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## **Announcement**

Thursday, 1 December 2022

#### **INVESTOR BRIEFING DAY 2022**

Woodside Energy CEO Meg O'Neill today outlined the company's compelling investment proposition as a safe, reliable, low cost and lower carbon supplier of energy to a world that needs it.

"At this critical moment in time, with the world now feeling the impact of an energy security and affordability crisis, Woodside is producing and developing the products and services needed for both decarbonisation and to support growing populations and economies," Ms O'Neill said at an investor briefing.

"Woodside is delivering on the strategy that drove the merger in June with BHP Petroleum, based on leveraging our portfolio of high quality assets, our disciplined approach to capital management and our ability to thrive through the energy transition.

"The company is well positioned as a high margin, high yield and gas weighted business that is generating strong returns today and will continue to do so as we realise our pipeline of development opportunities for 2027 onwards.

"Our expanded portfolio of long-life assets in Australia, the US, Senegal and the Caribbean offers the scale, diversification and resilience to deliver enduring value to shareholders.

"We are successfully executing world-class growth projects at Sangomar in Senegal and Scarborough/Pluto Train 2 in Australia, which are on target for first production in 2023 and 2026 respectively. The Mad Dog Phase 2 development in the Gulf of Mexico is also expected online in 2023.

"At Trion in Mexico, which contains around 500 million barrels of oil, the team is working towards being ready for a final investment decision in 2023.

"Our operating cash flow is forecast to remain at around \$7 billion to \$9 billion over the next five years. This, along with our strong debt profile with undrawn facilities of \$4.1 billion, highlights the strength of the balance sheet and provides Woodside with the liquidity capacity for both major capital investment and shareholder returns. Our BBB+ and Baa1 credit ratings were also recently reaffirmed.

"Woodside will continue to apply our clear capital allocation framework as we assess our opportunities in both conventional and new energy, all of which must support our net equity emissions reduction targets and commitments to shareholders.

"Woodside's customer-led, scalable approach to investing our targeted \$5 billion in new energy and lower carbon services is beginning to yield results. In recent months, we announced plans for a hydrogen refuelling station near Perth and awarded a major contract for the H2OK hydrogen project in the US, where an investment decision is being targeted for 2023 and first production in 2025.

"Our LNG marketing strategy reflects changing global dynamics and we have expanded our presence in the Atlantic Basin and increased volume of shorter-term trading of all products. Woodside is both building on our existing long-term relationships and diversifying our customer base to ensure our position as a partner of choice to buyers seeking reliable supply and energy security.

"We have already implemented initiatives to deliver more than \$200 million in post-merger synergies and are on track to achieve net synergies of more than \$400 million by 2024," she said.

To access the live webcast of the Investor Briefing Day, please follow the link at <a href="https://webcast.openbriefing.com/9173/">https://webcast.openbriefing.com/9173/</a>. The webcast will commence at 09.30 AEDT / 06.30 AWST (16.30 CST on Wednesday, 30 November 2022).

A copy of Woodside's Investor Briefing Day 2022 slide pack is attached.

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This announcement was approved and authorised for release by Woodside's Disclosure Committee.

#### Forward looking statements

This presentation contains forward-looking statements with respect to Woodside's business and operations, market conditions, results of operations and financial condition, including, for example, but not limited to, statements about expectations regarding long-term demand for Woodside's products, timing of completion of Woodside's projects, expected synergies from the BHP Petroleum merger, expectations regarding future capital expenditures, the payment of future dividends and the amount thereof, future results of projects, operating activities, and new energy products, and expectations regarding the achievement of Woodside's scope 1 and 2 new equity emissions targets. All forward-looking statements contained in this presentation reflect Woodside's views held as at the date of this presentation. All statements, other than statements of historical or present facts, are forward-looking statements and generally may be identified by the use of forward-looking words such as 'guidance', 'foresee', 'likely', 'potential', 'anticipate', 'believe', 'aim', 'estimate', 'expect', 'intend', 'may', 'target', 'plan', 'forecast', 'project', 'schedule', 'will', 'should', 'seek' and other similar words or expressions.

Forward-looking statements are not guarantees of future performance and are subject to inherent known and unknown risks, uncertainties, assumptions and other factors, many of which are beyond the control of Woodside, its related bodies corporate and their respective Beneficiaries.

Details of the key risks relating to Woodside and its business can be found in the "Risk" section of Woodside's most recent Annual Report released to the Australian Securities Exchange and in Woodside's filings with the U.S. Securities and Exchange Commission and available on the Woodside website at <a href="https://www.woodside.com/investors/reports-investor-briefings">https://www.woodside.com/investors/reports-investor-briefings</a>. Further details of the key risks can also be found in the prospectus issued by Woodside in connection with its admission to trading on the London Stock Exchange, available on the Company's website at <a href="https://www.woodside.com/investors">https://www.woodside.com/investors</a>. You should review and have regard to these risks when considering the information contained in this presentation.

Investors are strongly cautioned not to place undue reliance on any forward-looking statements. Actual results or performance may vary materially from those expressed in, or implied by, any forward-looking statements.



## INVESTOR BRIEFING DAY 2022

1 December 2022

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## Disclaimer, important notes and assumptions

#### Information

- This presentation has been prepared by Woodside Energy Group Ltd ("Woodside"). By accessing/attending this presentation you agree to be bound by the following conditions.
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  particular needs of any Woodside shareholder or any other person. The information contained in this presentation does
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- expectations regarding long-term demand for Woodside's products, timing of completion of Woodside's projects, expected synergies from the BHP Petroleum merger, expectations regarding future capital expenditures, the payment of future dividends and the amount thereof, future results of projects, operating activities, and new energy products, and expectations regarding the achievement of Woodside's Scope 1 and 2 equity emissions targets. All forward-looking statements contained in this presentation reflect Woodside's views held as at the date of this presentation. All statements, other than statements of historical or present facts, are forward-looking statements and generally may be identified by the use of forward-looking words such as 'guidance', 'foresee', 'likely', 'potential', 'anticipate', 'believe', 'aim', 'estimate', 'expect', 'intend', 'may', 'target', 'plan', 'forecast', 'project', 'schedule', 'will', 'should', 'seek' and other similar words or expressions.
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- Investors are strongly cautioned not to place undue reliance on any forward-looking statements. Actual results or performance may vary materially from those expressed in, or implied by, any forward-looking statements.

#### Notes to petroleum resource estimates

- I. Unless otherwise stated, all petroleum resource estimates are quoted as at the effective date (i.e. 1 June 2022) of the Reserves and Resources Update included in Woodside's Half-Year Report released to the Australian Securities Exchange and the London Stock Exchange on 30 August 2022 and available at <a href="https://www.woodside.com/news-and-media/announcements">https://www.woodside.com/news-and-media/announcements</a>, net Woodside share at standard oilfield conditions of 14.696 psi (101.325 kPa) and 60 degrees Fahrenheit (15.56 degrees Celsius).
- 2. Woodside is not aware of any new information or data that materially affects the information included in the Reserves and Resources Update. All the material assumptions and technical parameters underpinning the estimates in the Reserves and Resources Update continue to apply and have not materially changed.
- 3. Proved (1P) Reserves are estimated and reported in accordance with the United States Securities and Exchange Commission (SEC) regulations, which are also compliant with SPE-PRMS guidelines. SEC-compliant Proved (1P) Reserves estimates use a more restrictive, rules-based approach and are generally lower than estimates prepared solely in accordance with SPE-PRMS guidelines due to, among other things, the requirement to use commodity prices based on the average price during the 12-month period in the reporting company's fiscal year. Proved plus Probable (2P) Reserves and Best Estimate (2C) Contingent Resources are estimated and reported in accordance with SPE-PRMS guidelines and are not compliant with SEC regulations.



## Disclaimer, important notes and assumptions (continued)

#### Notes to petroleum resource estimates (continued)

- 4. Woodside reports its petroleum resource estimates inclusive of all fuel consumed in operations.
- 5. For offshore oil projects, the reference point is defined as the outlet of the floating production storage and offloading facility (FPSO) or platform, while for the onshore gas projects the reference point is defined as the outlet of the downstream (onshore) gas processing facility.
- 6. Woodside uses both deterministic and probabilistic methods for the estimation of Reserves and Contingent Resources at the field and project levels. All Proved (1P) Reserves estimates have been estimated using deterministic methodology and reported on a net interest basis in accordance with the SEC regulations and have been determined in accordance with SEC Rule 4-10(a) of Regulation S-X. Unless otherwise stated, all petroleum estimates reported at the company or region level are aggregated by arithmetic summation by category. The aggregated Proved (1P) Reserves may be a conservative estimate due to the portfolio effects of arithmetic summation.
- 7. 'MMboe' means millions (106) of barrels of oil equivalent. Natural gas volumes are converted to oil equivalent volumes via a constant conversion factor, which for Woodside is 5.7 Bcf of dry gas per 1 MMboe. Volumes of natural gas liquids, oil and condensate are converted from MMbbl to MMboe on a 1:1 ratio.

#### **Assumptions**

• Unless otherwise indicated, the targets set out in this presentation have been estimated on the basis of a variety of economic assumptions including: (1) US\$70/bbl Brent long-term oil price (2022 real terms, inflated at 2.0%); (2) currently sanctioned projects being delivered in accordance with their current project schedules; and (3) applicable growth opportunities being sanctioned and delivered in accordance with the target schedules provided in this presentation. These growth opportunities are subject to relevant joint venture participant approvals, commercial arrangements with third parties and regulatory approvals being obtained in the timeframe contemplated or at all. Woodside expresses no view as to whether its joint venture participants will agree with and support Woodside's current position in relation to these opportunities, or such commercial arrangements and regulatory approvals will be obtained. Additional assumptions relevant to particular targets or other statements in this presentation may be set out in the relevant slides. Any such additional assumptions are in addition to the assumptions and qualifications applicable to the presentation as a whole.

