

# ASX ANNOUNCEMENT 8 August 2018

ASX: ABX



AIF<sub>3</sub> for Aluminium smelters & Lithium ion batteries. Corethane: clean as gas, cheap as coal

## ALCORE Limited to have global technology licence

Australian Bauxite Limited (**ABx**) is pleased to announce that its wholly-owned subsidiary, ALCORE Limited will have global licence rights for bauxite refining using the ALCORE technology.

- ALCORE technology is designed to refine raw bauxite to produce Aluminium Fluoride (AIF<sub>3</sub>) and other valuable co-products see Figures 1 & 2.
- The global licence will allow ALCORE Limited to build multiple plants in any locations to meet growing demand for AIF<sub>3</sub> and associated co-products as increase aluminium smelter production and as use of AIF<sub>3</sub> in lithium ion batteries increase demand for AIF<sub>3</sub>.
- Site construction works for Stage 1 of the ALCORE project commenced on 1 July as planned at ALCORE's pre-approved Pilot Plant site in Berkeley Vale, Central Coast NSW.
- Stage 1 is designed to produce AIF₃ test samples and then produce Corethane, which is pure hydrocarbon powder refined from low-value coals. Graphite can also be refined to a very high purity for use in high-efficiency batteries.
- Corethane has been used to provide thermal and electrical power. It has also been used several times as a gas-substitute in gas turbine electrical generators, and used as a diesel substitute for fuel security purposes. Corethane also has industrial applications and several potential customers have already requested test samples for their industrial plants.
- Discussions continue with governments, agencies and major companies in the aluminium industry

#### ABx CEO, Ian Levy Comments:

"Step by step, ABx is bringing ALCORE's powerful new bauxite refining technology closer to becoming an important domestic producer and supplier of key AIF<sub>3</sub> products for the Australasian aluminium smelters. However, in the longer-term, these global technology rights allow ALCORE Limited to produce AIF<sub>3</sub> in any location globally. Creating ALCORE Limited as a project-specific subsidiary is expected to unlock considerable value for shareholders in both the short and medium terms."

"ALCORE Technology also produces several valuable co-products including silica fume for the cement industry and Corethane pure hydrocarbons for energy and fuel security. Upside potential includes production of pure AIF<sub>3</sub> for Lithium-ion batteries, iron oxide pigments, titanium oxide pigments. Further potential exists for developing ultra-pure products such as high purity alumina ("HPA") for the manufacture of scratch-resistant sapphire glass for phones and computer screens."

"ABx itself continues the development of its three core bauxite projects; the Tasmanian mine, the large Binjour Project in central QLD and the Penrose refractory bauxite project 90km inland of Port Kembla NSW."





Figure 1: Summary of the ALCORE Business Strategy

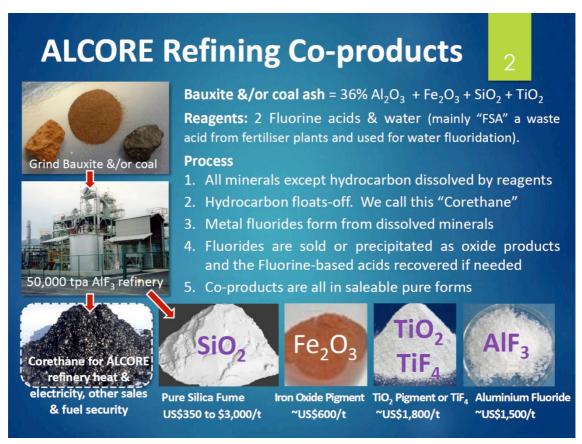


Figure 2: Summary of ALCORE Bauxite Refining Process and Co-products





#### For further information please contact:

Ian Levy, CEO and MD Australian Bauxite Limited

Telephone: +61 (0) 2 9251 7177 Mobile: +61 (0) 407 189 122

#### **About Australian Bauxite Limited**

### ASX Code ABX Web: www.australianbauxite.com.au

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & holds the core of the Eastern Australian Bauxite Province. ABx's 14 bauxite tenements in Queensland, New South Wales & Tasmania totalled 914 km² & were selected for (1) good quality bauxite; (2) near infrastructure connected to export ports; & (3) free of socio-environmental constraints. All tenements are 100% owned, unencumbered & free of third-party royalties. ABx's discovery rate is increasing as knowledge, technology & expertise grows. The Company's bauxite is high quality gibbsite trihydrate (THA) bauxite that can be processed into alumina at low temperature.

ABx has committed a large proportion of its expenditure into Research and Development to find ways to capitalise on the main strengths of its bauxite type, mainly highly clean, free of all deleterious elements and partitioned into layers, nodules, particles and grains of different qualities that can be separated into different product streams using physical, chemical and geophysical methods.

ABx has declared large Mineral Resources at Inverell & Guyra in northern NSW, Taralga in southern NSW, Binjour in central QLD & in Tasmania, confirming that ABx has discovered significant bauxite deposits.

ABx's first mine commenced at Bald Hill near Campbell Town, Tasmania in December 2014 – the first new Australian bauxite mine for more than 35 years.

ABx aspires to identify large bauxite resources in the Eastern Australian Bauxite Province, which is a globally significant bauxite province. ABx has created significant bauxite developments in 3 states - Queensland, New South Wales and Tasmania. Its bauxite deposits are favourably located for direct shipping of bauxite to both local and export customers.

ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.

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Paul Lennon Chairman Leon Hawker Chief Operating Officer Ian Levy CEO & MD Jacob Rebek Chief Geologist

Ken Boundy Director Paul Glover Marketing, Exploration & Relationships

Henry Kinstlinger Company Secretary

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