

Pilgangoora, a world-class lithium and tantalum production center

Annual General Meeting - 21 November 2019

Ken Brinsden, Managing Director and CEO

ASX: PLS



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Important Notices and Competent Persons Statement

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Mineral Resources and Ore Reserves

Recipients of this presentation outside Australia should note that it is a requirement of the Australian Securities Exchange listing rules that the reporting of ore reserves and mineral resources in Australia comply with the Australasian Joint Ore Reserves Committee Code for Reporting of Mineral Resources and Ore Reserves ("JORC Code"), whereas mining companies in other countries may be required to report their ore reserves and/or mineral resources in accordance with other guidelines (for example, SEC Industry Guide 7 in the United States). Recipients should note that while Pilbara's mineral resource and ore reserve estimates comply with the JORC Code, they may not comply with the relevant guidelines in other countries, and do not comply with SEC Industry Guide 7. In particular, SEC Industry Guide 7 does not recognise classifications other than proven and probable reserves and, as a result, the SEC generally does not permit mining companies to disclose their mineral resources, including indicated and inferred resources, in SEC filings. Accordingly, if Pilbara were reporting in accordance with SEC Industry Guide 7, it would not be permitted to report any mineral resources, including indicated and inferred resources, and the amount of reserves reported by Pilbara may be lower than its estimates. You should not assume that quantities reported as "resources" will be converted to reserves under the JORC Code or any other reporting regime or that Pilbara will be able to legally and economically extract them. In addition, investors should note that under SEC Industry Guide 7, mine life may only be reported based on ore reserves. Mine life estimates in this presentation assume that a portion of non-reserve resources will be converted to ore reserves, which would not be permitted under SEC Industry Guide 7.

Acceptance

By attending a presentation or briefing, or accepting, accessing or reviewing this document you acknowledge, accept and agree to the matters set out above.

No new information regarding the Pilgangoora Project

Information relating to the current mineral resource and ore reserve estimates, production targets and forecast information derived from the production targets (including information relating to the proposed expansions of the Pilgangoora Project), each in respect of the Pilgangoora Project, is extracted from the ASX announcement dated 3 August 2018 entitled "Outstanding DFS Results Support Pilgangoora Expansion", the ASX announcement dated 17 September 2018 entitled "Pilgangoora Reserve and Resource Upgrade", the ASX announcement dated 26 March 2019 "Stage 3 Scoping Study Outcomes" and as updated in the 30 June 2019 Annual Report.

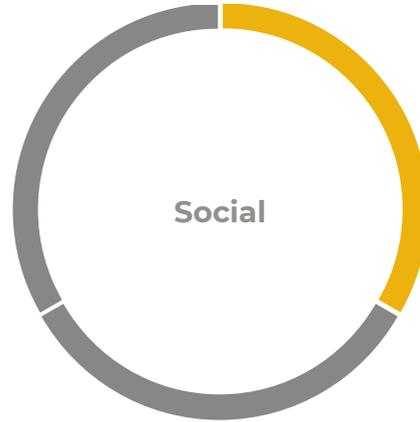
Pilbara Minerals confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the resource and reserve estimates, production targets and forecast financial information derived from the production targets in the announcements continue to apply and have not materially changed. The scoping studies referred to in this presentation in respect of the Revised Stage 2 expansion and the Stage 3 expansion have been undertaken to determine the potential viability of those expansions and to reach a decision to proceed with more definitive studies. Each scoping study has been prepared to an accuracy level of $\pm 30\%$. Each scoping study is based on low-level technical and economic assessments and is insufficient to provide assurance of an economic development case at this stage or provide certainty that the conclusions of the scoping study will be realised. The results of the scoping studies should not be considered a profit forecast or production forecast.

