Tuesday, 25 May 2021 ASX Code : LEL

MARKET ANNOUNCEMENT

Geophysical Data Supports Highly Encouraging Exploration Potential for Solaroz

KEY HIGHLIGHTS

- Extensive exploration has previously been undertaken by Orocobre Limited and Lithium Americas Corporation within the Salar de Olaroz Basin and adjacent to Lithium Energy's Solaroz Lithium Brine Project tenements
- Review of published Orocobre and Lithium Americas exploration data adjacent to or over Lithium Energy's tenements has been completed, leading to a more detailed conceptual geological model being developed for Solaroz and the lithium-rich Salar de Olaroz Basin
- The review has strengthened the view that the lithium-rich aquifer from which Orocobre extracts its lithium brine continues into Lithium Energy's ground
- Reported results from Orocobre's Olaroz North AMT Line Survey indicate the likely presence of conductive brines extending underneath the Solaroz Chico 1, Chico V and Payo 2 (South) tenements
- Furthermore, the interpreted paleo channel through which brines are interpreted to have likely flowed into the producing aquifer lies under the Solaroz Payo 1 and Payo 2 tenements
- Lithium Energy will finalise its analysis and expects to be in a position to announce an exploration target shortly

Lithium Energy Limited (ASX:LEL) (**Lithium Energy or the Company)** is pleased to advise that a detailed review of reported results from various geophysical surveys and drilling data previously undertaken in the Salar de Olaroz Basin (**Olaroz Salar**) by its neighbours Orocobre Limited (ASX/TSX:ORE) (**Orocobre**) and Lithium Americas Corporation (TSX/NYSE:LAC) (**Lithium Americas**) has been completed by the Company. These works were undertaken as a preliminary exercise to the Company providing a conceptual exploration target for Lithium Energy's flagship Solaroz Lithium Brine Project (**Solaroz**).

These previous exploration works include a combination of Gravity and Audio-frequency Magnetotellurics (**AMT**) surveys with follow on drilling undertaken by Orocobre in the Olaroz Salar, including a number of geophysical studies undertaken over or closely adjacent to Solaroz tenements held by Lithium Energy.

These results provide valuable insights into the composition of the Olaroz Salar and has assisted Lithium Energy to outline its own preliminary geological model of the Olaroz Salar, the location and depths of potential lithium-rich brine located in the "Deep Sands Unit" of the basin and more particularly, the location of potential lithium-rich brines relative to the Company's Solaroz tenements.

The review has strengthened the Company's belief that its Solaroz tenements lie over the same lithium-rich aquifer within the Olaroz Salar from which Orocobre has been extracting and processing lithium-rich brine for sale as lithium carbonate since 2015 and from which Lithium Americas plans to draw upon for its neighbouring development project.

The Company expects to shortly be in a position to announce a conceptual Exploration Target, based upon its review and analysis of the published Orocobre and Lithium Americas exploration reports.

Solaroz Project Deep Sand Unit

Lithium Energy's interpretation of the basin architecture is that the aquifer which supplies the lithium-rich brine being extracted by Orocobre and forming the lithium mineralisation upon which the Lithium Americas project is based, is contained in a Deep Sand Unit of the Olaroz Salar which extends to the north and west under the Talus Alluvial Wedge and the Solaroz tenements (refer Figure 1).

