

# Our progress through the energy transition



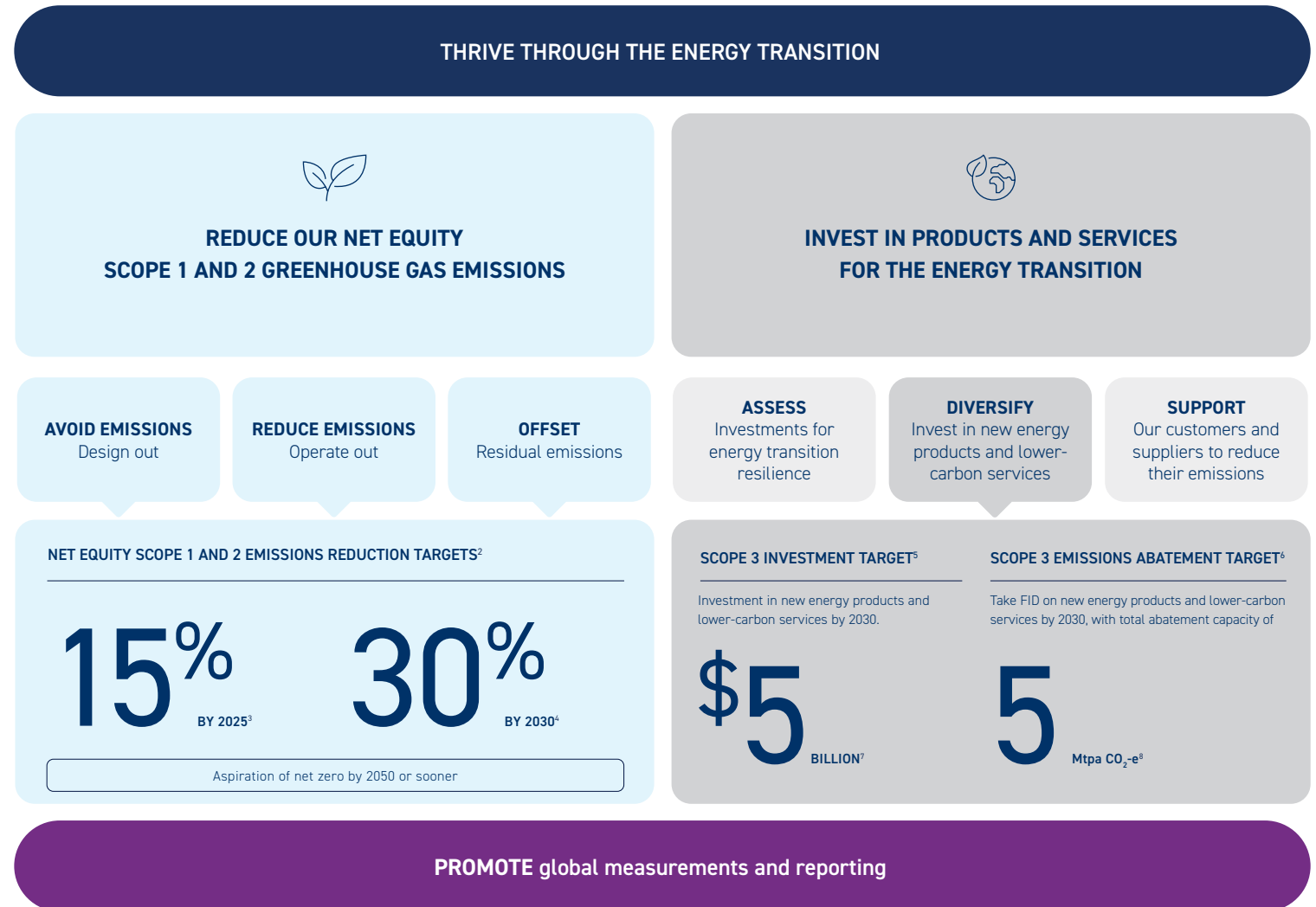
# Climate strategy

Woodside's climate strategy is integrated throughout our company strategy: our aspiration to thrive through the energy transition with a low-cost, lower-carbon, profitable, resilient and diversified portfolio.<sup>1</sup>

Our climate strategy contains two key elements:

- reducing our net equity Scope 1 and 2 greenhouse gas emissions; and
- investing in products and services for the energy transition.

These are depicted in the graphic (right) together with the supporting levers and associated targets.





# Highlights



Sustained demand:

## Customers committing to our LNG

- Emissions reduction and energy security are valued by our customers – LNG can help them meet both.
- We expect growth to be centred in Asia, and Woodside is advantaged to supply this demand.
- This is reinforced by firm demand side commitments to offtake, with over 15 Mt of LNG contracted to Asian buyers in the past 12 months.<sup>9,10,11</sup>

"Even in ambitious climate-focused scenarios, natural gas and LNG continue to play a considerable role... Natural gas fired power plants... can provide flexibility to integrate variable renewables. ...In emerging and developing economies, particularly in Asia, gas and LNG can help facilitate the transition away from coal."

Japan's Ministry of Economy, Trade and Industry (METI)<sup>12</sup>



2024 GHG emissions:

## 14% below starting base<sup>13</sup>

- We delivered strong Scope 1 and 2 GHG emissions performance at our facilities, achieving the addition of Sangomar production whilst maintaining the portfolio within Scope 1 and methane emissions benchmarks.
- We are pursuing emissions reduction opportunities and are continuing to develop a carbon credit portfolio.
- We are on track to meet our net equity Scope 1 and 2 GHG emissions reduction target of 15% by end of 2025.<sup>14,15</sup>



New energy investment:

## \$2.5 billion to date, with potential for 1.6 Mtpa abatement<sup>16,17</sup>

- Investing in opportunities where we have strengths and see profitable demand.
- Beaumont New Ammonia Project acquisition has delivered material progress towards our Scope 3 targets.<sup>18</sup>
- Production of ammonia expected in the second half of 2025 with CCS expected to commence in 2026.

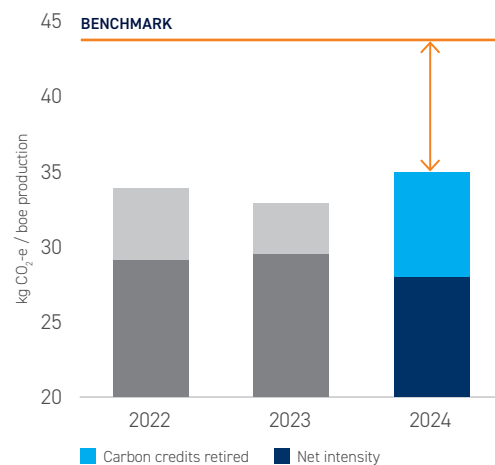
# Woodside's emissions are lower than industry benchmarks



Benchmarks used in the charts on this page are:

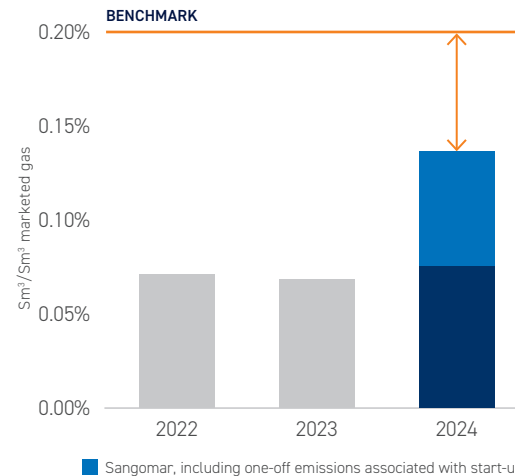
- Scope 1 and 2 intensity – the International Energy Agency's 2023 global average for oil, gas and liquefaction, weighted for Woodside actual production in 2024.
- Methane intensity – the Oil and Gas Climate Initiative's (OGCI's) 2025 target of well below 0.20%.
- Life cycle intensity – the Transition Pathway Initiative's most recent oil and gas sector mean, which is for 2023.

