

MARKET ANNOUNCEMENT

Lithium Energy Receives Further EIA Approval for Exploration at Solaroz Lithium Project

KEY HIGHLIGHTS

- Second EIA Approval received for exploration to commence at Lithium Energy's *Mario Angel* tenement which forms part of the Solaroz Lithium Brine Project
- Approvals now received for the *Payo* and *Mario Angel* tenements with the balance of approvals for the remaining Solaroz tenements expected to be received shortly
- Solaroz is located in the highly prospective 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)
- Latest Olaroz resource upgrade from Allkem on 4 April 2022 provides further support for Lithium Energy's conceptual Exploration Target at Solaroz
- The *Mario Angel* tenement directly adjoins and is surrounded by Allkem's tenements supporting its Olaroz Lithium Processing Facility

Exploration Approval – Mario Angel Tenement

Lithium Energy Limited (ASX:LEL) (**Lithium Energy**) is pleased to report that it has received a second Environmental Impact Assessment (**EIA**) approval from the local Jujuy Provincial Government Mining Authority to undertake exploration works at its Solaroz Lithium Brine Project in Argentina (**Solaroz**).

Approval has now been received from the Provincial Authority to commence exploration works on the *Mario Angel* tenement (543 hectares) which is located at the western side of the Salar de Olaroz basin (**Olaroz Salar**) and is ~6kms west from the Allkem's lithium brine production bore fields used for extraction of lithium brine from the Olaroz Salar for subsequent processing at Allkem's Olaroz Lithium Processing Facility (refer Figures 1 and 2).

Mario Angel is the second (after *Payo*¹) of 8 mineral tenements located in the Olaroz Salar held by Lithium Energy. With the receipt of this second EIA approval, Lithium Energy expects approvals for the remaining 6 tenements to be received shortly.²

1 Refer LEL ASX Announcement dated 7 February 2022: Lithium Energy Receives First EIA Approval for Exploration to Commence at Solaroz Lithium Project

2 Refer also LEL's December 2021 Quarterly Report released on ASX on 1 February 2022 and LEL ASX Announcement dated 20 December 2021: Solaroz Lithium Project – Exploration Update



The Government approval allows Lithium Energy to commence a programme of mapping, geophysics and drilling over the *Mario Angel* tenement, which aims to significantly contribute to the Company's understanding of the underlying hydrogeological and geochemical characteristics of the brine rich aquifer that comprises the Olaroz Salar underneath the Solaroz tenements.

William Johnson, Executive Chairman:

The receipt of the second of the Government approvals to start exploration at Solaroz is another important milestone for Lithium Energy and a further positive endorsement by the Argentinian Government Authorities of the Solaroz Lithium Project.

There is no better address to be exploring for lithium than the prolific Lithium Triangle where a number of world class lithium brine projects have been discovered. Our land position could not be better located being either directly adjacent to or principally surrounded by lithium majors ASX/TSX-listed Allkem Limited (formerly Orocobre) and NYSE/TSX-listed Lithium Americas Corporation.

Furthermore, Allkem's recent upgrade to their Olaroz Resource in tenements adjacent or nearby to those held by Lithium Energy has provided further support for the Company's conceptual Exploration Target for Solaroz.

There has been significant M&A activity in the area showing the global interest in the district and lithium brines in particular, and we are incredibly excited to kick off our exploration efforts at Solaroz.

