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SUMMARY REPORT: Dialogue Outcomes and Recommendations for Action

Australia-EU Green Hydrogen Dialogue EU Climate Dialogues (EUCDs)

Project partners











including Hydrogen



Executive Summary

The Australia European Union Green Hydrogen Dialogue brought together stakeholders across the green hydrogen and derivative value chain across the various jurisdictions and member states, underscoring the pivotal role of renewable hydrogen in the global energy transition. Recognising the opportunity for Australia to become a major exporter of green hydrogen and derivatives to Asia-Pacific and EU, the Dialogue series undertook a series of deep dives on current bottlenecks and explored solutions to unlock this value chain. Common consensus amongst the practitioners and policymakers is that enhanced international and bilateral cooperation is key to create business opportunities and share knowledge on policies, technical, financial, regulatory and sustainability aspects of green hydrogen production, investment and trade. This report synthesises key outcomes from the Dialogue, providing recommendations for various stakeholders to address challenges and expedite hydrogen deployment.

The key recommendations arising from the Dialogue series can be summarised as follows:

- 1. Research and Development: Emphasise collaboration between research sectors and industry to increase the Technology Readiness Level (TRL) of hydrogen technologies, de-risk their uptake, and reduce costs.
- 2. Finance and Investment: Australian Governments should support market-making schemes to align supply and demand prices, enabling participation in initiatives like H2Global and the European Hydrogen Bank.
- 3. Multi-level Governance: Enhance coordination between Australian federal, state, and local governments to develop and upgrade infrastructure, particularly ports and electrical transmission lines.
- 4. Certification and Standards: Ensure interoperability of the Australian Guarantee of Origin scheme with those in the EU and key export markets.
- **5. Social Licence**: Involve local communities early in project design to build social licence and share benefits, with support for local firms' participation in large-scale projects.
- 6. Sustainable Finance: Harmonise approaches to hydrogen-related activities in the Australian and EU sustainable finance taxonomies.

The Australia EU Green Hydrogen Dialogue underscored the importance of co-ordination and cooperation across government, industry, and research sectors. The integration of these efforts will be crucial in overcoming barriers and facilitating the deployment of green hydrogen, contributing to global sustainability and energy transition goals. The report calls for continued dialogue and collaboration to refine these recommendations and adapt to evolving policy measures.

Introduction

The **European Union's Climate Dialogues (EUCDs)** project was launched in February 2022 with the following interlinked objectives, to:

- 1. Facilitate exchanges on climate policy options, expertise, success stories and good practices between the EU and non-EU major economies with a view to informing policy development in partner countries.
- 2. Advance bilateral trade, investment, and innovation in pursuit of the Paris Agreement goals.
- 3. Contribute to improving public awareness, including in the business community, of challenges and opportunities associated with the implementation of the Paris Agreement.

The Australia EU Green Hydrogen Dialogue (AUS EU Dialogue) funded under the EUCD project aimed to facilitate knowledge sharing and increase awareness through dialogue on technical, financial, regulatory and the sustainability aspects of green hydrogen production, investment and trade related to green hydrogen derived from renewable electricity sources both on land and offshore.

The thematic focus of the AUS EU Dialogue covered the technical, financial, regulatory and sustainability aspects of green hydrogen (and derivatives) production, investment and trade, with the specific topics for each Dialogue proposed by the Project Partners being:

The AUS EU Dialogue covered the following five main themes:

- **1. Scaling Up Green Hydrogen**: Discussing the global state of play and strategies to accelerate production.
- 2. Green Financing: Exploring pathways and state-of-play in financing hydrogen projects.
- 3. Supply Chain Challenges: Addressing design and development issues.
- 4. Social Licence and Environmental Impacts: Enhancing community acceptance and mitigating impacts.
- 5. Opportunities Beyond Hydrogen: Investigating Power-to-X (PtX) solutions.

These themes also aligned with recent policy development in Australia and in EU, reinforcing the thematic focus of this dialogue series. For instance, during the period in which the Dialogues were held from March to June 2024, the Australian Government announced several policy and budget measures that related to identified challenges and recommendations for action eg: <u>Future Made in Australia</u> on matters such as renewable hydrogen, low carbon liquid fuels, strengthening standards and streamlining approvals processes for renewable energy projects, finance and investment. The Australian Federal Government also announced the second iteration of the Hydrogen Headstart Program as well as proposing a \$2/kg tax credit for hydrogen production in Australia.

