

Alpha **HPA**

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

ASX: **A4N**
ASX Announcement
24 February 2023
(32 pages)

HALF YEAR REPORTS

In accordance with Listing Rule 4.2A, I attach the Company's Appendix 4D and Interim Financial Report for the half year ended 31 December 2022. This Interim Financial Report should be read in conjunction with the Company's 30 June 2022 Annual Report.

Yours sincerely

Richard Edwards
Company Secretary

pjn11566

Appendix 4D

Half Year Report

Name of entity

ALPHA HPA LIMITED

ABN or equivalent company
reference

79 106 879 690

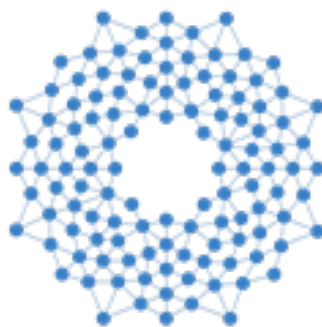
Financial year ended ('current period')

31 DECEMBER 2022

Results for announcement to the market

Revenues from ordinary activities	Down	22.8%	to	8,595
Loss from ordinary activities after tax attributable to members	Down	37.8%	to	4,483,610
Net loss for the period attributable to members	Down	37.8%	to	4,483,610
Dividends (distributions)	Amount per security		Franked amount per security	
Final dividend	Nil¢		Nil¢	
Interim dividend	Nil¢		Nil¢	
Previous corresponding period				
Final dividend	Nil¢		Nil¢	
Interim dividend	Nil¢		Nil¢	
Record date for determining entitlements to the dividend.	N/A			
Brief explanation of any of the figures reported above and short details of any bonus or cash issue or other item(s) of importance not previously released to the market:				
NTA backing	Current period		Previous corresponding period	
Net tangible asset backing per ordinary security	0.08 cents		0.06 cents	

The attached Half Year Report which forms part of this Appendix 4D has been audited.



Alpha **HPA**

ABN 79 106 879 690

Alpha HPA Limited
and its controlled entities
Interim Financial Report

for the half-year ended 31 December 2022

Corporate Information

ABN 79 106 879 690

Directors

Norman Seckold - Chairman
Rimas Kairaitis - Managing Director
Peter Nightingale – Director
Dr Regan Crooks - Non-Executive Director
Cameron Peacock - Non-Executive Director
Anthony Sgro - Non-Executive Director
Justin Werner - Non-Executive Director

Company Secretary

Richard Edwards

Principal Place of Business and Registered Office

Level 2, 66 Hunter Street
Sydney NSW 2000
Australia

Auditors

KPMG
Level 16, Riparian Plaza
71 Eagle Street
Brisbane QLD 4000

Share Registry

Computershare Investor Services Pty Limited
Level 3, 60 Carrington Street
SYDNEY NSW 2000

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Alpha HPA Limited and its controlled entities

Directors' Report

The Directors of Alpha HPA Limited ('Alpha' or 'the Company') and its subsidiaries ('the Group') submit their report for the half-year ended 31 December 2022 and the Auditor's Review report thereon.

Directors

The names of the Directors of the Company in office during the half-year period and until the date of this report were:

- Norman Seckold – Director since 30 November 2009
- Peter Nightingale – Director since 30 November 2009
- Justin Werner – Director since 23 December 2010
- Rimas Kairaitis – Director since 1 November 2017
- Anthony Sgro – Director since 1 November 2017
- Cameron Peacock – Director since 3 February 2021
- Dr Regan Crooks – Director since 6 September 2022

Results

The loss of the Group for the half-year after providing for income tax amounted to \$4,483,610 (2021 - loss of \$7,209,605).

Company Overview

Alpha is an ASX-listed specialty metals and technology company focused on commercialising its proprietary licensed aluminium purification technology to produce High Purity Alumina ('HPA') and related products for use in the burgeoning lithium-ion battery, semiconductor and light emitting diode ('LED') lighting markets. The Company is commercialising its technology through the delivery of its 'HPA First' Project within the Gladstone State Development Area in Queensland, Australia.

HPA First Project – (Alpha - 100%)

The half-year saw a number of material achievements in advancing the HPA First Project. Highlights during the half included:

- Successful commissioning and first commercial production from the Stage 1 Precursor Production Facility
- Alpha and Orica expanding their strategic partnership with signing of an MoU to explore technical and commercial feasibility of establishing a new manufacturing facility in North America and Orica acquiring a 5% equity interest in the Company
- Federal Government Critical Minerals grant of \$15.5M to fund Stage 1 expansion confirmed and \$6.2M of funds drawn down
- Federal Government \$45.0M MMI-C grant advanced for Stage 2 HPA First Project
- Engineering design for Full Scale HPA First project advanced
- MoU signed with Brenntag – world's largest chemical distributor
- Test orders under manufacture across LED, Li-ion battery, semi-conductor and sapphire glass sectors
- Expanded product marketing including multiple in-person visits to key target customers in Japan and USA
- Successful product development of high purity alumina-hydrate and anhydrous aluminium-sulphate

Alpha HPA Limited and its controlled entities

Directors' Report

Review of Operations

During the half-year under review, 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 high technology and de-carbonising industries including:

- LED lighting;
- Lithium-ion batteries; and
- Semi-conductors.

Activities during the half were highlighted by:

- Construction and commissioning activities related to the delivery of the Stage 1 Precursor Production Facility ('PPF'). The Stage 1 PPF is the Company's first commercial production facility representing the acceleration of commercial production and cashflows through the Company's ultra-high purity aluminium precursors.
- Commercial production of aluminium nitrate pre-cursor crystals, with maiden production commencing on 26 November 2022.
- Ongoing product marketing activities of the Company's suite of ultra high-purity precursor and alumina products including marketing trips to the US and Japan to further technical and commercial discussions with a potential end users.
- Continuing product development activities with the successful development of nano-alumina powders and 4N purity alumina tri-hydrate ('ATH').
- Continuing to advance a number of the conditions precedent to the Final Investment Decision (FID) on the full scale HPA First Project.

Further details on these developments are outlined below.

Alpha HPA Limited and its controlled entities

Directors' Report

STAGE 1 – PPF

The half year saw the completion of construction, commissioning and first commercial production from the Stage 1, Precursor Production Facility ('PPF') component of the HPA First Project.