Sustainability

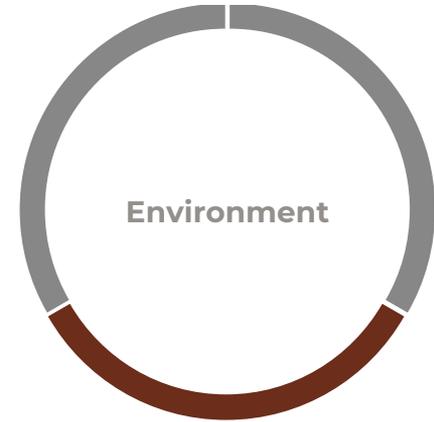
Contribute to a sustainable future through responsible operations and ethical business practices that deliver economic returns for our shareholders, while creating shared value in the community



- 'Safety Matters' is core to 'What We Stand For'
- Empower, lead and support underpins safety culture
- TRIFR rate 3.93 and LTIFR 0.79 - first year of operations



- Procured \$16M of goods from regional community FY19
- Create shared value through both direct and in-kind contributions
- Alignment to United Nations Sustainable Development Goals



- No recorded non-compliances in FY19
- Strong systems and controls – data management and compliance reporting
- Employee and contractor training



2018 - 2019 highlights

An exceptional year as we went from developer to producer and established our position in the global lithium supply chain

Official opening of the

Pilgangoora Lithium-Tantalum

Project

AU\$132.4M

received from product sales

Good safety performance

across construction, commissioning and ramp-up

Completion of

11 shipments

containing

13 cargoes

of spodumene concentrate

Completion of a positive **Definitive Feasibility Study** for the **Stage 2, 5Mtpa** expansion and encouraging results from the **Scoping Study** for a **Stage 3, 7.5Mtpa** expansion

Total
128,373dmt

spodumene
concentrate shipped

Option exercised with

POSCO

for the establishment of a jointly-owned 40ktpa LCE chemical conversion facility in South Korea

Commercial production declared effective

1 April 2019

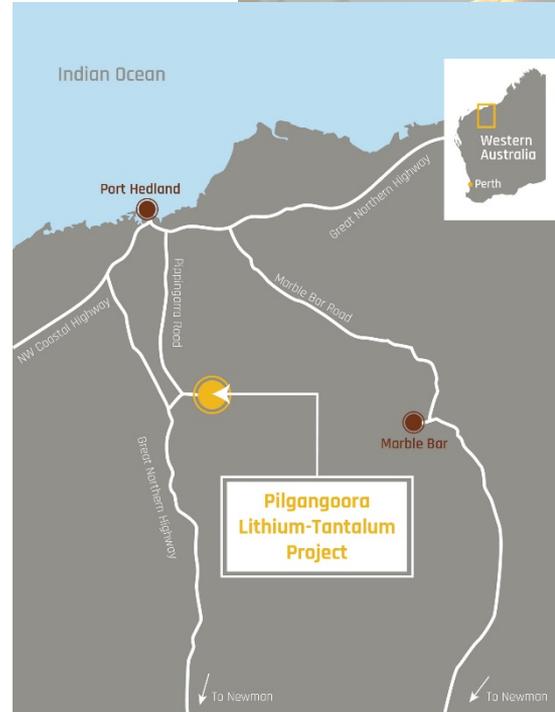
Total
~104,062lbs

tantalite sold

Pilgangoora Lithium-Tantalum Project

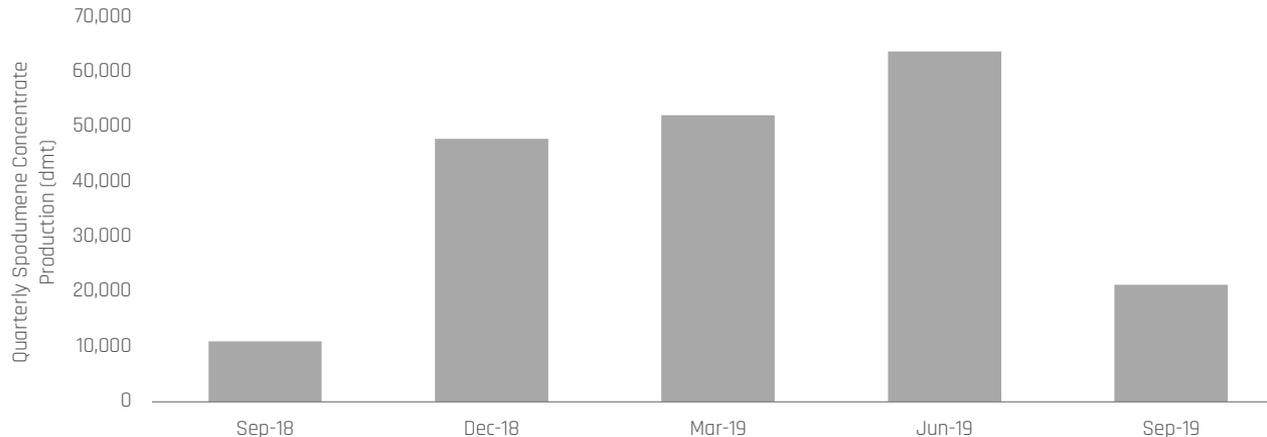
One of the largest spodumene-tantalite resources in the world