This period also saw bilateral agreements between the EU and Australia, one being the Joint Statement on EU Australia Energy Relations by EU Commissioner for Energy Kadri Simson and Minister for Climate Change and Energy, The Hon. Chris Bowen, and the Memorandum of Understanding between the European Union and Australia to co-operate on a bilateral partnership on sustainable critical and strategic minerals.

Dialogue Design

The Dialogue comprised invitation only roundtable discussions with key stakeholders from Australia and the European Union to exchange insights, experiences and good practices. Five Dialogue sessions engaged participants from business, policy, civil society and academic sectors between March – June 2024 in roundtables with generally between 15 -30 expert representatives from Australia and the EU (see <u>Appendix 1: Dialogue Participant Organisations</u>).

A final report on Dialogue outcomes and recommendations for action was developed drawing on the insights from the Dialogue Sessions to the main regulatory, technical and any other challenges to green hydrogen deployment, proposing solutions and actions per stakeholder groups to address these barriers to accelerate the production, trade and investment in green hydrogen between the EU and Australia and globally.

Dialogue Outcomes – Challenges, Barriers And Solutions

The challenges and barriers identified during each Dialogue session and actions proposed to address these by different stakeholder sectors are summarised below:

Dialogue #1: Scaling And Accelerating Hydrogen Production – Global State of Play

- Research and Development is being supported in the EU with funding distributed across the value chain, in the private sector, at universities and research institutions, and at start-ups. Funding is technology-agnostic and is allocated towards technologies of both high and low TRL. Funding projects are co-designed with industry.
- 2. Technology Scaleup in the EU is mostly focused on scaling electrolyser production and deployment, especially on achieving local manufacturing capacity. A partnership of manufacturers and other companies across the supply chain is being established.
- 3. The Australian H₂ Economy can be unlocked through EU offtake agreements, that will provide a demand for the local production of green hydrogen. Initiatives such as H₂Global can play a role to assist in matchmaking.
- 4. Ports and Hubs are crucial infrastructures for the hydrogen economy. Challenges for implementation include lack of space and competition with other uses, as well as access to financing (for port infrastructure). Engagement and collaboration is proposed between Australian and EU port initiatives to share knowledge and practices, for example, the North Sea Hydrogen Valley Ports and Ports of Rotterdam, Flanders and Bremen and the Hydrogen Valleys program.
- 5. Enabling Policies in the EU and Australia should include investment and market development for hydrogen in hard to abate sectors such as fertiliser production. Concerns have been raised by ammonia producers of consumer reluctance to pay green premium for ammonia, however car manufacturers such as BMW have shown that they are willing to pay for green steel. Policy should further define aspects such as what constitutes renewable fuels of non-biological origin (RNFBOs).
- 6. Certification Schemes have been and are in development in the EU and Australia. It is important for mutual recognition and coherence between these schemes, which must also be designed to

facilitate export to markets which may not have such a scheme in place. It was noted that the EU has adopted voluntary schemes to assess greenhouse gas emissions for hydrogen production.

Dialogue #2: Green Financing of The Hydrogen Economy

- Green hydrogen projects, spanning from small to export scale, face challenges in progressing to commercial decision (i.e. FID) due to risk allocation concerns. Risk factors were multifold and diverse, ranging from technology, offtake agreements, land availability, and supply chain risks. A national approach to co-ordination across supply chains was called for to identify and mitigate these risks and to overcome deployment challenges.
- 2. Government support was critical to the commercial viability of hydrogen projects, with new market-making schemes like the US IRA, EU Hydrogen Auction and the SIGHT Program in India, along with initiatives like Hydrogen HeadStart in Australia, required to support and match both the supply and demand side.
- 3. Diverse sources of finance were essential to the management of risk allocation and development of green hydrogen projects, including more flexible, larger and longer-term government investment in large scale hydrogen projects eg: such as special investment funds.
- 4. Interoperable sustainable finance taxonomies between the EU and Australia were critical to facilitate further investment into hydrogen and derivative projects.
- 5. The Carbon Border Adjustment Mechanism (CBAM) introduced in the EU could trigger a "race to the top" on the international scale, as to remain competitive, nations may need to adopt their own CBAM mechanisms, fostering a global movement towards higher environmental standards and creating an international trade price signal leveraging and reinforcing the EU CBAM.
- 6. A greater focus on technological advancement i.e.: Technology Readiness Level (TRL) progression across the supply chain was imperative to meet hydrogen and other industry expectations.

