

Provaris Energy Ltd (ASX: PV1, Provaris, the Company) is pleased to provide the following update on the Company's development activities for the **quarter that ended 31 March 2023**.

HIGHLIGHTS

- MOU Collaboration with Norwegian Hydrogen AS to develop compressed hydrogen value chains from the Nordics to Europe with the first Concept Design Study underway for an export site from Norway.
- Study scope includes the development of a bulk-scale production facility using grid connected renewable power to export green hydrogen to Europe using Provaris' H2Leo storage and H2Neo marine transport carriers. Export volumes from Norway will be strategic in reaching the REPowerEU ambition of 10mtpa hydrogen imports by 2030.
- Tiwi H2 Solar Precinct Early Works program continues to progress along with the final EIS Assessment's Terms of Reference (ToR) to be finalised in the June quarter. Development of the Environmental Impact Statement (EIS) submission continues along with land and project agreements advancing.
- Following the receipt of Design Approval in December 2022 for the H2Neo carrier from the American Bureau of Shipping (ABS), Phase 3 qualification of the selected cargo tank materials and welding procedures is underway, along with investigations for prototype testing.
- Launch of a gaseous hydrogen floating storage solution called H2Leo, with a design capacity range of 300 to 600 tonnes of hydrogen, expandable to up to 2,000 tonnes, providing the global hydrogen industry with an energy efficient and cost-effective storage solution.
- Development of H2Leo will run in parallel with the remaining engineering and approvals for H2Neo, targeting prototype testing and final class approval later this year, with H2Leo set to become available in 2025.
- Provaris remains engaged with Province Resources (ASX:PRL) in supporting the HyEnergy Project's Prefeasibility Study now underway, which includes a compressed hydrogen export pathway.
- Cash position of \$6.5 million on 31 March 2023.

Provaris Managing Director and CEO, Martin Carolan, commented: "We are excited to have launched our large-scale compressed hydrogen floating storage solution H2Leo which represents another important breakthrough for our company. This new floating storage solution complements our pipeline of hydrogen production and transport projects, in addition to reducing timelines to first revenues and IP commercialisation.

We are also thrilled to collaborate with Norwegian Hydrogen AS to accelerate the development of a green hydrogen value chain in Europe, and with the progress of our Tiwi H2 project to develop an integrated compressed hydrogen export supply chain to service the Asian market. Both projects are advancing well and we look forward to achieving further key milestones in the upcoming quarter.

It is also pleasing to continue to witness an increase in awareness and interaction from hydrogen developers across Europe and Asia seeking to understand the benefits of our compressed hydrogen supply chain value proposition. We will remain engaged in discussions with relevant parties and benefit from our first mover advantage."

PROVARIS JOIN FORCES WITH NORWEGIAN HYDROGEN TO REPOWER THE EU

In early January, Provaris announced a Memorandum of Understanding (MOU) with Norwegian Hydrogen AS, a Norwegian-based developer of hydrogen production hubs and value chains across the Nordic region, to collaborate on the development on green hydrogen value chain projects in the Nordics.

The collaboration brings together the skills, experience and ambitions of both companies to accelerate the development of a hydrogen value chain covering large scale production and export of hydrogen to the key ports of Europe.

The MOU provides a framework to jointly undertake a Concept Design Study to:

