

## ASX RELEASE

30 April 2019

# Activity Report for the Quarter ended March 2019

Lithium Power International Limited (ASX: LPI) (LPI or the Company) is pleased to submit its quarterly Activity Report for the period ended 31 March 2019.

## HIGHLIGHTS

- LPI released its Definitive Feasibility Study (DFS) for the Maricunga Lithium Brine Project on 22 January 2019.
- The DFS shows a pre-tax NPV of US\$1.302b and an IRR of 29.8%, assuming a 50% debt/equity ratio (after-tax NPV of US\$940m, IRR 26.7%). On a 100% equity basis, NPV is US\$1.286b with an IRR of 23.8%.
- Forecast CAPEX of US\$563m is inclusive of 19% VAT, recoverable once in production, and includes direct development costs of US\$456m, indirect costs of US\$45m and contingencies of US\$63m.
- Project operating costs are estimated at US\$3,772 per tonne (/t) of Lithium Carbonate Equivalent (LCE), excluding offsets from potassium chloride (KCl) sales and any royalties.
- Production of 20,000 tonnes per annum (t/a) LCE would yield a high-value battery-grade lithium carbonate, unlike many lithium hard rock projects under development.
- A maiden Ore Reserve estimate, prepared in accordance with JORC and NI 43-101 international standards, was released on 21 January 2019. It includes a total of 742,000 tonnes (t) of LCE,<sup>1</sup> which exceeds the 20-year project mine life production needs.
- There is potential to expand resources and reserves beneath the existing resource, which is currently defined to a depth of 200 m. An exploration target between 200 m – 400 m, confirmed by deep borehole results, could add between 1 Mt – 2.5 Mt of new resources.



<sup>1</sup> After 58% lithium process recovery efficiency, the total recovered Reserve is 430,000 tonnes LCE (118,000 tonnes Proved – 313,000 Probable).

## HIGHLIGHTS continued

- The Maricunga project's Environmental Impact Assessment (EIA) has passed the initial 45-day assessment period and completed Stage One of the review process on 26 March, with the submittal of the answers to the first consolidated set of queries and/or observations sent by the Environmental Assessment Authorities. The Company is now waiting for the second set of questions which should be received by the second week of May. Notwithstanding the uncertainties related to this process, approval is still forecast for 4Q19.
- Government approval was given for the use of electricity infrastructure. Energy to be supplied through existing, nearby transmission lines.
- Water rights have been secured throughout the mine life.
- The Company is in discussions for off-take agreements and project finance with international institutions.
- In Western Australia (WA), an extensive soil sampling program covering the Tabba Tabba property identified a 4.3km-long area of elevated lithium and tantalum, with Li<sub>2</sub>O values up to 689 ppm.
- Tabba Tabba drilling activities will commence in 2Q19, representing the first stage of the WA development program.
- The WA program advances the Company's strategy of being a diversified international lithium project developer, both in terms of geography and lithium source by having both hard rock and brine projects.

## MARICUNGA PROJECT - CHILE

### CHILE JOINT VENTURE COMPANY - MINERA SALAR BLANCO S.A.

The Maricunga Joint Venture project (the Project) is operated under the Joint Venture Company, Minera Salar Blanco S.A. (MSB). LPI owns 51% of MSB.

The Project has been confirmed as Chile's highest grade and most advanced lithium project outside the Salar de Atacama. It is the only project on the Maricunga salt lake with a released DFS, and is the most advanced in the EIA approval process.

### RESERVE ESTIMATE AND RESOURCE UPDATE

The Reserve estimate and Resource update was completed and released during the quarter, and were prepared in accordance with JORC and NI 43-101 international reporting standards.

The Mineral Resource estimate consists of 100% Indicated and Measured Resources. The previous 20% Inferred Resources has been converted to Indicated Resources since the drilling in 2H18 of two sonic holes to 200 m, providing a revised Resource of 2,070,000 tonnes of LCE.

This estimated Mineral Resource data was used in the DFS, and has been prepared by competent persons and reported in accordance with requirements of the 2012 JORC code.

A sophisticated hydrogeological model was developed to define a maiden brine Reserve for the project, taking into account brine recovery from the aquifers in the salar.

An overall mining Reserve of 742,000 tonnes of LCE has been defined for brine extracted from the aquifer and pumped to the ponds, of which 203,000 is classified as Proved and 539,000 as Probable.

When the lithium pond and process recovery efficiency of 58% is applied, the total recovered LCE equates to 430,000 tonnes, of which 27% derives from Proved Ore and 73% from Probable Ore in brine fed to the ponds.



