



The Manager Companies - ASX Limited
20 Bridge Street
Sydney NSW 2000

ASX Announcement
25 January 2024
(14 pages)

ACTIVITIES FOR THE QUARTER ENDED 31 DECEMBER 2023

HPA FIRST PROJECT STAGE 1

- Cumulative Al-nitrate production of ~258 tonnes at target 5N (99.999%) purity
- HPA circuit commissioning and producing ~30kg HPA/day
- Rolls crusher, jet mill and sinter oven all installed and in commissioning
- Boehmite and alumina tri-hydrate circuit in commissioning

HPA FIRST PROJECT STAGE 2

- Stage 2 DFS near complete
- Project Finance process nearing completion

PRODUCT MARKETING

- HPA sales to South Korean Semiconductor sector accelerated
- Increased US end-user focus following:
 - Alpha HPA's attendance at the US-Australia Critical Minerals delegation
 - The Australia-United States Climate, Critical Minerals, and Clean Energy Transformation Compact (the Compact)
- Certification of Product Carbon Footprint (PCF) by CarbonChain
- 3rd party research confirmation of safety benefits of Ultra-Coat process

ALPHA SAPPHIRE

- Phase B (48 sapphire growth units) fully funded with:
 - \$30M project funding from Queensland Critical Minerals and Battery Technology Fund (QCMBTF)
 - \$40M Strategic Placement to AustralianSuper, Orica and select institutional investors to provide matching funding to QCMBTF project funding
- Successful sapphire growth testing at Ebner-Fametec's Austrian facility
- First two sapphire growth units shipped and en-route to Gladstone
- Successful development of custom, circular HPA tablet
- Phase B site selection advanced

CORPORATE

- Board changes to facilitate next phase of the Company's growth



PROJECTS UPDATE

The Board of Alpha HPA Limited ('Alpha' or 'the Company') is pleased to provide the December 2023 quarterly activities report.

Alpha remains strongly focused on the delivery of the HPA First and Alpha Sapphire Projects, each representing the commercialisation and production of critical high purity aluminium products driving de-carbonisation utilising the Company's proprietary aluminium purification and refining technology.

The HPA First and Alpha Sapphire Projects will deliver a range of ultra-high purity aluminium products that are critical materials to the supply chains of key de-carbonising high-technology sectors including:

- Semiconductors;
- LED lighting; and
- Lithium-ion batteries.

Activities in the December quarter were focused on:

- Continued production of 5N (>99.999%) purity aluminium nitrate (Al-nitrate), with cumulative production now at ~258 tonnes of 5N purity.
- Final deployment of the Federal Government's \$15.5M Critical Minerals Development Program (**CMDP**) to finalise the installation and commissioning of equipment for the Stage 1 HPA circuit which will expand the facility's production to cover the full suite of the Company's high purity aluminium product range.
- Ongoing expansion of product marketing and product development activities of the Company's suite of ultra-high purity precursor and alumina products.
- Implementation of the Company's collaboration with the Ebner-Fametec Group to accelerate the Company's staged entry into the downstream production of synthetic sapphire glass.
- Advancing the multiple workstreams related to completing Project financing discussions with Government lending agencies to facilitate a Final Investment Decision (**FID**) for the full scale, Stage 2 of the HPA First Project.

Further details on these activities are outlined below.

HPA FIRST PROJECT - STAGE 1

HPA circuit expansion

During the quarter the Company completed the deployment of the \$15.5 million grant awarded under the Critical Minerals Development Program (CMDP) to install a small-scale commercial high-purity aluminas (HPA) circuit within Stage 1 and expand the capability of the Stage 1 PPF to include Alpha's full high purity aluminium product range.

All major equipment orders have been delivered and installed, with final commissioning activities underway.

