

# MARKET ANNOUNCEMENT

## Drilling of First Hole Advancing on Schedule at Solaroz Lithium Brine Project in Argentina

### SUMMARY

- Lithium Energy's first drill hole in its high impact maiden drilling programme at the highly prospective Solaroz Lithium Brine Project is located 10kms from Allkem Limited's (ASX/TSX:AKE) lithium production bore field and 3kms from the Maria Victoria concession which Allkem recently acquired.
- Drilling is progressing well and on schedule, with the first hole currently at 60 metres depth, where the pre-collar is being cemented in place, ahead of a further 300 - 350 metres of HQ Diamond Core drilling into the conductive brines indicated by geophysics.
- Discussions advancing with contractors to secure additional rig(s) to accelerate the current initial 10 hole, 5,000 metre drilling programme and expand drilling to other target areas across the expansive Solaroz concessions.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased confirm drilling<sup>1</sup> is progressing well and on schedule at Lithium Energy's highly prospective flagship Solaroz Lithium Brine Project, located 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) on the Salar de Olaroz basin (**Olaroz Salar**) (refer Figure 2).

Drilling is currently underway at the first hole (borehole OZDH001) (refer Figure 1) within the Mario Angel concession (refer Figure 2) at Solaroz. The drilling has reached a depth of 60 metres on schedule where the pre-collar is being cemented in place, in order to isolate any fresh or brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

This is consistent with interpretation of the TEM geophysics recently undertaken by Lithium Energy<sup>2</sup>, which indicates that brackish water is likely to be encountered within the first 50 – 60 metres of drill hole OZDH001, with more conductive material expected below this depth.

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1 Refer LEL ASX Announcements dated 15 September 2022: \$15 Million Capital Raising to Accelerate Drilling at Solaroz Lithium Brine Project in Argentina, 12 September 2022: Landmark Maiden Drilling Programme Commences at the Solaroz Lithium Brine Project in Argentina and 8 September 2022: Rig Mobilising for Landmark Maiden Drilling Programme at Solaroz Lithium Brine Project in Argentina

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.

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



After the pre-collar has been "set" with concrete, Lithium Energy will advance to drill test to a depth of 350 - 400 metres below surface with HQ Diamond Core. Drilling to target depth is expected to take a further ~3 weeks.

On completion of the drill hole, geophysical logging will be undertaken to determine the width and physical parameters of individual aquifers identified, which will be sampled using single and/or double packers. The drill hole will then be cased with PVC as a monitoring bore for flow testing.

This first hole, of a planned 10 hole, 5,000 metre initial drilling programme, is located approximately 10kms from Allkem's Olaroz Lithium Facility production bore field and less than ~3km from the Maria Victoria concession which was recently acquired by Allkem as a 'strategic lithium tenement' (see Figure 2 for location).<sup>3</sup>

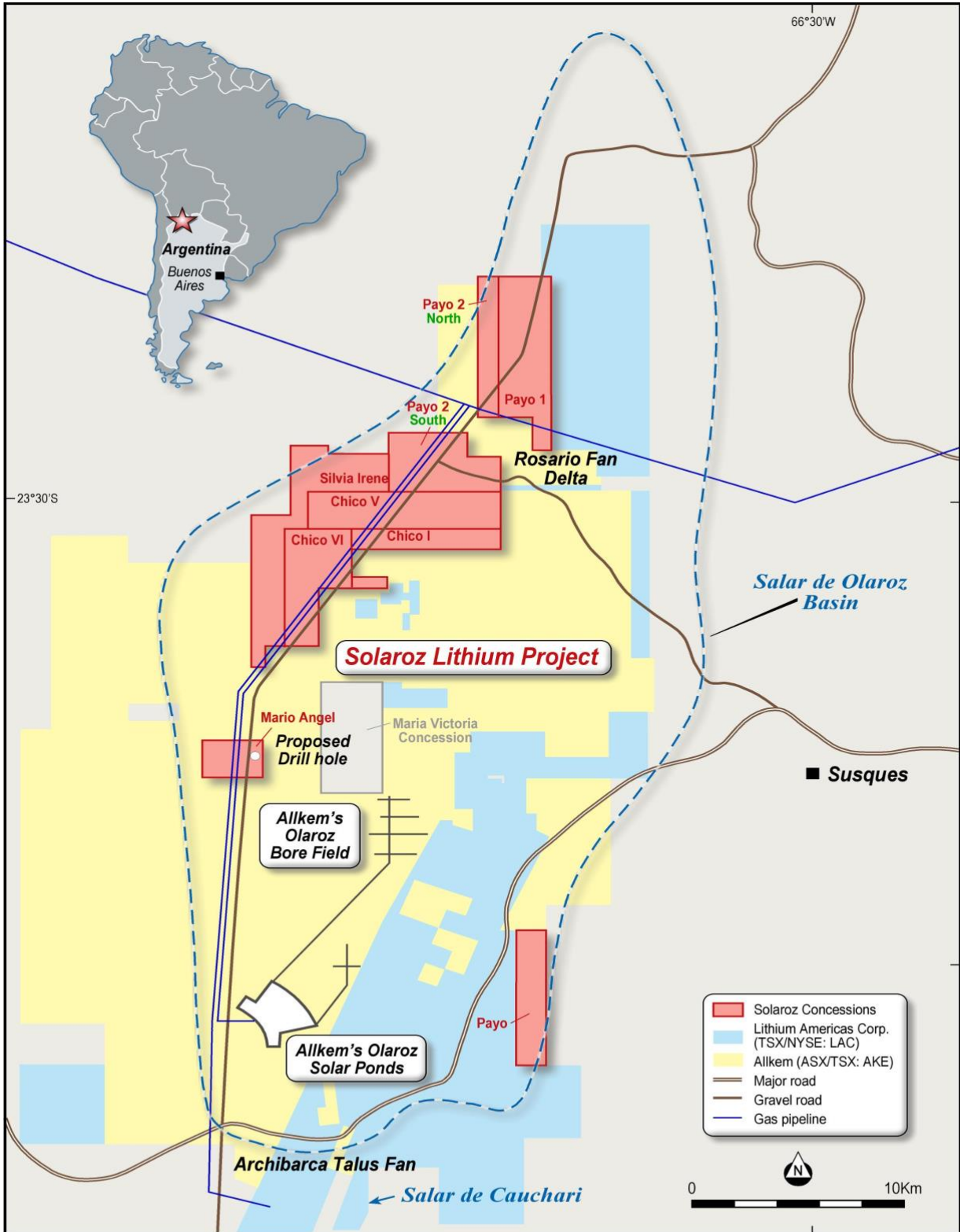
Lithium Energy is presently seeking to secure an additional drilling rig (or rigs) to accelerate the initial (10 hole, 5,000 metre) drilling programme and to drill additional holes at target areas across the Solaroz concessions. Discussions are presently being advanced with multiple contractors in this regard.



*Figure 1: Drill Rig operating on borehole OZDH001 (Mario Angel Concession)*

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<sup>3</sup> Refer Allkem ASX Announcement dated 15 August 2022: Allkem to acquire strategic tenement in exchange for Borax



**LITHIUM ENERGY LTD** **Solaroz Lithium Project, Argentina**  
**Solaroz Concessions Location Plan**

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Figure 2: Maiden Drill Hole Location on Mario Angel Concession at Solaroz  
 (Solaroz Concession Locations Adjacent to Allkem and Lithium Americas Concessions in Olaroz Salar)

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

- 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"
- 26 May 2021 entitled "Geophysical Data Supports Highly Encouraging Exploration Potential for Solaroz"

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 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 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).