

QUARTERLY ACTIVITIES REPORT – 31 December 2022

COMPANY DETAILS

ABN: 94 647 135 108

PRINCIPAL AND REGISTERED OFFICE

Suite 1, Level 1
680 Murray Street
West Perth WA 6005
T | +61 8 9214 9737
F | +61 8 9214 9701
E | info@lithiumenergy.com.au
W | www.lithiumenergy.com.au

ASX CODE: LEL

SECURITIES ON ISSUE

95,010,000 shares comprising:

- 60,150,000 listed shares
- 34,860,000 unlisted shares (escrowed to 19 May 2023)

35,850,000 unlisted options, including:

- 14,000,000 Options (escrowed to 19 May 2023)

BOARD OF DIRECTORS

William Johnson (Executive Chairman)
Farooq Khan (Executive Director)
Peter Smith (Executive Director)

COMPANY SECRETARY

Victor Ho
E | cosec@lithiumenergy.com.au
T | (08) 9214 9737

AUTHORISED FOR RELEASE BY - FOR FURTHER INFORMATION:

William Johnson
Executive Chairman
E | chair@lithiumenergy.com.au

31 January 2023

HIGHLIGHTS

Solaroz Lithium Project (Argentina)

- Major new lithium discovery with significant intersections of up to **~235 metres of lithium brine mineralisation** with lithium concentrations of **up to 555 mg/L**.
- Drilling is advancing at the second and third drill holes, with significant intersections of conductive brines encountered – assay results are pending.
- Lithium Energy exercised early its option to acquire the mineral concessions comprising the Solaroz Lithium Brine Project in Argentina, in consideration of a cash payment of US\$3.84 million.

Burke Graphite Project (Queensland, Australia)

- CSIRO anode test work confirms Burke Graphite has excellent Li Ion battery potential.
- An extensive drilling programme has been completed at Burke Tenement comprising a combination of RC, diamond core and geotechnical holes (totalling ~2,600m across 29 holes) – assay results are pending.
- ~2,500 metres of drilling with metallurgical sampling is planned for the Corella Tenement to test the extent of graphite mineralisation identified through previously conducted sampling and EM survey.

CHAIRMAN'S REVIEW

During the December 2022 quarter the Company made substantial progress advancing with both of its battery mineral projects. At Solaroz, we made a significant lithium discovery in our very first drill-hole, followed by further significant intersections of brines encountered in our second and third holes. The thicknesses of these intersections together with the distance between these holes provides increasing confidence that extensive occurrences of lithium-rich conductive brines are present at Solaroz that may constitute a new globally significant resource of lithium.

The Company is also very pleased to have reached agreement with the owner of the Solaroz concessions during the quarter to exercise the option over these concessions early, for a significantly discounted sum. The early option exercise reflects the confidence which the Company has in the tremendous prospectivity of these concessions, given their location being directly adjacent to or principally surrounded by lithium majors Allkem Limited and Lithium Americas Corporation on the Salar de Olaroz basin.

At the Burke Graphite Project, the completion of further test work conducted by CSIRO is highly encouraging as it establishes the potential of graphite from Burke to be refined into a high value anode material suitable for use in Lithium-ion batteries. With the recent completion of drilling at the Burke tenement and with the maiden drilling at the Corella tenement to commence shortly, Lithium Energy is rapidly accelerating the development of the highly attractive graphite side of its battery minerals business.

As the only ASX listed company with significant exposure to the two most important ingredients of lithium-ion batteries, lithium and graphite, the Company is uniquely positioned and rapidly advancing to establish itself as globally significant player in the battery minerals industry.

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.



ASX : LEL

www.lithiumenergy.com.au

LITHIUM ENERGY LIMITED

A.B.N. 94 647 135 108

Suite 1, Level 1, 680 Murray Street, West Perth, Western Australia 6005

T | +61 8 9214 9737

F | +61 8 9214 9737

E | info@lithiumenergy.com.au

PROJECTS

SOLARAZ LITHIUM BRINE PROJECT (ARGENTINA)

(90%)

Significant Discovery of Lithium in Maiden Drillhole at Solaraz

Drilling at the first drill hole (SOZDD001) within the Mario Angel concession at the Solaraz Lithium Brine Project (**Solaraz**) (refer Figure 10) confirmed a significant lithium discovery, with lithium concentrations of up to **555 mg/L**.

