



ASX Announcement | 31 October 2023
Hexagon Energy Materials Limited (ASX: HXG)

July – September 2023 (FYQ1) Quarterly Activities Report

Hexagon completes the WAH₂ Preliminary Feasibility Study and continues to progress commercial discussions regarding its flagship project.

Hexagon Energy Materials Limited (ASX: HXG) ('Hexagon' or 'the Company') is pleased to provide this Quarterly Activities Report for the quarter ended 30 September 2023 (Q1 FY24).

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

EXECUTIVE SUMMARY

The September 2023 quarter saw the Company using the completed WAH₂ Project Preliminary Feasibility Study (ASX updated announcement 2nd August 2023) as the foundation of engagement with strategic partners around the WAH₂ Project including off-take, gas supply, infrastructure and CO₂ sequestration. The Company commenced Pre-FEED activities for WAH₂ during the quarter and continued to progress strategic conversations regarding potential development of the Company's suite of mineral assets.

1. WAH₂

The WAH₂ 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 WAH₂ project progressed to plan through Q3 2023 with the release of the results of the WAH₂ Pre-Feasibility Study (HXG ASX updated announcement 2nd August 2023), progression of commercial discussions and commencement of Pre-FEED activities.

1.1 Pre-Feasibility Study

The WAH₂ Pre-Feasibility Study (PFS) was completed on time and on budget with engineering and cost estimation undertaken by Petrofac (a leading energy services company). The key results of the PFS include:

- Market assessment.
- Identification of preferred production technology.
- Scale and phasing of production capacity.
- Definition of the Base Case project. This is an 'islanded project' that builds, owns, and operates dedicated facilities for supply of utilities, production of ammonia and production export. This provides for a project that is, as far as practicable, independent of others and therefore offers Hexagon a high degree of control. It also facilitates the evaluation of potential benefits of third-party provision of services and shared infrastructure.
- Mass balance analysis to support low-emissions intensity of the ammonia produced.

HEXAGON ENERGY MATERIALS LIMITED

Australian Business Number (ABN) 27 099 098 192

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- AACE Class 4 capital and operating cost estimates.
- Economic analysis.
- Risk assessment and mitigation controls, and
- Definition of Pre-FEED scope.

1.2 Commercial Discussions

Leveraging the results of the PFS, Hexagon progressed confidential commercial discussions with potential gas suppliers, CCS service providers, infrastructure owners, utility providers and ammonia customers through the quarter.

Hexagon progressed discussions with DevelopmentWA to finalise key terms for land tenure.

1.3 Pre-FEED Activities

Hexagon commenced technical pre-FEED activities with Petrofac, selected the preferred process technology provider for the WAH₂ Project, developed the WAH₂ Project Regulatory Approvals Plan and issued a request for proposals for provision of environmental approvals services.

Pre-FEED activities are expected to be completed in Q2 2024.

2. WAH₂ TRACKING

Timing	Stage	Status
Q3 - Q4 2022	<ul style="list-style-type: none"> • Complete scoping study 	Achieved on time & budget
Q1 - Q2 2023	<ul style="list-style-type: none"> • Complete WAH₂ Preliminary Feasibility Study Report • Secure Option to Lease from WA Government over preferred project site • Progress Commercial discussions 	Achieved on time & budget
Q3 2023 -Q2 2024	<ul style="list-style-type: none"> • WAH₂ Pre-FEED Studies • MOUs for project inputs and offtake, maturing into conditional commercial agreements prior to FEED entry • FEED entry Q2 2024 	Ongoing
Q3 2024 -Q2 2025	<ul style="list-style-type: none"> • FEED Studies • Unconditional commercial agreements for project inputs and offtake prior to FID • FID by Q2 2025 	

3. Graphite – McIntosh and Ceylon (Alabama)

3.1 McIntosh

The McIntosh graphite project continues to be progressing in collaboration with Hexagon’s JV partner, Green Critical Minerals Pty Ltd (GCM).

Under the terms of the Agreement Green Critical Minerals (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 will bring cash and exploration funding to Hexagon and leverage off past investments made by the Company.

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

During the July-September quarter results from the latest exploratory drill program were announced. (ASX GCM 18th July 2023). Highlights included 280m thick Graphitic Schist at the Emperor target. Follow up drilling intersected up to 208m of graphitic schist, drilled 150m to the south of the above mentioned discovery hole, and up to 230m of graphitic schist was intercepted 200m to the north of the discovery hole.

These findings will be included in the 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.

In the quarter South Star undertook a drill program consisting of total drilling of around 1500m. At the time of writing we are still awaiting results from that programme. The outcomes of the programme and other technical analysis of the graphite will feed into a “PEA” (Preliminary Economic Assessment) that is due for completion by the end of Q1 2024. South Star’s budgeted spend on the project including drilling, testing, geos/consultants is budgeted at about US\$1M in CY 2023.

