AUSTRALIAN BAUXITE LIMITED

ASX code: ABX

QUARTERLY REPORT AND ACTIVITY STATEMENT FOR THREE MONTHS TO 31DECEMBER 2017

Corporate

- Current group available cash at the end of the quarter was $1.94 million.
- ABx has lines of credit for working capital, if required, and has no current plans for capital raisings.

Sales & Operations

- ABx loaded and shipped a combined 35,000 tonnes of cement-grade bauxite from the Bell Bay export port in Tasmania, 3 weeks ahead of schedule in October 2017.
- Fertiliser grade bauxite sales are growing steadily to satisfy growing agricultural demand at modest but valuable prices in Australian dollars. The outlook for regular fertiliser sales during 2018 is positive.
- Once sales despatches were completed, operations at the Bald Hill bauxite project at Campbell Town in northern Tasmania finalised the rehabilitation of pit areas MB6 and MB5. The rehabilitated land has been returned to sheep grazing in accordance with company policy to leave the land better than we found it.

Bauxite Refining Technology ALCORE

- This technology is for producing Aluminium Fluoride (AlF_3) used as an electrolyte for aluminium smelters & lithium ion batteries and a co-production of Corethane which is an ultra-pure hydrocarbon that can substitute for natural gas for electricity and heating of the ALCORE plant and for sale into the national grids if needed. Corethane also has markets for metallurgical use and brickmaking.
- ABx executed a Heads of Agreement with technology provider, Refined Ore Industries Limited (**ROIL**) for the global exclusive rights to apply the technology to beneficiate and refine bauxite into high-value products. ABx worked with ROIL to complete the technology development and to make the patent application in June 2017.
- ALCORE's business plan is to develop the first of several ALCORE bauxite refinery projects in Tasmania and/or northern QLD. ABx's uniquely clean bauxite is ideal for ALCORE because it is totally free of deleterious elements.
- ABx has commissioned Turnkey Innovative Engineering Pty Ltd (**Turnkey**) to help in the engineering, design and costing of the 1st stage of the ALCORE project to generate bulk samples of products for market-testing by ALCORE's prospective customers. ABx plans to report to shareholders about Stage 1 in March 2018.
- Financing plans are scheduled to be finalised in mid-2018. ABx has been approached by a party involved in the Aluminium Fluoride industry to discuss Stage 1 financing and, if successful, other participants in the Aluminium Fluoride industry have expressed interest in providing some finance for the construction of the 50,000 tonne per year production plant, subject to offtake agreements. Demand for AlF_3 is clearly strengthening.
- A third party is also seeking access to the Stage 1 Plant for the purification of graphite on terms that may supply one third of the cost of the Stage 1 Plant during its 12 to 18 months of testwork.
- Discussions are continuing with Federal and State Government ministries and with a government authority and these discussions will continue in 2018.
- ABx has been approached by two major companies seeking negotiations for access of two of the co-products from the ALCORE production plant, namely Corethane and Silica Fume.

Review of Binjour project

- ABx and its Indian marketing partner, Rawmin Mining and Industries (**Rawmin**) have applied for a Regional Jobs and Investment grant for the commencement of the Binjour Bauxite project in the Wide Bay Burnett region of central Queensland, shipping from the Port of Bundaberg.
- Resource modelling is in progress. Binjour Bauxite project resources are currently estimated as totalling 28 million tonnes from Binjour exploration licences [1] and granted mining lease at Toondoon south of Mundubbera. [1]
- Bulk samples were collected ahead of schedule in late December to expedite negotiations with customers for the execution of offtake sale-purchase agreements for the project.

TasTech Process Technology

- ABx completed a bulk-scale mining and processing project to confirm the effectiveness of ABx's TasTech technology at Fingal Rail project area, using freshly quarried Fingal Rail ore and stockpiled Bald Hill ore.

