



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

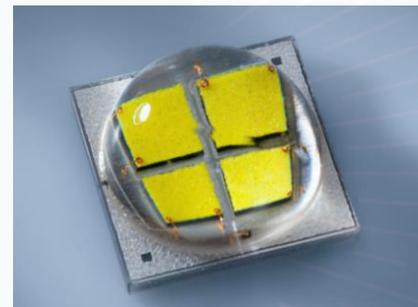
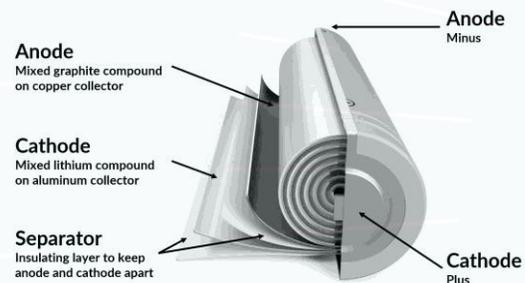
- Initially a 2,000tpa 5N Precursor Plant to minimise the CAPEX for entry into the market with a high rate of return.

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:

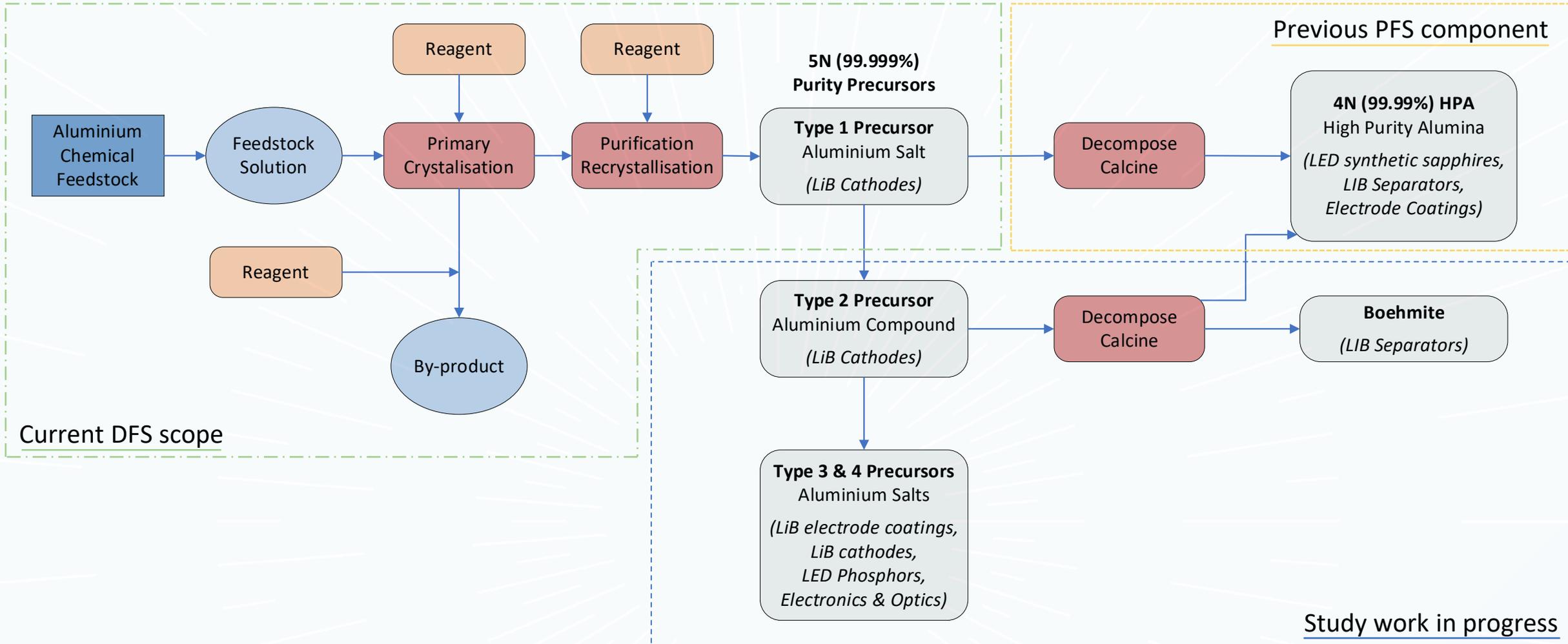
- The ARC HPA process is successful in treating locally available chemical feedstocks removing the need for the Kimberly based mining operation
- Successful production of >4N (99.99%) purity High Purity Alumina (HPA). (25 Mar 2021)
- Prefeasibility Study complete based on a 9,000tpa 4N HPA plant with 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

