

# MARKET ANNOUNCEMENT

## Landmark Maiden Drilling Programme Commences at the Solaroz Lithium Brine Project in Argentina

### SUMMARY

- Lithium Energy's highly prospective Solaroz Lithium Brine Project is located in the world renowned Lithium Triangle in Argentina and is directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC)
- Drilling of the maiden high impact drilling programme has now commenced, with the first hole underway and being drilled adjacent to Allkem's Olaroz Lithium Facility and circa 10kms from its production bore field
- The drilling programme will initially comprise 10 holes for circa 5,000 metres across Lithium Energy's extensive land holding on the Olaroz Salar
- The initial drilling programme will seek to validate the Exploration Target previously announced by the Company and has been designed to define a maiden JORC Mineral Resource of lithium at Solaroz
- Mr Murray Brooker has been engaged as Technical Consultant for Solaroz – Mr Brooker has previously acted as the Competent Person for lithium major Allkem Limited (previously Orocobre Limited) on its Olaroz and Cauchari lithium brine projects

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to announce that drilling has commenced at its 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) (refer Figure 1).

William Johnson, Executive Chairman:

*The commencement of drilling at Solaroz is a major milestone for Lithium Energy, with the objective of the planned drilling programme being to define a maiden JORC Mineral Resource of lithium at Solaroz.*

*Lithium Energy is also very pleased to confirm the engagement of highly regarded consultant hydrologist Murray Brooker, who has extensive lithium experience at the Olaroz Salar, where Solaroz is located. Mr Brooker has previously acted as the competent person preparing JORC reports for Allkem (previously Orocobre) on their neighbouring lithium production project to Solaroz. Mr Brooker's extensive experience at the Olaroz Salar is expected to be extremely valuable as he assists Lithium Energy to prepare its own maiden JORC Mineral Resource for Solaroz.*



**Commencement of Drilling at Solaroz**

Drilling has commenced at borehole OZDH001 within the Mario Angel concession (refer Figure 2) at Solaroz.



*Figure 1: Drilling rig at Solaroz Project (Mario Angel Concession), borehole OZDH001*

This first hole, of a planned 10 hole, 5,000 metre initial drilling programme, is located adjacent to Allkem’s existing production assets (approximately 10kms from its 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>1</sup>

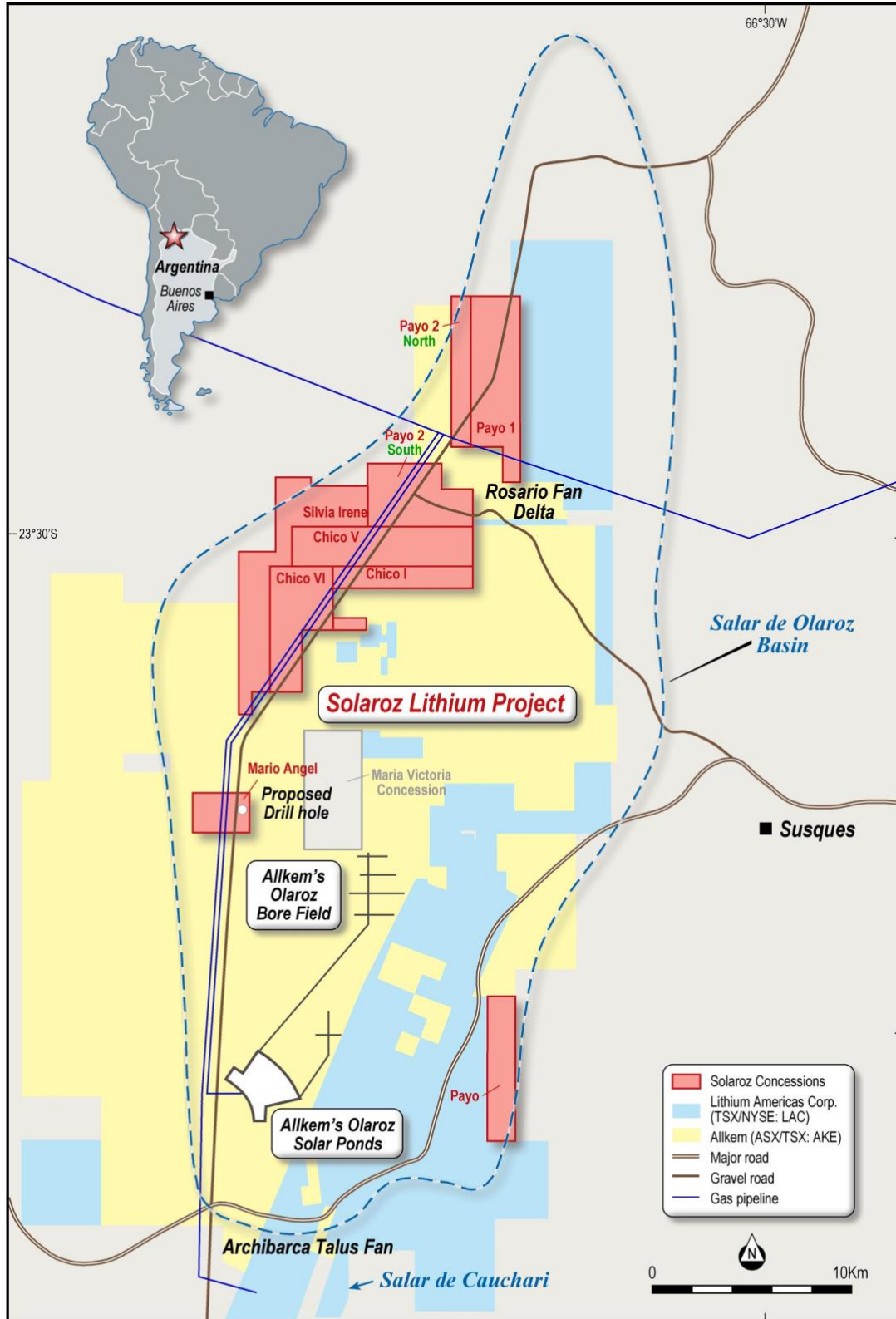
The initial 5,000 metre drilling programme comprises a combination of 10 diamond and rotary holes, undertaken by a drilling contractor with extensive experience in the Olaroz Salar. This drilling will test the extent and grades of lithium mineralisation, porosity and flow rates across the layer(s) of conductive brines which have been previously identified through a geophysics programme<sup>2</sup> undertaken by Lithium Energy.

