

1 November 2023

Corporate Update for Forthcoming Investor Presentations

Hexagon Energy Materials Limited attaches herewith a Corporate Update to be used in forthcoming investor presentations.

Authorisation

This announcement has been authorised by the Board of Directors.

About Hexagon Energy Materials Limited

Hexagon Energy Materials Limited (ASX: HXG) is an Australian company focused on *Future Energy* project development and *Future Energy* materials exploration and project development.

Hexagon is developing a business to deliver decarbonised Hydrogen (blue Ammonia) into export and domestic markets at scale, via its WAH₂ Project. The Company plans to use renewable energy to the greatest extent practicable.

Hexagon 100% owns the McIntosh Nickel-Copper-PGE and Graphite project in Western Australia and the Halls Creek Gold and Base metals project in WA.

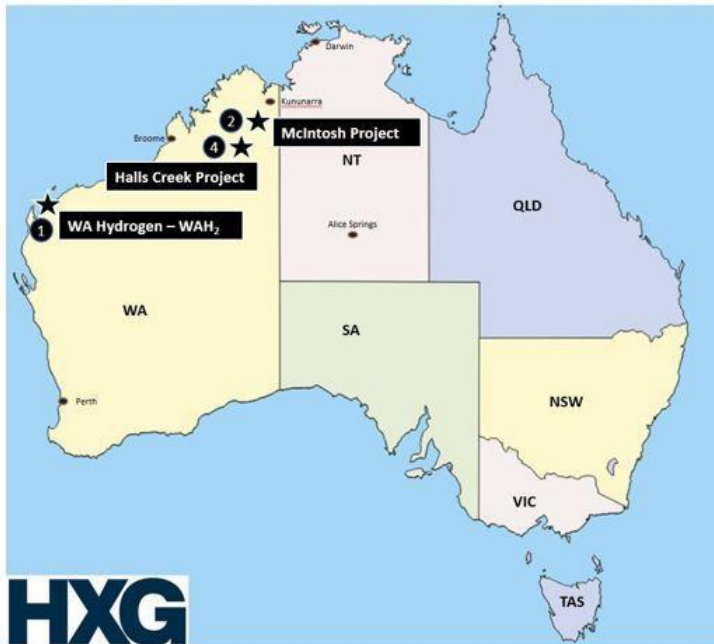
Hexagon's overarching goal for 2023 is to secure and leverage technical and commercial alliances by commodity across its project portfolio whilst maintaining a core focus on Northern Australian Future Energy and Future Energy Materials project development, in-house.

HEXAGON ENERGY MATERIALS LIMITED

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Northern Australia



USA



(Source: Britannica,
<https://www.britannica.com/place/Alabama-state>.)

Locations of Hexagon's projects

To learn more please visit: www.hxgenergymaterials.com.au

FOR FURTHER INFORMATION, please contact:

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Fuelling the Future

Low Emissions Ammonia

From Australia to APAC

November 2023

Important Notices

DISCLAIMER

The purpose of this presentation is to provide background information to assist in obtaining a general understanding of the Company's proposals and objectives. This presentation may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. This presentation is not to be considered as a recommendation by the Company or any of its subsidiaries, directors, officers, affiliates, associates or representatives that any person invest in its securities. It does not take into account the investment objectives, financial situation and particular needs of each potential investor. Investors should make and rely upon their own enquires and assessments before deciding to acquire or deal in the Company's securities. If you are unclear in relation to any matter or you have any questions, you should seek advice from an accountant or financial adviser.

All references to dollars (\$) in this presentation are to Australian dollars, unless annotated otherwise e.g. US\$ for USD.

Forward Looking Statements

Forward looking statements can generally be identified by the use of forward-looking words such as, 'expect', 'anticipate', 'likely', 'intend', 'should', 'could', 'may', 'predict', 'plan', 'propose', 'will', 'believe', 'forecast', 'estimate', 'target', 'outlook', 'guidance', 'potential' and other similar expressions within the meaning of securities laws of applicable jurisdictions.

There are forward looking statements in this document relating to the outcomes of the Pre-Feasibility Studies and ongoing work on the WAH₂ Project. Actual results and developments of projects and the market development may differ materially from those expressed or implied by these forward-looking statements. These, and all other forward-looking statements contained in this document are subject to uncertainties, risks and contingencies and other factors, including risk factors associated with the hydrogen business. It is believed that the expectations represented in the forward looking statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Any forward-looking statement is included as a general guide only and speak only as of the date of this document. No reliance can be placed for any purpose whatsoever on the information contained in this document or its completeness. No representation or warranty, express or implied, is made as to the accuracy, likelihood or achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this document. Hexagon Energy Materials Limited does not undertake to update or revised forward looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this document, except where required by applicable law and securities exchange listing requirements. To the maximum extent permitted by law, Hexagon Energy Materials Limited and its associates disclaim all responsibility and liability for the forward-looking statements, including, without limitation, any liability arising from negligence. Recipients of this document must make their own investigations and inquiries regarding all assumptions, risks, uncertainties, and contingencies which may affect the future operations of Hexagon Energy Materials Limited or its securities.

