



## QUARTERLY REPORT AND ACTIVITY STATEMENT FOR 3 MONTHS TO 30 SEPTEMBER 2020

### Corporate

- Group available cash at the end of the quarter was \$1.7 million and is currently is about \$1.3 million.
- Sales of cement and fertiliser grade bauxites totalled 33,915 tonnes worth in excess of \$2.4 million.
- Dr Mark Cooksey, as CEO of ABx's 89%-owned technology subsidiary, ALCORE Limited (**Alcore**) is driving Alcore's development and commercialisation of a new process for production of aluminium fluoride (**AlF<sub>3</sub>**).
- Alcore's Memorandum of Understanding ("MOU") with the Japanese global trading company Sojitz Corporation (**Sojitz**), which owns alumina assets in Australia, is already leading to potential business relationship with respect to AlF<sub>3</sub>.

### Sales & Operations

- Shipment of 33,405 tonnes of cement-grade bauxite from Bell Bay port completed on schedule.
- Delivered 509 tonnes of fertiliser grade bauxite from the Bald Hill Bauxite Project at Campbell Town to regularly supply bauxite to the fertiliser plant operated by Impact Fertilisers in Hobart, Tasmania.
- New orders received for fertiliser grade bauxite as agricultural fertiliser demand rises as droughts break
- **Binjour Bauxite Project inland from Bundaberg, QLD:** issues of mining leases, transport & shipping outlined in early 2020 are consideration by the Office of the Co-ordinator General for early review. Optimum engineering design of the Mining Lease Application was conducted in the quarter under difficult conditions because of the Queensland border closure.

## ALCORE Project

- Alcore's communications with the Japanese global trading company Sojitz includes assessments of potential customers. Final engineering due diligence will be done once international and interstate travel recommences.
- Alcore has continued achieving milestones in its laboratory. Alcore's business plans are to:
  - i. Produce AlF<sub>3</sub>, a high-priced ingredient in aluminium smelters and lithium ion batteries, by refining aluminium smelter waste materials, commercial gibbsite and ABx's gibbsite-rich, clean bauxite;
  - ii. Be Australia's first domestic producer of AlF<sub>3</sub> so as to increase security of supply for Australasian smelters and also to export additional tonnages to other smelters worldwide.
- Alcore's method is the world's first production of AlF<sub>3</sub> from the recycling of smelter waste and low-grade bauxite and uses the aluminium-related parts of the CORE Technology (patent application).
- Alcore has now demonstrated repeated production of:
  - ✓ Fluorine acids from aluminium smelter waste;
  - ✓ AlF<sub>3</sub> from aluminium hydroxide with composition and crystal form meeting commercial specifications;
  - ✓ AlF<sub>3</sub> from aluminium hydroxide and fluorine acids recovered from aluminium smelter waste.
- Alcore has also proven it can:
  - ✓ Produce AlF<sub>3</sub> from bauxite meeting most but not all commercial specifications, at moderate yields that will require adjustment of process settings to optimise. Chemical analyses are performed by CSIRO;
  - ✓ Prevent key impurities in bauxite from reacting with fluorine reagent mixtures, allowing the impurities to remain as solids that can be separated from the AlF<sub>3</sub> solution during processing;
  - ✓ Manufacture Corethane gas-substitute by reducing ash content in coal from 28% to 0.3%, thus making an ideal, ultra-clean substitute for coke and ideal for industrial heating as a substitute for gas and diesel.
- Alcore is now advancing from laboratory confirmation to an engineering validation program, to confirm process performance and product quality at a larger scale. The majority of the process steps are used in existing commercial processes and so will require limited verification. The few new process steps will involve more intensive testing, likely to involve international specialists and expertise .
- Several potential AlF<sub>3</sub> customers have visited the Alcore Research Centre to observe the production of AlF<sub>3</sub> from aluminium smelter by-products and are continuing to discuss future joint plans.

### COVID-19 Virus Pandemic Response – never give up

- ABx's strict health safety protocols are enforced at all ABx-Alcore facilities in compliance with national and state responses to the COVID-19 virus pandemic. Whilst 2 staff members are teleworking from



Melbourne, 1 from Adelaide and 1 from Tasmania, ABx continues to meet schedules by working harder, longer and with more determination to succeed no matter what is imposed on our business and people.

- The Alcore research centre is continuing its vital research without losing a shift.
- ABx Group is taking all appropriate steps to protect employees, contractors and customers, the safety of which is paramount. We regularly monitor updates from relevant authorities to keep ahead of potential pandemic threats and have registered the Alcore lab with NSW Health, if needed.
- Contingency plans to support our business and employees until the COVID-19 virus threat passes are in place. Dedicated work by staff is succeeding despite the shameful increasing regulatory burdens.