1. See Resource Statement

Sales & Operations

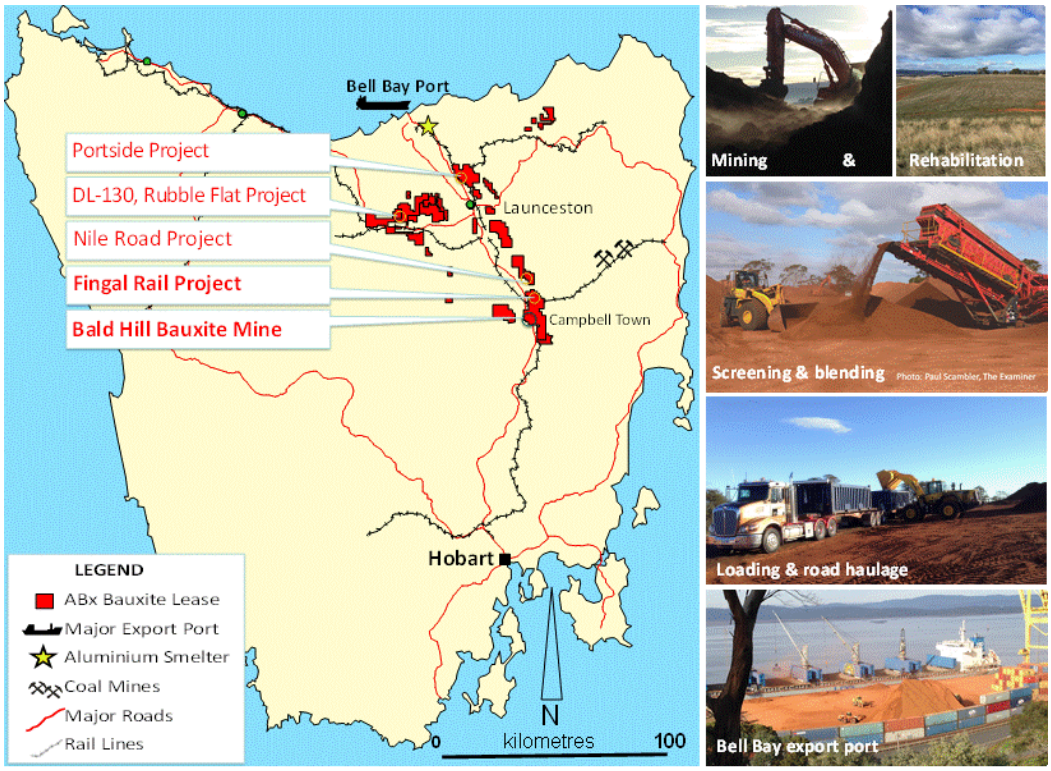


Figure 1

Locations of ABx bauxite mines, projects and transport infrastructure in Tasmania

Figure 2

Loading the 35,000 tonnes of bauxite from the two large port stockpiles in foreground to the ship in the distance at Bell Bay export port, Tasmania

Figure 3

Ship loading of the bauxite at Bell Bay export port

Operating Statistics – Table 1

Dispatch Date	Sale Tonnes
20/01/2016	446
8/04/2016	5,557
7/08/2016	35,913
9/09/2016	89
19/09/2017	30,000
28/09/2017	5,000
30/10/2017	669
Cement Sub Total	**77,674**
24/11/2015	195
16/03/2016	390
14/09/2016	1,500
31/01/2017	351
3/10/2017	468
13/11/2017	857
6/12/2017	704
Fertiliser Sub Total	**4,465**
Total all sales	**82,139**

Product stockpiles (at mine site, blended to specification)		
Cement-grade	1,800	tonnes
Fertiliser grade	950	tonnes
Subtotal product s/piles	**2,750**	**tonnes**
Mine stockpiles (grade controlled, ready for blending)		
Metallurgical grade	2,500	tonnes
Cement-grade	44,700	tonnes
Fertiliser grade	15,669.63	tonnes
Subtotal mine s/piles	**62,870**	**tonnes**
Total saleable processed stockpiles	**65,620**	**tonnes**
Screened material available for classification	30,200	tonnes
Broken Ore Stocks ready for screening:	36,700	tonnes
Grand total	**132,520**	tonnes