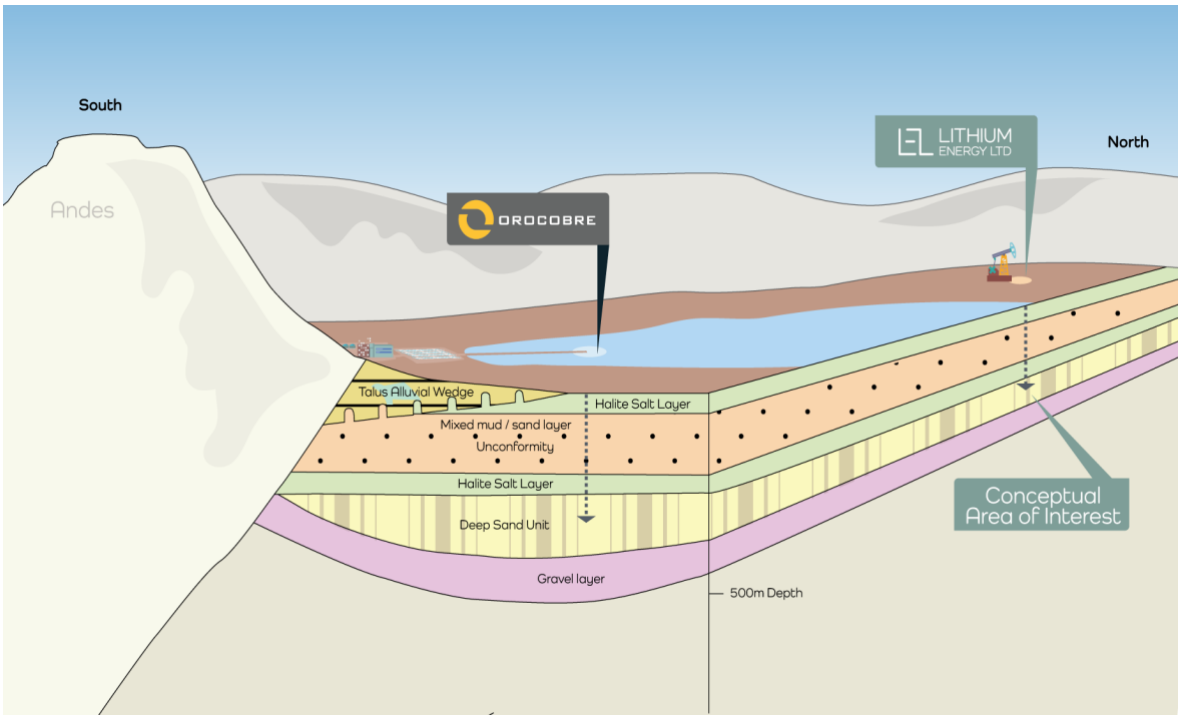

Figure 1: Solaroz Geological Exploration Concept

The presence of the Deep Sand Unit in the Olaroz Salar has been confirmed by exploration works undertaken by Orocobre and Lithium Americas. The Company notes that the Rosario Fan Delta at the northern end of the Olaroz Salar and over which the Solaroz Payo 1 and Payo 2 tenements are situated (refer Figure 2), contains the interpreted paleo channel through which brines are interpreted to have likely flowed from the north into the Deep Sand Unit within both the Olaroz Salar and neighbouring Salar de Cauchari to the south.

This Company's interpretation of the Deep Sand Unit and paleo channel is conceptual in nature, there has been insufficient exploration to estimate a JORC Mineral Resource in respect of the same and it is uncertain if further exploration will result in the estimation of a JORC Mineral Resource.

Review of Geophysics Results

As part of the review of exploration results in the Olaroz Salar, the Company has analysed a number of Gravity and AMT surveys conducted by Orocobre, some of which were undertaken over or closely adjacent to Lithium Energy's Solaroz tenements.

The proximity of these surveys has been very useful and highly encouraging for the Company to develop in greater detail an exploration outline for the Solaroz tenements.

The following diagram (Figure 2) outlines the location of Lithium Energy's Solaroz tenements relative to the historical geophysical surveys that have been conducted by Orocobre.

