

# **December 2024 Quarterly Report and Appendix 5B**

## **Highlights**

#### US EXIM Bank Financing

Lodgement of the Direct Loan and Guarantee Final Application with US EXIM Bank (EXIM) for the amount of US\$300 million. The application represents the final step in EXIM's formal consideration of the Project Utile funding proposal for the issue of the Preliminary Project Letter (PPL).

#### Grant of New Exploration Licence EL7019

Grant of EL7019 by the South Australian Department of Energy and Mining (DEM). This area lies to the west of EL6224 and adds a further 42km² to the existing 75km² of exploration territory within EL6224 (Figure 1).

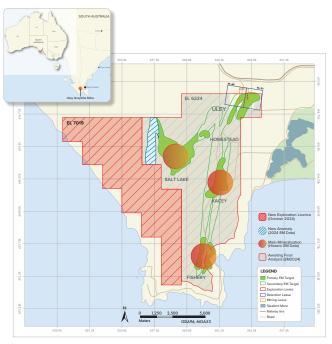


Figure 1

#### Imminent Release of Uley Region JORC 2012 Exploration Target and Results of Exploration Activities

Imminent release of the Uley Region wide JORC 2012 exploration target and final results of the geophysical surveys and related exploration activities. In July 2024, the release of the preliminary results of the exploration activities resulted in the application for additional exploration territory and the grant of EL7019 in October 2024. The release of the final results will require a revision of the key anomalies indicating graphite mineralisation in EL6224.

# • Sunlands Energy Co. Joint Venture (JV) Activities

Main research and development workstreams progressing according to the JV's schedule and results of graphite purification work were adopted as the commercially scalable process for the proposed South Carolina purification facility to be funded by EXIM.



#### ABOUT QUANTUM GRAPHITE LIMITED

QGL is the owner of the Uley flake graphite mineral deposits located south-west of Port Lincoln, South Australia. The company's Uley 2 project represents the next stage of development of the century old Uley mine, one of the largest high-grade natural flake deposits in the world. For further information, ggraphite.com



#### ABOUT SUNLANDS ENERGY CO.

Sunlands Energy Co. is the leading developer of thermal energy storage technology (TES Graphite Cells) designed to drive commercial, industrial and utility-scale steam turbine generators. The company's TES Graphite Cells are capable of restoring baseload generation, delivering critical synchronous support to grid networks and eliminating the large-scale curtailment of renewables generation. For further information, www.sunlandsco.com

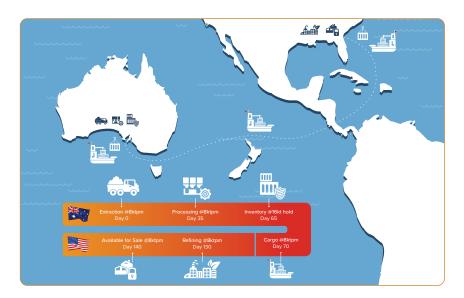
#### **US Exim Bank Financing**

During the period, the Company prepared and lodged the Direct Loan and Guarantee Final Application with EXIM for the amount of US\$300 million. The application represents the final step in EXIM's formal consideration of the Project Utile funding proposal for the issue of the PPL.

Project Utile was the subject of the EXIM Letter of Interest (LOI) and Term Sheet (see ASX announcement of 18 July 2024: US EXIM Bank Update) issued to the parties in mid-July 2024.

The Project Utile activities include:

- All Uley 2 mining activities including Uley region resource exploration and JORC 2012 reserves expansion;
- b. Production of more than 100,000 tonnes per annum of flake graphite concentrate at the Uley mine site location;
- Production of 100,000 tonnes per annum of high purity graphite (HPG) at a facility to be located in South Carolina; and
- d. Logistics facilities in South Australia's Eastern Eyre Peninsula and South Carolina.



The PPL typically includes the financing offer with the corresponding general terms and conditions. A PPL is issued within 45 days of the date of the application subject to any further requests by EXIM for further or additional information. To date EXIM has not sought any further information.



Sal Catalano and Robert Grant inspecting the Port of Charleston's Wando Welch mega container terminals.