## OPERATIONS

On-ground exploration was curtailed in Queensland and Tasmania by COVID-19 travel restrictions but continued in NSW as time permitted. Engineering and senior staff costs increased for the Binjour Project and exploration lab research work increased. Direct research and development costs totalling \$1,540,000 was recorded in Appendix 5B for ALCORE Limited's mine production costs, research into Aluminium Fluoride technology, bauxite beneficiation and exploration, excluding staff and other administration costs. This level of costs is largely due to the production and profitable sale of bauxite from the Bald Hill Bauxite Project in the Quarter.

**Production and Sales:** ABx again tested our logistics and mining contractors in delivering a significant cargo of 33,405 tonnes to the port of Bell Bay, northern Tasmania. Mining and screening by Hazell Bros, cartage by Dave Wagner & Son and port services by QUBE Ports all stood the strain and the cargo was on-specification, carted and ship-loaded on time. Many thanks for their efforts during these very difficult times.

### Rehabilitation ahead of schedule



**Figure 1: "After" Rehabilitation**  
Rehabilitated land in the foreground and bottom right is now being cropped with good yields.

Pre-mining, the rocky ridge was only for grazing but stone-removal and reseeded to landholder specifications has resulted in an improved outcome.

Rehabilitation at the Bald Hill Bauxite Project is going well and ahead of schedule, taking advantage of the better growing season this year. ABx believes that the final rehabilitation of all land mined to date will be returned to the Landowner in a more productive condition than when mining commenced in accordance with ABX's paramount corporate policy, namely:

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

### Corporate skills in rehabilitating agricultural lands post-mining:

Unlike some other bauxite producers that operate in remote savannah regions, ABx has considerable experience dealing with the rehabilitation of good quality agricultural land. This experience will be important when ABx commences mining and rehabilitation operations in Binjour 115kms inland from Bundaberg, QLD.

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**Figure 2: “Before” rehabilitation  
Mining at Bald Hill Bauxite Project,  
Campbell Town, Northern Tasmania**

Extracting bauxite that meets the grade and physical characteristics required by customers, with surgery-like precision using the 85-tonne excavator.

Operations Manager, Nathan Towns (pictured) supervised ore extraction, processing, transport and ore blending activities.

**Figure 3:  
Loading the bauxite product at Bald Hill  
Bauxite Project**

Road trucks made multiple trips to and from Bell Bay port. The truck being loaded has a payload of 45 tonnes.



**Figure 4:  
Bauxite shipping stockpile at Bell Bay  
Port, Northern Tasmania**

Product homogenisation occurs during sequential production, transport, port stockpiling and ship loading.

**Figure 5:  
Bauxite ship-loading at Bell Bay Port,  
Northern Tasmania**

Ship loading involves six articulated ore trucks bring the bauxite for loading using ships gear.

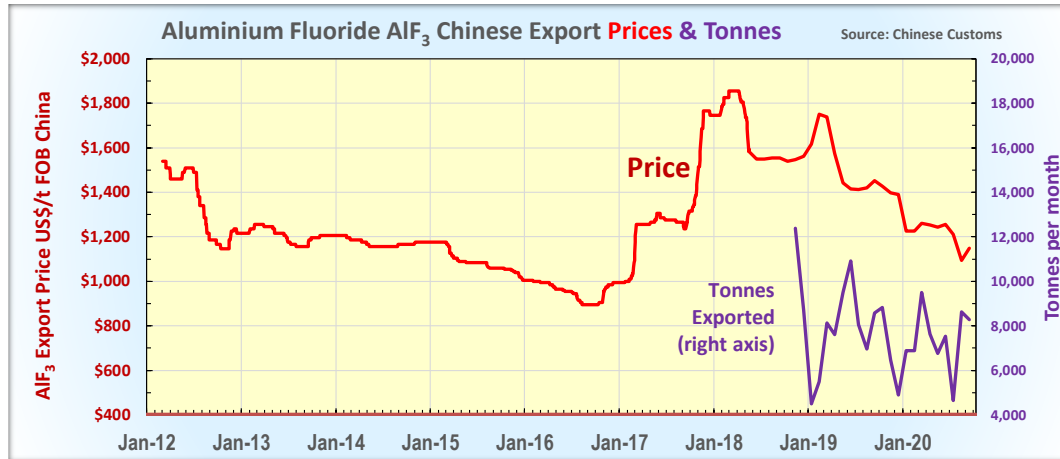


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## ALCORE Project

- $\text{AlF}_3$  is an essential electrolyte ingredient in aluminium smelters and global demand for  $\text{AlF}_3$  increases as aluminium smelter production increases and the use of  $\text{AlF}_3$  in next-generation batteries increases