- Production ramp-up well advanced
- Products shipped
 - ~6% spodumene concentrate
 - +5% and +30% tantalite concentrates
- Improved plant performance and product recovery
- Short-term production moderation strategy in response to current market dynamics
- New Stage 1 production offtake agreement with Great Wall Motors
- Term sheet agreed with POSCO for JV, final documents and board approvals expected early 2020
- New strategic investor CATL



Production update

- Campaign mining and processing programs underway
- Material improvement in product recovery performance following the most recent plant modifications:
 - 60% lithia recovery¹ achieved for the December quarter to date, inclusive of all commissioning, optimisation and ramp-up/down production periods
 - 66%-71% recovery range (average 68.5% sustained lithia recovery¹) between 6 - 10 November during steady-state production
- Targeting cash operating costs² of US\$320 - \$350/dmt CFR China (SC6.0 basis) from June 2020 and once steady state name plate capacity has been achieved



Production moderated from late June 2019 in response to customer demand

- Current production only intending to meet expected demand
- Disciplined approach to minimise cash expenditure in light of difficult market conditions

¹ Unreconciled daily lithia recovery until 10 November, with final recovery results subject to end-of-month survey reconciliation.

² Cash operating costs include mining, processing, transport, state and private royalties, native title costs, port, shipping/freight and site based general and administration costs and are net of Ta₂O₅ by-product credits.



Exceptional growth opportunity

A clear expansion pathway to meet customer growth requirements over time

UPSTREAM			DOWNSTREAM
STAGE 1: 2MTPA	STAGE 2: 5MTPA	STAGE 3: 7.5MTPA*	POSCO JV
<p>STAGE: Operations</p> <p>STATUS: Production (in ramp up) and shipments</p> <p>PRODUCTION: 330,000tpa ~6% spodumene concentrate and 321,000lbspa +5% tantalite concentrate</p> <p>OFFTAKE: Stage 1 spodumene concentrate ~100% under agreement</p>	<p>STAGE: DFS and conditional FID complete on original Stage 2 project</p> <p>STATUS: Revised Stage 2 expansion under consideration - Feasibility study expected to complete in January 2020 and FID shortly thereafter</p> <p>FINAL PRODUCTION: Incremental build out to 800-850,000tpa ~6% spodumene concentrate and 800,000lbspa +5% tantalite concentrate</p> <p>OFFTAKE: Stage 1 and 2 spodumene concentrate ~100% under agreement</p>	<p>STAGE: Proposed subject to market demand</p> <p>STATUS: Scoping study complete On hold pending customer demand</p> <p>PRODUCTION: Up to 1.2Mtpa ~6% spodumene concentrate 1,100,000lbspa +5% tantalite concentrate</p> <p>OFFTAKE: 100% uncontracted</p>	<p>STAGE: Binding Term Sheet, subject to Board approvals</p> <p>STATUS: Formal agreements, FID and Board approvals expected in early 2020</p> <p>PRODUCTION: 40ktpa LCE facility 21% ownership increasing to 30% Commissioning expected from the March Quarter 2021</p> <p>OFFTAKE: POSCO developing the offtake pipeline following final product qualification</p>