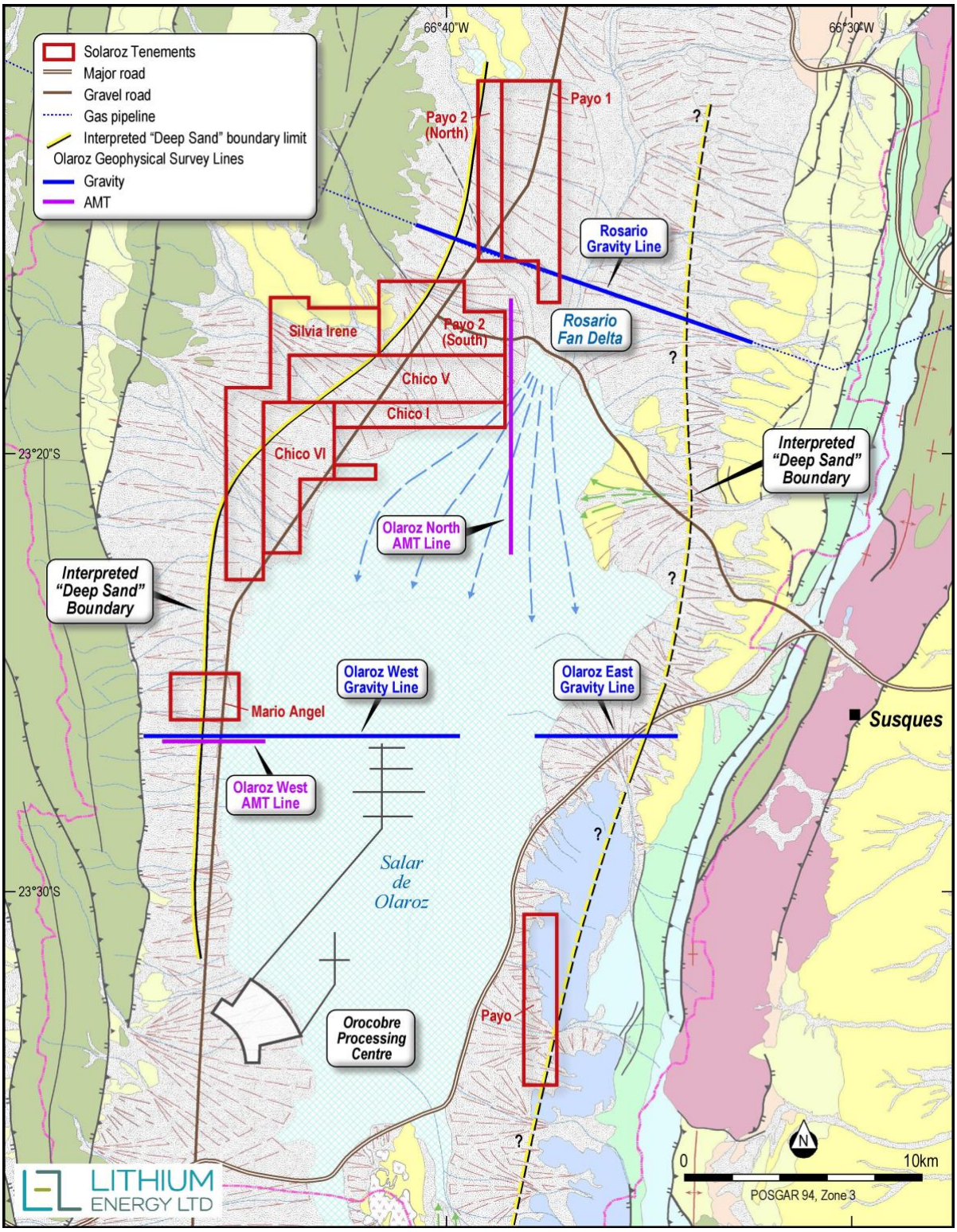

Figure 2: Location of geophysical surveys undertaken by Orocobre over the Olaroz Salar

The Gravity Line surveys undertaken by Orocobre were conducted principally to determine the depth below surface to the basement rock in the Olaroz Salar, which practically sets the lowest depth limit to which lithium-rich brines could be encountered in the basin.

The AMT Line surveys (which measure resistivity) were conducted to identify the interfaces between fresh water and the more conductive brines, facilitating the identification of the location and extent of potentially lithium-rich brines occurring above the basement rock.

A review of Orocobre's published results from the Rosario Gravity Line at the northern end of the Olaroz Salar and which overlaps Lithium Energy's Payo 1 and Payo 2 (North) tenements, shows the interpreted basement of the Olaroz Salar and indicates Olaroz Salar sediments (which have the potential to host the targeted lithium-rich brines) lie directly beneath the Rosario Fan Delta (Figure 3).

Importantly, it shows that Lithium Energy's Payo 1 and Payo 2 (North) tenements sit directly above the deepest part of the sediments on this gravity line, which increases the potential volume of host sediments that can be accessed by the Company.

