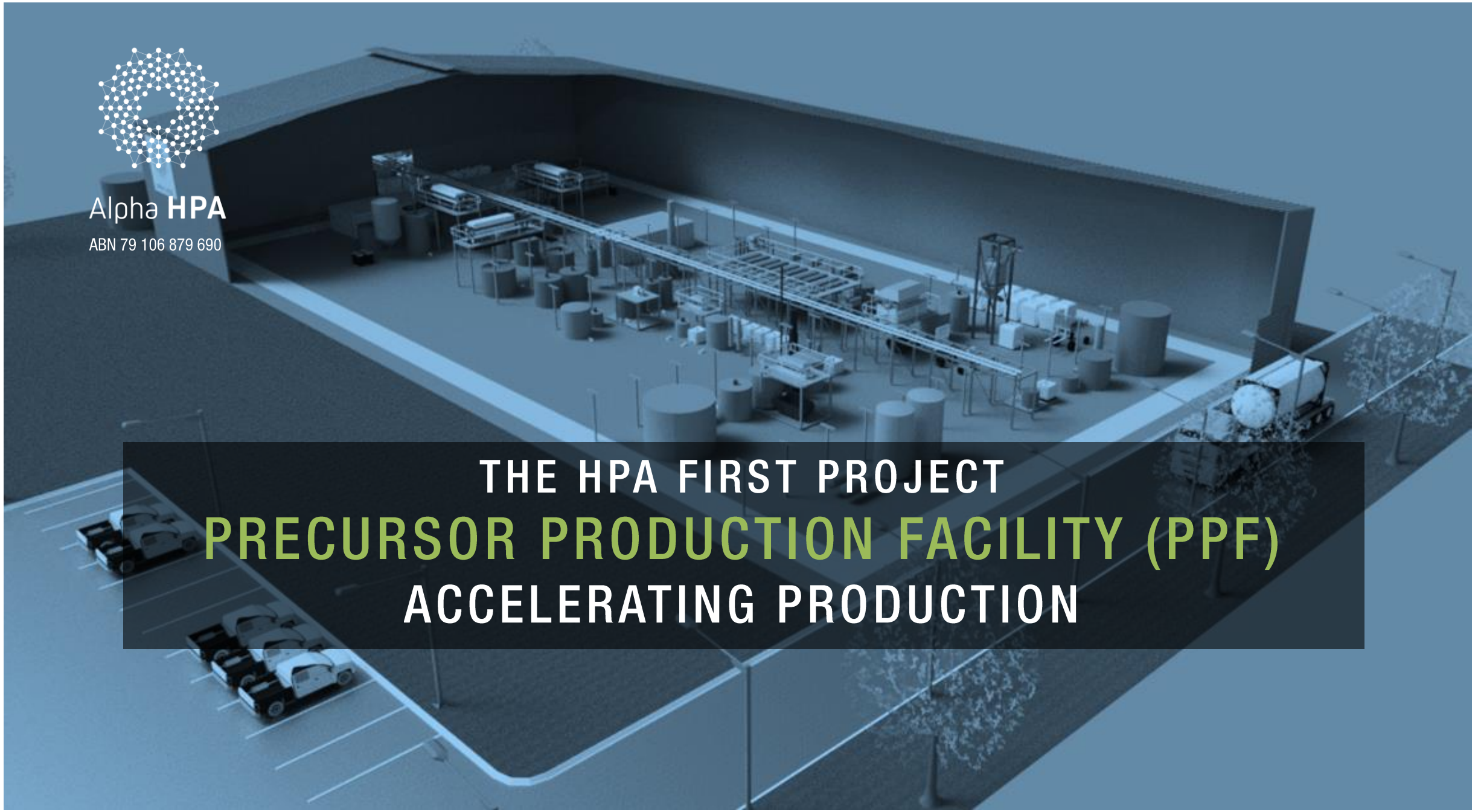
Alpha **HPA**

ABN 79 106 879 690



THE HPA FIRST PROJECT

PRECURSOR PRODUCTION FACILITY (PPF)

ACCELERATING PRODUCTION

Forward Looking and Cautionary Statements

Forward Looking Statements

This document makes contains certain forward-looking statements with respect to the financial condition, results of operations, and business of the Company and certain plans and objectives of the management of the Company. These forward-looking statements involve known and unknown risks, uncertainties and other factors which are subject to change without notice and may involve significant elements of subjective judgement and assumptions as to future events which may or may not occur. Forward-looking statements are provided as a general guide only and there can be no assurance that actual outcomes will not differ materially from these statements. Neither the Company, nor any other person, give any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. In particular, those forward-looking statements are subject to significant uncertainties and contingencies, many of which are outside the control of the Company. A number of important factors could cause actual results or performance to differ materially from the forward looking statements. Investors should consider the forward looking statements contained in this document in light of those disclosures.

Cautionary Statement

The financial metrics of the PPF referred to in this document are based on the material assumptions about the availability of funding and the pricing received for various high purity aluminium products. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by this document will be achieved. Investors should note that there is no certainty that the Company will be able to raise the amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the HPA First project. If it does, this could materially reduce the Company's proportionate ownership of the HPA First project.

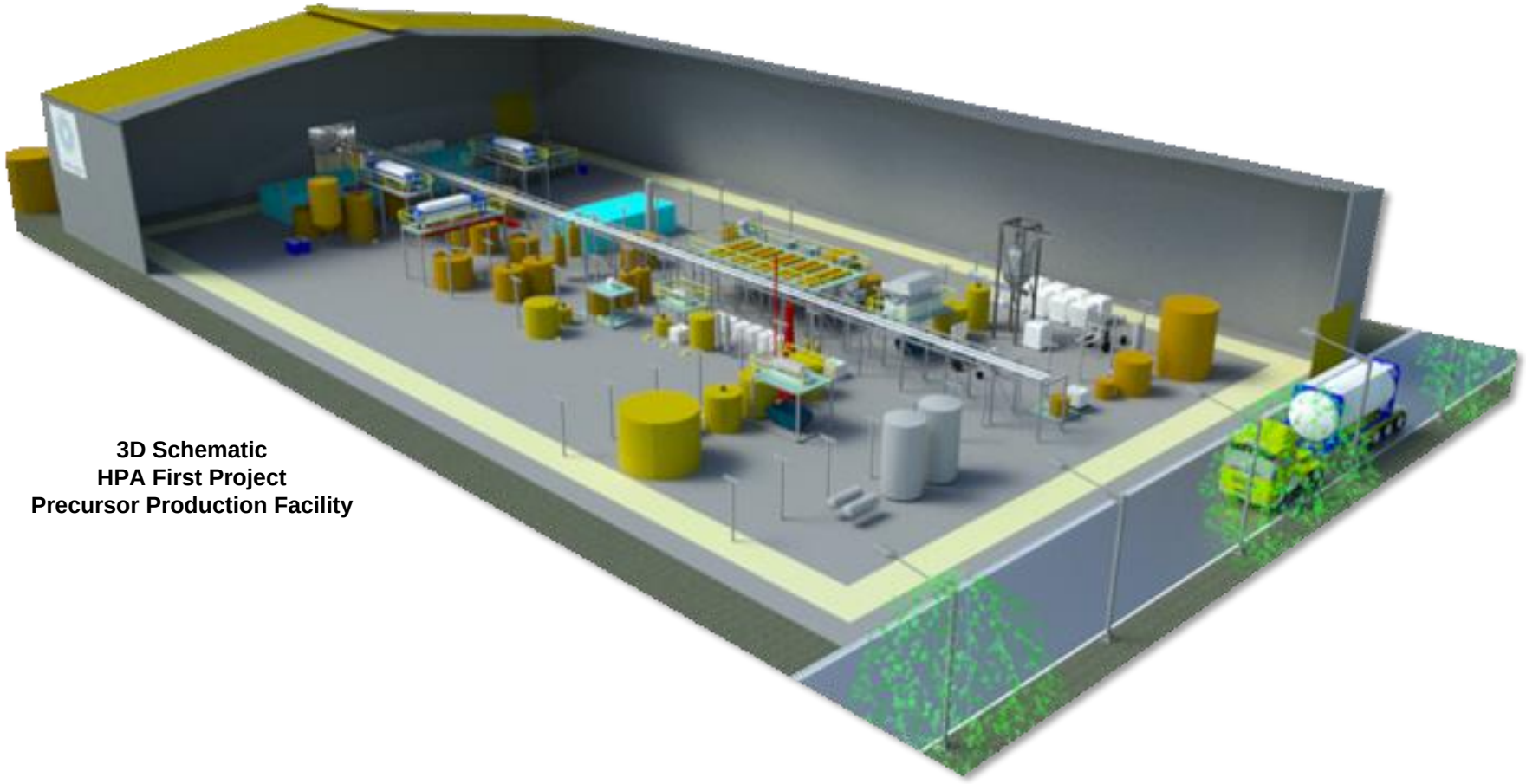
The Company intends to use any funds raised from the Placement to fund the construction costs of a precursor production facility (PPF). The Company has not undertaken a definitive feasibility study for the PPF. The capital costs and operating costs of the PPF have been estimated by third party engineers, however they have not been developed to a definitive feasibility study level and there is a risk that the capital and operating costs will be higher than anticipated. The Company's assessment of the economic viability of the PPF has involved assumptions about the pricing and volumes of products to be manufactured by the PPF, for which there are no present offtake or sale agreements. Consequently, there is a risk that the revenues generated by the sale of products manufactured by the PPF will be less than anticipated. There is no certainty that any assumptions made by the Company in assessing the economic viability of the PPF will be realised and consequently there is a risk that the Company will not generate the returns from the PPF that it anticipates.

