



ANNUAL GENERAL MEETING

10.00 AM Monday
15 NOVEMBER 2021

Presentation



Gold Project



Speewah Project



HPA Project



Commodity	Gold	Titanium & Vanadium	HPA, Al precursors & P-CAMs
Market	Precious Metals	Battery Materials Master Alloys	Battery Materials Specialty Optics
Locations	Mt Remarkable – WA Tennant Creek – NT	East Kimberley – WA	Unrestricted – WA
Status	Exploration	Metallurgical test work ongoing	DFS in progress
Note	Survey work ongoing	Largest Vanadium-in-Magnetite deposit in Australia	Utilises industrial feedstock Not constrained to a mine site



High Purity Metals

4N HPA & 5N Precursor Project

4N HPA & 5N Precursor Project

Origin

- High Purity Metals is a wholly owned subsidiary under King River Resources, focussed on developing the HPA Project.

Mission

- King River Resources is committed to commercialising the 4N HPA and 5N Precursor opportunities in a way that maximises the return on investment for our shareholders.

Process

- The ARC process can be used create 4N HPA and a selection of aluminium salt based 5N Precursors.
Aluminium chemical feedstock. Recrystallisation for purification. Finally Calcination.

Market

- This range of high purity products are utilised in the Electric Vehicle battery, LED and optics industries.

Economics

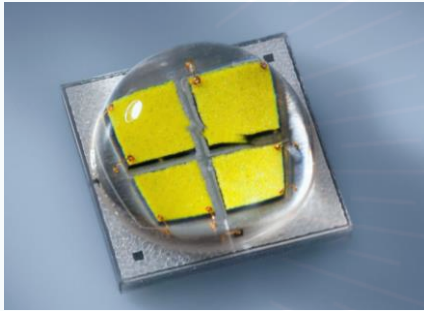
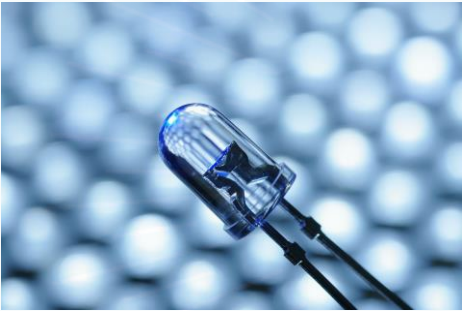
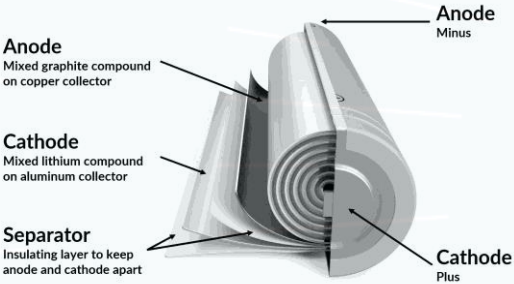
- Initially a 2,000tpa 5N Precursor Plant to minimise the CAPEX for entry into the market with a high rate of return.

Opportunity

- Ongoing testing with different feedstocks to broaden industry relationship and provide ESG benefits to others.

4N HPA & 5N Precursor Industries

Product / Industry	4N HPA (99.99% purity Al_2O_3)	5N Precursors (99.999% purity Al “salts”) <small>These can be in the form of hydroxides, sulphates or nitrates</small>
Battery	Battery Separator Coating Anode Coating	LiB electrode coatings LiB cathode materials
Lighting	LED Substrate	Phosphors
Optics	Synthetic Sapphire Glass	Electronics & Optics



December 2020 to July 2021:

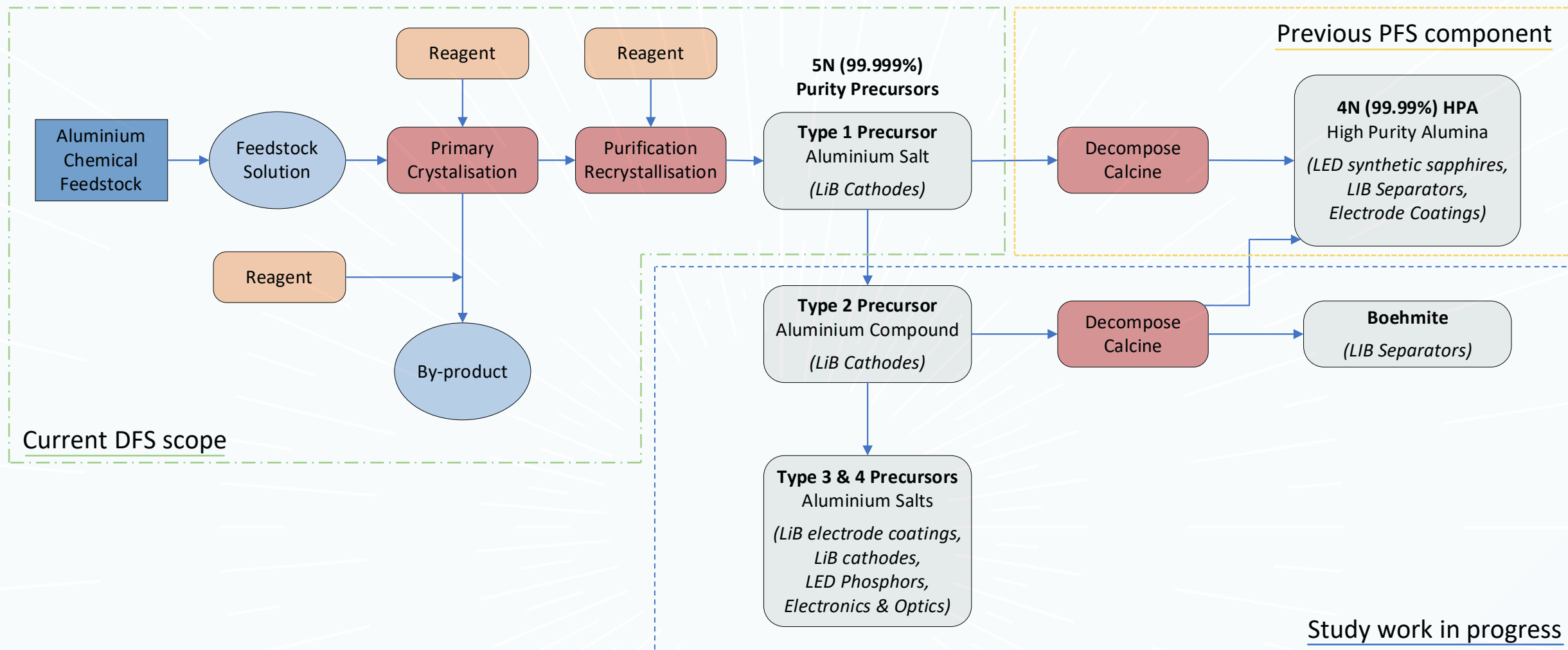
- The ARC HPA process is successful in treating locally available chemical feedstocks removing the need for the Kimberly based mining operation
- Successful production of >4N (99.99%) purity High Purity Alumina (HPA). (25 Mar 2021)
- Prefeasibility Study complete based on a 9,000tpa 4N HPA plant with a CAPEX of AUD\$203M. (16 Jun 2021)
- Employed an experienced professional to lead High Purity Metals and engage with the industry (26 Jun 2021)
- 5N (99.999%) purity Precursor compounds produced using the ARC process. (27 Jul 2021)

September 2021 to Nov 2021:

- 5N Precursors become the focus of the company strategy for commercialisation. (8 Sept 2021)
- COMO Engineers awarded the Definitive Feasibility Study. (5 Oct 2021)
- King River Resources joins the Future Battery Industries Cooperative Research Centre supporting two strategic projects, *“Cathode Precursor and Active Materials Production Pilot Plant”* and *“Development and application of Vanadium Redox Flow Batteries”*. (6 Oct 2021)
- New precursors and NCA P-CAM product development achieved in the laboratory (3 Nov 2021)