Gross equity Scope 1 and 2 GHG emissions intensity<sup>19</sup>



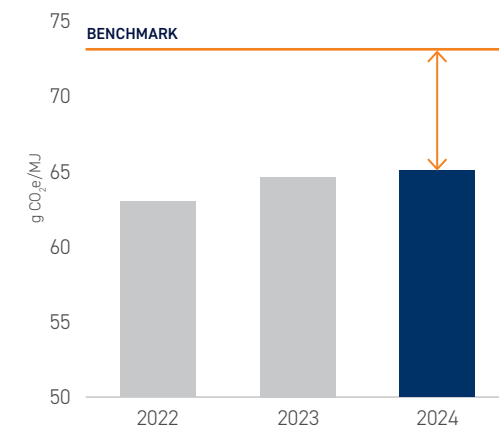
- Strong performance at facilities due to operational performance, resource quality and decarbonisation plans.
- Further net emissions reduction achieved from retiring carbon credits.
- Start-up of Sangomar added emissions as expected, whilst emissions intensity performance was maintained.

Equity methane emissions intensity<sup>20</sup>



- Woodside's methane performance is ahead of industry benchmarks and targets. Sangomar performance included one off emissions associated from start-up activities.
- Our methane plan is focused on advancing measurement, management, reporting, as well as supporting better regulation and practices across the value chain.
- We are a member of the flagship United Nations Environment Programme methane initiative – OGMP 2.0.

Scope 1, 2 and 3 GHG emissions life cycle intensity<sup>21</sup>



- Woodside has better GHG emissions life cycle intensity performance than industry benchmark due to higher weighting of natural gas in our portfolio.
- Sangomar production had modest impact on this metric despite adding energy growth to portfolio.
- Adding new energy products and lower-carbon services has potential to further reduce life cycle intensity.





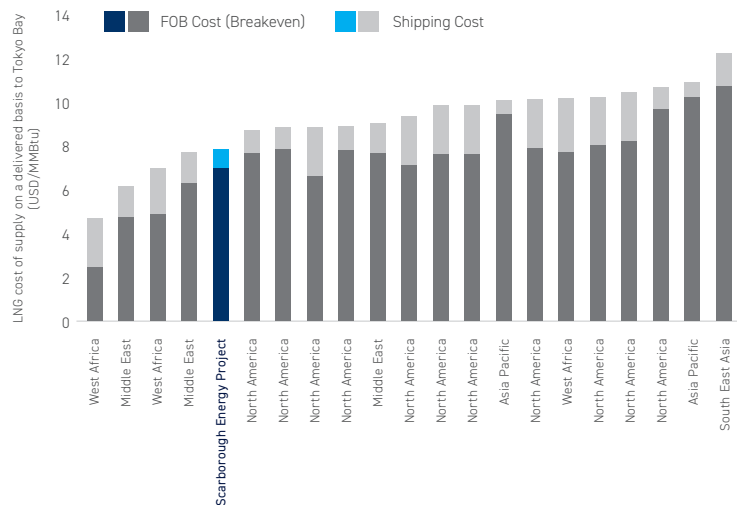


# Sustained LNG demand in the energy transition

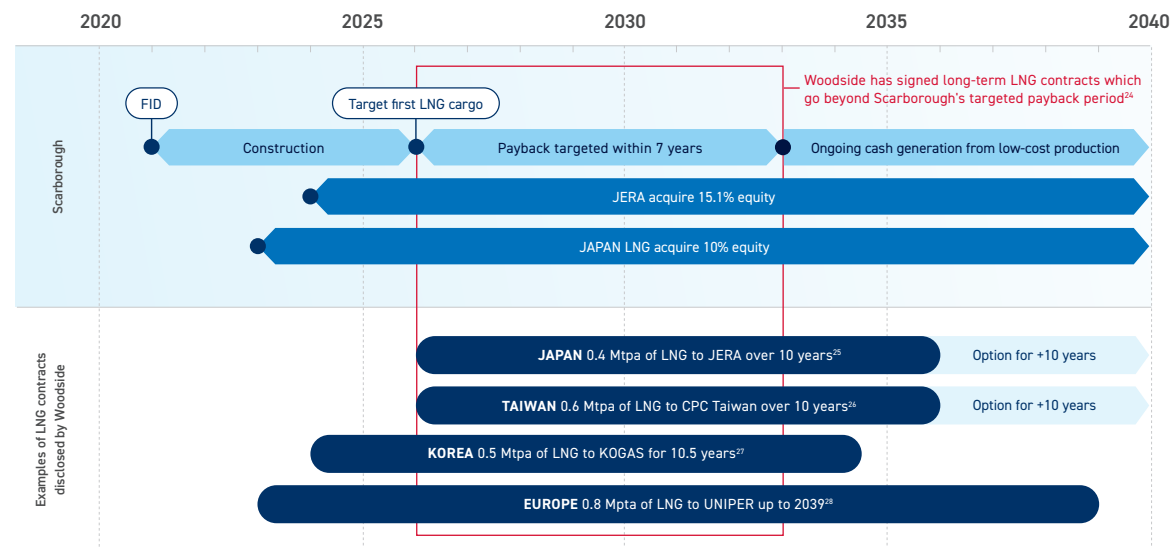
Woodside is confident in sustained demand for our LNG in the decades to come. This is because of our competitive supply, the demand from our customers, and the flexibility of LNG supply to support countries as they meet energy security, affordability and emissions reduction goals.

## Woodside's competitive supply<sup>22</sup>

Woodside's LNG supply is cost-competitive. For example, the Scarborough Energy Project is one of the most cost-competitive LNG projects under construction anywhere in the world for delivering LNG to Japan, due to a combination of production and shipping costs.<sup>23</sup>



## Customers are securing Woodside's LNG with firm long-term commitments



The sale of 25.1% of Scarborough equity to Japanese LNG buyers is evidence of their confidence in the demand for its products. In addition, Asian customers have also made long-term contractual commitments to Woodside LNG offtake, further evidence of the resilience of demand. Woodside carefully evaluates how much LNG to contract and how much to retain for flexible spot markets, balancing the benefits of derisking offtake with potential higher margins on the spot market. In the fourth quarter of 2024, Woodside sold 33.6% of produced LNG at prices linked to gas hub indices in the quarter (12.8% of total equity production), realising a 31% premium compared to oil-linked pricing.



Sustained demand for LNG is part of the energy transition because for many customers it allows them to achieve energy security while reducing emissions overall and these are both important goals.

