



# INDUSTRY ASSOCIATION REVIEW

ALIGNMENT ON CLIMATE

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**“Decisive action and collaboration are key to addressing the climate challenge, including working with industry associations to support a lower-carbon future.”**

**Peter Coleman**  
Chief Executive Officer and  
Managing Director

# A message from our CEO

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## **Achieving net zero emissions is going to require collective action from industry, governments and communities, across all available networks.**

This report summarises the findings of our 2020 industry association review, focusing on climate alignment. We report how 12 associations that are active in climate advocacy measure up against three of our key climate positions (refer page 8).

This analysis has reinforced the value of our rigorous management and continuous governance of memberships.

We maintain memberships that support our business priorities, align with our objectives, and provide value to the company and our shareholders. Specifically, we ensure no material misalignments exist with our climate positions as we work towards a net zero future.

We acknowledge our shareholders' growing interest in how we as a company navigate the energy transition to ensure Woodside continues to deliver value for decades to come and support a lower-carbon world.

We support the Paris Agreement goals and commitments and carbon neutrality by the second half of this century. We are actively working on ways we can progress this and our aspiration is that by 2050 we will be at net zero in relation to all our direct carbon emissions.

Already, we are making positive strides towards this. We are on track to achieve the 5% energy efficiency improvement target we set for 2016-2020, and have set a new target of 5% for the five years that follow.

Natural gas is essential to the global energy transition, providing energy the world needs while displacing more carbon-intensive fuels and enabling further growth in renewables.

Liquefied natural gas (LNG), in particular, has an important role to play in slowing growth in global emissions while expanding access to modern energy.

Woodside has decades of experience exporting LNG to customers in Asia, where we expect growing demand as countries seek to shift away from higher-carbon fuels.

Leveraging our existing expertise, we are investigating the potential for hydrogen and ammonia, working with customers and research partners to develop new energy technologies and markets.

We are also exploring technologies that involve the capture and use of carbon to minimise and manage its atmospheric impact. In 2020, we progressed our native tree-planting projects with our partner Greening Australia to generate quality carbon offsets.

In a sign of the centrality of climate change to our considerations, I have appointed a Senior Vice President Climate, who reports directly to me and is responsible for driving our approach and overseeing our emissions-reduction initiatives.

We acknowledge there are diverse views on how best to achieve the Paris Agreement goals and commitments. We won't always agree with all views articulated by associations, but through our memberships, we are working to influence the positioning of key associations in support of net zero.

Industry associations facilitate collaboration to develop climate solutions. They also generate significant debates that inform us and give us the opportunity to support the development of robust climate policy.

Decisive action and collaboration are key to addressing the climate challenge, including working with industry associations to support a lower-carbon future.

A handwritten signature in black ink, appearing to read 'Peter Coleman'. The signature is fluid and cursive, written on a white background.

**Peter Coleman**  
Chief Executive Officer and Managing Director

# Executive summary

## Woodside is a member of a range of industry associations in Australia and across the globe.

These associations play multiple roles, including setting technical standards, sharing best practice, facilitating stakeholder engagement and giving members a forum for discussion of a range of topics.

Our memberships help us to become better informed on issues that directly impact us, or topics that our industry influences. While the views of industry and the associations of which we are a member often align, it would be wrong to say this is always the case. Woodside makes its own views known through public statements, including in published submissions and executive speeches.

This report summarises the findings of our 2020 industry association review, focusing on the climate positions of relevant associations. The review that generated this report forms part of our ongoing industry association monitoring activities.

Section 1 outlines the roles that associations play to support industry and the wider community, including coordinating an industry response to unexpected events like the COVID-19 pandemic. Other groups promote industry best practice, for instance on process safety - something that is a high priority for Woodside.

Section 2 explains our governance of industry association memberships and the continuous monitoring we undertake. These processes assess associations' alignment with our objectives, address any divergence and ensure that memberships support our business priorities and deliver value.

