

ASX ANNOUNCEMENT 3 December 2018

ASX: ABX



AIF₃ for Aluminium smelters & Lithium ion batteries. Corethane: clean as gas, cheap as coal

2nd Milestone Achieved. ALCORE Lab Completed to Lock-Up Stage.

Australian Bauxite Limited (ABx)'s wholly-owned subsidiary, ALCORE Limited has acquired the equipment needed to produce test samples of key products and constructed the Stage 1 Core Laboratory to lock-up stage, thus staying ahead of schedule and within budget.

An Open Day for seed investors was held last Wednesday 28 November. A video of construction made by members of the ALCORE team showing development of the Lab can be seen at Australianbauxite.com.au/Interviews&News.htm and photos below show some images from the Open Day.

- ALCORE's patent (pending) application technology is designed to refine raw bauxite to produce Aluminium Fluoride (AIF₃) and other valuable co-products including the Corethane gas-substitute see Figures 1 & 2. AIF₃ is a key electrolyte ingredient in aluminium production by aluminium smelters.
- Global demand for AIF₃ and associated co-products continues to increase as aluminium smelter production increases and the use of AIF₃ in lithium ion batteries increases.
- Site construction and design 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 for pre-qualified aluminium smelter customers & then produce **Corethane**, which is pure hydrocarbon powder refined from low-value coals.
- Corethane has been used to provide thermal and electrical power. It has been used as a gas-substitute to fuel a large gas turbine for 14 months and achieve accreditation as a turbine fuel to generate electricity, with very low CO₂ emissions similar to natural gas.
- Corethane has also been used as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel.
- Corethane also has industrial applications and several potential customers have already requested test samples for their industrial plants.
- Graphite refining to a very high purity for use in high-efficiency batteries will also be tested.
- Discussions continue with governments, agencies and major companies in the aluminium industry.

ABx CEO, Ian Levy commented: "ABxs subsidiary ALCORE is sufficiently funded to deliver Stage 1 of the ALCORE project, thanks to strong support from seed capital investors. ALCORE's powerful new bauxite refining technology can lead to Australia's first production of AIF₃ products to provide security of supply for Australasian aluminium smelters. ALCORE's production of Corethane hydrocarbon can change the energy supply and fuel security outlook for eastern Australia"

ALCORE Limited is expected to unlock considerable value for shareholders in the short and medium term."

Achieving another milestone ahead of schedule has taken an extreme effort by many ALCORE staff, which has given us the confidence to overcome any unexpected obstacles that may arise."





"ABx is also pressing ahead with 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. Planning is underway for trial mining and processing testwork at the Binjour Project."



Figure 1: Summary of the ALCORE Business Strategy

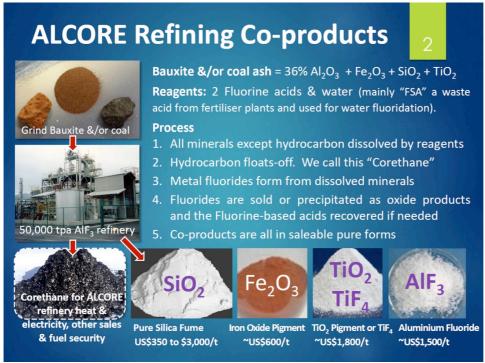


Figure 2: Summary of ALCORE Bauxite Refining Process and Co-products

For further information please contact:

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Photo record of the ALCORE Open Day

ALCORE Research Centre, Berkeley Vale 28 November 2018



ALCORE Research Centre



The Core Lab was built inside the ALCORE Research Centre



Roof & walls of Core Lab are steel-reinforced for high strength



XRF units and other equipment inside Core Lab



3 large fume cabinets for Lab test runs taking 7 to 20 minutes



ALCORE COO Phill Hall explained the role of the Core Lab



Opening: ALCORE cake cutting by Derek Firth, Chairman of Refined Ore Industries Ltd (ROIL) & Paul Lennon, Chairman of both ALCORE & ABx.



Some of the 32 attendees at the presentations



ALEGRE Limited



Floors are now sealed with hi-tech industrial vinyl (robust, antistatic & chemically stable). Kick-boards are the base for benches. All vinyl is turned-up the walls to seal the Core Lab.



Flooring applied to kick-board bases of rear Core Lab benches and the door threshold sills for all 3 laboratory doors. Note that the windows are for external observers to monitor the lab work.



3 large fume cabinets are sealed and ready for wiring-up. Exhaust conduits will send fumes into a scrubber unit filled with water & neutralising lime water, thence into a collection tank for testing prior to release into the waste disposal system for the Berkeley Vale industrial park.



Laying & heat-sealing the vinyl flooring by specialists

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. 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 in northern NSW, southern NSW, Binjour in central QLD & in Tasmania where 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 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 domestic 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.

About ALCORE Limited ALCORE

Australian Bauxite Limited (ABx) has incorporated ALCORE Limited as a wholly-owned subsidiary to manage the ALCORE Project leading to the construction of an ALCORE Production Plant to produce Aluminium Fluoride (AIF3) and valuable co-products, using patent (pending) new technology. The ALCORE Technology is designed to convert low grade bauxite worth \$50 per tonne into a suite of valuable products worth more than \$800 per tonne. 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 AIF $_3$ test samples for pre-qualified aluminium smelter customers & then produce Corethane, which is pure hydrocarbon powder refined from low-value coals and has been used to provide thermal and electrical power with low CO_2 emissions when used as a gas-substitute to fuel large gas turbines. Corethane has also been used as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel.

Directors of ABx Officers

 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