While EXIM considers the application, the parties due diligence team headed by Managing Director Sal Catalano, continue diligence on the short list of sites for the South Carolina HPG facility including working with local officials at the South Carolina Department of Environmental Services to finalise all outstanding environmental planning issues. The due diligence team members consisting of Director Michael Wyer, Sunlands Energy Co. Executive Director Quentin Law, Chief Financial Officer Pauline Borg and Company Secretary Rochelle Pattison will manage the application process.

In connection with the establishment of the South Carolina facility, Sal Catalano and Chimaera Capital US Executive Director Robert Grant concluded several meetings in South Carolina during the period to finalise the shortlist of locations for the South Carolina HPG facility. They met with senior officials in Union County, Dorchester County and the South Carolina Department of Environmental Services. The HPG facility will be constructed on a single site in either Dorchester County or Union County. The sites examined in each of these counties satisfied the parties' key criteria, i.e., location on the main Port of Charleston – Spartanburg rail line, suitable environmental controls and acceptable to the parties' insurers (especially in relation to weather events).

Sal Catalano and Robert Grant also attended meetings with Port of Charleston officials and inspected Wando Welch, one of the port's two main container terminals, capable of handling three mega container vessels at any one time. The port is very well equipped to handle the container cargo format adopted by the parties and already accepts major vessels and carriers from both North Asia and South East Asia.

#### Grant of new license EL7019

The exploration area within EL7019 was identified by the Company's geology team as part of its development of the Uley and district multi-decade resource expansion plan and specifically the completion of the tenements wide geophysical survey at the end of Q1 2024 (ASX release 2 April 2024: *Uley 2 and Uley 3 Resource Expansion Program - Completion of Uley Airborne Electromagnetic Survey*).

The preliminary results of the geophysical survey were announced on 24 July 2024 (ASX release: *Preliminary Results and Analysis of Geophysical Survey*). These results included discovery of the significant anomaly (Figure 2) that potentially extends the large Salt Lake mineralisation.

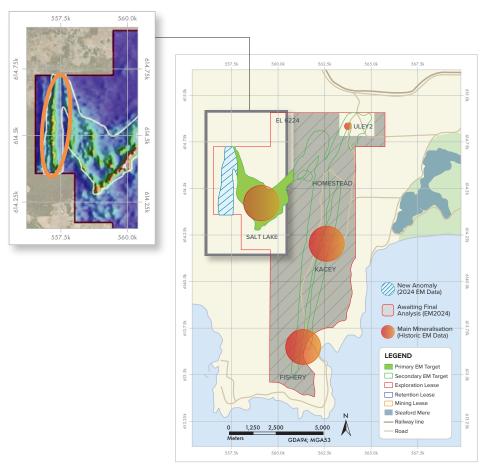


Figure 2

The interpretation of data that revealed this anomaly suggested the occurrence of other similar anomalies to the west of EL6224. Consequently, this modelling of data led the Company's geology team to identify the area that was ultimately the subject of the grant of EL7019.

#### Imminent Release of Uley Region JORC 2012 Exploration Target and Results of Exploration Activities

In the prior period, the Company released details of its exploration plans encompassing:

a. The near-term resource expansion of the Uley region (Uley Exploration Plan), including Uley 2 and Uley 3. This plan is based on a development of the Uley mineralised zones as indicated in Figure 3 for the purpose of a large-scale increase in the JORC 2012 mineral resources; and

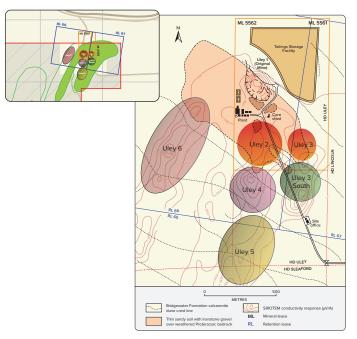


Figure 3 - Uley Region, Main Exploration Target Areas

b. Defining early works to build a resource base across the broader exploration leases, EL6224 and EL7019 (District Exploration Plan). To achieve this, the plan involves the further definition of the pre-existing identified mineralised zones as indicated in Figure 4 to better target exploration drill hole locations.