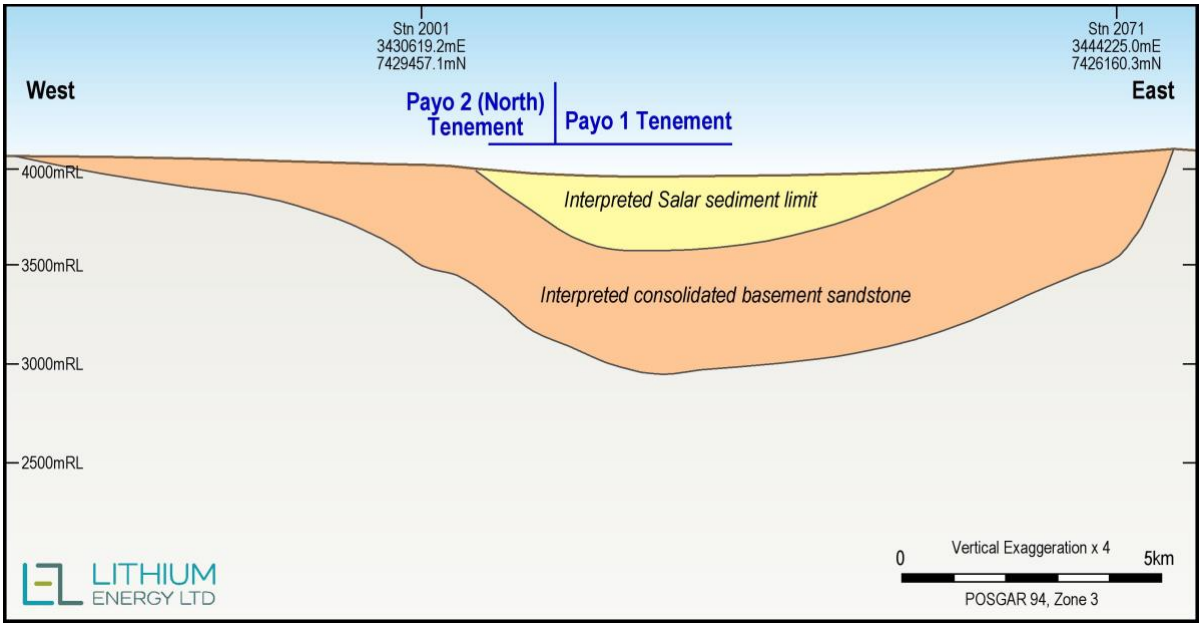

Figure 3: Historical geophysical surveys undertaken by Orocobre over the Salar de Olaroz basin

In addition, the reported results from Orocobre's Olaroz North AMT Line survey (which runs North to South) indicate the likely presence of conductive brines (shown as dark blue in Figure 4) from approximately 200 metres from surface extending to depth underneath Lithium Energy's Chico 1, Chico V and Payo 2 (South) tenements.

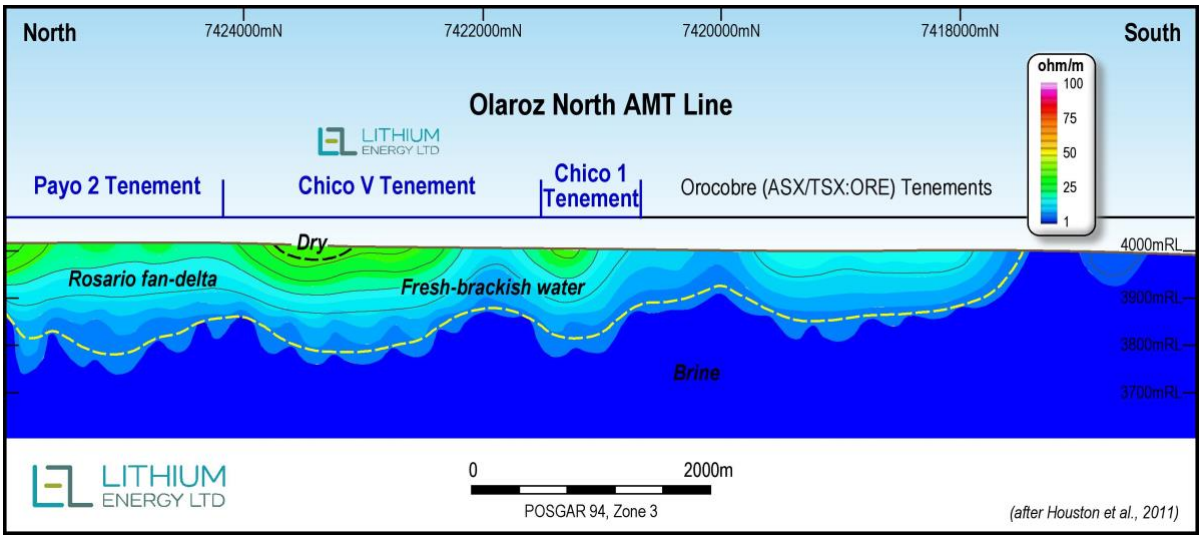

Figure 4: Orocobre Olaroz North AMT Survey

Similarly, the published results from the Olaroz West AMT Line (Figure 5) indicate a high likelihood that brines should be encountered underneath Lithium Energy's Mario Angel tenement, potentially constrained by a basin margin fault which appears to run along the western edge of the Olaroz Salar.