Section 3 summarises the findings from this year's climate alignment review. Our continuous approach to managing memberships explains why we have identified no material misalignment with the 12 associations reviewed. However, some misalignment was identified with the Canadian Association of Petroleum Producers (CAPP) due to insufficient explicit or implicit endorsement of the Paris Agreement goals and commitments and net zero by 2050. Based on our current business priorities, we have chosen to discontinue our memberships with CAPP, the Canadian LNG Alliance, the International Gas Union and the World Energy Council.

Sections 4 and 5 profile our memberships of bodies and research organisations which are actively working to progress lower-carbon climate solutions, whether through the development of new energy sources or through decarbonising existing supply chains. These memberships give us access to the networks and expertise that will support us to achieve Woodside's own climate ambitions.

Climate change is a global challenge that requires cross-sector collaboration. Acting alone, none of us would be able to achieve net zero, so it is important that we use available networks, including industry associations, to progress this common goal.

## Snapshot: Ways we are supporting a lower-carbon future



We have set a target to **improve energy efficiency by 5%** against baseline over 2016-20, with a new 5% target for 2021-25.



We are **investing A\$40 million in research to progress Australia's transition to a lower-carbon economy** through our Woodside-Monash Energy Partnership.



We have signed up to:  
**The World Bank's Zero Routine Flaring by 2030 initiative**  
**The Guiding Principles for Reducing Methane Emissions Across the Natural Gas Value Chain**  
**International Emissions Trading Association's Markets for Natural Climate Solutions Initiative.**



We are committed to **offsetting equity reservoir CO<sub>2</sub> emissions across our global portfolio from 2021.**



Through our partnership with Greening Australia, **we are undertaking large-scale, native tree planting projects to generate carbon offsets.**

# Section 1: The role of industry associations

## Woodside belongs to associations that bring together industry participants for a range of purposes.

Some associations, like the Business Council of Australia (BCA), draw members from across Australia's economy to advocate for conditions that support economic growth. Others, like the Australian Petroleum Production and Exploration Association (APPEA), are specific to our industry and play an important role in promoting best practice.

Some associations are formed to build understanding and facilitate progress on a specific issue – the Carbon Market Institute, for example, focuses on the transition to a net zero emissions economy.

While climate change is a significant issue for many associations, their remit is often much broader and we derive value from our memberships through a number of their services.

Additional roles associations can play has been evident during the COVID-19 pandemic, with peak organisations rallying response and relief efforts and coordinating industry actions to support economic stability.

### Coordinating industry responses to COVID-19

During the COVID-19 pandemic, industry associations have provided an interface between government and industry, facilitating a joint effort to minimise health and economic risks to Australia.

At a State level, the Chamber of Minerals and Energy Western Australia (CMEWA) and APPEA's Perth office were effective in coordinating real-time feedback from industry and aggregating a uniform industry view to the Western Australian Government on compliance with rapidly evolving health regulations and the impact of restrictions on the economy.

The coordinated effort supported the Government's decision-making and assisted businesses to manage the impacts of travel restrictions and physical distancing requirements. It also enabled industry to work on protecting the health of staff and the community, and continue to operate under challenging conditions, thereby protecting crucial jobs and services.

The BCA played a similar role at a national level, sourcing information from businesses on the impacts of the pandemic and policy responses and informing government considerations, including via Treasury's Business Liaison Unit.

Associations also coordinate funding from their members for community initiatives. For example, the CMEWA COVID-19 Community Support Initiative is using donations from members to support COVID-19 patients in remote and regional WA, as well as to support mental health and provide essential supplies to vulnerable community members. Woodside contributed to this initiative.





## Guiding process safety best practice

Woodside aims to be an industry leader in health and safety outcomes to protect people, communities and environments. Partly we achieve this through memberships of associations like the Energy Institute and the IChemE Safety Centre, which provide access to industry-leading process safety knowledge, standards and continuous improvement in industrial safety practices.

The Energy Institute is a global, independent network representing energy sector professionals and engaging in energy-related issues across the globe. Their process safety framework is widely applied across industry as best practice for managing hazards in high-risk operating environments. The framework, developed with input from industry and health, safety and environment regulators, is embedded in Woodside's operational and project management processes and gives us confidence that we operate our assets at an industry-leading standard.