At the end of the quarter, the HPA circuit expansion was close to fully commissioned, and will facilitate:

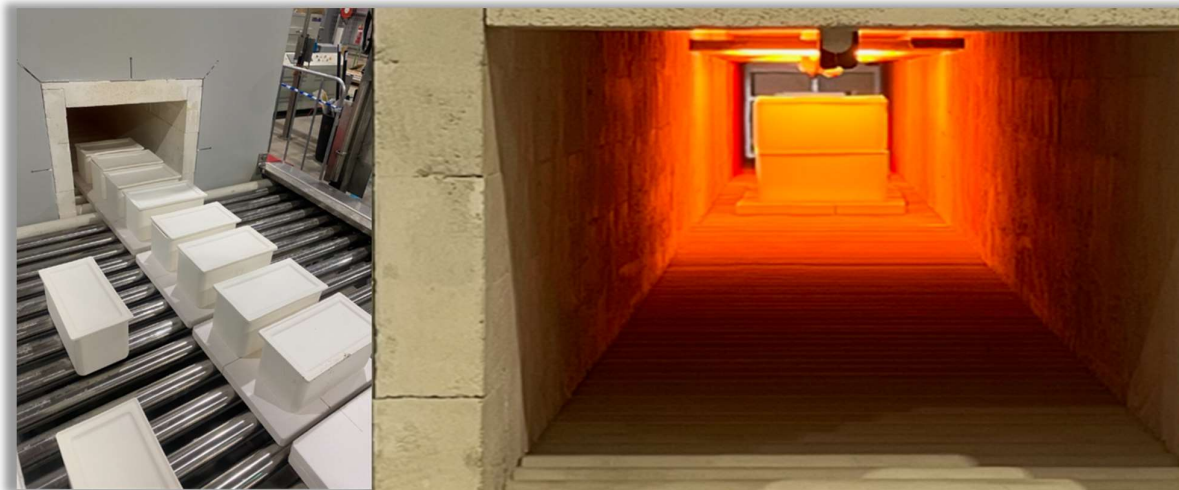
- between 15-40 tpa additional capacity of HPA production;
- Nano HPA production to service end-users in the semi-conductor/chemical mechanical polishing (CMP) sector;
- the capability to produce up to an additional 10tpa of high purity boehmite;
- the capacity to produce 15-25tpa of high purity alumina-trihydrate (ATH);
- the expansion of Stage 1 PPF production capacity of aluminium nitrate and aluminium sulphate; and
- the production of HPA tablets as feedstock for synthetic sapphire glass growth.

HPA circuit commissioning – production now at ~30kg/day

Alpha has made good progress on the commissioning of both the HPA rotary kilns and HPA tunnel kiln calcination circuits, which are now operating at circa 30kg HPA production per day (combined). The Company is continuing to advance production rates, with the intention of maximising saleable HPA and to provide HPA tablet feedstock for synthetic sapphire production by both Ebner-Fametec and Alpha Sapphire.



HPA rotary kilns – in final commissioning



HPA tunnel kiln – in final commissioning

Rotary dryer installed and under commissioning

The HPA dryer unit has been installed, and commissioning commenced. This will be utilised by both the HPA and ATH production circuits.



HPA dryer installed into Stage 1 and in commissioning

Sinter oven delivered and installation commenced

The HPA tablet sinter oven, a key piece of equipment to accelerate production capacity of HPA tablets for sapphire glass also arrived on site, has completed installation and is now in commissioning.



Sinter oven for HPA tablets – installed and in commissioning

Jet mill delivered and installation commenced

The jet mill, being the final piece of major equipment outstanding for the HPA circuit, was delivered, is now installed and in commissioning.



Jet mill unit (LHS) installed into the soundproof enclosure (RHS)

Boehmite and alumina tri-hydrate circuit (ATH) under commissioning

The high purity boehmite (Al-O-OH) and high-purity alumina trihydrate (Al(OH)^3) circuit (Area 1270) is now fully installed and undergoing commissioning.

This circuit includes the spray drying equipment, which will be used to manufacture spherical boehmites and spherical gamma alumina powders.



Area 1270 (high-purity boehmite and alumina trihydrate) circuit – under commissioning.

Stage 1 production

Stable production of high purity Al-nitrate precursor has continued, with cumulative Al-nitrate production having now reached approximately 258 tonnes at the target 5N (99.999%) purity level.

To date approximate 25 tonnes of Al-Nitrate have been despatched as test samples or converted to high-purity aluminas and alumina tri-hydrate for sales and testwork orders.

Approximately 50% of the Al-nitrate production will be dedicated to conversion into HPA once the Stage 1 HPA circuit is fully commissioned. The remainder is being allocated for sales once final contracts are concluded.

Over December 2023 – February 2024, Alpha has paused production of Al-Nitrate to allow for the Stage 1 PPF crews to focus on training and production from the newly installed HPA circuit.