HPA First Project: Precursor Production Facility (PPF)

- **Precursor Production Facility (PPF) to accelerate production from the HPA First Project and capture demand for the Company's high purity (5N) Al-precursor products in fast growing technology markets**
- PPF to capture the immediate market opportunity for Al-precursors as well as enhancing the economics of the Full Scale HPA First Plant
- PPF to focus on the Company's 5N Aluminium Precursors, namely:
  - **5N Precursor #1 (Aluminium nitrate-hydrate)**: For various speciality applications including specialty coatings, LED phosphors, lithium ion battery electrode coatings, laser scintillators etc.
  - **5N Precursor #2 (5N Aluminium sulfate-hydrate):** For synthesis of aluminium bearing lithium-ion battery cathode active materials (eg: NCA and NCMA)
- The PPF would have a design capacity of ~ 200 tonnes per annum of Precursor #1 or Precursor #2
- In addition the PPF would also be able to deliver pre-commercial volumes of HPA and boehmite (1-5 tonnes pa)
- The PPF is to be constructed on Alpha's Gladstone site, with only minor amendments to the existing MCU Project Approval
- The PPF to operate initially as a standalone facility, and then incorporated into the Full Scale HPA First Plant
- The PPF will not impact the scheduled commencement of construction or completion of the Full Scale HPA First Plant
- Estimated PPF Capex of $27.6M, inclusive of a 15% contingency
- PPF Production scheduled August 2022

HPA First Project: Precursor Production Facility (PPF)

- PPF designed to fast-track commercial volumes of 5N Al-precursors at ~200 tonnes per annum of Precursor #1 or Precursor #2
- Also able to deliver pre-commercial volumes of HPA and boehmite (1-5 tonnes per annum)
- To be constructed within Alpha's existing HPA First Project site at Gladstone
- Fully vendor quoted CapEx ~A$27.6M



3D Schematic
HPA First Project
Precursor Production Facility

PPF: Key Rationale

The PPF is a compelling strategic and commercial opportunity to position Alpha HPA as a near-term manufacturer of ultra-high purity Aluminium precursors

ACCELERATING PRODUCTION:

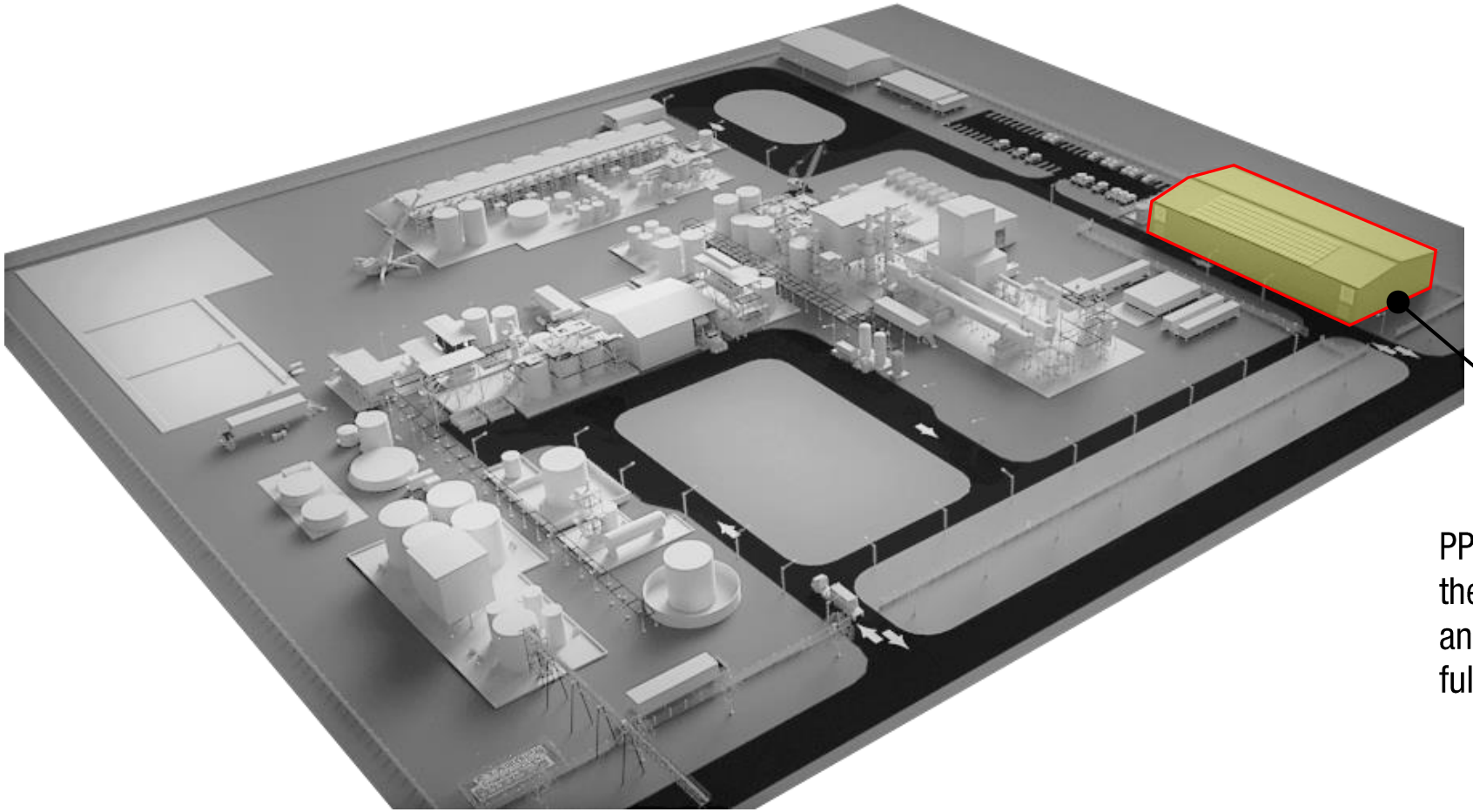
- Capitalising on strong existing demand for Alpha's ultra-high purity precursors, within established end user markets and growing demand from fast moving technology markets
- Establish important brand recognition, premium product reputation and build market share
- Accelerate Project cash flows by 18-24 months
- Across both established and emerging end user markets global supply chains are actively seeking new sources of supply, particularly from "ESG friendly" sources

COMPLIMENTARY TO THE FULL-SCALE HPA FIRST PLANT:

- Complimentary to the Full Scale HPA First Plant, becoming a dedicated unit for high purity Al-sulfate and bespoke high-value HPA and boehmite
- Will not impact the scheduled construction or completion of the Full Scale HPA First Plant
- Provides a fast track to commercial cash flows
- Estimated capital benefit of ~$10M-$15M for the Full Scale HPA First Plant

HPA First Project: PPF Integration

- The PPF to be constructed within the HPA First Project Footprint
- To be incorporated into the Full Scale HPA First Plant as a dedicated unit for 5N Al-Precursor #2.



