

ACBC WA and ANU Present:

# Australia-China Decarbonisation Roundtable

Green steel, hydrogen, and battery minerals

Thursday 4th August 2022

## Australia-China Decarbonisation Roundtable: Green steel, green hydrogen and battery minerals

ACBC and ANU are pleased to present this thought-provoking roundtable that will explore existing and future collaboration between Australia and China on decarbonisation. Attendees will hear from leading industry and academic experts whose discussion will focus on **Green Steel, Green Hydrogen and Battery Minerals**.

This is the second in a series of roundtable events on Australia-China links on low-carbon technology transitions, sponsored by the National Foundation for Australia-China Relations.

Australia and China's low-carbon transitions are deeply linked through their energy systems and value chains. Low-carbon transitions open opportunities to establish new energy, resource and processing industries in Australia, on the basis of natural resource endowments and industrial capabilities. It is therefore critical for many Australian businesses, governments and other stakeholders to develop a deep understanding of China's low-carbon transition.

Join our curated panel of experts to discuss existing and potential collaboration between Australia and China in Green Steel, Green Hydrogen and Battery Minerals.

*This workshop is the second of a series of ANU organized events on Australia-China links on low-carbon technology transitions, sponsored by the **National Foundation for Australia-China Relations**. It is convened by **ANU Crawford School of Public Policy** in association with **ANU Centre for China in the World** and **Grand Challenge Zero Carbon Energy for the Asia-Pacific**.*



# Event details

**Date:** Thursday 4th August 2022

**Time:** 12:00pm - 5:00pm AWST (12:00pm lunch for 1:00pm start)

**Location:** In-person (by invitation only) AND online

The Ritz Carlton Perth, 1 Barrack St, Perth WA 6000

**Cost:** Attendance is complimentary, thanks to generous sponsorship from the National Foundation for Australia-China Relations

**This event consists of two sessions:**

**More panelists and keynote speaker to be announced**

**Session 1: Green Steel**

1:00pm – 2:30pm AWST

- Biying Yu – Professor and deputy director, Center for Energy and Environmental Policy Research, Beijing Institute of Technology
- Christopher Stanley McMahan – Group Manager Technical Marketing, Fortescue Metals Group
- Siqi Wang - Senior Manager, Global Marketing, Sinosteel Engineering & Technology Co., Ltd.
- David Leigh – General Manager Steel Decarbonisation, Rio Tinto
- John Pye – Associate Professor, College of Engineering & Computer Science, ANU
- Session moderator: Frank Jotzo – Professor, Crawford School of Public Policy, ANU

**Session 2: Green Hydrogen & Battery Minerals**

3:00pm – 4:30pm AWST

- Yuki Yu - Founder and head researcher, Energy Iceberg
- Yasmin Liu - Executive Vice President (Chief Strategic Integration Officer) of Tianqi Lithium Corporation China (TLC) and the President and CEO of Tianqi Lithium Energy Australia Pty Ltd. (TLEA)
- Craig Buckley - John Curtin Distinguished Professor in Physics, Curtin University
- Wenting Cheng - Research Fellow, College of Law, ANU
- Session moderator: David Cullen - Chair of Energy sub-committee, ACBC WA

# Speaker information

## Session 1:



### **Biying Yu**

**Professor and deputy director, Center for Energy and Environmental Policy Research, Beijing Institute of Technology**

Biying Yu's recent research focus on energy policy and energy economics, energy system modeling, carbon emissions and climate policy, time use behavior, and etc. She has performed high-level research projects supported by NDRC, MOST, and NSFC in China. She has published over 50 papers in top journals including: Nature Energy, Nature Climate Change, Nature Communications, etc.



### **Christopher Stanley McMahan**

**Group Manager Technical Marketing - Fortescue Metals Group**

Chris has a background in analytical chemistry, QA/QC, QMS, R&D and process control, and over 30 years of professional experience in mining and metallurgy. Chris also represents the Minerals Council of Australia within the International Standards Organisation, and has previously worked with Anglo American, Rio Tinto and Alcoa. Fortescue Metals Group also operates Fortescue Future Industries, which is progressing major investments in the production and supply of green hydrogen and green ammonia for industrial decarbonisation. The Technical Marketing team which Chris leads is also responsible for the evaluation of alternative green iron and steel making technologies, positioning the Fortescue businesses to supply the raw materials required by a future decarbonised iron and steel making industry.



### **Siqi Wang**

**Senior Manager, Global Marketing, Sinosteel Engineering & Technology Co., Ltd.**

Siqi majors both in international economy and international law with IMBA background. She joined Sinosteel Engineering & Technology (Sinosteel) 14 years ago. She has also gained overseas working experience in Germany for DEUTZ. Sinosteel is a leading general contractor in China and has made outstanding contributions to the development of Chinese metallurgical industry by accomplishing over 600 national key projects for giant Chinese steel producers. Siqi has witnessed the global decarbonisation trend and is playing a key role in this low-carbon transition. With the contract signing of the Chinese first hydrogen based direct reduced iron demonstration project of Baowu Zhanjiang executed by Sinosteel, Siqi and her team are stepping up to promote and market Chinese "Green Steel" technology actively in South Asia, Europe and Australia. With her enthusiastic passion for the future "dream steel plant", she is making great effort to achieve green and low-carbon sustainable development of the global iron and steel industry.



