



**ASX Announcement | 30 November 2023
Hexagon Energy Materials Limited (ASX: HXG)**

Annual General Meeting Presentation Amendment

Hexagon Energy Materials Limited (ASX: HXG) attaches hereto a presentation given at today's Annual General Meeting which has been amended to correct an immaterial typographical error.

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.

Hexagon's plan is to use renewable energy in clean Hydrogen production to the greatest extent possible in its projects, transitioning from blue to green Hydrogen production on a commercial basis, over time.

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.

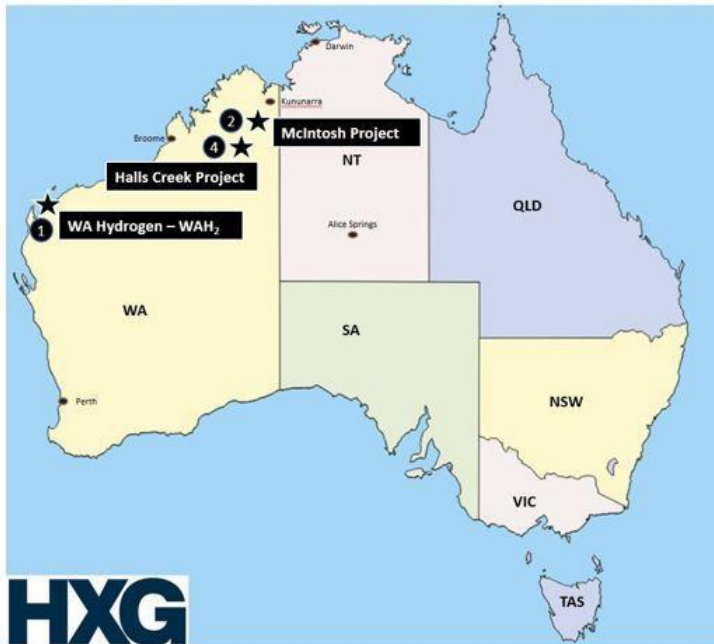
Hexagon's overarching goal for 2023 is to secure and leverage technical and commercial alliances by commodity across its project portfolio whilst maintaining a core focus on Northern Australian Future Energy and Future Energy Materials project development, in-house.

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

FOR FURTHER INFORMATION, please contact:

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Northern Australia



USA



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

Locations of Hexagon's Projects



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Hexagon Energy Materials Ltd
Annual General Meeting

30 November 2023

Hexagon's WAH₂ Project

Low Emissions Ammonia

From Australia to APAC

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)*

Competitive, low-emissions ammonia export project (WAH₂), annual net CF A\$244 million (100% project)¹

Targeting substantial Asian coal co-firing market opportunity, ~US\$10 Bn pa market by 2035²

Site secured & highly encouraging PFS completed

FEED approaching – pathway 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); annual net CF estimate from 2028

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

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

Ammonia for Coal

Electricity producers in North Asia are targeting to substitute ammonia for coal in their thermal power stations

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 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

Japan's Ammonia criteria

Australia well-placed, Hexagon best-placed



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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

WAH₂ Project Base Case **cost of supply US\$552 /T NH₃**. Target of < US\$500 /T NH₃ based on identified opportunities³

