



ALLIANCE MINERAL
ASSETS LIMITED

Alliance signs MOU for downstream JV to produce and sell Lithium Hydroxide

Alliance well-placed to benefit from downstream lithium hydroxide production and sales

29 APRIL 2019

CORPORATE DIRECTORY

Non-Executive Chairman

Geoffrey McNamara

Managing Director

Mark Calderwood

Executive Director -Operations

Mark Turner

Non-Executive Directors

Robert Vassie
Wei (Vicki) Xie
Ong Kian Guan
Chan Ming Fai

Company Secretary

Alexei Fedotov

Media contact: Nathan Ryan

NWR Communications
+61 (0) 420 582 887

Alliance Mineral Assets Limited (**Alliance** or the **Company**) (ASX: A40; SGX: 40F) is pleased to announce that it has, on 26 April 2019, entered into a non-binding memorandum of understanding (**MOU**) with Jiangxi Special Electric Motor Co., Ltd (**Jiangte**) to develop the terms on which the parties will cooperate in a 50:50 joint venture to produce and sell battery-grade lithium hydroxide (**Hydroxide JV** or **Joint Venture**).

The Hydroxide JV provides a unique opportunity for Alliance to participate in the downstream lithium products market within the next 6 to 12 months, without incurring capital costs and exposure to the risk associated with the construction of a conversion facility.

Strategic benefits of Hydroxide JV to Alliance include:

- Access to a nearly-completed lithium hydroxide circuit with an existing conversion facility (commissioning of hydroxide circuit to commence in September 2019)
- Exposure to a diversified, downstream customer base
- Alliance to further benefit directly from its own high-quality Bald Hill lithium concentrate
- **Profit margin per tonne of spodumene concentrate expected to improve significantly** when processed under the Joint Venture compared to selling raw spodumene concentrate⁽¹⁾
- Further strengthens the relationship between Alliance and Jiangte, with both companies working together to build relationships with downstream customers and partners

MOU and Hydroxide JV Highlights

- **Alliance will continue to own and operate the Bald Hill Mine** and will supply the spodumene to the Joint Venture with the cost of production and transport recovered from sales of lithium hydroxide
- Jiangte will continue to own and operate its lithium hydroxide and lithium carbonate converter in Yichun, Jiangxi Province, China (**Converter**) following its completion. **Alliance is not required to fund any of the capital cost of the Converter**
- Spodumene contributed by Alliance will be processed at the Converter to produce lithium hydroxide which will be sold by the Joint Venture to third-parties
- The Joint Venture will work to develop long-term downstream partnerships for battery-grade lithium hydroxide and/or lithium carbonate
- **Alliance and Jiangte will share equally in the margin** from the sales of lithium hydroxide after recovering respective costs of spodumene production and conversion costs, with the specific terms of cost recovery to be formalised in the JV Agreement (as defined below)
- Concentrate requirements of the Joint Venture for 2019 and 2020 are expected to represent only 20% of Bald Hill production. However, once fully operational, the Converter will process approximately 100,000t of spodumene per annum, capable of producing up to 15,000tpa of lithium hydroxide
- The Company's existing offtake arrangement with Jiangxi Bao Jiang Lithium Industrial Limited (JBIL)⁽²⁾ remains unaffected and Alliance will continue offtake negotiations with third-parties for the remaining, unallocated Bald Hill spodumene concentrate of up to 80,000tpa in 2019 and up to 90,000tpa in 2020
- The parties will work towards executing a formal binding agreement in relation to the Joint Venture by 30 June 2019 (**JV Agreement**)

Commenting on the MOU, Alliance Managing Director, Mr Mark Calderwood, said:

“The Hydroxide JV provides for a rapid, low-risk, low-cost entry into downstream production and sales of battery-grade lithium products. We see market demand for lithium hydroxide increasing. Aside from traditional industrial uses, a number of rechargeable battery manufacturers are now using lithium hydroxide in their products and this Joint Venture will enable Alliance to participate in this market. Over the next two months, Alliance and Jiangte will work towards completion of Joint Venture documentation and simultaneously continue talks with potential long-term downstream customers which may provide additional longer-term certainty around demand and pricing.