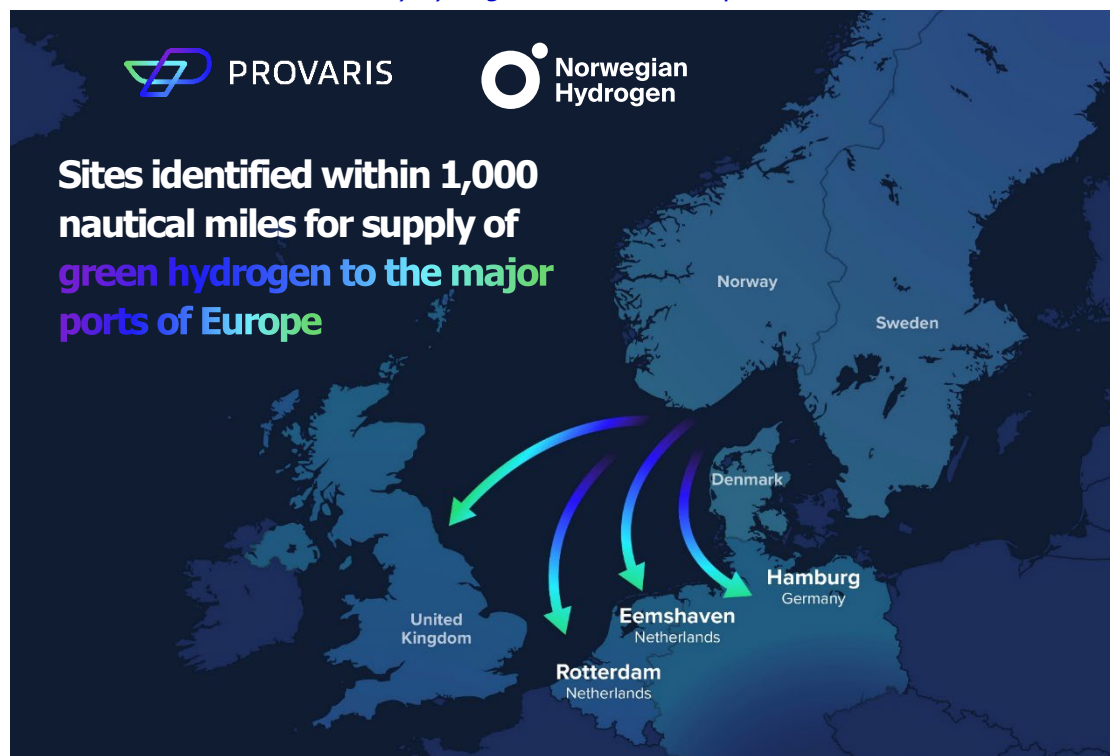
- > Review identified sites and select a preferred location suitable for domestic and export volumes of hydrogen.
- > Undertake a technical and economic review for the production and supply of compressed gaseous green hydrogen to nominated European ports.

The scope of the study will include the renewable power supply, production of hydrogen, compression facilities, storage, infrastructure for jetty loading and unloading, Provaris' H2Neo carrier, and import infrastructure required at identified import locations. Application for suitable funding schemes available through Norwegian schemes and the European Union will also be made.

During the quarter, significant progress towards the completion of a Design Concept Study in collaboration with Norwegian Hydrogen AS was made with members of the Provaris development being on-site in Norway. The study scope proposes the development of a 300MW hydrogen production facility to export up to 45,000 tpa of renewable hydrogen to Europe using Provaris storage and marine transport carriers. Export volumes from Norway will be strategic in reaching the REPowerEU ambition of 10mtpa hydrogen imports by 2030.

It is expected the results of the Norway project study will be finalised in the June quarter 2023, and will be a blueprint to replicate across multiple sites Europe within 1,000 nautical miles of major ports connected to the H2 backbone.

Figure 1: Nordic region provides strategic advantage for compressed hydrogen delivery to key hydrogen markets in Europe.



TIWI H2, TIWI ISLANDS, NORTHERN TERRITORY

Provaris acknowledges that its proposed Tiwi H2 Project is located on the traditional lands of the Munupi people. It is a privilege to have the support and such a close working relationship with the Munupi Clan and other key stakeholders.

The Company continues to advance its green hydrogen export project (Tiwi H2) during the March quarter. Located on the Tiwi Islands, Northern Territory (NT), the Tiwi H2 project will develop an integrated compressed hydrogen export supply chain for up to 100,000 tonnes per annum, avoiding up to 1 million tonnes of CO2 emissions annually.