Gas Supply

Hexagon has not secured a long-term gas supply agreement. There is no guarantee that current discussions will convert into firm commitments to supply gas over the long term. It should be noted that the WAH₂ Project is contingent on securing long term gas supply in line with the assumed volumes, timing and price. If this cannot be achieved, there is a risk that the WAH₂ Project may be downgraded, deferred or may not go ahead.

Financing

Hexagon has not secured funding for the WAH₂ Project and accordingly to achieve the range of outcomes required for Phase 1, Hexagon will need to secure between A\$405M and A\$567M in funding for the project (assuming farmout of 65% - 75% project, leaving Hexagon with a 25% - 35% project share). There is no certainty Hexagon will be able farm out the Project or to raise the amount of funding when required. It should also be noted that any raise may only be available on terms that may be dilutive to shareholders or otherwise affect the value of Hexagon's shares. If the proposed farm-out or funding cannot be achieved, there is a risk that the WAH₂ Project may be downgraded, deferred or may not go ahead.

Hexagon Energy Materials Limited

ASX Listed Project Developer (HXG)*

Low cost, low emissions Blue Ammonia export project (WAH₂), Annual Net CF A\$244 million (100% project)¹

Targeting very large Asian Coal Co-Firing Market Opportunity, ~US\$10 Bn pa market by 2035²

Site secured & Highly Encouraging PFS Completed

FEED Approaching – Gateway to Execute Partner MOUs/Agreements

FID Target 2025

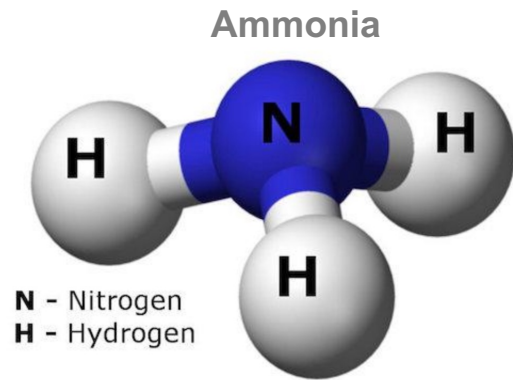
**HXG.ASX. Shares on issue 512,915,901. Market capitalisation \$5 million. nil debt, cash of \$1 million as at 30 September 2023.*

¹WAH2 Project Pre-Feasibility Study Updated Announcement (ASX: 2 August 2023)

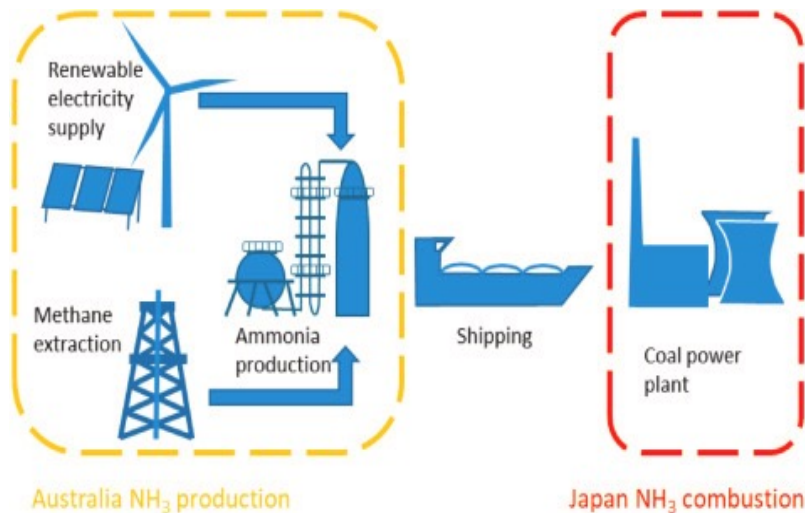
²Low-emissions ammonia market opportunity expected to reach 20 MTPA in Japan by 2035 based on 20% ammonia co-firing of coal fired fleet