Drilling at SOZDD001 was completed to a depth of ~337.5 metres, with **cumulative intersections of up to ~235 metres of lithium brine mineralisation** with significant levels of Lithium brine concentrations encountered, as follows:

- An upper aquifer ~175 metres thick between ~55 to 230 metres depth of mostly uniform lithium brine hosting sandstone units and fine gravels, with preliminary sampling and assay results indicating significant lithium grades generally increasing with depth from 399 mg/l at 94 metres to up to 555 mg/l at 229 metres depth.
- A lower aquifer (Deep Sand Unit⁹) ~60 metres thick of mostly uniform lithium brine hosting sandstone units and fine gravels, extending from ~265 to 325 metres depth, with assay results of up to 517 mg/l Lithium sampled at 274 metres depth.
- Drilling was stopped for operational reasons whilst still in lithium brine mineralisation in the Deep Sand Unit, which remains open at depth.

The results of the drillhole sampling for SOZDD001 are shown in Table 1¹:

Table 1 : Results of Packer Sampling at Drillhole SOZDD001

Intersection Samples ^(A)	Hole Depth Range		Li (mg/l)	K (mg/l)	Mg (mg/l)	Mg/Li Ratio	Conductivity (mS/cm)	Flow Rate (l/min)	Density (g/ml)
	From (m)	To (m)							
1 ^(B)	72.6	74.1	158	1359	363	2.30	199	14.3	1.132
2 ^(B)	75.6	79.4	101	844	226	2.24	215	15.4	1.156
3	93.6	97.1	399	3121	931	2.33	215	13.1	1.158
4	111.6	115.1	414	3249	968	2.34	216.1	7.36	1.166
5	129.6	133.1	416	3232	962	2.31	230.2	17.2	1.17
6 ^(C)	147.6	153.3	270	2178	650	2.41	208.3	11.5	1.141
7	227	229	555	4277	1201	2.16	224.4	9.6	1.196
8	268	274	517	4012	1074	2.08	224.5	4.7	1.193
9 ^(D)	275	293	485	3581	739	1.52	218.1	8.3	1.193

Notes:

- (A) A pre-collar has been cemented in place at a drill hole depth of ~50 to 60 metres, to isolate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.²
- (B) Sampling affected by dilution due to packer leakage allowing fresh water to penetrate. The lithium concentration for this section is still to be properly determine.
- (C) Sampling for this intersection was for approximately half the time of the other intersections and accordingly, the well fluids may not have flushed out fully prior to sampling. The lithium concentration for this section is still to be properly determined.
- (D) Sampling likely affected by dilution due to use of modified single packer (as opposed to double packers used for sample of all other intersections). The lithium concentration for this section is still to be properly determined.

1 Refer also LEL ASX Announcements dated 16 November 2022: Drilling Completed at Maiden Drillhole at Solaraz Lithium Brine Project, 1 November 2022: Further Significant Lithium Concentrations Encountered in Maiden Drillhole at Solaraz Lithium Brine Project, 19 October 2022: Major Lithium Discovery Confirmed In First Drillhole of Maiden Programme at the Solaraz Lithium Brine Project and 5 October 2022: Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaraz Lithium Brine Project

2 Refer LEL ASX Announcement dated 21 September 2022: Drilling of First Hole Advancing on Schedule at Solaraz Lithium Brine Project in Argentina

Lithium Energy is highly encouraged by the generally increasing Lithium concentrations at depth and the low Mg/Li ratios, which are positive in relation to future potential processing options.



Figure 1: SOZDD001 Drilling at Mario Angel Concession

Sampling of encountered brines was conducted by the use of double packers and single packers, depending on the condition of the drill hole.

Testing of brines for conductivity, flow rates and density were undertaken in the field, with testing of the chemical composition (particularly Lithium, Potassium, Magnesium concentrations) of brines being undertaken at a local laboratory in Argentina.

Core samples have also been collected for brine extraction and chemical analysis and specific yield and porosity testwork at a US-based laboratory.



Figure 2: Packer sampling at SOZDD001



Figure 3: Drill rig operating on SOZDD001

The lithium rich brines in SOZDD001 are contained mostly in sandstones and fine gravels, which have porosity and permeability levels that are typically favourable for brine extraction. The lithology stratigraphy of this maiden drill hole is illustrated in Figure 4.

