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Please direct all responses/queries to:

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Climate Change Authority

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Canberra, ACT, 2601

By email: consultation@climatechangeauthority.gov.au

Dear Brad Archer,

RE: SETTING, TRACKING AND ACHIEVING AUSTRALIA'S EMISSIONS REDUCTION TARGETS – ISSUES PAPER – MAY 2023

Woodside Energy Group Ltd (Woodside) welcomes the opportunity to comment on the Climate Change Authority's ("CCA") Setting, Tracking and Achieving Australia's Emissions Reduction Targets - Issues Paper 2023 ('the Paper').

Woodside aims to thrive through the energy transition by building a low-cost, lower-carbon, profitable, resilient and diversified portfolio. Our climate strategy is an integral part of our company strategy and has two key elements: reducing our net equity Scope 1 and 2 greenhouse gas emissions and investing in the products and services that our customers need as they secure their energy needs and reduce their emissions.

Regarding the CFI Review and NGER Review, Woodside intends to provide more detail in subsequent consultations beyond what is included in the attachment. The key points of our submission predominately consider questions from 1 through 20, as detailed in the attachments. Specific points include:

- The precise shape and pace of the energy transition is uncertain. It is expected to vary in different countries because they have different starting points, development requirements, resources, capabilities and energy security concerns. Woodside intends to supply the energy products that our customers need to secure their energy supplies as they reduce their emissions. Regarding Australia's important role in the global effort to limit temperature increases and enhancing Australia's prosperity and resilience as the world transitions to net zero emissions, a prescriptive fossil fuel phase out target is likely to be inconsistent with Australia being able to continue to meet the energy requirements of our diverse overseas customers/partners as they undertake their own approaches to the transition.
- Climate science has drawn a robust link between cumulative emissions of greenhouse gases and global temperature levels. However, the distribution of this carbon budget across different human activities requires additional judgements about a wider range of social, economic and technological factors and consumer and policy choices. It is thus recommended that a range of possible pathways are considered that provide flexibility to emerging Australian and international energy and decarbonisation needs.
- The IPCC has stated that strategies to achieve emissions reductions include transitioning from fossil fuels without Carbon Capture and Storage (CCS) to very low or zero-carbon energy sources, such as renewables or fossil fuels with CCS, demand side measures and improving efficiency, reducing non-CO₂ emissions, and deploying carbon dioxide removal (CDR) methods to counterbalance residual greenhouse gas emissions.
- Australia is well positioned to host a number of large-scale CCS projects, leveraging subsurface understanding obtained over decades of oil and gas exploration and production. CCS has a role in enabling the production of lower-carbon energy/products for domestic consumption and export, in providing a pathway for regional partners to decarbonise their emissions, and more broadly can support emissions reductions in other hard-to-abate industries.

We would welcome the opportunity to meet with the CCA in the future to discuss this feedback in detail, and to further contribute to the four interrelated projects outlined in the Paper.