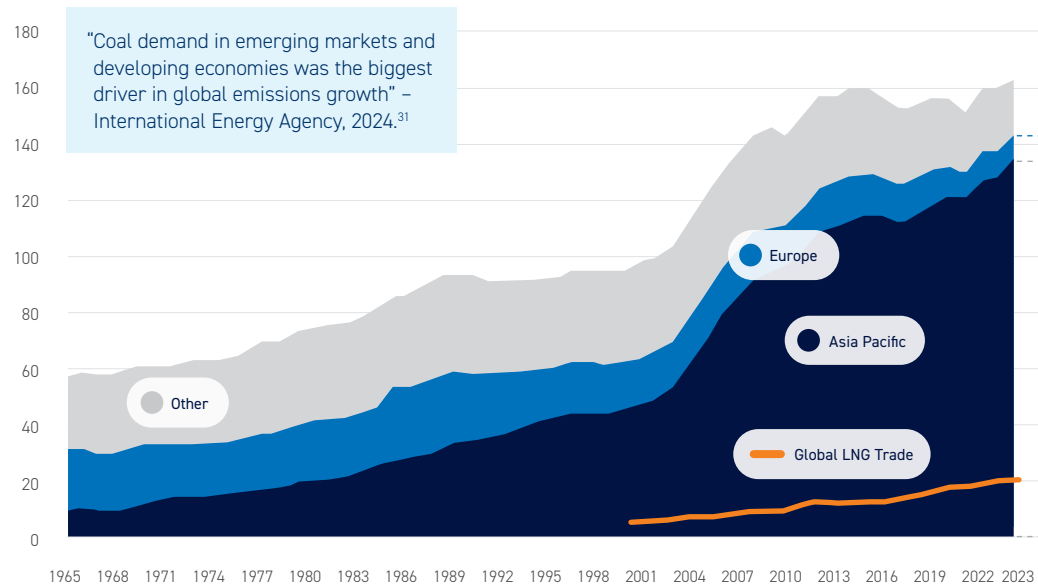
MYTH

Some express the view that coal has been largely displaced from the energy system and that the priority should shift to displacing gas.

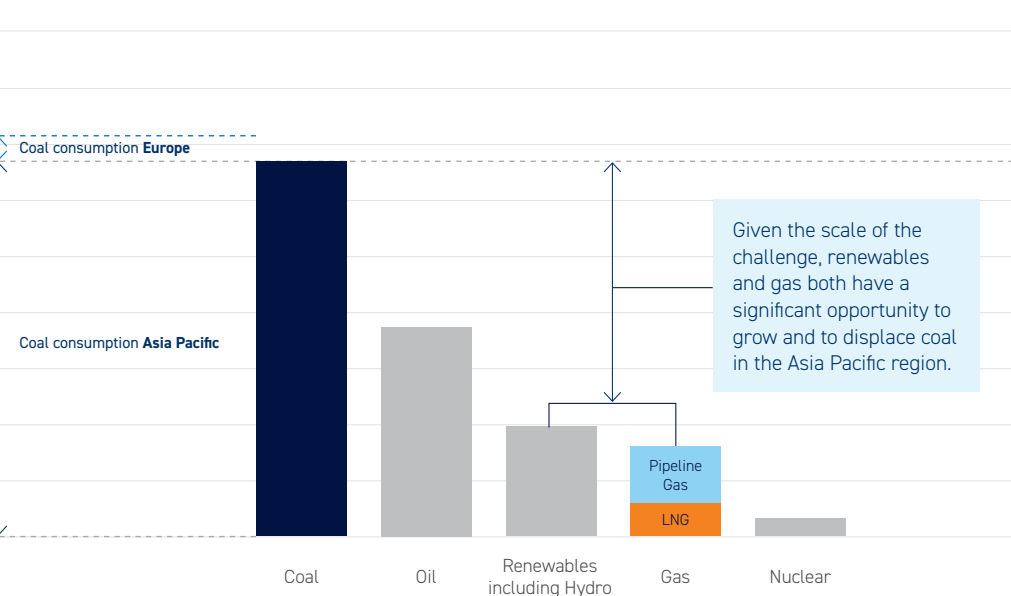
FACT

Europe has reduced its coal consumption by more than two thirds since peaking in 1987. Over the same period, the Asia Pacific region has increased coal consumption by more than four times, replacing European coal consumption many times over.<sup>29</sup>

Global coal consumption 1965-2023 (EJ)<sup>30</sup>



Asia Pacific energy consumption 2023 (EJ)<sup>32</sup>



Coal demand is continuing to grow in the Asia Pacific region and is driving global GHG emissions growth. Addressing this growth while maintaining energy security has been a priority for global climate and energy policy. In response to policy signals and technology improvement, renewables are growing quickly, especially in China. In addition to this growth of renewables, sustained use of natural gas can preserve energy security, support renewables by firming their intermittency and also directly replace coal where infrastructure allows. To illustrate the potential of this, in 2023 coal-to-gas switching was the largest single driver of emissions reduction in the US power sector.<sup>33</sup> As well as power generation, we also expect sustained use of natural gas in heavy transport and other hard-to-abate sectors.

\*All footnotes on this page will be displayed on page 14 as endnotes

# Strong Scope 1 and 2 GHG emissions performance

Our resource quality, design of assets and focus on operational emissions management are delivering strong Scope 1 and 2 GHG emissions results.

## 2024 Scope 1 and 2 GHG emissions

- Our net equity Scope 1 and 2 GHG emissions were 5,437 kt CO<sub>2</sub>-e, 14% below the starting base, on track to meet our 2025 target of 15%.<sup>34,35</sup>
- Our gross equity Scope 1 and 2 GHG emissions of 6,784 kt CO<sub>2</sub>-e, included emissions arising from the additional production from Sangomar. A portion of these were associated with initial start-up activity. The number of carbon credits retired was 1,347 kt CO<sub>2</sub>-e.
- Our gross equity Scope 1 and 2 GHG emissions intensity remained better than industry benchmark after accommodating Sangomar start-up.<sup>36</sup>

## Avoiding and reducing emissions is part of our daily operation



### Boil off gas compressor – seal vent modifications and technology trials

Modifying boil off gas compressor vents is an example of applying equipment redesign to reduce emissions.