PPF to be constructed within the HPA First Project footprint, and then incorporated into the full-scale commercial plant.

HPA First Project: PPF Financials

The PPF is forecast to be immediately cash flow positive, producing both Al-Precursor # 1 and Al-Precursor #2 at ~17 metric tonnes per month, with cash flow margins expanding once the Full Scale HPA First Plant is in place.

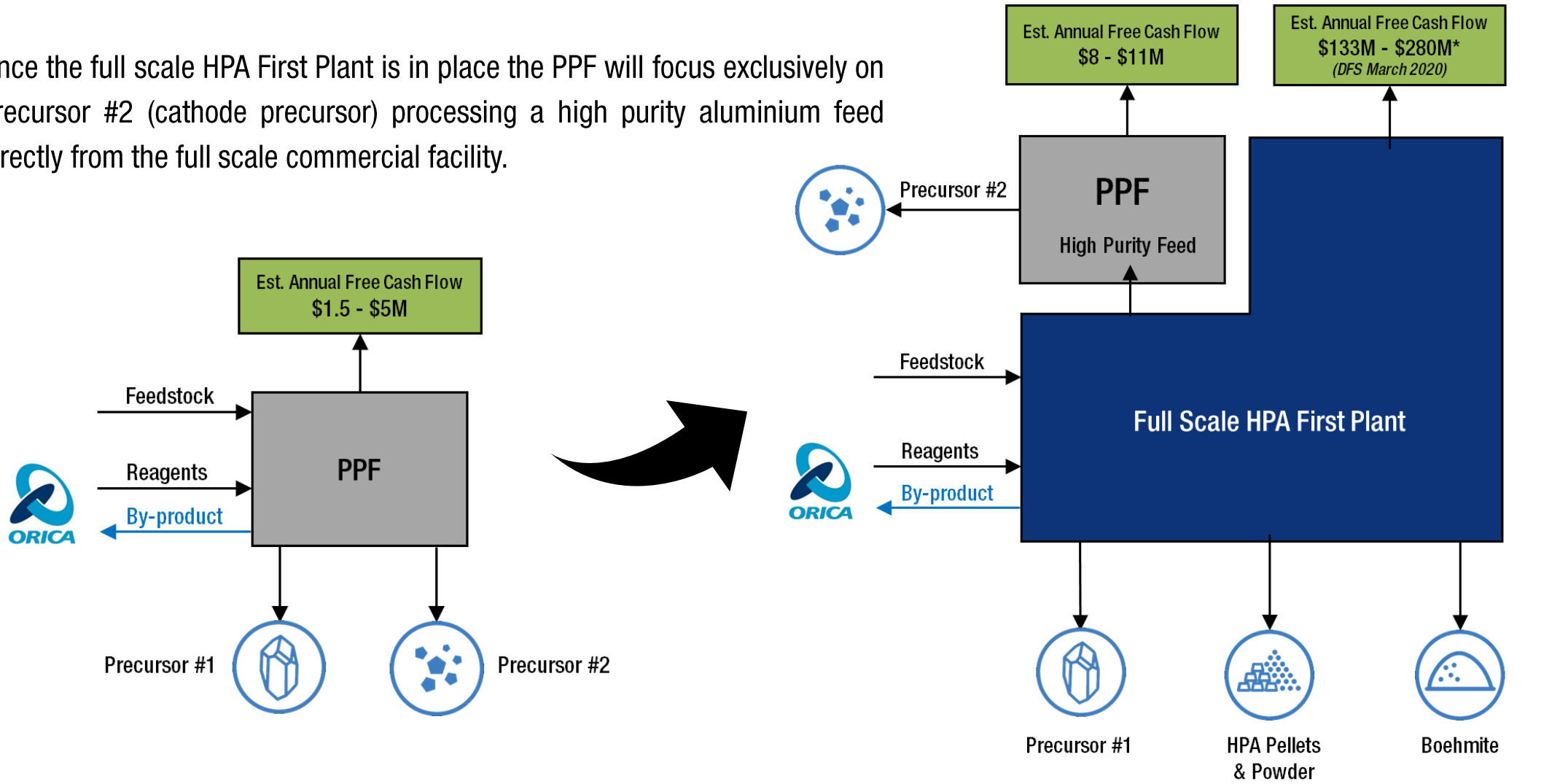
Post integration with the Full Scale HPA First Plant:

- The PPF will focus on Precursor #2 (cathode precursor) and high-value, bespoke orders of alumina and boehmite, processing a high purity aluminium feed directly from the Full Scale HPA First Plant with **an enhanced capacity of +200tpa**
- The majority of the PPF fixed costs will be transferred to the Full Scale HPA First Plant, and the variable costs (reagents, utilities etc) will fall to ~$0.1M pa. The full scale facility will take on the duty of the manufacture of Precursor #1, improving revenue margins for both Precursors.
- The PPF is expected to generate free cash flow of between $8M - $11M pa, in addition to free cash flows generated from the Full Scale HPA First Plant. This increases significantly as Precursor #2 production increase above 200tpa

Product Pricing	Scenario 1	Scenario 2	Scenario 3
Al Precursor #1 (US$/kg)	$50	$55	$65
Al Precursor #2 (US$/kg)	$35	$40	$45
Boehmite/HPA (US$/kg)	$15	$20	$25
Cash Flows PPF Only			
Annual Revenue ($A)	$11.4M	$12.7M	$14.8M
Free Cash Flow ($A) – PPF Only	$1.25M	$2.6M	$4.6M
Cash Flows PPF + Full Scale HPA First Plant			
Annual Revenue ($A)	$10.3M	$11.75M	$13.2M
Free Cash Flow ($A) – PPF+ Commercial	$8.4M	$9.9M	$11.4M

HPA First Project: PPF Integration

- Once the full scale HPA First Plant is in place the PPF will focus exclusively on Precursor #2 (cathode precursor) processing a high purity aluminium feed directly from the full scale commercial facility.