Yours faithfully,

Tony Cudmore

Executive Vice President – Strategy and Climate

Attachment: Responses to relevant questions from the Paper

Consultation question	Woodside response
Strategic Framework	
<p>What actions and enablers beyond those identified in the Strategic Framework could help Australia progress towards a prosperous and resilient net zero future? What are your highest priorities?</p>	<p>In Figure 2 – Strategic Framework, one of the six actions identified is “Sequester the residual”. This should be expanded to consider the role of carbon capture and storage (CCS) more broadly in supporting large-scale, multi-industry CCS hubs in reducing emissions from industry domestically, and potentially for international trading partners, as well as unlocking new industries such as hydrogen and ammonia.</p> <p>The Intergovernmental Panel on Climate Change (IPCC) AR6 Synthesis report states that Carbon dioxide removal (CDR) will be necessary to achieve net-negative CO2 emissions. Achieving a net negative outcome will require substantial support for CCS to store such emissions that could potentially be removed through solutions such as Direct Air Capture (DAC), or Bioenergy with CCS (BECCS). As these removal technologies reach appropriate maturity, CCS can initially be deployed predominantly for emissions reduction purposes.</p>
Progress Framework	
<p>What should the Authority measure or assess to determine progress towards a just transition and improved wellbeing?</p>	<p>There are numerous existing national frameworks that include measurements related to just transition and wellbeing. Reviewing and identifying the measurements from existing frameworks can be leveraged to determine progress towards a just transition and improved wellbeing.</p>
<p>What more could the Government do to help you reduce your carbon footprint?</p>	<p>Given the large investment required to progress decarbonisation, existing and future policy requires several focus areas: Stable regulations; a focus on timely approvals and permitting; supporting fiscal environments to improve viability; investment incentives; a robust offset system that commands confidence and is deep and liquid; increased support for the role of carbon capture and storage; and clear messaging on the role of oil and gas during the energy transition. Further detail on Woodside positions on how the Safeguard Mechanism Reform, and the Chubb review can help, are provided in questions below.</p>
<p>What are the other challenges and opportunities the global context presents Australia with in responding to climate change?</p>	<p>Australia is well positioned to host a number of large-scale CCS projects, leveraging subsurface understanding obtained over decades of oil and gas exploration and production. These CO2 storage projects may involve the injection of CO₂ into abandoned/decommissioned oil and gas reservoirs or in saline aquifers. The opportunity for Australia now is to use this natural advantage to drive investment in CCS. This would bring with it benefits for both decarbonisation and energy security. CCS has a role in both enabling low carbon energy/products for domestic consumption and export, as well as providing a pathway for domestic industrial emitters and our regional trading partners to decarbonise their emissions. Many nations in Asia face the complex challenge of emissions reduction in parallel with securing reliable, low-carbon energy supply, and will look to near-neighbours and trading partners to support their efforts.</p>

	The international trade of offset units through Article 6 will require additional responsibilities such as an assessment of suitable units, bilateral negotiation, accounting for import and export of units, as well as monitoring and compliance.
What role is there for corporate action to 2030 and beyond?	Corporates should be committed to reasonable standards of transparency on corporate climate targets and emissions reporting. As harmonization of international standards gathers pace through efforts by the International Sustainability Standards Board (ISSB), Australian Accounting Standards Board (AASB), US Securities and Exchange Commission (SEC), the Taskforce for Climate Related Financial Disclosure (TCFD) and Corporate Emissions Reduction Transparency scheme (CERT) amongst others, we look forward to frameworks that are consistent and complementary.
Target-setting Framework	
How could the Authority best strike a balance between ambition, domestic considerations and the international context in its 2023 NDC advice?	We need all options on the table if we are to successfully change the way we produce and consume energy and limit global temperature rise. Energy security and the energy transition therefore should not be seen as alternatives. It is increasingly clear that they both require effective management and substantial investment.
Cross-cutting Issues	
Sectoral Pathways	
What factors should the Authority consider when developing sectoral decarbonisation pathways? a. What are the risks and opportunities for households, business, workers and communities affected by the transition? b. Are there supply chain pressure points?	<p>The IPCC noted in the AR6 Working Group III summary for policymakers that “strategies to achieve emissions reductions include transitioning from fossil fuels without CCS to very low-or zero-carbon energy sources, such as renewables or fossil fuels with CCS, demand side measures and improving efficiency, reducing non-CO₂ emissions, and deploying carbon dioxide removal (CDR) methods to counterbalance residual greenhouse gas emissions. Pathways to limit warming therefore show different combinations of sectoral mitigation strategies consistent with a given warming level. Consideration to all pathways should be given, be technology agnostic and focus on net emissions reductions.”</p> <p>Given the CCA advice will focus on addressing the barriers preventing sectors from decarbonising and transitioning towards net zero and net negative targets, consideration of the full suite of abatement solutions should be included.</p> <p>Methane emissions reduction needs to be considered across all sectoral decarbonisation pathways and not be confined to facilities reporting under NGERs in order to best contribute to the goals of the Global Methane Pledge.</p>
Contributing beyond Australia’s borders	
How could Australia partner with other nations to accelerate global progress towards meeting the Paris Agreement goals?	Australia could partner with other nations to accelerate the development of markets and supply chains for lower carbon energy, such as hydrogen, and emissions abatement services and technologies, such as Carbon Capture Utilization and Storage (CC(U)S) across a broad range of industries in addition to oil and gas.

