

#### ASX Announcement | 31 January 2024 Hexagon Energy Materials Limited (ASX: HXG)

#### October - December 2023 (FYQ2) Quarterly Activities Report

## Flagship WAH<sub>2</sub> Project building momentum and on track towards mid-2024 FEED entry.

Hexagon Energy Materials Limited (ASX: HXG) ('Hexagon' or 'the Company') is pleased to provide this Quarterly Activities Report for the quarter ended 31 December 2023 (Q2 FY24).

Hexagon is an Australian-listed company focused on the *Clean Energy* transition including project development of *Low-Emssion Fuels* and *Energy Materials*.

#### **EXECUTIVE SUMMARY**

The December 2023 quarter saw the Company progress confidential commercial discussions with potential strategic partners regarding the WAH<sub>2</sub> Project and receive indicative pricing for several key aspects of the project. These have reduced uncertainty and, positively, have tended to come in under PFS Base Case assumptions<sup>1</sup>, providing opportunities to improve project economics. Technical and regulatory work remains on-track to support WAH<sub>2</sub> FEED-entry in mid-2024 as planned.

The Company received \$200,000 as a staged payment in relation to its existing McIntosh Graphite joint venture and continued to progress strategic conversations regarding potential development of the Company's other mineral assets.

Also in the quarter, the Company received A\$494,000 in rebates from government grants and tax R&D incentives and has applied for further rebates and reimbursements.

#### 1. WAH<sub>2</sub>

The WAH<sub>2</sub> Project is Hexagon's flagship project to supply low-emissions ammonia to the decarbonising powerhouse economies of the Asia Pacific, including Japan and South Korea. The project is well placed as Asia's energy transition drives an increasing demand for low emissions energy.

The WAH<sub>2</sub> Project progressed to plan through Q4 2023 with pre-FEED technical activities on track to support FEED-entry in mid-2024, continued progression of commercial discussions, regulatory approvals activities gaining momentum, and further strengthening of the Hexagon team.

#### 1.1 Pre-FEED Technical Activities

Technical activities are being led by Petrofac Asset Solutions Australia Ltd (Petrofac) as lead engineer and Topsoe A/S (Topsoe) as technology provider.

Technical inputs from potential strategic partners have allowed refinement of the design basis which has now been set for the core process. Detailed engineering and vendor engagement are progressing to plan and will support refined capex planning.

<sup>&</sup>lt;sup>1</sup> HXG ASX updated announcement 2<sup>nd</sup> August 2023.



#### 1.2 Commercial Discussions

Confidential commercial discussions have progressed with potential gas suppliers, CCS service providers, infrastructure owners, utility providers and ammonia customers.

Hexagon has received confidential indicative pricing from third parties for several key aspects of the project. These have reduced uncertainty and have tended to come in under PFS Base Case assumptions<sup>2</sup>, providing opportunities to improve project economics.

An economic update will be provided by Hexagon prior to FEED-entry once the ongoing confidential commercial discussions are completed.

#### 1.3 Regulatory Approvals

The scope of work has been defined in the Regulatory Approvals Plan.

Australasian Environmental Solutions (AES) has been retained to lead environmental approvals. Requirements for baseline environmental and heritage surveys have been defined and a request for proposals issued.

The Terms of the Option to Lease for the land allocated to Hexagon for the WAH<sub>2</sub> Project have been agreed in-principle with DevelopmentWA and approvals are being progressed.

#### 1.4 Capability Building

Hexagon continues to build capability with three key additions to the WAH<sub>2</sub> team in recent months - Reinhardt Matisons (ex Executive Vice President Woodside), Neil Theobald (ex Vice President Chevron) and Liz Sully (ex Santos, Woodside).

Reinhardt and Neil bring decades of commercial experience in the energy sector. Each was instrumental in building Australia's LNG trade with Asian counterparties, has an extensive network of relationships in key Asian markets, and a deep understanding of the WA gas market. Liz is a regulatory approvals specialist with an in-depth knowledge of the Australian regulatory landscape and established relationships with regulators, government and contractors.