Rehabilitation Completed Ahead of Schedule

Mine and screening sites being rehabilitated October 2016

Soil replaced across disturbed areas. 27 October 2016

Revegetation as at 24 November 2016

Completed rehabilitation as at 8 November 2017

Figure 4: Photographic record of successful rehabilitation at Bald Hill Bauxite Project, Campbell Town, Northern Tasmania

Bauxite Refining Technology ALCORE

ALCORE's bauxite refining technology produces Aluminium Fluoride (AlF_3) and other co-products including the gas-substitute Corethane to power the plant and Silica Fume for the cement industry which ABx already services with its supplies of cement-grade bauxite.

ABx has been in negotiations with potential customers about technical specifications for its AlF_3 product and it is considered likely that there is sufficient demand for a 50,000 tonnes per year AlF_3 production plant.

ABx will control all marketing of ALCORE products and is pleased to supply customers in the bauxite-alumina-aluminium industry to become more cost-efficient at the smelting stage, not just at the bauxite stage. Currently all AlF_3 used in Australia is imported at prices higher than those paid by overseas competitors.

Figure 5 Summary of the ALCORE process:
1. Inputs,
2. AlF_3 product &
3. Co-products

Note that Corethane is an ultra-pure hydrocarbon to power the production plant with zero particulate emissions & CO_2 emissions similar to natural gas.

ALCORE can also sell electricity to the grid or sell Corethane to industrial customers, several of which have already expressed interest.

Summary
ALCORE's bauxite refining converts Tasmanian bauxite valued at approximately US$50 per tonne into a suite of products worth in excess of **US$800 per tonne of bauxite** representing a more than **10-times** increase in the value per tonne of bauxite.

Competitive Advantage
ALCORE also exploits ABx's main strength – its uniquely clean chemical composition, totally free of any deleterious elements that would inhibit ALCORE's bauxite refining efficiency. Few, if any other Australian bauxite is so suited to ALCORE's bauxite refining technology.

Timetable
ABx has published a timeline for this project as follows:

1.	Complete assessment and costing of the Stage 1 "EV Plant" stage	28 February 2018
2.	ABx Board to review and agree to proceed or otherwise	Early March 2018
3.	ABx to announce its development plans, costs and financing	Mid March 2018

Binjour Project Commencing Financial Studies

This project area is located inland from Bundaberg, central Queensland, comprising the main project area located at Binjour, 115kms SW of Bundaberg between Gayndah and Mundubbera with a granted Mining Lease at Toondoon 25kms south of Mundubbera and an exploration project at Brovinia further to the south.