	<p>Australia could also seek to further assess our current and future trading partners' energy needs and decarbonisation pathways to understand the expected role for our existing exports and potential new exports. This could include an understanding of the roles and pathways in these nations for each of the fossil fuels (i.e. coal, oil and gas) as well as any associated emissions abatement plans. Abatement solutions are likely to include CO₂ imports to Australian CCS hubs where government-to-government bilaterals and well-defined legislation and regulations could support this movement of CO₂.</p>
<p>What do you see as the challenges and opportunities from a phase out of fossil fuel production? What should the Government consider when determining a plan for the phase out of fossil fuels?</p>	<p>In 2022 the IPCC published the Sixth Assessment Report – Working Group III – Mitigation of Climate Change ('AR6-WG3') report providing an updated global assessment of climate change mitigation progress and pledges, and examined the sources of global emissions. It explained developments in emissions reduction and mitigation efforts, and assessed the impact of national climate pledges in relation to long-term emissions goals.</p> <p>The report found that there are many pathways in the literature that likely limit global warming to 2°C with no overshoot, or to 1.5°C with limited overshoot. These pathways vary, sometimes widely, across global indicators including different sources of primary energy. These variations occur because, while climate science is able to calculate a “carbon budget” of net emissions before any particular temperature outcome is reached, the allocation of this budget between different human activities requires additional judgements about for example technology, economics, consumer preferences and policy choices.</p> <p>The demand for oil and gas in climate-related scenarios that could limit global warming to 1.5°C or 2°C is uncertain. For example in the AR6-WG3 report, the IPCC stated that in pathways that limit warming to 1.5°C (with a greater than 50% probability and with no or limited overshoot) the potential global use of gas in 2050 ranges from 30% above 2019 levels to 85% below them with a median 45% decline.</p> <p>Woodside intends to supply the energy products that our customers need to secure their energy supplies as they reduce their emissions. A prescriptive fossil fuel phase out is likely to be inconsistent with the requirements of our customers both domestically and internationally, as well as the broader expected demand outlined in the range of pathways referenced above, as the world navigates the energy transition. Any plan should include the full demand range in pathways assessed by the IPCC in its Sixth Assessment Report and the range in changes in demand for oil, gas, and coal respectively contained within these analyses. Consideration should be given towards role of abated versus unabated fuel use, and the broader emissions reduction opportunities for oil and gas, such as the deployment of CCS.</p>
<p>Should the Authority consider international maritime and aviation emissions in its advice?</p>	<p>Aviation emissions should be included in the advice, as it is a hard-to-abate sector, but also an industry that is being proactive in setting decarbonisation ambitions and goals. The aviation sector's key lever is using Sustainable Aviation Fuel (SAF) to reduce its emissions. However, to date, Australian policy settings do not adequately support the development of a local SAF industry, which leads to the cost of SAF being prohibitive (at least 4x more expensive than jet fuel).</p>

