

PILBARA MINERALS FINALISES JOINT VENTURE WITH POSCO TO PARTICIPATE IN DOWNSTREAM LITHIUM CHEMICALS FACILITY

AGREEMENT PAVES WAY FOR DEVELOPMENT OF A 43KTPA JOINTLY OWNED LITHIUM HYDROXIDE CONVERSION FACILITY IN GWANGYANG, SOUTH KOREA, WITH COMMISSIONING EXPECTED FROM SEPTEMBER QUARTER 2023.

KEY POINTS

- Incorporated joint venture (**JV**) in South Korea agreed between Pilbara Minerals and POSCO to jointly construct and operate a 43ktpa LHM primary lithium hydroxide chemical processing facility (**Conversion Facility**).
- JV supports Pilbara Minerals' strategic objective of becoming a fully integrated lithium raw materials company and diversifies the Company's global customer base providing exposure to the rapidly growing South Korean lithium chemicals market.
- Pilbara Minerals will initially hold an 18% interest in the JV, funded largely from the previously announced A\$79.6M Convertible Bond Agreement with POSCO.
- Call option granted to allow Pilbara Minerals to stage its investment to increase its JV interest to 30%, for a period up to 18 months after the successful ramp up of the Conversion Facility.
- Amended Offtake Agreement to supply 315ktpa of spodumene concentrate to the Conversion Facility at market pricing for the lesser of 20 years and the life of the Pilgangoora Project.
- JV to provide US\$25M offtake pre-payment facility to Pilbara Minerals to fund general working capital and future expansions at the Pilgangoora Project.
- Conversion Plant to play integral role in POSCO's supply chain and business strategy as it becomes a major battery materials supplier to global markets.

Australian lithium producer, Pilbara Minerals Limited (ASX: PLS) (**Pilbara Minerals** or **the Company**), is pleased to announce that it has executed a Shareholders Agreement with POSCO for the formation of an incorporated joint venture to develop and operate a 43ktpa lithium hydroxide monohydrate (**LHM**) Conversion Facility in South Korea.

The JV will be named "POSCO-PILBARA MINERALS LITHIUM SOLUTION CO LTD", with its establishment consistent with Pilbara Minerals' long-term strategy to become a fully integrated lithium raw materials company with a globally diversified customer base. The Conversion Facility will consist of two production trains, each with a 21.5ktpa LHM production capacity, using (in part) POSCO's leading patented purification technology which has been developed by POSCO over the last 10 years which will be licensed on a non-exclusive basis to the JV.

Based on studies undertaken by POSCO the capital development costs for the Conversion Facility are currently estimated at a pre-feasibility study level to be between USD\$600-650¹ million dollars (100% basis). After allowing for initial working capital and pre-production financing costs, the total JV funding requirement is expected to be approximately

¹ Costs are estimated at a KRW:USD exchange rate of 0.00084.

USD\$700-750¹ million dollars. Operating costs of the Conversion Facility are expected to be largely consistent with industry peers.

POSCO has recently acquired the site for the Conversion Facility in the Gwanyang province of South Korea and is currently undertaking early works and the detailed engineering required to finalise the design and costing of the Conversion Facility, ahead of construction which is targeted to commence during the March Quarter 2022. Final estimated capital development costs, operating costs and operating parameters are expected prior to the commencement of construction following completion of this work.

Debt funding for the JV is expected to be secured from Korean commercial banks following the establishment of the JV and completion of the early works and detailed engineering. A gearing ratio of ~50% of external debt has been agreed between parties, but with the ability for this to increase to 65% if required. This ensures that Pilbara Minerals' initial 18% equity participation in the JV will be largely funded through the previously announced A\$79.6M 5-year Convertible Bond Agreement being provided by POSCO (see ASX: 28th February 2018). Funds will be drawn down under the Convertible Bond Agreement following formation of the JV and completion of other conditions precedent, which are expected to be satisfied during the December Quarter 2021.