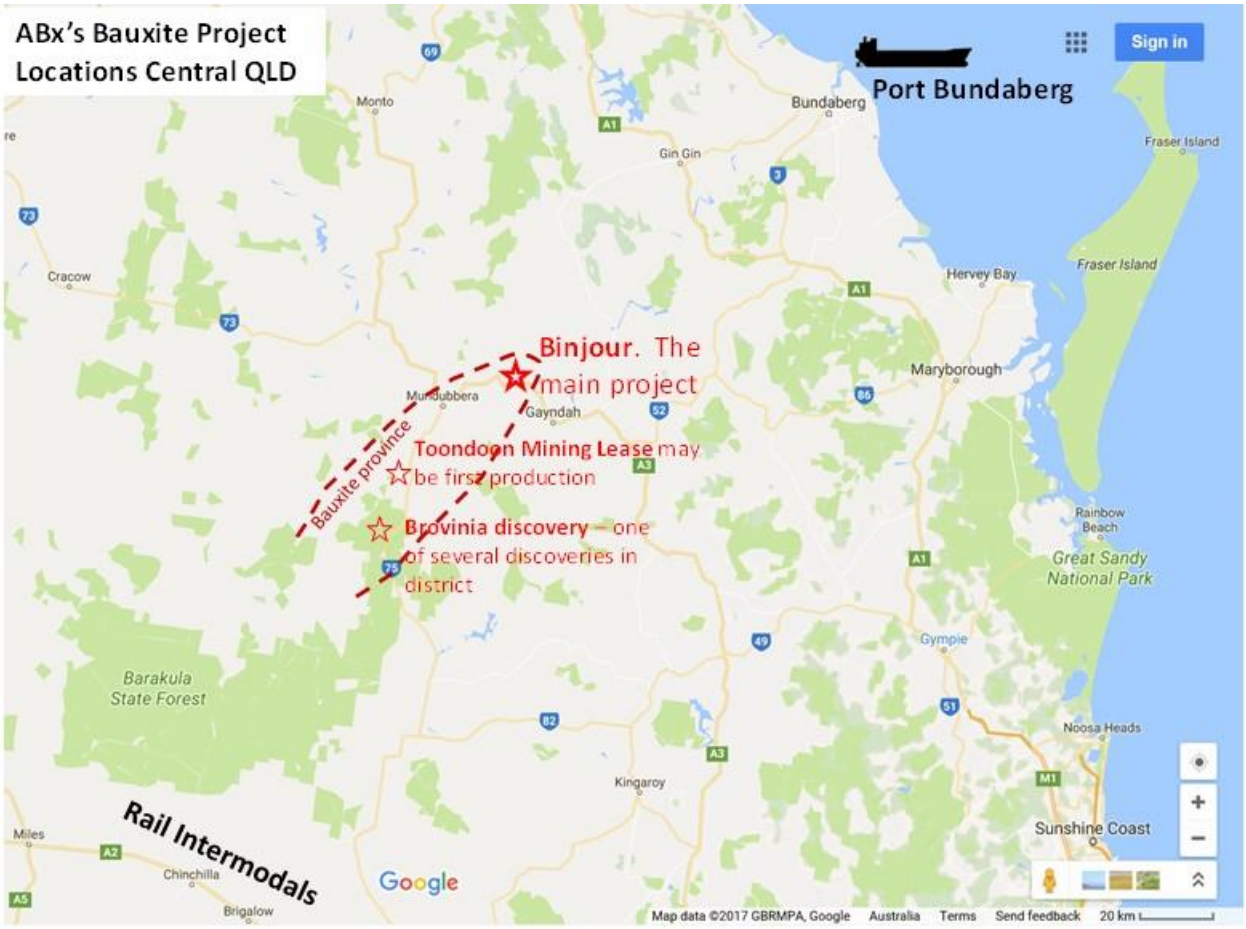


Figure 6: Location of Binjour, Toondoon and Brovinia Bauxite Project Areas

ABx and its Indian marketing partner, Rawmin Mining and Industries (**Rawmin**) have applied for a Regional Jobs and Investment grant for the commencement of the Binjour Bauxite project in the Wide Bay Burnett region of central Queensland, shipping from the Port of Bundaberg.

Resource modelling is in progress. Binjour Bauxite project resources are currently estimated as totalling 28 million tonnes from Binjour exploration licences [1] and granted mining lease at Toondoon [1] south of Mundubbera. [1]

Bulk samples were collected ahead of schedule in late December to expedite negotiations with customers for the execution of offtake sale-purchase agreements for the project. Discussions with prospective customers have commenced.

Once results from the resource re-estimation and the analyses of the bulk samples by multiple laboratories is completed, ABx will make a public statement of those results in the form of an ASX release.

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
Email: ilevy@australianbauxite.com.au

1. See Resource Statement

Bauxite Markets Improving Steadily

ABx sells into the strengthening cement markets until Chinese metallurgical bauxite prices continue their recovery to reach sufficiently profitable prices in Australian dollar terms.

ABx is growing its bauxite business by supplying cement-grade bauxite for making high-strength cement and supplying fertiliser-grade bauxite for making superphosphate fertiliser. As demand for stronger, low alkali cement for infrastructure construction increases, demand is growing for ABx cement-grade bauxite which is exceptionally low in alkali salts, is quartz-free and has good materials handling performance.