#### Climate strategy and emissions data

- Further information as to Woodside's climate strategy, including references to "lower carbon" as part of that strategy, is set out in Woodside's Climate Report 2021 available on the Woodside website at <a href="https://www.woodside.com/sustainability/climate-change">https://www.woodside.com/sustainability/climate-change</a>. The glossary and footnotes to this presentation provide further clarification of "lower carbon" where applicable.
- All greenhouse gas emissions data in this presentation are estimates, due to the inherent uncertainty and limitations in measuring or quantifying greenhouse gas emissions.
- Woodside "greenhouse gas" or "emissions" information reported are Scope 1 GHG emissions, Scope 2 GHG emissions, and/or Scope 3 GHG emissions. For more information on emissions data refer to Woodside's Climate Report 2021 available on the Woodside website at https://www.woodside.com/sustainability/climate-change

#### Other important information

- · All references to dollars, cents or \$ in this presentation are to US currency, unless otherwise stated.
- References to "Woodside" may be references to Woodside Energy Group Ltd, Woodside Energy Group Ltd and its

- subsidiaries or Woodside Energy Group Ltd and its applicable subsidiaries (as the context requires).
- This presentation does not include any express or implied prices at which Woodside will buy or sell financial products.
- A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at
  any time.

#### **Non-IFRS financial information**

• Throughout this presentation a range of financial and non-financial measures are used to assess Woodside's performance, including a number of financial measures that are not defined or specified under IFRS (International Financial Reporting Standards), which are termed Non-IFRS Financial Measures. These measures include EBITDA margin, Gearing, Underlying NPAT, Free cash flow and Capital expenditure. Refer to the glossary section of this presentation for the definition of these terms. Management uses these measures to monitor Woodside's financial performance alongside IFRS measures to improve the comparability of information between reporting periods and business units. These Non-IFRS Financial Measures should be considered in addition to, and not as a substitute for, or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRS. Non-IFRS Financial Measures are not uniformly defined by all companies, including those in Woodside's industry. Accordingly, they may not be comparable with similarly titled measures and disclosures by other companies.

#### Disclosure of reserve information and cautionary note to US investors

- Woodside is an Australian company listed on the Australian Securities Exchange, the New York Stock Exchange and the
  London Stock Exchange. Woodside reports its Proved (1P) Reserves in accordance with SEC regulations, which are also
  compliant with SPE-PRMS guidelines, and prepares and reports its Proved plus Probable (2P) Reserves and Best Estimate
  (2C) Contingent Resources in accordance with SPE-PRMS guidelines. It reports all of its petroleum resource estimates
  using definitions consistent with the 2018 Society of Petroleum Engineers (SPE)/World Petroleum Council
  (WPC)/American Association of Petroleum Geologists (AAPG)/Society of Petroleum Evaluation Engineers (SPEE) Petroleum
  Resources Management System (PRMS).
- The SEC prohibits oil and gas companies, in their filings with the SEC, from disclosing estimates of oil or gas resources other than "reserves" (as that term is defined by the SEC). In this presentation, Woodside includes estimates of quantities of oil and gas using certain terms, such as "Proved plus Probable (2P) Reserves", "Best Estimate (2C) Contingent Resources", "Reserves and Contingent Resources", "Proved plus Probable", "Developed and Undeveloped", "Probable Developed", "Probable Undeveloped", "Contingent Resources" or other descriptions of volumes of reserves, which terms include quantities of oil and gas that may not meet the SEC's definitions of proved, probable and possible reserves, and which the SEC's guidelines strictly prohibit Woodside from including in filings with the SEC. These estimates are by their nature more speculative than estimates of proved reserves and would require substantial capital spending over a significant number of years to implement recovery, and accordingly are subject to substantially greater risk of being recovered by Woodside. In addition, actual locations drilled and quantities that may be ultimately recovered from Woodside's properties may differ substantially. Woodside has made no commitment to drill, and likely will not drill, all of the drilling locations that have been attributable to these quantities. US investors are urged to consider closely the disclosures in Woodside's filings with the SEC, which are available at www.sec.gov.



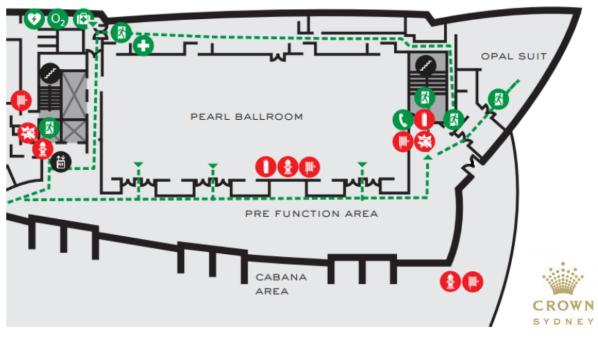
## **Evacuation route**

Follow directions of emergency wardens

Do not use lifts

Leave by the nearest fire exit stairs

Evacuate to an assembly point, north of Crown Sydney at the Barangaroo Reserve, or south of Crown Sydney at the Barangaroo Wharf Promenade



#### **KEY**

- Fire extinguishers
  - ....
- Break glass alarm
- FIRST AID

- ♠ FIRE HOSE REELS
- SUPPRESSION SYSTEM
- AUTOMATED EXTERNAL DEFIBRILLATOR

- M FIRE BLANKETS
  - S
- Evacuation routes
- EMERGENCY OXYGEN

- FIRE HYDRANTS
- •
- WARDEN INTERCOM PHONE
- ACCESS PACKS



## Introduction and welcome

Overview	Meg O'Neill, CEO and Managing Director	
Finance	Graham Tiver, CFO and Executive Vice President	
Marketing and trading	Mark Abbotsford, Executive Vice President Marketing and Trading	
Projects	Matthew Ridolfi, Executive Vice President Projects	
Australian operations	Breyden Lonnie, Vice President North West Shelf	
International operations	Shiva McMahon, Executive Vice President International Operations	
Exploration and development	Andy Drummond, Executive Vice President Exploration and Development	
New energy	Shaun Gregory, Executive Vice President New Energy	
Summary and Q&A	Meg O'Neill, CEO and Managing Director	



## The investment case – a global energy supplier







Scale, diversification and resilience to deliver enduring value

Framework established to optimise value and shareholder returns

Agile, flexible and adaptable as the world's energy mix evolves

**Advantaged locations** and markets

Conventional asset base weighted to LNG

Major growth projects in execution

**Pipeline of opportunities** 

**Resilient** cash flow

History of **strong dividends** 

Clear capital allocation and capital management frameworks

**Strong** balance sheet

Delivering **net emissions reduction** targets<sup>1</sup>

Progressing **new energy** opportunities

**Customer-led** and **scalable** 

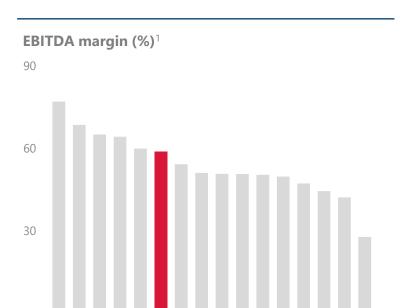
Safe | Reliable | Low cost | Lower carbon | High cash generation



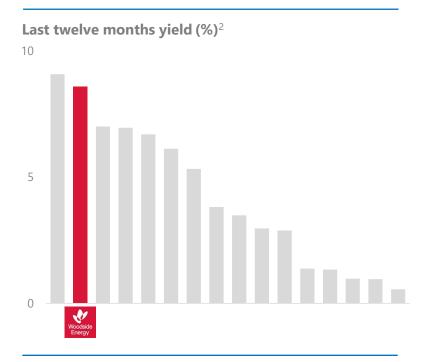
<sup>1.</sup> Woodside's net emissions reduction targets are for net equity Scope 1 and 2 greenhouse gas emissions, with a targeted reduction of 15% by 2025, 30% by 2030, with an aspiration of net zero by 2050. The net emissions reduction targets are relative to a starting base of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020. The baseline will be adjusted for the assets acquired through the merger with BHP Petroleum and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with an FID prior to 2021.

## Strongly positioned business

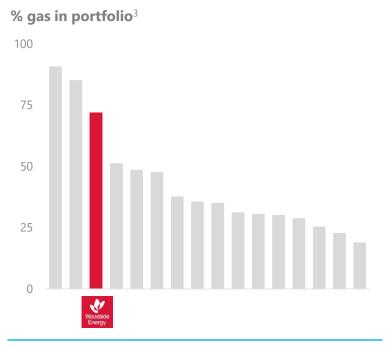




2 HIGH DIVIDEND YIELD







#### Distinctive combination of strong margin, high dividend yield and gas weighting

Dataset: Woodside Energy, Apache, Continental Resources, Canadian Natural Resources, ConocoPhillips, Coterra Energy, ENI, EOG Resources, Equinor, Hess Corporation, Inpex, Marathon Oil, Pioneer Natural Resources, Occidental Petroleum, Santos Source: ThomsonReuters Eikon (using last full-year of reported data).

- 1. Non-IFRS financial measure. EBITDA margin is calculated as earnings before interest, taxes, depreciation and amortisation divided by operating revenue. Source: ThomsonReuters Eikon (using last full-year of reported data).
- Dividend yield as of November 16, 2022. Yield is the quantum of returns to shareholders relative to share price, as at November 16, 2022. Source: Bloomberg.
- % gas is natural gas production divided by the total of oil, condensate, NGL, and natural gas production. Third Quarter 2022 production for Woodside. Source: ThomsonReuters Eikon (using last full-year of reported data).