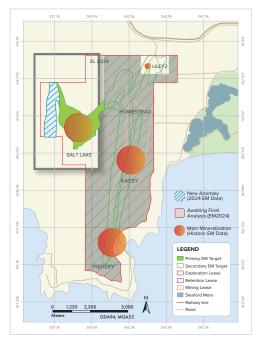


Figure 4

Each of these plans utilises the massive data set collected from the geophysical surveys conducted in 2024. Importantly, this data set is being processed together with the extensive drilling completed by the Company over the past 10 years and the historical data (including the data captured by RIO Exploration Pty Ltd, formerly CRA Exploration Pty Ltd) between 1981 and 1987.

This exercise represents the single largest analysis of exploration data of the Uley Region and the broader Mikkira Province and targets the further development of the Company's geological model. This refinement of the regional model will form the basis of a JORC 2012 exploration target for the Uley Region and a platform for better targeted exploration of EL6224 and EL7019.

The Company has experienced lengthy delays in completing this exercise and the formulation of the Uley Region JORC 2012 Exploration Target. The scope of the work required a critical reassessment of the existing geological model and reconciliation of the total data set with the existing mineralisation.

The Company expects to release the results of the Exploration Activities and a Uley Region JORC 2012 Exploration Target within the next 14 days.

#### Sunlands Energy Co. Joint Venture Activities

The JV has recently announced the successful development of the commercially scalable processes for the production of HPG at >99.7% and the manufacturing of TES Media with a range of application (mainly size-related) specific configurations (see ASX release of 15 January 2025: Research and Development Program Update). The results of the HPG Workstream were adopted for the design of the South Carolina 100,000 tonnes per annum HPG purification facility (see Figure 5), an essential element of the Project Utile proposal (see ASX release of 20 December 2024: US EXIM Bank Update - Lodgement Of Direct Loan And Guarantee Final Application).

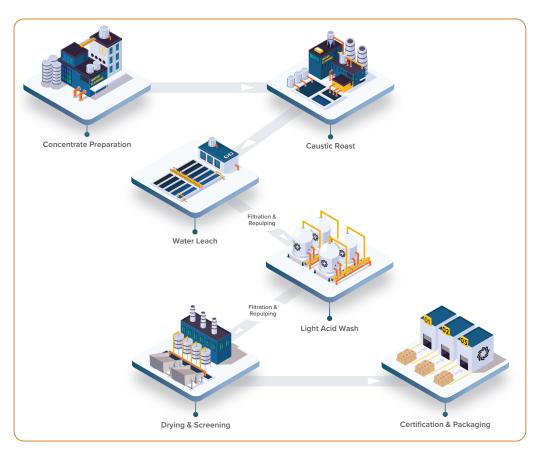


Figure 5 - Process flowsheet for the South Carolina HPG production facility

## Uley 2 Phase 1 Mining Study and Feasibility Summary Financial Metrics (updated)

Total undiscounted cash flow	A\$990.4 million <sup>1</sup>
Crusher feed	1,200,00 tpa
Graphitic carbon grade	11.89%
Graphitic carbon recovery	84%
Concentrate purity	94% graphitic carbon
Capital expenditure	A\$152.7 million
Processing cost (PCAF)	A\$236.05 per tonne (inclusive of admin)
Mining cost (MCAF)	A\$2.5 per tonne milled at surface plus 5c for every 4m
Production	100,000 dmt per annum
Product Cost (Av LOM)	US\$401.14 dmt (inclusive of drying and bagging)
Product Price (Ex-works)	US\$1,225 dmt



#### **Schedule of JORC 2012 Minerals Reserves and Resources**

JORC 2102 Mining Study and Ore Reserve Statement, November 2019<sup>2</sup>

	Classification	Tonnes (kt)	Total Graphitic Carbon (%)
Uley 2	Proved	811	11.66
Uley 2	Probable	3,191	11.95
	Total	4,003	11.89
JORC 2012 Mineral Re	esource Estimate, Novem	ber 2021³	
Uley 3	Inferred	900	6.6
	Uley 3 Total	900	6.6
Uley 2	Measured	800	15.6
	Indicated	4,200	10.4
	Inferred	1,300	10.5
	Uley 2 Total	6,300	11.1
<b>Uley Project Total</b>	TOTAL	7,200	10.5