Dialogue #3: Challenges in the Design and Development of Green Hydrogen Supply Chains

- 1. Australia possesses significant renewable energy potential, particularly in solar and wind power, making it ideal for large-scale green hydrogen projects.
- 2. Despite high potential, challenges such as community acceptance and limited grid infrastructure (and in some cases, limited port infrastructure) hinder scaling up hydrogen production and exports in Australia.
- 3. Encouraging both production and demand for green hydrogen and its derivatives is crucial to developing these value chains. Challenges in the green steel industry highlight the importance of diversifying suppliers and mitigating commercial risks.
- 4. The future of hydrogen export hinges on technological innovation and strategic infrastructure development. Investments in infrastructure must be adaptable to accommodate emerging technologies to optimise the hydrogen value chain.
- 5. The EU's leadership in green hydrogen regulation presents significant opportunities for trade, particularly for nations like Australia. The EU seeks to do business with nations sharing similar democratic values, providing avenues for developing new trade relationships and renewable energy supply chains.

Dialogue #4: Social Licence, Community Acceptance and Environmental Impacts

- 1. Energy transitions historically have lacked fairness, necessitating a just transition for equitable distribution of benefits and burdens. A systematic and comprehensive approach to value creation is required to assess the social, environmental and economic impacts on diverse groups impacted by energy innovations and industries.
- 2. Social license for renewable energy projects requires an evidence-based understanding of the social context, with lessons to be learned from successful models in Germany and Texas that emphasise community participation in the development of longer-term visions and an understanding of future needs to inform proactive policy design.
- 3. Hydrogen production raises specific community concerns around safety and water security, highlighting the importance of regulations and early community education and engagement to build trust and transparency around hydrogen production and place-based sustainable water solutions.
- 4. Standards and certification are vital to ensure there are clear conditions around engagement and planning consents applied to renewable energy projects so communities can see tangible social benefits for their region. Project proponents can demonstrate their recognition of and commitment to the critical role of First Nations Project peoples and indigenous traditional owners of land and waters through, for example, Reconciliation Action Plans.
- Co-ordination and collaboration across multiple levels of government federal, state and local – which takes a community and place-based rather than a project focussed perspective is essential to overcome organisational silos and cumulative project impacts and to foster local and regional community social acceptance.

Dialogue #5: Opportunities Beyond Hydrogen – PtX

- 1. Hydrogen derivatives including renewable ammonia and methanol will play a key role in enabling green shipping corridors to decarbonise the maritime sector, which is seeing increased policy and funding support to reach net-zero.
- 2. To unlock the true benefits of Power-to-X, an enabling framework encompassing standards, regulation, certification, policies and sectorial strategy is required.
- 3. The role of direct air capture technologies in a future green fuel supply chain is critical and more investment and research is required to advance this.

Recommendation For Actions Per Stakeholder Sector

The Dialogue discussion outcomes have informed the proposed recommendations for action by different stakeholder sectors to overcome the identified challenges and to expedite hydrogen deployment as follows:

Australian Federal Government

The Federal Government in Australia and the EU and its Member States have a key role in developing sustainable global hydrogen supply chains. As outlined above, the risk profile of this emerging industry arising from technical financial and regulatory challenges and lack of clear market signals for off-take underpins the critical role of government to unlocking this value chain. Some actions for the Federal Government, proposed by Dialogue discussions include to:

Government support and incentives

1. Continue and enhance current funding support provided to both project developers and offtakers to bring down the price mismatch between the supply price at which green hydrogen and derivatives can be generated and exported to EU and at the same time, the demand price at which green hydrogen and derivatives can be used by consumers in EU without taking a significant toll on the consumer budget. Transparency in such support is a must for the Australian Federal Government, with the per kg hydrogen subsidy provided to producers and end-users needing to be communicated to all stakeholders.

Based on insights provided by project developers in Australia in response to the Hydrogen Headstart program in Australia, it is recommended that the funding amount be increased to bring additional export focused projects into FID and potentially design and develop schemes that target projects for the EU market, in partnership with the EU and member states. Similarly, initiatives such as H2Global and the European Hydrogen Bank could be further tailored to increase Australian participation.

Research and Development across the supply chain

2. Support further research and development to bring emerging technology in this industry to market to ensure further cost reductions. In Australia, while there remain funding opportunities to bring up the technology readiness level (TRL) of hydrogen and derivative technologies, they are mostly focused for lab-scale and at present significant funding is required to trial these technologies in larger prototype and demonstration facilities. In the EU, the Horizon Europe program and other funding schemes such as Clean Hydrogen Partnership are shown to successfully enable such TRL enhancement and it is recommended to replicate such models in Australia.