The Opportunity: Substitute Ammonia for Coal

Hexagon offers pure-play exposure to the burgeoning low-emissions ammonia market



A stable molecule providing access to the energy potential of hydrogen



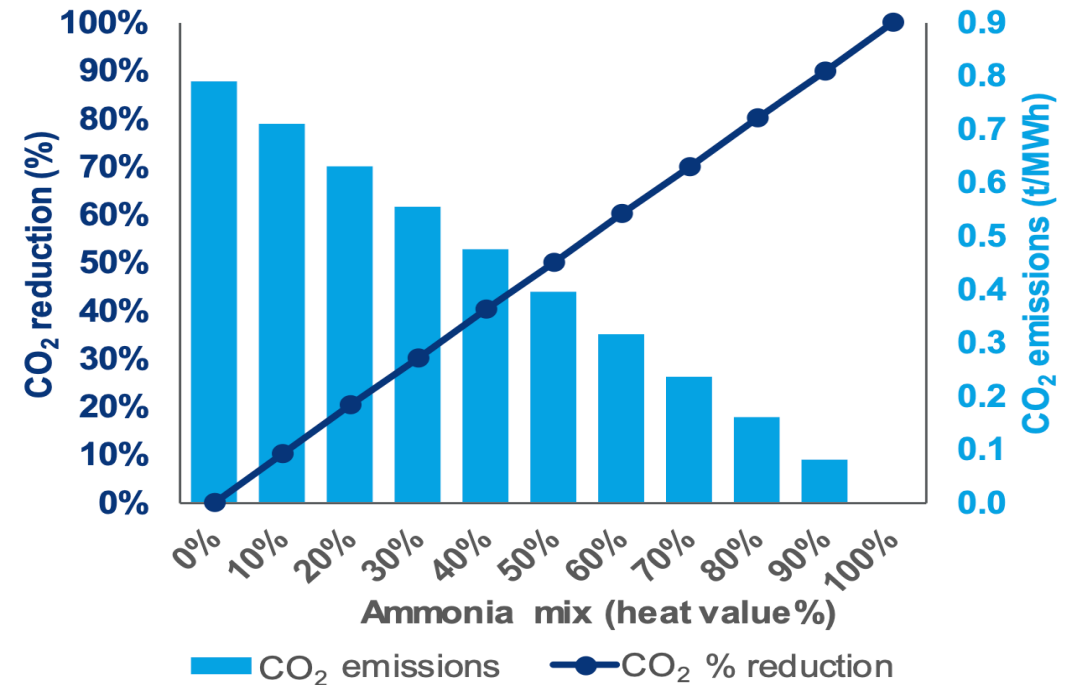
- **Ammonia for Coal:** Electricity producers in North Asia are targeting to substitute ammonia for coal in their thermal power stations
- **Huge Market Potential:** Japan's demand for low-emissions ammonia is expected to grow from ~nil to 20 MTPA by 2035¹
- **Australia Well Placed:** Australia is seen as a key supplier, competitive cost and secure location. LNG industry lessons
- **Hexagon Best Placed:** Hexagon's WAH₂ Project, based in Maitland WA, is the best-placed proposed low-emissions ammonia project in Australia
- **Project Delivery = Company revaluation:** Multiple milestones in coming months likely revaluation events for Hexagon

Market Size: US\$10 Bn per annum in just Japan

Japan plans to prioritize low-emissions ammonia to meet its climate targets

- **Current Coal Generation:** 1/3 of Japan's electricity needs are currently met from coal-fired generation¹
- **Emissions Target:** Japan has committed to reduce greenhouse gas emissions by 46% in 2030²
- **Govt Backing Co-Firing:** Government and industry plan that by blending Ammonia with Coal Japan's can meet low-emissions with existing power plants
- **= Huge Demand Growth:** Huge growth in market for low-emissions ammonia, expected to reach 20 MTPA³ with a value of US\$10 Bn/yr⁴ by 2035

CO₂ Reduction and Emissions of Coal-ammonia Co-firing⁵



Source: (1) JEPIC, Wood Mackenzie; (2) relative to 2013, METI strategic energy Plan; (3) based on 20% ammonia co-firing of coal fleet; (4) indicative low-emissions ammonia price of US\$500 /T; (5) Wood Mackenzie

Japan's Ammonia Criteria: To Access the Market

Japanese energy producers have three critical hurdles that suppliers need to meet



Low Emissions

Less than 4.2 T CO₂e /T H₂e¹, lower preferred and prioritized

Detailed engineering work by Petrofac demonstrates emissions intensity of 1.1 T CO₂e /T H₂e, further improvement opportunities identified³

Cost Competitive

US\$500 – 600 /T NH₃² delivered in Japan

Hexagon's Base Case cost of supply from the WAH₂ Project of US\$552 /T NH₃. Target of < US\$500 /T NH₃ based on identified opportunities³