IChemE Safety Centre is the leading professional body for chemical, biochemical and process engineers. The COVID-19 pandemic introduced new risks to our operations, altering the way we needed to operate to maintain safety. Drawing on feedback from member organisations including Woodside, the Centre published guidance on maintaining process safety during the pandemic. This included advice on mitigating risks posed by the increased presence of flammable liquids (e.g. hand sanitiser) on site, operating with less staff and managing increased distraction and stress levels at work. The publication of lessons-learned from incidents, guidance, studies and a network of industry leaders in process safety provides us with key information to continue developing our understanding of risks, and how we consider them in the design and operation of our assets.

# Section 2: Reviewing our memberships

## Woodside’s oversight and governance of memberships is embedded in our management processes.

This includes an approval process to join new associations; continuous monitoring of all active memberships; regular reviews on how they align with Woodside’s objectives, policies and principles; and assessing the overall value they provide to our business.

Our internal monitoring process ensures that associations we belong to advocate positions that broadly reflect Woodside’s and that our memberships continue to deliver value for our company and shareholders.

Climate change and greenhouse gas emissions are a significant issue for our business, and are identified in our 2019 Sustainable Development Report as the leading material issue for both our internal and external stakeholders.

When we monitor our memberships, we also consider how they manage our other two material issues: health and safety performance, and social and cultural impacts on communities.

An Executive Steering Group, made up of the most senior representatives from Woodside’s Corporate Affairs, Investor Relations, Legal and Environment areas, meets at least twice a year to formally assess alignment and membership value.

If a membership no longer supports business priorities or a material misalignment is identified that cannot be addressed through constructive engagement, the membership is reconsidered at a senior level.

Woodside’s Executive Committee, CEO and the Board of Directors also review memberships annually.

## Our memberships governance process



As part of our ongoing monitoring, in 2020 we continued to focus on alignment of climate positions of relevant associations. This report summarises these findings.

## Alignment on climate: review process

Our Executive Steering Group oversaw this review and presented findings to Woodside's Executive Committee, CEO and the Board of Directors for endorsement.

### 1. Selecting associations

For the purposes of assessing climate alignment we consulted our internal memberships register and selected associations we consider to be active in climate advocacy.

#### ASSOCIATIONS REVIEWED IN THIS REPORT

Australian Industry Greenhouse Network

Australian Petroleum Production and Exploration Association

Business Council of Australia

Canadian Association of Petroleum Producers

Canadian LNG Alliance

Carbon Market Institute

Chamber of Commerce and Industry WA

Chamber of Minerals and Energy WA

International Gas Union

International Association of Oil and Gas Producers

IPIECA

World Energy Council

### 2. Comparing positions

The review assessed how the views of these associations align with the following climate positions that Woodside advocates:

- » Support for Paris Agreement goals and commitments and global net zero emissions by 2050.
- » Support for appropriate protection to manage the social and economic costs of the transition.
- » Support for lower-emissions technologies and other pathways to reducing/offsetting emissions.

We assessed associations as either aligned, some misalignment identified or misaligned based on the following conditions:

- **Aligned:** Associations found to broadly share Woodside's climate positions.
- **Some misalignment identified:** Associations found to not broadly share Woodside's climate positions.
- **Misaligned:** Associations found to have views that contradict Woodside's climate positions.

### 3. Analysing information

We considered each association's most recent policies and principles, public statements, relevant media reporting and our own understanding of their positioning to determine how they align with Woodside's.

If an association did not take a public stance on the Paris Agreement goals and commitments or support global net zero by 2050, we engaged Woodside representatives that regularly interact with them to seek further clarity on their position to appropriately determine alignment.

### 4. Addressing misalignment

If misalignment was identified, we considered the significance of the issue and the scope Woodside has to influence from within. We then measured these misalignments against the broader value of the membership. A key consideration to Woodside is that divergence on some issues may be outweighed by the overall benefits of membership.

If misalignment cannot be addressed through constructive engagement, Woodside will further assess whether the membership should continue.

#### Limitations of review

This review and its findings are reflective of Woodside's views only.