Cross jurisdictional funding that allows trialling of EU technologies in Australia (and vice versa) is also recommended. To this end, Australia's participation in the Horizon Europe research program through government co-funding is recommended as an early, low-hanging pathway for enhanced joint-research. Furthermore, programs such as HyGate, which was jointly funded by Australian and German Governments to integrate emerging technologies within demonstration plants led by commercial entities are recommended to be further scaled up.

Enhanced co-operation and knowledge sharing between EU and Australia

3. Facilitate further co-ordination, co-operation and knowledge sharing amongst Australian and EU partners. Dissemination of project learnings and research findings is critical for the broader ecosystem to advance the green hydrogen economy. In Australia, CSIRO maintains and operates the HyResource website, which is an online portal that outlines and links both industry and research projects related to hydrogen. In the EU, initiatives by the Clean Hydrogen Partnership such as the European Hydrogen Observatory and Hydrogen Valleys platforms also assist with knowledge sharing by providing data, information and collaboration on large-scale integrated hydrogen projects along the value chain. Dialogue participants indicated that the exchange of knowledge through readily accessible knowledge platforms and bilateral engagement such as that facilitated by the AUS EU Dialogue, should continue to play a key role in facilitating such bilateral co-operation and co-ordination.

An initial knowledge sharing initiative suggested was that the exporting/importing ports in EU and Australia co-ordinate the development of the hydrogen value chains and share knowledge on challenges related to safety, and concerns around ammonia handling. Other themes for future collaboration and knowledge sharing suggested were in the development and regulation of critical minerals/strategic raw materials value chains.

Co-ordination role of national government

4. National governments and the European Union are recognised as having to play an active role to play in co-ordinating the various activities of respective state and local and regional governments. In the case of Australia, states often have multiple government departments all working to support hydrogen economy but without synergy, causing bureaucratic red-tape and duplication for project approvals and development. Similarly, the EU importing ports will play a critical role in facilitating the hydrogen economy not just for their member state but across the European region. Access to EU funding for the upgrading of port infrastructure if therefore required, which national governments alone are unable to support.

Land use and supply chain risks (such as electrolyser ordering time and electrical connection issues) pose significant challenges in project viability, prompting calls for Australian national co-ordination. Whereas Australian states were putting initiatives in place to address these issues, a cohesive national strategy was needed. Such collaboration within 'Team Australia' is crucial for the hydrogen industry, including urging state governments to ensure a level playing field for electricity pricing.

Interoperability of hydrogen standards and certification schemes

5. The Australia Federal Governments and the EU and member states can play a major role to ensure hydrogen certification schemes are developed to be coherent and interoperable. As the Australian certification scheme is under development, it is recommended that the Australian Government Guarantee of Origin scheme be designed in the context of the regulations and standards in numerous overseas markets (including Asia-Pacific and Europe).

Globally harmonised sustainable finance taxonomies

6. Development of coherent sustainable finance taxonomies by both the EU and Australia, spearheaded in Australia by the Federal Government, is key to ensuring critical finance and investment necessary for the green hydrogen economy development. The Australian Federal Government can play a key role in communicating the development of this taxonomy with the relevant stakeholders and the harmonisation of how hydrogen is treated under such schemes in Australia.

State and Local Governments

In both Australia and the EU, sub-national ie: local and regional governments play a crucial role in project permits, land and water approvals, assisting with attaining project social license and providing funding and subsidies to close the pricing mismatch between hydrogen production price and the consumer preferred buying price. Dialogue participants suggested that Australian state and local governments increase support through the following actions:

- 1. The State and Local Governments can play a key role in co-ordinating and supporting processes related to planning, land purchase and electrical connectivity outlined above. In the EU, it would be of value if Member States and regional/provincial governments were co-ordinate amongst each other to develop a coherent import and end-use strategy for imported hydrogen and derivatives.
- 2. Local governments play a critical role in renewable energy and hydrogen projects gaining social license. With hydrogen and derivative project spanning multiple states and regions, broader Federal and State government cross-border and cross-local government collaboration is required.
- 3. The State and Local Governments should work closely and co-ordinate with the Federal Government on the upgrading of infrastructure, notably that of ports and electrical transmission lines, that underpins the hydrogen and derivative value chain. In both EU and Australia, this has typically not yet been a priority.
- 4. Identification and supporting local firms within the state and local government region to be part of large hydrogen and derivative projects. This would not only enable local participation in projects to allow attainment of social license, it would also help improve regional and local economies. In many cases, project developers working in a new region would not be privy to local business capabilities, which state and local governments can play a key role in promoting.

