

Alpha **HPA**

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

ASX: **A4N**
ASX Announcement
29 January 2022
(9 pages)

ACTIVITIES REPORT FOR THE QUARTER ENDED 31 MARCH 2022

HIGHLIGHTS

FEDERAL GOVERNMENT GRANT SUPPORT FOR HPA FIRST PROJECT

- **\$45M** – Modern Manufacturing Initiative ('MMI-C') for capital expenditure towards the full-scale commercial facility of the HPA First Project
- **\$15.5M** – The Critical Minerals Accelerator Initiative ('CMAI') for the immediate expansion of the product range and production capacity in the Stage 1 -PPF

PRODUCT MARKETING

- Multiple product test orders for:
 - cathode coating
 - sapphire glass production and
 - specialist ceramics
- Further Li-B anode coating trials commenced with anode OEM's

STAGE 1 – PPF

- Main building slab completed, building frame in place and cladding commenced
- Process equipment and tankage deliveries continue
- First PPF product order received

STAGE 2 – FULL SCALE PROJECT

- Environmental Authority (EA) approval issued for both Stage 1 & Stage 2
- Study underway to adopt higher precursor volumes at the HPA First full-scale commercial facility
- Lender due diligence advanced

BRISBANE FACILITY

- New site for Brisbane facility secured following flood impacts
- Re-commencement of unit operations in late April – early May

WONOGIRI PROJECT DIVESTMENT COMPLETE

- Divestiture complete with the successful ASX IPO of Far East Gold (ASX: FEG)
- Alpha holds 17.1M shares in FEG representing 7.93% of issued capital

STATEMENT OF CO-OPERATION WITH QUEENSLAND GOVERNMENT

- Signatory to the Statement of Co-operation with the Queensland Government and other industry participants towards net zero emission manufacturing

HPA FIRST PROJECT

SUPPLYING DE-CARBONISATION

The Board of Alpha HPA Limited ('Alpha' or 'the Company') is pleased to provide the March 2022 quarterly activities report for its HPA First Project, representing the commercialisation and production of critical high purity aluminium products driving de-carbonisation.

During the March quarter, Alpha remained strongly focused on the delivery of the HPA First Project in Gladstone, Queensland, which represents the commercialisation of the Company's proprietary aluminium purification and refining technology. The HPA First Project will deliver a range of ultra high purity aluminium products that are critical materials to the supply chains of key de-carbonising technologies including:

- LED lighting, and
- Lithium-ion batteries.

Activities in the March 2022 quarter were dominated by:

- Ongoing product marketing and product development activities of the Company's suite of ultra high-purity precursor and alumina products.
- Construction, engineering and procurement activities related to the delivery of the Stage 1 Precursor Production Facility ('PPF'). The PPF will be the Company's first commercial production facility representing the acceleration of commercial production and cashflows through the Company's ultra-high purity aluminium precursors.
- Continuing to advance a number of the conditions precedent to the Final Investment Decision on the full scale HPA First Project.

Further details on these developments are outlined below.

STAGE 1 - PPF

The March quarter saw the Company continue to make substantial progress on the Stage 1, PPF component of the HPA First Project. The PPF is fully funded to production and represents the acceleration of commercial production and cashflows through the Company's ultra-high purity aluminium precursors.

During the quarter the following workstreams were advanced.

Main building slab completed with building frame in place and cladding commenced

The final concrete pour for the main PPF building slab base was completed allowing the commencement of building erection. The main PPF building frame installation has now been completed and building cladding has commenced (*refer images below*).

Mechanical Equipment and Design

The Structural, Mechanical and Piping installation (SMP) scope was issued and designs for final mechanical installation were finalised. Delivery of final fabricated equipment is continuing, both on site and via the Company's staging yard in Gladstone.

Electrical Instrumentation and Controls

Contracts for the Electrical, Instrumentation and Control (EI&C) package 1 and System Integration package have been executed. IT infrastructure design is being finalised. Electrical distribution boards are ready for delivery.

Ancillary Contracts Awarded

Contracts were awarded for flue duct fabrication, cable trays, concrete coating, filter cloths, chemical hoses, mobile fleet and insulation boards.