4N HPA & 5N Precursor Process

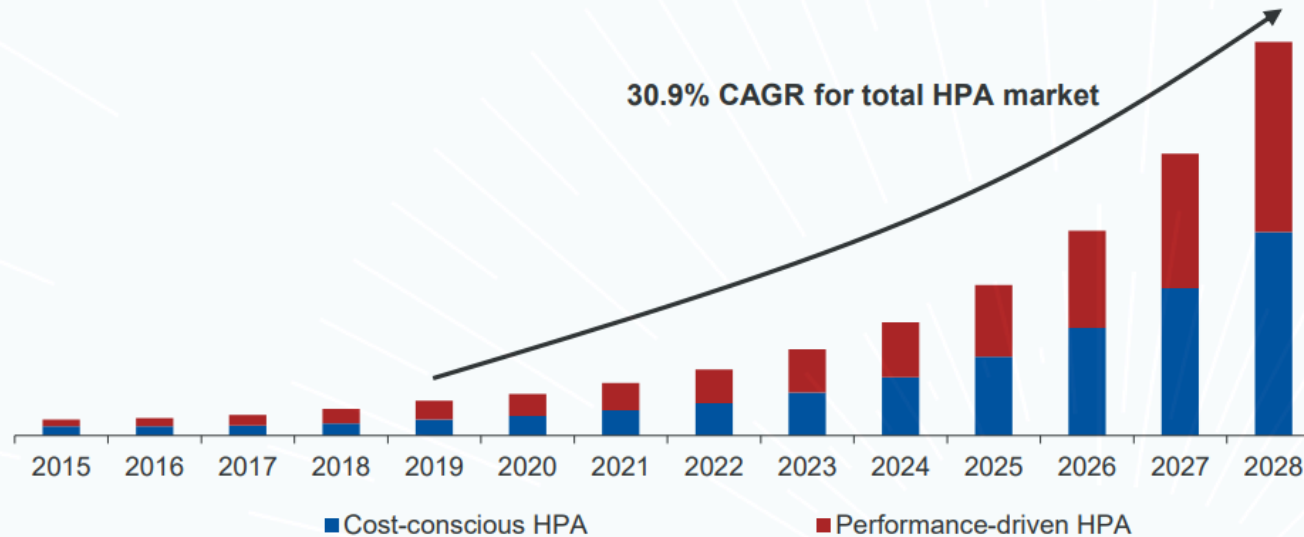
High Purity Metals Flowsheet



4N HPA & 5N Products

4N HPA

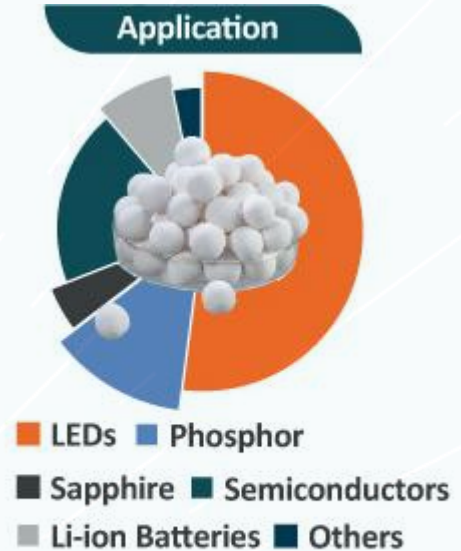
Total unconstrained HPA demand by purity, 2015-2028 (tonnes)



Source: CRU Consulting. Oct 2020

5N Precursors

Demand for 5N precursors is an ever-evolving market and with the current EV and ESG revolution demand is foreseen to continue to exceed supply of battery minerals and precursor products.