Under revised offtake terms, Pilbara Minerals will supply 315ktpa of chemical grade spodumene concentrate on commercial terms to the Conversion Facility. This will be sourced from Pilbara Minerals' existing installed production capacity at the Pilgangoora Project (inclusive of the recently restarted Ngungaju processing facility). Product sold under the offtake agreement will be at prevailing market prices for chemical grade spodumene concentrate sold on a CIF basis.

In recognition of the annual offtake quantity increasing from 240ktpa to 315ktpa for the expanded 43ktpa LHM Conversion Facility, the JV will provide Pilbara Minerals with a second ranking secured US\$25 million product prepayment facility which may be used for general working capital or to partly fund any future expansions of the Pilgangoora Project. The prepayment will be conditional on any regulatory and other approvals including the consent of the Company's senior secured lenders under its senior secured syndicated finance facilities.

The 315ktpa offtake agreement will not impact the Company's ability to continue to supply product under its existing offtake arrangements with other customers.

The Conversion Plant will play an integral role in POSCO's overall strategic objective of becoming one of South Korea's largest battery materials producers, supporting South Korea's (and the world's) rapidly growing market for lithium-ion batteries for EVs, energy storage and other mobile power applications.

Pilbara Minerals' Managing Director and CEO, Ken Brinsden, said:

"We are delighted to have executed the Shareholders Agreement with POSCO to jointly own and develop a 43ktpa chemical conversion facility in South Korea which will form an important part of POSCO's overall supply chain for the lithium raw materials market in South Korea and abroad. This agreement further cements our long-standing relationship with a world-class strategic partner, in the rapidly growing South Korean lithium raw materials market. This joint venture will give Pilbara Minerals significant exposure to one of the world's most dynamic and fastest growing markets for lithium chemicals. Production is expected to commence from the second half of 2023, which should coincide with burgeoning global lithium chemicals demand."

"We are very pleased to have the opportunity to partner with a company like POSCO and the supply of spodumene concentrate to the JV chemical plant will also have the benefit of further diversifying our global sales arrangements over time."

Overview of Downstream JV

Pilbara Minerals will make a staged investment of up to 30% in the JV. The Company will initially subscribe for an 18% interest, with a call option (at Pilbara Minerals' election) available to increase its interest to 30%. This call option will be available for up to 18 months after the successful ramp up of the Conversion Facility to 90% of nameplate capacity. The call option will initially be exercisable at cost (plus 3.58% interest per annum) up until the date the Conversion Facility receives battery certification from tier 1 battery producers, and thereafter at fair value. This structure provides an important benefit to Pilbara Minerals, including added flexibility to stage its investment over time to reduce its initial exposure during the construction and ramp-up phases of the Conversion Facility.

The project development timeline for the Conversion Facility will see major construction works likely to commence from early 2022, with detailed engineering and early works already underway. Construction of the first train of the Conversion Facility is expected to be completed by mid-2023, with the second train to be completed approximately three months later.

Category	2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Joint Venture Plant																
BOD Approval																
Establishment of JV																
Engineering																
Plant Construction																
Commissioning																
Ramp-up																

Figure 1: Indicative Project Delivery Schedule

To support POSCO's timeline of delivering first production by mid-2023 to take advantage of expected strong demand conditions, the Company has elected to proceed with the formation of the JV for the joint development of the Conversion Facility in the knowledge that early works and detailed engineering are still being progressed and yet to be completed prior to the commencement of construction of the Conversion Facility. Given the level of study undertaken to date is at a pre-feasibility stage of assessment and further engineering works are to be completed prior to the commencement of construction, Pilbara Minerals has established certain key protections in the Shareholders Agreement against both significant cost overruns, and the Conversion Facility not achieving ramp up or key operational milestones.

Background to POSCO as a Joint Venture Partner

POSCO along with POSCO Chemicals are developing a battery materials park in the Gwangyang Free Trade Zone of South Korea, which will include the proposed Conversion Facility jointly owned by POSCO and Pilbara Minerals. The Conversion Facility will be supplied spodumene concentrate under offtake from Pilbara Minerals' Pilgangoora Project.