	<p>Furthermore, there are ways in which industrial CO₂ can be used as a feedstock (alcohol-to-jet) to generate SAF as opposed to using cooking oil or crop-based feedstock (HEFA), which comes with its own sustainability challenges. This presents a big opportunity for industrial CO₂ to be used as a feedstock to generate SAF and help decarbonise the aviation industry in Australia and overseas. Other international jurisdictions are providing financial incentives for SAF, also noting that SAF demand is expected to grow significantly.</p>
<p>Targets</p>	
<p>What types of targets do you see as important and/or problematic, and why?</p>	<p>Woodside is supportive of the current government's approach for Australia's targets to currently include the Point Targets, Emissions budget, and Net Zero Target. Supplementary targets proposed in the paper may be useful to guide progress, provided they do not inadvertently constrain solutions for reductions within Australia, and in the international context. Targets must be technology agnostic and allow for a range of solutions, targeting lowest cost of abatement across the economy.</p>
<p>Are Kyoto-era schemes fit for the Paris Agreement era?</p>	
<p>What do you see as the strengths and weaknesses of the NGER scheme? How could it be improved?</p>	<p>A fair, robust and transparent Safeguard Mechanism (SGM) can support a reduction in Australian emissions, as well as encourage businesses and industries to further innovate and adopt smarter practices and technologies in line with our collective emissions reduction targets.</p> <p>It is our view that the Mechanism reforms provide a significant opportunity to set a strong, clear and stable framework for business to operate within. Policy stability in this area is going to be key in maintaining Australia's reputation as a safe, secure and reliable exporter of natural resources and energy, while underpinning a strong domestic economy and employment.</p> <p>It is appropriate to apply the same decline rate at all Mechanism facilities. While the proposed decline rates are ambitious, they are achievable if there is:</p> <ol style="list-style-type: none"> a. The ability to accrue and trade safeguard credits for performance that exceeds the baseline. b. There is access to deep, liquid and appropriately regulated domestic and international trading and crediting markets. c. The fund to support Emissions Intensive Trade Exposed (EITE) facilities is expanded to match the ambition and potential of the policy. <p>Woodside is actively participating in industry collaboration initiatives to mature, harmonise and advocate for accurate and transparent measurement and reporting. One of the key strengths of the NGER Act is in providing a robust basis for reporting GHG emissions, noting that there are jurisdictions where Woodside operates without this framework in place where we subsequently draw upon NGER regulations to provide transparent reporting. Woodside has also voluntarily subjected its annual NGERs submissions to third-party auditing. The scheme continuously develops through year-on-year enhancements to NGER reporting to improve accuracy and completeness.</p>

	<p>Some weaknesses of the scheme include NGER's determination calculations / factors often drawn from international datasets where applicability to Australian conditions is not clear; complexity associated with higher order methods have prevented enhancements in reportable GHG emissions; retrospective changes as proposed under SGM reforms are difficult and costly to implement so should be avoided as much as possible; and market-based approach for scope 2 emissions currently is not supported, with a voluntary methodology proposed for consultation recently based on a nation-wide residual mix factor (RMF). Given focus on increased electrification and lower-carbon electricity sources it will be increasingly important to develop region-specific scope 2 accounting methodologies to enable market-based accounting for scope 2.</p>
<p>What aspects of methane measurement, reporting and verification should the Authority focus on as part of the NGER review?</p>	<p>Woodside supports improvements to the measurement, reporting and verification (MRV) of reported methane emissions for the purpose of identifying and promoting mitigation activities by enabling more transparency in the crediting of methane reductions. The framework should be holistic and tailored for Australian operations, with a pragmatic approach that balances measurement and estimation, ensuring that operators can optimise measurement type and frequency according to the materiality of emissions measured and their variability.</p> <p>Woodside would welcome a process to enable greater flexibility to incorporate emerging technologies for use in the reporting of methane emissions on all sources but in particular with any requirements to report fugitive emissions in line with LDAR practices. e.g. New Mexico ALARM program or State of Colorado AIMM.</p> <p>Measurement is relatively expensive within Australia, and thus an environment that supports investment in measurement and mitigation should be fostered. Improved outcomes will be obtained if methane measurements provide a pathway to incentives that de-risk higher-cost mitigation activities rather than penalising emissions detected.</p> <p>For an MRV framework to be viable in Australia, the requirements to support the development of measurement standards as well as the availability of local service providers needs consideration to ensure adequate, accurate, transparent, sustainable, and cost-effective measurement outcomes can be realised. The government may have a role to support and accelerate this.</p> <p>If the MRV approach is to include top-down measurement the measurement method should be technology agnostic and guided by performance specifications. Procedures for reconciling of inventories has challenged early adopters and may necessitate additional consultation.</p>
<p>Following the Government's acceptance of recommendations of the Chubb Review, what do you see as the strengths and weaknesses of the CFI and ERF?</p>	<p>The ERF scheme in its current form incorporates many of the common key integrity attributes found in other schemes operating in compliance and voluntary markets but diverges significantly from other markets in its lack of project-level transparency.</p> <p>The changes made following the Chubb review to increase transparency (such as the release of Carbon Estimation Areas) have made some progress, but further opportunities remain. A robust scheme should</p>