Mario Angel Tenement Location

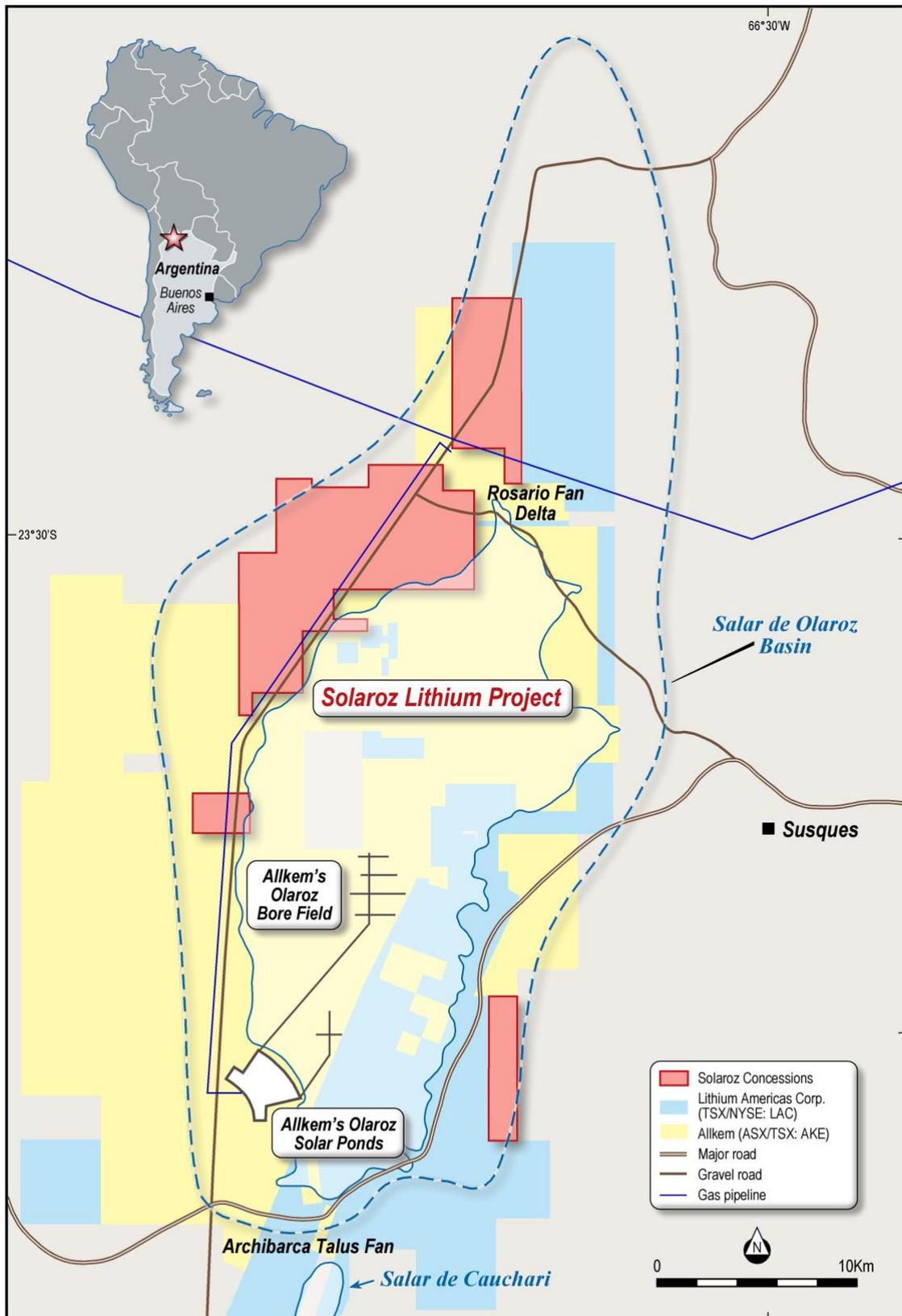
The location of Lithium Energy's *Mario Angel* tenement is shown in Figures 1 and 2.

Lithium Energy notes that Allkem recently released an update to their Olaroz Resource³, in which they substantially expanded the resource in the Olaroz Salar and confirmed strong project economics for expansion of production. The results from this update provide further support for Lithium Energy's conceptual Exploration Target, with the area defined by Allkem for their Updated 2022 Resource Outline extending close or adjacent to tenements held by Lithium Energy.

Exploration Approval – Remaining Tenements

Lithium Energy considers that the approvals received for exploration works to commence at the *Payo* and *Mario Angel* tenements confirms the support of the local Jujuy Government for the advancement of the Solaroz Project and expects that the remaining six (6) approvals will be received shortly.

