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3 September 2025

Climate Change Authority  
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Canberra ACT 2601  
By email: [consultation@climatechangeauthority.gov.au](mailto:consultation@climatechangeauthority.gov.au)

Dear Review Team

**WOODSIDE SUBMISSION TO CLIMATE CHANGE AUTHORITY 2025 ISSUES PAPER CONSULTATION**

Woodside welcomes the opportunity to comment on the Issues Paper for the 2025 Annual Progress Report and provides the following information for consideration. In addition to this submission, as a member company of the Australian Energy Producers (AEP), and the Australian Industry Greenhouse Network (AIGN), we also draw your attention to their respective submissions.

**About Woodside**

Woodside is a global energy company founded in Australia, providing reliable and affordable energy to help people lead better lives. Driven by a spirit of innovation and determination, we established the liquefied natural gas (LNG) industry in Australia 35 years ago and today supply a growing base of customers. We have reliably delivered natural gas to homes and businesses in Australia for decades, supporting the development of local industry and driving economic prosperity.

Woodside's climate strategy is integrated throughout our company strategy: to thrive through the energy transition with a low cost, lower carbon, profitable, resilient and diversified portfolio.<sup>1</sup> Our climate strategy has two key elements: reducing our net equity Scope 1 and 2 greenhouse gas emissions and investing in products and services for the energy transition.

The key recommendations of our submissions, detailed in Attachment 1, are that:

- The energy transition must deliver energy security and affordability as well as emissions reduction. Achieving this requires policy settings that enable a whole-of-economy approach to investment in energy supply and decarbonisation, that is technology neutral, economically efficient, and protects Australia's international competitiveness.

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<sup>1</sup> For Woodside, a lower carbon portfolio is one from which the net equity Scope 1 and 2 greenhouse gas emissions, which includes the use of offsets, are being reduced towards targets, and into which new energy products and lower carbon services are planned to be introduced as a complement to existing and new investments in oil and gas. Our Climate Policy sets out the principles that we believe will assist us achieve this aim.

- The roles of gas and Carbon Capture and Storage (CCS) are underrepresented in important policy settings of Australia's approach to the energy transition. The intent of the Future Gas Strategy which addresses the role of gas and CCS should be applied across all government policies.
- Environmental approvals must meet expectations for rigour, be streamlined and timely, to enable the significant investment needed to deliver an energy system that is secure, lower-emissions, and contributes to the nation's ongoing prosperity.
- The Safeguard Mechanism should remain stable and predictable, with proportional contributions from industry and flexibility to pursue least-cost abatement.

We look forward to the Annual Progress report and welcome the opportunity to meet with the CCA in the future to discuss this feedback in detail.