Focus in the March 2023 quarter:

- > The Owners Engineer (CE Partners) appointed for the Solar Precinct Early Works program remains on track to finalise the preferred solar farm design, generation capacity, and updated cost estimates for early May 2023.
- > Finalisation of the Project's EIS Assessment's Terms of Reference (ToR) scheduled to be published at the end of April 2023, including requirements of the EPBC Referral from the Australian Federal Government.
- > Environmental Impact Statement (EIS) progressing with its submission planned for Q4 2023.
- > Submission of draft land agreements for Tiwi Land Council and Munupi Clan review remains on track for early May, with the land access agreement for Solar Monitoring equipment still planned for mid-2023.

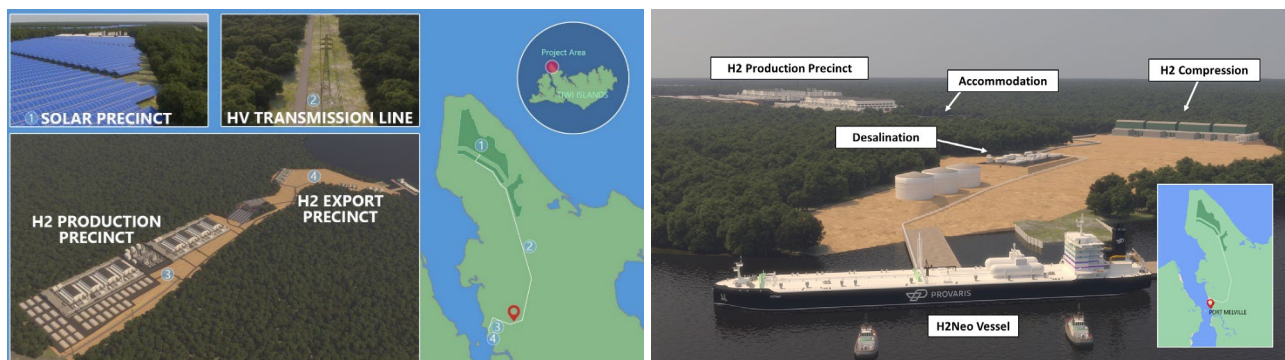
Provaris continues to advance areas of the EIS submission including Social Impact Assessment, Greenhouse Gas Abatement Plan, and Noise Assessment. Submission of the EIS is planned for Q4 2023 which will cover both the Northern Territory and Federal approval processes. Additionally, the Project's EIS Assessment's final Terms of Reference (ToR) is scheduled to be published by the end of April 2023 by the NT EPA and will include requirements of the EPBC Referral from the Australian Federal Government that was lodged in 2022. The published ToR will shortly be available on the NT EPA website. <https://ntepa.nt.gov.au/>

The Company is on track to deliver its Solar Precinct Early Works program in early May 2023 as the Owner's Engineer appointed is finalising the preferred solar farm design, the generation capacity, and the updated cost estimates for the solar precinct. Due to weather and site access delays in early 2023, Provaris will now undertake the overall site's geotechnical drilling program in a single phase in mid-2023.

Provaris completed a "Wind Design Criteria and Design Report" specific for the solar site location. The solar panel design proposed has been installed in many high wind area sites throughout the world, including hurricane or cyclonic regions. Existing installations throughout southern US and Hawaii have design speeds similar or above Region D wind speeds (Australia) with some experiencing 700-year wind speed events without damage. Within Australia, several installations are operational within Region C cyclonic zoning. Such sites have been impacted by remnant cyclonic systems, and storm wind speeds above design wind speeds and all have performed well without damage.

Discussions with stakeholders and drafting by advisors are also continuing across various land access agreements required for both the near-term detailed design activities and the long-term development agreement for Tiwi H2. Submission of draft land agreements for Tiwi Land Council review are scheduled for early May, and agreement for the Solar Monitoring equipment is still scheduled for mid-2023 to align with the region's dry season.