³ Refer Allkem's ASX/TSX Announcement dated 4 April 2022: Olaroz resource upgraded 2.5x to 16.2 million tonnes LCE – Confirmation of strong project economics for Olaroz stage 2



**Solaroz Lithium Project, Argentina
 Solaroz Tenements Location Plan**

Figure 1: Solaroz Tenement Locations Adjacent to Allkem and Lithium Americas Tenements in Olaroz Salar

Exploration Work Planned to Validate Exploration Target

Lithium Energy proposes to test the proposition that the aquifer which supplies the lithium-rich brine being extracted by Allkem extends under the Company's Solaroz tenements. This will be tested by geophysical work and drilling with a view to fast tracking production of lithium carbonate dependent upon these works being successfully concluded.

In anticipation of the remaining exploration approvals being granted, Lithium Energy is engaging with local geophysics and drilling contractors to prepare for the advancement of exploration works across the whole Solaroz project.

An extensive work programme will be conducted, aimed at locating potentially lithium bearing brines of economic interest and obtaining preliminary information related to the hydrogeological and geochemical characteristics of the brine rich aquifer that comprises the Olaroz Salar underneath the Solaroz tenements, including:

- Geophysical surveys to define the basin basement morphology and thickness of the hydrogeological units that have the potential to contain brines of economic interest; and
- an exploration drilling campaign based on the results from previous work, to assess the distribution and geochemistry of the brine and to obtain data related to basic physical parameters of the different hydrogeological units.

Lithium Energy will also undertake an assessment of relevant mine economic criteria to assist in developing a pathway to the completion of feasibility study(s), including the delineation of a maiden Mineral Resource.

Solaroz Project Background

Lithium Energy's flagship Solaroz Lithium Brine Project (**Solaroz Project** or **Solaroz**) comprises 8 mineral tenements totalling approximately 12,000 hectares, located approximately 230 kilometres north-west of the provincial capital city of Jujuy within South America's 'Lithium Triangle' in North-West Argentina in the Salar de Olaroz basin (Olaroz Salar).

The highly prospective nature of the Solaroz Project is highlighted by its close proximity to two world class Lithium brine assets, being the flagship Olaroz Lithium Facility of Allkem Limited (ASX/TSX:AKE) (formerly Orocobre Limited) (**Allkem**)⁴ and the advanced Cauchari-Olaroz development project held by Lithium Americas Corporation (TSX/NYSE:LAC) (**Lithium Americas**) (under a joint venture with Ganfeng Lithium).