	<p>include publicly available project design and registration information, project compliance documentation (monitoring and verification), project unit issuance, retirement and claims records and public records of the complaints and appeals processes relating to project registration and issuance. Public access to project registration, issuance information and a complaints process can provide additional opportunity for investors, ACCU market purchasers, independent ratings agencies and non-government organisations to form their own views as to whether an ERF project has integrity. In this way, facilitating a secondary level of oversight of ERF project integrity may assist the regulatory authority.</p> <p>Woodside notes the findings in the CCA's Review of International Offsets Report 2022 (CCA Report) that Gold Standard and Verra were the leading international offset schemes for governance. In this respect, Woodside supports changes to the ERF Project Register and Australian National Registry of Emissions Units (ANREU) that would facilitate increased public reporting and access to project specific and method approval information.</p> <p>In addition, the ERF design should have regard to the emerging standards being set by the newly formed Integrity Council for the Voluntary Carbon Market Core Carbon Principles for Program Governance and Mitigation Activity Information (CCP) requirements. The role and impact of the CCPs in carbon markets has yet to crystallise, but its progress could be monitored closely and the principles could be used to inform both the ongoing development of the ACCU market, and the potential expansion of the SGM to incorporate carbon credits originated outside of Australia.</p> <p>Woodside considers that, although resource intensive, co-design approaches bringing together developers, academia and other stakeholders are likely to lead to the most widely used and enduring methods. We commend the increasing emphasis on co-design for open-source methods in the CER's method development processes.</p>
<p>How could the CFI, ERF and NGERs be improved in the context of the Paris Agreement era?</p>	<p>At the COP26 United Nations Climate Change Conference 2021, world governments agreed to progress the rules for international carbon offset trading through Article 6 of the Paris Agreement. Woodside welcomes this outcome as a potential step towards broad acceptance of the use of offsets in delivering against climate ambition alongside technology measures to prevent and abate emissions. A focus on developing bilateral and multilateral approaches for the utilisation of international carbon markets has the potential to accelerate rulemaking, simplify trade interactions and bolster overall ambition.</p> <p>Several of Woodside's key LNG customers and their host countries (Japan through JCM, the Joint Crediting Mechanism, and South Korea) are already utilising the international carbon market to incentivise nearer-term emission reductions. Prioritising Article 6 would be another important way to demonstrate integrity of the ERF framework and give confidence to Australia's trading partners regarding the use of offset units by Australian exporters.</p>

