Thursday, 15 September 2022 ASX Code : LEL

MARKET ANNOUNCEMENT

$15 Million Capital Raising to Accelerate Drilling at Solaroz Lithium Brine Project in Argentina

SUMMARY

- Heavily oversubscribed $15 Million capital raising completed to fund acceleration of drilling at the Solaroz Lithium Brine Project
- 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 is underway, with the first hole in progress and being drilled adjacent to Allkem's Olaroz Lithium Facility and circa 10kms from its production bore field
- The additional funding raised will allow for the acceleration of the current 5,000m drilling programme and for the drilling of additional holes at Solaroz through the engagement of multiple drilling rigs
- The drilling programme is being undertaken to validate the Exploration Target previously announced by the Company and establish a maiden JORC Mineral Resource of lithium at Solaroz
- Funds will also enable the Company to advance further drilling at the Burke Graphite Project, which has one of the highest grade graphite deposits globally, hosting a JORC Inferred Mineral Resource of **6.3Mt @ 16.0% TGC**

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to announce the completion of a $15 Million capital raising (before costs) via the issue of 15,000,000 shares at an issue price of $1.00 per share.

The issue was completed within the Company's 15% placement capacity and additional 10% placement capacity (approved at the last AGM) under the ASX Listing Rules, to new and existing institutional and sophisticated and professional shareholders/investors. Canaccord Genuity (Australia) Limited acted as Lead Manager to the placement which was heavily oversubscribed.

The funds raised will be used principally to accelerate and potentially expand exploration activities at the Solaroz Lithium Brine Project in Argentina, to advance the development of the Burke Graphite Project (Queensland) and for general working capital purposes.

Acceleration of Drilling at Solaroz

Drilling has recently commenced[1] at the 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) (refer Figure 2).

Drilling is currently underway at borehole OZDH001 (refer Figure 1) within the Mario Angel concession (refer Figure 2) at Solaroz.

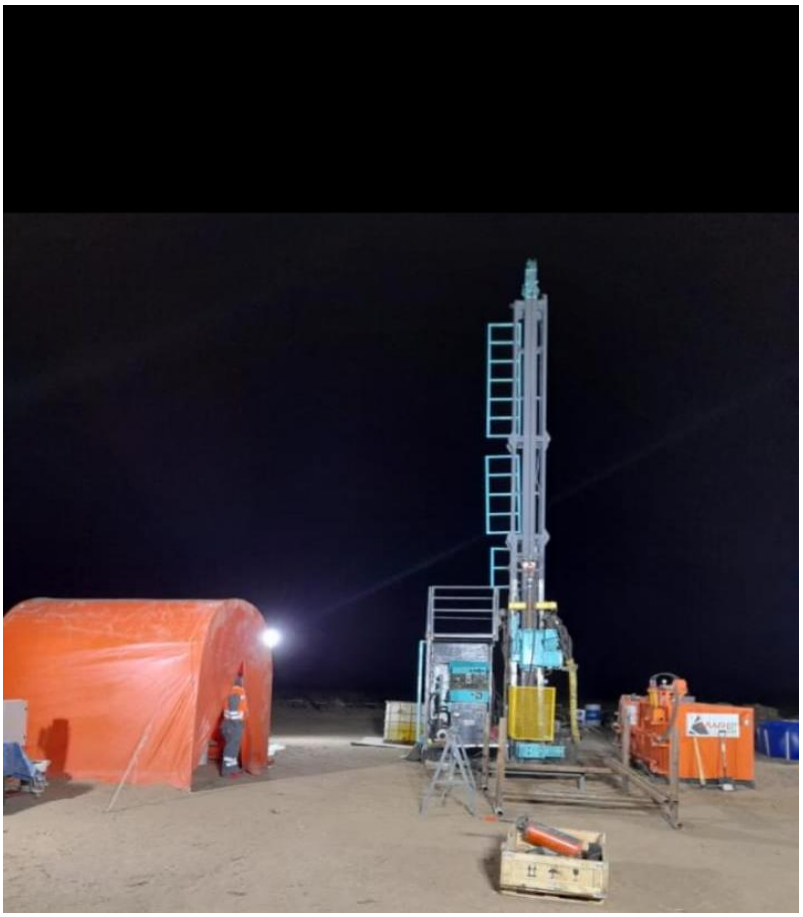

Figure 1: Drilling underway at Solaroz Project (Mario Angel Concession), borehole OZDH001

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).[2]

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 undertaken by Lithium Energy.

1 Refer LEL ASX Announcements dated 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 Refer Allkem ASX Announcement dated 15 August 2022: Allkem to acquire strategic tenement in exchange for Borax

Part of the additional funding raised will now be applied to securing an additional drilling rig (or rigs) to accelerate this programme and to potentially drill additional holes and increase the total metres drilled under this programme.

Accelerating the drilling with an additional rig (or rigs) will reduce the time required to develop a maiden JORC Mineral Resource for Solaroz. Drilling additional holes will enable the Company to gain a better understanding of the salar hydrology in the Solaroz concession area and allow for increased confidence in the maiden JORC Mineral Resource definition.