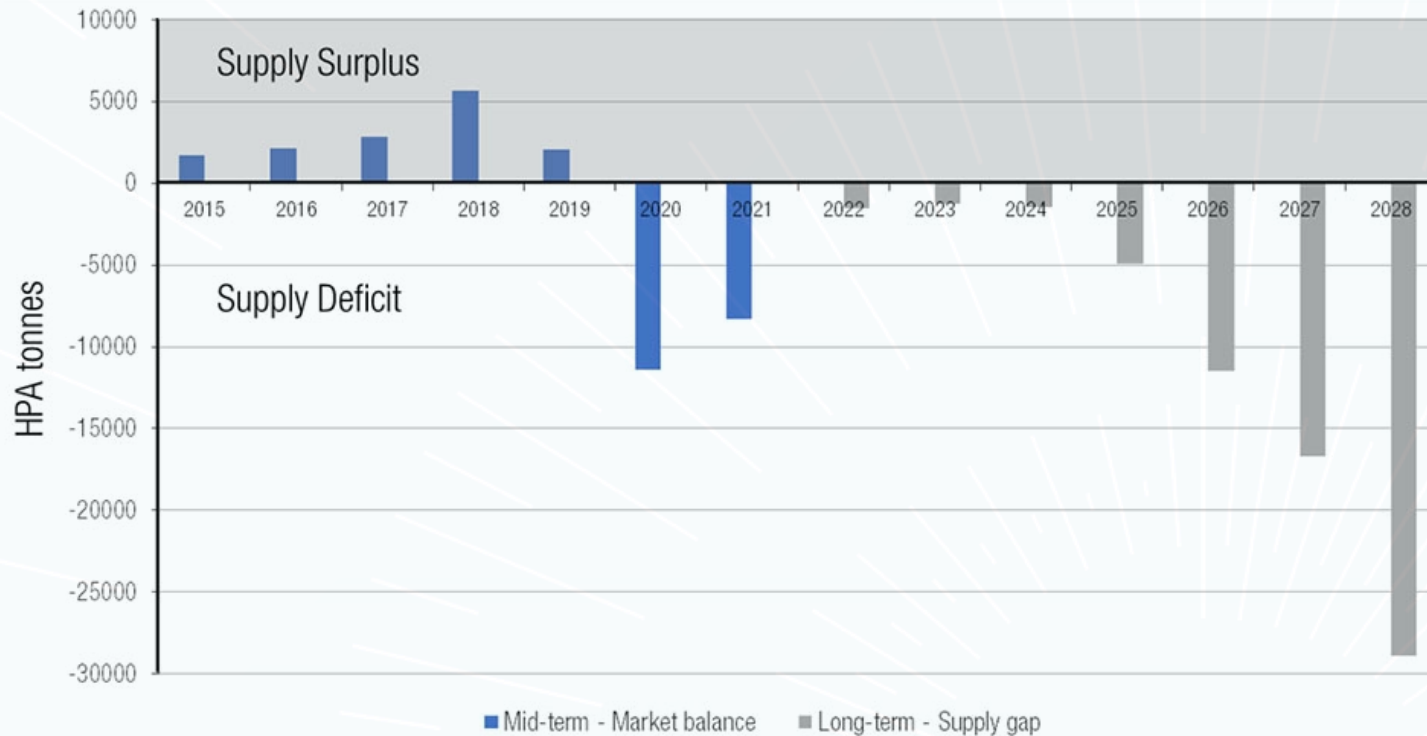


Transparency
Market Research
Insight Analysis. Accurate Results

LED's	~55%
Phosphor	~12%
Sapphire	~4%
Semiconductors	~18%
Li-Ion Batteries	~8%
Other uses	~3%

Market Dynamic & Application

4N HPA – Market Dynamic



Source: CRU Consulting. Sept 2020



Market Pricing Estimates

SGA: 99.5%	3N HPA 99.9%	4N HPA 99.99%	5N HPA 99.999%
\$400USD/t	\$6-9,000USD/t	\$20-40,000USD/t	>\$50,000USD/t

Pilot Plant

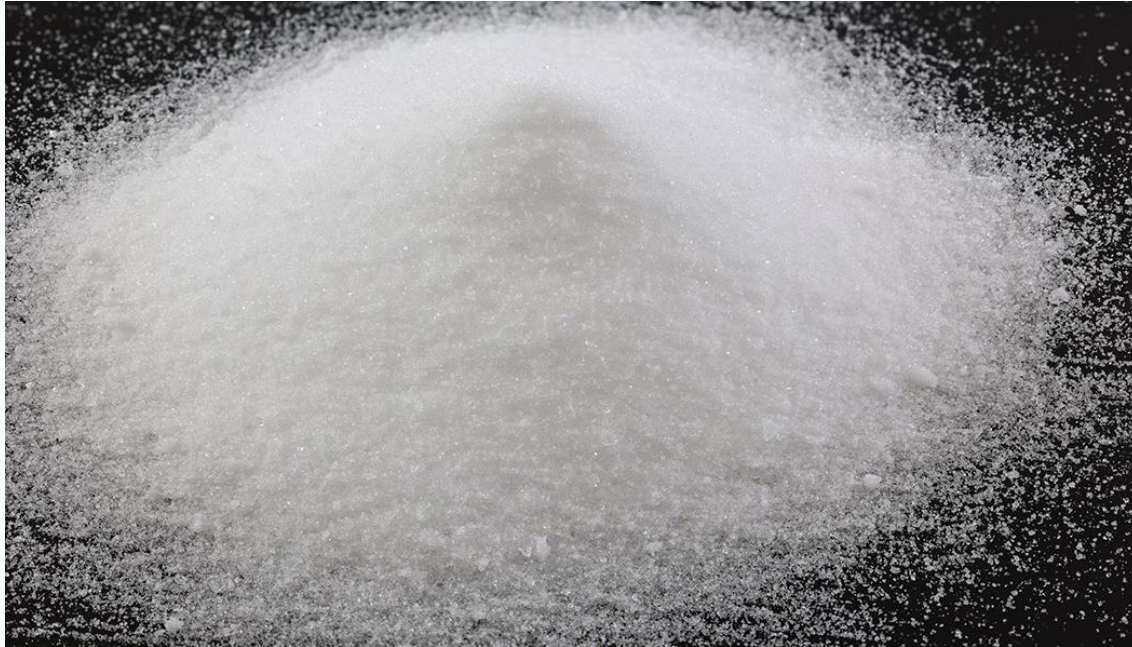


Receipt and assembly of the laboratory scale Pilot Plant at Source Certain International is complete and commissioning is underway to refine the process and produce Type 1 Precursor product market samples for distribution.