Yours sincerely,

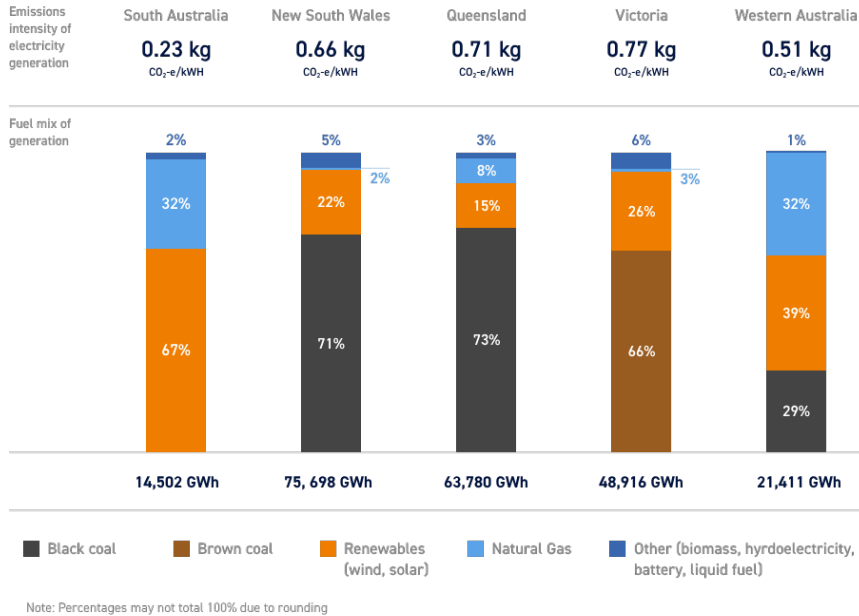


**Tony Cudmore**  
Executive Vice President – Sustainability, Policy & External Affairs

<b>Attachment 1: Issues Paper Response</b>																																																																									
<b>Supporting and enabling the transition to a net zero economy</b>																																																																									
<b>Question 1.</b>	<b>How well is the Australian Government supporting the transition to net zero?</b>																																																																								
<b>Q1 Woodside Response</b>	<p>Woodside supports the Australian Government’s efforts to reduce emissions in line with its current Nationally Determined Contribution to the Paris Agreement and acknowledges the progress made, including reforms to the Safeguard Mechanism (SGM), development of the Powering the Regions Fund, and ongoing improvements to the National Greenhouse and Energy Reporting Scheme (NGERS).</p> <p>However, insufficient attention has been paid over a long period of time to the importance of significant and timely investment in the energy supply projects needed for secure and affordable energy, and emissions reductions. Current policy settings do not fully contemplate the positive contribution to meeting energy and decarbonisation goals that can be made by fuels and technologies such as gas and CCS which have a significant amount to offer Australia’s and Asia’s transition. Not fully including these options in policy considerations makes reaching net zero harder and more expensive.</p> <p>Renewables are growing, which is positive, but Australia still uses as much coal as it did in 1989/90 (see Figure 1) because over that period there has been increased demand for energy, which has absorbed additional supply. This indicates why, as renewables continue to increase, their impact on emissions reduction should be supported by more gas, to both meet additional energy demand and substitute coal as existing coal-fired plants reach the end of their planned operational lives.</p> <p><b>Figure 1: Australia Electricity Generation by fuel type, physical units, financial year<sup>2</sup></b></p> <table border="1"> <caption>Australian electricity generation by fuel type in GWh</caption> <thead> <tr> <th>Financial Year</th> <th>Black coal</th> <th>Brown coal</th> <th>Oil Products</th> <th>Other</th> <th>Natural gas</th> <th>Renewables</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1989-90</td> <td>120,000</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>120,000</td> </tr> <tr> <td>1994-95</td> <td>100,000</td> <td>40,000</td> <td>0</td> <td>0</td> <td>10,000</td> <td>0</td> <td>150,000</td> </tr> <tr> <td>1999-00</td> <td>120,000</td> <td>50,000</td> <td>0</td> <td>0</td> <td>10,000</td> <td>0</td> <td>180,000</td> </tr> <tr> <td>2004-05</td> <td>120,000</td> <td>50,000</td> <td>0</td> <td>0</td> <td>10,000</td> <td>0</td> <td>180,000</td> </tr> <tr> <td>2009-10</td> <td>120,000</td> <td>50,000</td> <td>0</td> <td>0</td> <td>50,000</td> <td>0</td> <td>220,000</td> </tr> <tr> <td>2014-15</td> <td>100,000</td> <td>50,000</td> <td>0</td> <td>0</td> <td>60,000</td> <td>0</td> <td>210,000</td> </tr> <tr> <td>2019-20</td> <td>100,000</td> <td>40,000</td> <td>0</td> <td>0</td> <td>60,000</td> <td>60,000</td> <td>260,000</td> </tr> <tr> <td>2023-24</td> <td>100,000</td> <td>30,000</td> <td>0</td> <td>0</td> <td>50,000</td> <td>100,000</td> <td>280,000</td> </tr> </tbody> </table> <p>Australia’s National Electricity Market serves as an example of how higher proportions of gas combined with renewables can drive overall reductions in emissions intensity. The fuel mix in South Australian electricity generation relies on gas peaking generation for grid stability during periods of high renewable generation and for the reliable dispatch capacity it provides during periods of low renewable generation. The bar chart below demonstrates the impact of a gas-renewables mix in delivering substantially lower emissions intensity (i.e. fewer emissions per unit of electricity generated) than coal-dominated grids, but with the requirement for additional gas in order to achieve this aim.</p>	Financial Year	Black coal	Brown coal	Oil Products	Other	Natural gas	Renewables	Total	1989-90	120,000	0	0	0	0	0	120,000	1994-95	100,000	40,000	0	0	10,000	0	150,000	1999-00	120,000	50,000	0	0	10,000	0	180,000	2004-05	120,000	50,000	0	0	10,000	0	180,000	2009-10	120,000	50,000	0	0	50,000	0	220,000	2014-15	100,000	50,000	0	0	60,000	0	210,000	2019-20	100,000	40,000	0	0	60,000	60,000	260,000	2023-24	100,000	30,000	0	0	50,000	100,000	280,000
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<sup>2</sup> [Australia Energy Statistics 2025](#): Table O1 Australian electricity generation, by fuel type, physical units, financial year