Interpretation of recent geophysics undertaken by the Company at Solaroz[3] has already 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.[4] 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.

Solaroz 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[5] 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.

3 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.

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

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

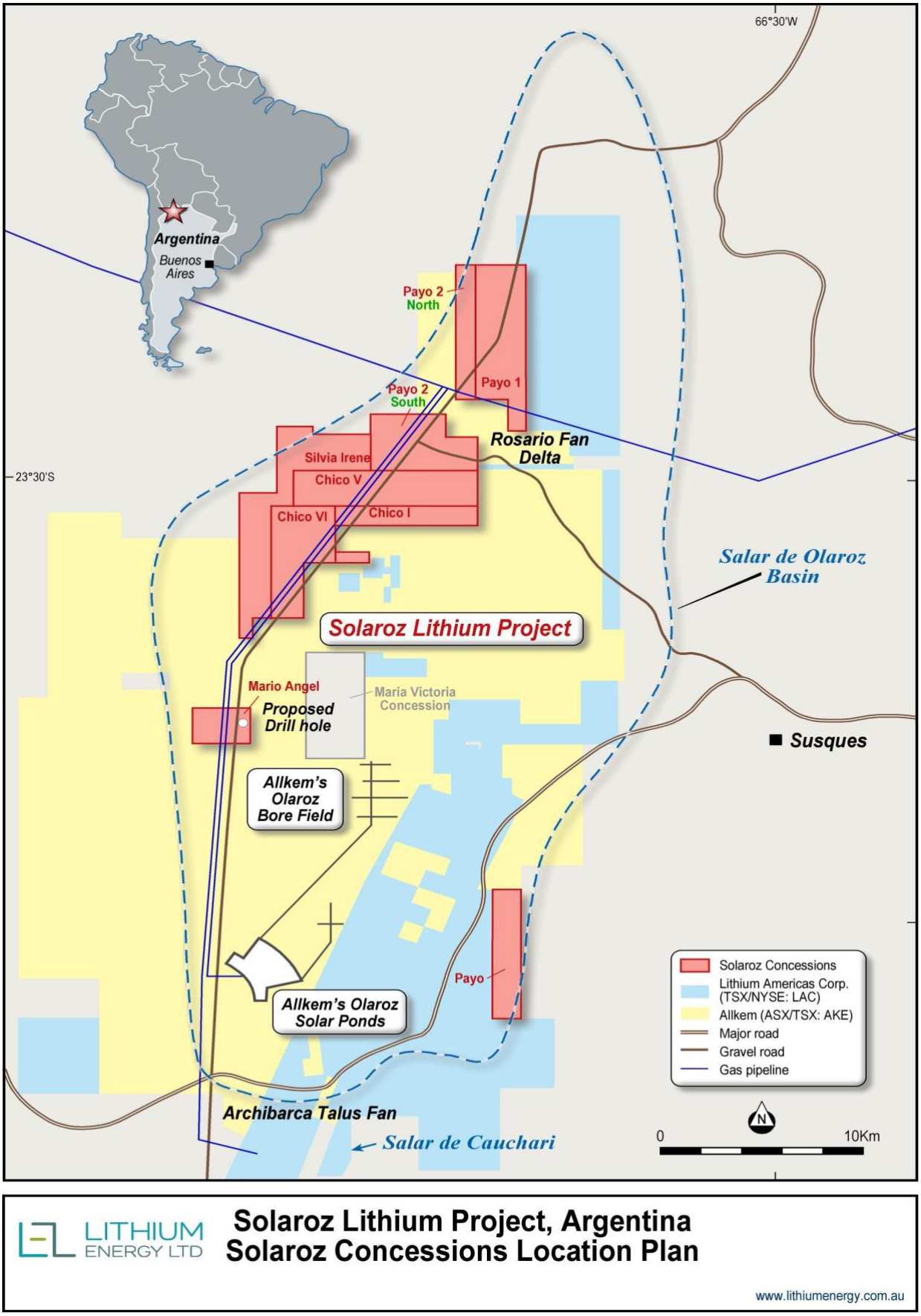

Figure 2: Maiden Drill Hole Location on Mario Angel Concession at Solaroz
(Solaroz Concession Locations Adjacent to Allkem and Lithium Americas Concessions in Olaroz Salar)

Advancing Drilling and Studies at Burke Graphite Project

The Burke Graphite Project (LEL:100%) is located in North Central Queensland and contains one of the highest grade graphite deposits globally, with a JORC Inferred Mineral Resource of **6.3Mt @ 16.0% TGC** for 1Mt of contained graphite, which includes higher grade material of **2.3Mt @ 20.6% TGC** for 0.464Mt of contained graphite:

Mineral Resource Category	Weathering State	Mt	TGC (%)	Contained Graphite (Mt)	Density (t/m)
Inferred Mineral Resource	Oxide	0.5	14.0	0.1	2.5
	Fresh	5.8	16.2	0.9	2.4
	Total Oxide + Fresh	**6.3**	**16.0**	**1.0**	**2.4**

Note: The Mineral Resource was estimated within constraining wireframe solids defined above a nominal 5% TGC cut-off. The Mineral Resource is reported from all blocks within these wireframe solids. Differences may occur due to rounding.