First reagent deliveries from Orica

The Stage 1 PPF successfully received and offloaded its first bulk reagent chemicals from Orica, allowing for commencement of chemical commissioning.

Commissioning Completion and ramp-up

Chemical commissioning of the aluminium nitrate circuit commenced in November 2022 and completed in December 2022. By the end of the period production of aluminium nitrate (Al-nitrate) during commissioning phase had reached approximately 16 tonnes, with assays confirming production at the target 5N (99.999%) purity level.

With the commissioning phase completed, Alpha has shifted to ramp-up and throughput optimisation with process rates to progressively increase from ~70% (during commissioning) to 100% over the course of the March 2023 quarter.

Al-nitrate production was paused for one week over the Christmas period to allow for the tie-in of downstream equipment and the conversion of Al-nitrates to high purity alumina (HPA). This will facilitate larger volumes of HPA production to service multiple sample orders from Li-ion battery and sapphire glass end-users.



Completed Stage 1 PPF

First funds from Critical Minerals Grant with orders placed for key long-lead equipment

During the period, Alpha received the first tranche of \$6.82 million (including GST) of a \$15.5 million Federal Government Critical Minerals Development Grant. These funds have been applied towards immediately expanding and accelerating the production capability of the PPF.

Alpha HPA Limited and its controlled entities

Directors' Report

Specifically, the grant funding has is being directed towards:

- further expanding Stage 1 PPF production capacity of aluminium nitrate and aluminium sulphate;
- facilitating up to 10tpa of additional capacity of 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; and
- installation of a large rooftop solar array and battery storage capacity.

Orders for the following key long-lead items were placed during the half:

- Rotary dryer
- Boehmite spray dryer
- Boehmite filter press
- Al-Sulphate centrifuge
- HPA tunnel kiln
- HPA tablet press
- Sinter oven for HPA tablets (for sapphire glass production)

This equipment will enable several existing tonnage-scale product orders to be fulfilled during 2023 and will see the Stage 1 facility capable of making production scale volumes of the Company's entire suite of high-purity aluminium products.

Product Marketing

During the half-year, Alpha continued to expand an active product marketing program with end-users, with a number of engagements continuing to mature to the commercial negotiation stage. The lifting of COVID19 related travel restrictions within key target jurisdictions allowed for numerous in-person interactions with target customers.

The commissioning of the Stage 1 PPF in November 2022 and the inclusion of some key HPA production equipment into Stage 1 has also allowed for the delivery of marketing samples to potential customers at an accelerated rate.

A number of dominant themes have emerged from Alpha's market outreach and product marketing, which are considered highly constructive to securing product sales and offtake agreements. These include:

- Critical material supply chains are being re-organised in response to COVID-19 supply shocks, geo-political tensions and a greater end-user focus on ethical and low-carbon supply.
- Alpha's products have been recognised by a number of end-users as the highest purity tested.
- Re-shoring and 'friend-shoring' of critical manufacturing and related supply chains. Particularly electronics, semiconductors and lithium-ion battery manufacturing.
- Government legislative support and stimulus programs to support the above.

Highlights of product marketing activities are summarised in the point below:

Alpha HPA Limited and its controlled entities

Directors' Report

HPA delivery to sapphire glass counterparty in the EU

Alpha delivered a large (100kg) test sample order of high-density (+3.5 g/cm³), HPA (>99.995%) as sintered tablets to an EU based sapphire growth counterparty as part of final qualification.



Alpha's 100kg – HPA tablet delivery

Supply bid prices accepted for HPA to Japan-based chemical company

Following successful qualification of Alpha's nano-HPA with a Japanese based chemical company which manufactures specialist materials for the LED sector, the Company was notified its supply pricing had been accepted with the parties now moving to sales contract documentation.

Initial product volumes are modest, with an upper estimate of 10 tonnes per annum, however the application is for a premium product, with pricing at the top-end of the Definitive Feasibility Study (DFS) pricing scenarios.

Al-sulphate orders for cathode manufacture

Alpha received and delivered additional high purity aluminium sulphate test orders for a large lithium-ion cathode manufacturer.

Additional sales of Al-nitrate and HPA powders

The Company placed further small volume high value sales for Al-Nitrate (6kg @ US\$350/kg) and HPA powder (10kg @ ¥95,000/kg) to research end-users.

These sales are expected to continue and assist in the development of longer-dated research-linked markets.

Alpha HPA Limited and its controlled entities

Directors' Report

First test orders for new high purity $\text{Al}(\text{OH})_3$ product

In response to multiple end-user requests, Alpha successfully developed a process for the manufacture of a >99.99% (4N) purity aluminium tri-hydrate ('ATH' or $\text{Al}(\text{OH})_3$). First test orders for this product were shipped to several potential customers in November for qualification testing. One counterparty responded rapidly with an additional order, which was shortly followed by a new order from an EU battery maker.

Follow-on order for large EU based cathode manufacturer

Following successful low volume (1kg) sample testwork and a related project site visit, Alpha received a larger volume (60kg) follow-on order of a specific HPA product for the next stage of qualification with an EU based cathode manufacturer. This order is expected to be completed and shipped by the end of January 2023.

Multiple new orders from EU based Li-battery manufacturer

Following a review of Alpha's products and low-carbon process, a large EU based Li-ion battery manufacturer ordered four test samples across most of Alpha's product range. These are currently being shipped.

The potential customer noted the ability to satisfy demand for multiple high purity aluminium products from a single production source was a key strategic advantage of Alpha's process.