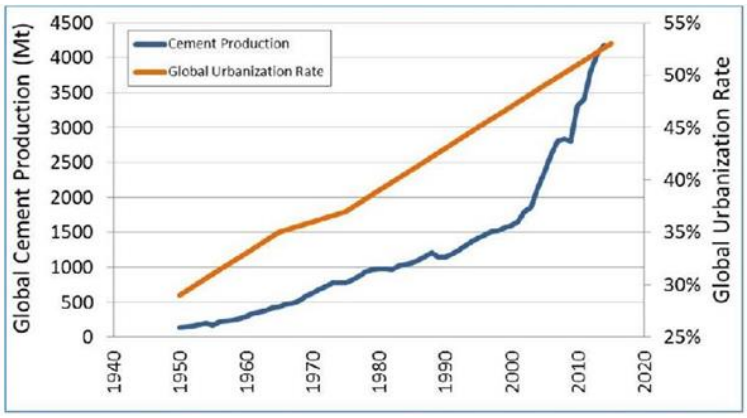


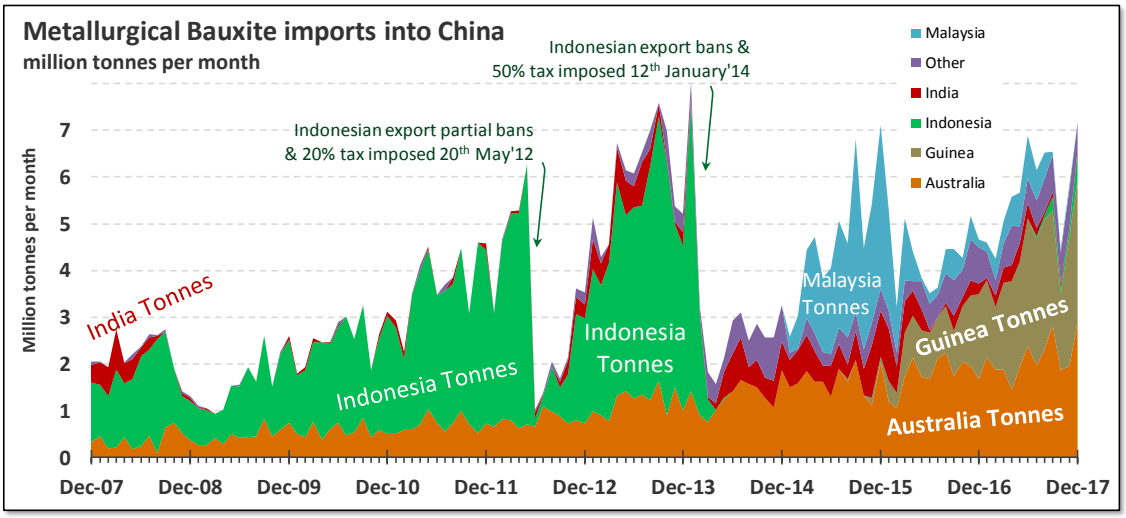
Figure 7: Graph showing cement production rising exponentially vs global urbanisation.