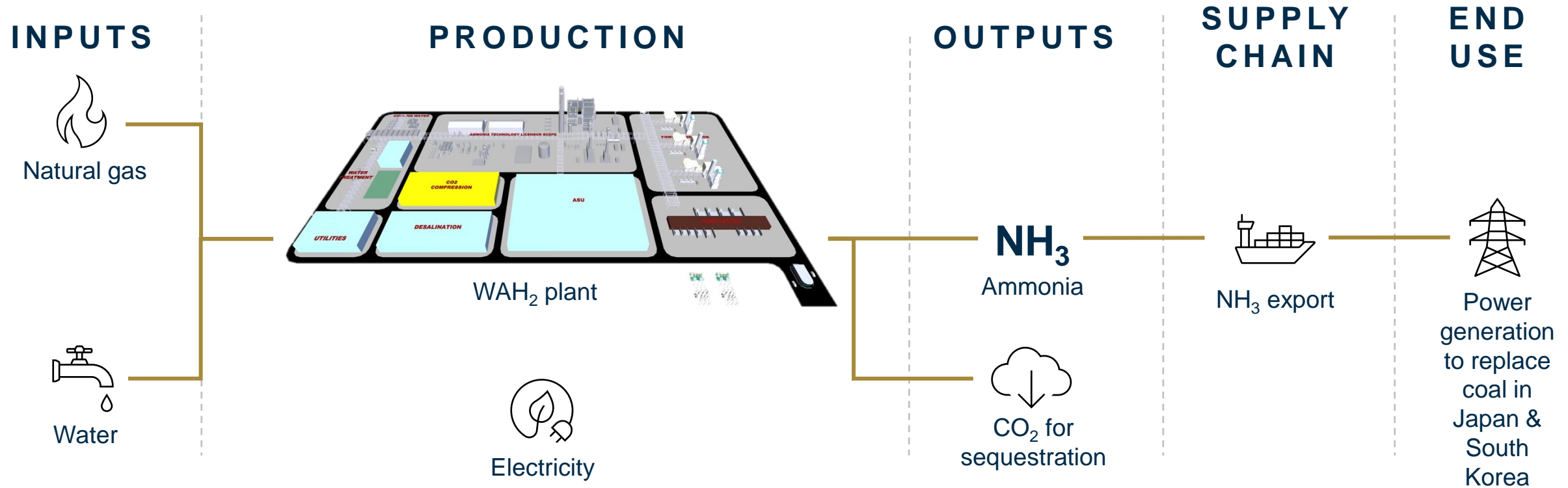
Secure Supply

From established and stable trading partner countries

Australia is an **established energy partner supplying 34% of Japan's energy imports**⁴. Decades-long collaboration to build and sustain stable LNG supply

Project overview - Hexagon's WAH₂ export plant

Material volumes of low-emissions, cost competitive ammonia, target online before 2030