First nano-HPA sale order for LED phosphor synthesis

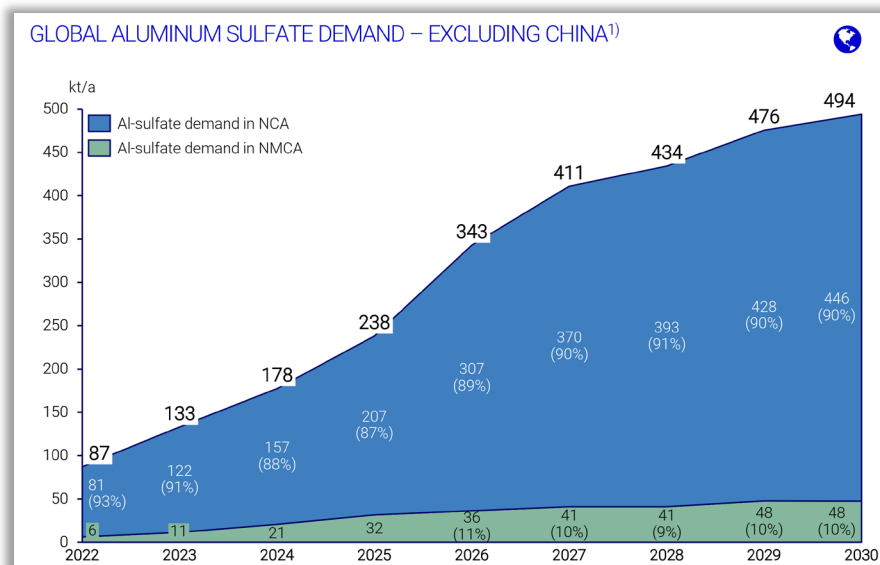
After multiple rounds of sample product testing with leading global LED manufacturer Lumileds, Alpha received its first sale order of nano HPA (5kg). A successful production run of this order by Lumileds is expected to lead to substantially larger production orders in 2023.

25kg Al-nitrate order for EU catalysts manufacturer

Alpha supplied quotes for the supply of Al-nitrate to an EU catalysts manufacturer in October 2022 and subsequently received and serviced a sample test order for 25kg for a qualification production run to complete in January 2023.

Market research confirms steep rise in Al-sulphate demand to 2030

Research by the highly regarded P3 Group (commissioned by Alpha) has forecast a dramatic escalation in Al-sulphate demand in Li-ion cathode applications. P3's research indicates ex-China demand growth for Al-sulphate from 87kt in 2022 to 494kt pa by 2030. This is considered highly favourable to Alpha's high-purity Al-sulphate product and market entry timing and correlates with the increased interest observed by Alpha in this product.



Alpha HPA Limited and its controlled entities

Directors' Report

MOU signed with Brenntag

During the half-year, Alpha signed a Memorandum of Understanding (MoU) with the world's largest chemical distributor, Brenntag Holding GmbH (Brenntag) for the potential sale and/or distribution of Alpha's products within Europe, Middle East and Africa (EMEA). Alpha and Brenntag will work co-operatively and on a non-exclusive basis to develop end-user markets and logistics solutions to the battery chemical markets.

The MoU also considers potential commercial collaboration in test and/or commercial production facilities.

Expanded US and Japan Marketing

During the period Alpha completed marketing visits to the US and Japan to visit existing and prospective end-users as well as to attend the North American Battery Show in Detroit. The Li-ion battery sector in North America in particular, has recently seen a dramatic increase in capital and technology investment, accelerated by the Production Tax Credits and Consumer Tax Credit incentives within the US Inflation Reduction Act (IRA).

Highlights from the Company's marketing trips include:

- test orders for each of Alpha's high purity precursors to a rapidly growing US-based cathode manufacturer and for a US based R&D facility of a global chemical company and cathode developer;
- expanded interest from anode and cathode active material manufacturers leading directly to four new test work programs placing high-purity aluminium oxide particle coating using Alpha's aluminium nitrate precursor; and
- expanded interest in the US semi-conductor sector (see below).

Increased interest and product orders from US semiconductor sector

Similar to the Li-ion battery sector, the US domestic semiconductor sector is undergoing strong capital and supply chain expansion through re-shoring initiatives stimulated by the US CHIPS Act.

The recent US marketing trip included a technical meeting at the headquarters of a global manufacturer of semiconductor polishing slurries (CMP slurries) to define supply and change management conditions and further product orders of nano-alumina for CMP polishing testwork.

By mid-October the Company had received and partially fulfilled multiple product orders for both nano-alumina and high purity boehmites, for testing by two further US based end users within the semiconductor industry.

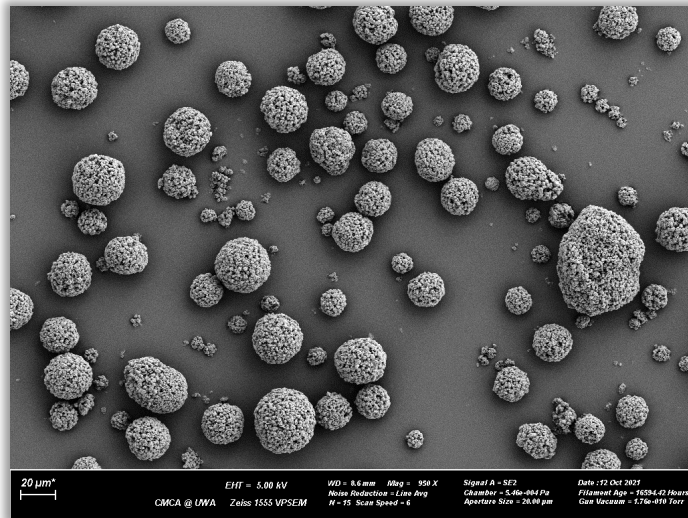
The final application for each is believed to be for polishing slurries for semi-conductor substrates (CMP slurries).

Alpha HPA Limited and its controlled entities

Directors' Report

Gamma HPA qualified and bid submitted with EU catalyst end-user

Alpha has qualified one its high-purity gamma alumina products with an EU based catalyst end-user. This product is a spherical gamma powder, specifically developed for specialist, high value catalyst applications. Bid pricing and freight terms have been requested and supplied, with expected first deliveries in 2023 if successful.



SEM image of Alpha's high purity, special gamma HPA powder

HPA order received for delivery from Stage 1 PPF

Following successful qualification, Alpha received a sales order from a US based lithium-ion battery manufacturer for an initial 1 metric tonne of HPA for delivery from the Stage 1 PPF in April 2023. The customer is in the early stages of scaling their manufacturing, with larger volume demand forecast from 2024.

Further Al-nitrate sales

During the period Alpha received a further high-price sales orders via a US based web-catalogue platform for a further 9kg @ US\$350/kg. The order is part of an ongoing series of sales over the previous 12 months delivering high purity aluminium nitrate to researchers and end-users. Alpha is anticipating larger volume orders through this avenue as the Stage 1 PPF ramps up production making commercial volumes available for manufacturing applications.