## Production growth supported by projects in execution

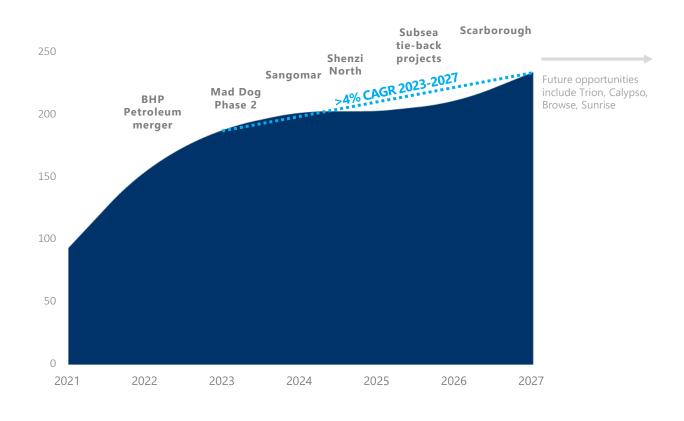
>4% compound annual growth rate (CAGR) from 2023 to 2027<sup>1</sup>

Key catalysts for production growth are Sangomar and Scarborough start-up

2023 production guidance of 180 – 190 MMboe

Pipeline of opportunities post-2027

#### Production profile with sanctioned projects (MMboe)<sup>1</sup>



<sup>1.</sup> Indicative only, Woodside share. The production profile is based on the assumptions that current sanctioned projects are delivered within their target schedules, an 82% participating interest in Sangomar and a 100% interest in Scarborough. It also assumes no sell-down of participating interests in Sangomar or Scarborough. Accordingly, the production profile is provided for illustrative purposes only and should not be relied on as guidance. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.



## Our products enable a stable energy transition



Providing the energy needed in a decarbonising world



#### **ENERGY AFFORDABILITY**

Affordability is required for **energy equity** and a stable energy transition



#### **ENERGY RELIABILTY**

Secure, reliable energy is **essential for economic growth and developing economies** 

Gas provides electricity grids with **reliable baseload and firming power**, enabling increased renewables deployment



#### **LOWER CARBON ENERGY MIX**

Emerging **new energy** markets will be balanced with **lower cost, lower carbon oil and gas** 



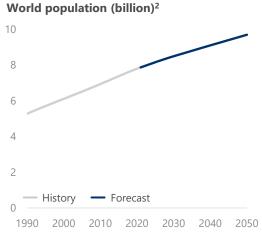
## Economic growth driving energy demand

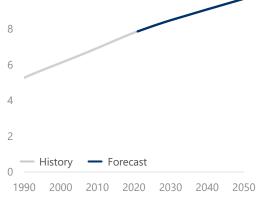
Global GDP expected to almost double by 2050 and global population growth is forecast to continue

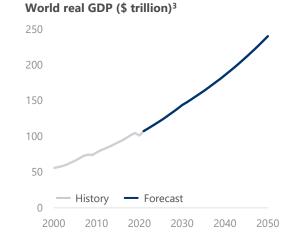
Non-OECD energy demand increase expected to outstrip efficiencies gained in OECD

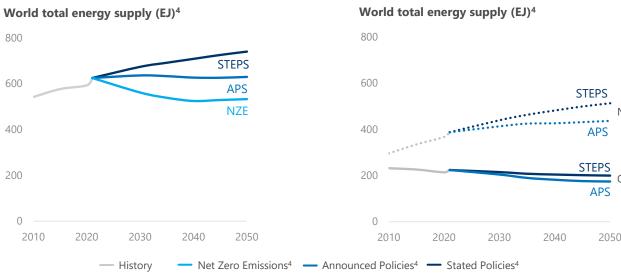
One in four people do not have access to clean cooking fuels<sup>1</sup>

One in ten people do not have access to electricity<sup>1</sup>











Source: IEA World Energy Outlook (2022). Statistics relate to 2021 as contained in the report.

History sourced from United Nations. Forecast: IEA World Energy Outlook (2022).

History sourced from OECD long-term real GDP forecast in 2010 USD (Purchasing Power Parity PPP basis). Forecast based on growth rates published in IEA World Energy Outlook (2022) Table 2.1.

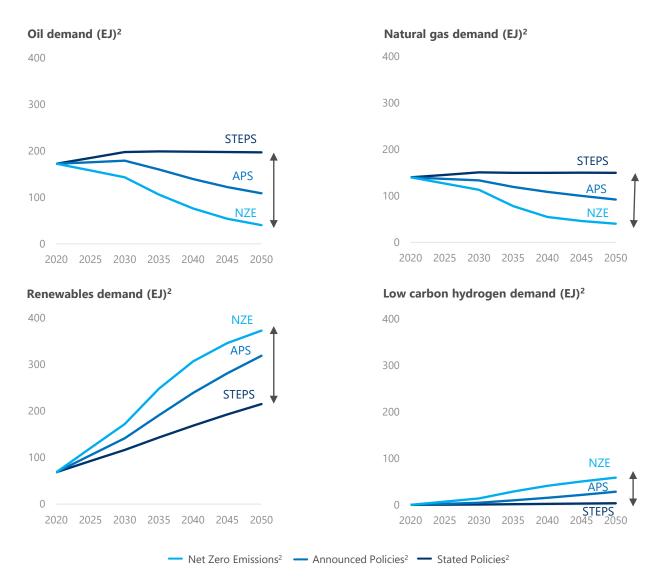
Source: IEA World Energy Outlook (2022). Total energy supply in exajoules (EJ). Net Zero Emissions (NZE) is an IEA scenario consistent with 1.5°C warming. Announced Pledges (APS) is an IEA scenario consistent with 1.7°C warming. Stated Policies (STEPS) is an IEA scenario associated with 2.5°C warming.

## Resilient hydrocarbon demand in a range of scenarios

Demand for oil and natural gas expected to remain strong to 2050+

Delivering IEA's Announced Pledges scenario (APS) requires global cumulative investment (2022-2050) of:

- \$15.3 trillion in oil and gas<sup>1</sup>
- \$1.9 trillion in hydrogen<sup>1</sup>





<sup>1.</sup> Cumulative investment in H2 and H2-based fuels from 2022-2050 in 2021 US dollars.

Source: IEA World Energy Outlook (2022). Total energy supply in exajoules (EJ). Net Zero Emissions (NZE) is an IEA scenario consistent with 1.5°C warming. Announced Pledges (APS) is an IEA scenario consistent with 1.7°C warming. Stated Policies (STEPS) is an IEA scenario associated with 2.5°C warming.

## Natural gas is important for economic progress

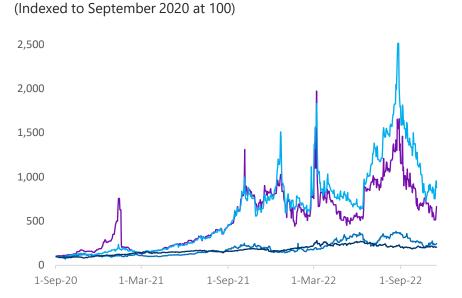
Ukraine crisis has disrupted global markets, highlighting the importance of energy security and affordability

Global markets also impacted by renewables performance, demand, low inventories and weather

Natural gas is expected to play a critical role in the energy transition across a range of sectors and is important as a lower carbon alternative to coal

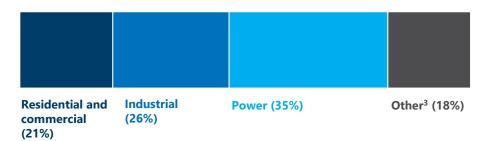
Woodside is well positioned to meet customer demand for reliable and secure energy supply

## Global oil and gas pricing disrupted post Ukraine<sup>1</sup>



European natural gas (TTF)
Asian LNG spot (JKM)
US Henry Hub gas
Brent oil price

#### Global gas demand by sector 2021<sup>2</sup>



<sup>1.</sup> Source: ICE and Platts.

Source: IEA

<sup>8.</sup> Other includes energy sector uses, transport, agriculture, distribution losses, and statistical differences.

## Strategy to thrive through the energy transition

#### **PROFITABLE**

High cash generation

Robust investment decisions

## **LOWER CARBON**

Targeted 30% reduction in net equity Scope 1 and 2 emissions by 2030<sup>1</sup>

New energy projects and lower carbon services

#### **LOW COST**

Resilient portfolio cash flow breakeven oil price of ~\$30/bbl<sup>2</sup>



#### **RESILIENT**

Strong balance sheet

Resilient across a range of possible energy-use scenarios

### **DIVERSIFIED**

Development options

Advantaged locations

Long-life conventional assets



<sup>1.</sup> Woodside's net emissions reduction targets are for net equity Scope 1 and 2 greenhouse gas emissions, with a targeted reduction of 15% by 2025, 30% by 2030, with an aspiration of net zero by 2050. The net emissions reduction targets are relative to a starting base of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020. The baseline will be adjusted for the assets acquired through the merger with BHP Petroleum and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with an FID prior to 2021.

<sup>2.</sup> Notional breakeven based on 2023 operating and capital expenditure excluding major projects (Scarborough, Sangomar, Mad Dog Phase 2), trading, exploration and the benefit of hedging.

## Global, competitively-positioned portfolio

#### **PORTFOLIO BENEFITS**

Diversified product mix

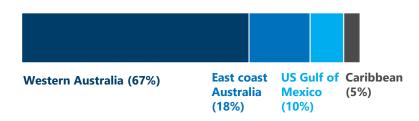
Geographically diverse

Conventional production

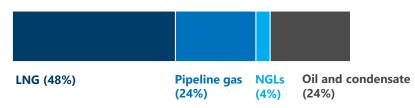
**Long-life assets** 

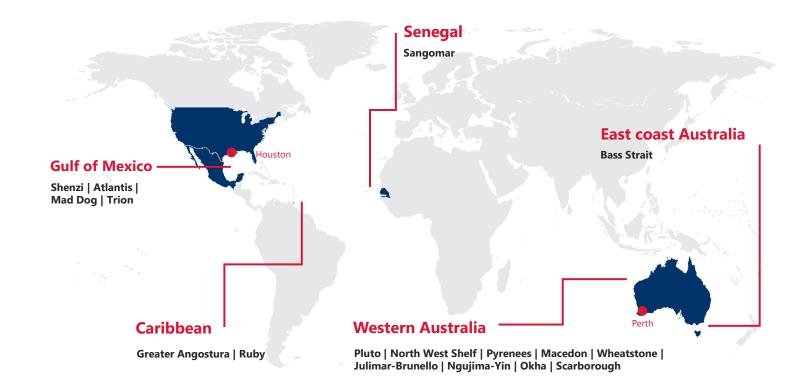
Emerging new energy business

#### Diversified sources of production<sup>1</sup>



#### Diversified product mix<sup>1</sup>





## Disciplined capital allocation



#### **OFFSHORE**

**Generate high returns to fund** diversified growth, focusing on high quality resources

**CHARACTERISTICS** 

**FOCUS** 

**OPPORTUNITY TARGETS** 

High cash generation Shorter payback period Ouick to market

**IRR > 15%** Payback within 5 years<sup>2</sup>



**GAS** 



**PIPELINE** 

LNG

Leveraging infrastructure to monetise undeveloped gas, including optionality for hydrogen