PRODUCT MARKETING

Across the quarter Alpha continued to service a wide range of product orders across a number of high-technology sectors, namely:

- **Lithium-ion battery (LiB) sector:** With a focus on cathode coating & dopants and anode coatings
- **LED Lighting sector:** With a focus on HPA for synthetic sapphire LED substrates and LED phosphors
- **Semi-conductor sector:** With a focus on materials for Chemical Mechanical Polishing (CMP) and thermal interface materials for semi-conductor packaging

Alpha is utilising capacity in both the Stage 1, Precursor Production Facility (PPF) in Gladstone, QLD and the Company's product development facility in Brisbane to service various stages of its expanding market outreach, which includes:

- servicing existing sales orders;
- delivering into tonnage scale orders for end-user production testwork;
- servicing technical qualification, usually involving multiple test orders; and
- delivering initial production scale orders to demonstrate product suitability.

HPA sales to South Korean Semiconductor sector brought forward

Since July 2023 Alpha has been delivering small scale sales of a bespoke HPA powder to an end-user in the South Korean semiconductor sector at between 40-50kg per month @ >US\$30/kg. These sales have been completed under a Letter of Intent (LOI) which includes sales expansion to:

- 1 tonne per month from January 2024; and
- up to 1,000tpa by 2026.

In consideration of the positive progress on the Stage 1 HPA circuit commissioning, sales of this custom HPA product were brought forward to include a 220kg sales order in December.

USA marketing

During the quarter Alpha completed a USA marketing trip off the back of the Company's participation in the Australian Critical Minerals Delegation to Washington DC.

The delegation coincided with a State visit by the Australian Prime Minister and with the recent announcement of the Australia-United States Climate, Critical Minerals, and Clean Energy Transformation Compact (**the Compact**).

End-user visits substantially advanced a number of large volume negotiations with key USA based end users, most notably:

- the accelerated testing and potential >1,000tpa supply of custom HPA's to a key supplier to the US semiconductor sector;
- the larger volume supply of custom high purity alumina hydroxides to a manufacturer of high purity catalysts; and,
- the potential supply of a high purity alumina hydroxide precursor to an existing manufacturer of high purity aluminas to the technical ceramics sector.

A number of further test orders were generated from the trip which are now being manufactured between Alpha's Stage 1 facility in Gladstone and the Brisbane product development centre.

Certification of Product Carbon Footprint (PCF) by CarbonChain

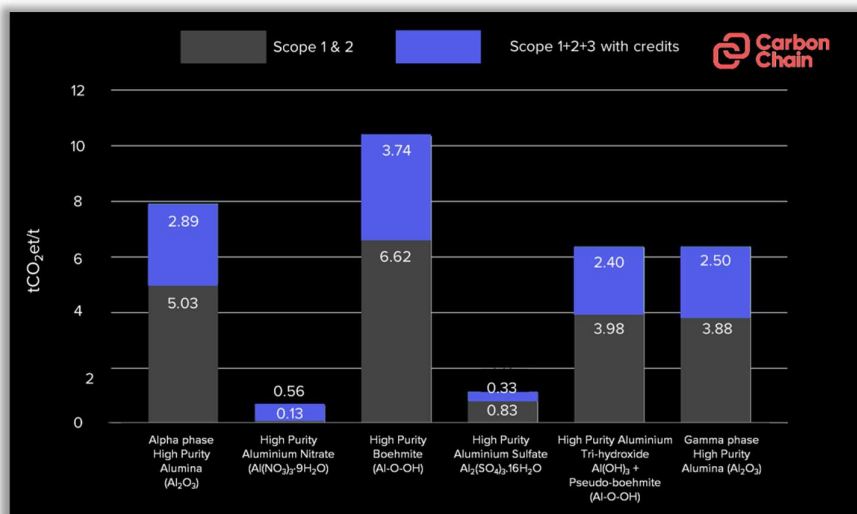
During the quarter Alpha completed third party modelling of cradle-to-gate, product carbon footprint (PCF) analysis of each of its high purity aluminium products.

The modelling is inclusive of Scope 1, 2 & 3 emissions and credits received for the recycling of key reagents.

The PCF results by each product are represented graphically below.

