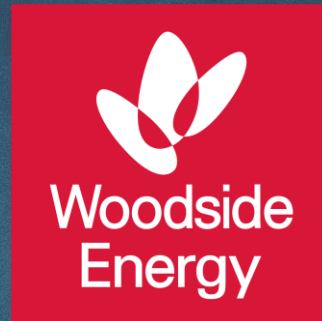


**PART OF  
A BETTER  
FUTURE**



# **BUILDING AMMONIA- POWERED GREEN SHIPPING CORRIDORS FROM AUSTRALIA TO THE WORLD**

---

Woodside Energy Group Ltd

Andrea Galt, Head of New Energy - Europe

25 August 2022

## INTRODUCTION

# 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. All information included in this presentation, including any forward-looking statements, speak only as of the date of this presentation. Except as required by law, neither Woodside, its related bodies corporate, nor any of their respective officers, directors, employees, advisers or representatives (“**Beneficiaries**”) intends to, or undertakes to, or assumes any obligation to, provide any additional information or revise the statements in this presentation, whether as a result of a change in expectations or assumptions, new information, future events, results or circumstances.

This presentation may contain industry, market and competitive position data that is based on industry publications and studies conducted by third parties as well as Woodside’s internal estimates and research. While Woodside believes that each of these publications and third party studies is reliable, Woodside has not independently verified the market and industry data obtained from these third party sources. Accordingly, undue reliance should not be placed on any of the industry, market and competitive position data contained in this presentation.

To the maximum extent permitted by law, neither Woodside, its related bodies corporate, nor any of their respective Beneficiaries, assume any responsibility for, or make any representation or warranty (express or implied) as to, the fairness, currency, accuracy, adequacy, reliability or completeness of the information in this presentation.

### No offer or advice

This presentation 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 presentation 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 and recommendations contained in this presentation do not constitute, and should not be taken as, financial product advice. The Woodside board encourages you to seek independent legal, financial, taxation and other professional advice before making any investment decision.

This presentation shall not be distributed, transmitted, published, reproduced or otherwise made available to any other person, in whole or in part, directly or indirectly, for any purposes whatsoever. In particular, this presentation and the information contained herein may not be taken or transmitted, in, into or from and may not be copied, forwarded, distributed or transmitted in or into any jurisdiction in which such release, publication or distribution would be unlawful. The distribution of this presentation may be restricted by law, and persons into whose possession this presentation comes should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the relevant jurisdiction.

### Forward looking statements

This presentation may contain forward-looking statements with respect to Woodside’s business and operations, market conditions, results of operations and financial condition which 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. 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.

### 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 or its applicable subsidiaries. This presentation does not include any express or implied prices at which Woodside will buy or sell financial products.

## INTRODUCTION

# We are Woodside

- We are a global energy company, proudly Australian with a spirit of innovation and determination.
- We provide energy that the world needs to heat homes, keep lights on and support industry.
- We aim to thrive through the global energy transition with a low-cost, lower-carbon, profitable, resilient and diversified portfolio.

## OUR FOCUS

**PROVIDE LOW-COST, LOWER-CARBON ENERGY THE WORLD NEEDS**

**Our resilient and diversified portfolio will help us thrive through the global energy transition.**

### World-class assets

Our focus is the safety, reliability, efficiency and environmental performance of our operations, leveraging more than 35 years of experience.

### Delivering growth

We have growth opportunities across our three pillars of oil, gas and new energy.

