Altech Chemicals Limited (ASX:ATC)

Annual General Meeting

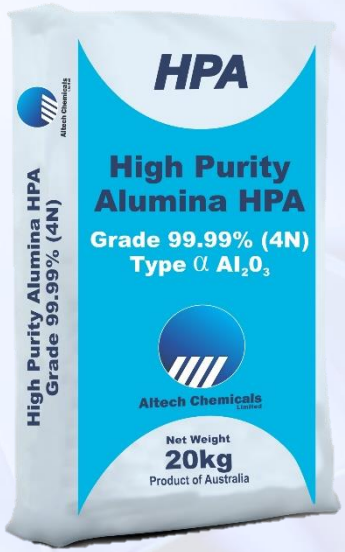
Altech Chemicals Limited

Iggy Tan
Managing Director

Altech Chemicals
Limited

Our Vision

To be a world leading producer of high purity alumina (HPA)



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Sapphire Gemstone

- Sapphire & Ruby
- Natural form of high purity alumina (HPA)
- Formed by mother nature like diamonds
- Colour from impurities
- Nearly as hard as diamond (Moh 9)

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What is HPA?

- Purified alumina (Al_2O_3)
- Greater than 99.99% (4N) purity
- Smelter Grade Alumina (SGA) ~ 99.5% (5,000 ppm impurities mainly sodium)
- Bayer Process uses sodium hydroxide (NaOH)
- Sodium impurity is problem for electronics industry

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Smelter Grade Alumina	High Purity Alumina	High Purity Alumina	High Purity Alumina
SGA 99.5%	HPA 99.9% (3N)	HPA 99.99% (4N)	HPA 99.999% (5N)
$400 per t	$6,000 per t	$23,000 per t	$50,000 per t

Our Target Business

HPA substrate for LEDs

HPA in Sapphire Crystal Glass

High Price for Purity

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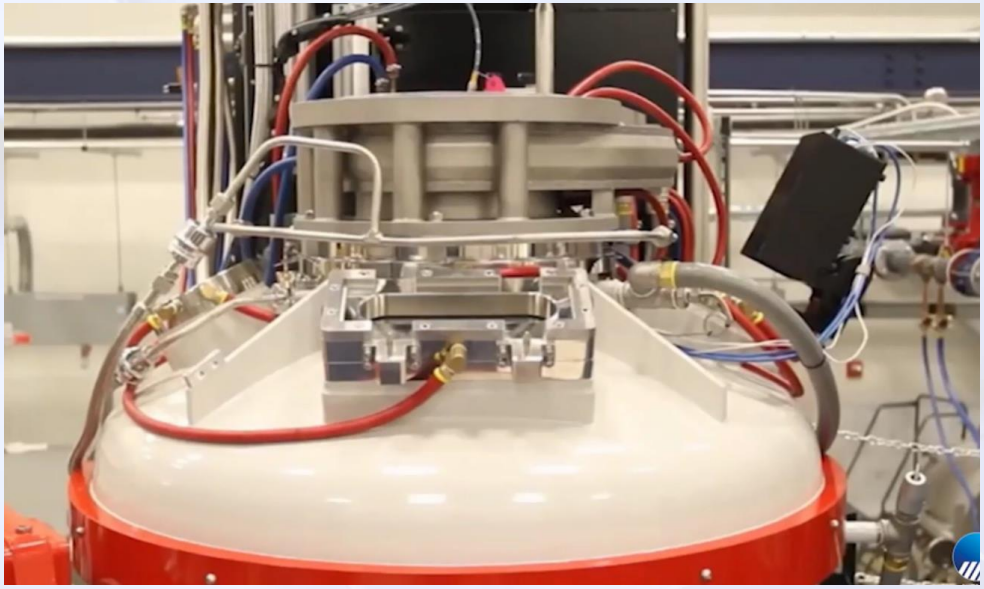
Sapphire Production



HPA Furnance

Sapphire crystal boule

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Sapphire Wafer Production

Sapphire wafer

Sapphire glass screen

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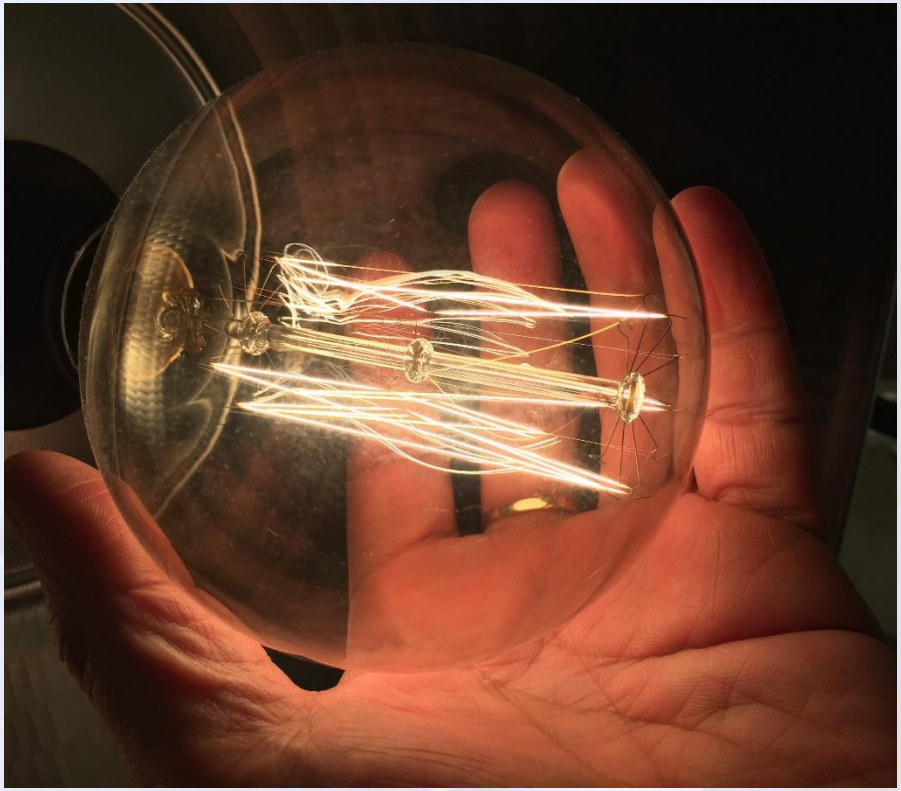
LEDs lights of the future