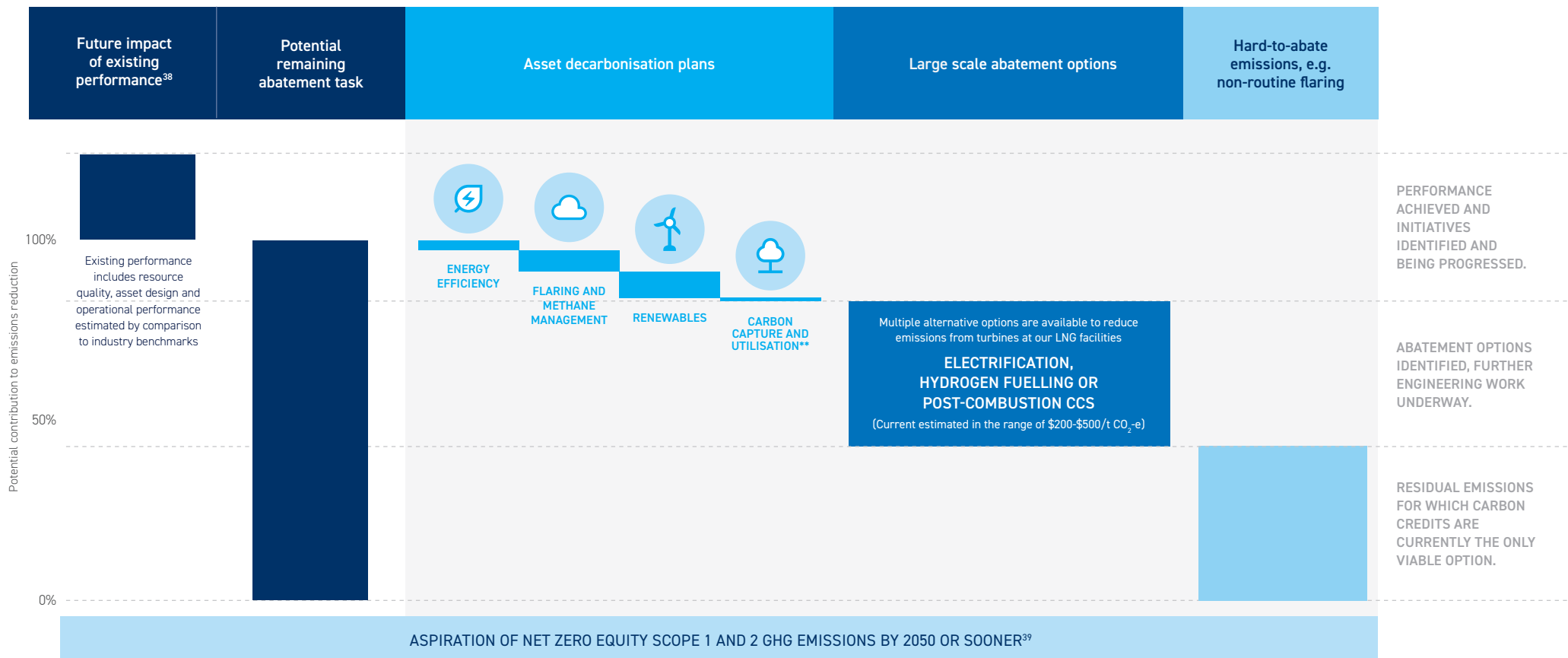
### Power generator optimisation

Woodside engineers monitor performance data, including analytics which determine the optimal power generator mix for peak system operability and energy efficiency.



# Emissions reduction opportunities

This chart shows an estimate of the GHG emissions from Woodside's current portfolio of producing assets and sanctioned projects\* that we expect may require abatement to meet regulatory or corporate goals.<sup>37</sup> It also shows the technology levers available to us and the relative contribution they may make.



\*This includes Scarborough, Trion and Beaumont New Ammonia Project as well as producing assets. Emissions and abatement opportunities at future investments can be added when a FID is taken and design is complete.

\*\*Associated with the CO<sub>2</sub> captured from Gippsland Basin Joint Venture gas, which is sold for reuse to Australian industries e.g. food, beverage, hospitality, manufacturing and medical.

# Leading on methane management

Woodside's methane management strategy is to measure, reduce, and report methane emissions and lead the adoption of leading practices in industry and regulations.

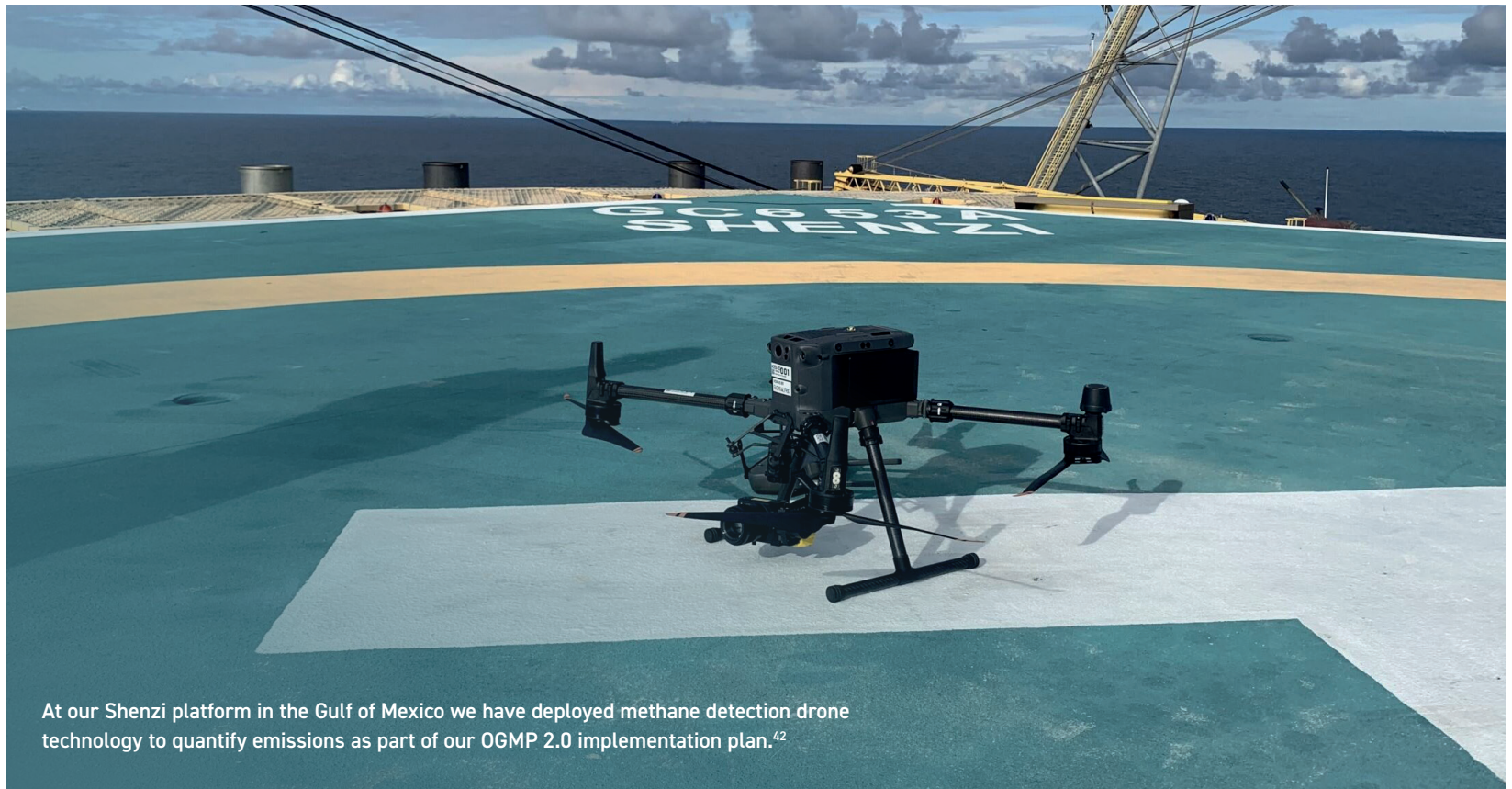
## Methane Emissions Intensity Performance

In 2024, we maintained our reported methane emissions intensity at around 0.1% of production by volume, ahead of industry benchmark and target levels.<sup>40</sup>



### Oil and Gas Methane Partnership 2.0 (OGMP 2.0)

We joined OGMP 2.0 the UN Environment Program's flagship oil and gas methane mitigation and measurement programme in January 2024 and are preparing our implementation plan.<sup>41</sup>



At our Shenzi platform in the Gulf of Mexico we have deployed methane detection drone technology to quantify emissions as part of our OGMP 2.0 implementation plan.<sup>42</sup>

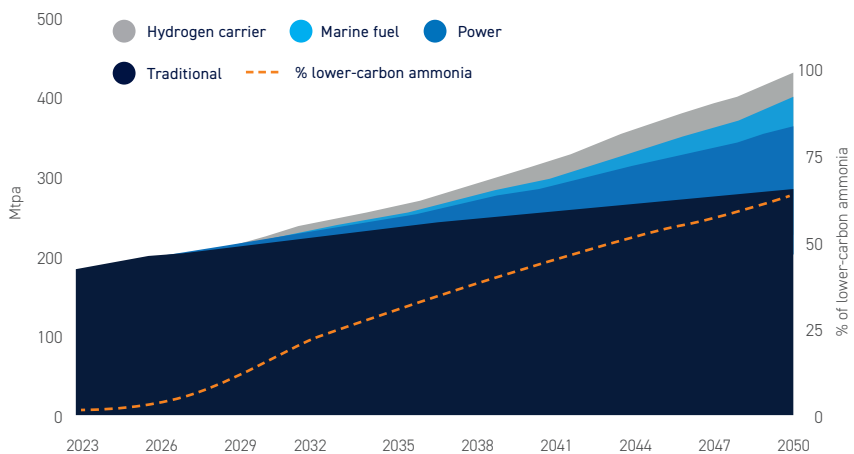


# Disciplined investment in new energy

We are developing new products and services, in which we expect demand to grow in the energy transition and for Woodside to have competitive advantages. We will only invest when we have confidence in profitable customer demand that meets our capital allocation framework requirements.