Hexagon's target remains WAH<sub>2</sub> FEED entry in mid-2024. This will require the completion of planned technical work and finalisation and execution of conditional commercial agreements for key aspects of the project. Confidential negotiations continue with key input providers, potential off-takers and strategic partners.

#### 2. WAH<sub>2</sub> Tracking

Timing	Stage	Status
Q3 - Q4 2022	Complete scoping study	Achieved on time & budget
Q1 - Q2 2023	<ul> <li>Complete WAH<sub>2</sub> Preliminary Feasibility Study Report</li> <li>Secure Option to Lease from WA Government over preferred project site</li> <li>Progress Commercial discussions</li> </ul>	Achieved on time & budget

<sup>&</sup>lt;sup>2</sup> HXG ASX updated announcement 2<sup>nd</sup> August 2023.



Q3 2023 -Q2 2024	<ul> <li>WAH<sub>2</sub> Pre-FEED Studies</li> <li>MOUs for project inputs and offtake, maturing into conditional commercial agreements prior to FEED entry</li> <li>FEED entry end Q2 2024</li> </ul>	Ongoing
Q3 2024 -Q2 2025	<ul> <li>FEED Studies</li> <li>Unconditional commercial agreements for project inputs and offtake prior to FID</li> <li>FID end Q2 2025</li> </ul>	

#### 3. Graphite – McIntosh and Ceylon (Alabama)

#### 3.1 McIntosh

The McIntosh graphite project continues to be progressing in collaboration with Green Critical Minerals (GCM).

GCM has the right to earn up to 80% interest in the Graphite Mineral Rights only across Hexagon's McIntosh Project tenements. The tenements will remain wholly held/managed by Hexagon. The agreement with GCM brings cash to Hexagon and exploration funding to the project and leverages off past investments made by the Company.

In addition to expenditure on the GCM drill program, GCM made the second staged payment of \$200,000 to Hexagon in Q4 2023.

During the quarter GCM released the following announcements from its 2023 drill program:

- 1 Nov 2023, Discovery Hole Intersects 250m of Graphite Mineralisation
- 21 Nov 2023, Emperor Test Work Confirms High 97% Purity and SPG Potential
- 27 Nov 2023, Amended-Emperor Testing confirms High Purity & SPG potential
- 18 Dec 2023, Battery Annode and Downstreat Potential At Emporer

These findings will be included in GCM's updated PFS due in Q1 2024 and form the basis of the expanded Emperor Resource.

#### 3.2 Ceylon (Alabama)

Hexagon and South Star Battery Metals Corp (TSXV:STS, OTCQB: STSBF) (South Star) entered an Earn-In and Option Agreement on Hexagon's Ceylon Graphite Project located in Alabama, USA (HXG ASX Announcement 4 November 2021). The agreement provides the right for South Star to acquire 75% in the project in return for C\$750,000 in expenditure on the project within agreed guidelines.

South Star completed a drill program of around 2,000m over 15 holes. The results of this program will feed into an NI 43 101 resource statement and mine planning update which will be released in parallel with the findings of the Preliminary Economic Assesment (PEA). The PEA will include mineralogical analysis of graphite concentrates to refine the metalurgical flow sheet design for concentrates. Product testing will include purification, micronization, shaping and coating tests as well as production of samples of Coated Spherical Graphite (CSPG) and coin cell battery testing. The results from the geological and mine plan findings and technical testing will feed into the CAPEX/OPEX analysis and the project economic model. The PEA is scheduled for completion by end March quarter 2024.

Total expenditure on the project by South Star upon the completion of the PEA is forecast to be approximately C\$3m (AUD3.3m). Hexagon is free carried.



#### 4. Minerals

During the quarter Hexagon updated the project summary and dataroom to assist strategic conversations on progressing the potential of the McIntosh and Halls Creek projects The Company will provide further detail as and when any definitive agreements are made.