* Up to 7.5Mtpa



Pilbara Minerals - connected to the entire supply chain

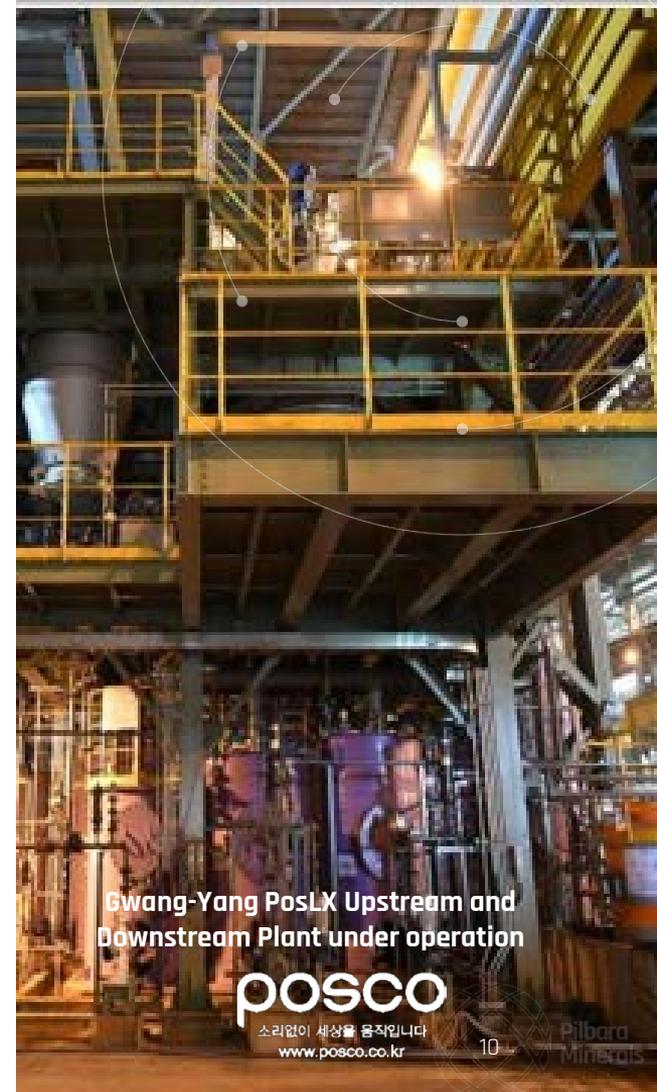


*Potential PLS JV partners

Proposed POSCO JV

Very important strategic relationship with POSCO for participation in the rapidly developing South Korean lithium ion battery market

- Up to 30% JV in chemical conversion facility in South Korea with the capacity of 40ktpa (LCE basis)
- Facility to apply Posco's PosLX technology for lithium chemicals purification
 - Outstanding technology creating very high purity products and enabling reagent recycling
 - Hydroxide / carbonate production underway at the Gwangyang demo plant
- Synergy maximisation through development within a larger battery raw materials industrial park
- JV term sheet signed
- FID of both Boards expected in early 2020



Gwang-Yang PosLX Upstream and Downstream Plant under operation

CATL strategic benefits

New strategic relationship with a strong, experienced, global partner



Combines **CATL's downstream battery and market expertise** with Pilbara Minerals' expertise in upstream lithium mining operations



Further diversifies Pilbara Minerals' **strategic shareholder** base, adding a battery manufacturer to the existing strategic shareholders



CATL is a key player in the battery market with a **strong balance sheet (US\$4.7bn in cash¹)**



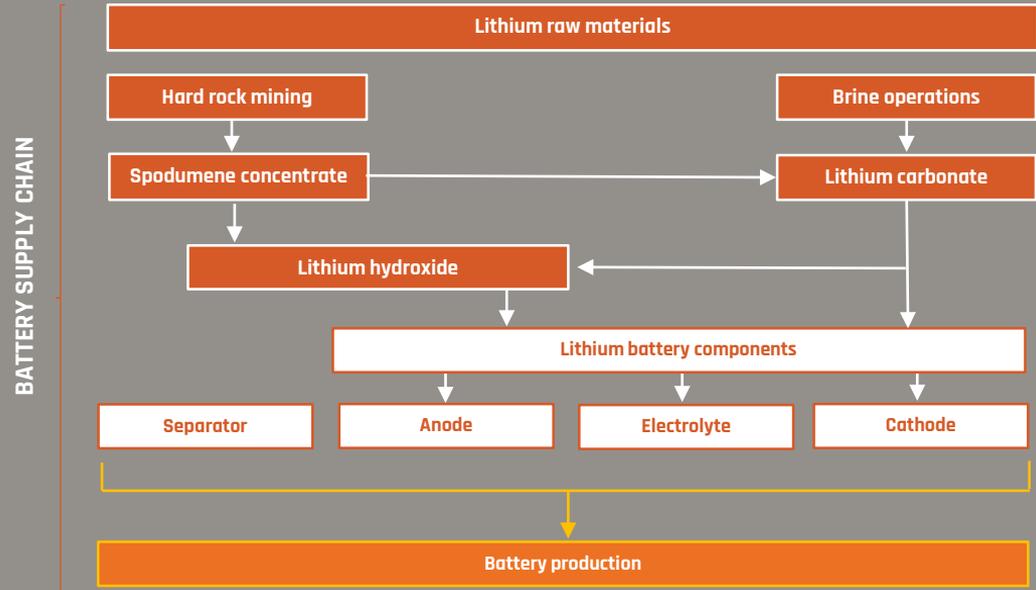
Connects Pilbara Minerals to one of the **world's largest battery companies**, further integrating Pilbara Minerals' within the lithium ion supply chain