This downstream Joint Venture opportunity will enable Alliance to further benefit from its high-quality Bald Hill lithium product which provides for high-recovery and reduced conversion costs at one of the world’s largest and modern processing facilities with lower levels of emissions. We are proud of the relationship we have developed with Jiangte and the Joint Venture is a significant step forward in what is anticipated to be a long-term integrated relationship in the supply of battery cathode materials.”

Jiangte’s Chairman Mr Jun Zhu also commented on the MOU:

“This cooperation between one of Australia’s premium spodumene producers and a large Chinese lithium salts producer combines the key strengths of both parties to create a competitive participant in the lithium hydroxide products market, making greater contributions to the development of the global lithium power industry chain, while potentially enhancing the market influence and profitability of both parties.”

Alliance’s entry into the MOU is not expected to have a material impact on the net tangible net assets per share and earnings per share of the Group for the current financial year ending 30 June 2019.

None of the Directors or controlling shareholders of the Company or their respective associates have any interest, direct or indirect, in the MOU and Jiangte, save for their respective shareholdings in the Company.

Jiangte, through its 100%-owned subsidiary Weier Antriebe und Energietechnik GMBH, is a 6.4% shareholder in Alliance.

Alliance will continue to update shareholders, as and when there are further material developments in connection with the MOU and the JV Agreement.



Figure 1 | Aerial view of Jiangte’s Yinli New Energy conversion facility which extends 800m by 350m

About Jiangte

Jiangte, founded in 1991, has been listed on Shenzhen Stock Exchange since 2007 and has a market capitalisation of approximately 11B RMB (A\$2.3B).

Through its wholly-owned subsidiaries in China, Europe and Japan, Jiangte has been engaged in the R&D, production and sales of specialised electric motors (since 1945) and the production of lithium battery cathode material, electric automobile drive motors and control systems, and electric vehicles (since 2012).

Jiangte has been producing battery-grade lithium and other by-products since 2010 and owns two conversion facilities in the Yuan Zhou District, Yichun, Jiangxi, China (one of which includes the Yinli New Energy facility – refer below for further details).

Jiangte has developed a high-efficiency, low-cost technology of lithium extraction from lepidolite and spodumene, and was the first enterprise to enter into large-scale production of lithium carbonate extracted from lepidolite in China.

About Jiangte's Yinli New Energy Facility

Jiangte's 30-hectare Yinli New Energy facility, constructed in 2018, is one of the largest lithium mineral conversion facilities in the world⁽³⁾. When the facility's three conversion lines are fully operational, the site should be capable of producing between 30,000 to 40,000 tonnes per annum of lithium carbonate and hydroxide. The facility uses advanced technologies in kiln and evaporation processes to achieve industry minimum emissions of H₂S and CO₂ from tail gas.

One of Yinli New Energy's three conversion lines is currently operated by the JBJLIL joint venture⁽⁴⁾, fed with Bald Hill spodumene, and is currently producing lithium carbonate.

A second conversion line is currently capable of producing lithium carbonate from spodumene. This line is envisaged to be used for the Hydroxide JV after the completion and commissioning of a hydroxide circuit to complement its existing calcining, leaching and lithium carbonate circuits. The finished hydroxide circuit will provide the flexibility of producing lithium hydroxide, lithium carbonate or both, in addition to a sodium sulphate by-product. Sections of the hydroxide circuit are about to commence commissioning.

See photos on the following pages from a visit to the Yichun Processing Facility by senior Alliance personnel in March 2019.

About the Bald Hill Mine

The Bald Hill Lithium and Tantalum Mine (**Bald Hill Mine** or **Mine**) is located in the southeast of the Goldfields-Esperance Region of Western Australia, approximately 105km south-southeast of Kalgoorlie. Kalgoorlie is the main hub in the region providing access to the Mine which can be accessed from Perth by air, rail and road. The Mine is approximately 350km by road from the Port of Esperance.