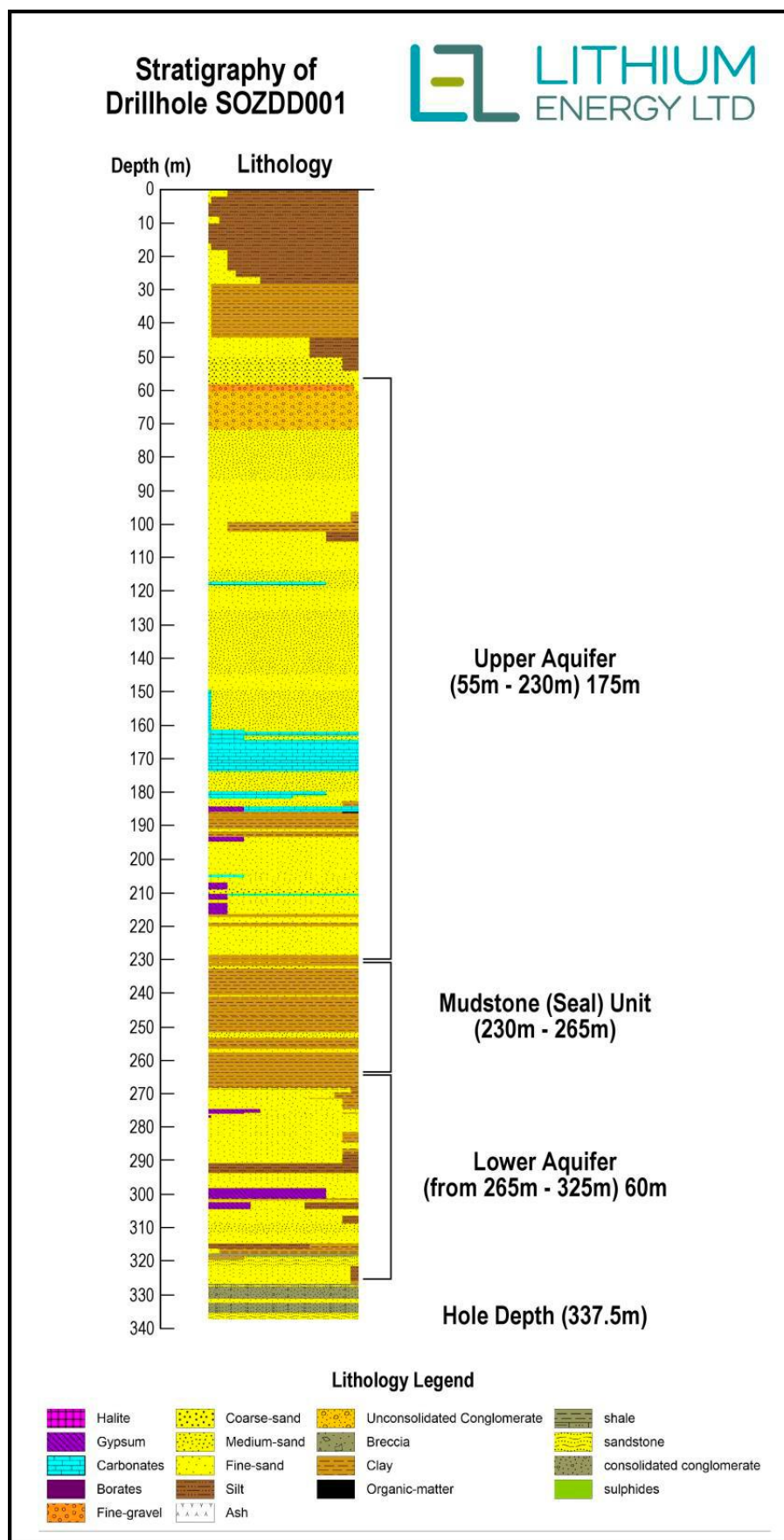


Figure 4: SOZDD001 Stratigraphy showing Upper (175m) and Lower (60m) Aquifers (Cumulative 235m) to Hole Depth (337.5m)

Conductive Brines Encountered at Second and Third Drillholes

Drilling is advancing at the second and third holes (SOZDD002 and SOZDD003) in the northern central section of the Olaroz Salar (refer Figure 10), with two drilling rigs now operating concurrently. Significant intersections of highly conductive brines have been encountered at depth in both holes, with full lithium assay results pending completion of each hole.³

Drilling at hole SOZDD002 (within the Chico V concession, refer Figure 10) has intersected highly conductive brines over an interval of approximately **107 metres**, from a depth of 186 metres to 293 metres. From 186 metres to 293 metres, the brines are hosted in unconsolidated sands, below which conductive brines are hosted in fractured shales, with drilling continuing to advance and encountering highly conductive brines (to a current depth of 438 metres). Refer also Figure 8 (Stratigraphy of SOZDD002) and Table 2 (Results of Field Testing of Packer Samples at SOZDD002).