CATL is **supportive of Pilbara's development strategy** (subject to lithium market sentiment and other customer demand) and **the scale and quality of the Pilgangoora project**

Hard rock lithium supply: key to future battery production

Its ability to be directly converted into lithium hydroxide makes hard rock supply more cost competitive and the preferred feedstock for the emerging high nickel cathode chemistries which support energy dense batteries that enable extended driving range.



PROXIMITY TO MARKET
ENVIRONMENT
GROWTH

**WA HARD ROCK
LITHIUM IS THE FUTURE**

QUALITY PRODUCTS
RELIABLE PARTNERS

STABLE GOVERNANCE
CONFLICT FREE



LOW-COST

VALUES

SOCIALLY RESPONSIBLE

QUALITY PRODUCTS

SUSTAINABILITY

STABLE GOVERNANCE

CONFLICT FREE

DIVERSITY

RELIABLE PARTNERS

SAFETY



LITHIUM EXTRACTED FROM ORE THE FUTURE PROOF SOLUTION FOR VOLKSWAGEN

Lithium ore to lithium hydroxide

- Commercially more attractive
- More stable to extract and easier to scale
- Better suited to next generation of batteries

Australia the world market leader for ore-based production

- Stable political system
- High degree of transparency
- Ambitious environmental standards

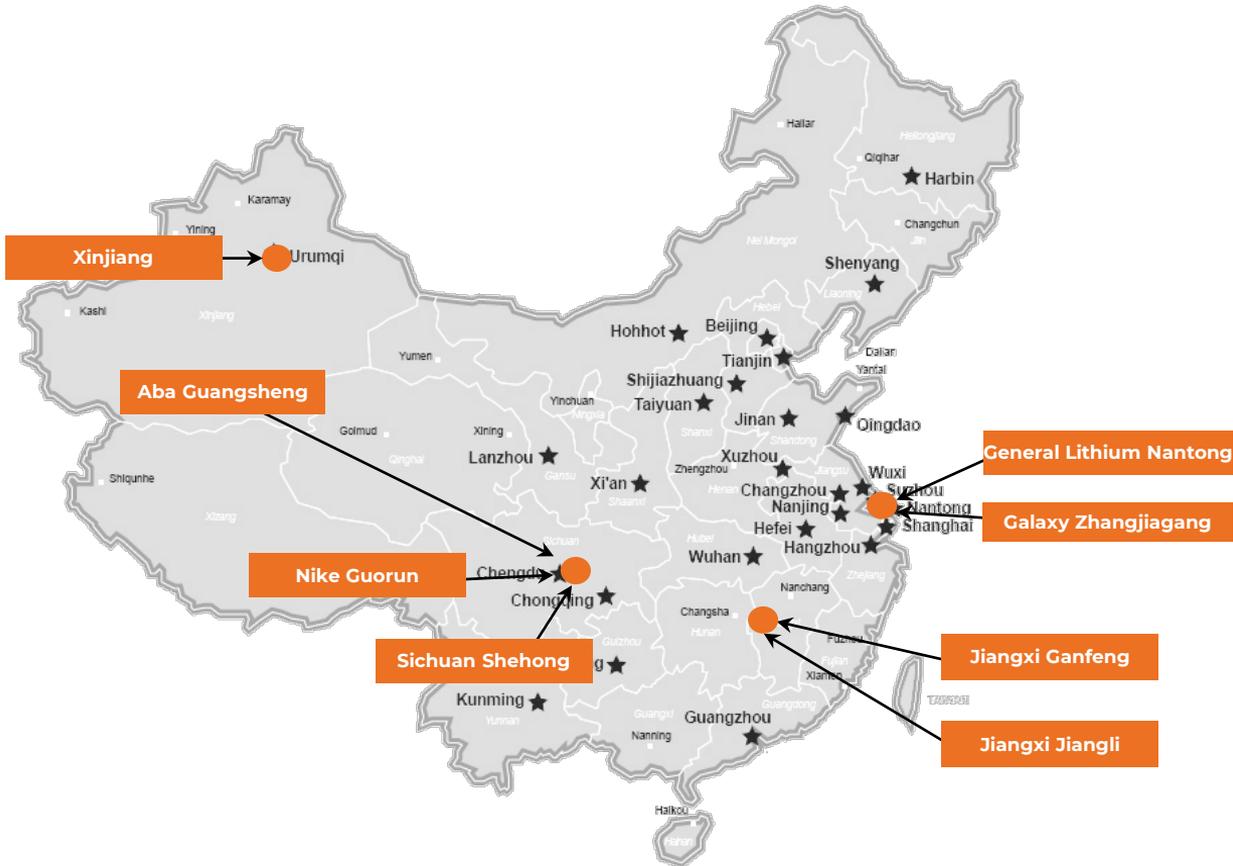
Volkswagen focused on lithium supply from mining industry