The Mine commenced commercial production in July 2018. During the March Quarter of 2019 the mine produced 38,291wmt of premium spodumene (lithium) concentrate and by-product concentrates containing 34,380Lbs of tantalum pentoxide. Production rates at the Mine are expected to continue to increase throughout 2019. In 2020, the lithium concentrate production rate is expected to be 20,000 tonnes per month.

Total Indicated and Inferred lithium mineral resources are currently 26.5Mt at 1.0% Li₂O and 149ppm Ta₂O₅. Exploration drilling has commenced with the aim of increasing resources and upgrading current Inferred resources to Indicated, to extend mine life.

The Bald Hill Mine currently produces a high quality spodumene concentrate with low levels of deleterious elements and low levels of moisture and fines. The Bald Hill premium product is typically **+6% Li₂O**, **<0.5% Fe**, **<0.5% mica**, **<3% H₂O**, **<1% K₂O** and >98% of the concentrate greater than 1mm in size.



Figure 2 | Two of the three calcining kilns at Jiangte's Yinli New Energy facility.



Figure 3 | Ongoing construction for hydroxide circuit in the foreground with existing leach circuit in the background at Jiangte's Yinli New Energy facility.



Figures 4a and 4b | Ongoing construction at Jiangte's Yinli New Energy facility



Figure 5 | Lithium carbonate bagging and storage at Jiangte's Yichun facility

Footnotes

- 1) Based on an estimated cost of production of US\$550/t, transport costs, Jiangte estimated conversion costs, import and sales taxes, a spodumene concentrate grade of 6.1% and 83% lithia recovery rate. The gross operating margin for Alliance, for tonnage processed by the Joint Venture, would increase from about 36% to 63% when compared to our current spodumene pricing formula based on market prices for lithium carbonate, excluding royalty and tax provisions.
- 2) Refer *Alliance Mineral Assets ASX & SGX announcement 15/01/2019: "Restructure of Lithium Offtake Agreements"*. Jiangte was referred to as Jiangte Special Electric Motor Co. Ltd. in the said announcement.
- 3) Source: *Benchmark Q4 2018 Lithium Report*.
- 4) Jiangxi Bao Jiang Lithium Industrial Limited (**JBIL**). JBIL is a 50:50 joint venture between Burwill Lithium Company Limited and Jiangte.

Glossary

The following abbreviations and terms are used in this announcement.

CO ₂	carbon dioxide	Ta ₂ O ₅	tantalum pentoxide
dmt	dry metric tonne	t	tonne
H ₂ S	hydrogen sulphide	tpa	tonnes per annum
Mt	million tonnes		

Competent Persons Statement

The Mineral Resource referred to in this announcement was reported by the Company in accordance with the 2012 edition of the JORC Code in an SGX announcement titled “Lithium Ore Reserve Increase of 105% at Bald Hill” dated 6 June 2018 which is available at www.allianceminerals.com.au and www.sgx.com. Alliance confirms that it is not aware of any new information or data that materially affects the information included in the said announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the said announcement continue to apply and have not materially changed.

Forward Looking Statements

This announcement may contain forward looking statements and projections including regarding estimated resources and reserves, production and operating costs profiles, capital requirements and strategies and corporate objectives. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon as representation or warranty, express or implied, of the Company. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

While the information contained in this announcement has been prepared in good faith, neither the Company, nor any of its directors, officers, agents, employees or advisors make any representation or give any warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, forward looking statement, opinions and conclusions contained in this announcement. Accordingly, to the maximum extent permitted by law, none of the Company, nor any of its directors, officers, employees, agents or advisors, nor any other person accepts any liability whether direct or indirect, express or limited, contractual, tortious, statutory or otherwise, in respect of the accuracy or completeness of the information or for any of the opinions contained in this announcement or for any errors, omissions or misstatements or for any loss, howsoever arising, from the use of this announcement. The Company disclaims any obligation to update or revise any forward looking statements based on new information, future events or otherwise except to the extent required by applicable laws.