Drilling at hole SOZDD003 (within the Chico 1 concession, refer Figure 10) has proceeded at a faster pace than at SOZDD002, with highly conductive brines intersected in the upper aquifer and the targeted Deep Sand Unit (lower aquifer) to a current depth of 557 metres. In the upper aquifer, highly conductive brines were intersected over an interval of approximately **107 metres**, from a depth of 176 metres to 283 metres before encountering a thick halite (salt unit) layer. At a depth of 500 metres, drilling then transitioned through the halite layer into the targeted Deep Sand Unit, where highly conductive brines were encountered - the current interval is approximately **57 metres** (to the current hole depth of 557 metres), **with highly conductive brines continuing to be encountered at depth in this lower aquifer** as drilling progresses. Refer also Figure 9 (Stratigraphy of SOZDD003) and Table 3 (Results of Field Testing of Packer Samples at SOZDD003).

The intersection of highly conductive brines at SOZDD002 and SOZDD003 (located approximately 15km from the initial lithium discovery at SOZDD001) is highly significant as it adds confidence to Lithium Energy's geological model of extensive sandstone aquifers hosting lithium-rich conductive brines being present below substantial portions of the Company's ~12,000 hectare concession holding at Solaroz.

Table 2 : Results of Field Testing of Packer Sample at Drillhole SOZDD002

Intersection Samples	Hole Depth Range		Conductivity (mS/cm)	pH	TDS (g/l)	Flow Rate (l/min)	Density (g/ml)
	From (m)	To (m)					
1	185	186	197	7.32	100.6	NA	1.155
2	186	204	202	7.28	104.7	16	1.175
3	189	229	214	7.29	106.8	18.2	1.145
4	266	283	223.4	8.16	111	1	1.18
5	284	301	227.9	7.22	114	9	1.183
6	301	320	228.5	7.4	114.6	10	1.18
7	320	343	214.8	7.21	107.7	10	1.92
8	368	391	234.4	7.15	117.2	11	1.2
9	392	415	223	7.37	111	5	1.195
10	416	439	230	7.32	112	5	1.2
Drilling continuing ahead in brines with current depth at 438m; further packer samples to be collected							

Note:

- (A) A pre-collar has been isolated at a drill hole depth of ~185 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

3 Refer also LEL ASX Announcements dated 31 January 2023: Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project and 14 December 2022: Intersections of Conductive Brines Encountered in Further Drillholes at Solaroz Lithium Project in Argentina

Table 3 : Results of Field Testing of Packer Sample at Drillhole SOZDD003

Intersection Samples	Hole Depth Range		Conductivity (mS/cm)	pH	TDS (g/l)	Flow Rate (l/min)	Density (g/ml)
	From (m)	To (m)					
1	158	176	172.9	6.85	86.71	NA	1.161
2	177.9	194	201	6.87	101	13	1.164
3	195.5	212	206	6.76	103	16	1.18
4	215.5	230	207	6.88	103	8	1.181
5	231.5	248	204	6.75	102	8	1.189
6	246.5	266	209.5	6.91	104.8	4.2	1.189
7	266.5	284.5	216	6.64	92.3	4.2	1.19
8	458.5	488.5	225	7.23	112	1.5	1.195
9	518.5	539.5	229	6.73	114.7	4	1.195
10	539.5	557.5	235	6.65	119.7	10	1.22
Drilling continuing ahead in brines with current depth at 557m; further packer samples to be collected							

Note:

- (A) A pre-collar has been isolated at a drill hole depth of ~158 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

Assay results from SOZDD002 and SOZDD003 (including lithium concentrations) are pending completion of the holes.