The 430,000 tonnes of defined Reserve exceeds the 20 years of production at 20,000 t/a of lithium carbonate, based on the Resource and Reserve defined to 200 m depth. The Company believes there is considerable scope to add additional Resources and probably Reserves below the current Resource drilling depth of 200 m.

## FINALISATION OF THE DEFINITIVE FEASIBILITY STUDY

The DFS Ore Reserve estimate supports the 20,000 t/a LCE production projected for the Maricunga throughout its 20-year mine life. Mineral Resources have been updated to a total of 2,070,000 tonnes of LCE, which are now classified as Measured or Indicated. Both Reserve and Resource estimates were prepared in accordance with JORC and NI 43-101 international reporting standards.

Engineering consultants WorleyParsons completed the DFS, with engineering and cost estimates totalling US\$563m. The total direct project costs of the capital investment represent US\$456m, inclusive of 19% VAT (recoverable once in production); indirect project costs represent US\$44.8m (10% on direct costs) with a provision for contingencies of US\$62.6m (14% on direct costs).

Project operating costs are estimated at US\$3,772 per tonne of lithium carbonate before any offset credits for the potassium chloride by-product, which was not considered in the DFS. This makes it highly competitive by placing it as one of the lowest-cost lithium carbonate producers globally.

The Project has a defined two-year ramp-up stage. There remains potential for the expansion of production, given the Exploration Target and likely extension of the brine mineralisation to significant depths below the existing resource. Currently, it is defined to 200 m depth.

The strong economics outlined in the DFS confirm the attractiveness of the project, with a leveraged NPV on a pre-tax basis (8% discount) of US\$1.302b, providing an IRR of 29.8% and a payback of 3.5 years. On a pure equity basis, the NPV is US\$1.286b with an IRR of 23.8%.

## PROJECT EIA

The Project's Environmental Impact Assessment (EIA) study was submitted to the Chilean Government environmental assessment authorities (the Authorities) in September 2018. On 14 January 2019, MSB received its first round of queries and/or observations from the Authorities, with a deadline to respond by 5 April 2019.

The majority of the replies was desktop work along with further analysis and modeling. It also included some additional monitoring of flora and fauna and the installation of 17 piezometers to monitor hydrogeological characteristics on the project area.

MSB successfully completed and submitted its response to the Authorities on 26 March 2019, two weeks before the due date.

Continuing engagement with local indigenous communities has been an important component of the EIA review process. The key community is the Diego de Almagro people, who have been actively and fully engaged in the Indigenous Participation process. It is expected that the Indigenous Participation process will be concluded in 2Q19, once final agreements are signed.

The Authorities now have until the second week of May to submit to MSB its second and final round of queries and/or observations, giving MSB a further two months to respond. Notwithstanding the uncertainties related to this process, approval is still forecast for 4Q19.

## PROJECT INFRASTRUCTURE

The Company has finalised details of the Project's water supply, with an important groundwater source close to the Maricunga Salar.

Improvements to the telecommunication capabilities will commence in 3Q19.



## PROJECT FUNDING

The Company is confident that required development funding will be obtained given the quality of the Project, the advanced status of the EIA, the excellent relationship with Chilean government departments and corporations, the solid mining jurisdiction and the global demand for lithium.

Discussions continue with various institutions on project funding and potential off-take partnerships, which will be a major focus in Q2 and Q3 of this year.

## ARGENTINA CENTENARIO – SALTA PROVINCE, ARGENTINA

The Centenario project is a 70:30 Joint Venture between LPI and Centenario Lithium. A drilling program to target a large conductive zone identified in a TEM electrical geophysical survey undertaken by the Joint Venture is in the process of being finalised. The geophysical target is believed to represent a significant body of brine, covering an area of approximately 12 km by 4 km based on the compilation of all available geological data. This is an exciting project that the Company considers to be part of its strategic diversification plan.

## WESTERN AUSTRALIA

Extensive desk top analysis and field sampling has advanced the development program for the Company's WA properties located in the Pilbara and Greenbushes areas in the north and south-west of Western Australia (Figure 2), which will now commence after the WA summer wet season.

A decision to expand activities on the WA properties resulted from positive preliminary sampling results and the availability of internal resources following the lodgement of both the EIA and the DFS for the Maricunga project.

The WA properties have been subject to little or no exploration for lithium in the past. They have the potential to create significant additional value for LPI, as shown by recent changes in the market capitalisations of other companies that have made attractive pegmatite discoveries in Western Australia.

The Company has opened a new, expanded office in Perth and employed additional staff to supervise all activities. All WA properties are 100% owned by LPI and are located a short distance either from the ports of Port Hedland or Bunbury.