Alpha considers each of these are likely to be sector leading in each product category. The very low carbon footprint results are enabled by:

- Alpha not using any (high embodied carbon) aluminium metal as process feedstock, unlike competing processes
- Alpha using 100% renewable electricity; and
- Alpha recycling close to 100% of its process reagents.



CarbonChain PCF modelling across Alpha's high purity aluminium product range

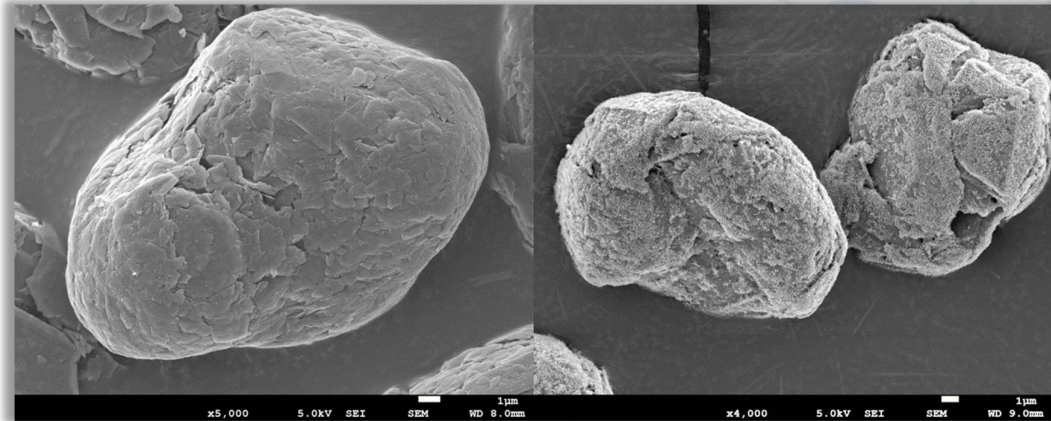
Third party research confirmation of safety benefits of Ultra-Coat process

Over the last several months Alpha has enjoyed very wide engagement across the LiB anode sector for the testing of Al-oxide coated graphite anode materials using ultra high purity Al-Nitrate precursors (Alpha's 'UltraCoat' process), with testing underway with 13 different end-users. The UltraCoat process provides for higher capacity, faster cycling LiB cells, and replaces the traditional carbon-pitch coat which represents the incumbent graphite anode coating process.

In significant part, the interest is being driven by the well described benefits of the process with respect to improved electrochemical performance.

More recently, Alpha has also been able to validate the very significant safety benefits of the Al-oxide coating. A key technical paper published by the leading anode manufacturer (BTR New Materials Group) confirms the process provides a **100% reduction in thermal runaway (battery fires) under nail-penetration testing**.

The nail penetration test is the industry standard test for battery safety under short circuit/trauma.



SEM imagery showing raw graphite anode particles (LHS) and Ultra-coated particles (RHS)

STAGE 2 – FULL SCALE PROJECT

Stage 2 DFS near complete

The Definitive Feasibility Study (DFS) for full scale, Stage 2 of HPA First Project is now in final draft and due for release during Q1 2024.

The updated DFS incorporates an updated production profile of Alpha's high purity aluminium products and represents the final financial case under negotiation with Project lenders (see below).

Project Finance process nearing completion

In parallel with the finalisation of the DFS, Alpha and its advisors continue to progress a Project Finance debt facility to be jointly funded by the following Australian Government financing agencies ('Lenders'):

- The Northern Australia Infrastructure Facility (NAIF), and;
- Export Finance Australia (EFA)

During the December quarter Alpha received:

- A Letter of Support (LOS) from EFA and;
- Strategic Assessment Phase (SAP) approval from the NAIF.

Alpha is now in the final stages of due diligence and approvals with the Lenders in respect of a debt facility.

About Export Finance Australia

EFA is Australia's export credit agency (ECA). EFA provides commercial finance for export trade and overseas infrastructure development. From small and medium sized enterprises (SMEs) to large corporates, foreign Governments and infrastructure projects, EFA helps Australian businesses take on the world. In doing so, EFA finance supports Australia's economic security and regional resilience.

EFA administers the Australian Government's National Interest Account, which currently includes the Critical Minerals Facility, the Defence Export Facility and lending for the Australian Infrastructure Financing Facility for the Pacific.