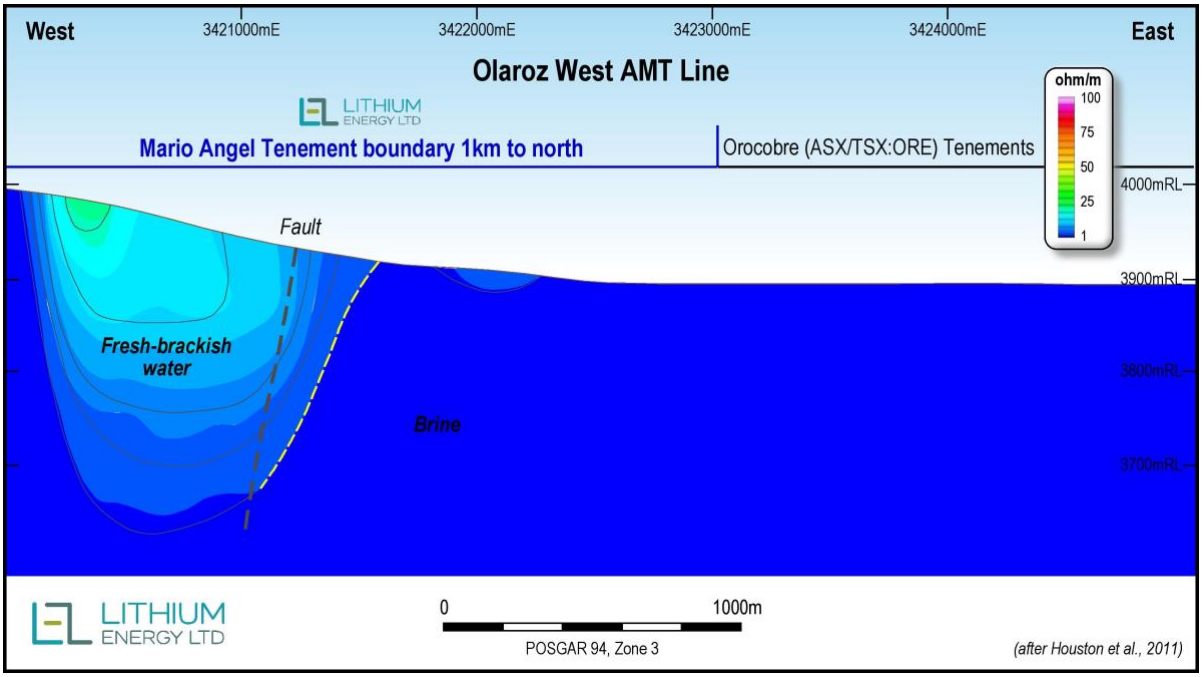

Figure 5: Orocobre Olaroz West AMT Survey

This Company's interpretation of the Gravity and AMT surveys is conceptual in nature, there has been insufficient exploration to estimate a JORC Mineral Resource in respect of the same and it is uncertain if further exploration will result in the estimation of a JORC Mineral Resource.

Review of Exploration Data – Summary

The above data supports Lithium Energy's initial interpretation of the basin architecture, that the aquifer which supplies the lithium-rich brine being extracted by Orocobre (and forming the lithium mineralisation upon which the Lithium Americas project is based) extends to the north and west under the Talus Alluvial Wedge and the Solaroz tenements.

Lithium Energy is highly encouraged by this review and is currently undertaking further analysis to enable the creation of a conceptual Exploration Target for the Solaroz Project, which will be released shortly.

Solaroz Project- Background

Lithium Energy's flagship Solaroz Project is directly adjacent to or principally surrounded by tenements held by Orocobre and Lithium Americas. Orocobre currently has a market capitalisation of approximately A$2 Billion, principally relating to its Olaroz lithium brine project at the Olaroz Salar where it has been extracting lithium brine and producing lithium carbonate since 2015. Orocobre is targeting production of 25,000 tonnes per year of primary grade lithium carbonate by 2024.[1]

Lithium Americas' Cauchari-Olaroz project is located in the Olaroz Salar and neighbouring Salar de Cauchari adjacent to Orocobre's Olaroz Lithium Facility and is targeting production of 40,000 tonnes per year of lithium carbonate, commencing mid-2022. Lithium Americas has a market capitalisation of approximately US$1.6 Billion and has so far committed over US$500 Million of capital works to the development of its Cauchari-Olaroz project.[2]

The location of Lithium Energy's Solaroz tenements is outlined in Figure 6.