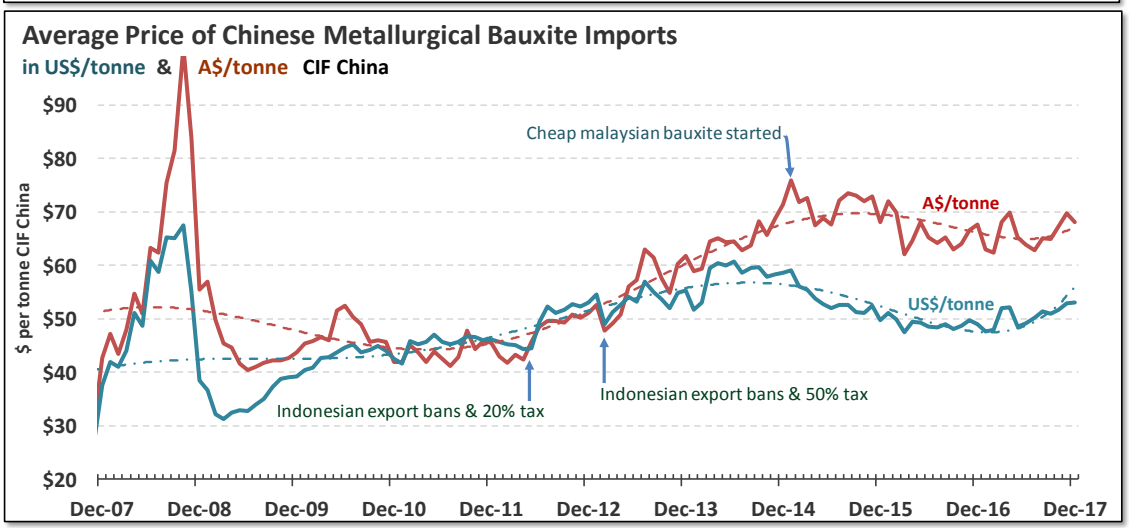
Source: Urbanisation - increased demand for cement, steel, aluminium, copper.... 3.12.2016

Infrastructure construction markets

ABx's low-sodium, quartz-free cement-grade bauxite supplies the right forms of Al_2O_3, Fe_2O_3 and SiO_2 in the correct ratio to increase the production rate of high-strength, corrosion-resistant Portland cement, by stopping kiln blockages, reducing fuel consumption and reducing wear rates on the kiln refractory brick linings.

Metallurgical Grade Bauxite Market (for aluminium production)





Figures 8 & 9: Graph of Chinese metallurgical bauxite import tonnes and Prices. Note the surging tonnages imported into China from Guinea since July 2007

Source: Chinese Customs, Bloomberg

Commentary: Demand for bauxite imports continues to grow in China and globally as aluminium production grows.

During 2015-16, Chinese aluminium companies established their own mines in the west African country of Guinea and assembled their own low-cost supply chains using large tonnage bulk-shipping from Guinea to China. Bauxite from Guinea has grown from zero tonnes in October 2015 to become the largest supplier into China, supplying 15.5 million tonnes in the last 6 months, as compared to 13.8 million tonnes from Australia.

Metallurgical-bauxite prices fell significantly in 2015-16 as bauxite from Malaysia was dumped into an already weakening bauxite market. Prices remained flat during 2016 as supply from Guinea in West Africa into China grew massively to create a supply surplus. Average prices have risen slightly during 2017 which has, until recently, been due to the increase in the proportion of the more expensive bauxite from Guinea.

However, there has been stabilisation and some strengthening in bauxite prices in recent months, albeit modest and offset by the recent increase in the AUD-USD exchange rate. See Figure 10 following.