Secure Supply

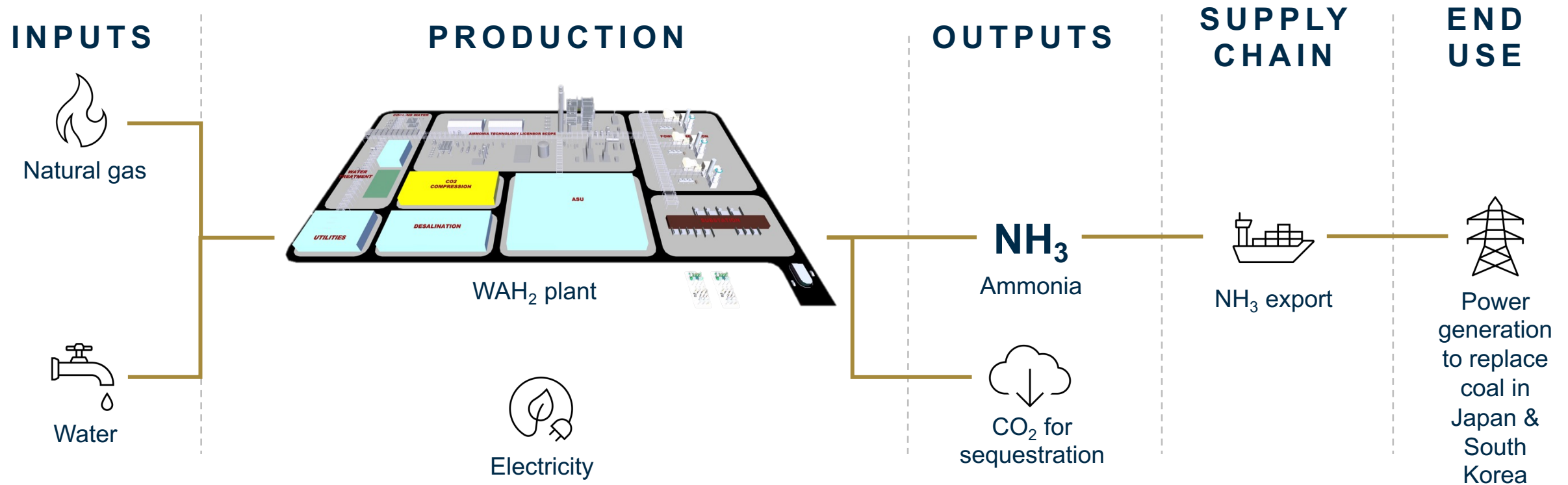
From established and stable trading partner countries

Australia is an established energy partner supplying 34% of Japan's energy imports⁴. Decades-long collaboration to build and sustain stable LNG supply

Source: (1) Clean Fuels Ammonia Association recommendation to METI; (2) HXG assessment, (3) WAH₂ Project Pre-Feasibility Study Updated Announcement (ASX: 2 August 2023); (4) Research Institute of Economy, Trade and Industry 'The New Australia-Japan Energy Relationship'

Project Overview: Hexagon's WAH₂ Export Plant

Material volumes of low-emissions, low-cost ammonia from a stable environment.
Target online before 2030



