

MARKET ANNOUNCEMENT

Advancement of Drilling Programme at Solaroz Lithium Brine Project in Argentina

SUMMARY

- Lithium Energy has mobilised drilling rigs to the fourth and fifth diamond drill holes of its initial 10 hole, 5,000 metre drilling programme at Solaroz.
- Drilling is targeting conductive brines identified by geophysics to depths of up to 500 metres below surface.
- Successful completion of initial holes have already established significant new discoveries of lithium mineralisation, supporting the potential for the widespread occurrence of lithium brines across significant portions of the 12,000 hectare concessions held by the Company at Solaroz.
- The objective of the drilling programme is to define a significant maiden JORC Mineral Resource of lithium at Solaroz.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to announce that drilling rigs have now mobilised to the fourth and fifth holes (SOZDD004 and SOZDD005) at its highly prospective flagship Solaroz Lithium Brine Project in Argentina, in the heart of South America's world renowned Lithium Triangle (**Solaroz**). Solaroz is located directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC) (refer Figure 2).

The drilling of the fourth (SOZDD004, located on Chico I concession) and fifth (SOZDD005, located on Chico VI concession) holes follows the significant lithium discoveries recently made by Lithium Energy at the first (SOZDD001, located on Mario Angel concession) and third (SOZDD003, located on Chico I concession) diamond drill holes at Solaroz, with cumulative lithium brine intersections encountered of up to 235 metres and lithium concentrations of up to 555 mg/ Lithium with low Mg/Li ratios and positive total porosities and specific yields.¹ Assays are still pending for the second hole in the programme, SOZDD002 (located on Chico V concession).

Lithium Energy notes that these results from drillholes SOZDD001 and SOZDD003 are similar (with respect to intersection widths, chemical composition and geophysical measurements) and support, when taken together with the interpretation of previously conducted geophysics, the potential for the widespread occurrence of lithium brines across significant portions of the 12,000 hectare Solaroz concessions owned by the Company. The positive total porosity and specific yield measurements together with low Mg/Li ratio are considered highly favourable for potential economic future brine extraction.

1 Refer LEL ASX announcements dated 10 March 2023: Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project and 14 March 2023: Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project



Interpretation of geophysical surveys² undertaken at these next two drill hole locations leads Lithium Energy to believe these sites also to be highly prospective for lithium bearing brines and that results from drilling these two holes should contribute to increasing confidence in the extent and quality of lithium mineralisation and the potential for economic brine extraction at Solaroz.

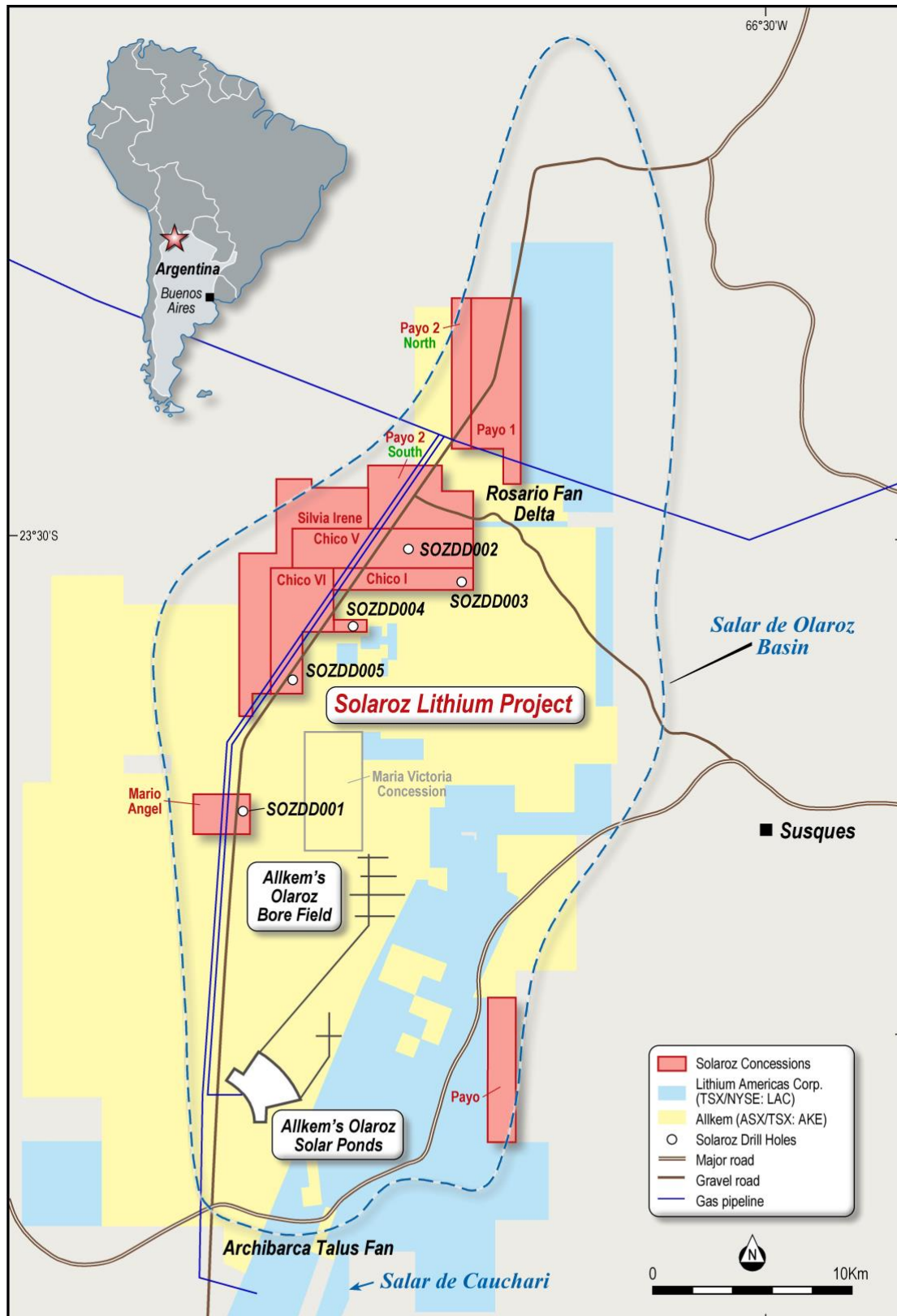
The objective of the initial 10 hole, 5,000 metre drilling program is to define a significant maiden JORC Resource of Lithium at Solaroz. The Company notes that it has recently appointed consulting group Hatch to undertake a Scoping Study for the production of battery grade lithium carbonate from the lithium rich brines at Solaroz, with the results of the Scoping Study scheduled to coincide with the definition of the Company's maiden JORC Mineral Resource at Solaroz.³