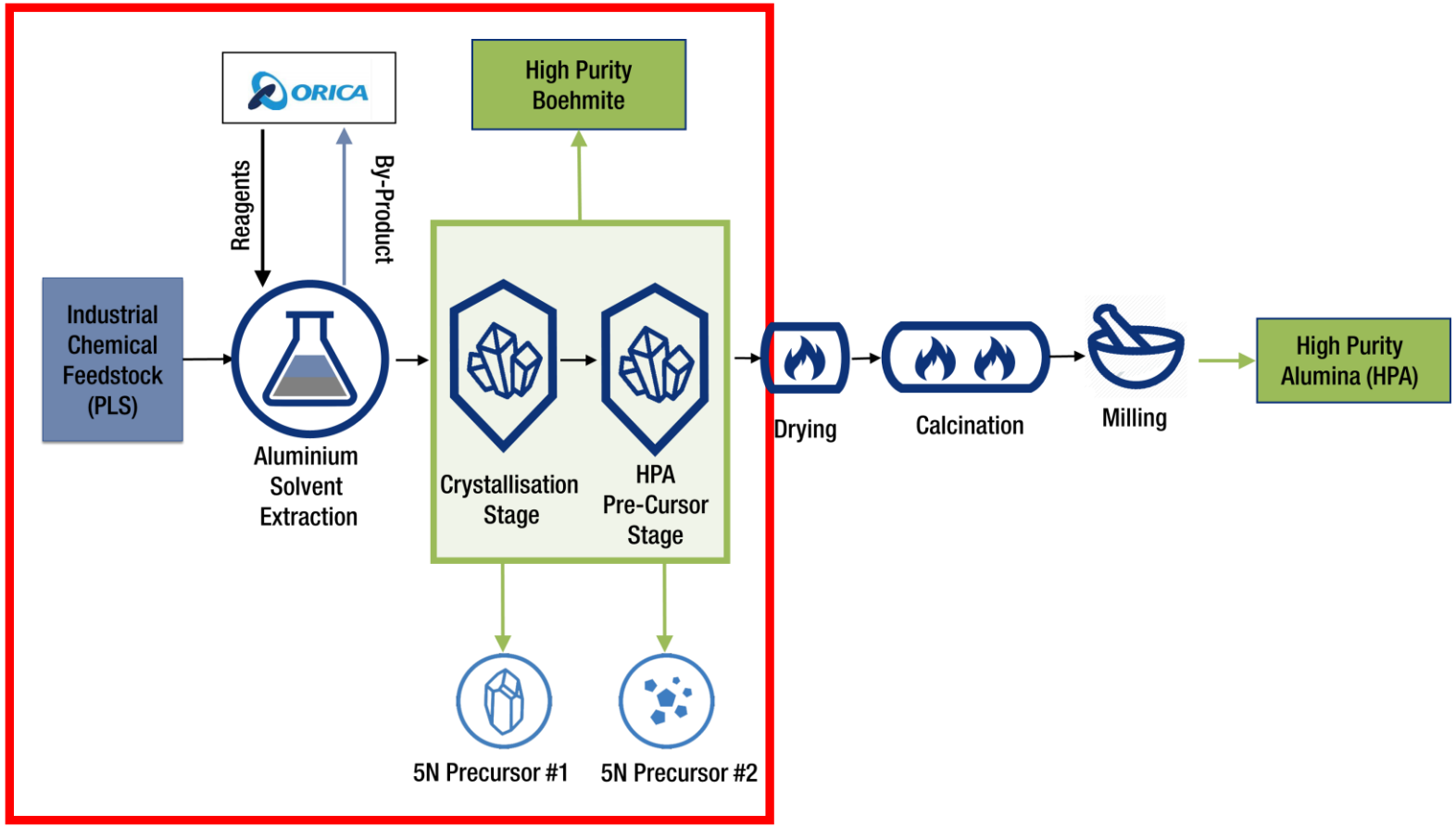


STAGE 1: PPF

STAGE 2: PPF + Full Scale Commercial Plant

PPF: Process Flow Sheet

- PPF will focus on the front end of the HPA First Process Flow Sheet
- Process Flow Sheet demonstrated with over 2,000 operating hours

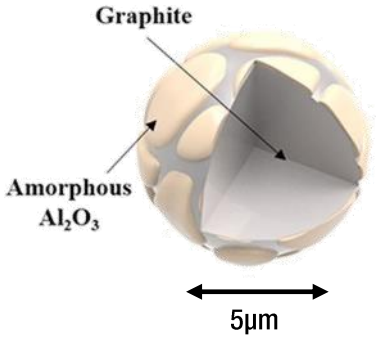


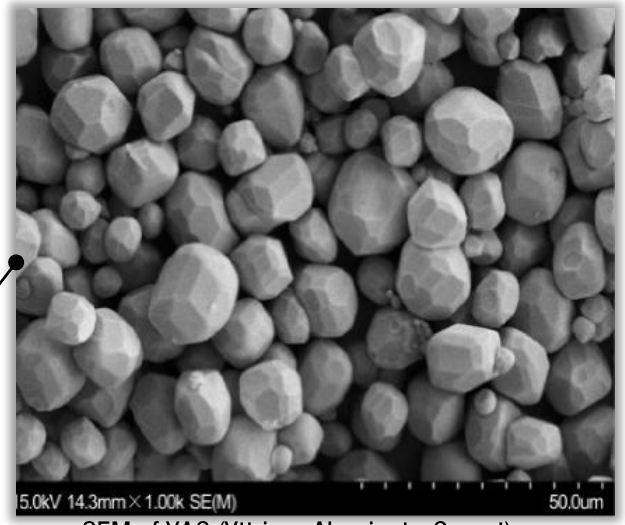
5N Al-Nitrate (Al-Precursor #1): Key Markets & Applications

Alpha HPA

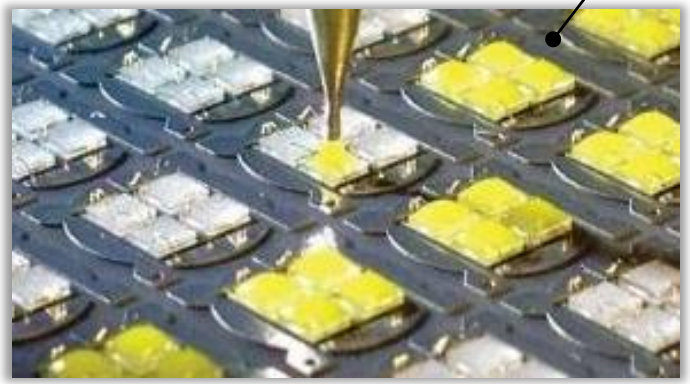
Multiple applications including:

- Particle coatings: - including Li-B electrode particles
- LED-phosphor synthesis – focus on mini & micro LEDS's
- Scintillators – optical laser crystals (YAG)
- **Other applications including**
  - Photonics/Optics
  - Dielectrics
  - Photovoltaics
  - Nanomaterials
  - Functional coatings
- End-user recognition as the highest purity Al-nitrate available

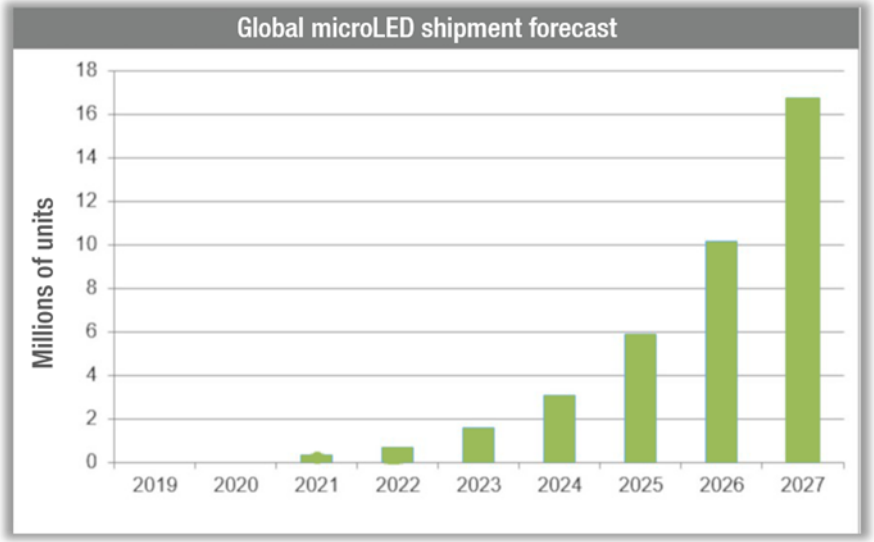




SEM of YAG (Yttrium-Aluminate-Garnet)



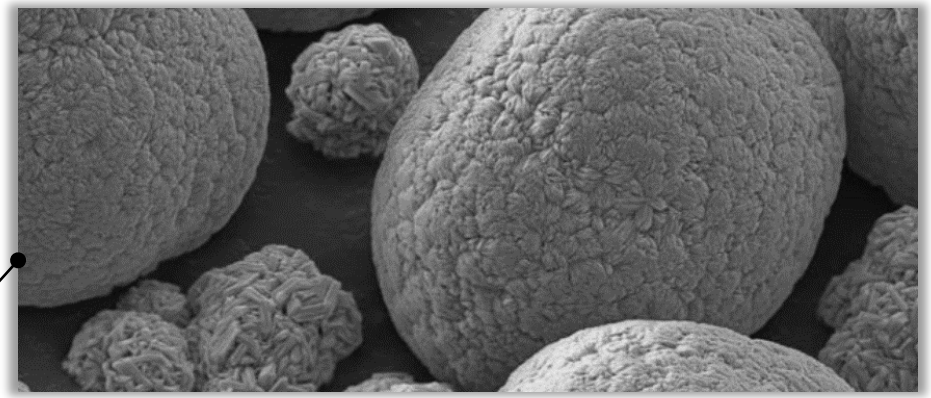
Addition of YAG phosphors to LED lighting circuits