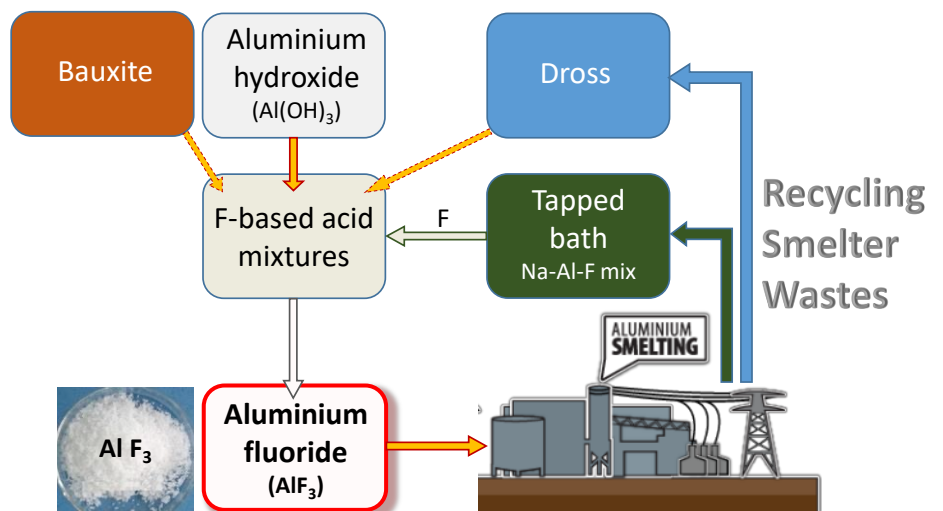
**Figure 6:** Prices & demand for aluminium fluoride  $\text{AlF}_3$  exported from China since 2011. Customers pay shipping costs in addition to prices. Recovery from the COVID-19 slow-downs may be starting?

- $\text{AlF}_3$  markets remain positive for ALCORE's predicted cost structure
- The ALCORE business plan targets long-established, broad industrial markets with many potential buyers
- ALCORE will be the first Australian supplier of  $\text{AlF}_3$  to the Australasian Aluminium Smelters and for export
- Australian  $\text{AlF}_3$  imports from China in the last 12 months totalled 25,000 tonnes averaging US\$1,340 (A\$1,860) per tonne FOB China.  $\text{AlF}_3$  is a strategically essential mineral product for aluminium smelters
- **Location of first plant at Bell Bay, Tasmania:** ALCORE is targeting industrial sites adjacent to the Bell Bay aluminium smelter in northern Tasmania for the first production plant
- Discussions continue with governments and supportive major companies in the aluminium industry
- Initial production will be simple design and later production modules more sophisticated to produce a full suite of products, designed to capitalise on "Refine and Recycle" advantages – see Figure 5

**Figure 7:** Summary of the ALCORE "Refine & Recycle" Business Strategy

This process has the strong potential to be the simplest and lowest cost method to make  $\text{AlF}_3$ . It provides an economically attractive way to utilise the aluminium-rich and fluoride-rich by-product waste streams from many aluminium smelters.

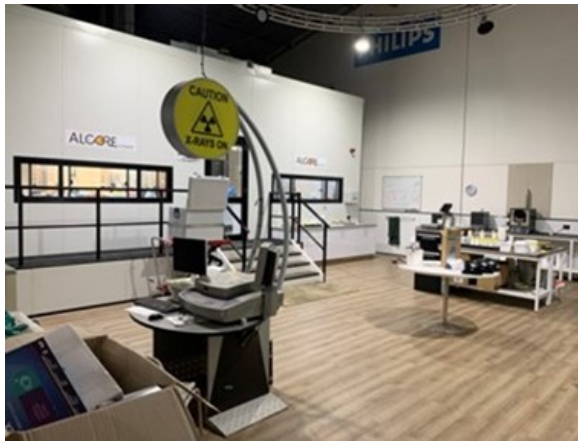
When smelters close-down, the Refine & Recycle processing is at its best, helping to recycle waste and by-products into saleable product rather than become expensive waste requiring disposal.





**Figure 8:**  
**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  $\text{AlF}_3$  and co-products. It will become a research centre for testing its technology on many ores.



**Figure 9**  
**Ore Preparation & Analytical Lab with XRF & furnaces**



**Figure 10**  
**Alcore test lab, fume cabinets with hi-tech fume scrubbers, showers, microscopes & Draegar air monitor (far wall)**



**Figure 11: Commercial-grade and well-crystallised  $\text{AlF}_3$  samples made repeatedly and consistently at the Alcore Research Centre**

## **ALCORE : CORETHANE - SUCCESSFULLY PRODUCED**

ALCORE's business plan is to produce  $\text{AlF}_3$  for aluminium smelting and other co-products including Silica Fume for Eco-cement and produce the gas-substitute Corethane for energy security.