An example of a new energy product that Woodside is developing is lower-carbon ammonia. Ammonia is a derivative of hydrogen. We expect the ammonia market to grow and to increasingly be lower-carbon, driven by emissions regulation and policy such as the European Union's Carbon Border Adjustment Mechanism.

## Global ammonia demand<sup>43,44</sup>



## About Beaumont New Ammonia Project<sup>45</sup>

The Beaumont New Ammonia Project positions Woodside in the expected lower-carbon ammonia market in Europe and Asia, benefiting from Woodside's existing customer relationships, marketing experience, and operational expertise.

- The project is our biggest investment in new energy to date (\$2.35 billion).<sup>46</sup>
- First ammonia production is targeted for the second half of 2025 with the addition of carbon sequestration targeted for the second half of 2026. The project was 83% complete at the end of 2024.
- Phase 1 has a design capacity of 1.1 Mtpa of ammonia and potential to contribute up to 1.6 Mtpa of CO<sub>2</sub>-e abatement.<sup>47</sup>
- Phase 2 will be a second 1.1 Mtpa production train, including the potential to contribute an additional 1.6 Mtpa of CO<sub>2</sub>-e abatement. This is subject to a separate FID.

The project delivers material progress towards our Scope 3 investment and abatement targets.



\*All footnotes on this page will be displayed on pages 14 and 15 as endnotes

# Disclaimers

This purpose of this document is to enable readers to obtain a high-level understanding of Woodside's climate-related progress and performance in 2024.

This Update contains extracts of information relating to Woodside's climate performance during 2024 in relation to its Climate Transition Action Plan (CTAP). This update does not contain all of the underlying context and detail that is included in such previous disclosures. This update should be read in conjunction with the CTAP and Woodside's Annual Report 2024 which include[s] more fulsome explanation of the underpinning assumptions, uncertainties, and context relevant to the information in this update.

## Information

This update includes content which is oriented towards future events, the trajectory and outcome of which are continually evolving and inherently uncertain, and contains forward-looking information regarding the plans, strategies, objectives, targets, aspirations and the like of Woodside in relation to climate change.

This update provides examples of how we currently intend to direct the management of our assets and deploy our capital, to help us achieve our strategic aims. The matters in this update are a 'point in time' disclosure and reflect management's expectations, judgments, assessments, assumptions, estimates and other information available at the date of this document and/or our planning processes. We operate in a dynamic and uncertain market and external environment.

Woodside's 'GHG' or 'emissions' information reported are net equity Scope 1 GHG emissions, Scope 2 GHG emissions, and/or Scope 3 GHG emissions, as the context requires.

Plans and strategies can and must adapt in response to dynamic market conditions, joint venture decisions, opportunities that might arise or other changing circumstances. Investors should not assume that any plan (or pathway we have articulated to achieve a strategic aim) is locked in and will not evolve and be updated as time passes. A number of aspects of our plans involve developments or strategies that are complex and may be delayed, more costly than anticipated or unsuccessful for many reasons, including reasons outside our control.

Scope 3 targets and related expectations regarding the future demand for our products or services, are subject to commercial arrangements, commercial feasibility, regulatory and Joint Venture approvals, and third party activities (which may or may not proceed). Individual investment decisions are subject to Woodside's investment targets. Such targets are not guidance. Scope 3 targets potentially include both organic and inorganic investment.

Woodside uses the term 'Lower-carbon services' to describe technologies, such as CCUS or offsets, that may be capable of reducing the net greenhouse gas emissions of our customers. Woodside uses the term "lower-carbon ammonia" to describe the use of hydrogen with emissions abated by carbon, capture, and storage (CCS), with an expected ammonia lifecycle (Scope 1, 2 and 3) carbon emissions intensity of 0.8 tCO<sub>2</sub>/tNH<sub>3</sub> (based on contracted intensity threshold with Linde) relative to unabated ammonia with a lifecycle (Scope 1, 2 and 3) carbon emissions intensity of 2.3 tCO<sub>2</sub>/tNH<sub>3</sub> (Hydrogen Europe, 2023).

Actual performance against Woodside's targets and aspirations may be affected by risks associated with our business, the uncertainty as to how the global energy transition to a lower-carbon economy will evolve, and physical risks associated with climate change, many of which are beyond Woodside's control.

Further detail on these risks and their potential financial impacts and mitigations can be found in the Risk Management section of the CTAP and the Risk Factors section of our Annual Report 2024 and our Sustainability Report (within the Annual Report 2024). These risks include, but are not limited to:

- the risk that a transition to a lower-carbon economy may impact demand (and pricing) for oil, gas, new energy products and lower-carbon services and their substitutes in our portfolio, the policy and legal environment for its production, our reputation and our operating environment. In addition, the imposition of regulation and availability and cost of emission allowances or offsets could adversely impact costs;
- the potential for higher than expected costs of transition to new technologies, and poor efficacy of new technologies could adversely impact costs of operations and reduce demand for hydrocarbon products, new energy or lower-carbon services; and
- the decarbonisation plans of Australia and other countries.

Subject to any terms implied by law which cannot be excluded, Woodside accepts no responsibility for any loss, damage, cost or expense (whether direct or indirect) incurred as a result of any error, omission or misrepresentation in information in this update.

This document contains industry, market and competitive position data based on industry publications and studies conducted by third parties, as well as Woodside's internal estimates and research. Woodside does not make any representation or guarantee that this material is accurate, complete, reliable or up-to-date.

## Forward-looking statements

This update contains forward-looking statements with respect to Woodside's business and operations and market conditions, including, for example, but not limited to, statements regarding future assessment, development, completion and execution of Woodside's projects, expectations regarding future capital expenditures, future results of projects, operating activities, new energy products, lower-carbon services, and expectations regarding the achievement of Woodside's net equity Scope 1 and 2 greenhouse gas emissions targets and aspiration or Woodside's Scope 3 investment and abatement targets. Statements that describe the objectives, plans, goals or expectations of Woodside are forward-looking statements.

Forward-looking statements in this update are not guidance, forecasts, guarantees or predictions of future events or performance. No representation or warranty, express or implied, is given as to the accuracy, completeness or correctness, likelihood of achievement or reasonableness of any forward-looking information in this document. Readers should not place undue reliance on any forward-looking statements contained in this update, particularly in light of the long time horizon this document discusses and inherent uncertainty in policy, market and technological developments in the short-, medium- and long-term.

Forward-looking information in this update may be affected by variables and changes in underlying assumptions which could cause actual results to differ materially from those expressed in this document. In addition to the risks referenced above, these include price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, transition risks, physical risks, legislative, policy, fiscal and regulatory developments, changes in accounting standards, economic and financial market

conditions in various countries and regions, political risks, abatement able to be delivered through engineering or operational changes, project delay or advancement, approvals and cost estimates. Some matters are subject to approval of joint venture participants or third parties. Targets, aspirations and opportunities described in this update may also change materially if Woodside changes its strategic aims set out in the Annual Report 2024 and the CTAP.