Conventional LEDs



New LED products

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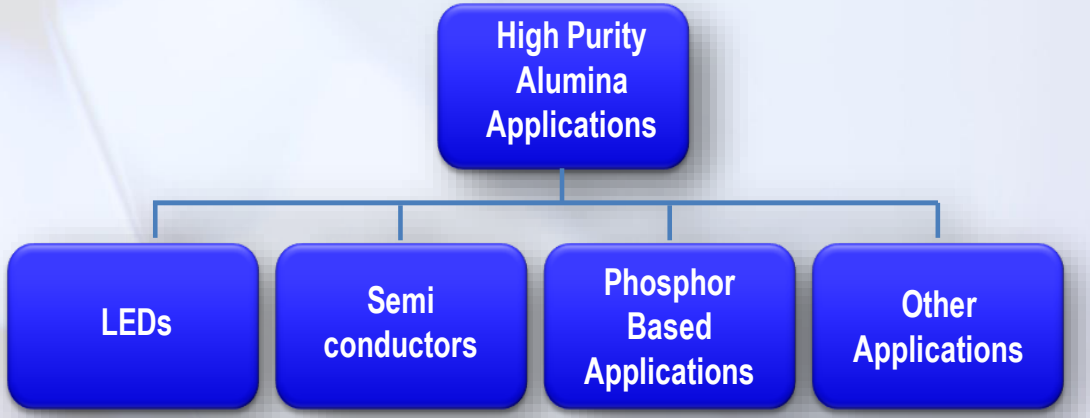
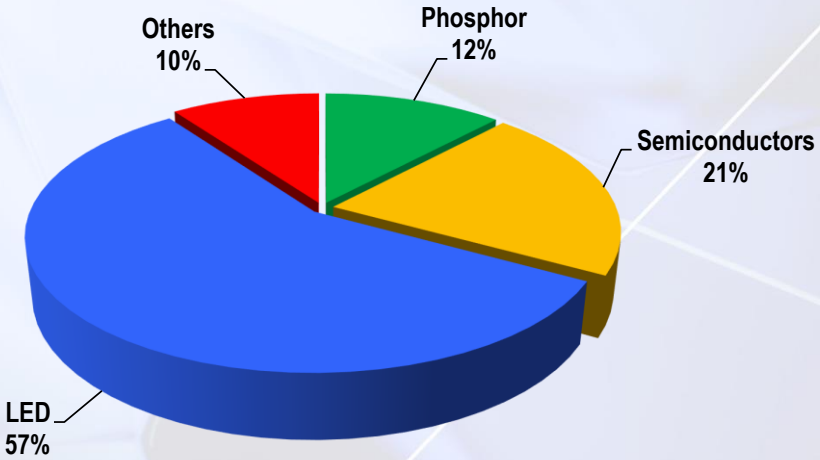
Uses of HPA 99.99% 4N



Smartphone and Lithium batteries are new markets



Source: Persistence Research "High Purity Alumina Market – Global Industry Analysis and Forecast 2016-2014

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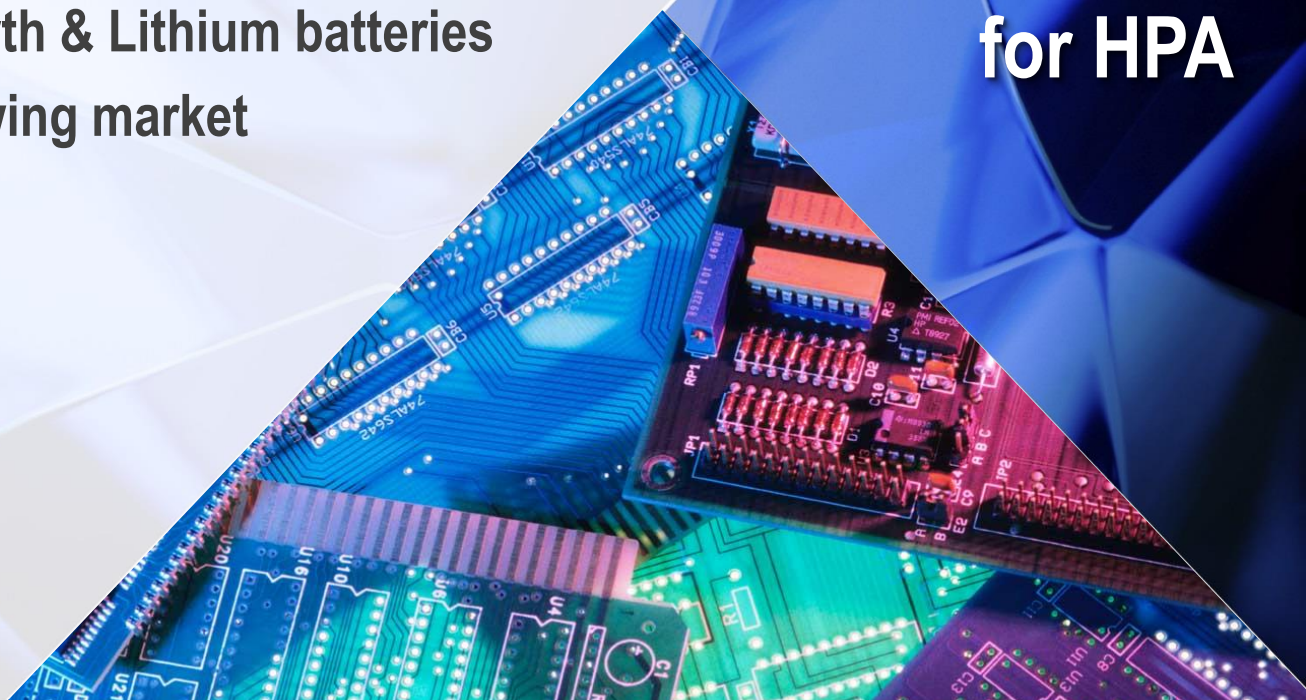
Demand for HPA

