

# MARKET ANNOUNCEMENT

## Drilling Programme Advances at Solaroz Lithium Brine Project in Argentina

### SUMMARY

- Lithium Energy has commenced drilling the second and third 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.
- Lithium Energy's initial drilling programme will seek to validate the previously announced Exploration Target and define a maiden JORC Mineral Resource of lithium at Solaroz.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy or Company**) is pleased to announce that drilling has commenced at the second and third holes (SOZDD002 and SOZDD003) at its highly prospective flagship Solaroz Lithium Brine Project in Argentina, in the heart of South America's world renowned Lithium Triangle (**Solaroz**), with two drilling rigs now operating concurrently. 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 second and third holes follows the significant lithium discovery recently made by Lithium Energy at the first diamond drill hole SOZDD001 at Solaroz, with cumulative lithium brine intersections of up to 235 metres and lithium concentrations of up to 555 mg/ Lithium.<sup>1</sup>

The recent interpretation of geophysical surveys<sup>2</sup> undertaken at these next two drill hole locations leads Lithium Energy to believe these sites to be highly prospective for lithium bearing brines.

---

1 Refer LEL ASX Announcements dated 16 November 2022: Drilling Completed at Maiden Drillhole at Solaroz Lithium Brine Project, 1 November 2022: Further Significant Lithium Concentrations Encountered in Maiden Drillhole at Solaroz Lithium Brine Project, 19 October 2022: Major Lithium Discovery Confirmed In First Drillhole of Maiden Programme at the Solaroz Lithium Brine Project and 5 October 2022: Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaroz Lithium Brine Project

2 Comprising (a) Passive Seismic surveys, which are being used to determine the base of the underlying basement rock, with the basement defining the theoretical depth limit of potential lithium mineralisation; and (b) Transient Electromagnetic geophysics (**TEM**), which measures electrical conductivity at depth and are being used to identify the depth of conductive brines (i.e. salty water with low electrical resistivity) above the basement rocks identified by the Passive Seismic programme. Also refer LEL ASX Announcement dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz

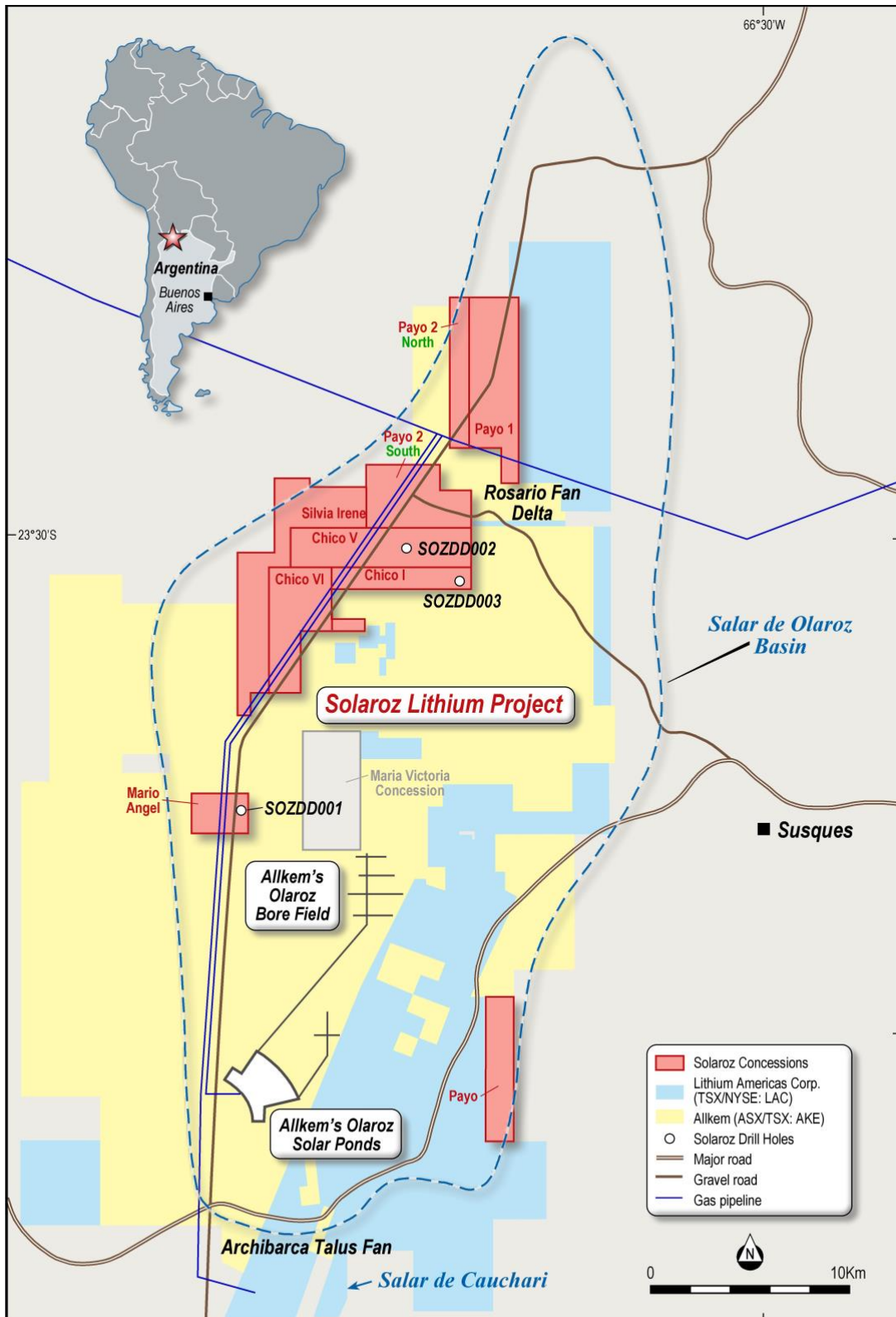




Figure 1: Diamond Drill Rig at SOZDD002, Chico V Concession on Olaroz Salar

In relation to these two diamond holes SOZDD002 and S00DD003 located on the Chico V and Chico 1 concessions respectively:

- Interpretation of the TEM geophysics indicates that fresh/brackish water is likely to be encountered within the first approximately 150 – 170 metres for both these holes, with more conductive brines expected below this depth.
- A ~150 – 170 metre pre-collar will therefore be drilled and cemented off first (in sections, to allow for quicker setting) at each hole, in order to isolate any fresh/brackish water and prevent dilution with any sampling and assaying of the deeper brines.
- After the entire length of the pre-collar has been "set" with concrete, Lithium Energy proposes to drill test to a target depth of approximately 450 - 500 metres below surface with HQ Diamond Core.
- Packer sampling of brines will be routinely undertaken as the hole proceeds to target depth - testing of brines for conductivity, flow rates and density will be undertaken in the field and testing of the chemical composition (ie. Lithium, Potassium, Magnesium concentrations) of brines will be undertaken at a local laboratory.
- Core samples (at approximately 8 metre intervals) will also be collected for brine extraction and chemical analysis and specific yield and porosity testwork at a US-based laboratory.



**LITHIUM ENERGY LTD** **Solaroz Lithium Project, Argentina**  
**Solaroz Concessions Location Plan**  
[www.lithiumenergy.com.au](http://www.lithiumenergy.com.au)

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

**AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:**

William Johnson  
Executive Chairman

T | (08) 9214 9737

E | chair@lithiumenergy.com.au

Peter Smith  
Executive Director

T | (08) 9214 9737

E | cosec@lithiumenergy.com.au

**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:

- 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.