- Stable prices
- Guaranteed capacity
- Transparent sustainability



Source: Volkswagen AG 2019 *Lithium ore mining Pilgangoora Lithium-Tantalum project*

Chinese spodumene converters - 2012



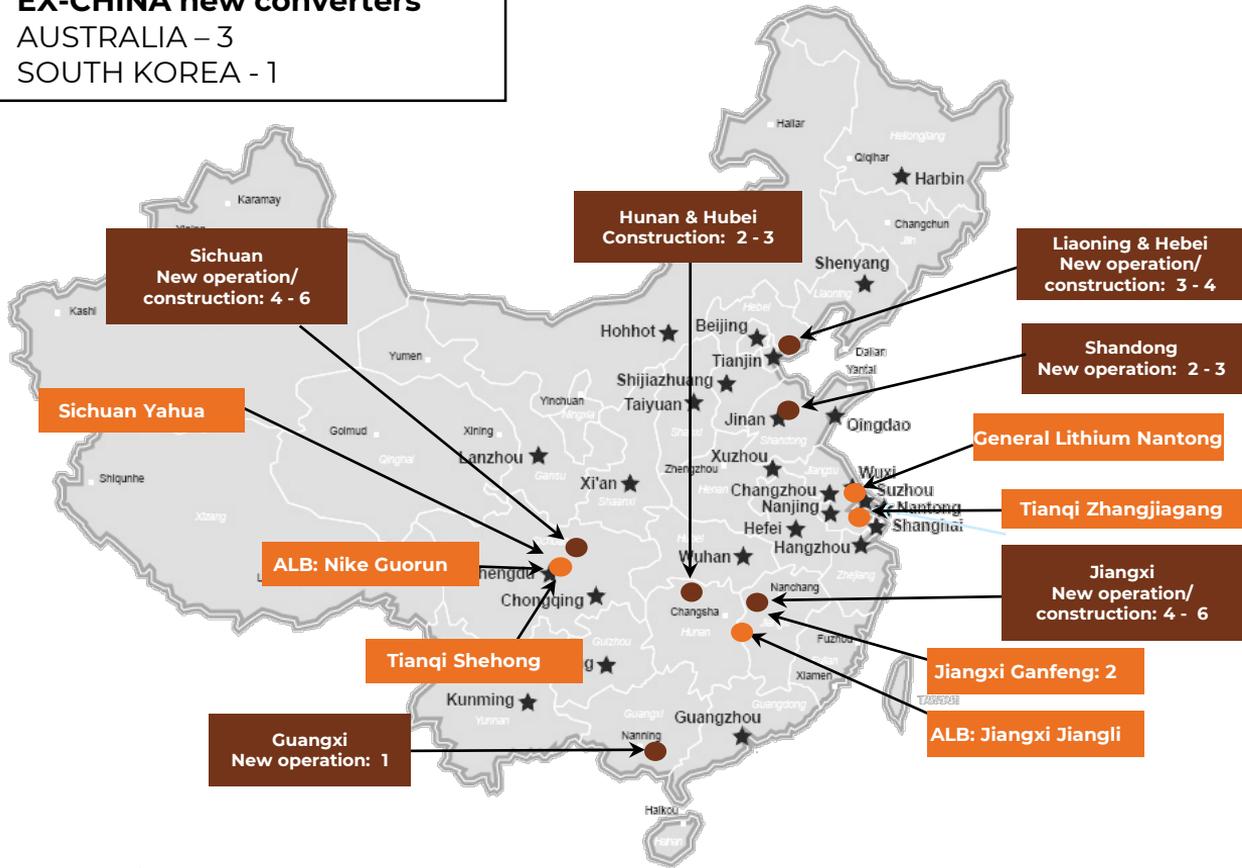
Eight facilities in operation

Limited export capacity



Chinese spodumene converters - 2019

EX-CHINA new converters
 AUSTRALIA – 3
 SOUTH KOREA - 1



Approximately 20 facilities already in operation

Export capacity growing

Approximately 15 facilities in varying stages of construction and/or commissioning, including many new operators without existing offtake in place

Source: PLS estimates

Well positioned post placement

Focus on reaching Stage 1 nameplate capacity and developing the 40ktpa lithium hydroxide conversion facility with POSCO

- Strong balance sheet and enhanced financial flexibility
- Supports ramp-up to name-plate capacity to achieve target operating cash costs of USD\$320-350/dmt CFR China (target Q4 FY20)¹
- Provides funding for an initial 21% share² in POSCO JV to develop a 40ktpa lithium hydroxide conversion facility in South Korea