Stable long-term cash flow profile

Resilient to commodity pricing

Long-term cash flow Strong forecast demand Upside potential

**IRR > 12%** 

Payback within 7 years<sup>2</sup>



#### **DIVERSIFIED**

**New energy products and lower** carbon services to reduce customers' emissions; hydrogen, ammonia, CCUS<sup>1</sup>

> Developing market Lower capital requirement Lower risk profile

> > IRR > 10%

Payback within 10 years<sup>2</sup>

**EMISSIONS REDUCTIONS** 

30% net emissions reduction by 2030, net zero aspiration by 2050 or sooner<sup>3</sup>

- CCUS refers to carbon capture utilisation and storage.
- Payback refers to RFSU + X years.
- Woodside's net emissions reduction targets are for net equity Scope 1 and 2 greenhouse gas emissions, with a targeted reduction of 15% by 2025, 30% by 2030, with an aspiration of net zero by 2050. The net emissions reduction targets are relative to a starting base of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020. The baseline will be adjusted for the assets acquired through the merger with BHP Petroleum and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with an FID prior to 2021.



## Opportunities across multiple energy sources



OIL



**GAS** 



**Sangomar Phase 1** targeting first oil late 2023

**Trion targeting FID** ready 2023

**Future tieback opportunities**, quick to market and low cost

Scarborough development underway

Future growth opportunities include Calypso, Browse and Sunrise

Flexible and dynamic marketing strategy

Hydrogen opportunities include H2OK, H2Perth, H2TAS, Southern Green Hydrogen (SGH)

**Long-lead items ordered** for H2OK, targeting FID ready 2023

**Investment** in Heliogen, String Bio, Hydrogen Refueller @H2Perth









## Merger benefits being realised

**MERGER BENEFITS** 

**Portfolio quality** 

Cash generation and balance sheet

Shareholder returns and capital discipline

**Development** optionality

**Energy transition leadership** 

Synergies and value creation

Implemented initiatives to deliver approximately \$200 million+ post-merger annual synergies<sup>1</sup>

On track to achieve \$400 million+ per annum net synergies by early 2024<sup>1</sup>

Strategic review affirmed the portfolio composition; Scarborough selldown process is ongoing

#### **Example synergy opportunities**



## Investing in emissions reduction



#### **SCOPE 1 AND 2**

Reducing our net equity greenhouse gas emissions

**15%** by 2025

**30%** by 2030

**Net zero** aspiration by 2050

or sooner

Net equity emissions reduction targets<sup>1</sup>

10% net emissions reduction achieved to 2021<sup>2</sup>

Targets extended to merged portfolio

Investing ~\$500 million in **asset decarbonisation** plans<sup>3</sup>

**Woodside Solar Project** 



#### **SCOPE 3**

Investing in the products and services our customers need as they reduce their emissions

## \$5 billion

Target to invest in new energy products and lower carbon services by 2030<sup>4</sup>

LNG supports our **customers**' decarbonisation goals

**H2OK;** H2Perth; Heliogen; Southern Green Hydrogen; H2TAS

Carbon capture and utilisation and carbon to products

#### Development of future oil, gas and new energy opportunities will be aligned with our decarbonisation targets

- 1. Woodside's net emissions reduction targets are for net equity Scope 1 and 2 greenhouse gas emissions, with a targeted reduction of 15% by 2025, 30% by 2030, with an aspiration of net zero by 2050. The net emissions reduction targets are relative to a starting base of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020. The baseline will be adjusted for the assets acquired through the merger with BHP Petroleum and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with an FID prior to 2021.
- 2. Woodside's net equity Scope 1 and 2 greenhouse gas emissions totalled 3,235 kt CO<sub>2</sub>-e in 2021, which was 10% below the 2016-2020 gross annual average.
- 3. Approximate expenditure to implement opportunities identified in Australian Operations asset decarbonisation plans assuming all opportunities progress to execution.
- 4. Individual investment decisions are subject to Woodside's investment targets. Not guidance. Potentially includes both organic and inorganic investment.



## A focus on sustainability and ESG issues



**TOPICS** 

**EXAMPLE** ACTIONS

Climate resilience and transition

Decommissioning Environment

Focusing on reducing net emissions and asset decarbonisation plans

Working with leading environmental research institutions on biodiversity



**SOCIAL** 

First Nations cultural heritage and engagement

Human rights

People and culture

Social contribution

A\$115 million social investment in Western Australian communities over the next five years

Established Indigenous Advisory Group bi-annual roundtable forum



Health, safety and wellbeing

Corporate governance
Cybersecurity
Major incident preparedness

Implementing area-specific safety improvement plans

Establishing US cyber hub and global response capability

Integrity, accountability and transparency drives our ESG performance



## Capital management optimising shareholder growth and returns



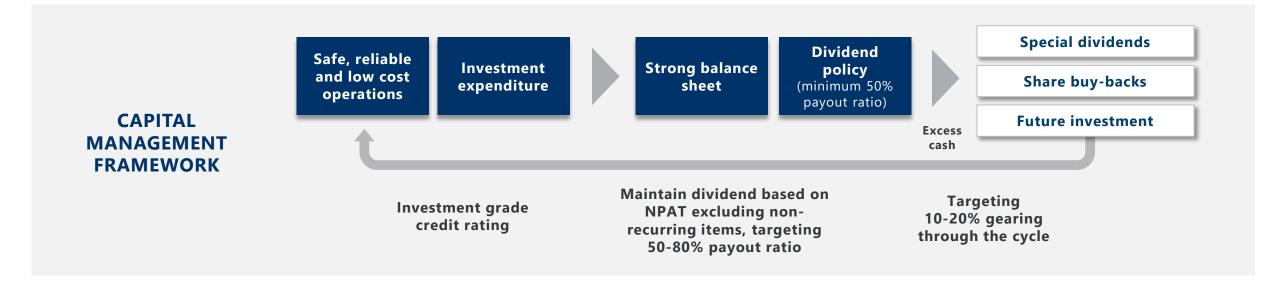
Well positioned for major capital investment through 2023 and 2024

2

Resilient through the price cycle

3

Capital management supports strong dividends and growth



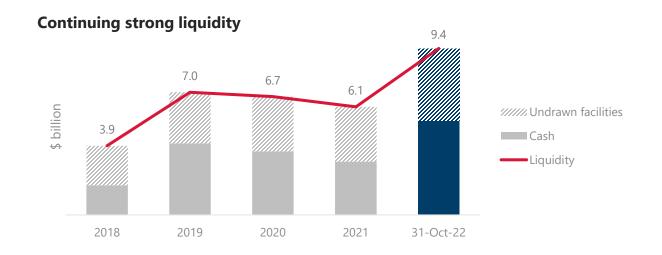
## Liquidity capacity for major capital investment and shareholder returns

Strong liquidity supported by cash generation

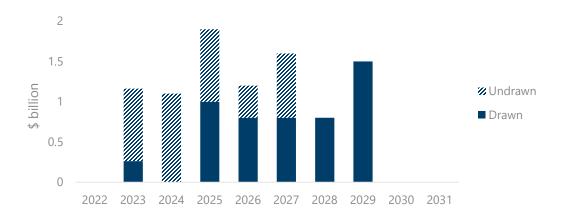
Undrawn debt facilities of \$4.1 billion

Balanced maturity profile; 3.6 years portfolio weighted average term to maturity

Credit ratings of BBB+ and Baa1 reaffirmed<sup>1</sup>



#### Balanced debt maturity profile<sup>2</sup>



<sup>1.</sup> Corporate debt credit ratings. BBB+ reaffirmed by S&P Global, Baa1 reaffirmed by Moody's.

<sup>2</sup> As at 31 October 2022

## **Investing in growth**

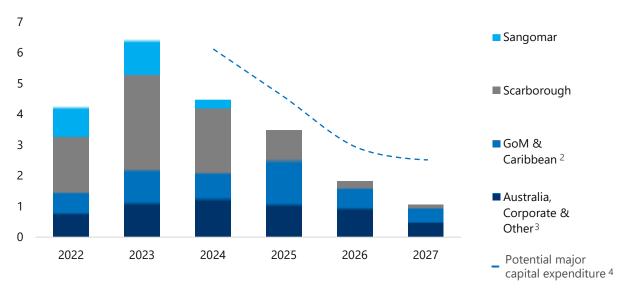
2023 capital expenditure guidance of \$6.0-6.5 billion

Investing in Woodside's future production

Maximising production from existing facilities

Capacity for future profitable investment opportunities

#### Forecast capital expenditure – committed activities (\$ billion)<sup>1</sup>



#### 2023 forecast capital expenditure

Capital expenditure			
Sangomar	%	~20%	
Scarborough	%	~50%	
GoM & Caribbean <sup>2</sup>	%	~15%	
Australia, Corporate & Other <sup>3</sup>	%	~15%	
Total capital expenditure	\$ million	6,000 – 6,500	

<sup>1.</sup> Indicative only, not guidance. Woodside share at current equity levels. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.

<sup>.</sup> Potential major capital expenditure is committed activities and indicative execution expenditure for Trion, Calypso and H2OK, assuming current participating interests and positive FIDs in accordance with targeted project schedules. 25



<sup>2.</sup> GoM & Caribbean includes future uncommitted expenditure.

<sup>3.</sup> Australia, Corporate & Other includes capital expenditure for Australian operations; Corporate; New Energy; Technology; and pre-FID capital expenditure for Browse and Sunrise.