In conjunction with conventional purification technologies, the Conversion Facility will also use POSCO's patented technology to produce up to 21.5ktpa of lithium hydroxide. POSCO's operations to date of both a pilot scale and 2,500tpa demonstration plant utilising the conversion technology to manufacture a very high-grade lithium hydroxide, has demonstrated a clear technically viable pathway for the next step to establishing large-scale lithium chemical conversion and purification facilities.

POSCO is considered to be a strong technology and operational partner in joint downstream chemical development, given its extensive research and development, and operating expertise in lithium raw materials technologies, cathode materials production and its significant growth aspirations in the battery materials sector.

Trading Halt

The Company requests that following the release of this announcement trading in its securities be reinstated.

Release authorised by Ken Brinsden, Pilbara Minerals Limited's Managing Director.

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FORWARD LOOKING STATEMENTS AND IMPORTANT INFORMATION

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this announcement are to Australian currency, unless otherwise stated.

Information in this announcement regarding production capacity of the Pilgangoora Project are underpinned by the Company's existing Ore Reserves that have been prepared by a Competent Person in accordance with the JORC Code (2012 Edition) and were released by the Company to ASX on 6 October 2021 (Material Increase in Ore Reserve).

ABOUT PILBARA MINERALS

Pilbara Minerals is the leading ASX-listed lithium company, owning 100% of the world's largest, independent hard-rock lithium operation. Located in Western Australia's resource-rich Pilbara region, the Pilgangoora Project comprising the Pilgan and Ngungaju processing plants produces a spodumene and tantalite concentrate. The significant scale and quality of the operation has attracted a consortium of high quality, global partners including

Ganfeng Lithium, General Lithium, Great Wall Motor Company, POSCO, CATL and Yibin Tianyi.

While it continues to deliver a low-cost, quality spodumene to market, Pilbara Minerals is pursuing a growth and diversification strategy to become a sustainable, low-cost lithium producer and fully integrated lithium raw materials and chemicals supplier in the years to come.

Through execution of this strategy, Pilbara Minerals is positioned to become a major player in the rapidly growing lithium supply chain, underpinned by increasing demand for clean energy technologies such as electric vehicles and energy storage as the world pursues a sustainable energy future.

ANNEXURE - OVERVIEW OF KEY TERMS OF TRANSACTION

Shareholders Agreement

The JV will be operated as a South Korean joint venture, to be incorporated under South Korean law ("**JV Company**").

Initial interests of the participants in the JV will be as follows:

- POSCO – 82%; and
- Pilbara Minerals (through a wholly owned subsidiary) – 18%.

PLS will initially subscribe for 18% and will have a call option to acquire additional shares in the JV Company to increase its percentage interest to 30%. The call option is exercisable up until 18 months following the successful completion of ramp up to 90% nameplate capacity of the Conversion Plant.

The following provisions have been agreed in the Shareholder Deed to provide certain protections for Pilbara Minerals:

- a) should there be a significant cost overrun prior to ramp up of the Conversion Facility which is not capable of being debt financed by the JV (up to a maximum gearing limit of 65%), there is no obligation on either shareholder to contribute additional equity to fund such overruns;
- b) while there is no obligation to do so, should there be a need for JV shareholders to contribute additional equity to fund such cost overruns, Pilbara Minerals may elect to dilute and defer its decision whether or not to contribute its share of the equity contribution until 18 months after the successful ramp up of the Conversion Facility; and
- c) should there be significant cost overruns or the Conversion Plant be substantially delayed in achieving successful ramp up (including achieving certain operating parameters for nameplate capacity, product quality specifications or unit operating costs), Pilbara Minerals will have the right to exit the JV and sell its shares in the JV to POSCO at the original price paid by the Company.