About NAIF

The Northern Australia Infrastructure Facility (NAIF) is a Commonwealth Government development financier, investing for impact in Northern Australia. NAIF's primary purpose is to accelerate infrastructure development and thereby drive transformational growth in northern Australia by innovative financing that:

- Generates public benefit including that outside of what is captured by the project proponent.
- Encourages longer term growth in the economy and population of northern Australia.
- Encourages private sector participation in the financing of northern Australia's infrastructure needs; and

Facilitates sustainable Indigenous participation, procurement, and employment outcomes.

The Company is now in the mature phases of market outreach and project financing with respect to the full scale Stage 2 HPA First Project, with the expectation of positioning Stage 2 to Final investment Decision.

Government Grants

Over the course of the quarter Alpha continued its work with the Grant administrators to align key milestone dates of the announced Government Grants with the Project Financing timetable.

- \$21.7M QLD Govt IPP Grant – FID date has been extended to on or before 30 June 2024
- \$45M Federal Govt MMI-C Grant – application submitted to extend FID date

Background

In March 2023, Alpha entered agreements with Ebner-Fametec, to provide for the staged entry by Alpha into the production and sale of synthetic sapphire glass utilising Ebner-Fametec sapphire growth technology and utilising Alpha’s custom high purity alumina (**HPA**) tablets as feedstock.

Alpha has agreed with Ebner to purchase and roll-out sapphire growth units in the following phases:

- **Phase A:** Purchase and installation of an initial 2 synthetic sapphire growth units: *Now Underway*
- **Phase B:** Purchase and installation of a further 48 synthetic sapphire growth units: *Total 50*
- **Phase C:** Purchase and installation of a further 50 synthetic sapphire growth units: *Total 100*

In June 2023, the agreement between Alpha and Ebner-Fametec was expanded to include a Letter of Intent to work co-operatively on an additional, large-scale expansion of the Australia based sapphire growth installation, to be referred to as the ‘**Nova Phase**’. The Nova Phase LOI contemplates the purchase, construction, installation and operation of up to an additional 1,000 synthetic sapphire growth units.

Completion of \$40M Strategic Placement to accelerate Alpha Sapphire

In November the Company announced it had received binding commitments from Australian Super, Orica Limited and other large shareholders to raise \$40 million (before costs) through the issue of approximately 54.8 million new fully paid ordinary shares in the Company representing 6.2% of Alpha’s existing shares on issue, at an offer price of \$0.73 per share (**Strategic Placement**).

The Strategic Placement provides matching funding to the \$30M funding from the QIC Critical Minerals and Battery Technology Fund (**QCMBTF**), as well as general working capital.

With the completion of the all conditions precedent to the drawing of both tranches of the QCMBTF facility (refer below), a total of \$60M funding is now available to fully fund Phases A and B of the roll-out of the Alpha Sapphire Project (in total, the first 50 sapphire growth units). Phases A and B of the Alpha Sapphire Project are projected to generate sufficient future cashflows to fund the future expansion through to completion of Phase C (being a further 50 sapphire growth units, taking the total number of sapphire growth units to 100).

Dependent on final production rates from Alpha’s existing HPA First Project Stage 1 facility in Gladstone, Alpha Sapphire Phases A and B are expected to be either wholly or substantially supplied with HPA tablet feedstock from the Company’s HPA First Project Stage 1.

The Strategic Placement is a strong endorsement of Alpha Sapphire and a significant corporate milestone in funding the Alpha Sapphire business through to positive cash flow.

Completion of \$30M Alpha Sapphire funding from QCMBTF

During the quarter the Company announced it had executed the binding transaction documentation for the provision of up to \$30 million of project funding from the QIC Critical Minerals and Battery Technology Fund (**QCMBTF**) for the Company’s 100% owned subsidiary, Alpha Sapphire Pty Ltd (**Alpha Sapphire**).

Proceeds from the QCMBTF project funding will be applied to accelerate the roll-out of the initial 50 sapphire growth units (Phases A and B) contemplated in the LOI announced with Austrian technology partner Ebner Industrieofenbau GmbH (**Ebner**) and Ebner subsidiary Fametec GmbH (**Fametec**).

Summary of key terms

Financier	Trustee of the QIC Critical Minerals and Battery Technology Fund (QCMBTF).
Commitment	\$30 million.
1st Financial Close	\$3 million (PAID)
2nd Financial Close	\$27 million.
Availability	Up to 31 December 2024.