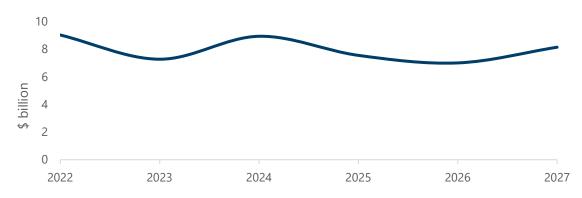
## **Resilient cash flows**

Resilient cash flow profile supported by portfolio of operational assets

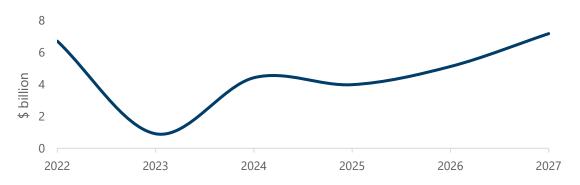
Cash flow supports funding of projects under construction and shareholder returns

Approximately \$70 million movement in free cash flow per \$1 movement in Brent oil price

#### Operating cash flow<sup>1</sup>



#### Free cash flow<sup>1,2</sup>



<sup>1.</sup> Indicative only and intended to provide overall future profiles for operating cash flow and free cash flow. The profiles assume a Brent oil forward price curve (as at 16 November 2022) of \$89/bbl in 2023, \$82/bbl in 2024, \$77/bbl in 2025, \$75/bbl in 2026 followed by a long term \$70/bbl (real terms 2022) from 2027. Includes sanctioned projects at current equity levels and unsanctioned cash flows for Trion in 2023 only. Assumes foreign exchange rate of AUD to USD 0.67. Assumes currently sanctioned projects being delivered in accordance with their current project schedules. Accordingly, the profiles are provided for illustrative purposes only and should not be relied on as guidance. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.





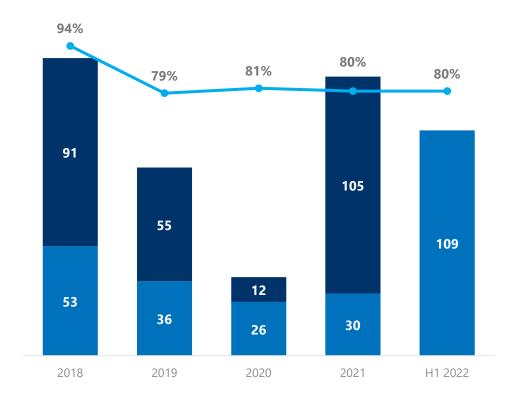
## Returning value to shareholders

Balance sheet positioned to deliver growth and returns

History of strong shareholder returns

214 US cents per share of fully franked dividends paid in last 12 months

#### Dividends paid<sup>1</sup> (US cps)



Final dividend payment

Interim dividend payment

Full-year dividend payout ratio (% of underlying NPAT)



## Customer-led and value-led marketing strategy



# BUILDING SCALE AND FLEXIBILITY IN PORTFOLIO



# ADAPTABLE, RESILIENT AND RESPONSIVE TO MARKET CHANGES



# FOCUS ON CUSTOMERS AND THE ENERGY TRANSITION

Expanding **global marketing presence**, including in the Atlantic where we have options for **low cost, flexible LNG offtake** 

Increasing **optimisation** and **shorter-term trading** of all products

Contract portfolio and price mix that **balances exposure** to upside and revenue certainty during volatile conditions

**Layering timing of sales** through market cycles, to capture opportunities at the right time

**Scaling up shipping** to support marketing and create value through delivery of seaborne products

Positioning as partner of choice to highquality buyers seeking **reliable supply and energy security** 

Building on core **long-term partnerships** 

**Diversifying customer base** and expanding new energy offerings



## Increasing price index diversification and gas hub exposure

#### Near-term (2023-2025)

- Leverage flexibility in base portfolio of oil-indexed sales to access upside through optimisation
- Retain share of uncommitted production to de-risk operations and access spot market
- Low volatility (including fixed price) sales support revenue stability
- Produced LNG gas hub exposure guidance of 20-25% in 2023

# Produced total portfolio¹ ~20% ~70% ~10% Produced LNG portfolio¹ ~10% ~65% ~20-25%

Oil

Low volatility

#### Longer-term (2027+)

- Increased portfolio flexibility with new production and expiry of legacy LNG and gas contracts
- Diversified LNG portfolio; sales tenor, buyers, pricing, price reviews and flexibility
- Adaptable and responsive to the market and buyers

# Produced total portfolio¹ ~20% ~60% ~20% Produced LNG portfolio¹ ~10% ~55% ~30-35% Low volatility Oil Gas hub



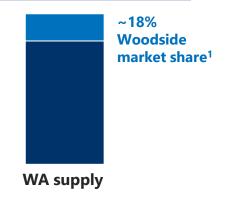
Gas hub

<sup>1.</sup> Indicative only. Not guidance. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.

## Increasing gas supply for Australian energy market needs

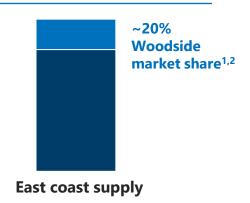
#### **Western Australia**

- LNG plants operate within WA's domestic gas reservation policy
- Portfolio of gas supply sources delivered to a diverse customer base at largely fixed pricing, increasing with Scarborough start up
- Recent stronger pricing achieved from upwards market trajectory





- 100% delivered to domestic market
- Exposure to recent elevated spot gas pricing, reflecting strong market demand for gas in residential and power sectors
- Opportunities including LNG imports, gas storage and other complementary activities







<sup>1.</sup> AEMO 2023 forecast market share based on volume. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.

<sup>2.</sup> East coast Australia includes New South Wales, Victoria, South Australia, Queensland, Australian Capital Territory and Tasmania.



## Outstanding project delivery, benefiting from increased scale



**SAFE** 

Zero lost time injuries or high-consequence work related injuries

Applying technology to reduce safety hazards and optimise day to day operations



**LOW COST** 

Increased scale enables improved contracting efficiency

Delivery ahead of schedule and under budget; Greater Western Flank Phase 3, Pyxis Hub, Julimar-Brunello Phase 2 and Shenzi subsea multiphase pump



**SCALE** 

Two operated major projects in progress with pipeline of operated development opportunities

Currently operating six drilling rigs globally

Capabilities and ways of working that scale across organisation

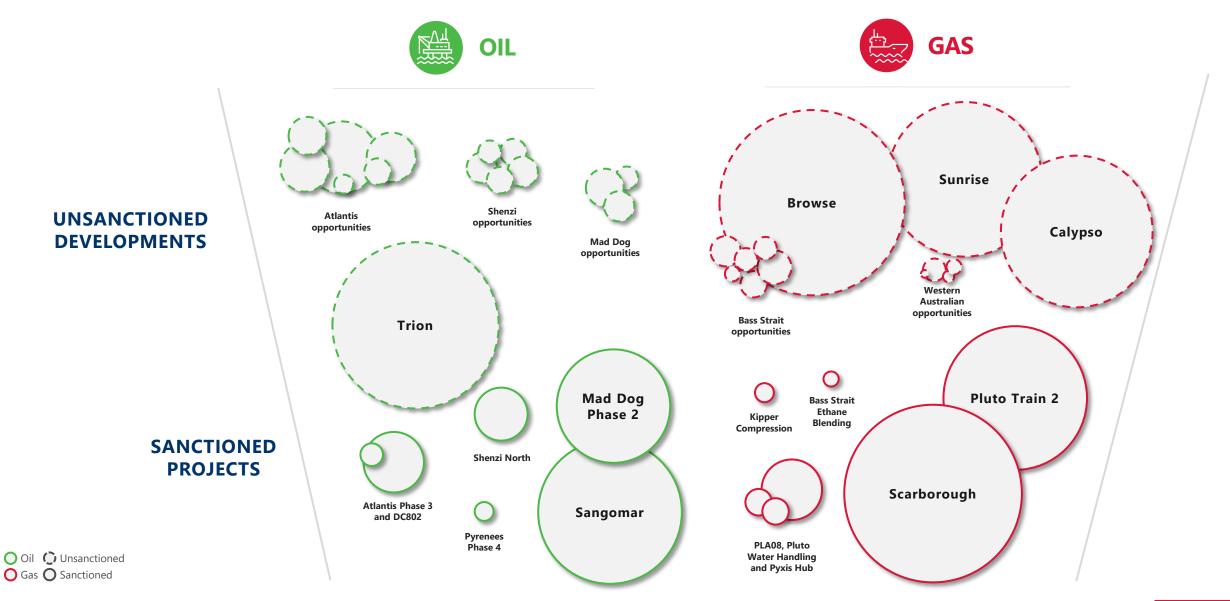


LOWER CARBON

Engineering decisions during the design phase in support of Scope 1 and 2 targets<sup>1</sup>



# Pipeline of conventional opportunities



# Sangomar Phase 1 – 72% complete, targeting first oil late 2023

# **Drilling**

- Second rig in operation since July 2022
- 6 out of 23 development wells completed
- On schedule with strong batch drilling performance

# FPSO conversion

- Conversion, topsides and turret fabrication complete
- Integration and commissioning to commence in Singapore

### Subsea

- All equipment manufacture nearing completion
- Offshore construction campaign commenced in September 2022
- Pipelay activities ongoing





# Scarborough – 23% complete, targeting first LNG cargo 2026

# Pluto LNG onshore

- Site **construction works started** and progressing safely
- Construction accommodation village in Karratha is operational
- Train 1 modifications contractor selection targeted for H1 2023

# **Trunkline**

- Trunkline tracking ahead of schedule
- Linepipe manufacturing ongoing

# Floating production unit (FPU)

- Procurement program well advanced; 90% of tagged equipment ordered
- First steel cut and fabrication commenced

# Subsea, umbilical, risers and flowlines (SURF)

- Xmas trees delivered and in warehouse
- Fabrication of the subsea flowlines ongoing