WAH₂ PROJECT FEATURES¹

Project life

25yr

Production technology

O₂ fired ATR

Production capacity

Ph1	Ph1 + Ph2
600kTPA	1200kTPA

Gross Project Capex

Ph1	Ph2
A\$1.62B	A\$1.29B

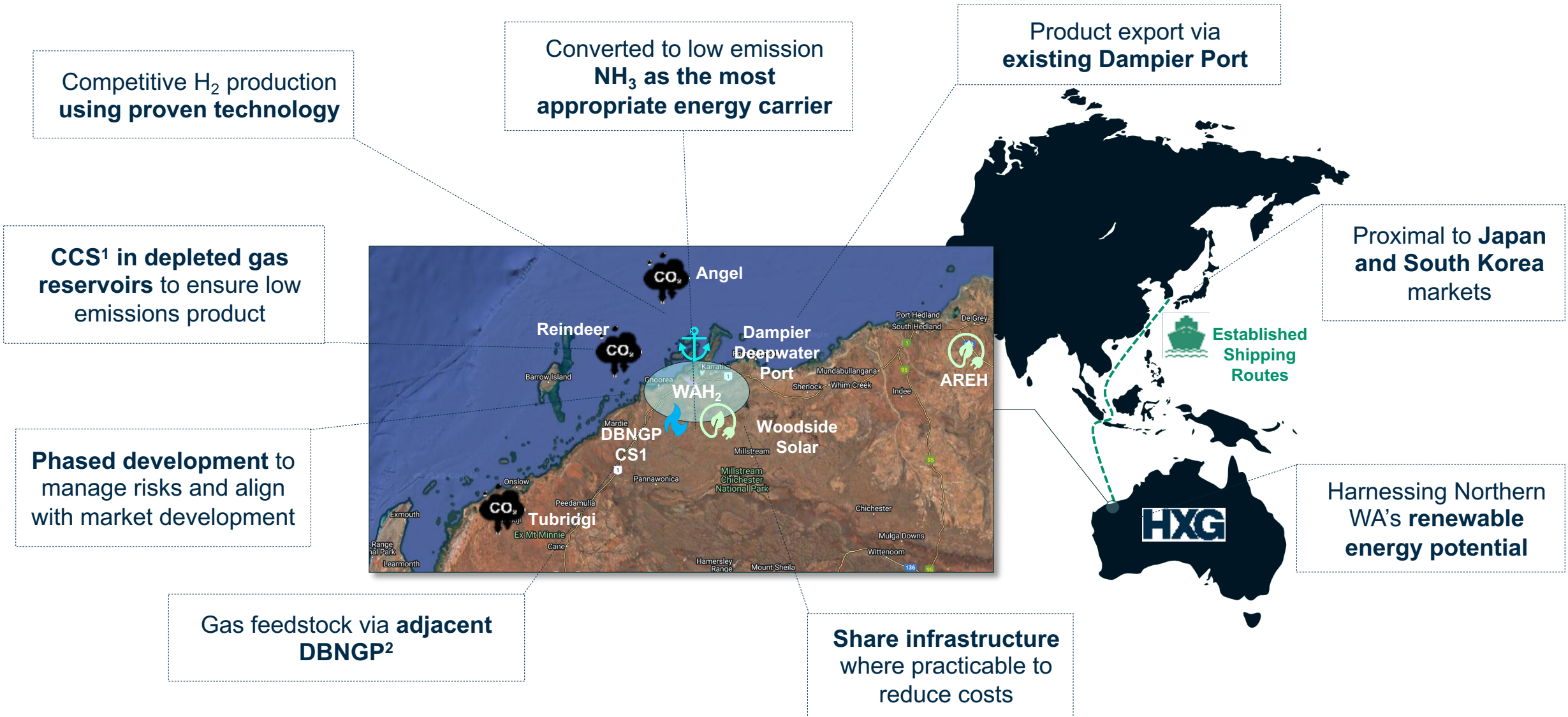
Emissions intensity

1.1kg CO₂e / kg H₂e

Note (1); WAH₂ Project Pre-Feasibility Study Updated Announcement (ASX: 2 August 2023)

Project Concept: Delivers Scale and Viability

Leverage surrounding existing and developing infrastructure to accelerate market entry



Note: (1) Carbon Capture and Storage; (2) Dampier to Bunbury Natural Gas Pipeline

Project Site: Allocation of Maitland SIA site

Proximity enables lower cost access to required services and infrastructure



Hexagon allocated 40 ha site in Maitland SIA

- Access to existing deep-water port, existing infrastructure corridors, multiple CCS options; adjacent to DBNGP²



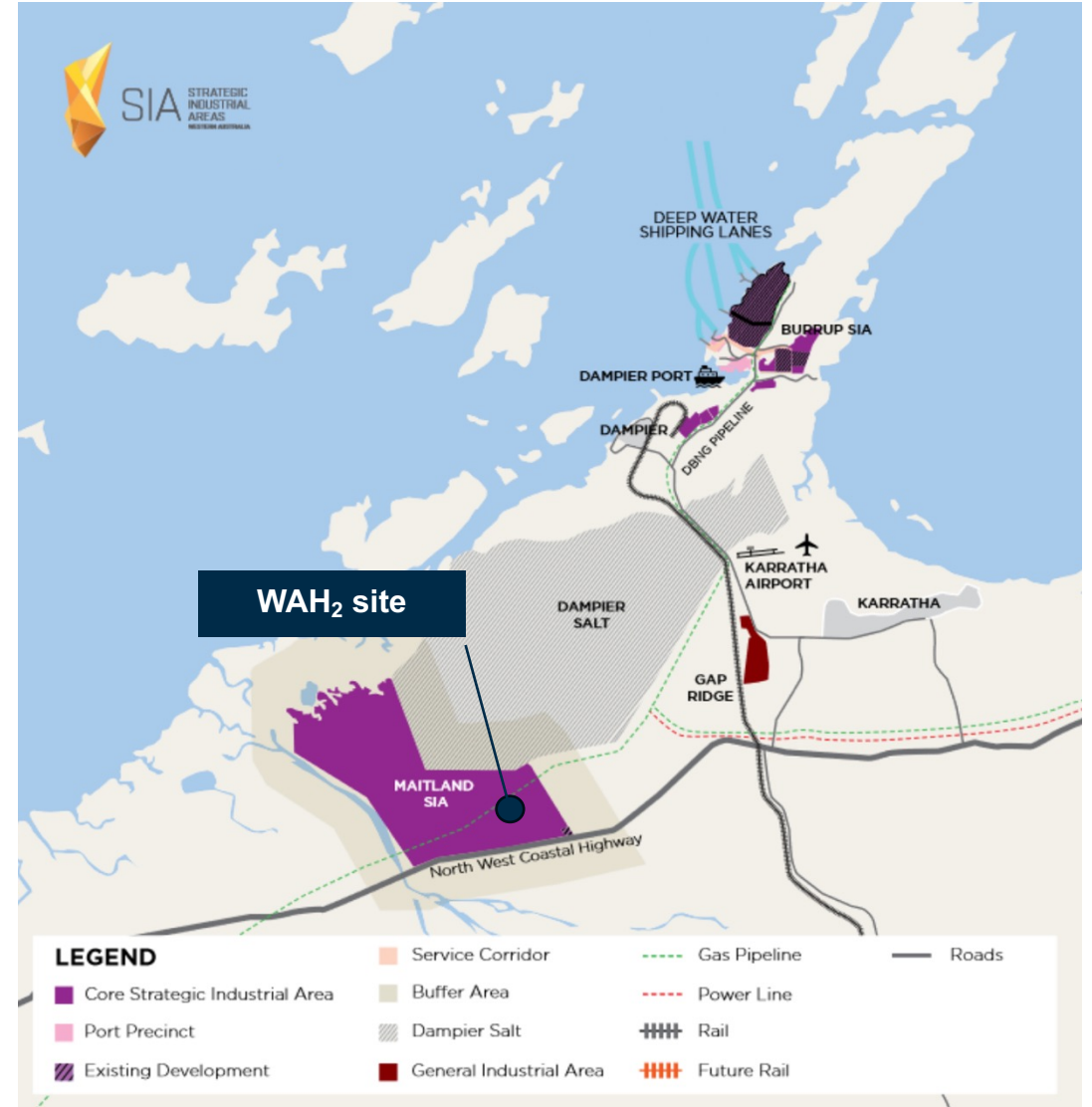
Award of land to proponents of other projects creates significant opportunities to share infrastructure

