AUSTRALIAN BAUXITE LIMITED

ALCORE Limited

AlF_3 for Aluminium smelters and lithium ion batteries

ASX: ABX

ASX ANNOUNCEMENT

26 August 2020

Alcore and Sojitz Memorandum of Understanding Agreement

Australian Bauxite Limited (ASX: ABX) advises that its subsidiary ALCORE Limited (**Alcore**) has executed a Memorandum of Understanding agreement (**MoU**) with the Japanese global trading company Sojitz Corporation (**Sojitz**), which owns alumina assets in Australia and other mineral resources worldwide.

The MoU provides a framework under which Alcore and Sojitz will explore a potential business relationship with respect to the business of Aluminium Fluoride (**AlF_3**).

Sojitz Group consists of approximately 400 subsidiaries and affiliates located in Japan and throughout the world, developing wide-ranging general trading company operations in a multitude of countries and regions.

Recent developments at Alcore

1. Chemical analyses from CSIRO Laboratory, Melbourne confirm that Alcore's AlF_3 products achieved commercial chemical grades and the required crystal type
2. Commercial-grade AlF_3 was produced from 30% dross waste from an aluminium smelter and 70% gibbsite mineral, which is the principle component of bauxite
3. Production of Corethane gas-substitute by reducing ash content in coal from 28% to less than 3%. Corethane can provide energy security for production plants and for metallurgical use
4. Appointment of Dr Mark Cooksey as CEO of Alcore. Dr. Cooksey has previously been a Senior Research Engineer in aluminium smelting with Comalco (now Rio Tinto Alcan) from 1997 to 2003. Dr Cooksey joined CSIRO in 2004 as Senior Research Engineer and became Senior Principal Research Leader in 2016. He holds a PhD in Chemicals & Materials Engineering and has worked closely with the aluminium industry on commercialising new technologies and processes
5. Entered into a contract with the major Australian engineering firm, Clough Projects Australia Pty Ltd Australia (Clough) to provide engineering for design and construction of Alcore's Production Plant

Commentary: Welcoming Sojitz to this project, Mark Cooksey, Alcore's CEO, commented:

> "Sojitz has been assisting Alcore for 3 years and is one of several aluminium industry corporations that are vitally interested in the Alcore processes and business plans. We welcome this third-party endorsement and we expect there will be further endorsements in the coming months as we start to standardise our product specifications and processing strategies. Sojitz can provide an immediate international capability and could assist in the supply chain for Alcore production of AlF3 which is a strategically important mineral product for aluminium smelting and battery production."

More about AlF_3 and Alcore Limited

AlF_3 is a strategically important mineral product for the aluminium smelting industry It is an electrolyte used to increase energy-efficiency of aluminium smelters by reducing the electrical power consumption per tonne of aluminium. Currently almost all AlF_3 is imported from China.

AlF_3 of high purity is part of the next generation of batteries including Lithium Ion batteries.

Alcore is planning the first domestic production of AlF_3 to supply Australasian aluminium smelters and to export. Currently Australasian imports from China exceed 30,000 tonnes per year worth more than A$60 million. Alcore plans to produce 10,000 tonnes per year growing to 50,000 tonnes.

Alcore is an 89%-owned subsidiary of Australian Bauxite Limited ("ABx") that has the global exclusive rights to the aluminium-related portion of CORE Technology (Patent Application).

Alcore has committed to the best strategy for the first commercial plant called "Refine & Recycle" whereby by-products from aluminium smelters will be converted into AlF_3 which can be sold back to the smelters as an essential electrolyte for smelting.

This "Refine & Recycle" strategy has the highest profit and lowest technological risk of all options assessed to date. It also has the fastest growth potential worldwide. Plants can be replicated adjacent to aluminium smelters throughout the western world that:

1. seek higher environmental credits for recycling by-products,
2. reducing emissions,
3. lowering costs and
4. reducing their dependence on imported AlF_3.

Alcore can refine two smelter by-product waste materials, one with high aluminium (~85% Al) and the second with high fluorine (~55% F), so that all AlF_3 components are freely available.

Alcore can convert these smelter by-product waste materials into a highly valuable AlF_3 for recycling back to the aluminium smelters.

This announcement has been approved for release by the Board of Australian Bauxite Limited.

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About Australian Bauxite Limited **ASX Code ABX** **Web: www.australianbauxite.com.au**

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & controls the Eastern Australian Bauxite Province. ABx's 11 bauxite tenements in Queensland, New South Wales & Tasmania totalling 662 km^2 are all 100% owned, unencumbered & free of third-party royalties. ABx's bauxite is 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 which is very 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 northern Tasmania. 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 and has created significant bauxite development projects 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.