# Managing risk



**INFLATIONARY** 

Project execution is well advanced; significant cost has been de-risked

**SUPPLY CHAIN** 

Relocating FPSO to Singapore for integration and commissioning

**REGULATORY** 

Maximising local content opportunities aligned with regulation

**CARBON** 

Utilising technology to reduce greenhouse gas intensity

Focus on 'operate out' opportunities within existing facility design



Project contracting strategy has helped mitigate inflation

Strategy of locking in costs early where possible and utilising lump sum contracts

Early market engagement and orders placement Supply chain pinch points identified and actioned early

Progressing secondary regulatory approvals

Lower emission Pluto Train 2 design<sup>1</sup> <0.1% CO<sub>2</sub> in reservoir



# Trion – progressing towards investment decision in 2023

### STRATEGIC ALIGNMENT

Value accretive investment

Generates **near-term cashflow** 

Competitive development cost with quick payback

### **ROBUST PLAN**

Trion is Mexico's first deepwater development

Material resource with ~500 million barrels of 2C contingent resource<sup>1</sup> (gross)

Well-characterised subsurface and mature development concept

Targeting FID ready in 2023

### **UNLOCKS FUTURE GROWTH**

Trion provides a base for future opportunities

Demonstrates deepwater capabilities in Mexico

**Establishes infrastructure** in Perdido Basin



# Trion – mature development concept provides execution flexibility

### **Floating facilities**

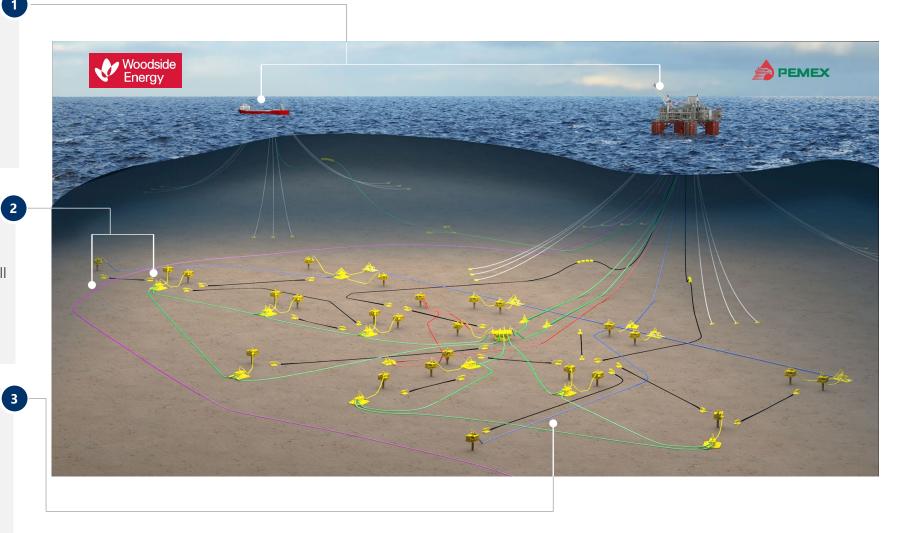
- Semi-submersible floating production unit with capacity of 100 kbbl/d oil
- Storage and offloading provided by separate vessel
- 12.6 kg CO<sub>2</sub>-e/boe emissions, benchmarks below industry average for deepwater facilities<sup>1</sup>

### **Subsea facilities**

- Subsea well development
- Expandable infrastructure supports future infill wells development
- Approximately 130 km gas lateral connecting Trion to the existing midstream pipeline for Mexican markets

### **Reservoir and wells**

- Two lower Eocene stacked reservoirs
- Target well depths of approximately 1,550 to 1,700 m below mudline
- Field development includes production, water injection and gas injection wells



# Trion – clear path to final investment decision

### **TECHNICAL**

- Subsurface characterisation
- Engineering work to support execution
- Emissions reduction through design and operating philosophy

### **CONTRACTING**

- High quality and experienced contractors engaged for major scopes
- Major scope of work competitively tendered
- FPU contractor selection and award

# **STAKEHOLDERS**

- Engagement plan
- Joint venture partner alignment

### **REGULATORY**

- Declaration of commerciality
- Minimum work program
- Mature industry regulations
- O Field development plan (post-FID)



# ~500 MMboe

2C gross resource<sup>1</sup>

~\$6-8 B

Capital expenditure estimate (100% share)

2028

Targeted first oil

# ~0.3 Mtpa

CO<sub>2</sub>-e peak gross Scope 1 and 2 emissions unabated<sup>2</sup>

Please refer to the "Disclaimer and important notices" section (including under the heading "Forward-looking statements") for important cautionary information relating to forward looking statements.

- 1. 321.6 MMboe (net contingent resource Woodside share, 2C).
- 2.  $\sim$ 0.2 Mtpa CO<sub>2</sub>-e peak Scope 1 and 2 emissions unabated Woodside equity share.





# Safe, low cost and lower carbon Australian operations



**SAFE** 

Implementing area-specific safety improvement plans

Focused process safety management, including ongoing verification of effective process safety risk controls



**LOW COST** 

New operating model implemented to control costs as NWS production declines

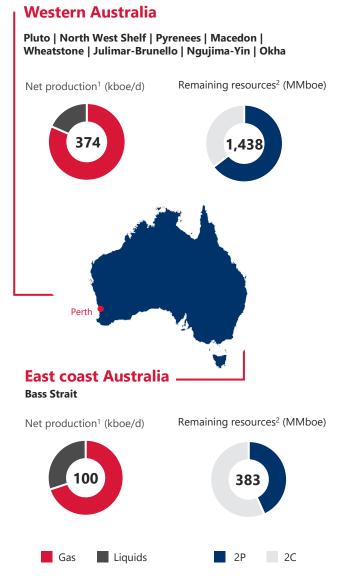
Delivering cost reductions through digital transformation



LOWER CARBON

Asset decarbonisation plans being pursued

Progressing a proposed solar facility that could supply up to 100MW of solar power to Pluto and other customers



<sup>1.</sup> Woodside Third Quarter Report 2022.

<sup>2. 2</sup>P + 2C net reserves and resources as at 1 June 2022 from the Woodside Half-Year Report 2022. Excludes Scarborough, Greater Scarborough, Greater Browse, Greater Sunrise and Stybarrow North. Includes fuel volumes of 138.3 MMboe and 17.3 MMboe for Western Australia and east coast Australia respectively.

# Maximising value from existing assets

# **Strong operational performance**

- Continuously optimising production and challenging current and future production constraints
- Maintaining high facility reliability

# **Nearfield and infill opportunities**

- Delivered NWS Greater Western Flank-3 and Lambert Deep projects ahead of schedule and under budget
- Developing economic infill and nearfield opportunities across the portfolio

## Leveraging capacity

- Transitioning the NWS business to toll other resource opportunities using available capacity at Karratha Gas Plant (KGP)
- Successfully processing Pluto gas via the Pluto-KGP Interconnector. To date, the Interconnector has accelerated 8 MMboe of Pluto production

# **Production (MMboe)**<sup>1</sup> 250 Woodside 200 150 train offline 100 Australian operations 50

2025

2026

2022

2023

2024



2027

<sup>1.</sup> Indicative only, not guidance. Refer to slide 10 of this presentation for further information on assumptions. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.

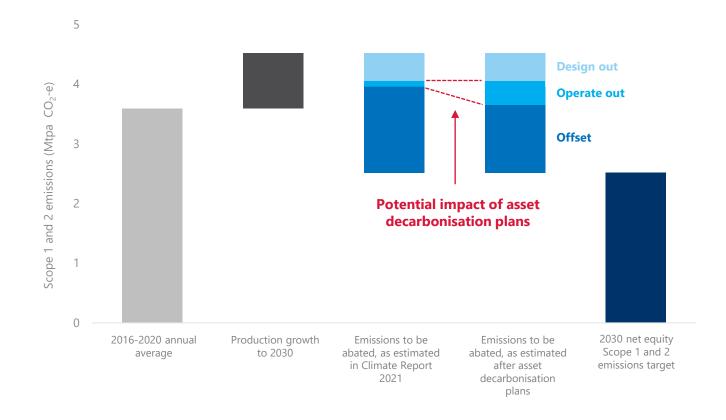
# Asset decarbonisation plans

Asset decarbonisation plans have identified opportunities for up to 300 kt in potential emissions reductions by 2030 for heritage Woodside assets

Future asset decarbonisation plans will be identified for heritage BHP assets

### Asset decarbonisation plan potential impacts<sup>1</sup>

(Heritage Woodside assets only)



# Committed to responsible decommissioning

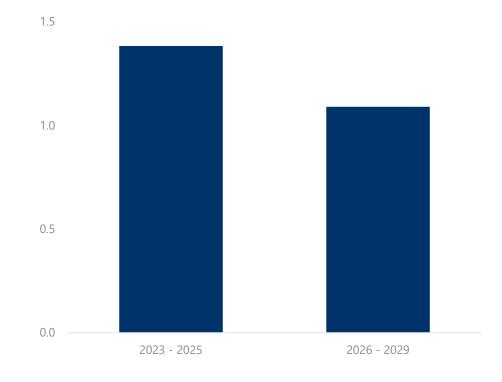
Enfield and Balnaves well plug and abandonment (P&A) campaign in progress

Bass Strait ongoing well P&A campaign and progressing approvals and planning for platform decommissioning

Multiple contracts awarded for removal of facility turrets and subsea hardware and equipment in WA waters

Progressing regulatory approvals for historical wellheads and subsea equipment removal

# Indicative Australian Operations cumulative decommissioning spend (\$ billion)<sup>1</sup>





<sup>1.</sup> Indicative only. Not guidance. Subject to a range of assumptions that may not occur as forecast. Please refer to the "Disclaimer and important notices" section (including under the heading "Forward looking statements") for important cautionary information relating to forward looking statements.