Figure 2: Illustration of H2 Export Project, Melville Island, Tiwi Islands, Northern Territory.



To view a short animation video of the Tiwi H2 project please [click the image below](#).



HYENERGY EXPORT STUDY, WESTERN AUSTRALIA

In January 2023, a public Knowledge Sharing Report was made available by the WA Government.

The Study scope analysed the compression and export of 200,000 tonnes per annum of green hydrogen from the proposed HyEnergy® hydrogen production facility to Singapore, and includes:

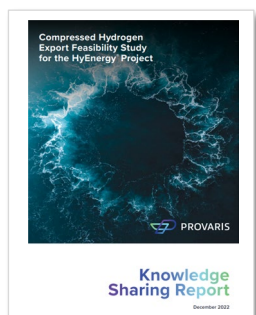
- > compression facilities;
- > an outgoing pipeline to an offshore loading terminal;
- > a fleet of Provaris' proprietary H2Neo 26,000 m3 GH2 Carriers; and
- > an import terminal in Singapore.

Outcomes of this Study continues to demonstrate a compressed hydrogen supply chain for marine storage and transport solution can accelerate the development of greenfield hydrogen export projects with the flexibility to also cater to offshore loading requirements and variable renewable energy production profiles. It also demonstrated the use of an offshore loading solution for compressed hydrogen can accelerate the development of greenfield hydrogen export projects with minimal technical barriers and smaller environmental footprints.

Provaris remains in consultation with Province Resources in the development the HyEnergy Project's Prefeasibility Study now underway, which includes a compressed hydrogen export pathway.

Optimisation activities have been identified to further mature the Study outcomes, including the use of Provaris' larger-scale 120,000 m3 H2Max carrier which is expected improve the LCOH for transport.

The Study was supported by a consortium of specialist consultants selected by Provaris including: WSP, Oropesa, APL NOV, Environmental Resources Management (ERM), Turner & Townsend, Paaras Marine Solutions, and GHD.



The Compressed Hydrogen Export Feasibility Study Public Sharing Report is made available by the WA Government. [Read the full report here](#)

This Study received funding from the Renewable Hydrogen Fund as part of the Western Australian Government's Renewable Hydrogen Strategy.

H2NEO COMPRESSED HYDROGEN CARRIER DEVELOPMENT CONTINUES

Following the receipt of Design Approval for the H2Neo hydrogen carrier from the American Bureau of Shipping (ABS), Provaris continues to qualify the selected cargo tank materials and welding procedures at C-FER Technologies (Edmonton, Canada).

A three-stage testing program commenced in Q2 2022 to confirm stainless steel and carbon steel material selections and to progressively test and select welding procedures in larger samples / thicker steel plates. Final (stage 3) testing is ongoing, where the full thickness steel sample is fatigue tested with the preferred weld geometry and root and filler weld technologies.

Provaris has engaged CRC Evans for these final stage 3 tests, utilizing their equipment and expertise in welding up high tensile steels. CRC Evans can further support Provaris and Asian shipbuilders during construction of lead ship(s).

Testing is ongoing with steel plates sourced from North American steel mills. In addition, a steel plate has been sourced from a Japanese mill. This additional plate will be tested within June 2023 to confirm that the locally sourced (assuming shipbuilding will take place in Asia) steel will meet the fatigue requirements of the H2Neo design.

As part of our investigations for prototype testing, we are further investigating ways to construct the initial compressed hydrogen cargo tanks outside of a selected shipyard and in jurisdictions that can attract Government funding. Discussions are ongoing with government departments in Europe. The target is further to ensure that the prototype tank will act as a pilot scale floating storage solution.