Anode coating test work expands

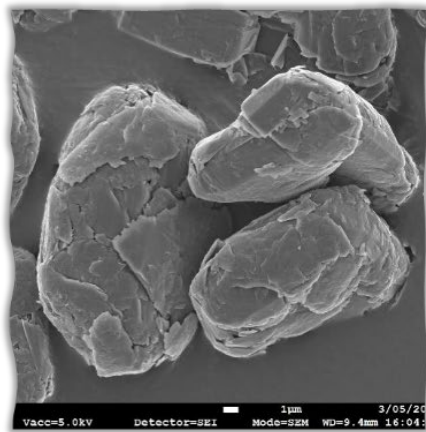
Alpha has further expanded its test-work in aluminium-oxide coating of both lithium-ion cathode and anode active material utilising the Company's 5N purity aluminium nitrate as the chemical precursor.

The coating process is capable of delivering a fine controlled coating of either high purity alumina (Al_2O_3) or high purity boehmite (Al-O-OH) on either lithium-ion battery anode or cathode particles. The coating delivers a number of benefits including increased rate performance, improved safety and faster charging. First stage electrochemical results have proved strongly encouraging, particularly for the boehmite coating path, which as a lower temperature process, represents a significantly lower cost coating.

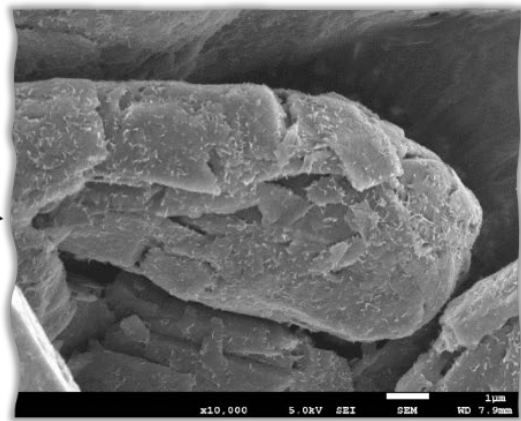
The test-work is specifically designed to facilitate increased end-user acceptance of Alpha's 5N purity aluminium nitrate precursor as the key ingredient in the coating process.

Alpha HPA Limited and its controlled entities

Directors' Report



SEM image of raw, uncoated
graphite anode particles



SEM of ultra fine (10-20nm)
Boehmite (Al-O-OH) coated anode particles

During the period, Alpha announced that a further four Li-B anode groups, including both existing large scale anode manufacturers as well as anode developers, will commence aluminium oxide coating testwork using Alpha's aluminium nitrate as a precursor.

Alpha now has active coating test-work underway or commencing with eight separate counterparties including large scale battery manufacturers as well as anode and cathode developers.

Based on the expanding interest in this application, Alpha considers the wider adoption of the coating process to be capable of driving commercial volume demand for the Company's 5N purity aluminium nitrate.

Project site visit by Li-B cathode manufacturer

Alpha has recently hosted a site visit from a large European Li-B cathode manufacturer with whom Alpha is in product qualification testing. The site visit is a required component of the on-boarding of their new suppliers.

Alpha HPA Limited and its controlled entities

Directors' Report

PRODUCT DEVELOPMENT

Throughout the period, Alpha continued to receive inbound end-user requests for new product development. Alpha's process flexibility and continuous operation of the Brisbane demonstration facility provides the opportunity to rapidly adjust process conditions to deliver new product specifications.

Alpha is very selective on new product development requests and is careful to allocate product development resources only in circumstances where there is a clear commercial benefit on a successful outcome.

The following new high purity aluminum products were developed during the period.

Successful development of Tri-Hydroxide (ATH)

Following interactions with several significant lithium-ion cathode manufacturers and a global advanced materials company, Alpha's product development team successfully developed a 4N+ $\text{Al}(\text{OH})_3$ (ATH) product with numerous sample products having now been shipped and under qualification testing.

This product is a potential high volume product across a diverse spectrum of applications including lithium refining and as a dopant in cathode and speciality glass manufacture.

Successful development of 5N purity anhydrous Al-sulphate precursor

Following interaction with a significant lithium-ion cathode manufacturer, Alpha's product development team have successfully developed an anhydrous form of its aluminium sulphate precursor at 5N purity.

Alpha is now marketing both anhydrous and hydrated aluminium sulphate precursors, per below:

- Hydrous Al-sulphate >> $\text{Al}_2(\text{SO}_4)_3 \cdot 16\text{H}_2\text{O}$
- Anhydrous Al-sulphate >> $\text{Al}_2(\text{SO}_4)_3$

In the period, test samples of anhydrous aluminium sulphate were delivered to two cathode manufacturers.

Alpha HPA Limited and its controlled entities

Directors' Report

STAGE 2 – FULL-SCALE PROJECT

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

Federal Govt \$45M MMI-C grant advanced

Alpha has been notified that \$45 million grant approved under the Modern Manufacturing Initiative, collaborations stream (MMI-C) is proceeding to negotiation of a grant agreement. Funding under this MMI-C grant will only be available once the Company reaches FID on Stage 2 of the HPA First Project.

Product Optimisation

Alpha has substantially progressed a study on the full-scale facility to accommodate marketing feedback and indicative product demand. The optimised Project will include higher volumes of aluminium precursors and capacity to deliver specific products to the sapphire glass, Li-ion battery, LED and catalyst sectors. The re-configured HPA First Project product scenarios will form the final basis for Project financing.

Multi-product engineering advanced

Alpha has advanced engineering studies to incorporate multiple high purity aluminium products into Stage 2 of the HPA First Project. The Company has engaged an engineering and Structural, Mechanical & Piping (SMP) firm that specialises in off-site plant pre-assembly with a view to delivering material capital expenditure reductions in a final delivered plant.

Lender due diligence advanced

Alpha continues to advance the lender due diligence process. Following the completion of technical ITE (Independent Technical Engineer) reports and the third party, independent Environment & Social (E&S) reports, Alpha has now provided lenders with third party CO₂ modelling data and updated Project marketing status.

Multiple stakeholder site visits

Alpha hosted multiple site visits to the HPA Project site with respect to participation in the Stage 2 Project finance and construction. Participants included potential strategic investors, existing investors as well as engineering firms engaged to progress the Stage 2 design.

Alpha HPA Limited and its controlled entities

Directors' Report

CORPORATE

Strategic equity placement with Orica

In November 2022, the Company executed a Subscription Agreement whereby Orica acquired a 5% equity interest in the Company.

The funds are being used to accelerate final engineering and product marketing for the full-scale HPA First Project at Gladstone and to advance feasibility studies on the potential of an additional HPA manufacturing facility in North America, with the remaining funds used for general working capital. Under the Subscription Agreement, Orica subscribed for 44,982,980 ordinary shares at \$0.44 per share to raise ~\$19.8M.