The ALCORE laboratory processed a representative sample of Hunter Valley black coal containing a relatively elevated level of ash at 28% ash. After processing, the ash content in this coal was reduced to the target level of 0.3% ash with relative ease. This low level of ash is the equivalent ash content of air. The processed coal was analysed by Bureau Veritas Minerals Pty Ltd laboratories, Cardiff, Newcastle NSW.

This refined coal would be a cleaner substitute for more expensive metallurgical coal & coke for smelting. More importantly, the exceptionally low ash level allows the coal to be milled without abrasion into a fine combustible powder to create a fuel called "CORETHANE" that can be atomised to create a high-energy gas that burns clean, like natural gas but produces lower cost heat energy, lower cost electricity and low-cost liquid fuels.

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**Summary:** Alcore's bauxite refining has the potential to convert a tonne of bauxite valued at US\$50 per tonne into a suite of products worth in excess of **US\$800** representing a **10-times** increase in net value. It can also convert aluminium smelter by-products into  $\text{AlF}_3$  using a simplified, lower-cost, higher-profit "Refine & Recycle" version of the Alcore Process.

**An Alcore project can be located anywhere** in the world and can be located adjacent to aluminium smelters to Refine & Recycle aluminium smelter by-products. Alcore production is not constrained by resource supply and can be located near customers, near sources of low-cost feedstock such as recyclable smelter waste.

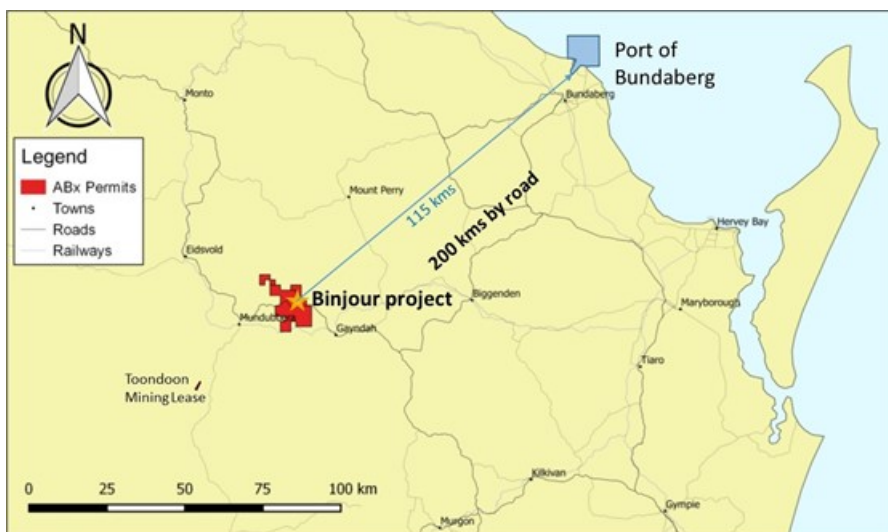
**Risk management:** Alcore's business plan is designed to minimise both the financial and technical risks:

1. Alcore process operates at low temperatures & low pressures
2. ALCORE's main products in the start-up years 1 to 5 are designed to be  $\text{AlF}_3$  utilising the simplest feedstock ingredients, selling  $\text{AlF}_3$  into deep, well-established markets with many customers.

This plan for ALCORE's initial products avoids the market risks of targeting high-purity products which can take several years of process improvements to achieve and often have only few buyers.

### Binjour Project, QLD – located 115kms inland from Bundaberg Port, Queensland

- Prior to COVID-19 restrictions, ABx's board of directors approved in early the engineering and related tasks for lodgement of a mining lease application and related project strategy for the Binjour Bauxite Project.
- The Binjour Bauxite Project pre-production and working capital costs are fully funded by ABx's marketing partner, Rawmin Mining and Industries of India.
- Customer marketing agreements are in abeyance until the economic effects of COVID-19 are better known. Fortunately east Asian economies appear to be emerging positively from the recession. The recently announce stimulation package in China is expected to stimulate bauxite demand needed for the Binjour project.
- ABx considers Binjour to be the best source of gibbsite-trihydrate (**THA**) bauxite in Queensland that is suitable for processing in low-temperature Bayer-technology alumina refineries and sweetener circuits.
- Bauxite resources total 40.5 million tonnes comprising 37 million tonnes of thick bauxite at Binjour plateau and 3.5 million tonnes in the granted mining lease at Toondoon, located 46 kms south of Binjour <sup>1</sup>.
- Binjour bauxite is 3 to 15 metres thick and comprises 10.4 million tonnes suitable for simple bulk mining and shipping as "DSO Bauxite <sup>1</sup>" and 26.6 million tonnes to be upgraded by ABx's proprietary TasTech technology to achieve the long-term sales grade of 44% to 45%  $\text{Al}_2\text{O}_3$  & 5%  $\text{SiO}_2$  which is ideal "metallurgical bauxite" for producing aluminium metal via the low-temperature Bayer alumina refineries.