A project plan and budget have been developed, with work to consist of an initial 4000 m of drilling across two projects: Tabba Tabba and Strelley.



Figure 2: Location of LPI's properties in the Pilbara and south-west region of Western Australia

## TABBA TABBA – PILBARA, WA

LPI's Tabba Tabba project is located along the highly productive Tabba Tabba Shear Zone (Figure 3), which hosts the historical Tabba Tabba tantalum mine and the Strelley pegmatites.

Additionally, a recent advanced lithium pegmatite discovery has been made by FMG directly adjacent to LPI's property, for which a resource has yet to be announced. There is known spodumene mineralisation, with lithium oxide concentrations of up to 1.2%, within greenstone belts in which pegmatites have intruded along this shear zone. With the recent and historical discoveries, the shear zone is shaping up as one of the most interesting areas for hard rock lithium in Australia and the world.

LPI has conducted an extensive soil survey over the three greenstone belts in the Tabba Tabba property (E45/4637). The survey identified an area of elevated lithium, tantalum and other elements along 4.3 km, directly on strike from the FMG project and extending directly from the property boundary with that company. The highest result in soils was 689 ppm Li<sub>2</sub>O. The survey was completed over the three north-east trending greenstone belts, comprising lines that were nominally on 200 m spacing, with samples taken every 25 m along lines. A total of 1661 primary samples were taken, with 184 duplicate samples taken and analysed.

Field mapping also identified that the zone of elevated soil geochemistry contains numerous outcrops of coarse to fine grained pegmatite dykes. They vary in width and length and will be mapped and sampled in more detail.

Targets have been defined for an initial 3000 m drilling program to commence in 2Q19, with drilling to test the upper 100 m of the target. Positive drilling results would lead to resource definition, potentially to be followed by a Scoping Study and additional resource drilling.

The property is easily accessed by road, and is approximately 60 km south of Port Hedland, a major port, from which lithium concentrates are regularly shipped. The closeness to infrastructure reduces both project risk and potential C1 cost. Few global projects are so well located to port and support infrastructure. The initial 3000 m drilling program is planned for mid-2019, following the completion of heritage surveys and clearances, geological mapping and rock chip sampling.

## STRELLEY – PILBARA, WA

The Strelley project has a similar structural setting to the Tabba Tabba project. It is located 15 km to the north along the Tabba Tabba Shear Zone (Figure 3), where the greenstone belt with the highest lithium in soil geochemistry on the LPI Tabba Tabba project (Belt 1) continues. This area has shallow, wind-blown sand cover.

An initial 1000 m of systematic aircore drilling will be undertaken to obtain samples for geochemistry and mapping of the rock type. Structures that are considered to potentially host pegmatites will be targeted. The mineralised Tabba Tabba tantalum pegmatites are located 5 km south-south-west of LPI's Tabba Tabba property, and the Strelley pegmatites are located between the two LPI properties. Drilling is planned in 3Q19.

## PILGANGOORA – PILBARA, WA

The Pilgangoora project is approximately 110 km south-south-east of Port Hedland. The property abuts and is immediately west of the mining properties held by Pilbara Minerals and Altura Mining, where lithium is being mined from one of the world's largest lithium pegmatite deposits.

Further sampling and assessment on samples from the property is planned for 2019.