North American Memorandum of Understanding

At the same time as executing the strategic placement with Orica, Alpha signed a non-binding Memorandum of Understanding ('MoU') with Orica to mutually investigate the technical and commercial feasibility of establishing a new manufacturing facility in North America to produce high-purity aluminium products for the rapidly expanding future-facing industries in the region.

The facility would seek to leverage and replicate the chemical process synergies that have been successfully established between Orica and Alpha in the development of the HPA First Project at Gladstone, Queensland. This would include the supply of process reagents and the offtake of process by-products to/from Alpha's and Orica's manufacturing facility, supporting circularity between the two parties.

The rationale for exploring an operational footprint in North America for Alpha is to provide a local production source to supply and capitalise on the rapidly expanding manufacturing capacity across future-facing industries in the region, including the lithium-ion battery sector, and re-shoring of supply chains into the semiconductor sector. Both sectors are key markets for Alpha's high-purity aluminium products, and both are being stimulated by key legislative initiatives including the US Inflation Reduction Act and the US CHIPS Act.

Alpha and Orica will initially focus on the technical and commercial feasibility through 2023 of a new manufacturing facility to produce high-purity aluminium products near Orica's Carseland manufacturing centre in Alberta, Canada.

Appointment of Non-Executive Director

In September 2022, the Company appointed Dr Regan Crooks as a Non-Executive Director. Regan is a Chemical Engineer who brings a wealth of experience in technology commercialisation and corporate strategy at a critical time in Alpha's development as a world class industrial chemical company.

Working in senior executive and consulting roles over the last 20 years, Regan has supported numerous multinationals, start-ups, research and venture capital groups to develop innovative products and to rapidly scale and enter global markets. As consulting CEO for private companies including Future Feed Pty Ltd and Growave Pty Ltd, Regan has been directly involved and responsible for securing numerous international licensing and collaboration partnerships and bringing new technologies to market.

Regan also has direct experience in the chemicals market having spent 7 years as R&D Manager at Solvay, a leading multinational chemical company, where she was a part of a senior management team developing and commercialising new products.

Alpha HPA Limited and its controlled entities

Directors' Report

Receipt of \$2.0M R&D Tax Rebate

In August 2022, Alpha received an R&D Tax Incentive refund of \$2.0 million for the 2020/21 financial year.

The R&D Tax Incentive is an Australian Government program under which companies receive cash refunds for 43.5% of eligible expenditure on research and development.

Subsequent Events

No matters or circumstances have arisen since the end of the reporting period, which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in future financial years.

LEAD AUDITOR'S INDEPENDENCE DECLARATION

A copy of the Lead Auditor's Independence Declaration on page 18 as required under Section 307C of the Corporations Act 2001 is attached to, and forms part of the Directors' Report for the half-year ended 31 December 2022.

Signed in accordance with a resolution of the Directors.



Norman A. Seckold
Chairman
Sydney, 24 February 2023



Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

To the Directors of Alpha HPA Limited

I declare that, to the best of my knowledge and belief, in relation to the review of Alpha HPA Limited for the half-year ended 31 December 2022 there have been:

- i. no contraventions of the auditor independence requirements as set out in the *Corporations Act 2001* in relation to the review; and
- ii. no contraventions of any applicable code of professional conduct in relation to the review.

A stylized, handwritten-style signature of the KPMG firm.

KPMG

A handwritten signature of Stephen Board.

Stephen Board
Partner

Brisbane
24 February 2023

Alpha HPA Limited and its controlled entities
Condensed Consolidated Interim Statement of Profit or Loss and
Other Comprehensive Income
for the half-year ended 31 December 2022

	31 December 2022 \$	31 December 2021 \$
Continuing operations		
Sales revenue	8,595	11,140
Cost of sales	(5,369)	-
Administration and consultants' expenses	(4,590,131)	(1,195,673)
Audit, legal and other professional fees	(123,165)	(292,005)
Depreciation	(116,605)	(36,691)
Director and company secretarial fees	(409,419)	(187,599)
Share based payments	8 (1,217,802)	(684,057)
Research and development expenses	(887,270)	(4,817,164)
Exploration and evaluation expenses	-	(1,050)
Impairment loss on exploration and evaluation assets	-	(80,000)
Marketing and market outreach costs	(562,608)	(45,460)
Unrealised gain on investment	4 3,330,244	117,792
Operating loss before financing income	(4,573,530)	(7,210,767)
Finance income	100,306	19,527
Finance expense	(10,386)	(18,365)
Net finance income/(expense)	89,920	1,162
Loss before income tax	(4,483,610)	(7,209,605)
Income tax expense	-	-
Loss for the period	(4,483,610)	(7,209,605)
Other comprehensive income for the period		
Items that may be classified subsequently to profit or loss		
Total other comprehensive income	-	-
Total comprehensive loss for the period	(4,483,610)	(7,209,605)
Earnings per share		
Basic and diluted loss per share attributable to ordinary equity holders (cents per share)	(0.55)	(0.91)

The above statement should be read in conjunction with the accompanying notes.

Alpha HPA Limited and its controlled entities
Condensed Consolidated Interim Statement of Financial Position
as at 31 December 2022

	Note	31 December 2022 \$	30 June 2022 \$
Current assets			
Cash and cash equivalents		28,258,805	16,831,134
Trade and other receivables	3	9,814,460	3,153,883
Prepayments		361,292	241,959
Inventory		83,406	10,935
Total current assets		38,517,963	20,237,911
Non-current assets			
Property, plant and equipment	5	30,691,331	28,295,635
Right-of-use-assets		387,765	493,946
Investments	4	8,659,046	5,328,802
Deposits		289,454	205,482
Total non-current assets		40,027,596	34,323,865
Total assets		78,545,559	54,561,776
Current liabilities			
Trade and other payables		4,621,299	7,155,272
Deferred government grant	6	6,603,511	-
Lease liability		220,645	213,573
Total current liabilities		11,445,455	7,368,845
Non-Current liabilities			
Lease liability		213,694	324,018
Total current liabilities		213,694	324,018
Total liabilities		11,659,149	7,692,863
Net assets		66,886,410	46,868,913
Equity			
Issued capital	7	127,550,697	101,716,126
Reserves		8,317,317	9,650,781
Accumulated losses		(68,981,604)	(64,497,994)
Total equity		66,886,410	46,868,913

The above statement should be read in conjunction with the accompanying notes.