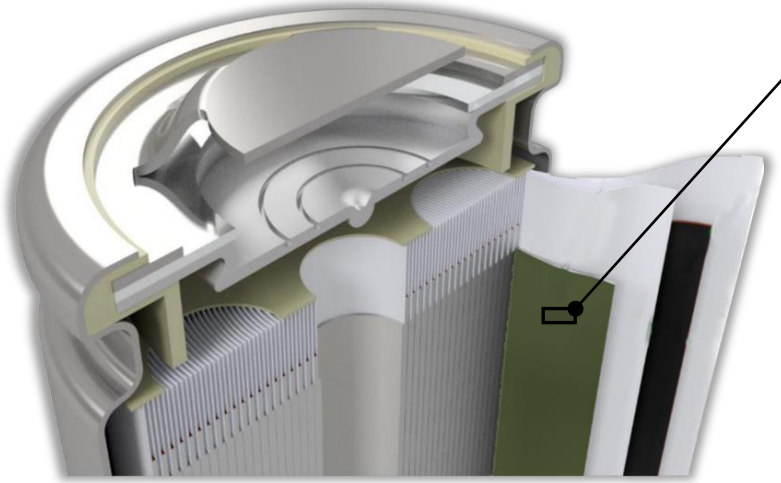
Graphic: Forecast growth in micro-LEDs to 2027
Source (www.microled-info.com)

5N Al-Sulfate (Al-Precursor #2): Key Markets & Applications

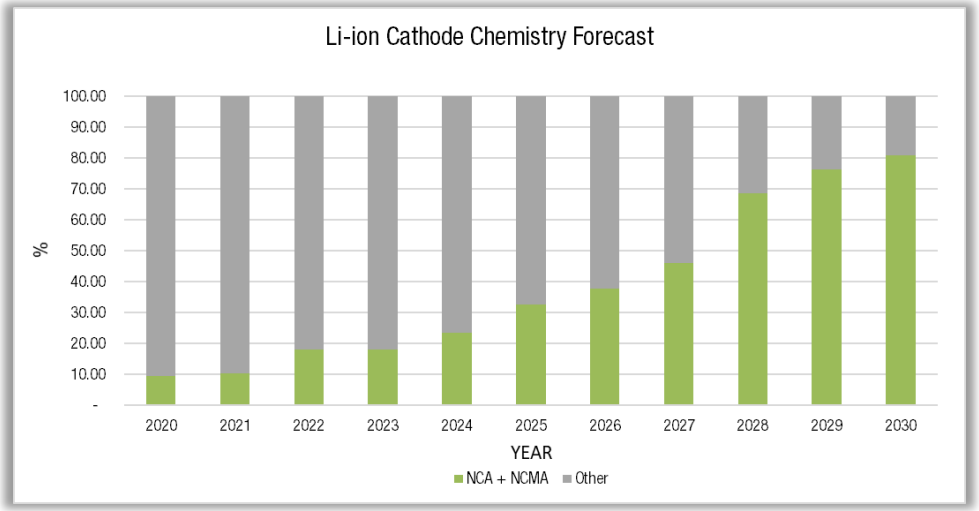
- For synthesis of aluminium-bearing, lithium-ion battery cathode active materials (CAM)
- Used in aluminium bearing cathode chemistries, ie:
  - NCA (eg: Tesla)
  - NCMA (eg: GM)
- NCA + NCMA chemistries forecast ~80% of all Li-B cathode by 2030 (UBS)
- Alpha HPA's precursor considered the highest purity globally



SEM of NCA Cathode Active Materials (CAM)



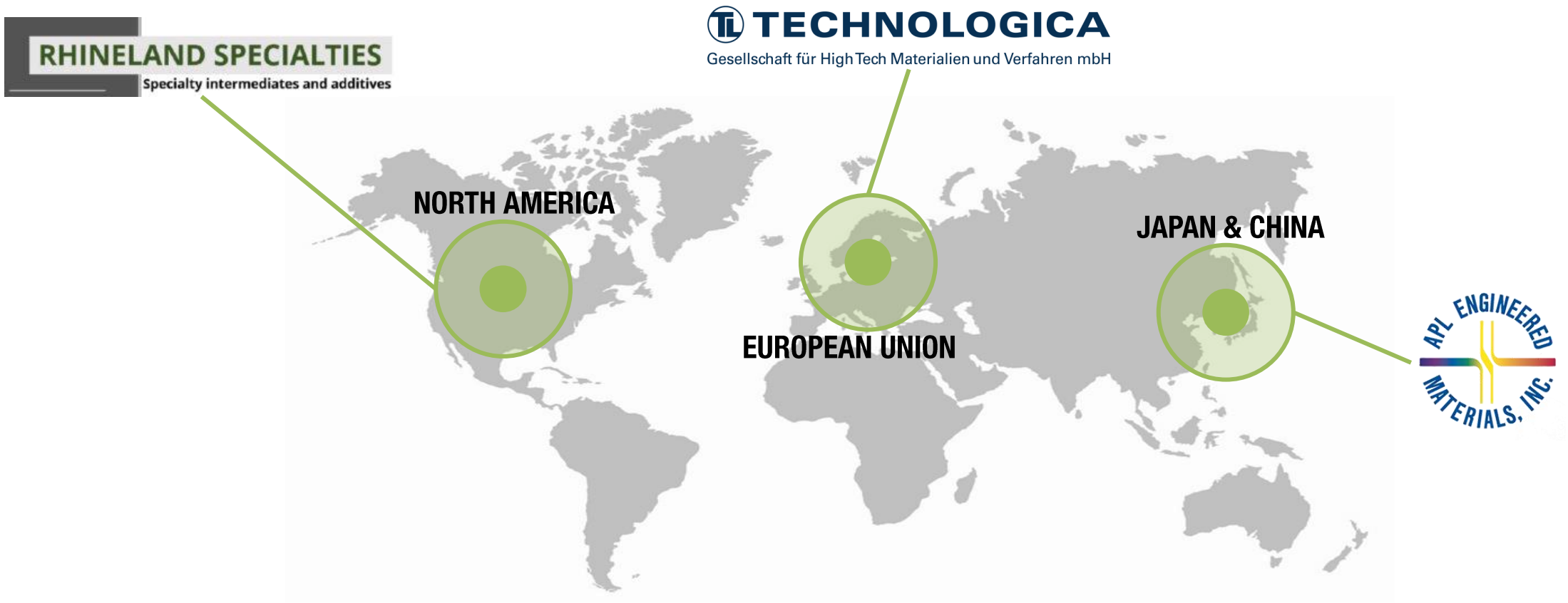
Lithium-ion battery breakaway



NCA + NCMA Cathode Chemistries ~80% by 2030
Source: UBS – Dec 2020

HPA First Project: PPF – Global Precursor Distribution Network

- Alpha HPA has built a global distribution network for precursor sales into speciality markets and key technology markets



HPA First Project: PPF – Key Stakeholders

- The PPF is supported by each of the following Key Project stakeholders

Counterparty	Role
ORICA	Supply & Offtake Agreement reached to provide PPF Reagents and by-product offtake
PRUDENTIA PROCESS CONSULTING	• PPF – Front End Engineering and Design (FEED) • PPF – Engineering Construction Management (EPCM)
AECOM	Engaged to progress MCU amendment – expected 2 month timeframe
HPA HPAlumina Pty Ltd	Updated technology Licence Agreement to match PPF strategy

Full Scale HPA First Project: Status Update

July '19 – Mar '20: HPA First Pilot Plant – +2,000 hrs operation, > 300kg HPA Production

Feb '20: Chemical Counterparty Agreement with Orica – Gladstone Project Location

Mar '20 Definitive Feasibility Study – completed March 2020

Aug '20: Offtake, marketing & financing MOU with Traxys

Sept '20: 2 x High-purity Li-B Pre-Cursor manufacture confirmed

Feb '21: Major Project Permitting Approval (MCU)

Feb '21: HPA Pellets qualifies for sapphire glass manufacture

Apr '21: MOU with Saint Gobain – all products

May '21: HPA powder qualifies for LED phosphor manufacture

May '21: MOU with CleanCo QLD to provide up to 100% Renewable Energy

May '21: Lenders Engineers (ITE) appointed – Final bank technical DD

Current: Global Market Outreach >40 end-user test product shipped, multiple products under devt.