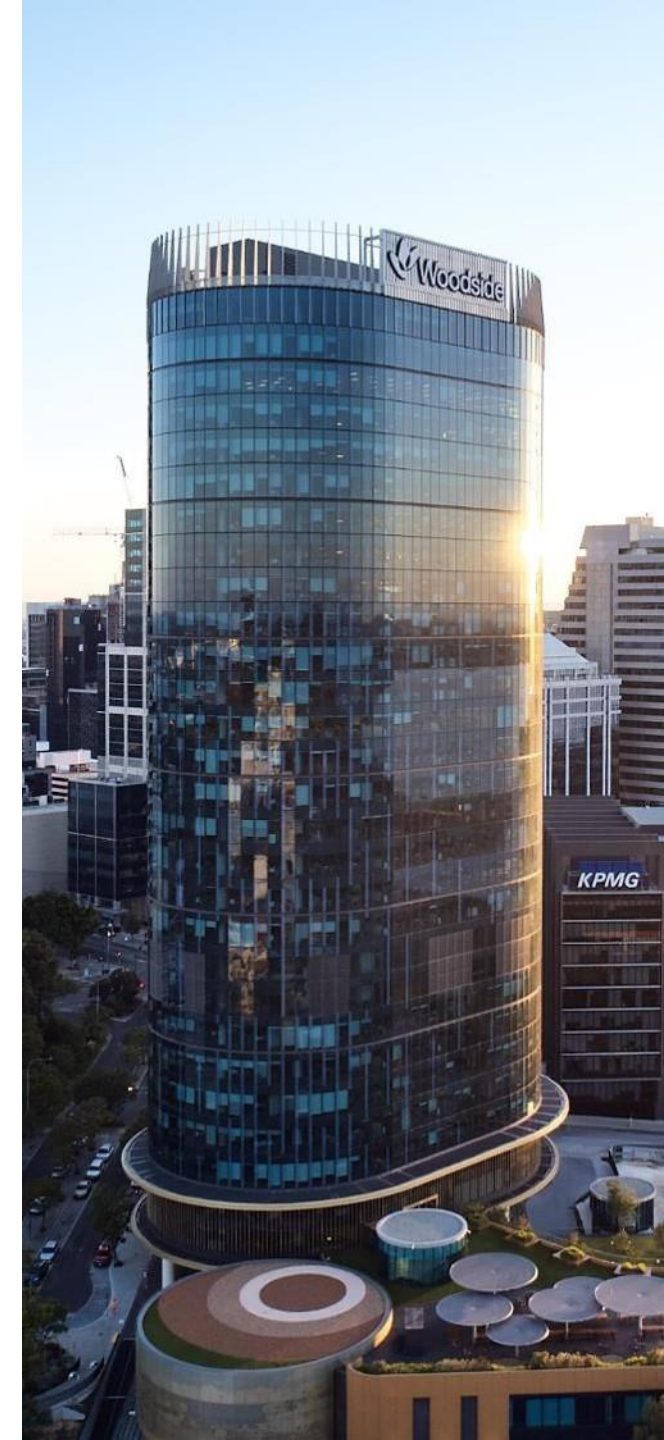
### Social and economic benefits

Environmental, social and governance performance is integral to our success.

### New energy

We are targeting to invest US\$5 billion in new energy products and lower-carbon services by 2030<sup>1</sup>.

1. Woodside analysis based on the Wood Mackenzie Corporate Benchmarking Tool Q4 2021, 1 December 2021. "Independent energy company" excludes NOCs, companies with free float less than 60% (for example, LUKOIL, Wintershall Dea and Rosneft), major integrated oil and gas companies (for example, BP, Chevron, Eni, ExxonMobil, Repsol, Shell and Total) and Canadian oil sands companies (for example, Canadian Natural Resources, Cenovus and Suncor).
2. Combined Woodside and BHP Petroleum total production for the 12 months to 31 December 2021. Excludes Algeria and Neptune production. Comprised of 53% BHP Petroleum production and 47% Woodside production.