SX Module fabrication progress

Upscaled PPF throughput

During the quarter Alpha elected to capture a number of opportunities through the PPF design and fabrication stages to materially upscale the capacity of the PPF. This decision was based on marketing feedback suggesting larger volumes on Al-Nitrate precursor could be placed into the market if available. Changes adopted to increase throughput include:

- Increased tank sizes
- Large diameter hard piping, and
- Upgraded process control system

As a result, the PPF capacity will be expanded by approximately 75% and expected to be in excess of 350tpa on an Al-nitrate basis, scaled up from 200tpa.

Common Infrastructure

Alpha also decided to take the opportunity to scale up key infrastructure installation to allow for common use of this infrastructure with both the PPF and the future Stage 2 facility. Common infrastructure installations include:

- High performance fibre optics data link
- Firewater tankage, pumping and piping
- Septic facilities
- Potable water connections
- Grid power connections

PPF Budget Update

As a result of the above decisions Alpha increased the PPF CapEx budget by approximately \$7.9m to accommodate the following:

- Upscaled tankage, piping and process control systems to allow for PPF capacity increase
- Additional engineering hours to allow for PPF capacity increase
- Increased earthworks and civils budget, to allow for larger volumes of clean fill and concrete

STAGE 1 - PPF

The Company continues to make good progress on the construction of Stage 1 PPF component of the HPA First Project as detailed above:



Cladding of the main PPF building is well advanced



PPF facility interior

STAGE 2 - FULL SCALE PROJECT

In parallel with the PPF, the Company maintains a number of workstreams directed at completing the remaining conditions precedent to the full-scale HPA First Project FID:

Environmental Authority approval issued for both Stage 1 and Stage 2

Alpha has now received approval from the Queensland Government Department of Environmental Science (DES) for the Environmental Authority (EA) for the HPA First project.

The EA sets out the environmental operating limits for all aspects of operations for both the PPF and full scale HPA First project. The conditions of the EA are in line with expectations for the project and reflect Alpha's broader commitment to low impact operations.

Lender Due Diligence

Alpha continues to advance due diligence with key lenders. Materials being provided to lenders include:

- Updated HPA Market Report (CRU- January 2022)
- Stage 1 ITE report (Bankers Engineers)
- Environmental & Social (E&S) due diligence report – completed by Bankers Engineer
- Indigenous Engagement Strategy (IES)
- Climate Reporting and Emissions Reductions Strategy
- Legal DD – Lender's legal appointment imminent
- Insurance – Alpha's insurance brokers appointed

Study underway to adopt higher precursor volumes

Alpha is currently completing a revised Project scenario modelling based on a range of updated product mixes informed by the Company's marketing activities. The re-configured Project will include higher volumes of aluminium precursors.

The re-configured HPA First Project product scenarios will form the final basis for Project Financing.

FEDERAL GOVERNMENT GRANT FUNDING SUPPORT

Modern Manufacturing Initiative

During the quarter the Company announced that the Commonwealth Department of Industry, Science, Energy and Resources ('Department of Industry') had approved its application for grant funding under the Modern Manufacturing Initiative - Collaboration Stream ('MMI-C').

The MMI-C grant will see \$45 million of grant funding applied toward the capital expenditure of the full-scale HPA First Project. Alpha was the lead applicant, with the grant application supported by Orica Ltd ('Orica') as joint applicant. The business collaboration between Alpha and Orica forms a key part of the HPA First Project, which leverages off the existing Orica manufacturing facility in Gladstone, QLD. 10% of the grant proceeds will flow to Orica to offset their capital expenditure required to support the HPA First Project.

The Company will execute a grant agreement with the Department of Industry in due course.

Critical Minerals Accelerator Initiative

Subsequent to quarter end the Company announced that it would be the beneficiary of further funding from the Department of Industry, having been awarded a further \$15.5M of grant funding under the Critical Minerals Accelerator Initiative ('CMAI')

The CMAI grant activities are distinct from those under the approved of \$45M MMI-C grant, whose grant monies will be directed towards the capital requirements of the HPA First Project's full-scale commercial facility.

The \$15.5million CMAI grant funds will be applied toward immediately expanding and accelerating the production capability of the PPF, which is currently under construction in Gladstone as Stage 1 of the HPA First Project.

