

MARKET ANNOUNCEMENT

Commencement of Lithium Brine Scoping Study at Solaroz

SUMMARY

- Hatch appointed to undertake a Scoping Study for the production of lithium carbonate from lithium rich brines at the Solaroz Lithium Brine Project in Argentina.
- Scoping Study will include engineering works and a trade-off study of a conventional brine evaporation pond process design and Direct Lithium Extraction (**DLE**) option (which replaces the use of evaporation ponds) to determine the most effective processing methodology for Solaroz lithium brines.
- Scoping Study for Solaroz will be conducted in conjunction with the definition of a maiden JORC Mineral Resource estimate for Solaroz currently being developed.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to advise that it has appointed consulting group Hatch to undertake a Scoping Study for the production of battery grade lithium carbonate from lithium rich brines at its Solaroz Lithium Brine Project (**Solaroz**) in Argentina.

The Scoping Study will include engineering study and analysis to determine the optimal processing methodology for Solaroz lithium brines. As part of this work, Hatch will undertake a trade-off study to develop alternative flowsheet configurations (for the processing and upgrading of lithium brines and production of battery grade lithium carbonate) at Solaroz, including the following:

- (1) A conventional brine evaporation pond process design - as implemented by Solaroz neighbours in the Salar de Olaroz basin, the Olaroz Lithium Facility of Allkem Limited (ASX/TSX:AKE) and the Cauchari-Olaroz Project being developed by Lithium Americas Corporation (TSX/NYSE:LAC), and others; and
- (2) Direct Lithium Extraction (**DLE**) options, which replaces the use of evaporation ponds - DLE consists of several chemical processes that can bypass the need for large evaporation ponds for the production of lithium from brines.

Hatch is a global multidisciplinary project management, engineering and professional services consultancy with extensive experience in critical minerals. Hatch has substantial experience in lithium engineering processing of brines, including projects located on salars in Argentina.

The preliminary engineering studies will occur in parallel to the ongoing resource definition drilling and evaluations currently being undertaken by Lithium Energy 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 later in the year.



Lithium Energy has already made significant progress towards the definition of a maiden JORC Mineral Resource at Solaroz. In this regard, the Company is currently undertaking an initial 10 hole, 5,000 metre drilling programme, where results to date have been highly encouraging with reported lithium grades, brine volumes, MG/Li ratios, total porosities and specific yields all being positive indicators for the potential economic future brine extraction at Solaroz¹.

Executive Chairman, William Johnson:

Lithium Energy is pleased to have engaged Hatch to undertake the Scoping Study at Solaroz. Hatch is very highly regarded in the resources industry and has substantial experience with design and operational support for lithium production from brines, including multiple lithium brine projects in Argentina.

As the Company advances with its resource definition at Solaroz, we are excited to commence this study so that we can be well positioned to fast-track development of Solaroz once we have selected a preferred development pathway.

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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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 (2012) COMPETENT PERSON STATEMENT

The information in this document that relates to Exploration Targets and Exploration Results 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"

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

- 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 Australian Institute of Geoscientists (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 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 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).

Lithium Energy's ASX Announcements may be viewed and downloaded from the Company's website: www.lithiumenergy.com.au or the ASX website: www.asx.com.au under ASX code "LEL".

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.