4. Minerals

Both McIntosh and Halls Creek have been subject of strategic discussions as to their future development during the period. 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

During the September 2023 quarter:

- During the period, the Company announced the appointment of new CEO, Stephen Hall and Non-Executive Director Philipp Kin.
- Hexagon's cash position at the end of the quarter was \$868,602.
- The Company paid the amounts noted at Item 6.1 on the Appendix 5B, being payments of \$107,000 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 (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.

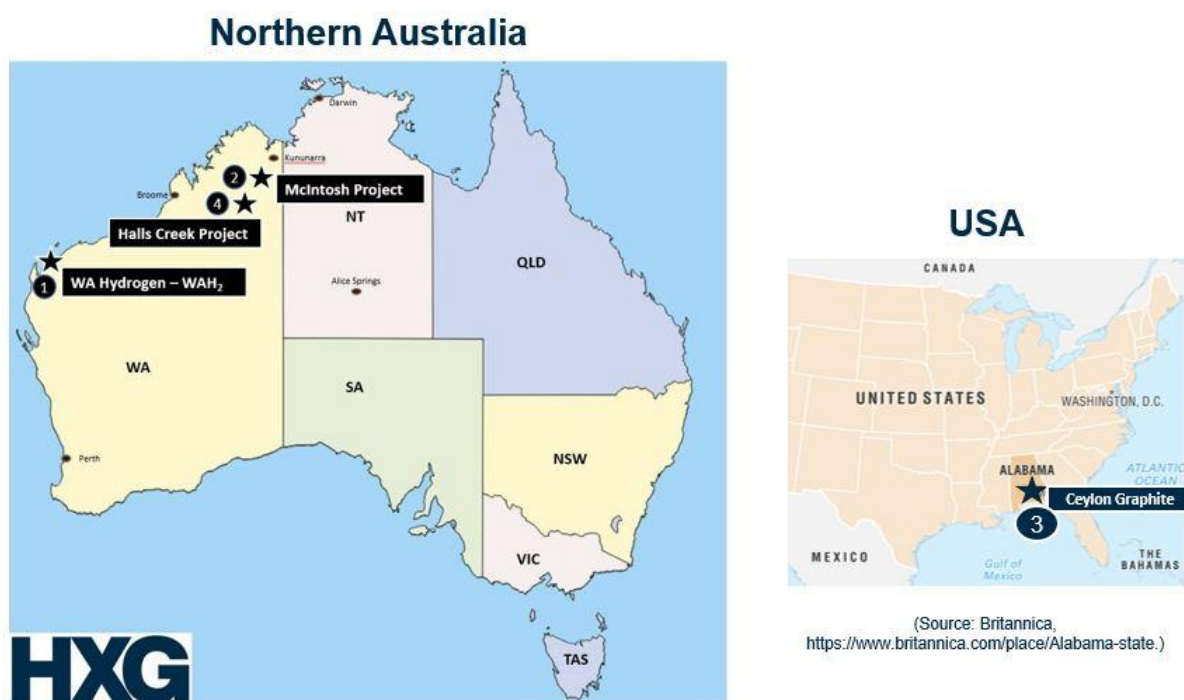


Figure 4 - Locations of Hexagon's projects

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

FOR FURTHER INFORMATION,

Investors Contact:

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Stephen Hall

CEO

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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

27 099 098 192

Quarter ended ("current quarter")

30 September 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(74)	(74)
(b) development	(263)	(263)
(c) production	-	-
(d) staff costs	(80)	(80)
(e) administration and corporate costs	(207)	(207)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	15	15
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other	-	-
1.9 Net cash from / (used in) operating activities	(609)	(609)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	(25)	(25)
(c) property, plant and equipment	-	-
(d) exploration & evaluation	(32)	(32)
(e) investments	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 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	(57)	(57)

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	1,535	1,535
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(609)	(609)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(57)	(57)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	869	869

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	849	515
5.2	Call deposits	20	1,020
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)	869	1,535

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	107
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
6.1 - Payments to Directors		

7.	Financing facilities <i>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.</i>	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 quarter end		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, 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.		
	-		

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

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(609)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(32)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(641)
8.4	Cash and cash equivalents at quarter end (item 4.6)	869
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	869
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.4
<i>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.</i>		
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 level of net operating cash flows for the time being and, if not, why not?	
	Answer: Yes	
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: Yes, the entity is due to receive \$200k in the next quarter as per its agreement with Green Critical Minerals as a reimbursement for previous exploration costs. The entity is also expecting to receive its research and development income tax concession in the next quarter.	
8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
	Answer: Yes. The entity expects to continue its operations and meet its business objectives in the coming quarters based on the current cashflow forecast prepared for management purposes and its demonstrated ability to access capital markets.	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>		

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 October 2023

Authorised by: Board of Directors
(Name of body or officer authorising release – see note 4)

Notes

1. 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.