**Figure 12:**  
Locations of Binjour bauxite project and transport infrastructure in Queensland

<sup>1</sup>. See Resource Statement

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- **Bulk sampling & processing testwork** confirmed ABx's decision to commit to project development. This work confirmed that Binjour bauxite screens well (ASX: 30 May 2019).
- **This testwork also discovered** that an extensive deep bauxite layer grading more than 48% Al<sub>2</sub>O<sub>3</sub> and less than 3% SiO<sub>2</sub> that is the highest quality gibbsite-trihydrate bauxite in eastern Australia which was obscured by an overlying red mud layer that conceals the bauxite.
- **Mining simulation:** Bulk sampling tested production parameters including **dilution** from red mud overburden, **mining** behaviour, screening and handling characteristics.
- **Grades:** Results show that bulk-mined, bulk-screened bauxite from Binjour can meet the required DSO grades to be marketable.
- **Operations:** Information about operating methods, dust and noise management, environmental issues, and rehabilitation options was also learned.
- **Rehabilitation:** ABx always examines post-mining reinstatement of the land at the outset of all mining projects. This important planning work commenced in November-December 2019 and several attractive options exist to leave the land significantly better than we found it. We only operate where welcomed.

#### Bulk dry-screening of Binjour bauxite

A 28 tonne bulk sample was mined and mixed onto a stockpile from Pits 10 & 11, using methods that are expected to be used during production. This sample was trucked to Gympie and screened using a rotating trommel with a 10mm aperture screen.



**Figure 13:**  
**Screening & environmental measurements at Gympie**

This bulk-screening testwork in late September confirmed the laboratory tests in mid 2019 that Binjour bauxite is ideal for dry-screening to remove fine fractions that must be minimised for safe shipping.

Dust-carry was measured to help decide the location and size of any mining lease application(s).

#### Selection of an Initial Mining Lease Application Area at Binjour

- Based on the evidence from bulk sampling, ABx has assessed the results from its 1,000 drillholes at Binjour and has identified sites that:
  - a. Are on freehold land titles, with no strategic cropping or environmental issues;
  - b. Are ideally located for transport, processing, environmental and community issues; and
  - c. Contain the high-quality layer of bauxite which will be in great demand.
- **Seasonal complementarity:** The Binjour Bauxite Project will maximise production during the Queensland dry season from April to November and ABx's Tasmanian mines will maximise production in summer from December to May. Rawmin's mines in north western India will maximise production in the Indian dry season from November to May but cease shipments in monsoon months June to September. Coordinated production and shipments will achieve all-year delivery to the customer of bauxite at a consistent specification.
- **Memorandum of Understanding Agreement** for access to the preferred stockpile site at the Port of Bundaberg was finalised and executed during 2019.

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## Penrose bauxite types in strong demand

ABx's Penrose bauxite deposit located in a pine plantation 90km inland of Port Kembla NSW (see Figure 14) contains a bottom layer grading 55% Al<sub>2</sub>O<sub>3</sub> and very low iron content suitable for refractory bauxite applications. The strategy for Penrose is to sell each layer to separate customers but a primary customer-partner is needed.

ABx has concluded that whilst Penrose bauxite is ideal feedstock for the ALCORE bauxite refining technology, it is best for the manufacture of an Australia building product and separate sale of other layers. ABx has drafted a business proposal but this work has been impacted by the COVID-19 pandemic.

### Qualifying statements

**General:** The information in this report that relate to Exploration Information and Mineral Resources are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and Mr Levy is a director of Australian Bauxite Limited.

**Mainland:** The information relating to Mineral Resources on the Mainland was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Mr Rebek and Mr Levy have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Reserves. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

**Tasmania:** The information relating to Exploration Information and Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012. Mr Rebek and Mr Levy have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking 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. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

### Disclaimer Regarding Forward Looking Statements

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements.

ABx does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

### Patent

As advised previously, Refined Ore Industries Ltd (ROIL) was the owner of the CORE process technology via ROIL's intellectual property company, Berkeley Process Technologies Pty. Ltd which issued a global exclusive licence for the aluminium-related portion of the CORE process technology to ABx in November 2017 and ABx has issued a global exclusive sub-licence to ALCORE when ALCORE was incorporated on 1 July 2018. After a company restructure and expansion of the patent definition to cover isolation and extraction of mineral compounds, metals, metalloids, alloys and elements from waste streams, mineral ores, recyclable commodities, industrial by-products and mixed substances, the holding company is now named Core Refining Limited (CRL) and the intellectual property company is Core Intelligence Australia Pty Ltd (CIAL) which holds the Patent Application No. 2019904311 and the global exclusive licences to ABx and ALCORE continue in force.

CRL's CORE process technology involves the refining of a wide range of ore types using a combination of fluorine acids and related thermal energy process steps. The technology that is licensed to ABx and ALCORE by CRL is part of CRL's broader Core technology.