We endeavour to provide a fair summary of the positions taken by industry associations but recognise that this analysis involves interpretations and judgement.

By measuring alignment against the three specified climate positions, we also acknowledge it is possible that there may be divergence on issues that sit outside the scope of this review.



# Section 3: Findings

## Our review assessed the climate positions and advocacy of 12 industry associations active in climate advocacy.

We have summarised our findings and alignment assessment for these associations below. All associations were found to be aligned except for the Canadian Association of Petroleum Producers, which we identified some misalignment with.

### Aligned

#### **Australian Industry Greenhouse Network (AIGN)**

The AIGN is a network of industry associations and businesses representing Australia's resources and manufacturing industries in the climate change policy debate.

Woodside is a corporate member and we participate in monthly network meetings.

The AIGN advocates for climate policy that creates positive short and long-term outcomes and considers sustainable industrial development and economic growth. Developed in 2010, their climate policy principles include promoting public and private investment in first-of-a-kind low emissions technologies; implementing efficient and effective greenhouse gas emissions reporting; and adoption of adaptation strategies based on sound science.

While the AIGN does not explicitly endorse net zero emissions by 2050, they support the United Nations Framework Convention on Climate Change (UNFCCC) processes and targets, and publicly welcome the Paris Agreement goals and commitments and carbon neutrality by the second half of this century.

We assessed the AIGN as aligned.

#### **Australian Petroleum Production and Exploration Association (APPEA)**

APPEA is the peak national body representing Australia's oil and gas industry, and supports a national climate change policy that delivers abatement at least cost and facilitates broad-based investment decisions consistent with an international price on carbon.

Our Executive Vice President Development and Marketing sits on the Board of Directors and chairs APPEA's Greenhouse and Energy Policy Committee. We also participate in a number of working groups.

In 2017, APPEA published the Gas Vision 2050: Reliable, secure energy and cost-effective carbon reduction statement: a vision for gas out to 2050 with a focus on decarbonisation and the role of technology in a lower-carbon future. Options for driving emissions reduction through technology are further outlined in a recent APPEA submission to the Federal Government's Technology Investment Roadmap Discussion Paper.

In 2020, APPEA is engaging with members to update its Climate Change Policy Principles. These principles were formalised in 2010 and updated in 2015, noting the objectives of the Paris Agreement goals and commitments.

As a member of APPEA, Woodside participates in regular information and policy discussions and encourages APPEA to offer pragmatic solutions that see our industry make a contribution to Australia's emission reduction target under the Paris Agreement.

While APPEA does not explicitly support net zero by 2050 it does broadly share Woodside's climate positions. Woodside is actively involved in APPEA's ongoing climate change principles review and will continue to engage with them to strengthen alignment.

On this basis, we assessed APPEA as aligned.

#### **Business Council of Australia (BCA)**

The BCA is a peak association representing the chief executives of Australia's largest companies. The BCA provides a platform to contribute to national dialogue focused on economic growth and social issues.

Our CEO sits on the Board of Directors and we participate in several working groups.

The BCA explicitly endorses the Paris Agreement goals and commitments and transitioning to net zero by 2050, and for the past year has been engaging closely with members to develop a detailed policy position that supports progress on this. The BCA is also a member of the Australian Climate Roundtable, a cross-sector alliance dedicated to participating in informed, constructive climate policy debate.

In January 2020, the BCA released a scoping paper for its energy and climate change project, focused on developing a comprehensive energy and climate change policy package driven by science, technology and innovation to help Australia achieve net zero emissions by 2050.

Since then, the BCA has been engaging with members through technical working groups to finalise details of this policy package. Woodside is actively involved in these consultations.

Consistent with Woodside's views, the BCA argues that technology needs to drive the transition to net zero emissions future while creating new jobs, opportunities and industries to maintain Australia's competitiveness.

Support for the Paris Agreement goals and commitments was further evident in early 2020, when the BCA backed legislation which included adoption of a net zero by 2050 target.

Woodside will continue using its influence within the BCA to support development of a policy position that progresses decarbonisation across the economy.

We assessed the BCA as aligned.