Pending: Orica Definitive Agreements

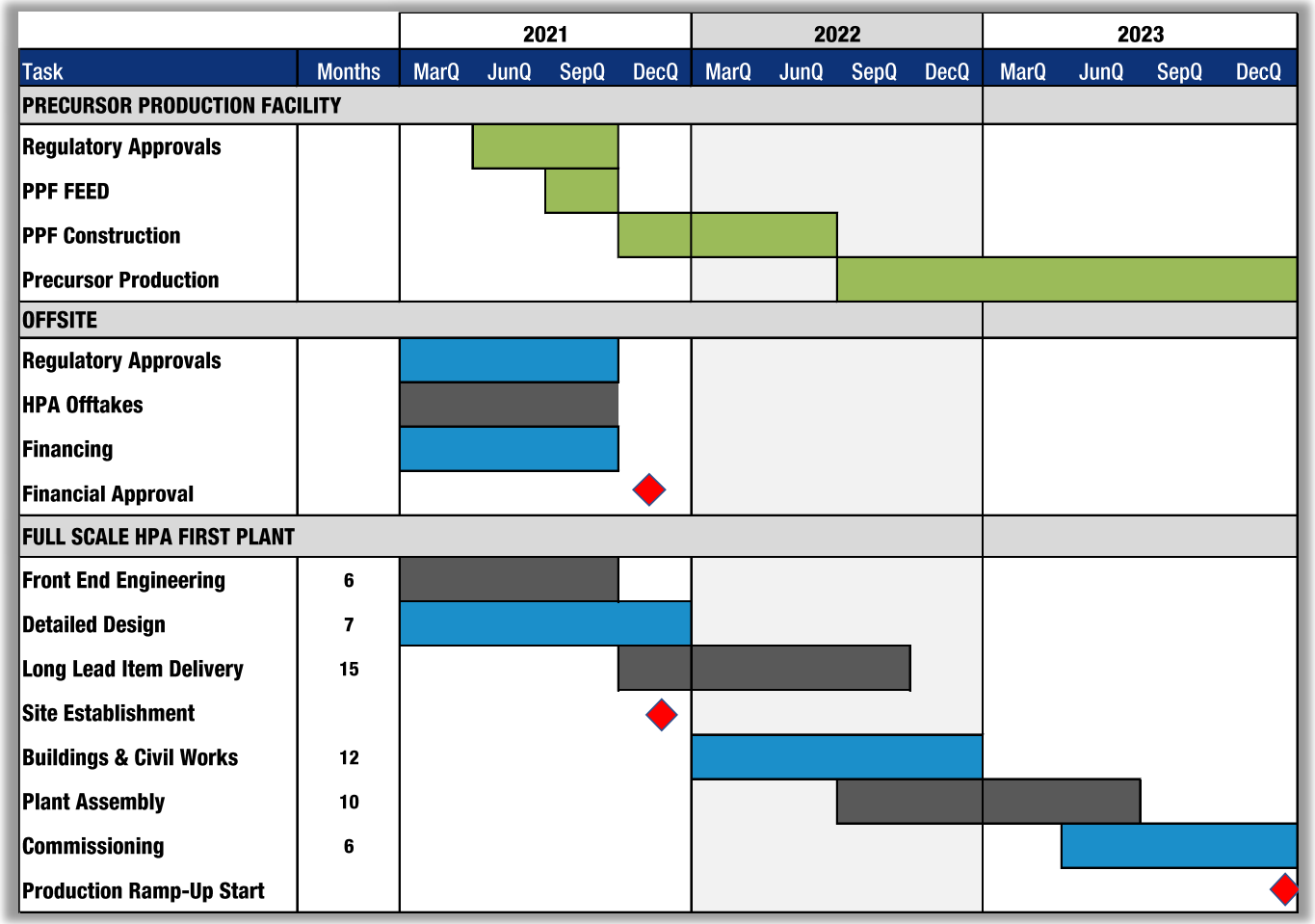
Pending: Large Volume Product Offtakes

Pending: Final Product Mix and DFS Update

Pending: Project Financing and FID

Project Schedule: PPF Accelerates Production

- Inclusion of the PPF accelerates production by >18 months
- Targeting full commercial scale production by late CY2023



Board & Management

Norman Seckold
Chairman

40+ years in the full time management of natural resource companies. Past Chairman and Director of listed companies including Bolnisi Gold NL, Timberline Minerals Inc., Perseverance Corporation Limited, Valdora Minerals NL, Palmarejo Silver and Gold Corp.
Currently Chairman of Santana Minerals Limited and Sky Metals Limited and Deputy Chairman of Nickel Mines Limited.

Rimas Kairaitis
Managing Director

20+ years experience in minerals exploration and project development in gold, base metals and industrial minerals. Led the geological field teams to the discovery of the Tomingley and McPhillamy's gold deposits in NSW and steered the Hera gold-lead-zinc Project from discovery through commercial production. Previously founding Managing Director and CEO of ASX-listed Aurelia Metals. Currently a Director of Sky Metals Ltd.

Peter Nightingale
Director and CFO

30+ years as a Director or Company Secretary for a range of resource companies including Pangea Resources Limited, Timberline Minerals Inc., Perseverance Corporation Limited, Valdora Minerals NL, Mogul Mining NL and Bolnisi Gold NL.
Currently a Director of Nickel Mines Limited and Prospech Limited.

Justin Werner
Non-Exec. Director

20+ years' mining and management experience. Previously consulted to a number of blue chip mining companies including BHP, Rio Tinto and Freeport McMoran.

Successful track record of mine discovery and development.
Currently Managing Director of Nickel Mines Limited.

Tony Sgro
Non-Exec. Director

Chemical Engineer with 45+ years' senior management experience in the supply of specialised equipment to the process industries with an emphasis on mining and oil & gas.

Co-founder, Director and General Manager of Kelair Pumps for 36 years.

Cameron Peacock
Non-Exec. Director

Mr Peacock is an finance and equity market professional. Over the last 20+ years he has worked in numerous finance focused roles across banking, private equity and equity capital markets. Cameron also covers the Investor Relations and Business Development functions with Alpha HPA and Nickel Mines Ltd.

Rob Williamson
C.O.O.

Rob is a mechanical engineer and joins the Company having recently rebuilt and started up a new 155ktpa SX zinc refinery in the USA in the capacity of Vice President and GM of the facility and ideally placed to bring 20 years of experience in large facility operations to Alpha HPA. Rob is based in Brisbane and responsible for building a Project delivery team for our HPA project in Gladstone.

Corporate Snapshot

Alpha HPA

TRADING INFORMATION

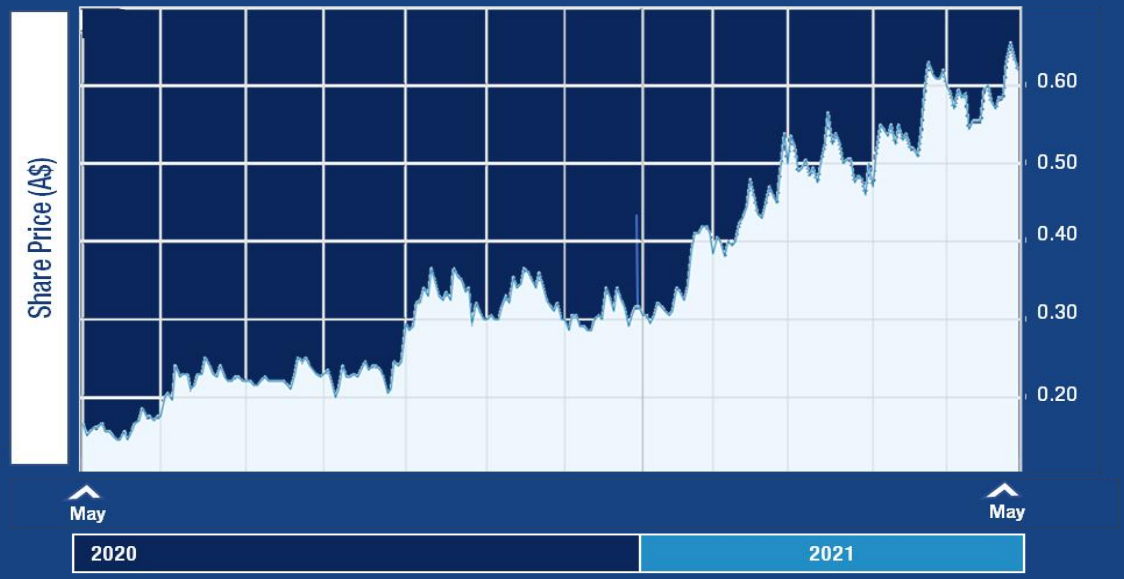
ASX CODE	A4N
Share Price (28-05-2021)	~62c
52-week trading range	14c – 67.5c
Issued Shares	692.4M