**Figure 2: Fuel mix and emissions intensity of select Australian states<sup>3,4,5</sup>**



Woodside estimates that if the emissions intensity of the other States shown in the bar chart matched South Australia's, the same amount of electricity could be generated with approximately ~95 MT CO<sub>2</sub>e fewer emissions. For context, Australia's total emission in the year to June 2025 were 440.2 MT CO<sub>2</sub>e, approximately 86 MT CO<sub>2</sub>e above the indicative value of Australia's 2030 single-year point target in its Nationally Determined Contribution<sup>6,7</sup>.

Australia needs a complete approach to net zero, not one that favours certain technologies while discounting others. There is also a risk to public support for climate action when affordability and reliability are not sufficiently included in policy settings. The energy transition must deliver secure, affordable energy alongside emissions reductions. If it fails on any of these fronts, public trust and social consensus will erode.

<b>Question 2.</b>	<b>What changes could the Australian Government make to improve the effectiveness of existing policies or address gaps in supporting Australia's transition to a low-emissions climate resilient, and prosperous economy?</b>
<b>Q2 Woodside Response</b>	<p><b>Recognise the role of gas in the energy transition by applying the Future Gas Strategy consistently through Government policy:</b> As indicated in the answer to Question 1, there is significant scope to enhance the role of natural gas in supporting renewables and contributing to emissions reduction in the power sector.</p> <p>Reinstating and expediting annual offshore exploration acreage releases, alongside timely regulatory approvals, will help ensure future supply can be brought to market in line with demand. Investment in gas-fired firming generation should be incentivised through mechanisms such as the Capacity Investment Scheme or the proposed Electricity Services Entry Mechanism (ESEM), as recommended in the NEM Review Draft Report. These measures are vital to send clear market signals and enable timely deployment.</p>

<sup>3</sup> Australian Department of Climate Change, Energy, the Environment and Water, 2023/2024. 'Australian National Greenhouse Accounts Factors.'

<sup>4</sup> Net Generation in GWh taken from Open Electricity: NEM for the calendar year of 2024

<sup>5</sup> Fuel mix percentages accessed online <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/data-dashboard-nem> 12 months to 22 Jan 2025 and for SWIS accessed online <https://opennem.org.au/>

<sup>6</sup> Australian Department of Climate Change, Energy, the Environment and Water, 2025. National Greenhouse Gas Inventory Quarterly Update: March 2025.

<sup>7</sup> Commonwealth of Australia 2022. Australia's Nationally Determined Contribution Communication 2022.