1 Refer Orocobre's March 2021 Quarterly Activities Report release dated 19 April 2021

2 Refer Lithium America's First Quarter 2021 Results release dated 6 May 2021

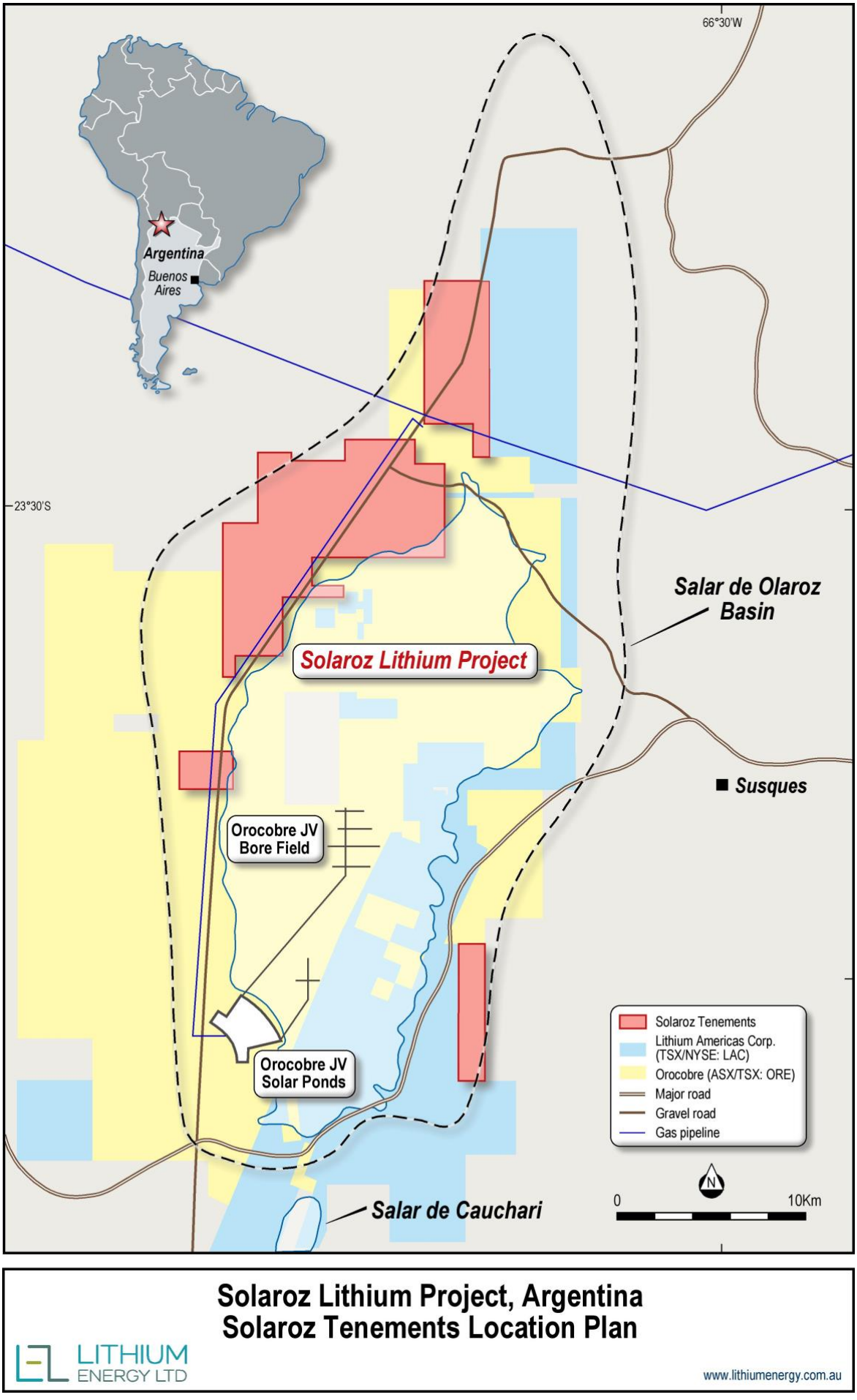

Figure 6: Solaroz Project Tenement Locations

Solaroz Project Location in 'Lithium Triangle

The Solaroz Project comprises 8 mineral tenements totalling approximately 12,000 hectares, located approximately 230 kilometres north-west of the provincial capital city of Jujuy within South America's 'Lithium Triangle' in North-West Argentina in the Olaroz Salar.