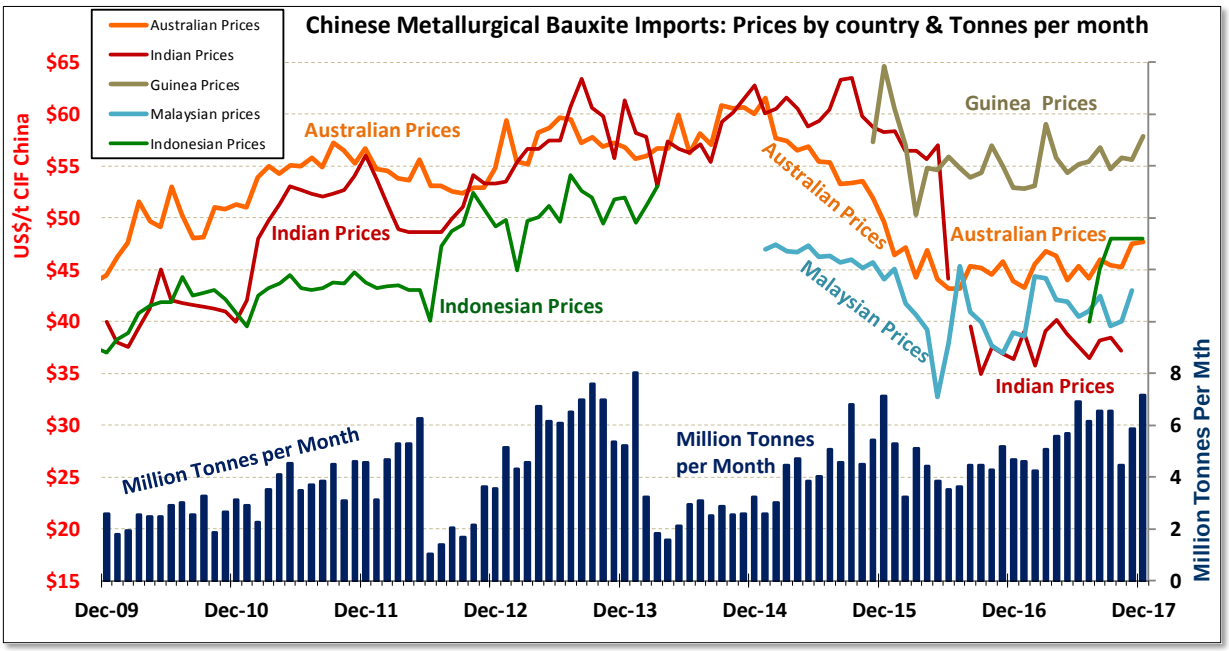


Figure 10: Chinese metallurgical bauxite import tonnes & prices for major supplier countries in US$ per tonne CIF China. Note that prices for bauxite from Guinea in West Africa are significantly higher than prices for bauxite from Australia, India & Malaysia Source: Chinese Customs, Bloomberg

Since bauxite supply from Guinea reached a stable level in 2016-17, prices for bauxite stabilised at their new levels. The relative prices from each country represents a combination of cost of delivery and relative quality differences. This pattern resembles the pattern for other bulk commodities like iron ore and coal.

The commencement of new alumina refineries in China and India that require new supplies of imported bauxite is now happening and will change this market setting. Some new alumina refinery projects are actively seeking to secure their own supply chains for bauxite.

Overall market commentary

During times of cheap shipping costs, the flood of bauxite from Guinea effectively creates a dampening influence on metallurgical bauxite prices, until the growing demand for imported bauxite in China and India reaches a new level.

China's strategies to create a reliable and controlled supply of vital bauxite ore supplies into China have succeeded remarkably well for the time being. However, new entrants into the alumina refinery industry will not rely on bauxite mines operated by their competitors and they will encourage new suppliers of metallurgical bauxite, as has happened in all other bulk commodities like iron ore and coal.

ABx will sell metallurgical bauxite when prices and sale terms are attractive. The current market is improving.

Exploration: Penrose Pine Forest Quarry NSW

The Penrose project is located in a pine plantation adjacent to the major Hume Highway, some 90km from Port Kembla, south of Sydney NSW. It contains a grey-white, low iron bauxite that potentially could be used to produce refractory bauxite or high value chemical-grade bauxite.

Figure 11
Location of the Penrose Bauxite project area

During the quarter, ABx conducted beneficiation research on this bauxite at its laboratory in Tasmania which concluded that a combination of the following physical sorting methods can significantly upgrade Penrose Bauxite:

1. Crushing and dry sieving to various size fractions reduces SiO_2 & TiO_2 in the fines
2. Dry gravity separation and wet gravity separation reduces Fe_2O_3, SiO_2 & TiO_2 in the light fraction
3. Magnetisation by heating and magnetic sorting removes Fe_2O_3 & TiO_2 in the magnetic fraction
4. Wet leaching tests of Fe_2O_3 in oxygen-free reducing conditions are still in progress.