- Global HPA demand 25,315tpa in 2016 [1]
- Expected to increase to 86,831tpa by 2024 [1]
- Growing at a CAGR of 17%
- Driven by LED growth & Lithium batteries
- Entering a fast growing market



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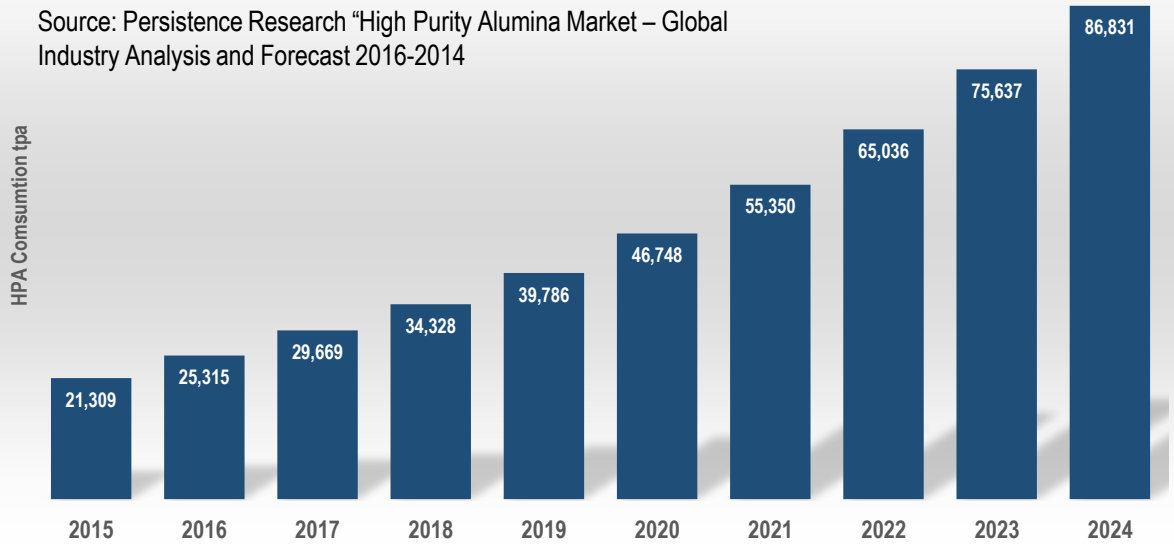
Demand for HPA

Global High Purity Alumina Forecast 2015 -2014

Source: Persistence Research "High Purity Alumina Market – Global Industry Analysis and Forecast 2016-2014



Global LED lamps forecast - 864 million in 2015 to 4.1 billion by 2024

Source: 'LED Lighting: Global Outlook'

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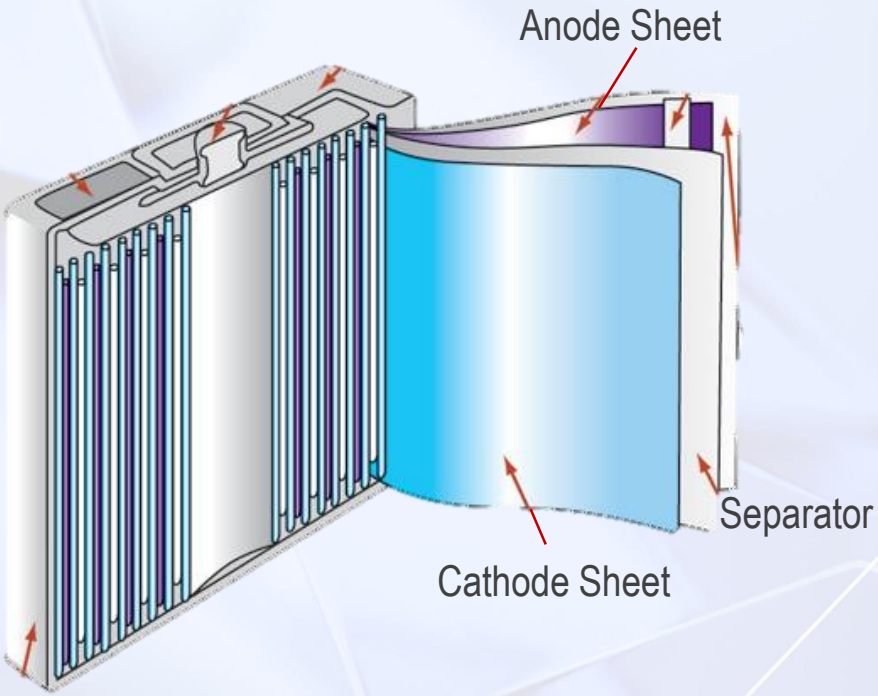
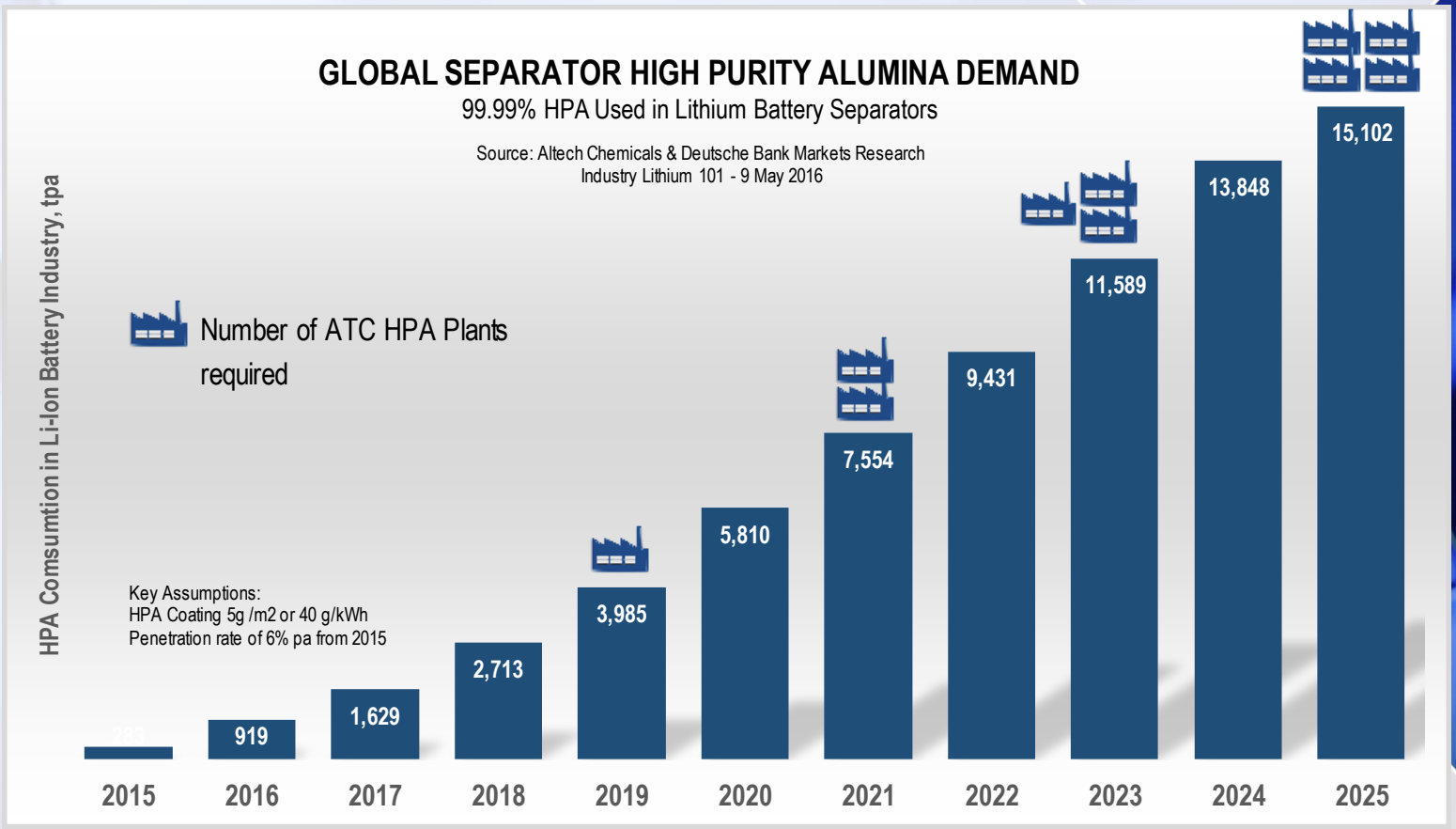
Lithium Battery Separator