Woodside does not undertake to provide ongoing market updates on forward-looking information, including plans to achieve strategic aims or targets, or on performance against its plans or targets, except to the extent it has a legal obligation to do so. Past performance is not a guide to future performance.

## No offer or advice

This update is not intended to and does not constitute, form part of, or contain an offer or invitation to sell to Woodside shareholders (or any other person), or a solicitation of an offer from Woodside shareholders (or any other person), or a solicitation of any vote or approval from Woodside shareholders (or any other person) in any jurisdiction.

This update has been prepared without reference to the investment objectives, financial and taxation situation or particular needs of any Woodside shareholder or any other person. The information contained in this update does not constitute, and should not be taken as, financial product or investment advice. Woodside encourages you to seek independent legal, financial, taxation and other professional advice before making any investment decision.

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## Other important information

All references to dollars, cents or \$ in this update are to US currency, unless otherwise stated.

References to "Woodside" may be references to Woodside Energy Group Ltd and/or its applicable subsidiaries (as the context requires).

This update does not include any express or implied prices at which Woodside will buy or sell financial products.

All greenhouse gas emissions data in this update are estimates, due to the inherent uncertainty and limitations in measuring or quantifying greenhouse gas emissions, including those uncertainties set out in the GHD Assurance Statement in the sustainability data section of the Woodside website. As of the date of publication, further information regarding the calculation of Woodside's greenhouse gas emissions is consistent with the description contained in the supporting table of climate-related data available on our website. There may be differences between Woodside's calculation of greenhouse gas emissions and the approach adopted by third parties.



# Glossary

Abate / Abatement	Avoidance, reduction or removal of an amount of carbon dioxide or equivalent.
Aspiration	Woodside uses this term to describe an aspiration to seek the achievement of an outcome but where achievement of the outcome is subject to material uncertainties and contingencies such that Woodside considers there is not yet a suitable defined plan or pathway to achieve that outcome.
Carbon credit	A tradable financial instrument that is issued by a carbon-crediting program. A carbon credit represents a greenhouse gas emission reduction to, or removal from, the atmosphere equivalent to 1 t/CO <sub>2</sub> -e, calculated as the difference in emissions from a baseline scenario to a project scenario. Carbon credits are uniquely serialised, issued, tracked and retired or administratively cancelled by means of an electronic registry operated by an administrative body, such as a carbon-crediting program.
CCS	Carbon capture and storage.
CCUS	Carbon capture utilisation and storage.
CO <sub>2</sub> -e	CO <sub>2</sub> equivalent. The universal unit of measurement to indicate the global warming potential of each of the seven greenhouse gases, expressed in terms of the global warming potential of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) any greenhouse gas against a common basis. <sup>48</sup>
Decarbonisation	Woodside uses this term to describe activities or pathways that have the effect of moving towards a state that is lower-carbon, as defined in this glossary.
Emissions	Emissions refers to emissions of greenhouse gases unless otherwise stated.
Equity greenhouse gas emissions	Woodside sets its Scope 1 and 2 greenhouse gas emissions reduction targets on an equity basis. This ensures that the scope of its emissions reduction targets is aligned with its economic interest in its investments. Equity emissions reflect the greenhouse gas emissions from operations according to Woodside's share of equity in the operation. Its equity share of an operation reflects its economic interest in the operation, which is the extent of rights it has to the risks and rewards flowing from the operation. <sup>49</sup>
FID	Final investment decision.
Flaring	The controlled burning of gas found in oil and gas reservoirs.
GHG or Greenhouse gas	The seven greenhouse gases listed in the Kyoto Protocol are: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); nitrogen trifluoride (NF <sub>3</sub> ); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ). <sup>50</sup>
Goal	Woodside uses this term to broadly encompass its targets and aspirations.
Gulf of Mexico	"Gulf of Mexico" refers to the US Continental Shelf area bounded on the northeast, north, and northwest by the States of Texas, Louisiana, Mississippi, Alabama and Florida and extending to the seaward boundary with Mexico and Cuba.
LNG	Liquefied natural gas.
Lower-carbon	Woodside uses this term to describe the characteristic of having lower levels of associated potential GHG emissions when compared to historical and/or current conventions or analogues, for example relating to an otherwise similar resource, process, production facility, product or service, or activity. When applied to Woodside's strategy, please see the definition of lower-carbon portfolio.
Lower-carbon ammonia	Lower-carbon ammonia is characterised here by the use of hydrogen with emissions abated by carbon capture, and storage (CCS), with an expected ammonia lifecycle (Scope 1, 2 and 3) carbon emissions intensity of 0.8 tCO <sub>2</sub> /tNH <sub>3</sub> (based on contracted intensity threshold with Linde) relative to unabated ammonia with a lifecycle (Scope 1, 2 and 3) carbon emissions intensity of 2.3 tCO <sub>2</sub> /tNH <sub>3</sub> (Hydrogen Europe, 2023).
Lower-carbon portfolio	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.
Lower-carbon services	Woodside uses this term to describe technologies, such as CCUS or offsets that could be used by customers to reduce their net greenhouse gas emissions.
MMBtu	Million british thermal units
Net equity greenhouse gas emissions	Woodside's equity share of net greenhouse gas emissions which includes the utilisation of carbon credits as offsets.

Net greenhouse gas emissions	Woodside has set its Scope 1 and 2 greenhouse gas emissions reduction targets on a net basis, allowing for both direct emissions reductions from its operations and emissions reduction achieved from the utilisation of carbon credits as offsets (including credits relating to avoidance, reduction and / or removal activities). Net greenhouse gas emissions are equal to an entity's gross greenhouse gas emissions reduced by the number of retired carbon credits. <sup>51</sup>
Net zero	Net zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. Where multiple greenhouse gases are involved, the quantification of net zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, and others, as well as the chosen time horizon). <sup>52</sup>
New energy	Woodside uses this term to describe energy technologies, such as hydrogen or ammonia, that are emerging in scale but which are expected to grow during the energy transition due to having lower greenhouse gas emissions at the point of use than conventional fossil fuels.
Offsets	The compensation for an entity's greenhouse gas emissions within its scope by achieving an equivalent amount of emission reductions or removals outside the boundary or value chain of that entity.
RFSU	Ready for startup.
Scope 1 GHG emissions	Direct GHG emissions. These occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment. Woodside estimates greenhouse gas emissions, energy values and global warming potentials are estimated in accordance with the relevant reporting regulations in the jurisdiction where the emissions occur (e.g. Australian National Greenhouse and Energy Reporting (NGER), US EPA Greenhouse Gas Reporting Program (GHGRP)). Australian regulatory reporting principles have been used for emissions in jurisdictions where regulations do not yet exist. <sup>53</sup>
Scope 2 GHG emissions	Electricity indirect GHG emissions. Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organisational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated. Woodside estimates greenhouse gas emissions, energy values and global warming potentials are estimated in accordance with the relevant reporting regulations in the jurisdiction where the emissions occur (e.g. Australian National Greenhouse and Energy Reporting (NGER), US EPA Greenhouse Gas Reporting Program (GHGRP)). Australian regulatory reporting principles have been used for emissions in jurisdictions where regulations do not yet exist. <sup>54</sup>
Scope 3 GHG emissions	Other indirect GHG emissions. Scope 3 is a reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of Scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services. Please refer to the data table on page 73 of the Climate Action Transition Plan and 2023 Progress Report for further information on the Scope 3 emissions categories reported by Woodside. <sup>55</sup>
Starting base	Woodside uses a starting base of 6.32 Mt CO <sub>2</sub> -e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.
Target	Woodside uses this term to describe an intention to seek the achievement of an outcome, where Woodside considers that it has developed a suitable defined plan or pathway to achieve that outcome.
\$, USD, US\$	US dollars