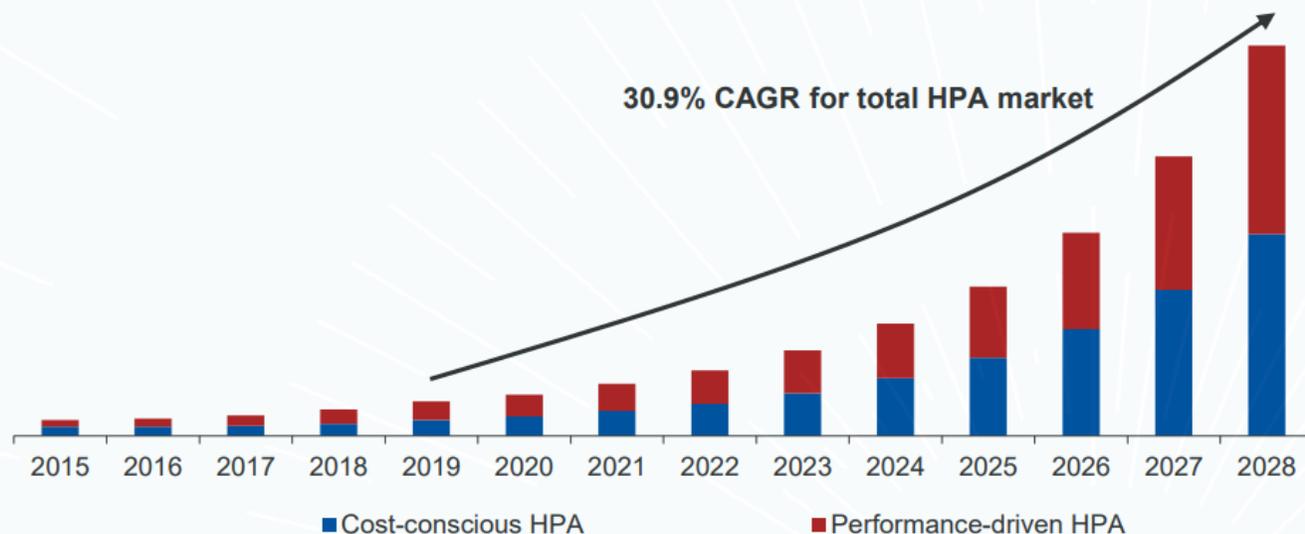
High Purity Metals Flowsheet



4N HPA & 5N Products

4N HPA

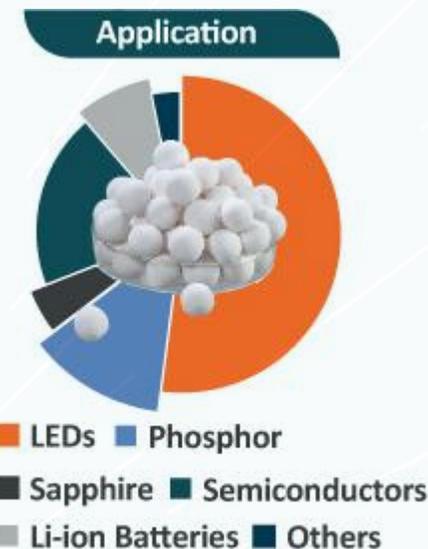
Total unconstrained HPA demand by purity, 2015-2028 (tonnes)