# Woodside's Climate Strategy

## STRATEGY



Reduce our net equity greenhouse gas emissions (Scope 1 & 2)

DESIGN OUT

OPERATE OUT

OFFSET PORTFOLIO



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

CAPITAL ALLOCATION FRAMEWORK

SUPPORT VALUE CHAIN

PROMOTE MEASUREMENT & REPORTING

## TARGETS

15%  
by 2025

30%  
by 2030

Net zero  
aspiration by 2050  
or sooner

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

\$5 billion

Invested in new energy products and lower-carbon services by 2030<sup>2</sup>

## PROGRESS

10% reduction on 2016-2020 gross annual average in 2021<sup>3</sup>

On course to achieve 2025 target of 15% reduction

Released Climate Report 2021

H2Perth, H2TAS, H2OK and Heliogen

Woodside Solar Project

Exploring carbon capture and storage options

1. Target is for net equity Scope 1 and 2 emissions. Relative to a starting base of the gross annual average equity Scope 1 and 2 emissions over 2016-2020 and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with an FID prior to 2021. The starting base will be adjusted for the combined Woodside and BHP petroleum portfolio.  
2. Targeted investment in new energy products and lower-carbon services by 2030. Individual investment decisions are subject to Woodside's investment hurdles. Not guidance.  
3. Woodside heritage basis.

# Woodside's New Energy Purpose Statement

To deliver safe, reliable and affordable new energy solutions for customers worldwide, to build a better future

*Customers, collaboration and courage will be key to a successful energy transition*

# Thriving through the energy transition



## FOCUS

- New energy products and lower carbon services to reduce customers' emissions



## CHARACTERISTICS

- Developing market
- Lower capital requirement
  - Lower risk profile



## APPROACH

- Customer focused
- Technology agnostic
  - Low cost

# NEW ENERGY Projects

## H2Perth



Proposal for a world-scale hydrogen and ammonia production facility



Phased development: First phase focused on lower-carbon, low-cost and early hydrogen: 65 TJ/day natural gas and up to 250 MW electrolysis



Project designed to abate, store and/or offset all emissions associated with the production of hydrogen and ammonia



Later expansion to be driven by additional renewable energy developments



H2Perth schematic. Conceptual only, not to scale.

## H2OK

Proposed initial phase targeting up to 90 tpd of liquid hydrogen leveraging existing network

Future capacity of up to ~65,000 tpa of liquid hydrogen

MOU executed with Hyzon Motors

Discussions with a number of potential customers regarding potential offtake volumes



H2OK schematic. Conceptual only, not to scale.

## H2TAS

Proposal for renewable hydrogen production for export as ammonia

Phased development: First phase 300 MW electrolysis capacity

Planned to be powered by a combination of wind and hydropower



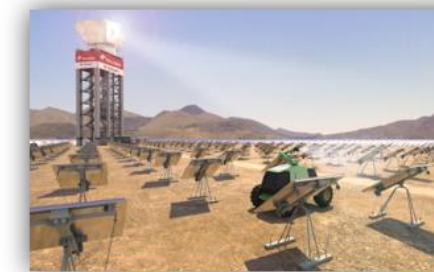
H2TAS schematic. Conceptual only, not to scale.

## Heliogen Collaboration

Commercial-scale demonstration deployment of Heliogen's AI-enabled concentrated solar technology

Initial phase targeting 5 MWe

Concentrated solar energy system to deliver clean energy with nearly 24/7 availability



Heliogen's breakthrough solar technology. Conceptual only, not to scale.

## Woodside Solar Project

Proposed solar photovoltaic power facility

Solar facility could supply up to 100 MW of solar energy to Pluto LNG and other customers