HPA Separator Forecast



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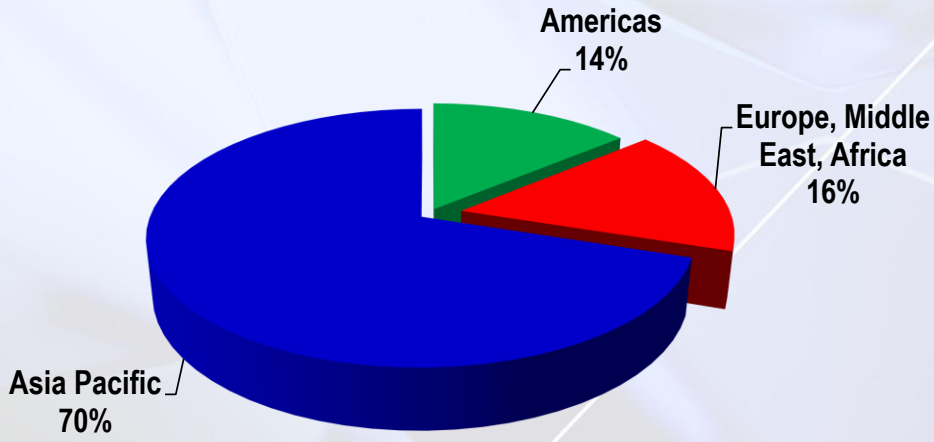
HPA Geographic Demand

- 70% of HPA demand - Asia Pacific region (APEC)
- Region for the world's manufacturing
- Altech's HPA plant (Malaysia) well-positioned to service APEC region
- Transport, customer service, technical credibility



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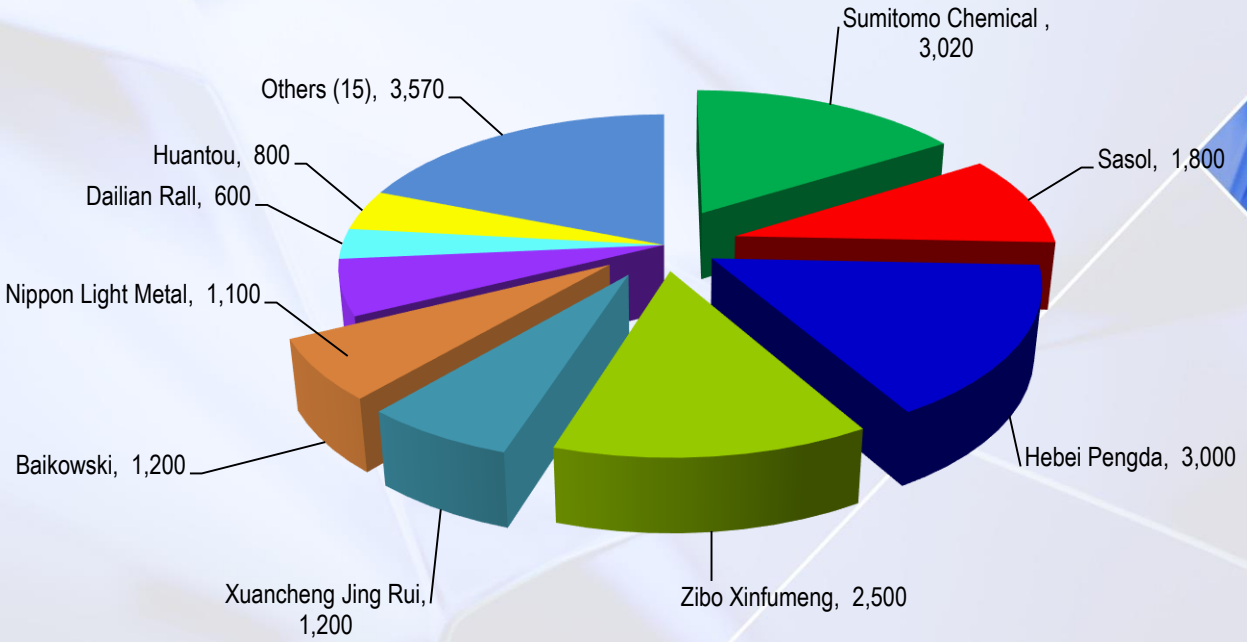
Current HPA Producers