Figure 1: Diamond Drill Rig at SOZDD005, Chico VI Concession on Olaroz Salar

2 Refer also LEL ASX Announcement dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz

3 Refer LEL ASX Announcement dated 20 March 2023: Commencement of Lithium Brine Scoping Study at Solaroz



Solaroz Lithium Project, Argentina Solaroz Concessions Location Plan

Figure 2: Solaroz Drill Hole Locations within Solaroz Concessions in Olaroz Salar
(Adjacent to Allkem and LAC Concessions)

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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 concessions 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 concessions being developed into production by Allkem Limited (ASX/TSX:AKE) 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.

JORC CODE COMPETENT PERSON'S STATEMENTS

The information in this document that relates to Exploration Results (in relation to drillholes SOZDD002 and SOZDD003) are based on, and fairly represents, information and supporting documentation prepared by Mr Peter Smith, BSc (Geophysics) (Sydney) AIG ASEG. Mr Smith is a Member of the Australian Institute of Geoscientists (**AIG**) and an Executive Director of the Company. 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**). 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.

The information in this document that relates to other Exploration Results and Exploration Targets in relation to the Solaroz Lithium Project is extracted from the following ASX market announcements made by Lithium Energy dated:

- 14 March 2023 entitled "Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project"
- 10 March 2023 entitled "Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project"
- 27 February 2023 entitled "Drilling Continues to Advance at Solaroz Lithium Brine Project"
- 31 January 2023 entitled "Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project"
- 14 December 2022 entitled "Intersections of Conductive Brines Encountered in Further Drillholes at Solaroz Lithium Project in Argentina"
- 16 November 2022 entitled "Drilling Completed at Maiden Drillhole at Solaroz Lithium Brine Project"
- 1 November 2022 entitled "Further Significant Lithium Concentrations Encountered in Maiden Drillhole at Solaroz Lithium Brine Project"
- 19 October 2022 entitled "Major Lithium Discovery Confirmed In First Drillhole of Maiden Programme at the Solaroz Lithium Brine Project"
- 5 October 2022 entitled "Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaroz Lithium Brine Project"
- 18 August 2022 entitled "Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz"
- 9 May 2022 entitled "Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project"
- 8 June 2021 entitled "Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina"

The information in the original announcements is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Peter Smith (BSc (Geophysics) (Sydney) AIG ASEG). Mr Smith is a Member of the AIG and a Director of the Company. 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 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 announcements (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 announcements (referred to above).

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 Lithium Energy, 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 Lithium Energy 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. Lithium Energy 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. Lithium Energy does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.