# Safe, low cost and lower carbon international operations



### **SAFE**

Mature process and personal safety approach, driven by field leadership and active contractor involvement

Demonstrated deep water operations capability



### **LOW COST**

Large, low cost producing assets with expansion potential and access to infrastructure and attractive markets

Established capability in understanding and optimising assets for value

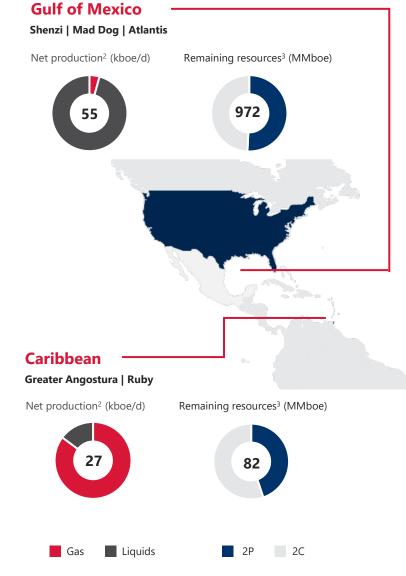
Restructured organisation over the last two years for low cost environment



# LOWER CARBON

Lower carbon intensity basin<sup>1</sup>

Ongoing improvement in operating performance through efficiency opportunities



- 1. Wood Mackenzie report titled 'Carbon emissions performance in US GoM: a low emitter in the crossfire', February 2021.
- 2. Net production rate for Q3 2022.
- 2P + 2C net reserves and resources as at 1 June 2022 from the Woodside Half-Year Report 2022. Excludes Trion, Wildling, Deepwater T&T, Liard and Sangomar. Includes Shenzi North and fuel volumes of 16.6 MMboe and 2.8 MMboe for GOM and Caribbean respectively.



# **Gulf of Mexico**

### Shenzi

## **Atlantis**

# **Mad Dog**

First oil: 2009
Working interest: 72%

Current production: 29 kboe/d1

First oil: 2007
Working interest: 44%
Current production: 16 kboe/d1

First oil: 2005
Working interest: 23.9%

Current production: 10 kboe/d1









Not to scale

High quality oil assets | Operating excellence | Pipeline of future growth

# Maximising value of existing assets

### **Gulf of Mexico**

- Mad Dog Phase 2 expected online 2023
- Track record of executing profitable projects
  - Subsea multi phase pump and operational optimisation
  - Infill drilling and side tracks to maintain on-plateau production
- Pipeline of value-adding projects to maximise production
- Leveraging experience in effective life extension and corrosion management

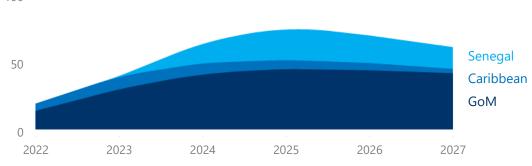
### Caribbean

Optimisation focus for later life asset phase and maintaining readiness for growth

## Senegal

Focus on operational readiness for Sangomar through 2023

# Production (MMboe)<sup>1</sup> 250 200 150 250 100





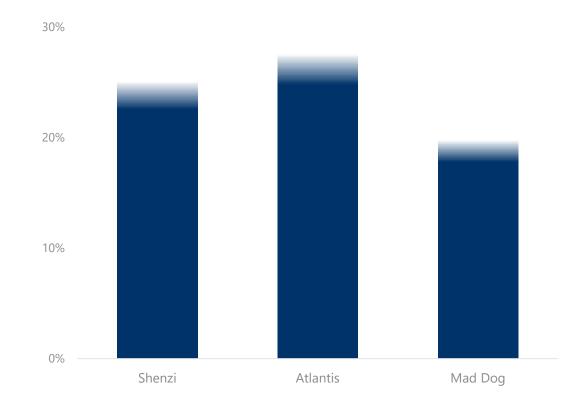
# High return future growth options in the Gulf of Mexico

Infill activities informed by ocean bottom node seismic

Leveraging existing facilities

~200 MMboe net 2C contingent resources converted to 2P over last five years

### Average IRR for unsanctioned growth options (%)<sup>1</sup>





# **Exploration**

Value-focused portfolio to generate low cost, lower carbon development opportunities

High return options near existing infrastructure

Green field options prioritising "fast to market" and commerciality

# Risk management

Characterise the subsurface and commercial elements

Leverage co-ownerships

Build diverse portfolio

### **Value focus**

Fast commercialisation

Efficient execution

Rapid, high quality decisions

Disciplined spend: \$300 – 400 million annual budget<sup>1</sup>



# Calypso – development

# **Concept and resource**

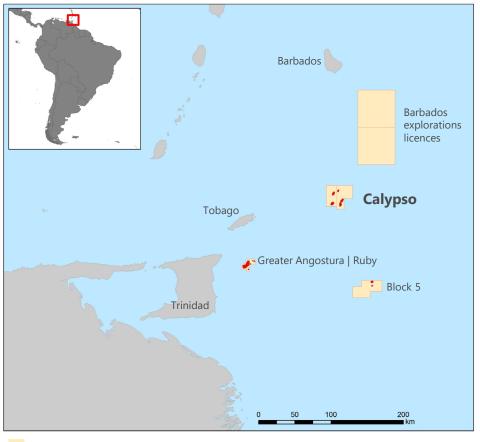
- 3.2 Tcf gross 2C contingent resource with additional unpenetrated potential<sup>1</sup>
- ~250 km to southeast coastline in Trinidad
- Development concept screening is currently ongoing

# **Strategic fit**

- Trinidad and Tobago's largest undeveloped discovered resource
- Potential partial backfill to Atlantic LNG and domestic petrochemical infrastructure

### **Focus areas**

- Low cost, lower carbon development concept
- Commercial and marketing alignment



Woodside licences

# **Browse – development**

# **Concept and resource**

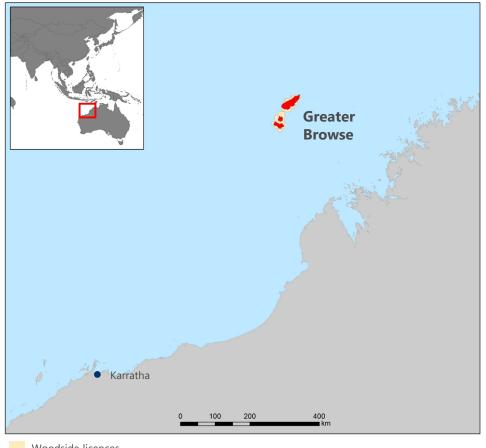
- 14.6 Tcf of gas and 412 MMbbl condensate (gross contingent resource, 2C)<sup>1</sup>
- Two FPSO facilities delivering ~11.4 Mtpa of LNG/LPG and domestic gas
- ~900 km pipeline to existing NWS project infrastructure

# **Strategic fit**

Large resource with potential to back fill NWS, offer domestic gas security and provide long-term supply to Asian markets

### **Focus** areas

- Carbon solution
- Commercial progress
- Environmental approvals





# Sunrise – development

# **Concept and resource**

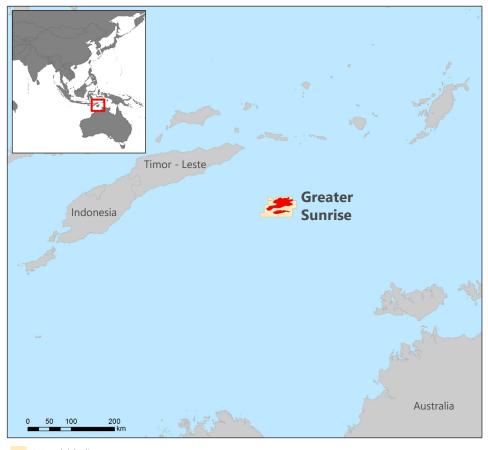
- 5.3 Tcf (dry gas) and 226 MMbbl condensate (gross contingent resource, 2C)<sup>1</sup>
- Development concept screening in progress

# **Strategic fit**

- Large resource with multiple development options
- LNG opportunity supported by expected future gas demand

### **Focus areas**

- · Commercial and marketing alignment
- Select appropriate development concept



Woodside licences



# Executing our new energy and lower carbon services strategy



# CUSTOMER COLLABORATION





# INTEGRATED CARBON SOLUTIONS

**Working with customers** to develop demand for new sources of energy

Targeting hydrogen and ammonia production leveraging Woodside's core capabilities

Developing solutions to help **decarbonise**Woodside and our customers

## Scalable to match the pace of the energy transition



Targeting \$5 billion investment in new energy products and lower carbon services by 2030<sup>1</sup>

# Integrated carbon solutions

# CARBON MANAGEMENT STRATEGY

Develop integrated carbon solutions to help our hydrocarbon business, new energy business and our customers

	OFFSETS	CARBON CAPTURE AND STORAGE (CCS)	CARBON TO PRODUCTS
FOCUS	Originate high integrity offset units and purchase from select third parties	Secure and accelerate CCS in Australia and beyond	Invest in technology advancement to convert carbon into useful products
BENEFITS	Available at scale now	Potential for large scale CO <sub>2</sub> storage	Future conversion of carbon at source of generation
PROGRESS	Executed plan to secure offsets to meet Woodside's 2030 net emissions reduction targets <sup>1,2</sup>	Awarded three permits to advance studies on carbon capture and storage in Australia <sup>3</sup>	Collaborations with String Bio, ReCarbon and LanzaTech

<sup>1.</sup> Amount of offsets includes those currently held in offset accounts, forecast yield from forward contracts and offsets related to land purchased for carbon origination projects (but not yet fully implemented). The offsets include Australian Carbon Credit Units and voluntary market offset units. Forecast includes offsets required up to and including 2030 and excludes retired units.



<sup>2.</sup> Woodside equity emissions abatement demand is based on current and sanctioned projects at current equity share as well as near and medium term net equity Scope 1 and 2 greenhouse gas emissions targets. Refer to slide 20 for further information on Woodside's net emissions reduction targets.

<sup>3.</sup> The carbon capture and storage permits are subject to commercial agreements, regulatory approvals and being granted appropriate titles.