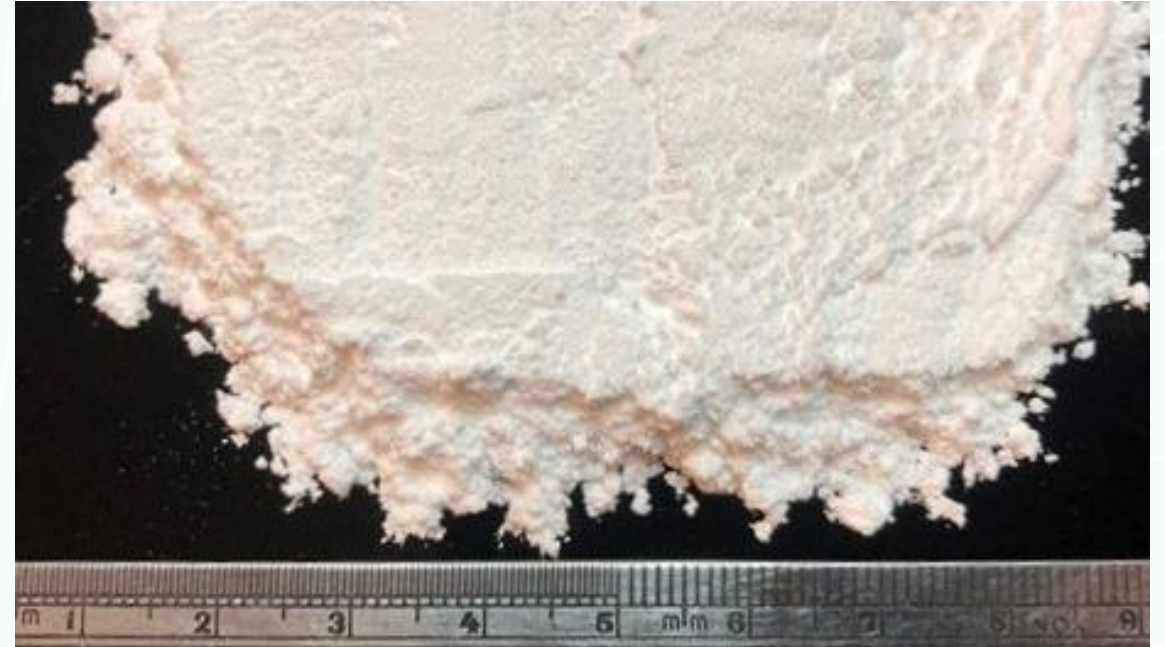
Type 1 Precursor & HPA

Type 1 Precursor & HPA

Successful production of the 5N (99.999% purity) Type 1 Precursor which is calcined to create 4N (99.99% purity) HPA.



Type 1 Precursor – Aluminium Salt



4N High Purity Alumina powder

Type 2 Precursor & NCA P-CAM

Type 2 Precursor & NCA P-CAM

Successful production of the Type 2 Precursor which is an Aluminium Compound that can be combined with Nickel and Cobalt to produce a NCA based P-CAM.



Type 2 Precursor – Aluminium Compound



Nickel-Cobalt-Aluminium (NCA) based P-CAM

Definitive Feasibility Study: 2000tpa HPA Type 1 Precursor Production Facility

- The DFS remains on track to be completed by early May 2022 (As per ASX release 5 Oct 2021)

Plant Location

- The reduced footprint and non-toxic nature of the process provides flexibility in the location
- Multiple opportunities available. Selection subject to outcomes of further industry engagement

Laboratory Work

- Laboratory Pilot Plant to produce samples to provide to the market
- SCI to continue to expand on the range of precursor products that can be produced
- SCI to continue to work on a variety of P-CAM products to increase market opportunities
- SCI to investigate alternate feedstocks, especially waste streams of other industry processes.

Industry Engagement

- Continued discussions with potential industry partners and complementary producers
- Several NDAs recently signed to support exploration of opportunities, leading to potential MOUs or JVs.