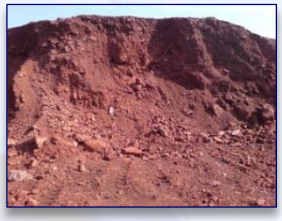
- Six largest HPA producers
- 3 Chinese, 1 Japanese, 1 Sth African, 1 French



Technavio Research

Altech's Differentiation

Current HPA Producers



Bauxite

Alumina Refinery

Smelter Grade Alumina 99.8%

Alumina Smelter

Aluminium Metal

US$3,000 per tonne

Aluminium Dissolution

99.99% HPA

Aluminous Clay

ALTECH HPA PLANT

One Single Process Step

99.99% HPA

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Low-impurity Aluminous Clay Feedstock

- Processed by mother nature
- Very low Iron (Fe) due to weathering
- Silica is non reactive – easily removed

	Bauxite Darling Range *	Canadian HPA Project	Altech HPA Project
Al_2O_3 (%)	34.5	22.77	30.5
SiO_2 (%)	21.5	53.29	56.3
Fe_2O_3 (%)	21.2	8.36	0.7
TiO_2 (%)	2.00	0.98	0.7
K_2O (%)	0.24	3.41	0.1
NaO (%)	0.005	1.42	0.1

Typical Mean Analysis

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Meckering Kaolin Deposit

- Altech owns 100% of deposit in W Aust
- Low environmental impact
- 12 Mt JORC Resource
- > 250 year mine life
- 130kms from Fremantle Port
- Mining lease granted

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Altech's HPA Process

- Use a standard HCl leach process
- Developed in 1980's by alumina industry
- Couldn't compete with Bayer SGA costs
- But great at producing HPA (no sodium ions)
- However little demand of HPA in 1980s

- Demand of HPA is here today

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Altech Business Strategy

New HPA Demand + Established Process + Great Deposit + Experienced People → Shareholder Value

"the last piece of the puzzle is in place"

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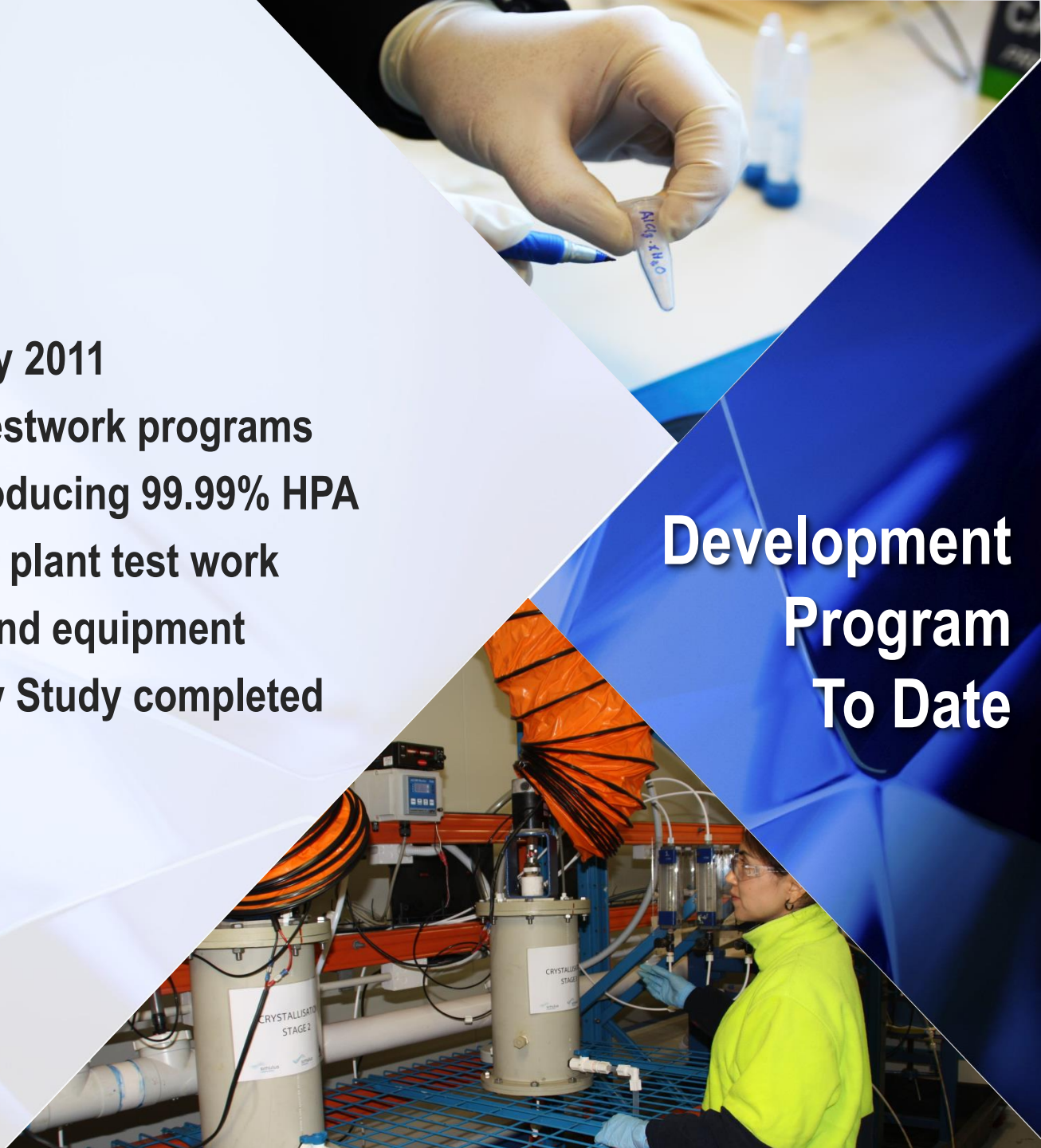
Development Program To Date