#### 4.1 McIntosh

Hexagon's McIntosh Ni-Cu-PGE Project in the West Australian Kimberly region lies in the centre of an area known for active Ni-Cu-PGE extraction. McIntosh is surrounded by well-established Nickel and/or PGE producers, exporters and substantial Ni-Cu-PGE JORC resources. Over the past three years, Hexagon has undertaken substantial appraisal work to establish the geology of the project.

#### 4.2 Halls Creek

Hexagon's Halls Creek project has demonstrated significant potential for Au-Base Metal-PGE. During the quarter the Company has forwarded preparatory work for additional exploration including heritage approvals.

#### **CORPORATE**

Hexagon's cash position at the end of the quarter was \$1,026,000.

The Company received A\$494,000 in rebates from government grants and tax R&D incentives.

The Company paid the amounts noted at Item 6.1 on the Appendix 5B, being payments of \$71,000 to related parties and their associates. This was the aggregate amount paid to the directors including directors' fees and consulting fees.

#### **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 (low-emissions ammonia) into export and domestic markets at scale, via its WAH<sub>2</sub> Project. The Company plans to use renewable energy to the greatest extent practicable.

Hexagon 100% owns the McIntosh Nickel-Copper-PGE project and the Halls Creek Gold and Base Metals project in Western Australia. The Company has two joint ventures on its Graphite properties.

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

FOR FURTHER INFORMATION,

**Investors Contact:** 

Hexagon Energy Materials Ltd Stephen Hall CEO +61 8 6244 0349

#### Competent persons' attributions

The information within this report that relates to exploration results including geological data for the McIntosh Project and Halls Creek Project is based on information generated and compiled by Mr Michael Atkinson. Mr Atkinson is a consultant to Company and a member of The Australian Institute of Geoscientists. He has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results Mineral Resources and Ore Reserves and he consents to the inclusion of the above information in the form and context in which it appears in this report.

### **Appendix 5B**

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

# HEXAGON ENERGY MATERIALS LIMITED

ABN Quarter ended ("current quarter")

27 099 098 192 31 December 2023

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(95)	(169)
	(b) development	(47)	(310)
	(c) production	-	-
	(d) staff costs	(142)	(222)
	(e) administration and corporate costs	(134)	(341)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	17
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	494	494
1.8	Other (Green Critical Minerals Transaction for WA Graphite)	200	200
1.9	Net cash from / (used in) operating activities	278	(331)

2.	Cash flows from investing activities			
2.1	Pay	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements	-	(25)
	(c)	property, plant and equipment	-	-
	(d)	exploration & evaluation	(121)	(153)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(121)	(178)

3.	Cash flows from financing activities	_	_
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (Office Rental Lease Liability)	-	-
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	869	1,535
4.2	Net cash from / (used in) operating activities (item 1.9 above)	278	(331)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(121)	(178)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,026	1,026

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,006	849
5.2	Call deposits	20	20
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,026	869

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000	
6.1	Aggregate amount of payments to related parties and their associates included in item 1	71	
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-	
6.1 - I	6.1 - Payments to Directors		

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	-
7.6	Include in the box below a description of each facility above, including the lender, interestrate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.  -		tional financing

8.	Estim	nated cash available for future operating activities	\$A'000
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	278
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	(121)
8.3	Total ı	relevant outgoings (item 8.1 + item 8.2)	157
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	1,026
8.5	Unuse	ed finance facilities available at quarter end (item 7.5)	-
8.6	Total a	available funding (item 8.4 + item 8.5)	1,026
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)		N/A
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
	8.8.1	Does the entity expect that it will continue to have the current le cash flows for the time being and, if not, why not?	evel of net operating
	Answe	er: N/A	
	8.8.2	Has the entity taken any steps, or does it propose to take any steps to fund its operations and, if so, what are those steps and believe that they will be successful?	•
	Answe	er: N/A	
	8.8.3	Does the entity expect to be able to continue its operations and objectives and, if so, on what basis?	d to meet its business
	Answe	er: N/A	
	Note: w	here item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above	e must be answered.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2024

Authorised by: Board of Directors

(Name of body or officer authorising release – see note 4)

#### Notes

 This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An

- entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.