



## IEA Hydrogen Technology Collaboration Programme Task 52 "Hydrogen for Iron and Steelmaking" Melbourne Workshop

**Date:** Thursday, 12 Feb 2026

**Location:** Learning and Teaching Building, 19 Ancora Imparo Wy, Clayton VIC 3168, Australia

**Format:** Hybrid (in-person and virtual participation)

**Zoom meeting link,** Meeting ID: 863 0899 1133, Password: 875405.

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

### Workshop Objective:

To convene Asia-Pacific industry, research, and policy leaders to discuss hydrogen-based iron and steelmaking, share regional case studies and technology progress, identify priority gaps, and inform IEA Hydrogen TCP Task 52 analysis, outputs, and future collaboration.

*This workshop is supported by the National Foundation for Australia–China Relations, through The Superpower Institute and Monash University's Powering Clean Industry Partnerships for a Net Zero Future initiative, the Green Steel Leaders Forum (GSLF), as well as the Monash Engineering Research Talent Accelerator Programme.*

---

### 09:30–10:00 | Opening Session: Welcome and Framing

Session Chair: **Stuart Walsh**, Co-Task Manager, IEA Hydrogen TCP Task 52, Monash University

*Welcome remarks*

**Aijun Huang**, Associate Dean (International), Faculty of Engineering, Monash University

*Task 52 introduction and workshop framing*

**Changlong Wang**, Task Manager, IEA Hydrogen TCP Task 52, Monash University

### Session Overview

- Introduction to Task 52 and its relevance to iron and steel decarbonisation
- Overview of participating institutions and stakeholders
- Workshop objectives and strategic priorities
- Agenda walkthrough and expected outcomes, including a joint white paper

---

### 10:00–11:00 | Plenary Session 1: Technology (15-minute presentations plus brief Q&A)

Session Chair: **Shreejan Pandey**, Director, Monash Energy Institute

**Geoffrey Brooks**, Joint Professor, Sustainable Mineral Processing, Swinburne University of Technology and CSIRO

*Hydrogen ironmaking technologies: status and development*

**Shibo Kuang**, Deputy Director, ARC Research Hub for Smart Process Design and Control; Acting Director, Monash–BHP–Baowu China Knowledge Centre

*Development of low-carbon metallurgical technologies*

**Martin Smith**, Business Development Director, Primetals Green Technologies

*Hydrogen DRI using low-quality iron ores*

---



## 11:00–11:15 | Morning Tea and Networking

---

## 11:15–12:30 | Plenary Session 2: Strategic Context (12-minute presentations plus brief Q&A)

Session Chair: **Baethan Mullen**, CEO, The Superpower Institute

**Thomas Lingafelter**, Senior Manager, Greenhouse  
*Insights from the Greenhouse–World Economic Forum green iron workshop*

**Ingrid Burfurd**, Policy Lead, The Superpower Institute  
*A green iron plan for Australia*

**Heather Colclough**, Assistant Director, Energy Initiatives and Advice, Geoscience Australia  
*Mapping Australia's green iron and steel potential*

## Panel discussion: Australia's Opportunities and Challenges in Green Iron Supply Chains

Panel Chair: **Scott Hamilton**, Director, Smart Energy Council

Scene Setting: **James Boyle**, Australia Country Lead, Mission Possible Partnership  
*Global low-emission iron and steel project tracking*

Panellists:

**Rachelle Doyle**, Research Lead, HILT CRC; Fellow, Australian Academy of Technological Sciences and Engineering

**Johann Rinnhofer**, CEO, Thyssenkrupp Nucera Australia

**Dimitri Lafleur**, Chief Scientist, Australasian Centre for Corporate Responsibility

**Richard Carcenac**, Senior Manager for Green Metal Technology, Fortescue

---

## 12:30–13:10 | Task 52 Overview and Collaboration Discussion

- **Task A**, Technology mapping and readiness assessment
- **Task B**, Green iron and steel supply chains and infrastructure
- **Task C**, Global pathways, competitiveness, and trade