### **David Leigh**

**General Manager Steel Decarbonisation, Rio Tinto**

David has accountability for managing the range of Rio Tinto's scope 3 initiatives related to its iron ore sales. This includes partnerships with steelmakers, engineering companies and multiple research providers and universities in search of low carbon emission steelmaking technologies. David has been with Rio Tinto since 1989. Over this 33 year career, he has worked across a range of leadership and technical roles, covering most facets of Rio Tinto's business including; research and development, technology creation, technology implementation, new business, government relations, plant operations, contract negotiation, technical marketing and project engineering. Steel decarbonisation is a fast-evolving sector and a fulfilling opportunity for David to combine his personal passion to reduce carbon emissions with his diverse skillset and professional experience.



### **John Pye**

**Associate Professor, College of Engineering & Computer Science, ANU**

John Pye is Convener of the Renewably Refined Metals program in the Australian National University's Grand Challenge: Zero Carbon Energy for the Asia Pacific. John is also engaged in the Heavy Industry Low Carbon Transition Cooperative Research Centre (HILTCRC), Australia's leading collaboration transforming heavy industry for the low-carbon economy, where he focuses on opportunities for hydrogen ironmaking in Australia.



### **Frank Jotzo (session moderator)**

**Professor, Crawford School of Public Policy, ANU**

Frank Jotzo is professor of environmental economics at the Australian National University's Crawford School of Public Policy, and Head of Energy at the ANU Institute for Climate Energy and Disaster Solutions. His research and project leadership spans policy instruments for emissions reductions, economics of decarbonisation, opportunities in the transition to net zero emissions systems and international dimensions of climate change and energy policy.

# Speaker information

## Session 2:



### Yuki Yu

#### Founder and head researcher, Energy Iceberg

Energy Iceberg is a boutique policy & market intelligence provider striving on bridging the Chinese energy market knowledge gap. Since it was founded, Energy Iceberg has brought forth unique insights into the Chinese hydrogen, energy storage, and renewable markets. Yuki has over 12 years of experience in the Chinese electricity and renewable industry. Prior to setting up Energy Iceberg, she had worked for one of the Chinese grid companies as a researcher for 7 years.



### Yasmin Liu

#### Executive Vice President (Chief Strategic Integration Officer) of Tianqi Lithium Corporation China (TLC) and the President and CEO of Tianqi Lithium Energy Australia Pty Ltd. (TLEA).

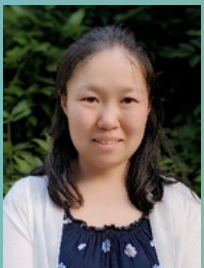
Ms Liu has a major in Law from the Southwest University of Political Science and Law and a Master's degree in Human Resource Management (MA. Human Resource Management) from the University of Hertfordshire. She received professional certification from the Chartered Institute of Personnel and Development in 2004. Before joining Tianqi Lithium Corporation China, Ms Liu was held senior management positions at Walmart Department Store Co., Ltd. Ltd., and Coca Cola (Sichuan) Beverage Co., Ltd.



### Craig Buckley

#### John Curtin Distinguished Professor in Physics, Curtin University

Prof. Buckley leads the Hydrogen Storage Research Group at Curtin University, and is currently the Australian executive committee member for the IEA Hydrogen Technology Collaboration Program. His research is focussed on hydrogen storage materials and the investigation of the structural properties of a wide range of materials. Craig has been a lead/co-investigator on over \$100 M of research funding and has published over 225 peer reviewed scientific papers.



### Wenting Cheng

#### Research Fellow, College of Law, ANU

Wenting Cheng is a fellow under the Grand Challenge program Zero Carbon Energy for the Asia-Pacific. Her current research focuses on energy regulation and norm collision in the trade-climate nexus, including intellectual property and clean technology diffusion, the regulation of green finance, and the international negotiation on environmental goods. Her research also extends to specific regulatory mechanisms for energy, in particular off-shore wind power and hydrogen.



### David Cullen (session moderator)

#### Chair of Energy sub-committee, ACBC WA

Currently Energy Chair at ACBC WA, David has over 40 years' experience in the oil and gas industry. In more recent years, he has worked in BP's Australian Upstream business with a focus on Domestic Gas and LNG marketing. David was based in Beijing for 2.5 years as NWS's Chief Representative and has acted as Australian Co-Chair of the Australia China Natural Gas Technology Partnership Fund, providing support and direction for the development of knowledge and cultural exchange for Australians in China and Chinese gas professionals in Australia.

# Event Partners



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