- Water supply, power supply, CO₂ transmission, ammonia export



Native Title approval provided by existing Burrup and Maitland Industrial Estates Agreement

- Indigenous Land Use Agreement required with Ngarluma Aboriginal Corporation



Note: (1) Strategic Industrial Area; (2) Damier to Bunbury Natural Gas Pipeline
Source: Image - DevelopmentWA

Why Hexagon?: WAH₂ Project is best placed

One of a kind – early mover project with competitive advantages related to technology choice and secured site



> 140 Australian Hydrogen Projects: More than 140 hydrogen-related projects have been announced in Australia



30 Low-emissions Ammonia: Of these, only 30 are targeting low-emissions ammonia as the product



Majority Electrolysis-based: The large majority are electrolysis-based, with cost and schedule challenges

- Proving technology at scale, supply chain constraints, cost of supply



Only 5 are based on gas reforming with CCS¹

- Others use coal, with emissions challenges; or biomass, unproven at scale



WAH₂ is Unique: the only proposed gas-based project with access to an existing deep-water port and multiple, mature CCS projects nearby

Source: Hexagon analysis of publicly available information; Note (1) carbon capture and storage

Project Delivery 1: Partner w/Key Industry Operators

HXG is seeking the fastest, lowest-cost, lowest-risk pathway to production

Partners accelerate pathway to operation:

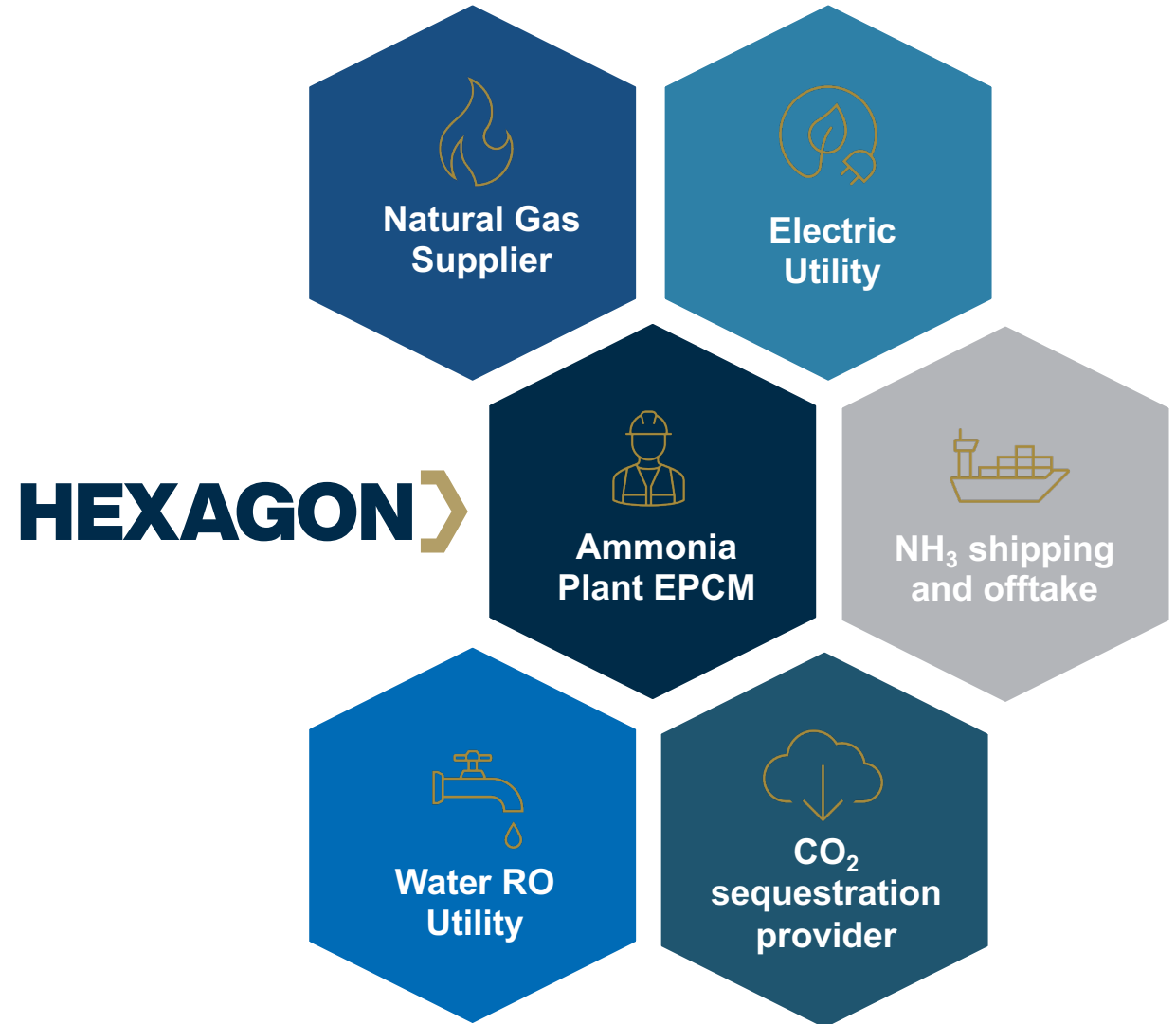
By partnering with existing industry operators, Hexagon can de-risk technical issues and lower costs by using existing infrastructure.

In this way a small company can build out a large project.

Key asset (site) already secured:

Hexagon has already secured the key asset, ideally-located industrial land close to:

- Gas supply
- CO₂ sequestration projects
- Water supply
- Existing port services
- Existing ammonia infrastructure



Project Delivery 2: HXG team plus Strategic Partners HEXAGON

Experienced team supplemented by strategic partners to secure way forward for WAH₂

Board of Directors



Charles Whitfield
Chairman

CIO of Drumrock Capital
Ex MD **Citibank & Deutsche Bank**, Head of Strategic Equity Transactions



Andrew Kirk
Commercial Director

Head of LNG for Power Co., Bangkok. Ex-17 years **Woodside** LNG Strategy. Co-founder Green Hydrogen Asia, Malaysia



Stephen Hall
CEO/ Project Leader

30 years-experience energy sector
Ex-**Woodside Energy** VP Strategy, Power & New Markets
Ex-VP North-West Shelf Development



Reinhardt Matisons
Business Development

35 years commercial experience Energy sector. Ex-EVP Marketing, Trading & Shipping at **Woodside Energy** Ltd. Ex-Senior Consultant Potem & Partners

Industry Partners



Engineering and construction specialists



Ammonia Process specialists



Garry Plowright
Non-Exec Director

Land Access and Approvals Manager at **Pilbara Minerals**
History in Mining law, regulatory process and mine development.



Philipp Kin
Non-Exec Director

Career spanning investment banking (M&A, DCM and ECM) and energy research roles including Lead WA LNG Asset Economist at **Shell**



Neil Theobald
Business Development

Senior Adviser Asia Natural Gas & Energy Asscn
Senior Advisor to **McKinsey & Co.**
Ex-**Chevron** VP Global LNG, Gas & Trading
Ex-Non-Exec Chair North-West Shelf Gas



Liz Sully
Regulatory Approvals

25 years regulatory approvals experience in onshore and offshore energy sector
Ex-**Santos & Woodside** Regulatory Approvals Specialist

A Board with a wealth of experience in developing projects and businesses from inception to multi-billion-dollar enterprises. Background in energy, finance and project development.