4 Orocobre Limited (former ASX:ORE) changed its name to Allkem Limited (ASX:AKE) with effect on 6 December 2021

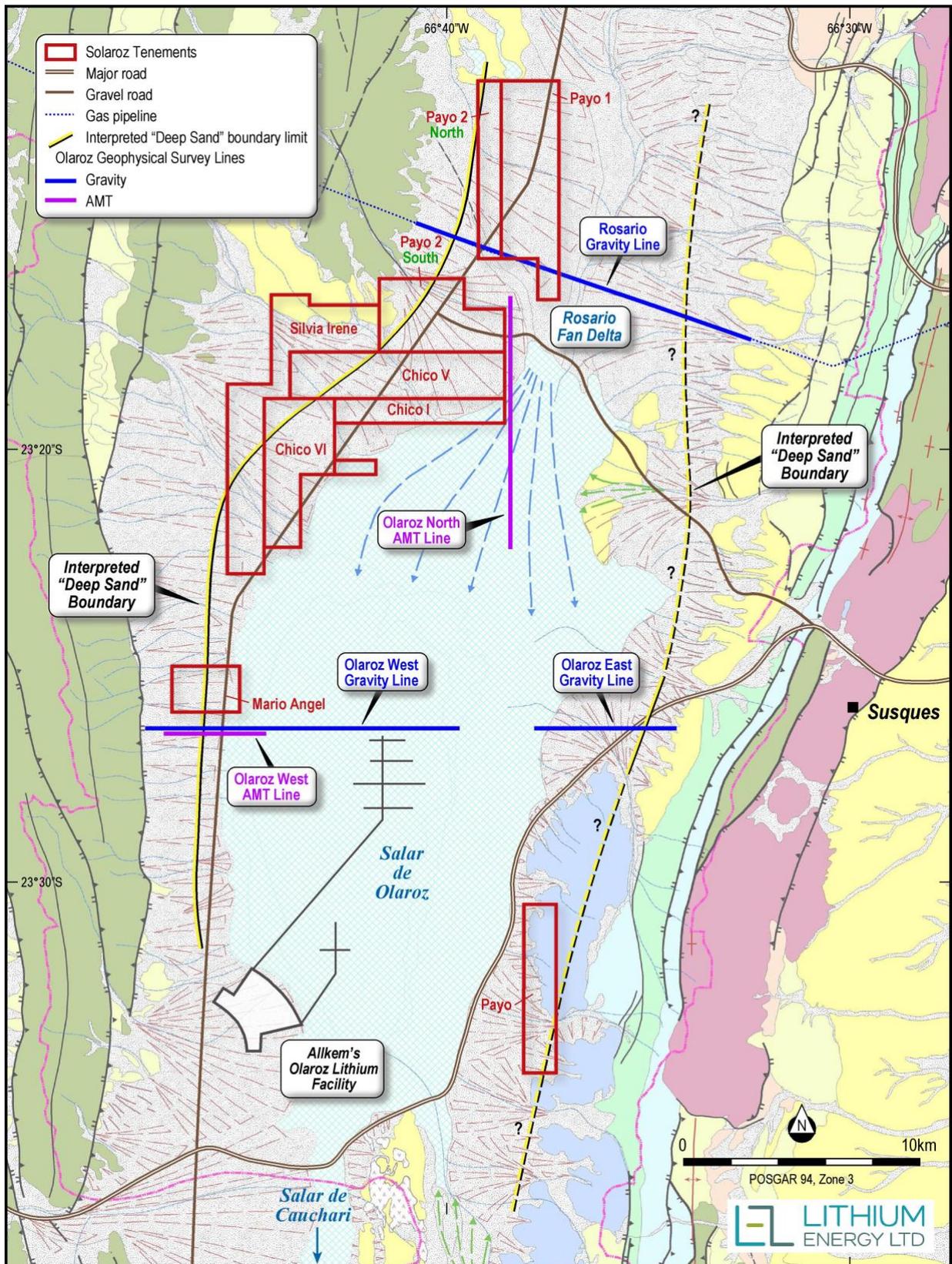


Figure 2: Geology of the Olaroz Salar with Location of the Solaroz Tenements and Location of Geophysical Surveys undertaken by Allkem Limited (formerly Orocobre Limited)⁵

5 Source: Salfity Geological Consultants - www.salfitygeologicalconsultant.com

Solaroz Exploration Target

Lithium Energy has established a conceptual Exploration Target for the Solaroz Project of⁶:

1.5 to 8.7 million tonnes (Mt) 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**

Brine Area (km ²)	SOLAROZ EXPLORATION TARGET					
	Thickness of Deep Sand Unit (m)	Lithium (mg/L)	Average Specific Yield (Sy) (%)	Brine Volume (million m ³)	Contained Lithium (Mt)	Contained LCE (Mt)
Upper Assumption Estimate						
78	150	700	20	2334	1.6	8.70
Lower Assumption Estimate						
78	75	500	10	584	0.3	1.5

Notes:

- (1) 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.
- (2) Brine Volume ranges are approximations derived from an interpretation of open file geological and geophysical data.
- (3) Porosity are approximations based upon open file information contained within Houston et al (13 May 2011), Orocobre (23 October 2014) and Lithium Americas (30 September 2020).
- (4) Lithium grade ranges have been approximated from a review of open file information (Houston et al (13 May 2011), Orocobre (23 October 2014)).
- (5) Percentage values have been rounded (to the nearest 1,000 unit) in relevant calculations.
- (6) A conversion factor of 5.323 has been adopted to convert elemental Li to Li₂CO₃ ((LCE).
- (7) For further details in relation to the Exploration Target, refer to Lithium Energy’s ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina.

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 tenements 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 tenements being developed into production by Allkem Limited (ASX/TSX:AKE) (formerly Orocobre Limited) 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. LEL was spun out of Strike Resources Limited (ASX:SRK) via a \$9 million IPO; Strike remains a major (43%) shareholder of the Company.

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

JORC CODE COMPETENT PERSON'S 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:

- 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.