WAH₂ PROJECT FEATURES¹

Project life

25yr

Production technology

O₂ fired ATR

Production capacity

Ph1

600kTPA

Ph1 + Ph2

1200kTPA

Gross Project Capex

Ph1

A\$1.62B

Ph2

A\$1.29B

Emissions intensity

1.1kg CO₂e / kg H₂e

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

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



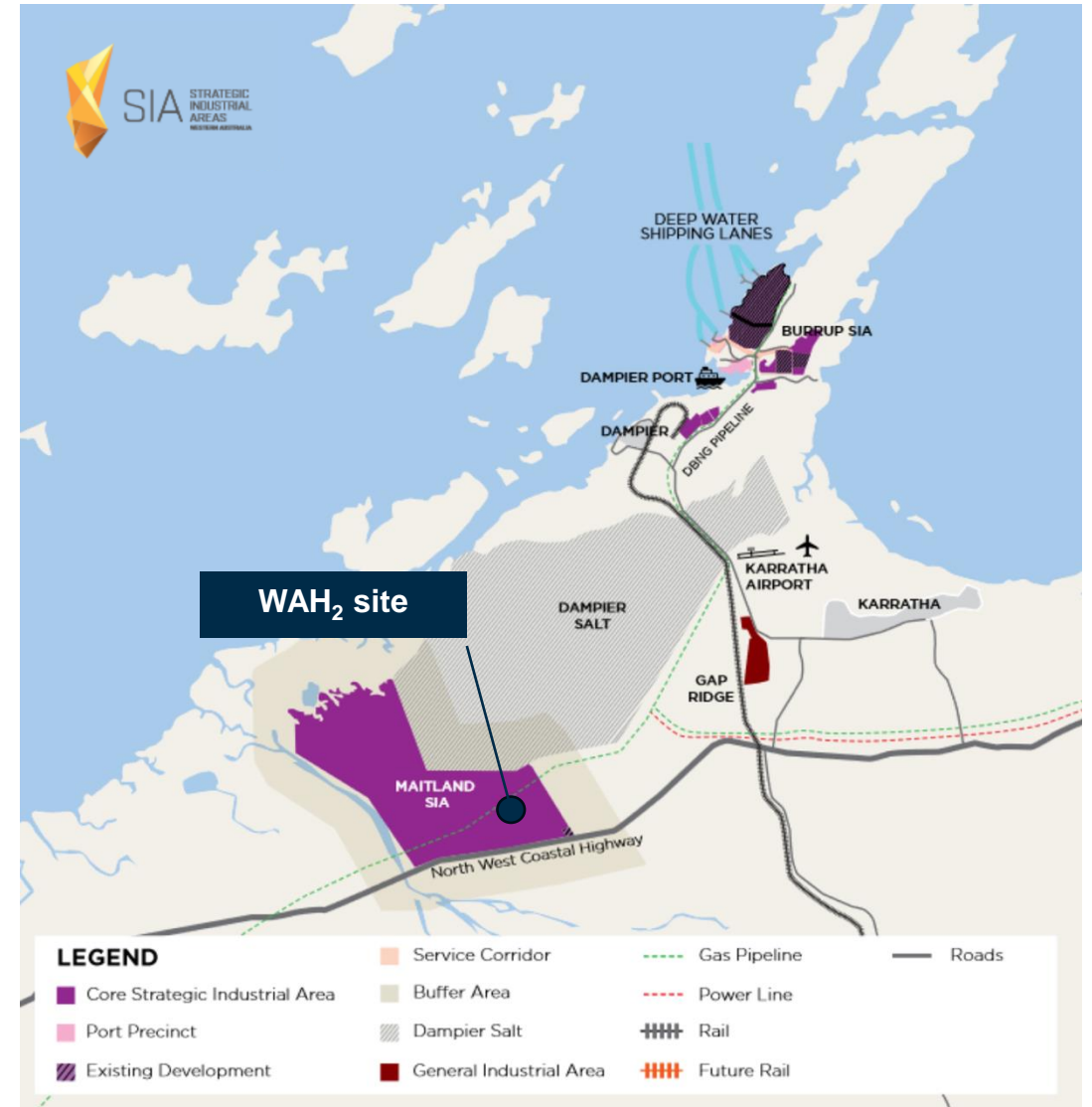
Award of land to proponents of other projects creates significant opportunities to share infrastructure

- 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) Dampier to Bunbury Natural Gas Pipeline
Source: Image - DevelopmentWA

WAH₂ Project is best-placed

Early mover project with competitive advantages related to tech. 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

23

Majority Electrolysis-based Cost and schedule challenges (Proving technology at scale, supply chain constraints, cost of supply)

5

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

1

Partnering with experienced industry players

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

Partners accelerate pathway to operation:

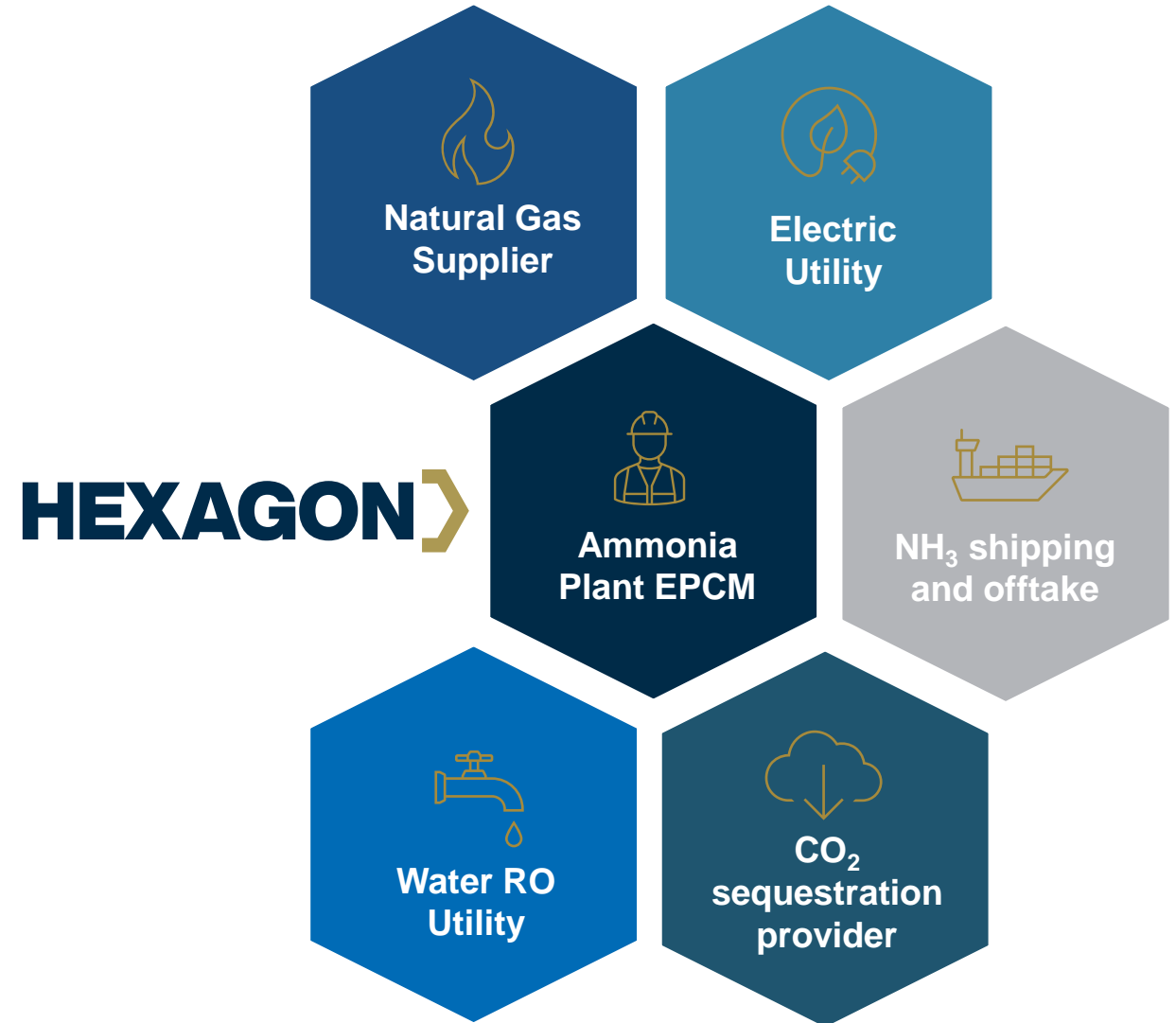
By partnering with existing industry players, Hexagon can de-risk technical issues and enable lower costs by using existing infrastructure

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

Key asset (site) already secured:

Ideally-located industrial land close to

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



Our team

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



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**

Wealth of experience in **developing**
projects and businesses from inception
to multi-billion-dollar enterprises

Project Leadership Team



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 Poten & Partners



Neil Theobald
Business Development

Snr 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 energy sector
Ex-**Santos & Woodside** Regulatory
Approvals Specialist

Combined experience over 80 years with focus on
technical and commercial development of
projects in joint venture with Japanese corporates

Industry partners



**Engineering and
construction specialists**



**Ammonia Process
specialists**

World class technical advisors to
provide **detailed technical and
costing analysis**