	<p><b>Efficient regulatory approvals:</b> Unlocking new supply demands streamlined, effective approvals and regulators must make timely, sound decisions. To achieve this, Woodside recommends the following actions:</p> <ul style="list-style-type: none"> <li>• <b>Approval agencies should meet statutory timelines</b> to ensure there are no delays in bringing new supply to market.</li> <li>• <b>Design EPBC Act reforms</b> that reinforce the principle of ecologically sustainable development by requiring the Minister to consider both long-and short-term economic, social, and environmental factors, and publish integrated assessments.</li> <li>• <b>Legislate a single-agency integrated assessment model</b> for major energy projects to fast-track approvals, consistent with the Productivity Commission’s recommendations.</li> <li>• <b>Review environmental approval legislation</b> and regulatory frameworks to mitigate against vexatious litigation driven by activist political agendas.</li> </ul> <p><b>Policy support to decarbonise export industries:</b> It is in Australia’s clear national interest that its export industries thrive, both because of the jobs and export earnings, but also because these industries can help support development, prosperity and security in Asia and with other trading partners. To remain a reliable supplier while meeting domestic climate goals, we must reconcile the remaining emissions with credible decarbonisation pathways.</p> <p>Targeted policy support could accelerate emissions reduction in established export sectors, especially given their role in global supply chains. Whilst the SGM should provide confidence to our export customers that the greenhouse gas emissions from Australian commodity supply have been regulated, in the absence of a clear green premium in export markets it is not certain that this attribute of Australian production will be remunerated. This raises the risk that the costs of decarbonisation could undermine competitiveness if not addressed. Mechanisms to ensure a level playing field, ensuring our exports compete fairly and support both climate and economic objectives, should be considered.</p> <p><b>Support CCS domestically and as an export service:</b> Carbon Capture and Storage (CCS) is a strategic and material investment opportunity for Australia. It offers a pathway to reduce emissions across hard-to-abate sectors while positioning Australia as a global leader in lower-carbon services. Government support is essential to unlock this potential both domestically and as an export capability.</p> <p>Accelerating bilateral agreements (e.g. with Japan) for cross-border carbon dioxide transport would create the opportunity for large-scale CCS facilities, delivering the economies of scale needed for commercial viability. Establishing decarbonisation hubs with shared infrastructure and access to firmed, lower-carbon power would further reduce costs and deployment timelines.</p> <p><b>Align energy policy and finance frameworks to support consistent investment signals:</b> The Australian Sustainable Finance Institute (ASFI) sustainable finance taxonomy should be revised. It is misaligned with the Future Gas Strategy on gas and CCS and risks distorting capital markets and diverting investment from otherwise sound sectors.</p>
<b>Deploying renewable energy infrastructure</b>	
<b>Question 3.</b>	<b>What are the main challenges to deploying the renewable energy and related infrastructure needed to reach Australia’s energy targets?</b>
<b>Q3 Woodside Response</b>	<p>In Woodside’s experience there are three main challenges: the slow pace of approvals to deploy new energy infrastructure (refer to question 2), the requirement to address the challenge of intermittency of renewables at high system penetration levels, and constraints on how quickly renewable energy can be deployed.</p> <p>The challenge of intermittency can be addressed by utilising natural gas fired generation as a firm source of power, enabling higher levels of renewables deployment and emissions reduction (in addition to storage technologies).</p> <p>Even with progress on intermittency and regulatory approvals, there are still limits on how quickly renewable energy can be deployed, driven by supply chain limitations, labour availability, and capital availability. This means that replacing the capacity from retiring</p>