Figure 3: Illustration of the H2Neo 26,000m³ compressed H2 carrier



LAUNCH OF BULK-SCALE HYDROGEN FLOATING STORAGE SOLUTION (H2LEO)

Following completion of an extensive Front End Engineering Design (FEED) program and Design Approval from ABS in December 2022 for the H2Neo 430 tonnes carrier, Provaris commenced work on the requisite engineering and safety studies during the quarter to advance the concept through to an Approval in Principle (AIP) from Class.

The development of a gaseous hydrogen floating storage solution, called H2Leo, has been designed as a flexible solution for specific industry applications with a design capacity range of 300 to 600 tonnes of hydrogen. The future development includes expanding the storage capacity from 100 to 2,000 tonnes of hydrogen storage.

The H2Leo provides the global hydrogen economy with an energy efficient and cost-effective storage solution and extends the Provaris IP and commercialization of compressed hydrogen solutions for Provaris' integrated projects, but also the entire spectrum of hydrogen value chains using alternative carriers or applications that require a bulk-scale static solution.

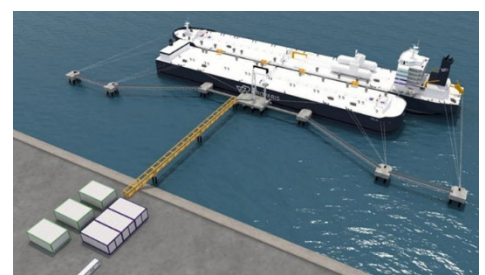
The benefits of a floating solution include cost and flexibility it offers against the constraints of land-based solutions, both in terms of land-use, capex and permitting.

H2Leo allows for greater flexibility and optimization of Provaris' compressed hydrogen supply chain projects, reducing the total cost of supply by providing buffer storage at export and / or import locations.

The development of H2Leo will run parallel to the remaining engineering and approvals for H2Neo, targeting prototype testing and final class approval later this year, with H2Leo set to become available in 2025.

Post the quarter, the American Bureau of Shipping (ABS) provided 'Approval In Principal' (AIP) for the H2Leo, the first of its kind to receive this level of approval. The company targets a US\$ 0.2 – 0.3 million / tonne capital cost for the H2Leo, making it significantly cheaper than onshore solutions. The floating storage solution is suitable for various hydrogen supply chains and applications, including bunkering for the maritime sector, intermittent/buffer storage for green hydrogen production, and long-duration storage for excess renewable energy.

Figure 4: Illustration of the H2Leo 26,000m³ compressed hydrogen floating storage integrated with H2Neo 430t carrier for loading or unloading.



CORPORATE

World Hydrogen Summit 2023, Rotterdam: Marketing and awareness programs for Provaris' compressed hydrogen export supply chain remain ongoing in Europe where the growth in commercial applications continues. This activity includes Provaris' selection in Austrade's Team Australia delegation for the World Hydrogen Summit 2023 in Rotterdam May 9-11. Provaris has been selected by the Sustainable Energy Council as a panelist on the main summit program with Garry Triglavcanin (Chief Development Officer) which covers "Hydrogen Infrastructure: Storage, Transportation & Distribution".

Hannover Messe, Germany: In early April, Provaris was a member of a Norwegian delegation to the Hannover Messe 2023 in Germany, which had a focus on Hydrogen and Fuel Cells. The delegation was supported by Innovation Norway, NORWEP and AHK German-Norwegian Chamber of Commerce. Per Roed (Chief Technical Officer) presented on day 3 outlining the benefits of a compressed H₂ supply chain from Norway to Germany. The event also included a site trip and meetings with the SALCOS team of Salzgitter AG steel mill (6mtpa) which is underway with a 10 year decarbonization plan to remove 95% of 8mtpa of CO₂ emissions, which will requirement for 300ktpa of green 'gaseous' H₂ by 2030 to run their direction reduced iron (DRI) plant to produce green steel.



The company will be holding retail broker investment meetings during the June quarter across Sydney, Melbourne and Brisbane.