*What inputs and priorities should Task 52 consider towards 2026?*

## Partner Input Topics

- Mapping institutional capabilities and interests
  - Collaboration mechanisms for data, models, and publications
  - Priority output areas for policy and industry relevance
- 

## 13:10–14:00 | Lunch

---

## 14:00–16:00 | Asia-Pacific Industry and Policy Updates



Session Chair: **Fiona Simon**, CEO, Australian Hydrogen Council

## **Australia**

**Jenny Selway**, CEO, The Heavy Industry Low-carbon Transition Cooperative Research Centre (HILT CRC)  
*Collaboration in Australian low-emissions iron and steel research*

---

## **China**

**Tianduo Peng**, Associate Professor, Director of Zero-carbon Transportation & Industrial Transition, Institute of Climate Change and Sustainable Development, Tsinghua University  
*DRI production potential in China*

**Li Wang**, Country Head China, Transition Asia  
*Case studies of low-carbon transition practices in Chinese steel enterprises*

**Yinghao Liu**, Chief Scientist, China Baowu Steel Group  
**Gangming Huang**, Head of Operations Improvement Department, Baosteel Zhanjiang Iron & Steel  
**Lisheng Liang**, Assistant General Manager and Director of the Ironmaking Plant, Baosteel Zhanjiang Iron & Steel  
**Shiming Tang**, Director of the Engineering Management Office, Ironmaking Plant, Baosteel Zhanjiang Iron & Steel  
*China's first one-million-tonne near-zero carbon hydrogen shaft furnace*

**Changliang Liu**, Deputy Director, Institute for Industrial Development, Nanjing Steel  
*Green iron for specialty steel*

**Guangyu Ma**, Director, Environment and Resource Technology Research Institute, Ansteel Group  
*Integrated pilot plant for green power and hydrogen fluidized bed ironmaking*

---

## **Japan**

**Yuko Nishida**, Senior Manager, Renewable Energy Institute  
*System and policy perspectives on hydrogen and steel in Japan*

---

## **South Korea**

**Rachel Eun Ko**, Managing Director, Next Group  
*South Korea's green steel development and policy perspectives*

**Myoung Gyun Shin**, Senior Vice President and Head of the Low-Carbon Iron & Steel Making R&D Center, POSCO Holdings  
*Update on POSCO's hydrogen-based ironmaking process HyREX®*

---

**16:00–16:10 | Coffee Break**



---

## 16:10–17:00 | Breakout Discussions: Parallel Sessions

Participants join breakout groups aligned with subtasks or cross-cutting themes.

### Breakout Objectives

- Identify shared objectives and priority knowledge gaps
- Identify institutional synergies and complementary expertise
- Suggest potential collaborative outputs including white papers, datasets, models, and policy briefs
- Support global policy and industry decision-making through gap analysis

### Task A – Technology Mapping and Readiness

Moderator: **Alfonso Chinnici** (Chair of Sustainable Energy & Energy Transition, Adelaide University)

- Consolidate technology list and readiness criteria
- Identify priority data gaps and industry inputs

### Task B – Supply Chain and Infrastructure

Moderator: **Stuart Walsh** (Subtask B co-lead, Monash University)

- Priority Asia-Pacific corridors and infrastructure bottlenecks
- Potential datasets, partners, and assumptions to explore

### Task C – Pathways, Competitiveness and Trade

Moderator: **Wolf-Peter Schill** (Subtask C co-lead, Head of Division, Energy, Transportation, Environment Department, DIW-Berlin)

- Scenario framing and competitiveness metrics
- Outputs most useful for industry and policy relevance

---

## 17:00 | Report-Back, Alignment and Close

### Report-Back

- Task A, B, and C summaries
- Cross-task alignment and shared definitions

### Joint White Paper Discussion & Planning

- Purpose and scope
- Writing responsibilities and timeline

### Next Steps

- Confirmation of subtask leadership and participation
- Upcoming workshops
  - September 2026, **Oxford**, UK; March to May 2027, **Beijing**, China