<sup>&</sup>lt;sup>2</sup>Released to the market on 1 December 2019

# **Schedule of Tenements (ASX Listing Rule 5.3.3)**

Tenement	Tenement Type	Interest	Changes during the Quarter
ML5561⁴	Mining Licence	100%	Nil
ML5562⁴	Mining Licence	100%	Nil
RL66⁵	Retention Licence	100%	Nil
RL67⁵	Retention Licence	100%	Nil
EL6224⁵	Exploration Licence	100%	Nil
EL7019⁵	Exploration Licence	100%	Granted 10 October 2024

 $<sup>^{\</sup>mathbf{4}}$  Registered in the name of Quantum Graphite Operations Pty Ltd

<sup>&</sup>lt;sup>1</sup>Includes JORC 2012 Reserves and Resources

<sup>&</sup>lt;sup>3</sup> Released to the market on 18 November 2021

 $<sup>^{\</sup>rm 5}$  Registered in the name of Quantum Graphite Explorations Pty Ltd

# Uley Region Location and Resource Expansion Priorities

#### Priority 1 - Uley 2 Project Expansion

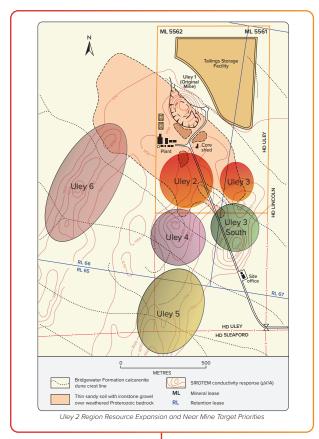
- Uley 4 Extension drilling to 50m-by-50m intervals
- Infill drilling at Uley 3

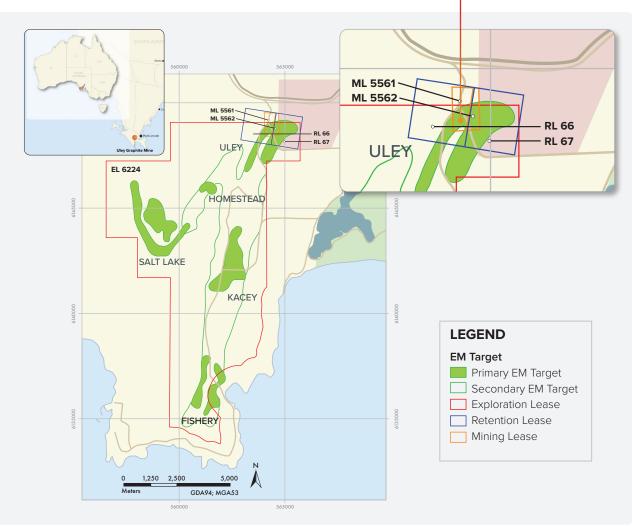
#### Priority 2 - Uley 2 Project Expansion

 Uley 3 South Extension drilling to 50m-by-50m intervals

#### Priority 3 - Uley Region Resource Definition

- Uley 6 geophysical anomaly target
- Uley 5 beyond Uley 4 along strike of the geophysical anomaly.





#### **Corporate Information and Announcements**

As at 31 December 2024 the Company had 350,008,387 ordinary shares on issue and 1,610 shareholders. The top 20 shareholders held 62.25% of the issued ordinary shares in the Company. As at 31 December 2024 the Company held cash at bank of \$2,066,634. As at 29 January 2025 the Company held cash at bank of \$2,613,057.59. Related party payments in the amount of \$208,940 were made in the period. These payments were made to SC Capital Pty Ltd (\$82,500 for technical services), Chimaera Capital Limited (\$48,607 for asset management services) and WyerPlanVC Pty Ltd (\$77,672 for consulting services).

#### **Competent Person's Statement**

The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters relating to Mineral Resources is based on, and fairly represent, the Mineral Resources and information and supporting documentation extracted from the reports prepared by a competent person in compliance with the JORC Code (2012 edition) and released to the ASX (including under the company's previous code, VXL on 17 December 2014, 5 May 2015 and 15 May 2015 respectively).