Source: CRU Consulting. Oct 2020

5N Precursors

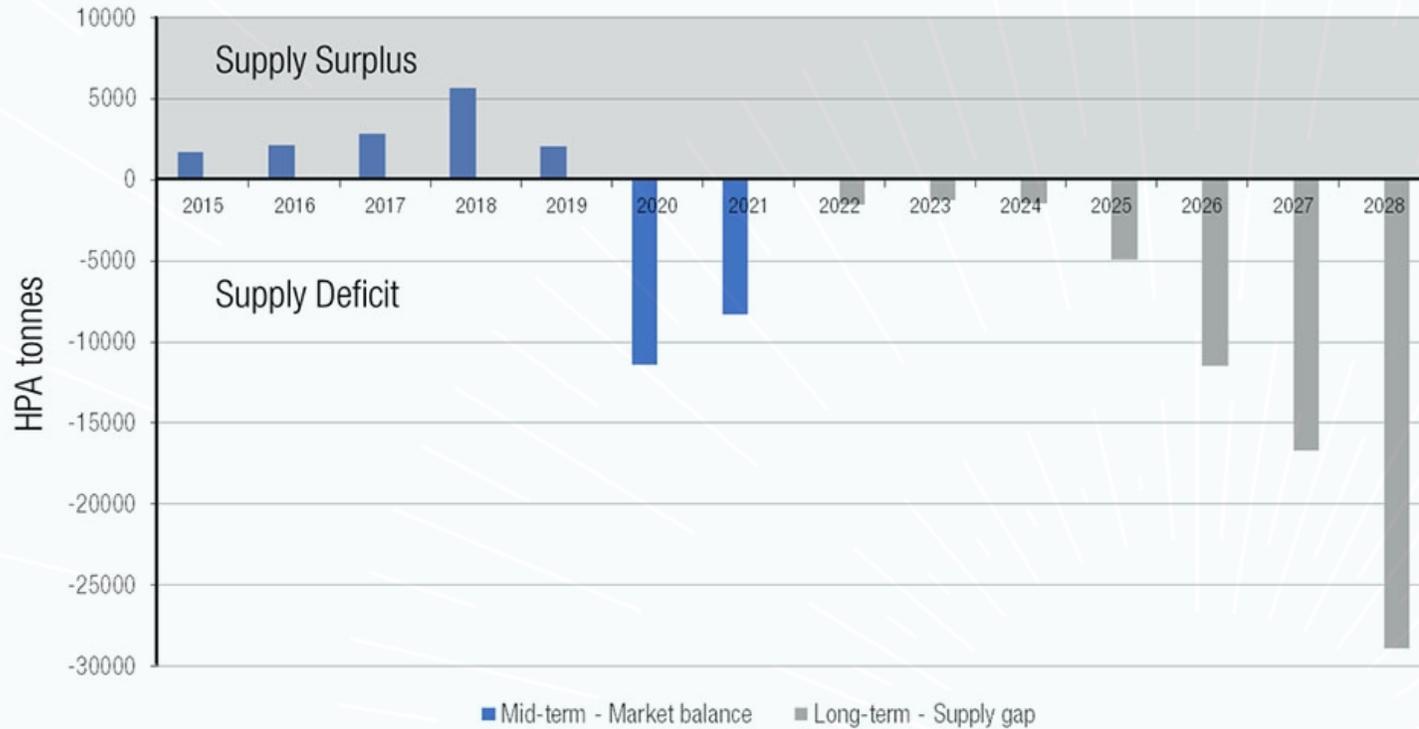
Demand for 5N precursors is an ever-evolving market and with the current EV and ESG revolution demand is foreseen to continue to exceed supply of battery minerals and precursor products.



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.

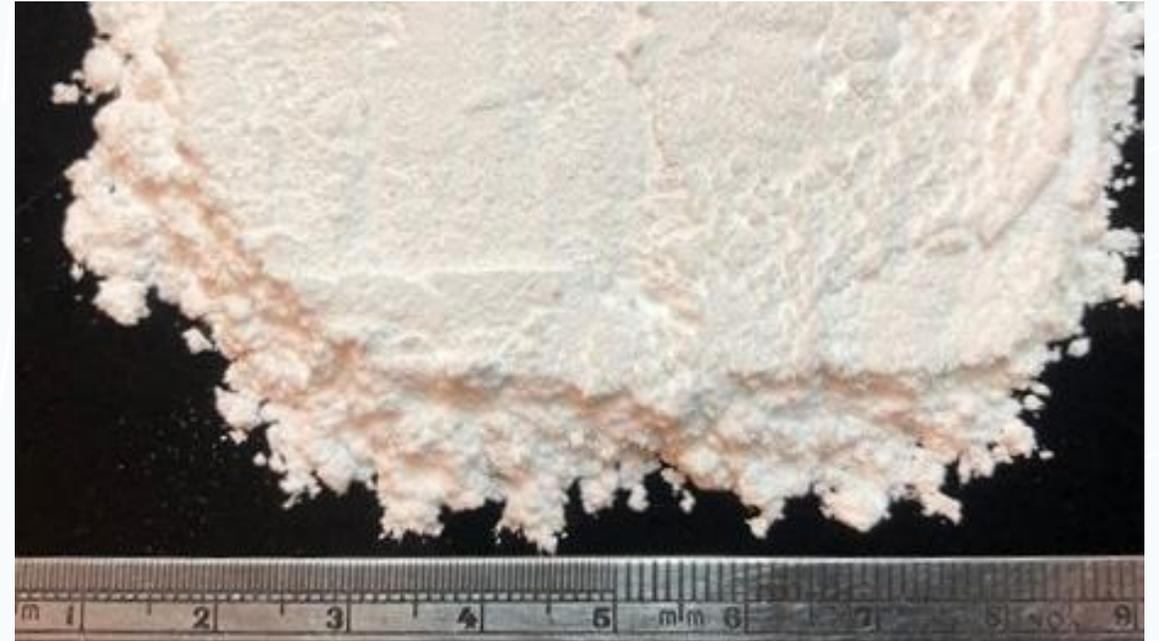
Type 1 Precursor & HPA

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.