## Units of measure

%	percentage	MJ	megajoule
boe, boe/d	barrels of oil equivalent /per day	MMBtu	Million british thermal units
CO <sub>2</sub>	Carbon dioxide	Mt	Million tonne
EJ	exajoule	Mtpa	Million tonnes per annum
g	grams	NH <sub>3</sub>	Ammonia
kg	kilograms	Sm <sup>3</sup>	Standard cubic metre
kt	kilotonne	tCO <sub>2</sub> -e	tonnes of carbon dioxide equivalent

\*All footnotes on this page will be displayed on page 15 as endnotes

# Endnotes

- 1 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.
- 2 Targets and aspiration are for net equity Scope 1 and 2 greenhouse gas emissions relative to a starting base of 6.32 Mt CO<sub>2</sub>-e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.
- 3 This means net equity for the 12-month period ending 31 December 2025 are targeted to be 15% lower than the starting base.
- 4 This means net equity emissions for the 12-month period ending 31 December 2030 are targeted to be 30% lower than starting base.
- 5 Scope 3 targets are subject to commercial arrangements, commercial feasibility, regulatory and Joint Venture approvals, and third party activities (which may or may not proceed). Individual investment decisions are subject to Woodside's investment targets. Not guidance. Potentially includes both organic and inorganic investment.
- 6 Ibid.
- 7 Includes pre-RFSU spend on new energy products and lower-carbon services that can help our customers decarbonise by using these products and services. It is not used to fund reductions of Woodside's net equity Scope 1 and 2 greenhouse gas emissions which are managed separately through asset decarbonisation plans.
- 8 Includes binding and non-binding opportunities in the portfolio, subject to commercial arrangements, commercial feasibility, regulatory and Joint Venture approvals, and third party activities (which may or may not proceed). Individual investment decisions are subject to Woodside's investment targets. Not guidance.
- 9 See announcement titled "Woodside and Kogas sign agreement for long-term LNG supply". [https://www.woodside.com/docs/default-source/media-releases/woodside-and-kogas-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=dfc9ef5b\\_9](https://www.woodside.com/docs/default-source/media-releases/woodside-and-kogas-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=dfc9ef5b_9).
- 10 See announcement titled "Woodside and CPC sign agreement for long-term LNG supply" [https://www.woodside.com/docs/default-source/about-us-documents/woodside-and-cpc-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=667cd731\\_1](https://www.woodside.com/docs/default-source/about-us-documents/woodside-and-cpc-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=667cd731_1).
- 11 See announcement titled "Woodside and JERA sign agreement for long-term LNG supply". [https://www.woodside.com/docs/default-source/media-releases/woodside-and-jera-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=1e6b022f\\_1](https://www.woodside.com/docs/default-source/media-releases/woodside-and-jera-sign-agreement-for-long-term-lng-supply.pdf?sfvrsn=1e6b022f_1).
- 12 Japan's Ministry of Economy, Trade and Industry (METI) and International Energy Agency discussion paper "Future of LNG: security, affordability, and decarbonization" October 2024. <https://www.meti.go.jp/press/2024/10/20241007002/20241007002-1.pdf>.
- 13 Targets and aspiration are for net equity Scope 1 and 2 greenhouse gas emissions relative to a starting base of 6.32 Mt CO<sub>2</sub>-e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.
- 14 Ibid.
- 15 This means net equity for the 12-month period ending 31 December 2025 are targeted to be 15% lower than the starting base.
- 16 Cumulative spend against the investment target at the end of 2024 includes 80% of the total \$2,350 million for the Beaumont New Ammonia Project acquisition. The remaining 20% will be paid at Project completion.
- 17 Scope 3 emissions abatement capacity of 1.6 Mtpa CO<sub>2</sub>-e assumes supply of carbon abated hydrogen and CCS operational for phase 1 of the Beaumont New Ammonia Project. Woodside has made the assumption to estimate the avoided emissions through the displacement of conventional marine fuel. Actual displaced emissions may differ based on actual use case.
- 18 The information regarding Beaumont New Ammonia (BNA) in this update does not contain all the underlying context and details that is included in the announcement "Woodside to acquire OCI's Clean Ammonia Project", released 5 August 2024. Refer to the announcement for the full explanation of the underpinning assumptions, uncertainties, and context relevant to BNA. [https://www.woodside.com/docs/default-source/asx-announcements/2024/woodside-to-acquire-oci-s-clean-ammonia-project.pdf?sfvrsn=cf35e9ed\\_1](https://www.woodside.com/docs/default-source/asx-announcements/2024/woodside-to-acquire-oci-s-clean-ammonia-project.pdf?sfvrsn=cf35e9ed_1).
- 19 Woodside analysis, based on Woodside Scope 1 and 2 greenhouse gas emissions data for 2022, 2023 and 2024 relative to a comparable portfolio of upstream oil, upstream natural gas and LNG liquefaction assets, based on the average emissions intensity of these project categories reported in Table 3.1 of IEA's "The Oil and Gas Industry in Net Zero Transitions" (November 2023).
- 20 Woodside methane emissions data for 2022, 2023 and 2024 relative to an industry target characterised by OGCI's 2025 methane intensity target. OGCI's 2023 upstream intensity in their 2024 progress report was 0.14%. [https://www.ogci.com/wp-content/uploads/2024/12/241115\\_OGCI\\_ProgressReport2024.pdf](https://www.ogci.com/wp-content/uploads/2024/12/241115_OGCI_ProgressReport2024.pdf).
- 21 Woodside analysis, based on Woodside Scope 1, 2 and 3 emissions data for 2024 relative to the Transition Pathway Initiative oil and gas sector mean reported in their assessment Woodside on 9 June 2024. <https://www.transitionpathwayinitiative.org/companies/woodside-petroleum>.
- 22 Wood Mackenzie LNG tool, Destination in Japan = Negishi Regas Terminal (Tokyo Bay), Discount Rate = 12%, Ship Volume = 174k m3. Scarborough Energy Project is the breakeven for Scarborough gas field supplying Pluto Train 1 and Pluto Train 2. For Train 1 only look forward costs from the Scarborough FID have been included.
- 23 Assets that have taken the Final Investment Decision (FID) and/or are under construction, including those in which where a final EPC or EPCIC contract has been signed represents a defacto FID.
- 24 Woodside's 2023 Climate Transition Action Plan and Progress Report, page 49. [https://www.woodside.com/docs/default-source/investor-documents/major-reports-\(static-pdfs\)/ctap2023/climate-transition-action-plan-and-2023-progress-report.pdf?sfvrsn=d6f6eed4\\_11](https://www.woodside.com/docs/default-source/investor-documents/major-reports-(static-pdfs)/ctap2023/climate-transition-action-plan-and-2023-progress-report.pdf?sfvrsn=d6f6eed4_11).
- 25 See announcement titled "Woodside and JERA sign agreement for long-term LNG supply".
- 26 See announcement titled "Woodside and CPC sign agreement for long-term LNG supply".
- 27 See announcement titled "Woodside and Kogas sign agreement for long-term LNG supply".
- 28 See announcement titled "Woodside and Uniper sign agreement for LNG supply to Europe". [https://www.woodside.com/docs/default-source/media-releases/media-release---woodside-and-uniper-sign-new-lng-agreement.pdf?sfvrsn=d4b30e35\\_3](https://www.woodside.com/docs/default-source/media-releases/media-release---woodside-and-uniper-sign-new-lng-agreement.pdf?sfvrsn=d4b30e35_3).
- 29 Energy Institute: Statistical Review of World Energy (2024).
- 30 Ibid.
- 31 International Energy Agency (2024): CO<sub>2</sub> Emissions in 2023
- 32 Energy Institute: Statistical Review of World Energy (2024).
- 33 International Energy Agency (2024): CO<sub>2</sub> Emissions in 2023.
- 34 Targets and aspiration are for net equity Scope 1 and 2 greenhouse gas emissions relative to a starting base of 6.32 Mt CO<sub>2</sub>-e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.
- 35 This means net equity for the 12-month period ending 31 December 2025 are targeted to be 15% lower than the starting base.
- 36 Woodside analysis, based on Woodside Scope 1 and 2 greenhouse gas emissions data for 2024 relative to a comparable portfolio of upstream oil, upstream natural gas and LNG liquefaction assets, based on the average emissions intensity of these project categories reported in Table 3.1 of IEA's "The Oil and Gas Industry in Net Zero Transitions" (November 2023).
- 37 Indicative only, not guidance. Potential impact of opportunities identified in asset decarbonisation plans assuming all opportunities identified progress to execution, which is not certain and remains subject to further maturity of cost and engineering definition. Greenhouse gas quantities are estimated using engineering judgement by Woodside engineers. Please refer to page 12 for important cautionary information relating to forward looking statements.
- 38 Quantification of emissions reductions associated with the continuation of existing performance is inherently uncertain. However, it is possible to provide an estimate by comparison to a benchmark of a comparable portfolio of upstream oil, upstream natural gas and LNG liquefaction assets with a similar product mix to Woodside's forecast production between 2025 and 2050. The industry average emissions reported in Table 3.1 of IEA's "The Oil and Gas Industry in Net Zero Transitions" (November 2023) has been applied to Woodside's forecast production between 2025 to 2050 to determine the benchmark performance used to estimate the emissions reduction. Woodside's LNG projects, inclusive of upstream and liquefaction facilities, have been benchmarked based on the industry average LNG liquefaction emissions intensity stated by the IEA. This is a conservative approach as does not include the average industry emissions associated with upstream production from these facilities.
- 39 Targets and aspiration are for net equity Scope 1 and 2 greenhouse gas emissions relative to a starting base of 6.32 Mt CO<sub>2</sub>-e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.
- 40 Woodside methane emissions data for 2024, relative to OGCI average and targets. <https://www.ogci.com/action-and-engagement/reducing-methane-emissions/#methane-target>.
- 41 See announcement titled "Woodside joins UNEP oil and gas methane partnership 2.0". [https://www.woodside.com/docs/default-source/media-releases/woodside-joins-unesp-oil-and-gas-methane-partnership-2.0.pdf?sfvrsn=15d3afd8\\_8](https://www.woodside.com/docs/default-source/media-releases/woodside-joins-unesp-oil-and-gas-methane-partnership-2.0.pdf?sfvrsn=15d3afd8_8).
- 42 On 20 January 2025, President Trump issued an Executive Order renaming the area known as the "Gulf of Mexico" as the "Gulf of America". The US Interior Department formally announced the change on 24 January 2025 and US federal agencies are currently in the process of implementing the change. In this 2024 Annual Report, Woodside uses the term "Gulf of Mexico" to refer to the area in which its Shenzi, Mad Dog and Atlantis projects are located, as that term was in effect during the period covered by this report. Woodside will adopt the naming conventions required by applicable laws and regulations in relation to US waters.
- 43 Wood Mackenzie Global Ammonia Strategic Planning Outlook 2024, published 31 May 2024.