### **Canadian LNG Alliance (CLNGA)**

The CLNGA represents Canadian LNG project interests based in British Columbia (BC), Canada. They are committed to building an efficient, sustainable, world-leading LNG industry in Canada that supports the nation's commitment to emissions reduction and the global transition to a lower-carbon future.

The CLNGA supports the development of emerging technologies that can drive decarbonisation across the LNG value chain and grow a clean technology industry in parallel, evident in their contribution to CleanBC's Clean Growth Program for Industry consultation process.

The CLNGA also emphasises genuine engagement and cooperation with First Nations in achieving its goals to build an inclusive LNG industry.

While the CLNGA does not publicly endorse the Paris Agreement goals and commitments and net zero emissions by 2050, they state that LNG provides necessary infrastructure to embark on the path to a clean energy transition, from achieving net zero LNG to zero emissions hydrogen production.

We assessed the CLNGA as aligned, however based on our current business priorities, we have decided to discontinue our membership.

### **Carbon Market Institute (CMI)**

The CMI is the peak independent body representing Australian industry and business focused on developing a carbon market and supporting Australia on its path to a net zero emissions future.

Woodside is an associate member and participates in the Australian Climate Policy Working Group, Carbon Project Development Working Group and the Blue Carbon Taskforce.

The CMI supports the Paris Agreement goals and commitments and publicly aspires for net zero emissions by 2050, evident in their 2020 'transition to zero' strategy.

The CMI states that enhanced finance and innovation is urgently needed to enable clean industry, carbon farming, regenerative agriculture and climate repair.

Their 2020 strategic objectives include establishing frameworks that focus on skills development and alternative employment creation to manage transition impacts, and increasing pathways to achieving lower-emissions that is supported by government funding.

We assessed the CMI as aligned.



## **Chamber of Commerce and Industry WA (CCIWA)**

CCIWA is Western Australia's peak business body, representing a broad membership on a range of issues affecting business.

CCIWA has recommended the establishment of a national Australian framework to meet international obligations to reflect the Paris Agreement goals and commitments.

CCIWA acknowledges Western Australia's aspiration to achieve net zero by 2050 and has urged a coordinated approach between regulators and government to ensure Australia meets its international obligations under the Paris Agreement.

It has also encouraged government investment in carbon management strategies, including carbon capture and storage or geo-sequestration and mineral carbonation.

CCIWA supports the development of green hydrogen for export and introduction into the West Australian electricity grid.

We assessed CCIWA as aligned.

## **Chamber of Minerals and Energy Western Australia (CMEWA)**

CMEWA is the peak resources sector representative body in Western Australia.

Our Senior Vice President Operations sits on the Management Committee and we participate in several working groups.

CMEWA supports the implementation of the Paris Agreement goals and commitments and net zero emissions by 2050. The primacy of the Paris Agreement was underlined in its submission on climate change policy in Western Australia. CMEWA advocates for a consistent national framework and deepening the offsets market to meet global commitments.

CMEWA also supports the development of sustainable new energy sources, encouraging government investment in hydrogen.

We assessed CMEWA as aligned.

## **International Gas Union (IGU)**

The IGU is a global independent non-profit organisation representing over 95% of the global gas market (as at June 2020).

Woodside is a Standard Associate Member of the IGU.

The IGU's mission is to advocate for gas as an integral part of a sustainable global energy system, and to promote the political, technical and economic progress of the gas industry. The IGU advocates for urgent and increased efforts towards climate change mitigation to meet the aspirations of the Paris Agreement goals and commitments.

The IGU believes natural gas is the fastest, most economical way to achieve a sustainable energy future.

The IGU organises the triennial LNG Series and World Gas Conference, which generates dialogue amongst global gas leaders on innovation and strategic development for a sustainable energy future.

We assessed the IGU as aligned, however based on our current business priorities, we have decided to discontinue our membership.

## **International Association of Oil and Gas Producers (IOGP)**

The IOGP is a global industry body comprised of oil and gas producers, industry associations and upstream service companies. Their mission is to provide a forum for sharing experiences to improve health, safety, environment, social responsibility and operations performance across the sector.