Pathway to first 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



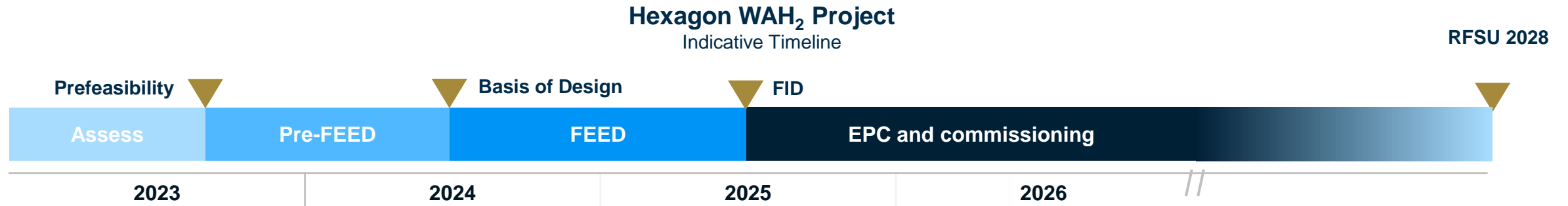
PH1 BUILD & COMMISSION

- 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

Timeline - significant milestones approaching

MoUs with counterparties next step for WAH₂ Project value realisation



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 proposition

FEED on WAH₂ the next key milestone, pathway to Project partnerships

Early mover in substantial market

Hexagon is a front runner in accessing a high growth, government backed market

Advantaged project making significant progress

Secured project site with access to key existing infrastructure and inputs

Near-term catalysts

Multiple near-term milestones expected to 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

Hexagon's Graphite and Mineral Assets

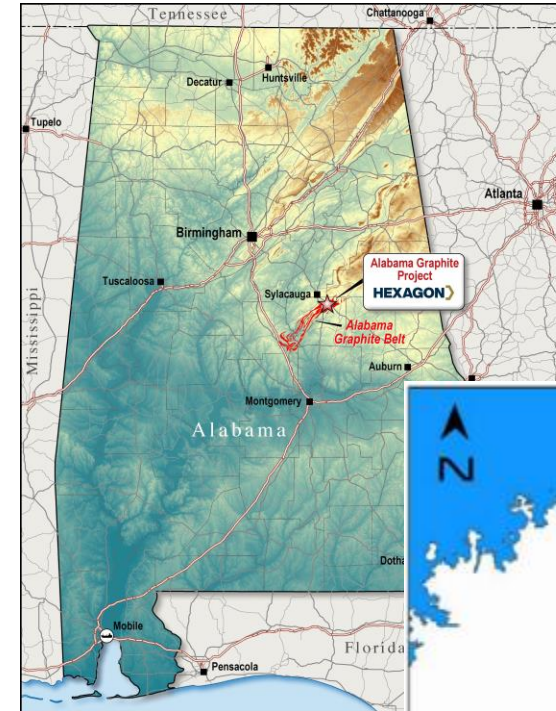


Graphite Assets

Progress continues with our Graphite JV partners in USA and Australia

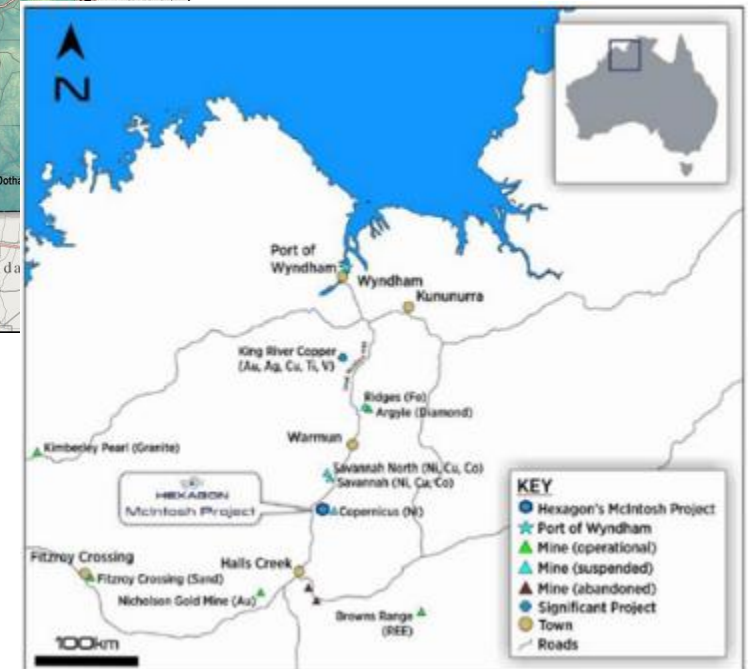
Ceylon Project JV with South Star Graphite

- Second DDH drilling campaign and completed 15 holes program for a total of 1998 meters. Results due November 2023
- NI43-101 PEA scheduled for completion by end of March 2024
- JV partner has spent U\$1.56M as of Q3, 2023 and budgeted approximately U\$650 for PEA.