Alpha HPA Limited and its controlled entities
Condensed Consolidated Interim Statement of Changes in Equity
for the half-year ended 31 December 2022

	Note	Issued Capital \$	Reserves \$	Accumulated Losses \$	Total \$
Balance as at 1 July 2021		99,799,748	7,622,477	(57,138,870)	50,283,355
Total comprehensive income for the period					
Loss for the period		-	-	(7,209,605)	(7,209,605)
Total comprehensive loss for the year		-	-	(7,209,605)	(7,209,605)
Transactions with owners, recorded directly in equity					
Contributions by and distributions to owners					
Issue of shares	7	900,000	-	-	900,000
Cost of issue		(6,200)	-	-	(6,200)
Fair value of options exercised during the period		234,701	(234,701)	-	-
Share based payments		-	684,057	-	684,057
Total contributions by and distributions to owners		1,128,501	449,356	-	1,577,857
Balance at 31 December 2021		100,928,249	8,071,833	(64,348,475)	44,651,607
Balance as at 1 July 2022		101,716,126	9,650,781	(64,497,994)	46,868,913
Total comprehensive income for the period					
Loss for the period		-	-	(4,483,610)	(4,483,610)
Total comprehensive loss for the year		-	-	(4,483,610)	(4,483,610)
Transactions with owners, recorded directly in equity					
Contributions by and distributions to owners					
Issue of shares	7	23,332,511	-	-	23,332,511
Cost of issue	7	(49,206)	-	-	(49,206)
Fair value of options exercised during the period	7	2,551,266	(2,551,266)	-	-
Share based payments	8	-	1,217,802	-	1,217,802
Total contributions by and distributions to owners		25,834,571	(1,333,464)	-	24,501,107
Balance at 31 December 2022		127,550,697	8,317,317	(68,981,604)	66,886,410

The above statement should be read in conjunction with the accompanying notes

Alpha HPA Limited and its controlled entities
Condensed Consolidated Interim Statement of Cash Flows
for the half-year ended 31 December 2022

	Note	31 December 2022 \$	31 December 2021 \$
Cash flows from operating activities			
Receipts from customers		2,208	-
Cash payments in the course of operations		(3,359,003)	(1,691,509)
Interest received		100,184	19,527
Interest paid		-	(2,619)
Government grants and incentives		2,001,120	
Net cash from/(used in) operating activities		(1,255,491)	(1,674,601)
Cash flows from investing activities			
Payments for exploration expenditure		-	(1,050)
Payments for research and development expenditure		(1,731,241)	(5,961,379)
Payments for plant and equipment		(14,942,601)	(4,499,517)
Payments for purchase of land		-	(2,648,851)
Payments for security deposits		(34,471)	-
Government grants and incentives		6,200,000	-
Net cash used in investing activities		(10,508,313)	(13,110,797)
Cash flows from financing activities			
Proceeds from the issue of shares	7	23,332,511	900,000
Transaction costs on the issue of shares	7	(49,206)	(6,200)
Repayment of lease liability		(103,252)	(29,714)
Net cash from financing activities		23,180,053	864,086
Net increase/(decrease) in cash and cash equivalents		11,416,249	(13,921,312)
Cash and cash equivalents at 1 July		16,831,134	50,344,366
Effect of exchange rate adjustments on cash held		11,422	(15,746)
Cash and cash equivalents at 31 December		28,258,805	36,407,308

The above statement should be read in conjunction with the accompanying notes.

Alpha HPA Limited and its controlled entities

Notes to the Condensed Consolidated Interim Financial Statements

for the half-year ended 31 December 2022

1. REPORTING ENTITY

Alpha HPA Limited ('the Company') is a company domiciled in Australia. The condensed consolidated interim financial statements of the Company as at and for the half-year ended 31 December 2022 comprise the Company and its controlled entities (together referred to as 'the Group').

The Group is a for-profit entity developing the HPA First Project, to produce high purity aluminum products for the battery, LED and semi-conductor markets

The consolidated annual financial report of the Group as at and for the year ended 30 June 2022 is available upon request from the Company's registered office at Level 2, 66 Hunter Street, Sydney, NSW, 2000 or at www.alphahpa.com.au.

2. BASIS OF PREPARATION

(a) Statement of compliance

The condensed consolidated interim financial statements are general purpose financial statements prepared in accordance with the requirements of the Corporations Act 2001 and Australian Accounting Standard AASB 134 'Interim Financial Reporting'.

The condensed consolidated interim financial statements do not include full disclosures of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the annual financial report for the year ended 30 June 2022 and any public announcements made by the Company during the interim reporting period in accordance with the continuous disclosure requirements of the Corporations Act 2001 and the ASX Listing Rules.

These condensed consolidated interim financial statements were authorised for issue by the Directors on 24 February 2023.

(b) Estimates

The preparation of the condensed consolidated interim financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expense. Actual results may differ from these estimates.

The significant judgements made by management in applying Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied in the consolidated annual financial report for the year ended 30 June 2022. These were:

- Accounting for research and development activities, which involves distinguishing between research and development activities in accordance with AASB 138. Management have determined that the criteria to capitalise development costs for the full scale HPA First plant has not been met during the period.
- Note 8 Share Based Payments.
- Unrecognised Deferred Tax Assets.

(c) Changes in accounting policies

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2022 and have not been applied in preparing these consolidated financial statements. None of these are expected to have a significant effect on the financial statements of the Group.

(d) Going concern

The consolidated financial statements have been prepared on a going concern basis, which contemplates the continuation of normal business operations and the realisation of assets and settlement of liabilities in the normal course of business. The Group incurred a loss after tax of \$4,483,610 (2021 - \$7,210,767), and had net cash outflows from operating activities, payment for property, plant and equipment and research and development expenditure of \$17,929,333 (2021 - \$14,785,398) for the half year ended 31 December 2022.

Alpha HPA Limited and its controlled entities

Notes to the Condensed Consolidated Interim Financial Statements for the half-year ended 31 December 2022

The Group's main activity is development of the HPA First Project and as such it does not presently have a source of operating income, rather it is reliant on equity raisings or funds from other external sources to fund its activities.