- Started work in early 2011
- Many studies and testwork programs
- No issues about producing 99.99% HPA
- Supporting lab pilot plant test work
- Off the shelf plant and equipment
- Bankable Feasibility Study completed



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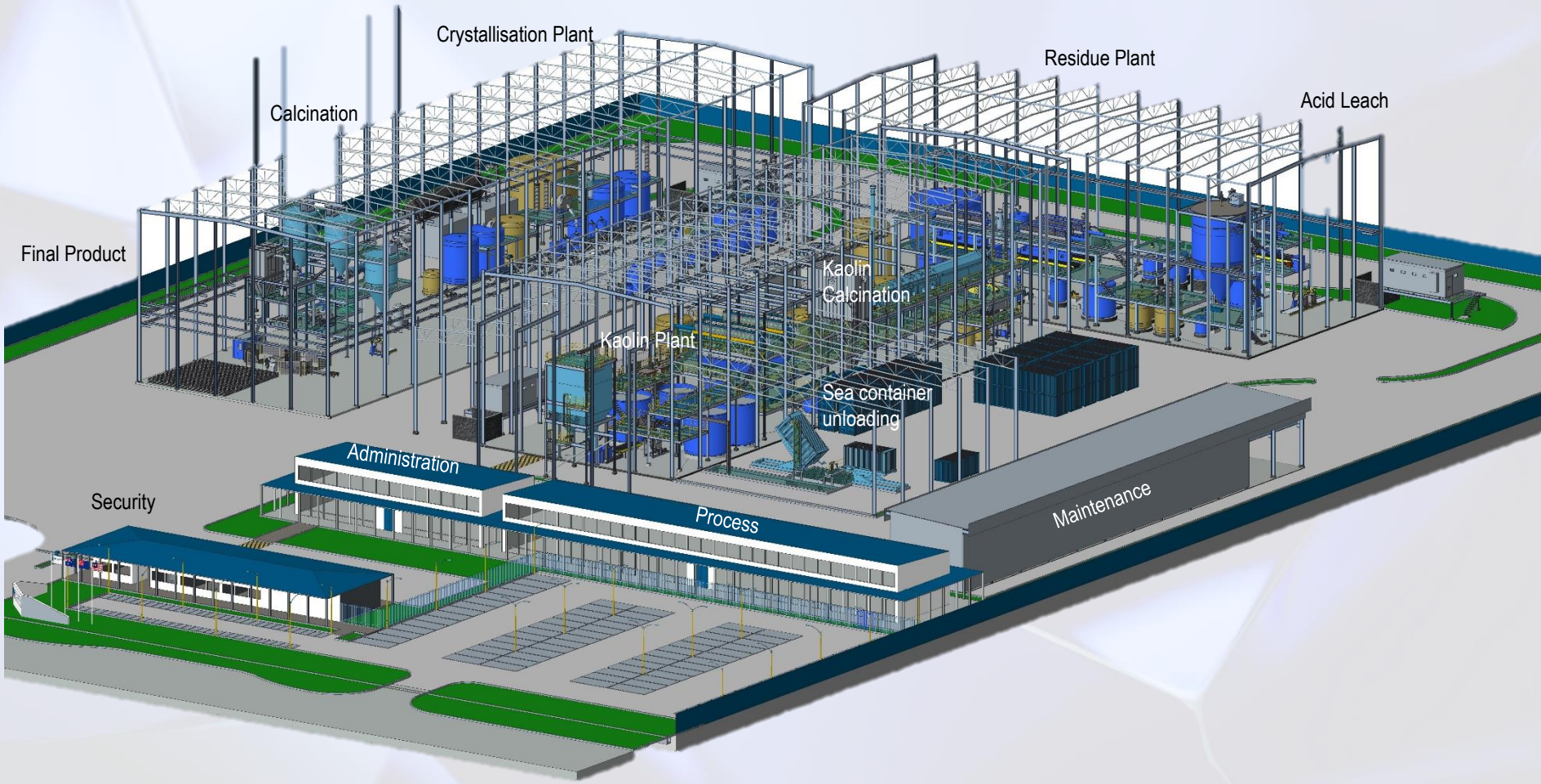
HPA Site Location Johor

- Lower quartile costs
- Kaolin feedstock shipped from WA
- Chemical industrial park
- Sea container ports
- Site secured
- Malaysian government incentives

Altech's HPA Plant - Malaysia



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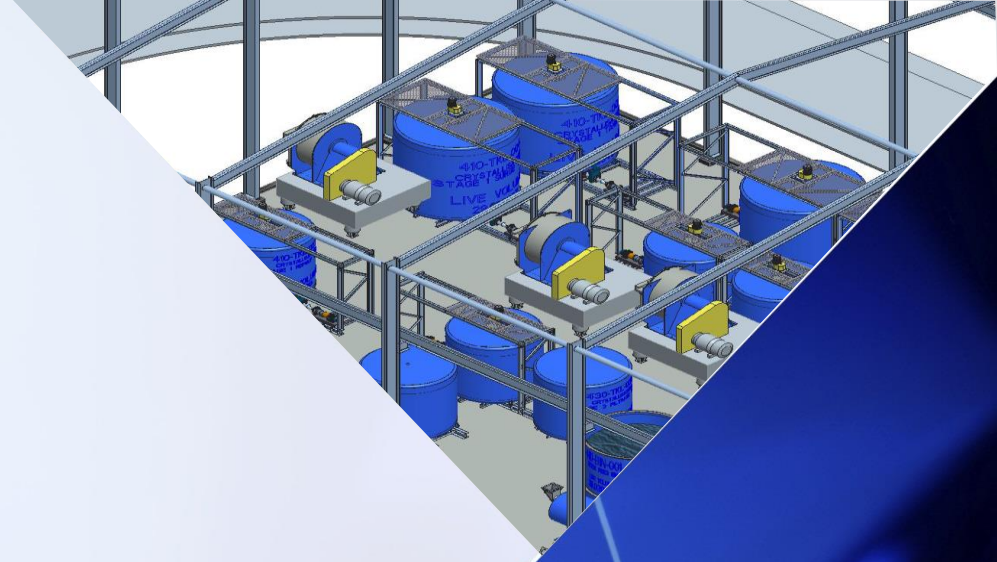