The project team has combined experience in the energy sector of over 80 years with focus on technical and commercial development of projects in joint venture with Japanese corporates.

Hexagon has engaged with world class technical advisors to provide detailed technical information, costing and analysis required by Hexagon and our partners.

Project Delivery 3: Three Steps to 1st Production

Preserving shareholder value by staged approach



PRE-FEED

- Target completion Q2 2024
- Current funding
- Self-fund; any capital raise would occur post first strategic MoU announcement
- Prior to FEED, farm down 65-75% of project ownership



FEED

- Target completion Q2 2025
- Total expenditure ~\$12-15 M
- Self fund remaining \$3-5 M (25%-35% Hexagon share)
- Raise finance to fund the project through to FID



PH1 BUILD & COMMISSION

- Target completion 2028
- Total expenditure ~\$1,620 M
- HXG share funded 60:40 debt/project finance to equity (\$162-228 M equity)
- Ph2 considered post Ph1 with free cashflow generation

By breaking the path to production into discreet steps and bringing in partners at key steps, HXG can leverage its team and capital

Progress to Date: A lot in a short time

The HXG Team and our Partners have delivered substantial progress in a short space of time

1: IDENTIFIED THE OPPORTUNITY - EARLY MOVER

Exponential growth expected in Asian Ammonia/Hydrogen demand – Focus Japan’s Co-Firing Strategy

2: ENCOURAGING PFS COMPLETED

Phase 1 600k TPA of NH3 production capacity - Annual Net Cash Flow Before Tax of A\$244¹ million (100%) – Potential FID 2025

3: ADVANTAGEOUS SITE SECURED

Allocation of site in Maitland SIA close to required services and infrastructure – gas, water, electricity, shipping export, CCS

4: POSITIVE PARTNER ENGAGEMENT

Experienced management receiving unequivocal support for concept and delivery plan from potential off-takers and project partners

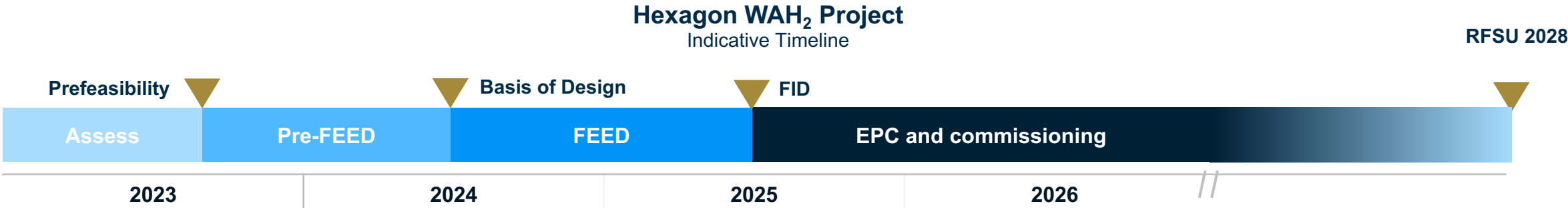
5: TARGETING FEED

A key milestone to progress Partner discussions and materially de-risk project will be entering FEED – clear plan to achieve

Note: (1) Annual net cash flow before tax is revenue less fixed and variable operating costs, at full production capacity (100% project).; (2) WAH2 Project Pre-Feasibility Study Updated Announcement (ASX: 2 August 2023)

Timeline for Revaluation: Major Catalysts

Several milestones scheduled for the next 6 months that could significantly re-rate HXG. MoUs with counterparties will move the WAH₂ Project from a 'great idea' towards reality



Award of land

Complete Pre-Feasibility Study

MoUs for energy supply, gas supply, CO₂ sequestration, ammonia offtake

Conditional¹ Agreements for energy supply, gas supply, CO₂ sequestration, ammonia offtake

Initial Project Structuring and Participation Agreements

Financing Agreements

Unconditional Agreements for energy supply, gas supply, CO₂ sequestration, ammonia offtake

Note: (1) Conditions precedent include WAH₂ Project FID

Compelling Investment Case

FEED on WAH₂ the next key milestone, gateway to Project Partnerships

- **Early Mover in Huge Market:** Hexagon is a front runner in accessing a high growth, government backed market
- **Advantaged Project with great progress:** Already secured project site in premier location with key existing infrastructure and inputs
- **Near-term Catalysts:** Multiple near-term milestones will be catalysts for revaluation
- **Attractive Returns:** Accessing government and subsidized funding would leverage shareholder payoffs
- **Growth Upside:** Ongoing growth profile through WAH₂ Phase 2 and additional project opportunities¹

Note: (1) WAH2 Project Pre-Feasibility Study Updated Announcement (ASX: 2 August 2023)





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FOR FURTHER INFORMATION, please contact:

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