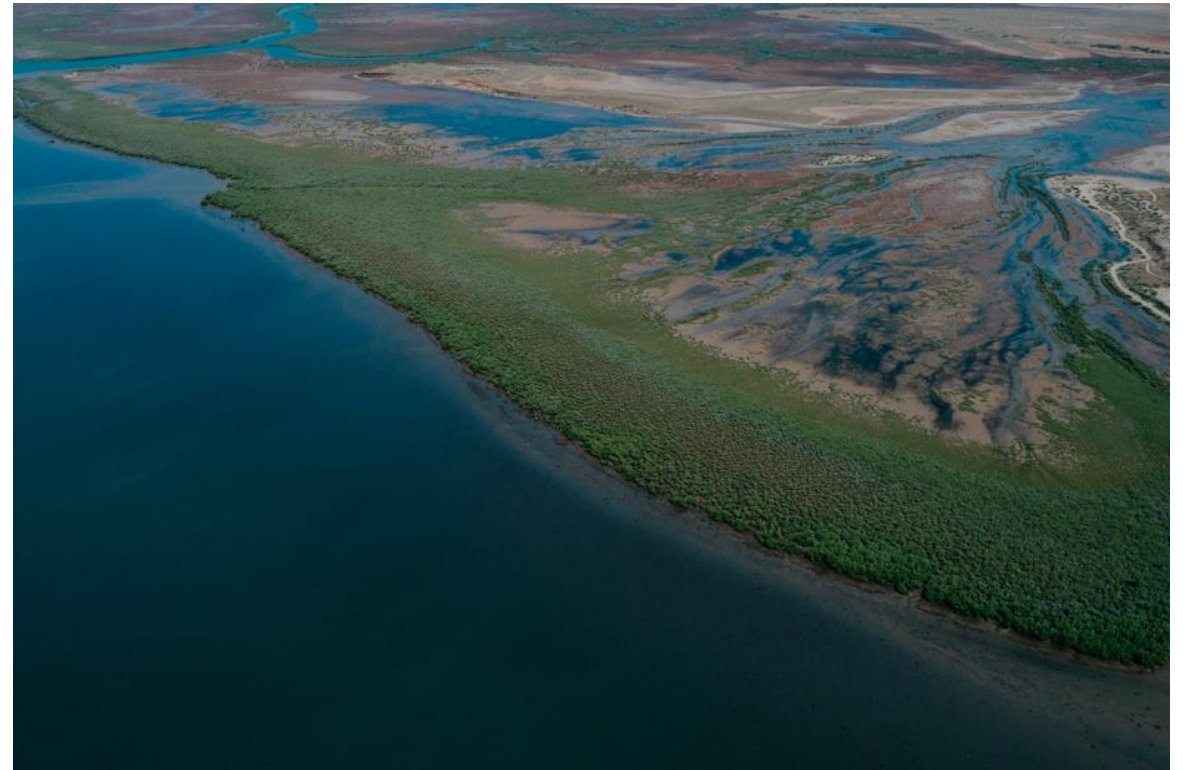
Complemented by battery energy storage systems