- Capital cost estimate US$78.7m
- Payback period 3.7 years
- Pre-tax NPV_9 of US$357.5m
- Highly attractive IRR of 33.3%
- Operating cost of US$9,070/t
- Sale price of US$23,000/t
- Margin of US$13,930/t
- EBITDA US$55.7m pa

Last updated March 2016

Highly Attractive BFS

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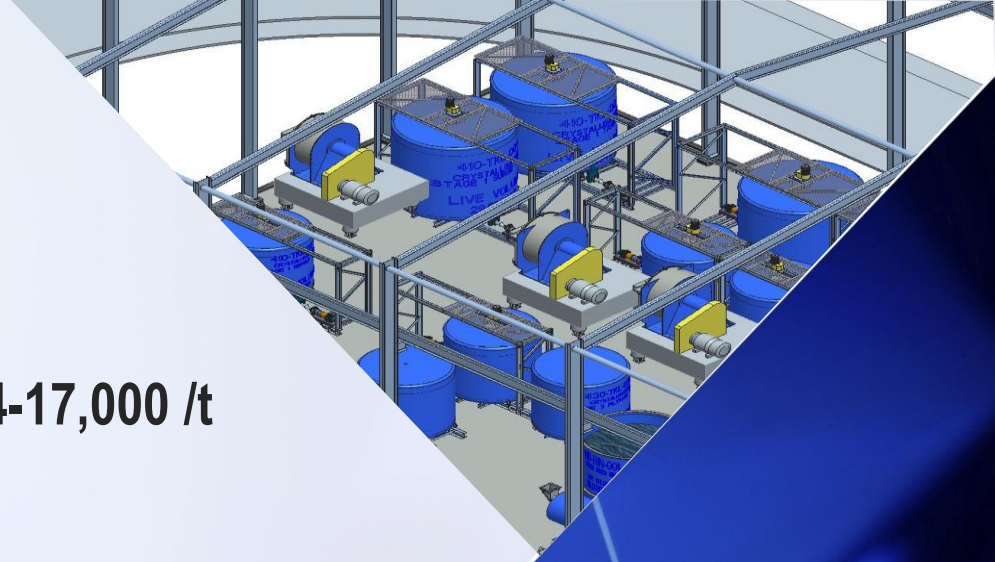
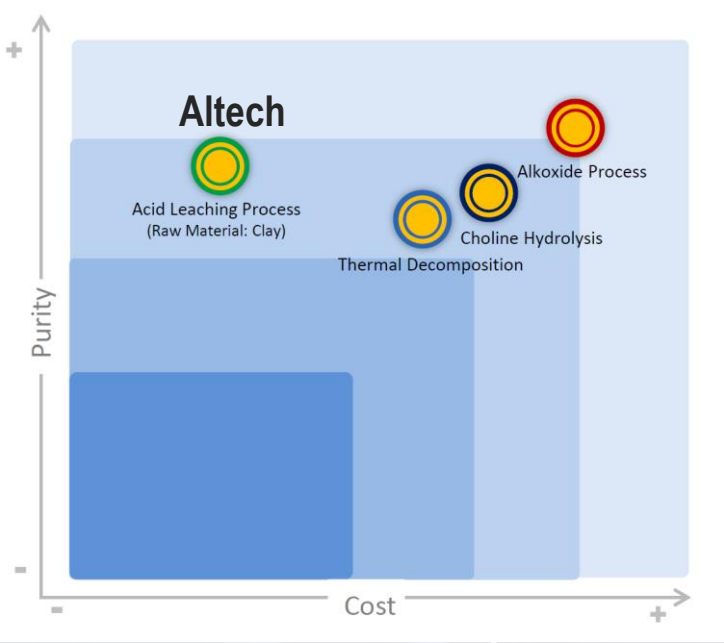


- **Breakaway - competitors US$14-17,000 /t**
  1. **We own our feedstock**
  2. **Main reactant HCl re-used**
  3. **Plant in low cost country (Malaysia)**

Bottom Quartile for Op Costs



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Mitsubishi signs full off take

- Off take sales with Mitsubishi
- First ten years of HPA operations
- Secures sales for 100% of 4,000tpa HPA production
- Exclusive global distributor
- Experienced with HPA
- Strategic priority – Lithium batteries

Contract Year	Forecast Production	Contracted Sales
Year 1	2,700t	2,700t
Year 2	3,000t	3,000t
Year 3	3,400t	3,400t
Year 4	3,800t	3,800t
Year 5	4,000t	4,000t

Contract Year	Forecast Production	Contracted Sales
Year 6	4,000t	4,000t
Year 7	4,000t	4,000t
Year 8	4,000t	4,000t
Year 9	4,000t	4,000t
Year 10	4,000t	4,000t

MITSUBISHI

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- Debt funding with KfW IPEX Bank
- 60% of plant – German suppliers
- Target of US$70m
- Export Credit cover of $60m
- Target sole lender – KFW IPEX Bank
- M+W Group as general contractor

We are at the funding stage

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Project Update

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Meckering Development

- Mining lease granted
- Option to purchase from landowner
- Grade control drilling completed
- Mineral resource of 12 Mt established
- > 250 years mine life
- Maiden ore reserve of **1.2 Mt**
- **30 year mine plan completed**

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Meckering Development

- **Mining proposal about to be submitted**
- EPC contractor awarded
- Mining contractor awarded
- Mining contract being drafted
- Shipping & transport contractor awarded

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Johor Development

- Site secured with deposit
- Opened Malaysian subsidiary office
- Awarded transport & shipping contractor
- WKL appointed to commence permitting
- Site soil drilling & survey completed
- Utilities application commenced
- Supply contracts underway
- Final site layout completed

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Detailed Design M+W Group

- Detailed design in full force
- About 50 engineers in Germany and Singapore
- Major equipment packages out for final pricing
- Kilns and HCL – preliminary eng
- Major pipe routing completed
- 3D model of plant finished
- Site layout completed
- Architecture design completed