CAPITAL STRUCTURE

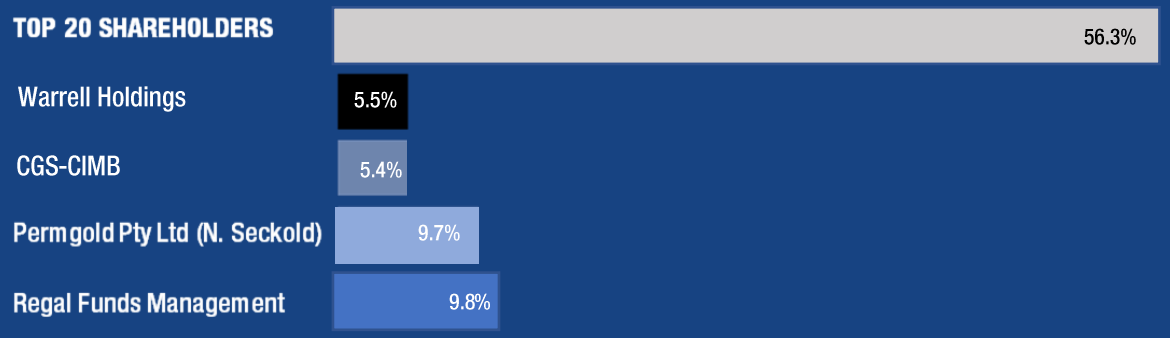
Issued Shares	692.4M
Unlisted options (@20c)	5.0M (expire 30 June 2021)
Unlisted options (@20c)*	10.0M (expire 31 July 2022)
Unlisted options (@30c)	39.0M (expire 31 July 2022)
Unlisted options (@35c)*	5.0M (expire 31 July 2023)
Unlisted options (@35c)	26.0M (expire 31 July 2023)
Market Cap	$429M
Est Cash (28-05-2021)	~$3M
Enterprise Value	$426M

* Licensor Options

SHARE PRICE PERFORMANCE – 12 MONTHS



SHAREHOLDERS

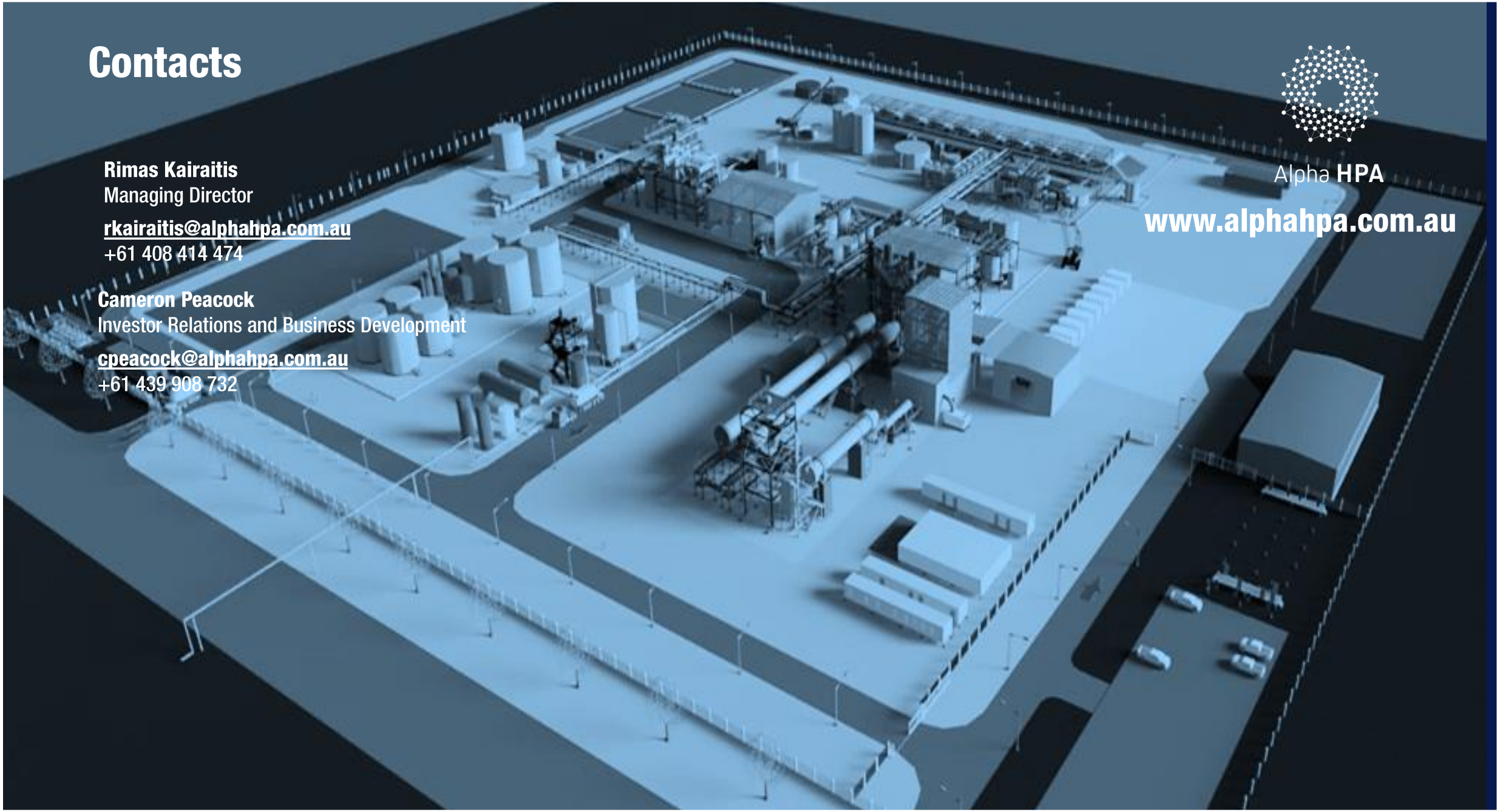


Capital Raising:

- Placement to raise approximately $50M
- Funds to be applied to:
  - 100% financing of the construction and operation of the HPA First – Precursor Production Facility
  - Accelerating key component of the Front End Engineering and Design (FEED) for the full Commercial Facility
  - Accelerating deposits for key long-lead items and vendor packages for the full scale commercial facility
  - Purchasing the land currently optioned adjacent Orica's Yarwun facility within the Gladstone State Development Area ('GSDA')
  - General Working Capital

USE OF FUNDS	$
Precursor Production Facility (PPF)	
PPF Construction (incl. contingency)	$27.6M
Full Scale Commercial Facility	
FEED Study – Full Scale Commercial	$1.0M
Long Lead Items: deposits & vendor packages	$2.5M
Other	
Land Acquisition	$2.5M
General Working Capital	$16.4M
TOTAL	$50.0M

Contacts



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Alpha **HPA**

www.alphahpa.com.au

Appendix 1: PPF – Summary Financials - CAPEX

DIRECTS				
Basis		WBS	Area Description	TOTAL
	PROCESS PLANT	1100	Feed Preparation	$764,637
		900	Autotitrator	$138,990
		1105	Feed Pre-Treatment	$345,615
		1110	Extraction	$2,506,549
		1120	Washing	$56,195
		1130	Strip	$176,625
		1140	Impurity #1 Removal	$58,751
		1145	Impurity #2 Removal	$24,887
		1150	Crud	$195,340
		1200	Crystallisation	$871,328
		1210	Dissolution	$74,534
		1220	Precursor	$329,497
		1230	Precursor Filter	$1,366,914
		1260	By-Product Treatment	$644,797
		1270	Boehmite Production	$2,751,175
		1280	Al Precursor #2 Production	$960,104
			Drying and Calcining	$1,000,025
	REAG	1600	Reagent #1	$109,042
		1605	Oxidisng agent	$25,578
		1610	Reagent #2	$141,706
		1620	Other Reagents	$17,712
	UTILS	1710	Water	$83,573
		1720	Waste Water	$149,655
		1730	Cooling Water	$176,848
		1740	Boiler	$423,561
		1750	Air Compressor	$264,245
	Other		Earthworks	$1,000,000
			Roads and Carpark	$262,200
			Fencing and Security	$189,600
			Infrastructure Connections	$250,000
			Civils	$1,351,537
			Site Building, lab and offices	$1,648,000
			Structural Steel	$256,000
			Fire Water	$250,000
			Laboratory Equipment	$250,000
			TOTAL DIRECTS	$19,115,217