- 44 Definitions for potential ammonia uses. Hydrogen carrier for transporting hydrogen. Marine fuel specifically for the maritime industry. Power for co-firing coal-fired power plants. Traditional uses for fertiliser, metals and mining, major chemical and other industrial applications.
- 45 The information regarding Beaumont New Ammonia (BNA) in this update does not contain all the underlying context and details that is included in the announcement "Woodside to acquire OCI's Clean Ammonia Project", released 5 August 2024. Refer to the announcement for the full explanation of the underpinning assumptions, uncertainties, and context relevant to BNA. [https://www.woodside.com/docs/default-source/asx-announcements/2024/woodside-to-acquire-oci's-clean-ammonia-project.pdf?sfvrsn=cf35e9ed\\_1](https://www.woodside.com/docs/default-source/asx-announcements/2024/woodside-to-acquire-oci's-clean-ammonia-project.pdf?sfvrsn=cf35e9ed_1).
- 46 Cumulative spend against the investment target at the end of 2024 includes 80% of the total \$2,350 million for the Beaumont New Ammonia Project acquisition. The remaining 20% will be paid at Project completion.
- 47 Scope 3 emissions abatement capacity of 1.6 Mtpa CO<sub>2</sub>-e assumes supply of carbon abated hydrogen and CCS operational. Woodside has made the assumption to estimate the avoided emissions through the displacement of conventional marine fuel. Actual displaced emissions may differ based on actual use case.
- 48 IFRS Foundation, 2021. "Climate Related Disclosures Prototype", Appendix A. <https://www.ifrs.org/content/dam/ifrs/groups/trwg/trwg-climate-related-disclosures-prototype.pdf>. The IFRS published a further consultation document subsequent to the 2021 prototype. As it did not contain an updated definition of Paris-Aligned scenarios Woodside has retained use of the previous edition.
- 49 World Resources Institute and World Business Council for Sustainable Development, 2004. "GHG Protocol: a corporate accounting and reporting standard" <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Resources/A-corporate-reporting-and-accounting-standard-revised-edition>.
- 50 IFRS Foundation, 2021. "Climate Related Disclosures Prototype", Appendix A. <https://www.ifrs.org/content/dam/ifrs/groups/trwg/trwg-climate-related-disclosures-prototype.pdf>. The IFRS published a further consultation document subsequent to the 2021 prototype. As it did not contain an updated definition of Paris-Aligned scenarios Woodside has retained use of the previous edition. Definition as per the Australian Clean Energy Regulator <https://cer.gov.au/markets/reports-and-data/corporate-emissions-reduction-transparency-report/corporate-emissions-reduction-transparency-report-2024/cert-report-2024-glossary>.
- 51 Australian Clean Energy Regulator, 2023. "Corporate Emissions Reduction Transparency report 2023" <https://cer.gov.au/markets/reports-and-data/corporate-emissions-reduction-transparency-report/corporate-emissions-reduction-transparency-report-2024/cert-report-2024-glossary>.
- 52 IPCC, 2018: Annex I: Glossary [Matthews, J.B.R. (ed.)]. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 541-562. <https://doi.org/10.1017/9781009157940.008>
- 53 World Resources Institute and World Business Council for Sustainable Development, 2004. "GHG Protocol: a corporate accounting and reporting standard". <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Resources/A-corporate-reporting-and-accounting-standard-revised-edition>.
- 54 Ibid.
- 55 Ibid.

### **Document feedback**

We welcome feedback on this Climate Update  
via [companyinfo@woodside.com](mailto:companyinfo@woodside.com)

### **Head Office**

#### **Woodside Energy Group Ltd**

Mia Yellagonga  
11 Mount Street  
Perth WA 6000

#### **Postal Address**

GPO Box D188  
Perth WA 6840  
Australia

T +61 8 9348 4000  
E [companyinfo@woodside.com](mailto:companyinfo@woodside.com)



**Woodside Energy Group Ltd**

ABN 55 004 898 962  
[woodside.com](http://woodside.com)