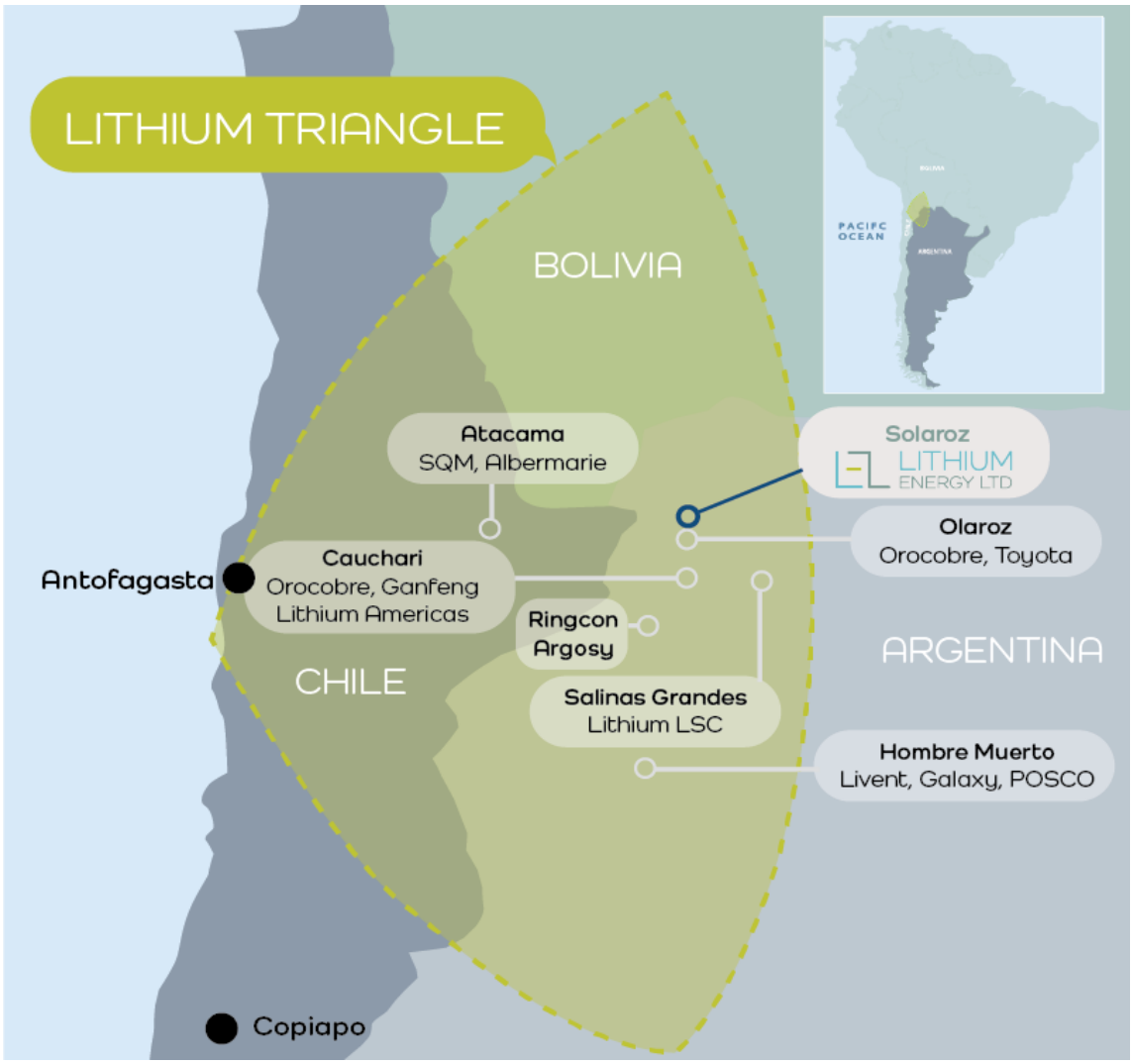

Figure 7: Solaroz Lithium Project Located in South America's 'Lithium Triangle'