Key Conditions Precedent to 1st Financial Close	Definitive documentation and other customary conditions, including final due diligence and internal investor approvals. (NOW COMPLETE)
Key Conditions Precedent to 2nd Financial Close	Final Investment Decision (FID) by Alpha Sapphire on Phase B (48 growth units) and matched funding from Alpha. Other customary conditions, including final due diligence and internal investor approvals.
Repayment Amount	4.35% of gross revenue (less power costs) generated from Alpha Sapphire from sapphire product sales, on the first 2,500 tonnes of sapphire product sales. Greater of full repayment amount and the full commitment becomes repayable in prescribed circumstances (including events of default).
Security	First ranking security over shares in Alpha Sapphire and its assets, subject to agreed exceptions.
Special Conditions relating to Facility	Phase B and Phase C (100 growth units) sapphire growth facility to be located within the state of Queensland.

Alpha Sapphire was advised by McGrathNicol and Ashurst. QIC was advised by e BurnVoir Corporate Finance and Allens.

Successful sapphire growth testing at Ebner-Fametec's Austrian Facility

During the quarter Ebner-Fametec's Austrian facility reported further successful sapphire growth testing with the most recent HPA tablets delivered from the HPA First Project.

The most recent sapphire growth results recorded a clean, c-axis boule with good colour and low imperfections. This boule is now being processed into sapphire blanks and wafers for final end user testing. The most recent sapphire growth assayed <2ppm total impurities (99.999% purity).

Alpha has recently shipped 100kg dof additional HPA tablets for follow-on testing in the multi-growth sapphire units in Austria.



Pre-melt crucible packed with Alpha HPA tablets (LHS). Completed, single crystal sapphire boule (RHS). (scale approx. 20cm diameter)

First two sapphire growth units shipped and en-route to Gladstone

Ebner-Fametec have completed manufacture and shipped the first two sapphire growth units (Phase A), which are now en-route to Gladstone. These units are now due to arrive at Sydney & Brisbane Ports between late-January and mid-February.



First two sapphire growth units packed and ready for shipping to Gladstone

Successful development of custom, circular HPA tablet

Alpha has now successfully developed the equipment design and manufacturing process for a custom, circular, sintered HPA tablet as a bespoke feedstock for the Ebner-Fametec sapphire furnaces.

The larger, approximately 1kg tablets have been successfully manufactured at the Stage 1 facility in Gladstone and sintered to an ultra-high density of $3.7 - 3.8 \text{ g/cm}^3$. By providing a custom, high density feedstock, these tablets are expected to improve materials handling, crucible charging and increase the yield per sapphire crystal run.

Manufacture of these tablets will now be scaled up and tested in sapphire growth units at Ebner-Fametec in Austria to confirm quality and implied higher sapphire yield.



Sintered high-density circular HPA tablets – custom designed for the Ebner-Fametec growth units

Alpha Sapphire, Phase B site selection

Alpha has advanced the formal site selection process for the installation for the Phase B site location which will be expandable to accommodate Phase C and the accompanying sapphire processing equipment to produce sapphire blanks. The team is focused on existing warehouse and office properties and has included engineering evaluations to ensure suitable sites can accommodate the sapphire growing equipment.

The site evaluation is being conducted in parallel with discussions on securing a competitive source of renewable energy linked with a suitable site for the Phase B and C roll-out of the Alpha Sapphire business unit (100 sapphire growth units in total).

CORPORATE

Board Changes

In November 2023 Justin Werner and Cameron Peacock retired as Directors of the Company

With its recent inclusion into the ASX300 and the substantial progress towards establishing significant production scale across the Company's HPA First Project and Alpha Sapphire businesses, the Company set a target to restructure the Board composition with a wider representation of more independent, non-executive Directors.

In fulfilling this objective, the Company was pleased to announce firstly the appointment of Annie Liu and then subsequent to the end of the quarter Marghanita Johnson as Independent, Non-Executive Directors.

Annie is a seasoned executive, having spent 20+ years in building and leading teams across stages from product incubation to rapid growth and scale-up in mature markets. Annie was the Executive Director at Ford (Model E) from 2022 to 2023. Prior to her role at Ford, Annie forged and managed Tesla's multi-billion-dollar strategic partnerships and sourcing portfolios that support Tesla's Energy and Battery business units including Battery, Battery Raw Material, Energy Storage, Solar and Solar Glass, including raw materials sourcing efforts such as lithium for battery cells.