That geophysics confirmed the presence of significant volumes of potentially lithium hosting brines at Solaroz, indicating brine thicknesses up to 300m and to depths of up to 500m below surface in sections.<sup>3</sup> Conductive brines such as those currently being mined by Allkem in adjoining concessions are a key pathfinder for the occurrence of lithium in the Olaroz Salar that demonstrate similar geophysical signatures. This information will then be interpreted to develop a potential maiden JORC Mineral Resource for Solaroz.

Whilst drill hole OZDH001 is progressing, Lithium Energy will continue interpreting the recent geophysics results to determine optimal location for subsequent drill holes in the 5,000 metre drilling programme.

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1 Refer Allkem ASX Announcement dated 15 August 2022: Allkem to acquire strategic tenement in exchange for Borax  
 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.  
 3 Refer LEL ASX Announcement dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz



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

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

## Engagement of Murray Brooker as Technical Consultant

Lithium Energy has engaged Murray Brooker as Technical Consultant for the Solaroz Project, to oversee the preparation of a Maiden JORC Mineral Resource at Solaroz.

Mr Brooker is a lithium consultant and hydrogeologist with 31 years' experience in the mining industry and has extensive experience evaluating salt lake lithium and potash brine projects in Argentina and has prepared many JORC code and Ni 43-101 compliant reports on salt lake projects. He has worked extensively in the Olaroz-Cauchari basin in Jujuy, Argentina, having acted as the JORC competent person for ASX listed Orocobre Limited (now Allkem) on the Olaroz and Cauchari lithium brine projects.

Mr Brooker was responsible for resource estimates on the Olaroz, Cauchari and Salinas Grandes Lithium projects for Orocobre and for supervision of the drilling and exploration programmes leading up to the resource estimates. Mr Brooker holds an MSc in Hydrogeology and an MSc in Economic Geology.

## Exploration Objective

The objective of Lithium Energy's exploration programme is to define a maiden JORC Mineral Resource of lithium from its substantial 12,000 hectare concession area on the Salar de Olaroz basin (**Olaroz Salar**), where Allkem Limited has been producing lithium since 2015 (under a joint venture with Toyota Tsusho Corporation (TYO:8015)) and Lithium Americas Corporation is advancing its Cauchari-Olaroz development project (under a joint venture with Ganfeng Lithium).

Lithium Energy has previously defined an Exploration Target<sup>4</sup> for Solaroz of:

**1.5 to 8.7 million tonnes of contained Lithium Carbonate Equivalent (LCE) based on a range of lithium concentrations of between circa 500 mg/L Lithium (Li) and 700 mg/L Li,**

based primarily on Lithium Energy's assessment of the results of previous exploration work undertaken by Allkem and Lithium Americas in the neighbouring area on the Olaroz Salar.

*The Exploration Target's potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

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### AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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## BOUT 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.

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4 Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina

## JORC CODE COMPETENT PERSON'S STATEMENTS

The information in this document that relates to Exploration Results 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 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).

## 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.