INDIRECTS				
Factored	INDIRECTS	900	Project Management, procurement, engineering	$2,173,823
Factored		901	Construction Management	$543,456
Factored		902	Temporary Construction Facilities	$90,576
Factored		903	Spares	$181,152
Factored		904	Commissioning	$362,304
Factored		905	Operations Readiness	$362,304
		906	Owners Costs	
Factored		907	Contractors G&A Costs	$181,152
Factored		908	Cranes	$90,576
Factored		909	First Fill	$181,152
Factored		910	Contractor Plant and Equipment	$181,152
Factored		911	Flights, and accommodation	$181,152
Factored		912	Mob and Demob	$181,152
Factored		913	Survey, Geotech, Soil Testing	$18,115
Factored		914	HSE and Medical Services	$18,115
Factored		915	Project Security	$90,576
Factored		916	Roads and Buildings Maintenance	$18,115
			TOTAL INDIRECTS	$4,854,872
			TOTAL DIRECTS AND INDIRECTS	$23,970,089
Factored			Contingency (of Directs & Indirects)	$3,595,513
			TOTAL (AUD)	$27,565,602

- PPF CapEx and OpEx have been built up by Prudentia Process Engineers
- CapEx Directs - $19.11M CapEx Indirects - $4.85M –factored estimates
- Contingency - $3.6M (15%)

Appendix 2: PPF – Summary Financials – OPEX (before integration)

Alpha HPA

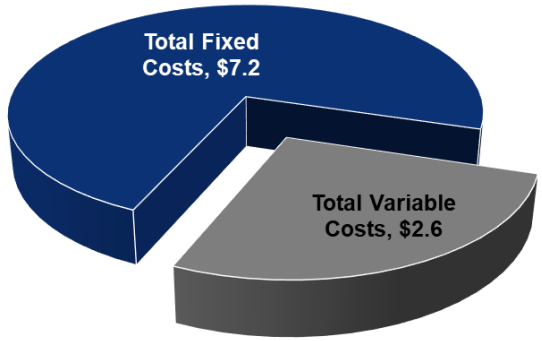
Fixed Costs

AREA	DESCRIPTION	Amount
FEED REAGENTS & TRANSPORT		
	Total	**$911,963**
UTILITIES		
	Water - Potable	$9,807
	Water - Raw	$0
	Water Chemicals (boiler, cooling & demin	$12,395
	Power, (connection, demand, capacity cha	$0
	Power, (usage)	$0
	Diesel - plant vehicles	$1,461,919
	Natural Gas - (dryers, calciner, boiler)	$13,316
	UTILITIES total	**$ 1,497,437**
CONSUMABLES		
	Filter Cloth	$48,000
	HPA product bulka bags & liner	$7,500
	Dust Collector Bags	$20,000
	Laboratory Chemicals / Costs	$104,000
	CONSUMABLES total	**$ 179,500**
OTHER		
	Residue Costs	$20,300
	Feed treament costs	$20,864
	Other #1	$234
	Tradewaste	$0
	OTHER total	**$ 41,398**
Variable Costs (AU$ pa)		**$ 2,630,298**

Variable Costs

LABOUR		
	Management	$848,813
	General Administration	$113,175
	Process Plant	$3,204,162
	Maintenance	$414,975
	Health, Safety, Environment and Quality	$924,250
	LABOUR Total	**$5,505,375**
GENERAL EXPENSES		
	Insurances	$170,000
	Vehicle Leasing and Running Costs	$97,150
	Other	$556,464
	GENERAL EXPENSES Total	**$823,614**
MAINTENANCE		
	Maintenance	$340,000
	MAINTENANCE Total	**$340,000**
CONTRACT SERVICES		
	Process Related (e.g. testwork)	$440,000
	Administration and General	$69,520
	CONTRACT SERVICES Total	**$509,520**
Fixed Costs (AU$ pa)		**$ 7,178,509**
TOTAL (AUD)		**$ 9,808,806**

Variable Costs V Fixed Costs (AUD millions per year)



Appendix 3: 5N Al-Nitrate (Precursor #1)

Alpha HPA

Typical Analysis

Analyte	Ag	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce
Method	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-ICP02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.001	<0.01	<0.001	<1	<0.1	<0.001	<0.001	<1	<0.001	<0.001

Analyte	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
Method	ME-MS02	ME-ICP02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-ICP02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.001	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.1	<0.5	<0.001

Analyte	Ge	Hf	Hg	Ho	In	K	La	Li	Lu	Mg
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.01	<0.001	<0.001	<0.001	<0.001	<5	<0.001	<0.001	<0.001	<1

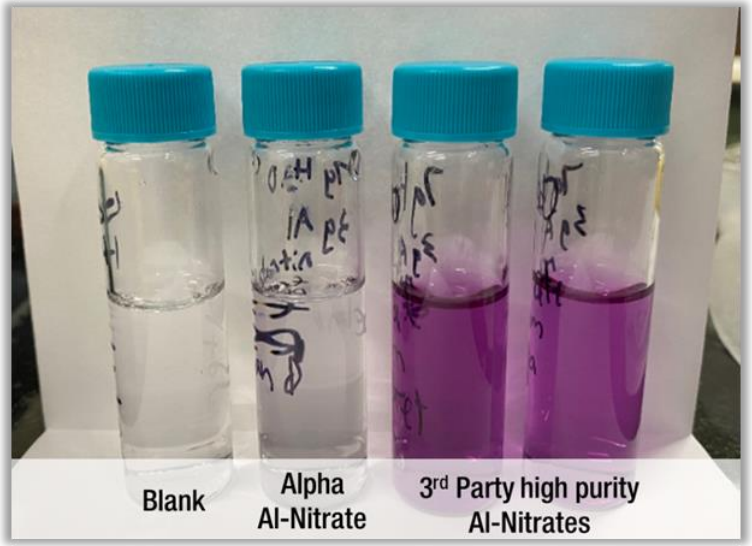
Analyte	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd	Pr
Method	ME-ICP02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-ICP02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.1	<0.001	<1	<0.001	<0.001	0.20	<5	<0.001	<0.001	<0.001

Analyte	Pt	Rb	Re	S	Sb	Sc	Se	Si	Sm	Sn
Method	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.001	<0.001	<0.0001	<5	<0.001	<0.001	<0.01	<1	<0.001	0.00

Analyte	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	W
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.001	<0.001	<0.001	<0.001

Analyte	Y	Yb	Zn	Zn	Zr
Method	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02
Unit	mg/L	mg/L	mg/L	mg/L	mg/L
Value	<0.001	<0.001	<0.1	<0.01	<0.001

TOTAL IMPURITIES (PPM)	0.20
AVERAGE Al CONTENT (%)	7.15



Third party test work showing the absence of colour impurities in Alpha's Al-nitrate in comparison to competitor products

Appendix 4: 5N Al-Sulfate (Precursor #2)

Alpha HPA

Typical Analysis

Analyte	Al	Ag	As	Au	B	Ba	Be	Bi	Ca	Cd
Method	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-ICP02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02
Unit	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	8.56	<0.001	<0.01	<0.001	<1	<0.1	<0.001	<0.001	<1	<0.001

Analyte	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga
Method	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	<0.001	<0.001	<0.1	<0.001	0.01	<0.001	<0.001	<0.001	<0.1	0.02

Analyte	Gd	Ge	Hf	Hg	Ho	In	K	La	Li	Lu
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<5	<0.001	<0.001	<0.001

Analyte	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd
Method	ME-ICP02	ME-ICP02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	<1	<0.1	0.00	<1	<0.001	<0.001	0.01	<5	0.00	<0.001

Analyte	Pr	Pt	Rb	Re	Sb	Sc	Se	Si	Sm	Sn
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	0.01	<1	<0.001	0.00

Analyte	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	W
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-MS02	ME-ICP02	ME-MS02	ME-MS02	ME-MS02	ME-MS02
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.001	<0.001	<0.001	0.01

Analyte	Y	Yb	Zn	Zr
Method	ME-MS02	ME-MS02	ME-MS02	ME-MS02
Unit	ppm	ppm	ppm	ppm
Value	<0.001	<0.001	0.39	<0.001

TOTAL IMPURITIES (PPM)	0.44
PURITY	99.999%