Earlier in her career, she held various leading manufacturing and procurement roles at Microsoft launching advanced technology products. Annie is a co-founder of Alto Group Inc, a trusted advisor and counsellor to many of the world's influential businesses in the EV value chain. Alto Group is also assisting Alpha on market engagements with a number of counterparties in the lithium-ion battery anode and cathode sector.

Marghanita has been the Chief Executive Officer of the Australian Aluminium Council since 2019. She has over 25 years' experience in the Australian mining and manufacturing sectors, predominantly within the aluminium industry. Prior to joining the Council she led government engagement and advocacy on behalf of Rio Tinto's Pacific Aluminium assets and prior to that held key climate and sustainability roles at Rio Tinto.

Marghanita has Environmental Engineering and Chemistry degrees from the University of Western Australia. She is currently Chair of the Australian Industry Greenhouse Network and a director of the Energy Users Association of Australia.

R&D Claim

The Company lodged a material R&D claim during the September quarter, which accesses the ATO's Temporary Full Expensing (TFE) rules as they relate to qualifying capital investment. The Company is expecting a rebate under the claim of between \$6 - \$7 million. At the end of the December quarter the claim remained under review.

Related Party Expenditures

During the December quarter, the aggregate amount of payments to related parties and their associates totalled \$563,331 comprising \$464,331 of payments to Directors or Director related entities for Directors' consulting fees and \$99,000 in fees were paid to MIS Corporate Pty Limited ('MIS'), an entity in which Directors Norman Seckold and Peter Nightingale have a controlling interest. MIS provides full administrative services, including administrative, Project commercial services, accounting, business development, staff, rental accommodation, services and supplies to the Group.

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Appendix 4C

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

Name of entity

Alpha HPA Limited

ABN

79 106 879 690

Quarter ended ("current quarter")

31 December 2023

Consolidated 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	22	29
1.2 Payments for		
(a) research and development	(4,080)	(5,472)
(b) product manufacturing and operating costs	(2,879)	(5,283)
(c) advertising and marketing	(206)	(308)
(d) leased assets	-	-
(e) staff costs	(1,755)	(3,934)
(f) administration and corporate costs	(1,305)	(2,835)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	163	341
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	746
1.8 Other (GST on government grants)	-	(926)
1.9 Net cash from / (used in) operating activities	(10,040)	(17,642)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(4,429)	(9,403)
(d) investments	-	-
(e) intellectual property	-	(2,000)

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
(f) other non-current assets	-	-
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)	5	54
2.6 Net cash from / (used in) investing activities	(4,424)	(11,349)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	40,000	43,650
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	(1,946)	(1,980)
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 (receipt of funds from QCMETF facility)	3,000	3,000
3.10 Net cash from / (used in) financing activities	41,054	44,670

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	9,677	20,589
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(10,040)	(17,642)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(4,424)	(11,349)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	41,054	44,670
4.5	Effect of movement in exchange rates on cash held	(11)	(12)
4.6	Cash and cash equivalents at end of period	36,255	36,255

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	36,255	9,677
5.2	Call deposits	-	-
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)	36,255	9,677

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	563
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.

Director fees, salaries and superannuation payments, as well as fees paid to MIS Corporate Pty Ltd, an entity in which Director's Peter Nightingale and Norman Seckold hold a controlling interest which provides administrative, accounting, company secretarial and rental services to the Company.

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 (QCMBTF facility)	30,000	3,000
7.4 Total financing facilities	30,000	3,000

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.

Facility provided by QIC Critical Minerals and Battery Technology Fund (QCMBTF) for acceleration of 50 sapphire growth units. Security is first ranking security over shares in Alpha Sapphire and its assets. Repayment amount is 4.35% of gross revenue (less power costs) generated from Alpha Sapphire from sapphire product sales, on the first 2,500 tonnes of sapphire product sales. Greater of full repayment amount and the full commitment becomes repayable in prescribed circumstances (including events of default).

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(10,040)
8.2 Cash and cash equivalents at quarter end (item 4.6)	36,255
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	36,255
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	3.61

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.

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

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.

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: 25 January 2024.

Authorised by: By the Board.
(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.