Refer Grade Tonnage Data in Table 2 of CSA Global Pty Ltd's Burke Graphite Project MRE Technical Summary dated 9 November 2017 (attached as Annexure A of Strike's ASX Announcement dated 13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits

The Burke Graphite Project comprises two granted Exploration Permits for Minerals (**EPM**) totalling approximately 26 square kilometres located in the Cloncurry region in North Central Queensland, where there is access to well-developed transport infrastructure to an airport at Mt Isa (~122km) and a port in Townsville (~783km).

The Burke EPM 25443 tenement (**Burke Tenement**) is located 125km north of Cloncurry adjacent to the Mt Dromedary Graphite Project held by Novonix Limited (ASX: NVX). The Corella EPM 25696 tenement (**Corella Tenement**) is located 40km west of Cloncurry near the Flinders Highway that links Mt Isa to Townsville.

Lithium Energy has developed a drilling programme comprising a combination of RC, diamond core and geotechnical holes (of ~2,500 metres across ~18 holes, to a depth of ~150 metres) to upgrade part of the JORC Inferred Mineral Resource at its Burke Tenement to a higher JORC Indicated Mineral Resource category, with further optimisation via 3D modelling, metallurgy tests and pit optimisation studies. All necessary access permits and approvals to undertake this drilling programme has been secured and site works have been completed on the Burke Tenement in advance of the commencement of this drilling programme.

The upgrade in the resource classification of the Burke Tenement is required in order to assist Lithium Energy undertaking a number of studies to assess the commercial viability of establishing a Purified Spherical Graphite manufacturing facility (for sale to lithium-ion battery anode manufacturers) potentially within the 22,000-hectare Lansdown Eco-Industrial precinct near Townsville, using its Burke Graphite as a feedstock material. An upgrade to a JORC Indicated Mineral Resource will in particular allow the Company to report on potential production rate(s) in respect of any proposed manufacturing facility using the Burke Tenement graphite.

Lithium Energy has also developed a drilling programme (comprising ~2,500 metres of drilling, including metallurgical sampling) at the Corella Tenement located approximately 30km west of Cloncurry (and approximately 150km south of the Burke Tenement), to test the extent of graphite mineralisation identified through the previously conducted ground Electro Magnetic (**EM**) survey[6].

Part of the funds from this capital raising will be applied towards advancing these drilling programmes and studies at the Burke Graphite Project.

6 Refer Strike Resources Limited (ASX:SRK) ASX Market Announcement dated 26 June 2018: Burke Graphite Project – New Target Area Identified from Ground Electro-Magnetic Surveys

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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

Solaroz Lithium Project (Argentina)

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:

- 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).

Burke Graphite Project (Queensland)

The Competent Persons named below have been previously engaged by Strike Resources Limited (ASX:SRK) (**Strike**), the former parent company of Lithium Energy Limited (and subsidiaries) that hold the interests in the Burke Graphite Project. Lithium Energy Limited was spun out of Strike into a new ASX listing in May 2021.

(a) The information in this document that relates to Mineral Resources in relation to the Burke Graphite Project is extracted from the following ASX market announcement made by Strike dated:

- 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".

The information in the original announcement (including the CSA Global MRE Technical Summary in Annexure A) that relates to these Mineral Resources is based on information compiled by Mr Grant Louw (MAIG, MGSSA) under the direction and supervision of Dr Andrew Scogings. Dr Scogings takes overall responsibility for this information. Dr Scogings is an employee of CSA Global Pty Ltd and at the time of the Mineral Resource estimation, Mr Louw was an employee of CSA Global Pty Ltd, who had been engaged by Strike to provide Mineral Resource estimate services.

Dr Scogings is a Member of AIG (and at the time of the Mineral Resource estimation, also a member of the Australian Institute of Mining and Metallurgy (**AusIMM**)) and has sufficient 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 announcement (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 announcement (referred to above).

(b) The information in this document that relates to Exploration Results in relation to the Burke Graphite Project is extracted from the following ASX market announcements released by:

(i) Lithium Energy dated:

- 27 September 2021 entitled "High Grade Burke Graphite to be Optimised for Lithium Battery Application"
- 9 July 2021 entitled "Graphene from Burke Graphite Project Opens Up Significant Lithium-Ion Battery Opportunity".

(ii) Strike dated:

- 21 April 2017 entitled "Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland".
- 13 June 2017 entitled "Extended Intersections of High-Grade Graphite Encountered at Burke Graphite Project".
- 21 June 2017 entitled "Further High-Grade Intersection Encountered at Burke Graphite Project".
- 16 October 2017 entitled "Test-work confirms the potential suitability of Burke graphite for lithium-ion battery usage and Graphene production".
- 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".
- 26 June 2018 entitled "Burke Graphite Project – New Target Area Identified from Ground Electro-Magnetic Surveys".

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, a consultant to Strike and also a Director of the Company (since 18 March 2021). 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 (2012). 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.