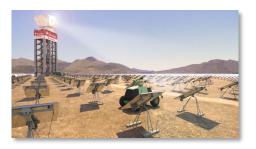
# Hydrogen and ammonia solutions

# HYDROGEN AND AMMONIA STRATEGY

Develop solutions and pursue technologies to assist our customers with their decarbonisation pathways

	HEAVY DUTY TRANSPORT	POWER	SHIPPING AND MARINE FUELS	INDUSTRIALS AND CHEMICALS
FOCUS	Decarbonisation of mobility sector (diesel substitution)	Decarbonisation of coal-fired power generation and longer term substitution of natural gas	Decarbonisation of maritime and supply chains	Provide lower carbon industrial feed stock and CCS in hard-to-abate sectors
BENEFITS	Line of sight to diesel parity Operational benefits versus battery electric trucks	Diversifies supply and provides lower carbon power  Potential to expand into combined cycle gas turbines	May enable lower carbon shipping corridors for bulk carriers	May enable progressive displacement of existing grey ammonia and hydrogen supply <sup>1</sup>
PROGRESS	Long lead items ordered for H2OK	Joint feasibility study on ammonia supply chain from Australia to Japan	Exploring opportunities with potential partners and original equipment manufacturers	Exploring new opportunities across hard-to-abate sectors

# A portfolio of new energy opportunities



### Heliogen

Initial 5 MW concentrated solar energy system to prove concept of clean energy delivery with nearly 24/7 availability. Potential deployment to support our operations



### наок

Proposed initial phase targeting up to 60 tonnes per day of liquid hydrogen leveraging existing network, a large portion which is wind-powered. Ideally located for US truck market



### **Woodside Solar**

Proposed solar facility that could supply up to 100 MW to Pluto and other customers located near Karratha in Western Australia, with the potential to expand this facility to up to 500 MW as customer demand arises in the future



### Southern Green Hydrogen

Proposal for renewable ammonia production facility, targeting up to 500,000 tonnes of ammonia per year



### **H2Perth**

Proposal for a world-scale hydrogen and ammonia production facility. Land secured in industrial precinct with access to Asian and Australian markets



### H2Tas

Proposal for renewable hydrogen production for export as ammonia to Asian markets

# **H2OK progressing towards FID**

### **TECHNICAL**

- Completed detailed geotechnical investigations
- FEED activities underway

## **CONTRACTING**

- Electrolysis equipment supply contract awarded in October 2022
- Execute agreements for power and water supply
- Award contract for liquification equipment supply
- Award engineering, procurement, construction contracts

### **MARKETING**

- Targeting primary end use of heavy-duty trucks and equipment
- O Progressing customer offtake discussions

### **REGULATORY**

- Awarded contract for local support on regulatory approvals
- Assess Inflation Reduction Act incentives
- Progressing regulatory and environmental approvals



**2023**Targeted FID

**2026**Targeted first liquid hydrogen



# New energy value chain

**Power generation** Processing, Liquids marketing **Customers** electrolysis + liquefaction **Segments of the value chain Advantaged locations** Large scale Key advantages and growth Years of strong **Strong global liquids** Power processing and catalysts for Woodside's H2 marketing capability relationships with experience for safe, Water and presence key energy customers projects reliable operations Infrastructure High barrier to entry Traditional plus new Potential for higher **Characteristics** Optimisation lever Deep market customers returns **Enabling capital Investment focus Enabling capital** Strategic focus aligned to Woodside's core capabilities



# The investment case – a global energy supplier







Scale, diversification and resilience to deliver enduring value

Framework established to optimise value and shareholder returns

Agile, flexible and adaptable as the world's energy mix evolves

**Advantaged locations** and markets

Conventional asset base weighted to LNG

Major growth projects in execution

**Pipeline of opportunities** 

**Resilient** cash flow

History of **strong dividends** 

Clear capital allocation and capital management frameworks

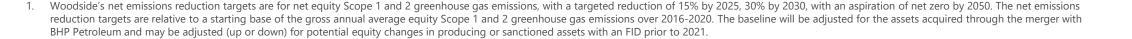
**Strong** balance sheet

Delivering **net emissions reduction** targets<sup>1</sup>

Progressing **new energy** opportunities

**Customer-led** and **scalable** 

Safe | Reliable | Low cost | Lower carbon | High cash generation











# Glossary

A contract the	
Australian dollar	
Australian Securities Exchange	
Proved plus Probable reserves	
Best Estimate of Contingent resources	
Billion cubic feet	
BHP Petroleum or BHPP means BHP Petroleum International Pty Ltd ACN 006 923 897 and, unless context otherwise requires, its subsidiaries. References to "BHP Petroleum International Pty Ltd" are to "BHP Petroleum International Pty Ltd" excluding its subsidiaries	
Barrel of oil equivalent, thousand barrels of oil equivalent, million barrels of oil equivalent, billion barrels of oil equivalent	
Includes capital additions on oil and gas properties and evaluation capitalised	
Carbon capture and storage	
Carbon capture and utilisation	
Carbon capture, utilisation and storage	
Methane	
Carbon dioxide	
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 for 100 years. It is used to evaluate releasing (or avoiding releasing) any greenhouse gas against a common basis <sup>1</sup>	
Conventional resources exist in porous and permeable rock with pressure equilibrium. The hydrocarbons are trapped in discrete accumulations related local geological structure feature and/or stratigraphic condition	
Cents per share	
To avoid, reduce or offset greenhouse gas emissions. It can apply to both the production and the use of products and services.	
Calculated as a profit before income tax, PRRT and net finance costs	
Calculated as a profit before income tax, PRRT, net finance costs, depreciation and amortisation and impairment divided by operating revenue	

EBITDAX	Calculated as a profit before income tax, PRRT, net finance costs, depreciation and amortisation, impairment and exploration and evaluation expense
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>2</sup>
FEED	Front-end engineering design
FID	Final investment decision
FPSO	Floating production storage and offloading
FPU	Floating production unit
Free cash flow	Cash flow from operating activities less cash flow from investing activities
Gearing	Net debt divided by net debt and equity attributable to the equity holders of the parent
GHG or greenhouse gas	The seven greenhouse gases listed in the Kyoto Protocol are: carbon dioxide ( $CO_2$ ); methane ( $CH_4$ ); nitrous oxide ( $N_2O$ ); hydrofluorocarbons (HFCs); nitrogen trifluoride ( $NF_3$ ); perfluorocarbons (PFCs); and sulphur hexafluoride ( $SF_6$ )
IRR	Internal rate of return
JCC	The Japan customs-cleared crude is the average price of customs-cleared crude oil imports into Japan as reported in customs statistics (also known as 'Japanese crude cocktail') and is used as a reference price for long-term supply LNG contracts
JV	Joint venture
KGP	Karratha Gas Plant
LNG	Liquefied natural gas
Lower carbon services	Woodside uses this term to describe technologies, such as CCUS or offsets, that may be capable of reducing the net greenhouse gas emissions of our customers
MMbbl	Million barrels
MMBtu	Million British thermal units
Mtpa	Million tonnes per annum
MW	Megawatt
MWh	Megawatt hour



<sup>1.</sup> See IFRS Foundation 2021: Climate Related Disclosures Prototype. Appendix A.

<sup>2.</sup> World Resources Institute and World Business Council for Sustainable Development 2004. "GHG Protocol: a corporate accounting and reporting standard".

# Glossary

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 reductions achieved from the use of offsets. Net greenhouse gas emissions are equal to an entity's gross greenhouse gas emissions reduced by the number of retired offsets	
Net equity greenhouse gas emissions	Woodside's equity share of net greenhouse gas emissions	
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>1</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	
NGLs	Natural gas liquids	
NPAT	Net profit after tax	
NWS	North West Shelf	
Offsets	<ul> <li>Carbon offsets. Avoided GHG emission, GHG emission reduction or GHG removal and sequestration made available to another organisation in the form of a carbon credit to counterbalance unabated/residual GHG emissions</li> <li>Avoidance offsets: Offsets which result in the avoidance of GHG emissions that would otherwise occur without the protective actions implemented to generate the offset, for example, the avoidance of deforestation</li> <li>Reduction offsets: Offsets that result in a reduction of GHG emissions from an activity that is additional, for example, CO2 capture and geological storage</li> <li>Removal offsets: Offsets based on the withdrawal of GHG emissions from the atmosphere, for example through the use of GHG sinks or GHG removal technologies. Removal offsets are important in achieving net-zero emissions as they help remove and store residual emissions<sup>2</sup></li> </ul>	
Operated and non-operated	Oil and gas joint venture participants will typically appoint one company as the operator, which will hold the contractual authority to manage joint venture activities on behalf of the joint venture participants. Where Woodside is the operator of a joint venture in which it holds an equity share, this report refers to that joint venture as being operated. Where another company is the operator of a joint venture in which Woodside holds an equity share, this report refers to that joint venture as being non-operated	

PRRT	Petroleum resource rent tax
RFSU	Ready for start-up
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. <sup>3</sup> Woodside estimates greenhouse gas emissions, energy values and global warming potentials in accordance with the National Greenhouse and Energy Reporting (NGER) methodology as applicable in FY20-21
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. <sup>3</sup> Woodside estimates greenhouse gas emissions, energy values and global warming potentials in accordance with the National Greenhouse and Energy Reporting (NGER) methodology as applicable in FY20-21
Scope 3 GHG emissions	Other indirect GHG emissions. Scope 3 is an optional 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 <sup>3</sup>
Shareholder or Woodside Shareholder	A holder of Woodside Shares from time to time
T&T	Trinidad and Tobago
Tcf	Trillion cubic feet
TRIR	Total recordable injury rate
Underlying NPAT	Net profit after tax excluding any exceptional items
Unit production cost or UPC	Production cost divided by production volume
USD	United States dollar
Woodside	Woodside Energy Group Ltd ACN 004 898 962
Woodside Shares or Shares	Fully paid ordinary shares in the capital of Woodside
YTD	Year to date

<sup>1.</sup> 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.)]. In Press. Page 555.



<sup>2.</sup> IPIECA 2022. "Net zero emissions: glossary of terms". https://www.ipieca.org/resources/awareness-briefing/net-zero-emissions-glossary-of-terms/, page 5.

World Resources Institute and World Business Council for Sustainable Development 2004. "GHG Protocol: a corporate accounting and reporting standard".

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