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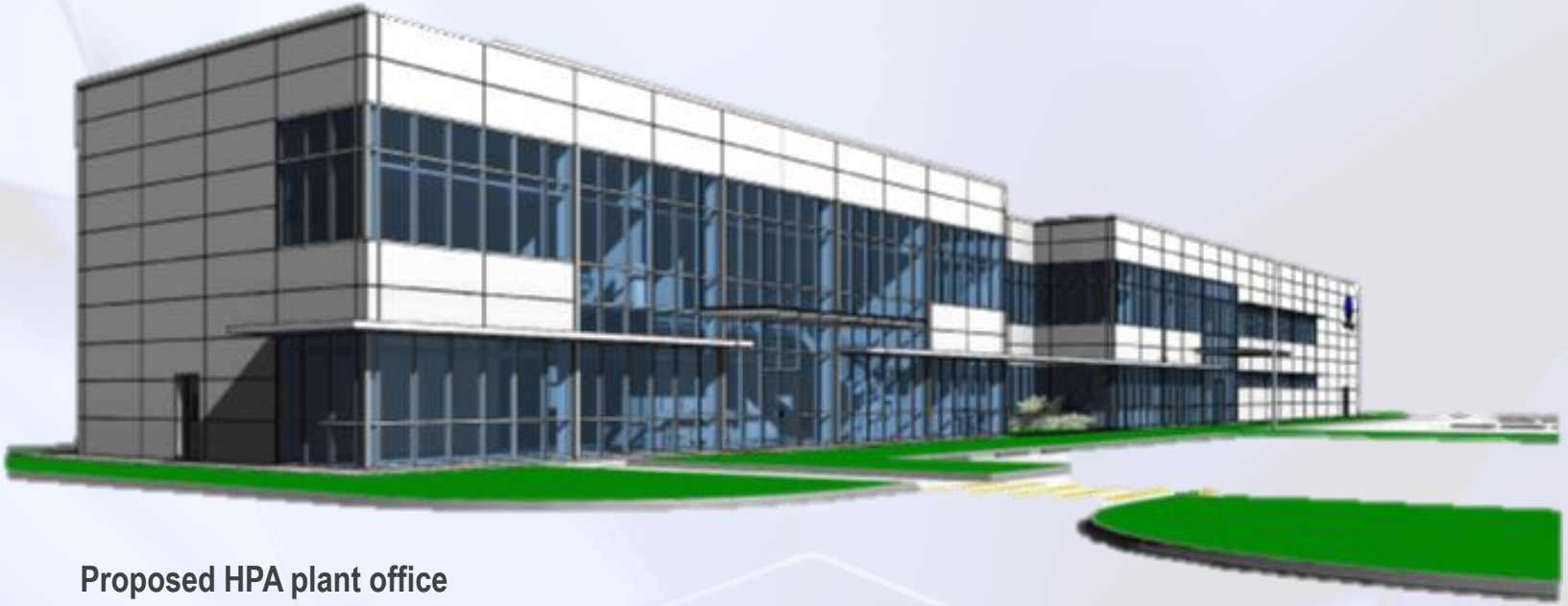
Altech's HPA Plant - Malaysia



Proposed HPA plant office

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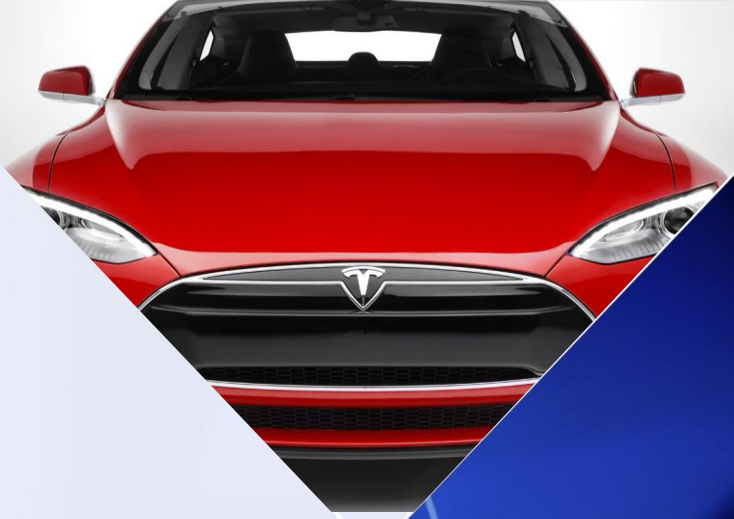

HPA Market Update

- HPA used in lithium battery separators
- Fire retardant separators – Samsung
- Strong growth in large format batteries
- Altech targeting 50% sales in Japan
- Japan price of 4N HPA – US$30,000 /t
- ATC BFS long term price used – US$23,000/t
- NPV would be US$ 597 million, IRR 47%
- Prefer to use conservative price

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Debt Funding Increased

- Debt target increased to US$70m
- Export credit finance increased to US$60m
- Long tenure, low interest rate
- Single bank financing (KFW IPEX)
- Indicative term sheet
- Positive pre-assessment ECA

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Due Diligence Update

- Independent DD consultants appointed
- Technical, legal and market consultants
- Thorough DD including site visits
- Review of lab pilot plant operation
- Preliminary DD report – No fatal flaws
- KFW DD meeting with Mitsubishi (Tokyo)
- Preparation of DD documentation

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Timeframe to market

- Debt funding term sheet Q1 2017
- Project equity Q2 2017
- Site works commencing Q2 2017
- 18 months construction
- First product due early 2019

Forward-looking Statements

This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.

Competent Person Statement

Competent Persons Statement – Meckering Kaolin Deposit

The Competent Person for the Ore Reserve statement is Mr Carel Moormann who is employed by Orelogy Consulting Pty Ltd as a Principal Consultant. Orelogy Consulting Pty Ltd is an independent mine planning consultancy based in Perth, Western Australia. Orelogy was requested by Altech Chemicals Ltd to prepare a reserve estimate for the Meckering kaolin deposit to provide feedstock for High Purity Alumina production. Mr Moormann is a Fellow of the Australasian Institute of Mining and Metallurgy and a Competent Person as defined by the 2012 JORC Code. Mr Moorman has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Carel Moorman consents to the inclusion in this release of the matters based on his information in the form and context in white it appears.

Competent Persons Statement – Meckering Kaolin Deposit

The information in this release that relates to Exploration Results and Mineral Resources are based on information compiled by Sue Border, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy and Fellow of the Australian Institute of Geoscientists. Sue Border has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mrs Border consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.