The Directors have prepared cash flow projections for the period from 1 January 2023 to 28 February 2024 that support the ability of the Group to continue as a going concern. These cash flow projections assume net cash outflows from operating and investing activities will continue and the operational expenditures are maintained within available funding levels. In addition, the cash flow projections indicate sufficient funds are available for the Group to realise its assets and extinguish its liabilities in the ordinary course of operations and at the amounts stated in the consolidated financial statements.

Accordingly, the consolidated financial statements for the half year ended 31 December 2022 have been prepared on a going concern basis as, in the opinion of the Directors, the Group will be in a position to continue to meet its planned activities and operating costs and pay its debts as and when they fall due for at least twelve months from the date of this report.

	As at 31 December 2022 \$	As at 30 June 2022 \$
3. TRADE AND OTHER RECEIVABLES		
<i>Current</i>		
GST receivable	472,387	1,113,876
R&D rebate receivable	-	2,001,120
Other receivables	42,073	38,887
Government grant receivable	9,300,000*	-
	9,814,460	3,153,883

* Relates to Federal Government grant funding of \$15.5 million under the Critical Minerals Development Program (CMDP), of which \$6.2M was received during the period.

4. INVESTMENTS

<i>Current</i>		
Opening balance	5,328,802	37,438
Share consideration received for disposal of the Collerina Project	-	340,000
Share consideration received for disposal of the Wonogiri Project	-	3,425,000
Unrealised gain	3,330,244	1,526,364
Closing balance	8,659,046	5,328,802

At 31 December 2022 the Company held the following shares in ASX listed entities:

- 17,125,000 shares in Far East Gold Limited, the fair value of which was \$8,220,000;
- 20,000,000 shares in Helix Resources Limited the fair value of which was \$140,000; and
- 456,558 shares in Santana Minerals Limited, the fair value of which was \$299,046.

Fair value is based on the closing market value of the shares on the last day of trading on ASX prior to 31 December 2022. The fair value measurements for the Group's investments have been categorised as Level 1 fair values based on quoted prices in an active market for identical assets.

Alpha HPA Limited and its controlled entities
Notes to the Condensed Consolidated Interim Financial Statements
for the half-year ended 31 December 2022

	As at 31 December 2022 \$	As at 30 June 2022 \$
5. PROPERTY, PLANT AND EQUIPMENT		
Construction in progress	-	25,619,136
Precursor plant facility*	27,913,168	-
Land	2,648,851	2,648,851
Office equipment	17,509	24,202
Machinery	65,398	-
Motor vehicles	43,139	-
Furniture and fittings	3,266	3,446
	30,691,331	28,295,635

* \$8,896,489 of government grant income earned during the period was offset against the carrying value of the precursor plant facility during the period. See Note 6 for further details.

6. DEFERRED GOVERNMENT GRANT

Opening balance	-	-
Recognition of deferred government grant	15,500,000	
Unwind government grant against property, plant and equipment	(8,896,489)	-
Closing balance	6,603,511	-

Upon confirmation of \$15.5 million of grant funding under the Federal Government's Critical Minerals Development Program (CMDP) the Company recognised this amount as a deferred government grant. Eligible expenditure under the grant agreement has been undertaken by the Company to expand the production capability of the Precursor Production Facility (PPF). In accordance with AASB 120 – Accounting for Government Grants and Disclosure of Government Assistance, the Company has recognised \$8,896,489 of total eligible government grant income earned for the period and has reduced the carrying value of the PPF by the same amount.

	As at 31 December 2022 \$	As at 31 December 2021 \$
7. ISSUED CAPITAL		
Issued and paid up capital		
857,219,604 ordinary shares fully paid (31 December 2021 – 793,284,971)	127,550,697	100,928,249

	N° of shares	\$	N° of shares	\$
Ordinary shares				
Fully paid ordinary shares carry one vote per share and carry the right to dividends.				
Balance at the beginning of the period	795,486,624	101,716,126	790,284,971	99,799,748
Issue of shares	44,982,980	19,792,511	-	-
Exercise of options	16,750,000	6,091,266	3,000,000	1,134,701
Costs of issue	-	(49,206)	-	(6,200)
Balance at the end of the period	857,219,604	127,550,697	793,284,971	100,928,249

Alpha HPA Limited and its controlled entities

Notes to the Condensed Consolidated Interim Financial Statements for the half-year ended 31 December 2022

7. ISSUED CAPITAL (continued)

During the period ended 31 December 2022, the Company issued 11,800,000 shares at \$0.30 each for cash totalling \$3,540,000, following the exercise of 11,800,000 \$0.30 options. The grant date fair value of the share options exercised transferred from reserves to share capital was \$1,268,289. Share costs totalled \$18,281.

Additionally, the Company issued 4,950,000 shares following the cashless conversion of 19,800,000 \$0.30 options. The grant date fair value of the share options exercised transferred from reserves to share capital was \$1,282,977.

In November 2022 the Company issued 44,982,980 shares at \$0.44 each, to Orica Investments Pty Ltd, for cash totalling \$19,792,511. Share costs totalled \$30,925.

During the period ended 31 December 2021, the Company issued 3,000,000 shares at \$0.30 each for cash totalling \$900,000, following the exercise of 3,000,000 \$0.30 options. The grant date fair value of the share options exercised transferred from reserves to share capital was \$234,701.

8. SHARE BASED PAYMENTS

During the half-year ended 31 December 2022, the following options were issued:

- The Company issued 3,000,000 \$0.90 options for no consideration with a grant date of 23 November 2022 and an expiry date of 31 August 2025, to Director Dr Regan Crooks. The fair value of the options granted is measured using a Black-Scholes formula, taking into account the terms and conditions upon which the options were granted. The fair value of the options granted was \$789,000. The Black-Scholes formula model inputs were the Company's share price of \$0.595 at the grant date, a volatility factor of 85% (based on historical share price performance), a risk-free interest rate of 3.27% and a dividend yield of 0%. One third of the options vested on grant date, 1/3 vest on 31 August 2023 and 1/3 vest on 31 August 2024. A share based payment expense of \$314,013 was taken up during the half-year ended 31 December 2022.

No options were issued during the half-year ended 31 December 2021.