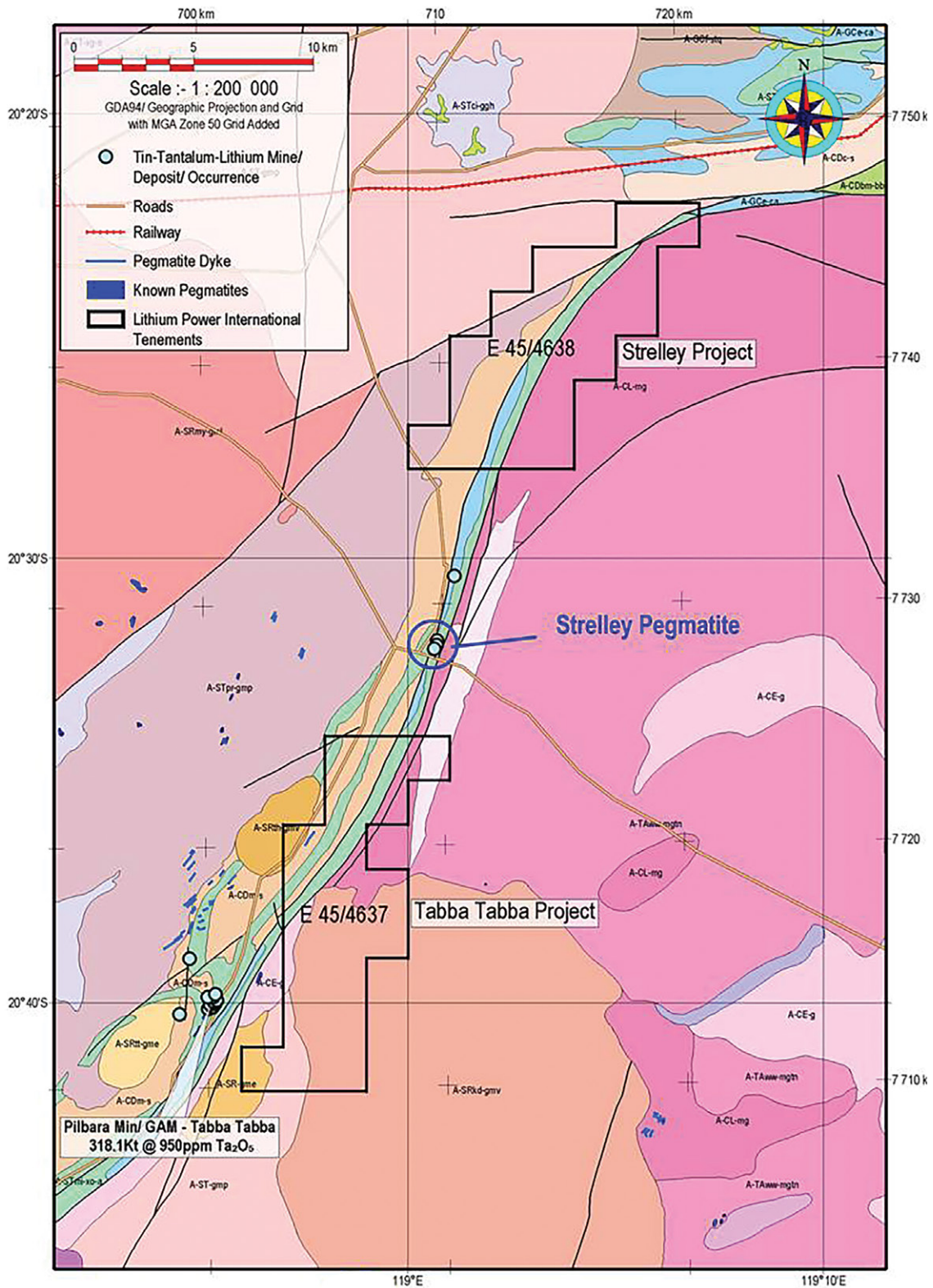


Figure 3: Map showing the Tabba Tabba and Strelley projects on the regional Tabba Tabba Shear Zone and greenstone belts (mafic and ultramafic units in pale green and blue), surrounded by granite and gneiss units. The three greenstone belts along the shear zone are labelled 1 to 3

## GREENBUSHES – SOUTH-WEST WA

The Greenbushes project is located 250 km south of Perth and comprises two properties located immediately north and south of the block that hosts the Greenbushes mine, which is owned by major lithium producers Tianqi Lithium and Albemarle.

LPI's properties are considered to be highly prospective for the discovery of lithium pegmatites along the same geological units and faults as the Greenbushes pegmatite. The properties, E70/4763 and E70/4774, cover extensive areas of forestry land, and LPI is seeking access to these areas for surface geochemical sampling and subsequent drilling.

## PROJECT ACQUISITIONS

LPI continues to evaluate third party projects that would be highly prospective additions to the WA project portfolio. A number were evaluated in 2018 and more are being considered.

## CORPORATE UPDATE

### Appendix 5B

The Appendix 5B quarterly cashflow report for the quarter ended 31 March 2019 is submitted separately.

The Company had a cash balance of AU\$16.1m as at 31 March 2019.

It is held in the Company's bank accounts in Australia, Chile and Argentina in Australian dollars, US dollars or Argentine pesos. The Australian dollar equivalents were converted at the closing foreign exchange spot rate.

Total funds within the Maricunga Joint Venture at the end of the quarter totaled US\$2.1m.

### Capital Structure

The Capital Structure at the end of the Quarter is as follows:

- 262.5m Ordinary Shares on issue,
- 34.6m Listed Options on issue at 55cps; and
- 46.3m Unlisted Options on issue averaging 25cps.

### Audited Interim Report for the 6 months ended 31 December 2018

The audit of the interim report was signed off by the Company's auditors, Ernst & Young, on 15 March 2019 and was released to the ASX on this same day, in compliance with ASX Listing Rules.