ABx is in discussions with two companies that specialise in refractory bauxite and chemical processing of bauxite.

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 18 bauxite tenements in Queensland, New South Wales & Tasmania totalled 1,390 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.

Resource Statement, Definitions and Qualifying 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_2O_3 %	SiO_2 %	A/S ratio	Fe_2O_3 %	TiO_2 %	LOI %	Al_2O_3 Avl @ 143°C %	Rx SiO_2 %	Avl/Rx ratio	% Lab Yield	O'Burden (m)	Int.Waste (m)
CAMPBELL TOWN	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
AREA TASMANIA [7]	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-	Inferred	2.4	3.3	30.9	19.5	--	35.4	3.9	16.7	--	--	--	--	1.9	0.1
Grade Bauxite [8]	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 [1]	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 [2]	Inferred	9.0	3.9	43.7	4.5	10	22.4	3.6	24.2	38.0	3.8	10	59	8.2	0.3
DSO	Indicated	15.5	5.3	44.2	3.1	15	23.4	3.7	24.9	39.5	2.6	15	62	9.4	0.3
	Total	24.5	4.8	44.1	3.6	12	23.1	3.7	24.6	39.0	3.0	13	61	8.9	0.3
TOONDOON QLD [3]	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 [4]	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	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
	Total Taralga	37.9	5.7	39.2	5.2	8	32.0	3.8	18.3	35.4	1.6	23	63	0.5	0.3
INVERELL N. NSW [5]	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 [6]	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	
GRAND TOTAL ALL AREAS	**124.6**									* PDM is Al_2O_3 spinel. Al_2O_3 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 "Al2O3 Avl" & reactive silica "Rx SiO2" 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 (Al203 Avl)/ (Rx SiO2) and "A/S" ratio is Al203/SiO2. Values above 6 are good, above 10 are excellent. **Lab Yield** is for drill dust samples screened by ALS lab at 0.26mm screen size. Production yields are not directly related to Lab Yield and are typically between 50% and 70%. Tonnages requiring no upgrade will have 100% yield.

Resource estimates exclude large tonnages of potential extensions that would be drilled during production to extend tonnages.

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

[1] *Maiden Tasmania Mineral Resource, 5.7 million tonnes announced on 08/11/2012*

[2] *Binjour Mineral Resource, 24.5 million tonnes announced on 29/06/2012*

[3] *QLD Mining Lease 80126 Maiden Resource, 3.5 million tonnes announced on 03/12/2012*

[4] *Goulburn Taralga Bauxite Resource Increased by 50% to 37.9 million tonnes announced on 31/05/2012*

[5] *Inverell Mineral Resource update, 38.0 million tonnes announced on 08/05/2012*

[6] *Guyra Maiden Mineral Resource, 6.0 million tonnes announced on 15/08/2011*

[7] *Initial resources for 1st Tasmanian mine, 3.5 million tonnes announced on 24/03/2015*

[8] *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 declared to 25/08/2016 total 124.6 million tonnes.

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.

Table 3: Tenement information required under LR 5.3.3

Tenement No.	Location
New South Wales	
EL 6997	Inverell
EL 7361	Guyra
EL 8370	Penrose Forest
EL 7357	Taralga
EL 7681	Taralga Extension
EL 8440	New Stannifer
EL 8600	Penrose Quarry
Queensland	
EPM 17790	Hampton
EPM 17830	Haden
EPM 17831	Hillgrove
EPM 18014	Binjour
EPM 18772	Binjour Extension
EPM 25146	Toondoon EPM
EPM 19427	Brovinia 2
ML 80126	Toondoon ML

Tasmania	
EL 7/2010	Conara
EL 9/2010	Deloraine
EL 16/2012	Reedy Marsh
EL 18/2014	Prosser's Road
ML 1961 P/M	Bald Hill Bauxite

Note:

During the quarter, an exploration license was relinquished.

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

Figure 12
ABx Project Tenements & Major Infrastructure in Tasmania, NSW and Queensland, Eastern Australia