Cash balance on 31 March 2023 was \$6.5 million. Cash expenditure during the quarter was in line with the FY2023 approved budget, with total operational cash outflows of \$1.6 million which included the completion of the H₂Neo FEED level design package and Class approvals program, development of the H₂Leo storage solution, project costs for Tiwi H₂, and corporate costs for Australia and Norway. Refer to the separately announced Appendix 4C for further details.

The aggregate amount for payments to related parties and their associates included in item 6.1 in the Company's ASX Appendix 4C for the quarter ended 31 December 2022 was \$225,000 comprising of fees, salaries and superannuation paid to Directors, including Executive Directors.

— END —

This ASX announcement has been authorised by the CEO of Provaris Energy Ltd.

To receive all company updates please [subscribe](#)

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About Provaris Energy

Provaris Energy Ltd (ASX: PV1) | www.provaris.energy

Provaris Energy Ltd (ASX: PV1) is developing a portfolio of integrated green hydrogen projects in the regional trade of Asia and Europe, leveraging our innovative compressed hydrogen bulk carrier. Our focus on value creation through innovative development that aligns with our business model of simplicity and efficiency. The choice to support all development phases of a project is in line with Provaris' strategic desire to develop and invest in profitable hydrogen projects across the value chain, establish an early-mover advantage for regional maritime trade of hydrogen, and to retain an equity position of these assets over the long term. With offices in Sydney, Perth and Oslo, the company's integrated approach to producing and transporting hydrogen can unlock a world of potential.

Disclaimer: This announcement may contain forward looking statements concerning projected costs, approval timelines, construction timelines, earnings, revenue, growth, outlook or other matters ("Projections"). You should not place undue reliance on any Projections, which are based only on current expectations and the information available to Provaris. The expectations reflected in such Projections are currently considered by Provaris to be reasonable, but they may be affected by a range of variables that could cause actual results or trends to differ materially, including but not limited to: price and currency fluctuations, the ability to obtain reliable hydrogen supply, the ability to locate markets for hydrogen, fluctuations in energy and hydrogen prices, project site latent conditions, approvals and cost estimates, development progress, operating results, legislative, fiscal and regulatory developments, and economic and financial markets conditions, including availability of financing. Provaris undertakes no obligation to update any Projections for events or circumstances that occur subsequent to the date of this announcement or to keep current any of the information provided, except to the extent required by law. You should consult your own advisors as to legal, tax, financial and related matters and conduct your own investigations, enquiries and analysis concerning any transaction or investment or other decision in relation to Provaris. \$ refers to Australian Dollars unless otherwise indicated.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Provaris Energy Ltd

ABN

53 109 213 470

Quarter ended ("current quarter")

31 March 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	-	-
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(12)	(213)
(d) leased assets	-	-
(e) staff costs	(652)	(2,114)
(f) administration and corporate costs	(191)	(624)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	60	108
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	39	155
1.81 Other (R&D Rebate Income)	-	-
1.82 Other (Project development)	(851)	(2,442)
1.9 Net cash from / (used in) operating activities	(1,607)	(5,130)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) 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	-	-
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 (provide details if material)	-	-
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	8,101	11,617
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,607)	(5,130)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	3	10
	Cash and cash equivalents at end of period	6,497	6,497

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	997	2,601
5.2	Call deposits	5,500	5,500
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)	6,497	8,101

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	225
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

Item 6.1 includes fees, salaries and superannuation paid to directors, relating to varying periods.

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 quarter end	-
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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.

N/a

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,607)
8.2	Cash and cash equivalents at quarter end (item 4.6)	6,497
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	6,497
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	4
<p>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</p>		
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1	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: N/a	
8.6.2	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: N/a	
8.6.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
	Answer: N/a	
<p>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</p>		

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: 24 April 2023

Authorised by: Martin Carolan
(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 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 standard applies 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.*