	<p>coal-fired power stations and expanding the grid to meet growing demand from electrification, such as for data centres and electric vehicles is likely to be a continuing task for the medium to long term. Australia is still a long way from deploying enough renewable capacity to meet its objectives. The Climate Change Authority's 2024 Progress Report underscores this challenge, projecting an 8 GW shortfall against the additional 33 GW required to meet Australia's 82% renewable electricity target by 2030.</p> <p>These factors mean that natural gas will need to play a critical role in Australia's energy mix for a significant period of time, as articulated in the Future Gas Strategy. Policymakers should therefore ensure gas is appropriately integrated into national planning and decarbonisation policy settings.</p>
<b>Question 4</b>	<b>What can the Australian Government do to address these challenges?</b>
<b>Q4 Woodside Response</b>	Refer to question 2
<b>The Safeguard Mechanism</b>	
<b>Question 5</b>	<b>How effective is the Safeguard Mechanism in driving onsite emissions reductions at Australia's largest industrial facilities since its 2023 reform?</b>
<b>Q5 Woodside Response</b>	<p>When the SGM reforms were announced in 2022, Woodside described the reformed SGM as an ambitious yet achievable framework for driving emissions reductions at Australia's largest industrial facilities. In the first compliance year of the reforms, the mechanism has delivered on some of its initial goals such as tightening baselines and removing excess headroom.</p> <p>However, some elements still need refinement, including the methodology for setting emissions intensities for new facilities that have not been appropriately adjusted for Australian circumstances (including adoption of benchmarks that are too narrow and have characteristics not replicable in Australian conditions) and limited access to decarbonisation support for emissions-intensive trade exposed facilities. We look forward to contributing to the 2026–27 review and have outlined potential improvements to the mechanism in our response to Question 6.</p>
<b>Question 6</b>	<b>What changes could the Australian Government make to the mechanism to help achieve Australia's emissions reduction targets?</b>
<b>Q6 Woodside Response</b>	<p><b>Maintain proportional share:</b> Woodside supports a whole-of-economy approach to emissions reduction, and it is critical that the mechanism maintains a proportional contribution from covered facilities to Australia's overall emissions targets, along with consideration of how emissions reductions could be addressed more broadly across the economy.</p> <p><b>Improve methods for assessing ACCU supply and demand expectations.</b> Given the size and scale of decarbonisation challenges at many industrial emitters across the economy, it is likely that access to Australian Carbon Credit Units (ACCU) will continue to be an important element of national decarbonisation policy for a significant period of time. Assessment of ACCU supply and demand should be based on evidence from industry's actual plans rather than the extrapolation of scenario-based trendlines. An example would be to establish a Carbon Credits Statement of Opportunities, modelled on AEMO's equivalents for gas and electricity. This would better inform Government of the need to take action to increase supply, for example by approving more ACCU methods, or by allowing international carbon credits to be used for SGM compliance consistent with Article 6 of the Paris Agreement, which Woodside recommends the Government work towards.</p> <p><b>New and expanded gas projects:</b> Revise the criteria for setting baselines for new and expanded facilities to realign with the policy intent to adjust benchmarks for Australian conditions.</p>

	<p><b>Compliance flexibility arrangements:</b></p> <ul style="list-style-type: none"> <li>• Maintain unrestricted ACCU use under the SGM, as it provides essential flexibility for facilities where decarbonisation options do not align with the legislated decline rate.</li> <li>• Accelerating development of new crediting methods and enabling high-integrity international credits overtime will support a deeper, more liquid offsets market.</li> <li>• Remove the 30% Australian Carbon Credit Unit baseline reporting rule.</li> </ul> <p><b>Policy support for export industry competitiveness:</b> Refer to question 2.</p>
<b>Question 7</b>	<b>What additional incentives could help drive on-site emissions reductions?</b>
<b>Q7 Woodside Response</b>	Electrification of LNG and other industrial sites is capital intensive and operationally complex, particularly when retrofitting existing infrastructure. To support cost-effective emissions reduction where viable, government should amend SGM rules to incentivise renewable power purchase or the import of lower-carbon electricity from external sources.
<b>Question 8</b>	<b>How can reporting on the Safeguard Mechanism be enhanced to build community confidence and enable better oversight?</b>
<b>Q8 Woodside Response</b>	As most covered facilities transition to mandatory climate-related financial disclosures, these disclosures will provide structured and comparable information on forward-looking climate strategies, reducing the need for duplicative reporting requirements.
<b>Question 9</b>	<b>How could the Authority improve its approach to assessing the performance of the Safeguard Mechanism? (For example, the approach to estimating emissions from new and expanding facilities)</b>
<b>Q9 Woodside Response</b>	The CCA should strengthen its assessment of the SGM by engaging directly with industry. A bottom-up approach, grounded in operational data and project level insights, would improve accuracy particularly for new and expanding facilities.