	<p>The international trade of offset units through Article 6 will require additional responsibilities such as an assessment of suitable units, bilateral negotiation, accounting for import and export of units as well as monitoring and compliance. Woodside supports the 2022 CCA Report’s recommendations to update Australia’s institutional and regulatory infrastructure for participation in Article 6 and publish a National Carbon Market Strategy that sets out the steps and outlines recent progress.</p> <p>Article 6 readiness responsibilities should be assigned to a regulatory body that is resourced for a dedicated focus on developing, implementing and monitoring compliance with the required architecture to enable internationally transferred mitigation outcomes.</p>
<p>Carbon credit integrity</p>	
<p>Following adoption of the Chubb Review recommendations, what concerns about ACCU integrity remain?</p>	<p>New gas supply and infrastructure requires regulatory certainty to attract the capital from international markets that is needed for large-scale projects.</p> <p>For the SGM to function effectively it needs to be supported by a functioning ACCU market. Broad reaching integrity claims risk undermining the functioning of the ACCU market. Increases in supply side transparency, regarding ACCU project documentation, will better facilitate self-regulation by Australian market participants and enable robust, evidence-based responses to future challenges on integrity of ACCUs.</p> <p>Project documentation transparency is an established principle in the voluntary carbon markets and is one of the Core Carbon Principles established by the ICVCM in its emerging integrity standards for Carbon Markets.</p> <p><i>Transparency</i> <i>The carbon-crediting program shall provide comprehensive and transparent information on all credited mitigation activities. The information shall be publicly available in electronic format and shall be accessible to non-specialised audiences, to enable scrutiny of mitigation activities.</i> <i>The Integrity Council – Core Carbon Principles https://icvcm.org/the-core-carbon-principles/</i></p> <p>A benefit of project documentation transparency is that it has the potential to leverage market mechanisms to increase scrutiny of project integrity and identify poor actors (if any), without additional burden on regulators. For example, in the voluntary carbon markets, independent third-party ratings agencies have emerged to inform the market on matters of integrity</p>
<p>What are the risks to integrity that should be buffered against?</p>	<p>Woodside does not support the concept of a generic “integrity safety net” or “buffer” as proposed under the recommendations of the Chubb review. Improving integrity or implementing specific buffers at the method level is the preferred measure to ensure that each ACCU issued represents a tonne of abatement.</p> <p>Key greenhouse gas abatement integrity risks include overestimated baselines (and over crediting), unaccounted leakage, non-permanence, non-additionality and inaccuracy. Exposure to these risks varies between methods and therefore method-specific buffers are a more fair and consistent way to address them.</p>

	<p>The existing Offsets Integrity Standards set out in the Carbon Credits (Carbon Farming Initiative) Act 2011 provide overarching, legislated, method approval criteria to mitigate against the key greenhouse gas abatement risks. Re-establishment of an independent body for assuring method integrity will provide further opportunity to adequately address some of these risks at the appropriate level.</p> <p>The voluntary carbon markets employ method specific buffers to address method-specific or activity-specific quantification or permanence risks and have not employed a generic 'integrity buffer' at the Standard level.</p>
How should a buffer be applied (e.g. government purchase, supply-side reserve, demand-side correction, other)?	Discounted issuance or Government purchase are the preferred methods for applying a buffer, where the discount or purchase volume reflects the level of uncertainty in the quantification of abatement calculated under the methodology.
What role should governments and users of offsets have in ensuring demand-side integrity?	The TCFD supports transparent disclosure of information to investors when it comes to climate-related plans, and financial risks and opportunities. ASX regulations provide protections to consumers with respect to claims and greenwashing. The Corporations Act regulates dealings in financial products (including ACCUs). Additional reporting and regulation is more likely to duplicate efforts rather than increase accountability. If required, these regulations should be amended, rather than new regulations introduced.
What protections are needed to ensure the integrity of carbon trading markets and exchange platforms?	Participation in carbon trading markets and exchange platforms should exclude retail clients (as defined under financial services regulation) in order to protect consumers and avoid the risks associated with retail financial services impacting the ACCU market and the Safeguard Mechanism. Schemes to market ACCUs and ACCU-market derivatives to retail customers may add a level of risk and complexity to the administration of the ERF by Government.
What role should international carbon markets have in Australia?	<p>Building a clear pathway for inclusion of international carbon credits in the Safeguard Mechanism is important to maintain carbon credit market liquidity. A broader market supply base would reduce the exposure to temporal supply and demand imbalances in the domestic carbon market and support the growth of the Australian economy.</p> <p>In addition to benefits to the Australian economy, there is potential for international offset use to support investment in climate change mitigation projects in developing countries, transfer or diffusion of technology in the host countries, as well as improvement in the livelihood of communities through the creation of employment or increased economic activity.</p>