About ALCORE Limited:

Australian Bauxite Limited (ABx)'s 89%-owned technology subsidiary ALCORE Limited was created to fund and manage the Alcore Project involving the construction of an Alcore Production Plant to produce Aluminium Fluoride (AlF_3) and valuable co-products using patent pending new Australian technology. Alcore intends to convert low grade bauxite worth $50 per tonne into a suite of valuable products worth more than $800 per tonne. Alcore's testwork commenced on 1 July 2019 at Alcore's high-technology Research Centre in Berkeley Vale, Central Coast NSW and is currently focussed on producing AlF_3 test samples for pre-qualified aluminium smelter customers. Its processes can also produce Corethane, which is pure hydrocarbon powder to provide thermal and electrical power with low CO_2 emissions when used as a gas-substitute or as a diesel substitute for fuel security purposes and is ideally suited for use as a sulphur-free bunker fuel. Corethane is also useable as a chemical reductant instead of imported coke and coals.

AlF_3 is a vital ingredient in aluminium smelters and is currently 100% imported. Alcore will be the first Australian producer of this strategically important mineral product and will provide security of supply to the large aluminium smelting industry in Australia. Alcore will make AlF_3 from smelter waste materials and thereby maximise the recycling by Australian aluminium smelters.

Directors of ABx

Paul Lennon	Chairman
Ian Levy	CEO & MD
Ken Boundy	Director
Henry Kinstlinger	Company Secretary

Officers

Leon Hawker	Chief Operating Officer
Jacob Rebek	Chief Geologist
Paul Glover	Marketing, Exploration & Relationships
Nathan Towns	Operations Manager
Dr Mark Cooksey	CEO Alcore Limited

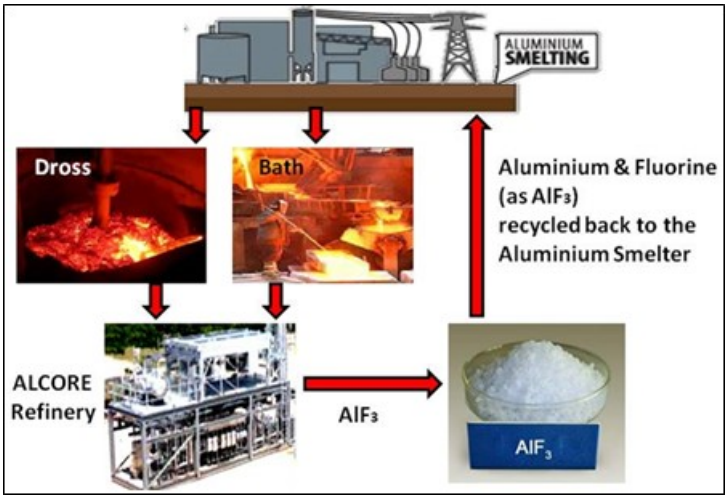

Figure 1

Summary of the ALCORE 'Refine & Recycle' strategy

This process has the strong potential to be the simplest and lowest cost method to make AlF_3. It provides an economically attractive way to utilise the aluminium-rich and fluoride-rich by-products from many aluminium smelters.

Figure 2

The $2.5 million ALCORE Laboratory built inside the ALCORE Research Centre

The Core Lab is a climate-controlled laboratory constructed inside the ALCORE Research Centre for the refining of bauxite and its components to produce test samples of AlF_3 and co-products. It will become a research centre for testing its technology on many ores.

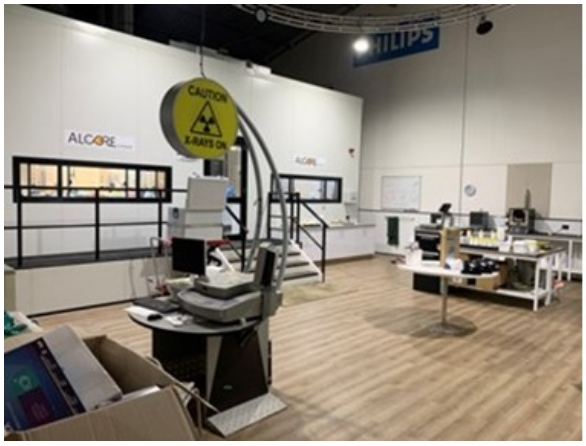

Figure 3: Preparation & Analytical Lab, XRF & furnaces

Figure 4: ALCORE test lab, fume cabinets with hi-tech scrubbers, showers, microscopes & Drager air monitor (wall)

Figure 5: Exterior support systems

a) Air purification and atmosphere control

b) Liquids processing & neutralisation plant

c) Duplicated secure LPG gas supply

d) Gas-fired Standby-Backup Generator