**Table 1: Tenement information required under LR 5.3.3**

Tenement No.	Location
<b>New South Wales</b>	
EL 6997	Inverell
EL 7357	Taralga
EL 8600	Penrose Quarry
<b>Queensland</b>	
EPM 18014	Binjour
EPM 25146	Toondoon EPM
ML 80126	Toondoon ML

<b>Tasmania</b>	
EL 7/2010	Conara
EL 9/2010	Deloraine
EL 18/2014	Prosser's Road
ML 1961 P/M	Bald Hill Bauxite

**Notes:** During the quarter, one exploration tenement was relinquished.

All tenements are in good standing, 100% owned and not subject to any Farm-in or Farm-out agreements, third-party royalties nor are they encumbered in any way.

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## Resource Statement

Tabulated below are the Mineral Resources for each ABx Project. The initial ASX disclosure for these Resources is given in the footnotes to the table. Refer to these announcements for full details of resource estimation methodology and attributions.

**Table 2: ABx JORC-Compliant Resource Estimates**

Region	Resource Category	Million Tonnes	Thickness (m)	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Al <sub>2</sub> O <sub>3</sub> Avl	Rx SiO <sub>2</sub>	Avl/Rx	% Lab	O'Burden	Int.Waste	
				%	%	ratio	%	%	%	@ 143°C %	%	ratio	Yield	(m)	(m)	
CAMPBELL TOWN AREA TASMANIA <sup>7</sup>	Inferred	1.3	3.0	42.6	3.5	12	25.4	3.5	24.6	36.7	3.0	12	50	2.1	0.1	
	Indicated	1.4	3.2	42.5	3.2	14	26.4	3.0	24.5	36.2	2.8	14	55	1.8	0.1	
	Total	2.7	3.1	42.5	3.3	13	25.9	3.3	24.5	36.5	2.9	13	52	2.0	0.1	
Fingal Rail Cement-Grade Bauxite <sup>8</sup>	Inferred	2.4	3.3	30.9	19.5	--	35.4	3.9	16.7	--	--	--	--	1.9	0.1	
	Indicated	3.9	3.8	31.1	19.0	--	35.2	4.0	16.9	--	--	--	--	1.7	0.1	
	Total	6.3	3.6	31.0	19.2	--	35.3	4.0	16.8	--	--	--	--	1.8	0.1	
DL-130 AREA TAS <sup>1</sup>	Inferred	5.7	3.8	44.1	4.3	10	22.8	3.1	25.0	37.6	3.2	12	55	1.5	0.1	
	Total Tas	14.7	3.6	38.2	10.5	n.a.	28.7	3.5	21.4	n.a.	n.a.	n.a.	54	1.7	0.1	
BINJOUR QLD <sup>2</sup> DSO, Screen & Cement	Inferred	14.2	4.3	40.7	7.3	6	24.7	4.3	22.1	32.3	6.7	5	80	8.5	0.3	
	Indicated	22.8	4.0	33.5	19.2	2	24.9	4.2	16.8	15.8	17.4	1	63	6.6	0.3	
	Total	37.0	4.1	36.2	14.6	3	24.9	4.2	18.8	22.1	13.3	2	69	7.3	0.3	
TOONDOON QLD <sup>3</sup>	Inferred	3.5	4.9	40.2	7.2	6	25.3	4.9	21.7	32.8	5.2	6	67	1.5	0.0	
TARALGA S. NSW <sup>4</sup>	Inferred	9.9	3.1	40.4	5.7	7	24.6	4.1	22.2	35.2	1.9	18	54	0.1	0.2	
	Indicated	10.2	3.7	41.3	5.3	8	25.9	4.0	22.9	36.1	1.9	19	55	0.7	0.4	
	Total	20.1	5.6	40.8	5.5	7	25.3	4.0	22.6	35.7	1.9	19	55	0.5	0.3	
	PDM-DSO* Inferred	7.6	2.5	37.0	6.0	6	38.4	3.5	13.3	22.1*	1.3	17	72	0.2	0.1	
	Indicated	10.3	3.1	37.6	3.9	10	40.4	3.7	13.5	22.4*	1.1	20	71	0.7	0.4	
Total Taralga	17.8	5.8	37.3	4.8	8	39.6	3.6	13.5	22.3*	1.2	18	72	0.5	0.3		
INVERELL N. NSW <sup>5</sup>	Inferred	17.5	4.7	39.8	4.8	8	27.7	4.3	22.2	31.0	4.2	7	61	2.3		
	Indicated	20.5	4.8	40.6	4.7	9	26.9	4.1	22.5	32.0	4.0	8	60	2.4		
	Total	38.0	4.8	40.2	4.7	9	27.3	4.2	22.4	31.6	4.1	8	61	2.4		
GUYRA N. NSW <sup>6</sup>	Inferred	2.3	4.2	41.4	3.6	12	26.2	3.3	24.6	35.0	2.8	13	56	3.4		
	Indicated	3.8	5.9	43.1	2.6	16	27.3	3.9	24.5	37.4	2.0	18	61	4.4		
	Total	6.0	5.3	42.5	3.0	14	26.9	3.7	24.5	36.5	2.3	16	59	4.0		
<b>GRAND TOTAL ALL AREAS</b>		<b>137.1</b>		* PDM is Al <sub>2</sub> O <sub>3</sub> spinel. Al <sub>2</sub> O <sub>3</sub> Avl at 225°C is >35%												