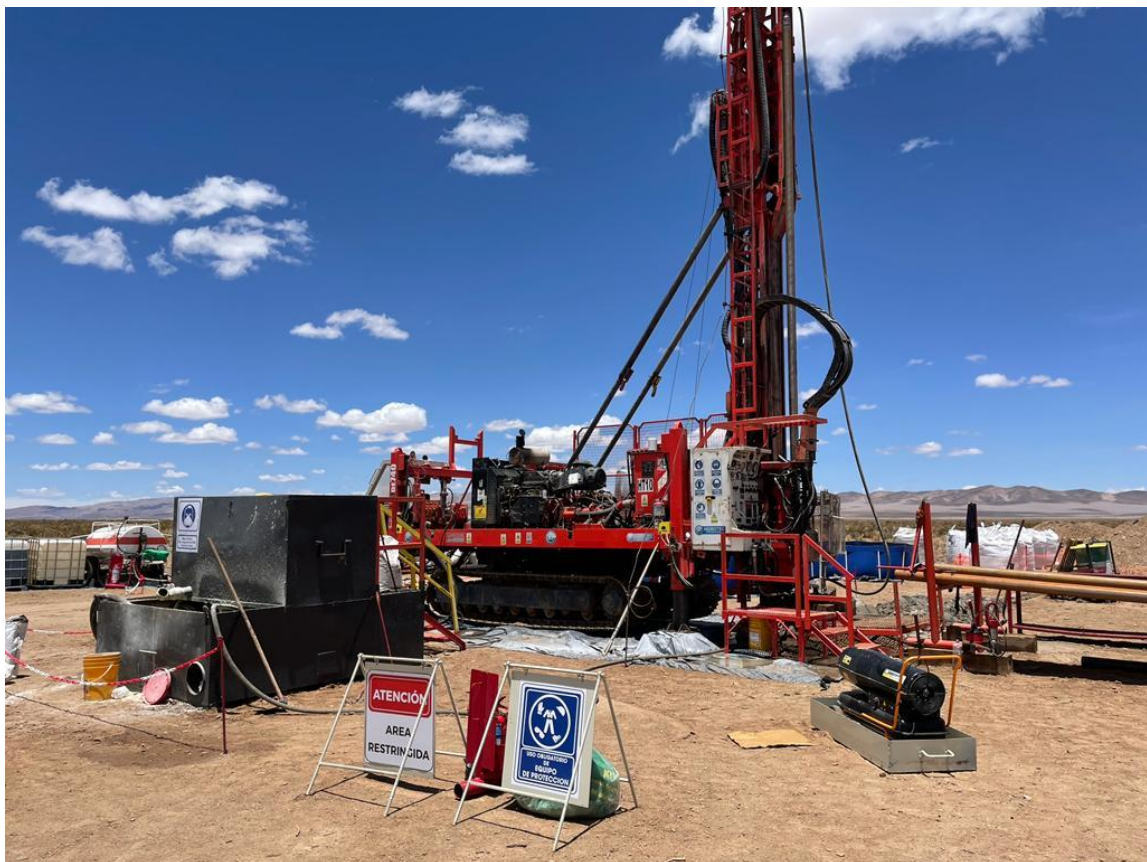


Figure 5: Diamond Drill Rig at SOZDD002, Chico V Concession



Figure 6: Second Diamond Drill Rig at SOZDD003, Chico I Concession on Olaroz Salar