#### **Forward Looking Statements**

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects' or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management, that could cause QGL's actual results to differ materially from the results expressed or anticipated in these statements.

QGL cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. QGL does not undertake to update or revise 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 announcement, except where required by applicable law.

#### FOR FURTHER INFORMATION CONTACT:

Company Secretary
Quantum Graphite Limited
E: info@qgraphite.com



#### **ABOUT SUNLANDS POWER**

Sunlands Power is our joint venture with Sunlands Energy Co. for the manufacture of coarse natural flake based thermal storage media and the manufacture of TES Graphite Cells. The flake for the storage media will be sourced exclusively from the QGL's Uley mine. The manufactured media will be fitted within TES Graphite Cells and the completed cells delivered to Sunlands Co. for deployment as a grid connected long duration energy storage solution. For further information, www.sunlandsco.com



#### ABOUT SUNLANDS PURE

Sunlands Pure is Quantum Graphite Limited's (QGL) purification technology partner. It was established by the Sunlands Energy Co. following agreement with QGL for the specific purpose of undertaking all downstream purification of Eastern Eyre Peninsula flake graphite concentrate

#### ABOUT LDES

A scalable energy storage system that can store energy predominantly from renewable sources for more than 12 hours and deliver dispatchable, inertia restoring energy to grid networks as required especially when renewables generation is not available. LDES is the critical solution underpinning the decarbonisation of grid networks.



#### ABOUT PROTHERM

Protherm Systems, founded in July 1987, is a leading thermal process engineering company, based in South Africa. The Company designs and supplies a wide range of thermal and related thermal processing plant and equipment for industrial users world wide, such as Plate Heat Exchangers, Shell and Tube Heat Exchangers, Air Dryers and Evaporators.



#### ABOUT INEMET

The Institute for Non-Ferrous Metallurgy and High Purity Materials focuses on sustainable and innovative processes that rethink existing production processes and the handling of supposed waste products in the spirit of the circular economy and zero waste thinking. INEMET's dedicated team work toward a greener future and the revolutionizing of non-ferrous metallurgy. It develops existing processes within pyrometallurgy, hydrometallurgy and the semiconductor industry in working groups and in a variety of projects. https://tu-freiberg.de/en/fakult5/inemet

# Appendix 5B

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

Name of entity

#### **Quantum Graphite Limited**

ABN

Quarter ended ("current quarter")

41 008 101 979

31 December 2024

Con	solidated 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	-	-
	(b) development	(64)	(64)
	(c) production	-	-
	(d) staff costs	(75)	(150)
	(e) administration and corporate costs	(594)	(1,127)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(733)	(1,341)

2.	Ca	sh flows from investing activities		
2.1	Pay	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	-	-
	(d)	exploration & evaluation	(1)	(78)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

Cons	solidated 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	(1)	(78)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	1,500
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	550	550
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	550	2,050

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,251	1,436
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(733)	(1,341)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1)	(78)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	550	2,050

Con	solidated 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	2,067	2,067

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	-	-
5.2	Call deposits	2,067	2,251
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)	2,067	2,251

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000	Year to Date \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(209)	(292)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

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	5,956	5,956
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	5,956	5,956
7.5	Unused financing facilities available at qu		-

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.

The finance facility was provided by Chimaera Capital Limited at an interest rate of 11.75%, the maturity date has been extended to the earlier of 1 February 2026 or the date of any capital raising being undertaken by the Company.

8.	Estimated cash available for future operating activities	\$A'000	
8.1	Net cash from / (used in) operating activities (item 1.9)	(733)	
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1)	
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(734)	
8.4	Cash and cash equivalents at quarter end (item 4.6)	2,067	
8.5	Unused finance facilities available at quarter end (item 7.5)	-	
8.6	Total available funding (item 8.4 + item 8.5)	2,067	
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.82	
	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 level of net operating cash flows for the time being and, if not, why not?

Αı	กรา	W	er:

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?

Λ	ns	<b>\ A /</b>	$\Delta$	r.
$\boldsymbol{-}$	IIO	vv	▭	١.

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:

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.

#### 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.

Data	29 January 2025
Date.	

Authorised by: ROCHELLE PATTISON - COMPANY SECRETARY

(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".
- 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.