Specifically, this CMAI grant funding will be directed towards:

- Further expanding PPF production capacity of high purity aluminium precursors
- Facilitating up to 10tpa of additional capacity of High Purity Alumina (HPA) production
- Facilitating up to 10tpa of additional capacity of High Purity Boehmite production
- Facilitating the addition of tableting capacity to produce HPA tablets for sapphire glass growth
- Installation of a large rooftop solar array and battery storage capacity

The Company will seek to promptly finalise a grant agreement with the Department of Industry.

BRISBANE FACILITY

During the quarter, Alpha's Demonstration facility in Brisbane was impacted by flooding following a period of extended heavy rainfall. The Brisbane facility produces a range of products for end-user qualification testwork, small scale product sales and vendor testwork.

The majority of the process equipment was either unaffected by the flood or recoverable, however, some items of process equipment were lost and will require replacement at an estimated cost of approximately \$250,000.

Most of the Company's high purity product stockpiles were unaffected, with Alpha currently retaining the following product inventory to service product marketing enquiries:

- 93kg of 5N purity Al-nitrate precursor
- 46kg of 4N+ purity alpha alumina (HPA)
- 33.5kg of 4N+ purity gamma alumina (HPA)
- 65kg of 4N+ purity intermediate products

Following the flooding event the Company made the decision to relocate its Demonstration facility. New premises have now been secured with operations presently being re-establishing at this new location. The larger premises will house both Alpha's Brisbane based operations and commercial teams.

Alpha is scheduled to recommence manufacturing aluminium precursors at the new site in early May and high purity alumina products in late-May, after receipt of replacement calcination equipment.

PRODUCT MARKETING

During the quarter Alpha maintained an active product marketing program with end-users, with a number of engagements now maturing to the commercial stage. Alpha also continues to outreach to new markets and jurisdictions, as well as continuing to receive inbound product test and sales orders.

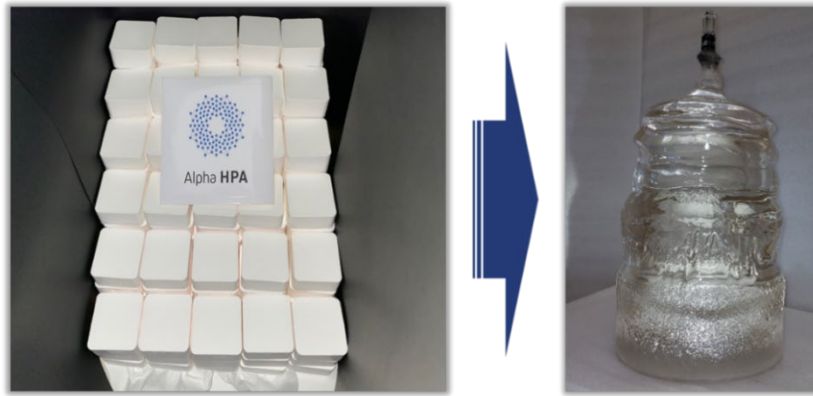
Key product marketing developments during the quarter included:

HPA Pellets for sapphire glass

Alpha's HPA pellet feedstock was qualified for sapphire glass manufacturer by a premium European based end-user. This end-user has now requested 2nd stage orders using the same feed material (from Alpha) and the same sapphire glass manufacturer.

The 2nd stage order volumes are expected to be 1-3 tonnes and represent a pre-commercial order ahead of potential larger contracts next year.

The 2nd stage request is considered a significant endorsement of Alpha's product quality, as the premium consumable electronics market represents the most demanding quality requirements for sapphire glass.



Alpha's pellets as feedstock to sapphire glass

Additionally, Alpha is seeking to respond to a significant increase in inbound demand for HPA pellets for sapphire glass growth with the sapphire glass market having been heavily disrupted as a result of Russian-targeted sanctions. The sapphire glass market includes a wide range of applications including:

- Sapphire wafer substrates for LED lighting
- Sapphire wafers for premium watches and consumer electronics
- Sapphire windows for smartphone camera lenses and LIDAR

Further lead sales orders

Alpha has recently satisfied a number of product sales orders. Each of these sales are considered lead orders for potential larger volume contracts. New sales orders this quarter include:

50kg Al-Nitrate precursor (US\$40/kg)

Alpha has completed a sales order for its 5N purity Al-Nitrate precursor as a lead order for the development of laser crystals for medical applications. Multi-tonnage orders are expected if testwork is successful.