- Supports completion of feasibility study and committed long lead items for revised incremental Stage 2, 5Mtpa expansion in preparation for FID in early 2020 (aligned with customer requirements)

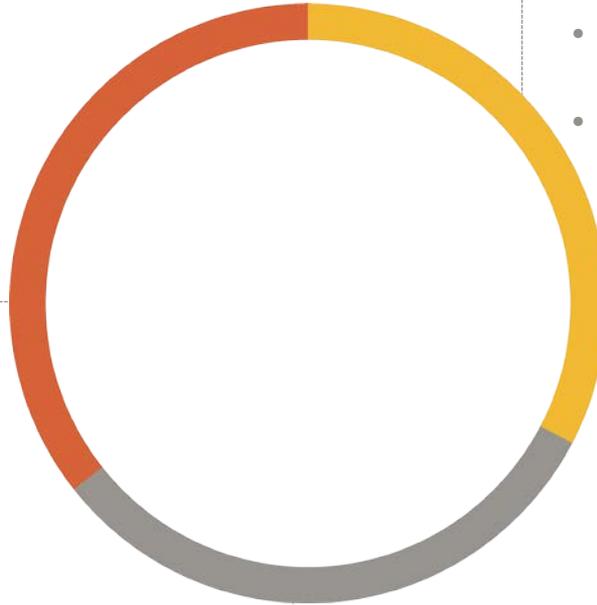
1. Refer to ASX announcement dated 25 July 2019; 2. Pilbara Minerals has the option to increase its POSCO JV position to 30% at its initial cost of entry for a 6 month period post commencement of JV production. Refer ASX announcement dated 27 August 2019. Transaction still subject to board approvals and other conditions as outlined in the ASX release.



PRODUCE

- Achieve annual nameplate production capacity 330,000dmt of high-quality 6% spodumene concentrate and 300,000lbs of tantalite concentrate.
- Complete plant rectification and improvement works to support lower production costs.

Long term strategy to become a fully integrated lithium raw material and chemical supplier



GROW

- Increase mine life through exploration
- Complete studies and secure funding for incremental Stage 2 expansion.
- Commence incremental project expansion in line with customer demand.

DIVERSIFY

- Finalise JV with POSCO to develop and operate a 40,000tpa downstream chemical conversion facility in South Korea.
- Continue to expand and diversify our customer base.

