and gap analysis can inform policy and industry decisions globally

Room Allocation:

- Room 1: **Technology** + online participants
- Room 2: **Supply Chains** and **Global Pathways** + online participants
- (Potentially additional groups in available offices if needed)



15:15 – 15:30 | Coffee Break

15:30 – 16:30 | Final Plenary Session – Synthesis and White Paper Planning

Breakout Reports

- Each breakout group presents key findings and collaboration opportunities

Subtask Leaders Synthesis

- Subtask leaders synthesize feedback and finalize scope and collaboration plans

Joint White Paper Planning

- Purpose and Scope
- Process: Writing responsibilities and timeline

Next Steps

- Confirmation of subtask leadership and participation
- Milestone planning and upcoming workshops:
 - **February 2026** -- Melbourne, during the Australian Hydrogen Research Conference
 - **June 2026** -- Oxford, United Kingdom

Closing Remarks:

- Summary of commitments and next actions
- Contact coordination and follow-up mechanisms



Institutions participating in the workshop

(To be updated)

Adelaide University

Agora Industry

Australian Government Department of Industry, Science, and Resources

Department of the Treasury

Australian Hydrogen Research Network

Australian National University

Australian Trade and Investment Commission

Calix Global

CEEW

CSEP

Chinese Academy of Science

Clean Energy Ministerial

Commonwealth Scientific and Industrial Research Organisation

Cyan Venture

DIW Berlin

European Commission

Fortescue

Fraunhofer ISI/IEG

Geoscience Australia

GFG Alliance

IEAGHG

Green Hydrogen Standard

HILT CRC

IEA

IETS TCP

IIASA

ISGAN TCP

IW Köln

K1-MET

Kawasaki Heavy Industries

Korea University

Lund University

LUT University

Mission Possible Partnership

Monash University

Nanjing Steel

OECD

PIK Potsdam

Primetals Technologies

PTJ (DE)

Responsible Steel

SINTEF

Smart Energy Council

Swedish Energy Agency

The Superpower Institute

Thyssenkrupp Nucera

Tsinghua University

TU Berlin

TU Delft

TU München

UNIDO

University of New South Wales

University of Oxford

University of Tokyo

Utrecht University

WIVA P&G

World Bank

World Steel Association

Wuppertal Institute