Woodside is an upstream member and participates in a number of committees and task forces.

The IOGP engages in a range of policy debates including climate change. They have welcomed the Paris Agreement goals and commitments and support the European Union's objective to reach net zero by 2050.

Specifically, the IOGP has proposed that achieving net zero will require cutting emissions in the production process, including methane leakage and flaring. They state it will require utilising gas as an alternative to coal and investment in renewable energies. They also support long-term carbon solutions, particularly carbon capture, use and storage to mitigate emissions.

The IOGP identifies hydrogen as an enabler to decarbonise natural gas, recommending scaling up technologies to underpin broad adoption of hydrogen and supporting the introduction of hydrogen into the gas grid.

We assessed the IOGP as aligned.

## **IPIECA**

IPIECA is the global oil and gas industry association that develops and shares best practice to improve environmental and social performance. It is also the industry's principal channel of communication with the United Nations (UN), actively participating in climate negotiations and attending the annual Conference of the Parties as an official observer.

Woodside participates in a number of working groups including the Climate Change Working Group.

IPIECA supports the Paris Agreement goals and commitments, recognising its importance to transition to net zero in the second half of the century. IPIECA leads engagements with the UN on behalf of its members and facilitates dialogue with key stakeholders in support of the Paris Agreement.

IPIECA has worked with its members on the topic of emissions reduction, including emissions management, lower-emission technologies, carbon management, carbon pricing and offsets.

IPIECA has also developed climate-related industry guidelines focused on greenhouse gas reporting, a series of good practice on energy efficiency and greenhouse gas management, and regularly coordinates expert workshops to explore key climate-related issues.

We assessed IPIECA as aligned.

## World Energy Council (WEC)

The WEC is an independent energy organisation promoting the sustainable supply and use of energy for the greatest benefit of all people.

The WEC believes innovation is fundamental to a sustainable energy future. They invest in research, tools, platforms and communities required to accelerate energy transition.

The WEC's support for the Paris Agreement goals and commitments was evident in a statement released in mid-2020 in which it urged businesses to set truly ambitious, science-based emissions reduction targets to achieve net zero. The WEC stated that the global energy transition needs to develop in a way that enables faster progress towards a net zero emissions economy and society, and also meets the energy demand growth in emerging and developing economies.

We assessed the WEC as aligned, however based on our current business priorities, we have decided to discontinue our membership.

## Some misalignment identified

### Canadian Association of Petroleum Producers (CAPP)

CAPP is Canada's peak organisation representing the nation's upstream oil and gas industry.

Woodside participates in several working groups and committees including the BC Policy Group.

CAPP supports climate policy that incentivises technology and innovation to address climate change and frameworks that consider environmental, economic and social outcomes.

Currently there is insufficient explicit or implicit support across CAPP's positions and advocacy to identify endorsement of the Paris Agreement goals and commitments and net zero by 2050. As such, we have identified some misalignment with CAPP.

Based on our current business priorities, we have decided to discontinue our membership with CAPP.

## OVERVIEW OF ALIGNMENT

Australian Industry Greenhouse Network	●
Australian Petroleum Production and Exploration Association	●
Business Council of Australia	●
Canadian Association of Petroleum Producers	●
Canadian LNG Alliance	●
Carbon Market Institute	●
Chamber of Commerce and Industry WA	●
Chamber of Minerals and Energy WA	●
International Gas Union	●
International Association of Oil and Gas Producers	●
IPIECA	●
World Energy Council	●

● Aligned ● Some misalignment identified ● Misaligned

## Next steps

We will continue to monitor the climate positions of associations.

Alignment with Woodside's climate positions, support for our wider business priorities and providing shareholder value will remain significant considerations in our decision to renew memberships or join new associations.

# Section 4: Working towards a lower-emissions future

**The pathway to a lower-emissions future relies on cross-sector, international collaboration that helps develop solutions to the climate challenge.**

Woodside belongs to a number of organisations focused on developing new energy pathways and technologies that support the Paris Agreement goals and commitments.

While natural gas has a significant role to play in the world's energy transformation as the lowest-emission hydrocarbon fuel, it also acts as a stepping-stone towards developing the technological capabilities needed to achieve carbon-neutral energy production.