These protective mechanisms have been deliberately designed to allow sufficient time for the construction, ramp up and establishment of steady state operations at the Conversion Facility to have occurred, ahead of the need for any decision to be made by the Company to contribute further equity into the JV. They will ensure Pilbara Minerals can defer any decisions to contribute further equity until such time as the final costs and operating performance of the Conversion Plant are known and the Conversion Plant has demonstrated an 18 month performance record.

Financing of the Conversion Facility's capital costs (inclusive of working capital) by the JV Company is to be based on a target gearing ratio of approximately 50% equity and 50% debt, but with the ability to increase to a maximum of 65% debt if required.

Pilbara Minerals will fund its initial 18% interest almost entirely from funds subscribed under the A\$79.5M Convertible Bond Agreement.

POSCO will maintain a minimum 51% interest in the JV Company for the first 5 years. Pilbara Minerals and its related entities will maintain a minimum interest of 18% (or 30% if the call option is exercised) in the JV Company for 5 years.

The JV Company will be governed by a board of directors comprising representatives of both POSCO and Pilbara Minerals.

The JV Company and its employees will manage the day-to-day operations of the JV and the Conversion Facility, with certain matters reserved for the decision of the board and shareholders.

All related party matters including any material contracts and sales contracts must be on commercially competitive and arm's length terms.

Other terms customary for incorporated joint ventures have also been agreed including matters reserved for board and shareholder decisions and pre-emptive rights for new issues and disposals of shares by a JV party.

The JV and its formation at completion will be subject to certain conditions precedent, including (but not limited to) provision of a detailed initial budget for the construction and ramp up period following completion of engineering studies, as well as regulatory approvals from any government agencies in South Korea in respect of Pilbara Minerals' foreign investment in the JV Company. Such approvals are expected to be received prior to formation of the JV when Pilbara Minerals acquires its initial 18% interest.

Amended Offtake Agreement

- Existing Offtake Agreement of 80ktpa to be assigned from POSCO to the JV company upon formation of the JV, with the annual supply commitment to be increased to 315ktpa of spodumene concentrate. 75ktpa of the total 315ktpa is conditional on a US\$25 million prepayment facility being made available to Pilbara Minerals by the JV Company.
- Term to be the lesser of 20 years and life of mine of the Pilgangoora Project.
- Product sold on a CIF (Port of Discharge Basis) with pricing determined on a commercial basis and reflective of the prevailing market price for spodumene concentrate sold on a CIF basis.
- Pricing based on a target lithia grade of 6.0% and adjusted on a pro rata basis for actual lithia grade delivered in accordance with the agreement and determined by independent assays.
- Price reviews permitted on a regular basis throughout the term of the agreement to ensure pricing remains reflective of the prevailing market for spodumene concentrate.
- US\$25 million second ranking secured prepayment facility to be made available by JV Company in consideration for Pilbara Minerals increasing the offtake tonnes to the JV from 240ktpa to 315ktpa of spodumene concentrate. The prepayment facility will be funded from external debt arranged by the JV Company.

A\$79.6 million Convertible Bond Agreement

- Five year repayment term.
- Repayable in full on maturity date (with no amortisation during the term).
- Redeemable at Pilbara Minerals election at any time without premium but subject to a minimum of \$5 million.
- Interest cost at a 1.5% margin above RBA cash rate accruing six monthly and payable at the earlier of redemption, conversion (that is it must be paid in cash and not converted) and maturity.
- Convertible to ordinary shares only at Pilbara Minerals election and at any time during the term up to five days before maturity – convertible at the lesser of 30 day

VWAP or five day VWAP of Pilbara Minerals' shares two days prior to conversion notice, less a 7.5% discount.

- PLS cannot issue more than two conversion notices with the first notice converting either 100% or 50% of the bonds. Any subsequent conversion must be for all remaining bonds.
- PLS to provide customary representations and warranties.

There are no major restrictions on conversion by Pilbara Minerals should the Company wish to remove the debt from its balance sheet.

Proceeds may be applied by Pilbara Minerals to fund its initial contributions under the JV.