**Explanations:** All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane.  
**Chemical definitions:** Leach conditions to measure available alumina "Al<sub>2</sub>O<sub>3</sub> Avl" & reactive silica "Rx SiO<sub>2</sub>" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "Avl/Rx" ratio is (Al<sub>2</sub>O<sub>3</sub> Avl)/(Rx SiO<sub>2</sub>) and "A/S" ratio is Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>. Values above 6 are good, above 10 are excellent. Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.

The information above relates to Mineral Resources previously reported according to the JORC Code (see Competent Person Statement) as follows:

- <sup>1</sup> Maiden Tasmania Mineral Resource, 5.7 million tonnes announced on 08/11/2012
- <sup>2</sup> Binjour Mineral Resource, 37.0 million tonnes announced on 18/06/2018
- <sup>3</sup> QLD Mining Lease 80126 Maiden Resource, 3.5 million tonnes announced on 03/12/2012
- <sup>4</sup> Goulburn Taralga Bauxite Resource Increased by 50% to 37.9 million tonnes announced on 31/05/2012
- <sup>5</sup> Inverell Mineral Resource update, 38.0 million tonnes announced on 08/05/2012
- <sup>6</sup> Guyra Maiden Mineral Resource, 6.0 million tonnes announced on 15/08/2011
- <sup>7</sup> Initial resources for 1<sup>st</sup> Tasmanian mine, 3.5 million tonnes announced on 24/03/2015
- <sup>8</sup> Resource Upgrade for Fingal Rail Project, Tasmania announced on 25/08/2016

Tabulated Resource numbers have been rounded for reporting purposes. The Company conducts regular reviews of these Resources and Reserve estimates and updates as a result of material changes to input parameters such as geology, drilling data and financial metrics.

**Global Mineral Resources total 137.1 million tonnes.**

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**About Australian Bauxite Limited ASX Code ABX**

Australian Bauxite Limited (ABx) has its first bauxite mine in Tasmania & holds the core of the Eastern Australian Bauxite Province. ABx's 10 bauxite tenements in Queensland, New South Wales & Tasmania totalled 582 km<sup>2</sup>. All tenements are 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 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.**

**About Alcore Limited**

Australian Bauxite Limited (ABx) has incorporated Alcore Limited as a majority-owned subsidiary to fund and manage the Alcore Project, to lead to the construction of an Alcore Production Plant to produce Aluminium Fluoride (AlF<sub>3</sub>) and valuable co-products, using patent application 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. Site construction works for Stage 1 of the Alcore project commenced on 1 July as planned at Alcore's pre-approved Research Centre in Berkeley Vale, Central Coast NSW.

Stage 1 is designed to produce AlF<sub>3</sub> 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<sub>2</sub> emissions when used as a gas-substitute to fuel large gas turbine. 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**

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

**Officers**

Leon Hawker COO  
Jacob Rebek Chief Geologist  
Paul Glover Marketing, Exploration  
Dr Mark Cooksey, GM Alcore  
Nathan Towns, Operations Mgrn