There is growing interest, from both governments and our customers, in the potential of hydrogen as an industrial-scale energy source. We expect to see large-scale hydrogen production around the world by 2030 and are working closely with customers and researchers to develop both blue and green hydrogen for global export.

Ammonia also presents opportunities as an enabler to hydrogen production and transport.

We are investing in relationships and knowledge that improve our understanding of the roles hydrogen and ammonia can play in global decarbonisation, including through our memberships. To illustrate this, an overview of the Green Ammonia Consortium is included in this section.

## OUR NEW ENERGY MEMBERSHIPS

Ammonia Energy Association

Australian Hydrogen Council

Green Ammonia Consortium

Hydrogen Council

H2 Korea

Korea Hydrogen Industry Association

## Green Ammonia Consortium (GAC)

Japan's GAC is dedicated to establishing a global green ammonia value chain that can enable a future hydrogen society built through ammonia conversion.

The GAC collaborates with industry and research organisations on technology projects to accelerate the transition to green ammonia. To date, their primary focus has been the consumption of large-scale ammonia combustion in coal-fired power plants, but are also exploring ammonia coal-fired gas turbines and ammonia fuel cell technology. The GAC also supports research in ammonia as a marine fuel.

Woodside is an associate member, working with the GAC to progress Japan's and Australia's hydrogen strategies.



# Section 5: Working with Research organisations

## Research organisations allow us to test pathways to decarbonisation.

Bringing together subject-matter experts, industry and government, these organisations facilitate research that can lead to new strategies and practical applications.

Woodside holds memberships of research organisations specialising in technologies to offset and abate emissions and future fuels expertise. This section highlights examples of research activities undertaken by three of these organisations.

### OUR MEMBERSHIPS SUPPORTING DECARBONISATION

Australian Industry Energy Transitions Initiative

CO2CRC

Future Energy Exports Cooperative Research Centre

Future Fuels Collaborative Research Centre

Global Carbon Capture and Storage Institute

### Australian Industry Energy Transitions Initiative (Australian Industry ETI)

The Australian Industry ETI is a recently established network of Australian businesses and industries committed to transitioning to net zero emissions across their supply chains by 2050 and securing long-term competitiveness through the adoption of clean energy solutions.

A focus will be analysing key industrial supply chains (accounting for over a quarter of Australia's annual emissions) in order to identify and implement practical emissions reduction solutions.

Woodside is a founding member of the Australian Industry ETI.

### CO2CRC

CO2CRC is Australia's leading carbon capture and storage (CCS) research organisation. Their research into CCS and monitoring aims to reduce emissions from emissions-intensive industries, demonstrate the safety of CCS and ensure members are technologically prepared. Reducing the cost of CCS to support demand is also a part of this focus. They work closely with government, regulators, local communities and industry members to ensure their research adheres to the strictest safety and environmental standards.

CO2CRC's Otway National CCS Research Facility is home to Australia's first demonstration project for the deep geological storage (geosequestration) of carbon dioxide. They also undertake economic analysis of CCS to uncover cost reduction and enable informed CCS policy development.

In 2020, they established the CO2CRC CCS Policy Forum, working with industry to develop a consensus view on a practical CCS policy framework to stimulate CCS investment and development in Australia.

Woodside is an industry member and is represented on the Board of Directors.

### Future Fuels Collaborative Research Centre (Future Fuels CRC)

The Future Fuels CRC is an industry-focused research, development and demonstration association developing technological solutions to enable Australia's transition to a lower-carbon future.

In 2018, the Australian Government committed A\$26.5 million to support the Future Fuels CRC's seven-year research and development program, exploring how to transition Australia's energy infrastructure to support new energy using fuels like hydrogen and biogas.

Their work on global hydrogen mapping and subsequent input into the Council of Australian Governments' Hydrogen Working Group helped inform Australia's National Hydrogen Strategy and continues to support national new energy policy and road mapping.

Woodside is a member of the Future Fuels CRC through our membership of the Australian Pipelines and Gas Association.



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