First construction subject to primary approvals and targeted in 2022

## BUILDING AMMONIA-POWERED GREEN SHIPPING CORRIDORS FROM AUSTRALIA TO THE WORLD

### Understanding the ammonia-powered green shipping opportunity

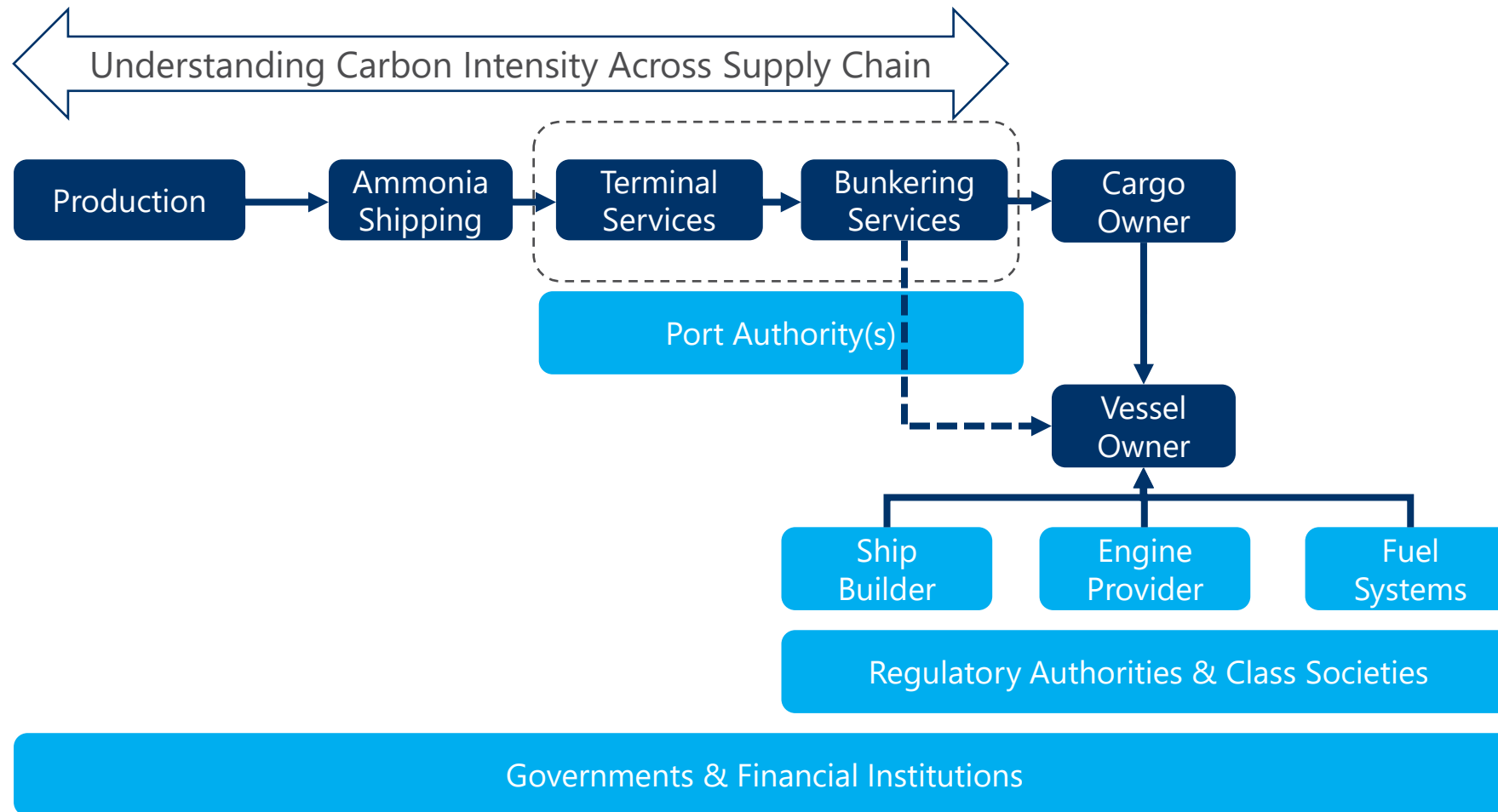
- Focused on understanding carbon intensity across the value chain
  - Production → shipping → storage → bunkering
- Significant demand for ammonia as a marine fuel
- Protecting the health and safety of our people, our contractors and our host communities
  - Together with strong environmental performance is essential
- Significance of this transformation for the maritime industry and key players in the value chain
- Inter-governmental leadership and industry collaboration crucial for successful development of new supply chains





# BUILDING AMMONIA-POWERED GREEN SHIPPING CORRIDORS FROM AUSTRALIA TO THE WORLD

## The Right Partners Working Together Key to Unlocking A Complex Supply Chain



# NEW ENERGY

## \$5 billion investment by 2030<sup>1</sup>

ENERGY TRANSITION PROGRESS

2021

### Market development

- Build relationships across value chain
- Technology flexible (hydrogen, CCS, renewables)
- Secure land and customers for projects
- Grow offsets portfolio to support base business
- Develop CCS opportunities
- Leverage existing capabilities

Mid-2020s

### Early new energy transition

- Achieve start-up of new energy projects
- Scale-up carbon offset projects
- Export ammonia from Australia
- Develop CCU opportunities
- Progress CCS opportunities

2030+

### New energy at scale

- Export liquid hydrogen from Australia
- Scale-up CCS activities
- Expand production to match market scale

### NEAR-TERM CUSTOMER FOCUS AREAS



#### Hydrogen for heavy vehicle transport

- Expected to play a key role in realisation of climate targets
- Truck manufacturers scaling up hydrogen fuel cell operations
- Line of sight to diesel price parity



#### Ammonia for power generation

- Transportable, price competitive option to reduce carbon emissions
- Exploring opportunities with existing customers

**Thank you for your attention**