McIntosh Project JV with Green Critical Minerals

- Latest drilling identified inter alia, 250m @3.9% graphite
- Second stage payment A\$200k received Nov 2023
- JV partner has stated estimated spend A\$2.5M as of Q4 2023.

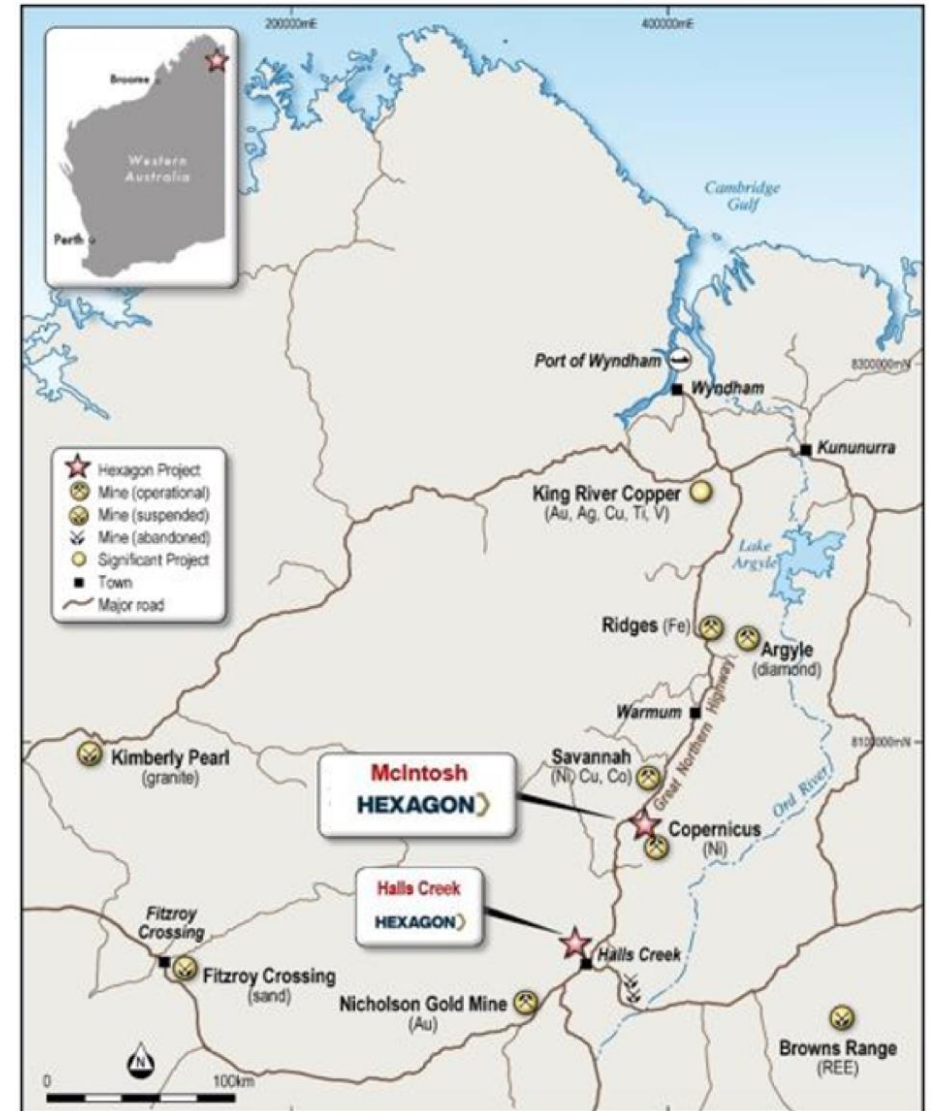


Hexagon's other Mineral Assets

McIntosh and Halls Creek mineral tenements

McIntosh and Halls Creek JV discussions in progress

- Further product test work currently being undertaken
- Review of results and data updated with PGE and Base metals potential identified
- Demonstrates strong potential for both tenements for key critical minerals
- New data room assembled and Investment Memoranda
- Strategic co-development discussions progressing and options being compared.



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FOR FURTHER INFORMATION
please contact:

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This announcement has been authorised for release to the ASX by the Board of Hexagon Energy Materials Ltd.