Further product testwork and sample orders

During the quarter Alpha received further orders from numerous potential customers spanning its full suite of ultra high-purity aluminium products. These orders include:

- Sintered HPA pellets for a South Korean based sapphire glass producer
- HPA powder for Li-B cathode coating
- High dispersible boehmites for speciality ceramics
- Al-Nitrate pre-cursors from a Japan based anode manufacturer for in-house testwork coating Li-B anode materials
- Multiple products for a European based developer of micro-LED phosphors
- Multiple products for a global lighting company
- Al-nitrate sample for an EU based manufacturer and distributor

Further pricing bids submitted

Alpha submitted a further two pricing bids during the quarter to supply:

- High dispersible boehmites at >100tpa
- Al-nitrate precursors at 2-5tpa

Alpha has now submitted 14 supply bids for price, volume and freight terms and remains active in advancing supply discussions where existing bids have been supplied, and where supply negotiations have commenced.

First PPF product order received

Subsequent to quarter end Alpha received its first product orders to be met by production from the PPF. The order is for an initial 1 metric tonne of Alpha's ultra high purity boehmite from a global materials company and will be applied to commercial scale production trials.

CORPORATE

Related Party Expenditures

During the March quarter, the aggregate amount of payment to related parties and their associates totalled \$275,000 comprising \$175,000 of payments to Directors or Director related entities for Directors' consulting fees and \$100,000 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 and investor relations staff, rental accommodation, services and supplies to the Group.

Wonogiri Project divestment complete

Alpha advises that with the successful ASX IPO of Far East Gold (ASX: FEG), the Company has completed the divestment of its 45% interest in the Indonesian Wonogiri Project which now forms part of FEG's exploration portfolio.

Alpha now holds 17.1M shares in FEG, or ~7.93% of its issued capital. These shares are in escrow until March 2024.

About the HPA First Project

The Company's HPA First Project represents the commercialisation of the production of ~10,000tpa equivalent of high purity alumina (HPA) and related high purity precursor products using the Company's proprietary licenced solvent extraction and HPA refining technology. The disruptive, low-carbon process technology provides for the extraction and purification of aluminium from an industrial feedstock to produce 4N (>99.99% purity) alumina and 5N (>99.999% purity) for sale into the lithium-ion battery and LED lighting industry.

Alpha completed a Definitive Feasibility Study in March 2020 following a successful pilot plant campaign in 2019. Alpha has since upscaled its Brisbane facility to demonstration scale and has now recorded over 4,000 operating hours and delivered an expanded range of over 80 high purity product orders to end-users globally.

Alpha is fully funded to the commercial production at its Stage 1, Precursor Production Facility which is scheduled to commence commercial production for the Company's high purity Aluminium Precursors from September quarter 2022.

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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 March 2022

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	9	15
1.2 Payments for		
(a) research and development	(937)	(7,257)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	-	-
(d) leased assets	-	-
(e) staff costs	(424)	(970)
(f) administration and corporate costs	(505)	(1,553)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	9	28
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	(1,848)	(9,737)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(8,854)	(13,130)
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	(2,649)

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	(8,854)	(15,779)

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	600	1,500
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(5)	(11)
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)	-	(6)
3.10	Net cash from / (used in) financing activities	595	1,489

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	36,407	50,344
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,848)	(9,737)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(8,854)	(15,779)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	595	1,489
4.5	Effect of movement in exchange rates on cash held	(11)	(28)
4.6	Cash and cash equivalents at end of period	26,289	26,289

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	26,289	36,407
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)	26,289	36,407

6. Payments to related parties of the entity and their associates

6.1 Aggregate amount of payments to related parties and their associates included in item 1

6.2 Aggregate amount of payments to related parties and their associates included in item 2

**Current quarter
\$A'000**

275

-

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.

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

-

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
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8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(1,848)
8.2 Cash and cash equivalents at quarter end (item 4.6)	26,289
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	26,289
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	14.23

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: Not applicable.

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: Not applicable.

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: Not applicable.

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: 29 April 2022.

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.