Figure 7: SOZDD003 drill rig operating on Chico I Concession

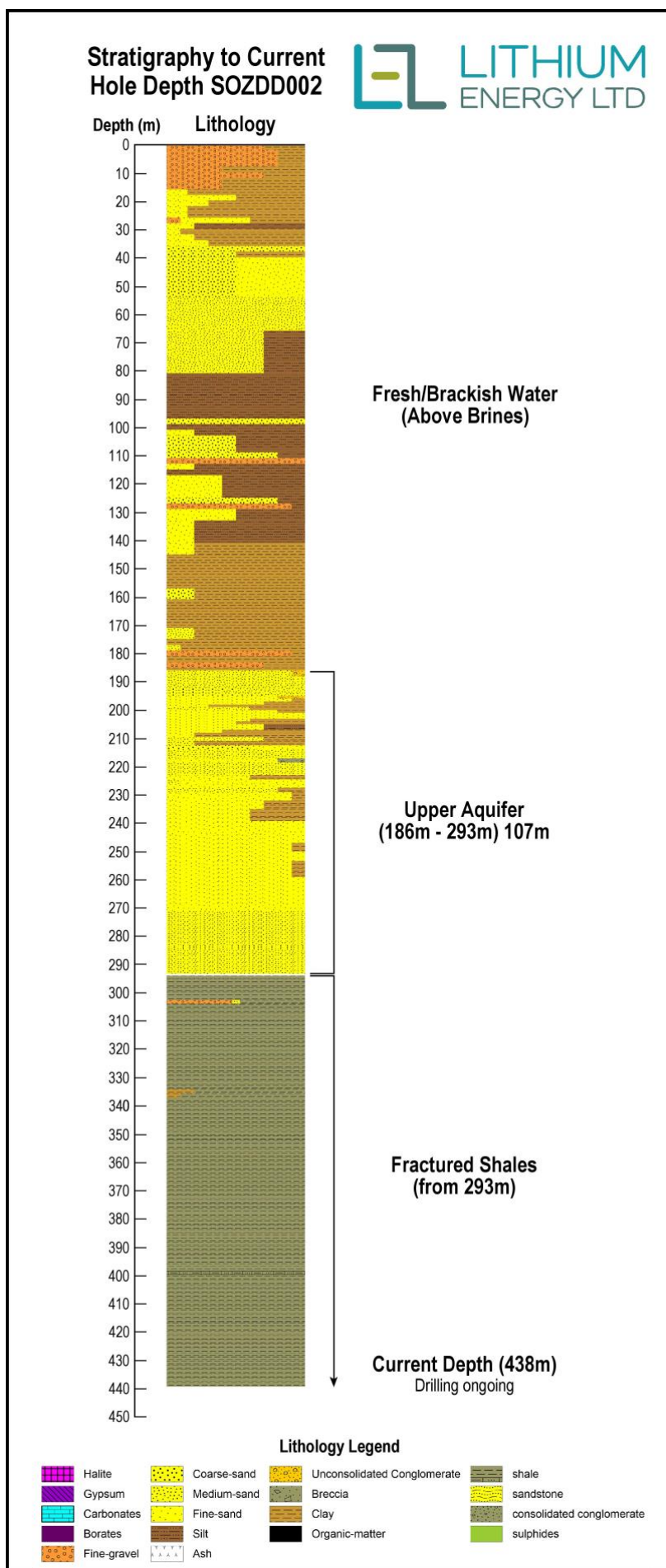


Figure 8: Drillhole (SOZDD002) Stratigraphy to current depth of 438 metres

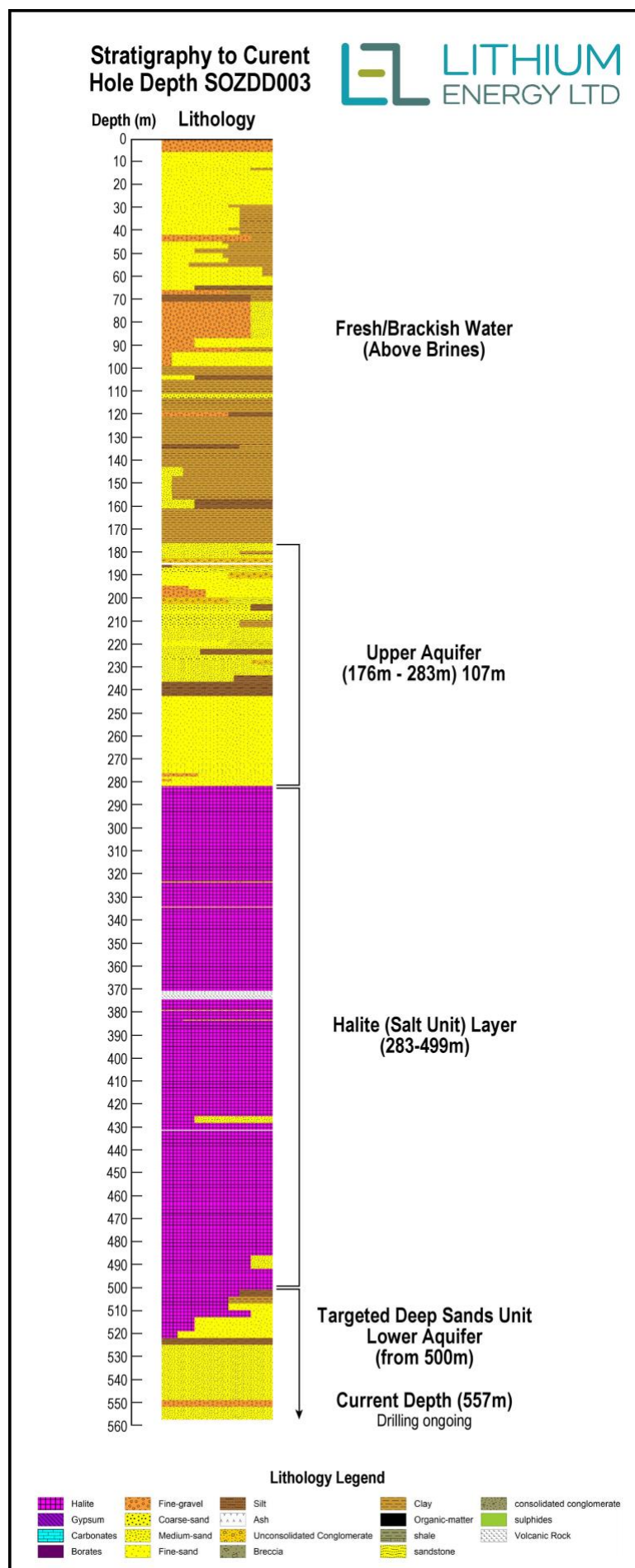


Figure 9: Drillhole (SOZDD003) Stratigraphy to current depth of 557 metres

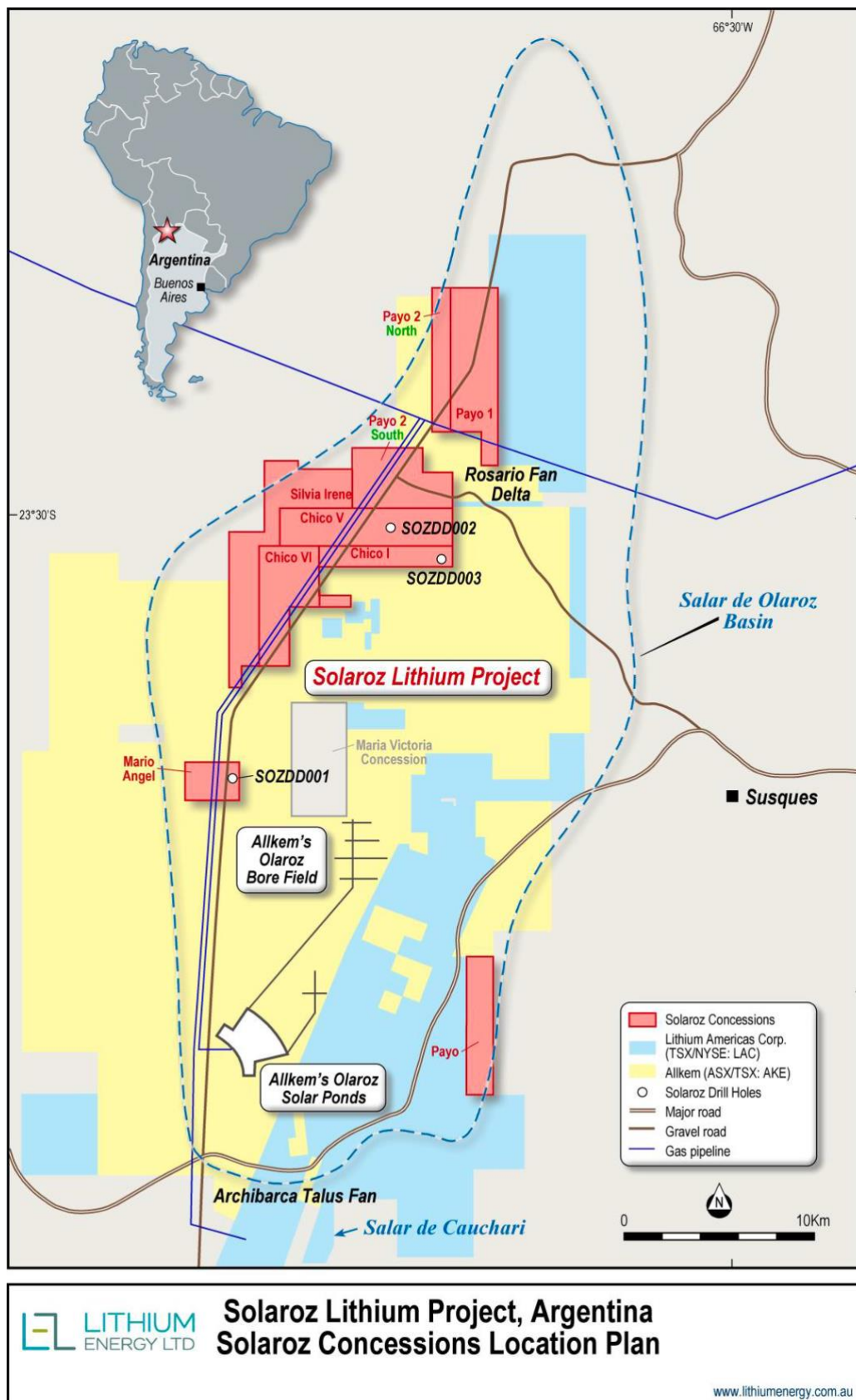


Figure 10: Solaroz Drill Hole Locations within Solaroz Concessions in Olaroz Salar (Adjacent to Allkem and LAC Concessions)

The core sample analysis/testwork results and packer readings (from the current drilling programme at Solaroz) will form the basis, when compiled with the geological logging and the geophysical borehole logging, for a characterisation of the drilled aquifers in terms of grade distribution and porosity/specific yield. These testwork will provide the detailed information which are necessary for the delineation of the maiden JORC Mineral Resource for Solaroz.