The Solaroz Project is adjacent to the paved highway which passes through the international border with Chile, 45 kms to the southwest (Jama Pass), continuing on to the major mining centre of Calama, and the Port of Mejillones, near Antofagasta in northern Chile. The Solaroz tenements lie at an altitude of approximately 3,900 metres and are accessed by good quality road infrastructure

Approximately 70 kms to the south of the Solaroz site a railway crosses from northern Argentina to Chile, providing potential access to a number of ports in northern Chile. There are a number of local villages within 50 kms of Solaroz and he regional administrative centre of Susques is within half an hour's drive.

A gas pipeline running from northern Argentina to Chile passes approximately 15 kms to the north of the Olaroz Salar.

Further details about the Solaroz Project is outlined in the Lithium Energy Prospectus (dated 30 March 2021[3]) and on the Company's website: **www.lithiumenergy.com.au**

3 Refer LEL's ASX Announcement released on 17 May 2021: Prospectus

References

This published data upon which the geological model for the Company's Solaroz Project has been developed includes the following works:

1. Houston, J., Gunn, M., Technical Report on the Salar De Olaroz Lithium-Potash Project, Jujuy Province, Argentina. NI 43-101 report prepared for Orocobre Limited, 13 May 2011
2. Orocobre Limited ASX/TSX Announcement dated 23 October 2014 entitled "Olaroz Project - Large Exploration Target Defined Beneath Current Resource"
3. Reidel, F., Technical Report on Cauchari JV Project – Updated Mineral Resource Estimate, prepared for Advantage Lithium Corporation, 19 April 2019
4. Burga, E. et al, Technical Report - Updated Feasibility Study and Mineral Reserve Estimation to support 40,000 tpa Lithium Carbonate Production at the Cauchari-Olaroz Salars, Jujuy Province, Argentina, prepared for Lithium Americas Corporation, 19 August 2019

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ABOUT LITHIUM ENERGY LIMITED (ASX:LEL)

Lithium Energy Limited is an ASX listed battery minerals company which is developing its flagship Solaroz Lithium Brine Project in Argentina and the Burke Graphite Project in Queensland. The Solaroz Lithium Project (LEL:90%) comprises 12,000 hectares of highly prospective lithium mineral tenements located strategically within the Salar de Olaroz Basin in South America's "Lithium Triangle" in north-west Argentina. The Solaroz Lithium Project is directly adjacent to or principally surrounded by mineral tenements being developed into production by Orocobre Limited (ASX/TSX:ORE) and Lithium Americas Corporation (TSX/NYSE:LAC). The Burke Graphite Project (LEL:100%) contains a high grade graphite deposit and presents an opportunity to participate in the anticipated growth in demand for graphite and graphite related products. LEL was spun out of Strike Resources Limited (ASX:SRK) via a $9 million IPO; Strike remains a major (43%) shareholder of the Company.

JORC CODE COMPETENT PERSON'S STATEMENTS

The Competent Person named below have also been previously engaged by Strike Resources Limited (ASX:SRK) (**Strike**), the former parent company of Lithium Energy Limited (and its subsidiaries) that hold the interests in the Solaroz Lithium Project. Lithium Energy Limited was spun out of Strike into a new ASX listing in May 2021.

JORC Code (2012) Competent Person's Compliance Statement – Solaroz Lithium Project (Argentina)

The information in this document that relates to Exploration Results in relation to the Solaroz Lithium Project is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Peter Smith (BSc (Geophysics) (Sydney) AIG ASEG), including information extracted from the ASX market announcement made by Strike dated 13 March 2019 and entitled "Strike Secures Solaroz Lithium Brine Project in Argentina's Lithium Triangle".

Mr Smith is a Member of the Australian Institute of Geoscientists (**AIG**) and a consultant to Strike (and also a Director of the Company (since 18 March 2021)). Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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' (the **JORC Code**).

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement (referred to above). Mr Smith consents to the inclusion in this document of the matters based on his information in the form and context in which it appears..

FORWARD LOOKING STATEMENTS

This document contains “forward-looking statements” and “forward-looking information”, including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of the Company, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as “plans”, “expects”, “is expected”, “is expecting”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes”, or variations (including negative variations) of such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “might”, or “will” be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management’s expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.

Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. The Company believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. The Company does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.