At 31 December 2022, unissued ordinary shares of the Company under option are:

Number of options	Exercise price	Expiry date	Expense recognised during current period
26,000,000	\$0.35	31 July 2023	76,155
5,000,000	\$0.35	30 September 2023	-
11,440,000	\$0.90	30 April 2025	827,634
3,000,000	\$0.90	31 August 2025	314,013

Alpha HPA Limited and its controlled entities
Notes to the Condensed Consolidated Interim Financial Statements
for the half-year ended 31 December 2022

9. SEGMENT REPORTING (continued)

Segment information is presented in respect of the Group's management and internal reporting structure.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly income earning assets and revenue, interest bearing loans, borrowings and expenses, and corporate assets and expenses.

Segment capital expenditure is the total cost incurred during the period to acquire segment assets that are expected to be used for more than one period in that geographic region.

For the half-year ended 31 December 2022, the Group had one segment, being development of the HPA First Project.

	HPA First Project \$	Exploration and Evaluation \$	Total \$
31 December 2022			
Revenue	8,595	-	8,595
Reportable segment loss before tax	(5,449,795)	-	(5,449,795)
Reportable segment assets	40,768,198	-	40,768,198
Reportable segment liabilities	10,545,161	-	10,545,161
31 December 2021			
Revenue	11,140	-	11,140
Reportable segment loss before tax	(5,622,650)	(1,050)	(5,623,700)
Reportable segment assets	8,548,787	365,129	8,913,916
Reportable segment liabilities	1,837,321	-	1,837,321

	As at 31 December 2022 \$	As at 31 December 2021 \$
Reconciliations of reportable segment revenues and profit or loss		
Profit or loss		
Total loss for reportable segments	(5,449,795)	(5,623,700)
Unallocated amounts:		
Interest income	100,306	19,527
Net other corporate income/(expenses)	865,879	(1,605,432)
Consolidated loss before tax	(4,483,610)	(7,209,605)

Alpha HPA Limited and its controlled entities

Notes to the Condensed Consolidated Interim Financial Statements for the half-year ended 31 December 2022

9. SEGMENT REPORTING

Reconciliations of reportable assets and liabilities

Assets

Total assets for reportable segments	40,768,198	8,913,916
Unallocated corporate assets	37,777,361	37,776,379
Consolidated total assets	<u>78,545,559</u>	<u>46,690,295</u>

Liabilities

Total liabilities for reportable segments	10,545,161	1,837,321
Unallocated corporate liabilities	1,113,988	201,367
Consolidated total liabilities	<u>11,659,149</u>	<u>2,038,688</u>

10. RELATED PARTIES

Key management personnel and Director transactions

A number of key management persons, or their related parties, hold positions in other entities that result in them having control or joint control over the financial or operating policies of those entities.

These entities transacted with the Group during the half-year as follows:

- During the half-year year ended 31 December 2022, Norman Seckold and Peter Nightingale held a controlling interest in an entity, MIS Corporate Pty Ltd, which provided full administration services to the Group, including rental accommodation, administrative, accounting and investor relations staff both, services and supplies. Fees charged by MIS Corporate Pty Ltd during the half-year amounted to \$192,500 (31 December 2021 - \$195,812). At 31 December 2022 there was \$42,000 outstanding (31 December 2021 - \$7,272).

11. FINANCIAL INSTRUMENTS

Financial risk management

The Group's financial risk management objectives and policies are consistent with those disclosed in the consolidated annual financial report as at and for the year ended 30 June 2022.

Carrying amounts versus fair values

The carrying amounts of financial assets and financial liabilities included in the balance sheet approximate fair values.

12. SUBSEQUENT EVENTS

No matters or circumstances have arisen since the end of the reporting period, which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in future financial years.

Alpha HPA Limited and its controlled entities Directors' Declaration

In accordance with a resolution of the Directors of Alpha PHA Limited, I state that:

In the opinion of the Directors:

- (a) the interim financial report and notes set out on pages 19 to 28 are in accordance with the *Corporations Act 2001* including:
 - (i) giving a true and fair view of the Group's financial position as at 31 December 2022 and of its performance for the half-year ended on that date; and
 - (ii) complying with Australian Accounting Standard AASB 134 'Interim Financial Reporting' and the Corporations Regulations 2001; and
- (b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

The Directors have been given the declarations required by Section 295A of the Corporations Act 2001 from the chief executive officer and chief financial officer for the financial half year ended 31 December 2022.

Signed in accordance with a resolution of the Directors.



Norman A. Seckold
Chairman

Sydney, 24 February 2023



Independent Auditor's Review Report

To the shareholders of Alpha HPA Limited

Report on the Interim Financial Report

Conclusion

We have reviewed the accompanying **Interim Financial Report** of Alpha HPA Limited.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the Interim Financial Report of Alpha HPA Limited does not comply with the *Corporations Act 2001*, including:

- giving a true and fair view of the **Group's** financial position as at 31 December 2022 and of its performance for the **half-year** ended on that date; and
- complying with *Australian Accounting Standard AASB 134 Interim Financial Reporting* and the *Corporations Regulations 2001*.

The **Interim Financial Report** comprises:

- Condensed consolidated statement of financial position as at 31 December 2022
- Condensed consolidated statement of profit or loss and other comprehensive income, Condensed consolidated statement of changes in equity and Condensed consolidated statement of cash flows for the half-year ended on that date
- Notes 1 to 12 comprising a summary of significant accounting policies and other explanatory information
- The Directors' Declaration.

The **Group** comprises Alpha HPA limited (the Company) and the entities it controlled at the half-year's end or from time to time during the half-year.

Basis for Conclusion

We conducted our review in accordance with ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity*. Our responsibilities are further described in the *Auditor's Responsibilities for the Review of the Financial Report* section of our report.

We are independent of the Company in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the *Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with these requirements.

Responsibilities of the Directors for the Interim Financial Report

The Directors of the Company are responsible for:

- the preparation of the Interim Financial Report that gives a true and fair view in accordance with *Australian Accounting Standards* and the *Corporations Act 2001*
- such internal control as the Directors determine is necessary to enable the preparation of the Interim Financial Report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Review of the Interim Financial Report

Our responsibility is to express a conclusion on the Interim Financial Report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the Interim Financial Report does not comply with the *Corporations Act 2001* including giving a true and fair view of the Group's financial position as at 31 December 2022 and its performance for the half-year ended on that date, and complying with *Australian Accounting Standard AASB 134 Interim Financial Reporting* and the *Corporations Regulations 2001*.

A review of an Interim Period Financial Report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with *Australian Auditing Standards* and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.



KPMG



Stephen Board
Partner

Brisbane
24 February 2023