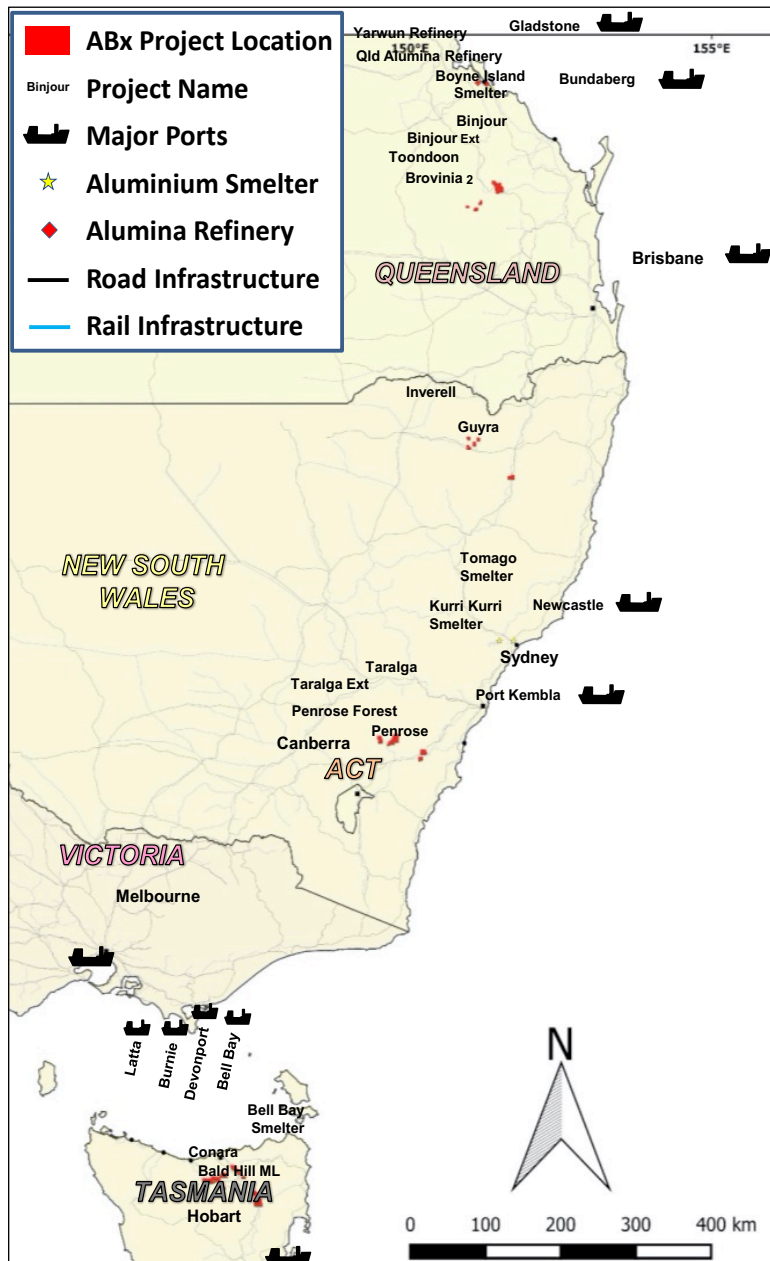


Figure 14 above

**ABx Project Tenements & Major Infrastructure in ABx's major bauxite project areas nearest export ports in Eastern Australia as follows, from south to north:**

1. Northern Tasmania, south of Bell Bay Port
2. Southern NSW Taralga & Penrose pine forest west of Pt Kembla
3. Central Queensland based on the major Binjour Bauxite Project, southwest of Port of Bundaberg which is a port that has no impact on the Great Barrier Reef.

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

**Name of entity**

Australian Bauxite Limited

**ABN**

14 139 494 885

**Quarter ended ("current quarter")**

30 September 2020

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date ( 9 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	2,192	2,223
1.2 Payments for		
(a) exploration & evaluation (if expensed)	(23)	(191)
(b) development	(52)	(328)
(c) production	(1,465)	(1,613)
(d) staff costs	(32)	(100)
(e) administration and corporate costs	(27)	(161)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	3
1.5 Interest and other costs of finance paid	(47)	(47)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	884	884
1.8 Other (Government package)	98	256
<b>1.9 Net cash from / (used in) operating activities</b>	<b>1,529</b>	<b>926</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) entities		
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation (if capitalised)	-	-
(e) investments	-	-
(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date ( 9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>-</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	99	274
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	(150)	-
3.6	Repayment of borrowings	(300)	(391)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>(351)</b>	<b>(117)</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	540	909
4.2	Net cash from / (used in) operating activities (item 1.9 above)	1,529	926
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(351)	(117)

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date ( 9 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,718</b>	<b>1,718</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	77	32
5.2	Call deposits	1,286	153
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	355	355
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,718</b>	<b>540</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	Nil
6.2	Aggregate amount of payments to related parties and their associates included in item 2	Nil
6.3	Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	<p>Lender: Justevian Pty Ltd Facilities: Fully repaid in September quarter Interest: 8.0% p.a. Security: Australian Bauxite Ltd RD refund</p> <p>Lender: Others Facilities: \$430,000 expired in September quarter Interest: 8.0% p.a. Securities: Australian Bauxite Ltd RD refund</p>		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	1,529
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	1,529
8.4	Cash and cash equivalents at quarter end (Item 4.6)	1,718
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	1,718
8.7	<b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	N/A. See Below.

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: The Company incurred the costs of a larger than normal mining campaign completed during the Quarter. Future campaigns will be funded from the proceeds of mining activities.

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: No steps are currently necessary as the Company has sufficient cash to fund its operations beyond the following two quarters.

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

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3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: The Company has sufficient cash to fund its operations beyond the following two quarters.

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## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31/10/2020

Authorised by: Ian Levy, Managing Director and CEO  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.