Industry and Business

Despite considerable support from governments and some market demand, many of the hydrogen and derivative projects have failed to proceed beyond FEED and into FID, sometimes raising questions about the viability of green hydrogen and derivatives being able to accelerate in the next decade. On the off-take side, clarity is required on concrete demand and price expectations from consumers arising from the integration of green hydrogen within current supply chains. To address these issues, industry stakeholders proposed the following actions:

- 1. Off-takers in Europe should carry out analysis on how much integration of green hydrogen at various prices will impact final product prices and convey this clearly to consumers. Dialogue participants opined that consumers in Europe are quite open to an increase in steel pricing arising from green iron/green steel pathways and similar market analysis should be carried out for other hydrogen derivatives and their end-use.
- 2. Industry can work with research organisations and universities to further support and demonstrate emerging hydrogen technology within the value chain, to de-risk uptake of these technologies to reduce costs. In recent times in both Australia and in EU, many grant funding pathways encourage such technology translation activities.
- 3. To attain social license and alleviate project concerns, industry can and should involve the local and regional community early in the project design and decision-making process, a step that has been historically overlooked until project announcements were made. It was noted that early onboarding of local communities has led to significantly more positive views and acceptance of projects.

4. Developers of publicly supported projects should clearly convey FEED findings more widely to community and other stakeholders and outline the complexities that may hinder proceeding towards FID. Such transparent communication will help alleviate concerns from stakeholders on the potential for wastage of public finance in developing risky projects.

Whilst publicly funded hydrogen projects in both the EU and Australia are required to publish knowledge sharing reports, the communication of their findings to the broader public has been limited. Industry has a key role in such communications and could address community concerns through initiatives such as site tours, community education programs, and collaborations with local universities to demystify safety issues and build trust.

Research

By its very nature, research can be pursued in various directions for hydrogen and its derivatives. Whilst this may lead to a wide range of outcomes, it is recommended that greater co-ordinated research efforts along the value chain are needed to ensure that constrained resources and technical expertise are used to solve specific and applied industry problems, in addition to the fundamental research that has underpinned the development of numerous hydrogen and derivative technologies.

Some recommendations for the research community are:

- Research between Australia and EU should be co-ordinated and facilitated through further research exchanges and dialogues. For instance, in the EU, liquid organic hydrogen carriers (LOHCs) receive considerable attention but in Australia they are not yet considered to be the carrier of choice and hence stakeholders raise questions whether these types of projects should indeed be funded. These questions can indeed be avoided through further exchanges between Australian and EU research partners.
- 2. The research community should work alongside government to recalibrate technology advancement, specifically through proper categorisation of what constitutes a level in the Technology Readiness Level (TRL) scale. The research community would potentially face industry backlash if technologies "oversold" and do not meet industry expectations.
- 3. Focus on scalable research efforts and develop more prototype and demonstration units of technologies to test real-world deployability of lab-scale findings and results.
- 4. Reflecting the approach of the Clean Hydrogen Partnership in the EU and ARENA TRAC Program in Australia, projects should be co-designed with industry with research funding distributed across the value chain for the private sector, research institutions and start-ups.

Conclusions

The AUS EU Dialogue has underscored the significant potential of renewable hydrogen in addressing global energy transition needs. Through a series of expert dialogues, the initiative has identified key areas for collaboration and action between Australian and European stakeholders, emphasising the necessity of integrated efforts across research, finance, governance, certification, and community engagement. The key areas for future policy and other actions by Australian government, industry and research sectors that were highlighted by participants during the Dialogue sessions are:

- 1. Research and development: Collaboration between the research sector and industry across the value chain for emerging hydrogen and derivatives technology to increase the Technology Readiness Level and de-risk uptake and reduce costs.
- 2. Finance and investment off-take and supply/demand prices: Enhanced Government support for market-making schemes for both project developers and off-takers to reduce the price mismatch between supply price and demand price, including to enable Australian participation in initiatives such as H2Global and the European Hydrogen Bank auctions.
- **3. Multi-level governance**: Greater co-ordination and collaboration between Federal, State and local governments in the development and upgrading of infrastructure that underpins the hydrogen and derivative value chain, notably that of ports and electrical transmission lines.
- **4. Certification and standards**: Australian Guarantee of Origin scheme to be interoperable with schemes in the EU and key export markets in the Asia Pacific region.
- 5. Social licence: Project developers to involve local and regional communities t early in the project design and decision-making process to build social licence and ensure sharing of the costs and benefits, with State and local government support for local and regional firms to participate in large-scale hydrogen and derivative projects.
- 6. Sustainable finance: Ensure harmonisation and coherence in the approach to hydrogen related activities in the Australian and EU sustainable finance taxonomies
- 7. EU and Australia ports initiative: An initial focus for co-operation and knowledge sharing between the EU and Australia is proposed between the exporting/importing ports in the EU and Australia as being critical for the broader hydrogen ecosystem and value chains.

The dialogue series has highlighted the necessity of ongoing international co-operation to overcome challenges and leverage opportunities in the green hydrogen sector. The recommendations provided aim to facilitate a robust and sustainable hydrogen economy, contributing to global efforts in mitigating climate change and promoting energy security. Such continuous exchange of knowledge and experiences between the EU and Australia is crucial for advancing the hydrogen agenda and achieving mutual energy and environmental goals.

Appendix 1: Dialogue Participant Organisations

ACCIONA ENERGIA

ACEN

AECOM

AEMC

ALGA

ANZ

Ark Energy

ARUP

Australian Stock Exchange

ATCO

Aurecon

Australian Academy for Technology Sciences and Engineering

Australian Gas Infrastructure Group

Australian Hydrogen Council

Australian Local Government Association

Australian Sustainable Finance Institute

Beyond Zero Emissions

Bluescope Steel

Bureau Veritas

Carbon280

Central Queensland University

Certscape

Clean Energy Council

Clean Energy Finance Corporation

Clean Hydrogen Partnership

Climate Energy Finance

Climate-KIC Australia

Committee for the Hunter

CPB Contractors

Commonwealth Scientific and Industrial Research Organisations (CSIRO) **Cultural Chameleon**

Department of Energy, Environment, Climate and Action, State of Victoria

Deloitte

Department of Climate Change, Energy, Environment and Water (DCEEW), Federal Government, Australia

Department of Foreign Affairs and Trade (DFAT), Federal Government, Australia

DG CLIMA European Commission

DG ENER European Commission

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) European Commission

DNV Australia

Endua

Energy Cycle

European Union Delegation to Australia, Canberra

Ferron Energy

Food Agility CRC

Fortescue Future Industries

Gary Testro Law

German Australian Chamber of Commerce and Industry

German Australian Hydrogen Alliance

GHD

Gladstone Regional Council

Global Centre for Climate & Security Governance (GCSG), University of Queensland

Global Counsel

Greenhouse

Griffith University

H2 Society Australia

H2Q Hydrogen Queensland

HIF A/Pac

Hunter Water Corporation

Hydgene

Hydrogen Europe

HYpe Certification

Iberdrola Australia

Inner West Council

Institute for Sustainability, Energy and Resources, University of Adelaide

Institute of Sustainable Futures, University of Technology Sydney

Linde/BOC

Low Emissions Technology Australia (LETA)

Macquarie Group

Macquarie University

Ministry of Economic Affairs, Ports and Transformation, Bremen, Germany

Ministry of Foreign Affairs, Denmark

Monash University

Net Zero Economy Agency

Net Zero Network

NewH2 Cluster

Nordion Energi

Norton Fulbright

NSW Decarbonisation Innovation Hub

ORICA

OTK

Ottereon Group

Parrington Group

Pollination

Port of Newcastle, New South Wales Port of Rotterdam, Netherlands

Queensland Farmers Federation

RE-Alliance

Regional Area Planning and Development (RAPAD) Queensland

Renewable Hydrogen Coalition - Europe

Renewables, Climate and Future Industries, Department of State Growth, Tasmania

RES Group

Roundtable on Sustainable Biofuels Smart Energy Council Star Scientific Sustain Intelligence The Superpower Institute Thyssenkrupp, Australia TPG University of Bremen University of New South Wales University of Newcastle University of Queensland Energy Systems University of Technology Sydney

University of Wollongong -Green Steel Research Hub

UTS DAB School of Built Environment

Vestas

Vireo Energy

Wood Plc

Woodside Energy

Woolworths Group

Yara Clean Ammonia