Early Exercise of Option to Acquire Solaroz Concessions

Lithium Energy has exercised its option to acquire the mineral concessions comprising the Solaroz Project in consideration of a cash payment of US\$3.84 million.⁴

Lithium Energy (through its 90% owned subsidiary in Argentina, Solaroz S.A.), had previously entered into an Option and Purchase Agreement (dated March 2019) (**Option Agreement**) with the registered legal and beneficial owner (**Owner**) of mineral concessions which comprise the Solaroz Project. Under the Option Agreement, Solaroz S.A. was required to make a series of payments in cash and (at the election of the company) shares over 4 years totalling US\$6.59 million to the Owner. Lithium Energy had (prior to the early option exercise) made option payments totalling US\$0.26 million, with US\$6.33 million remaining to be paid in tranches (with the final payment due in October 2025).⁵

Lithium Energy has reached agreement with the Owner for the early exercise of the option with a cash payment of US\$3.84 million (~A\$6 million) made in October 2022, being a (40%) discount of US\$2.49 million (~A\$3.9 million).

Solaroz Project Background

Lithium Energy's flagship Solaroz Lithium Brine Project comprises 8 mineral concessions 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 (refer Figure 11) in the Salar de Olaroz basin (the **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 Limited⁶) (**Allkem**) and the advanced Cauchari-Olaroz development project held by Lithium Americas Corporation (TSX/NYSE:LAC) (**Lithium Americas**) (under a joint venture with Ganfeng Lithium).

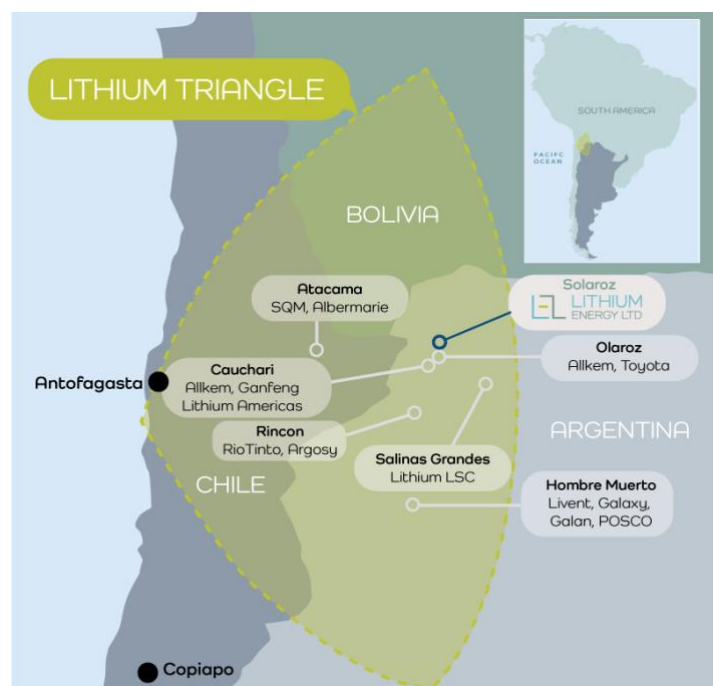


Figure 11: Lithium Projects Located in 'Lithium Triangle'

The Solaroz Project is directly adjacent to or principally surrounded by concessions held by Allkem and Lithium Americas in the Olaroz Salar (refer Figure 10). Allkem's Olaroz Lithium Facility at the Olaroz Salar (under a joint venture with Tokyo Stock Exchange listed Toyota Tsusho Corporation (TYO:8015)) has been extracting lithium brine and producing lithium carbonate since ~2015.⁷ Lithium Americas' Cauchari-Olaroz Project is located in the Olaroz Salar and neighbouring Salar de Cauchari adjacent to Allkem's Olaroz Lithium Facility.⁸

The location of Lithium Energy's Solaroz concessions is outlined in Figure 10.

⁴ Refer LEL ASX Announcement dated 31 October 2022: Early Exercise of Option to Acquire Solaroz Lithium Brine Project Concessions

⁵ Refer also, Note 21(d) (Contingencies - Deferred Payments Relating to Acquisition of Solaraz Lithium (Argentina)) to the financial statements in the Company's 2022 Annual Report

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

⁷ Source: Allkem ASX announcements

⁸ Source: Lithium America's public releases

Solaroz Exploration Target

Lithium Energy has established a conceptual Exploration Target for the Solaroz Project of⁹:

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), Allkem (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), Allkem (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.

The Exploration Target demonstrates the potential world-class scale of Solaroz and has been arrived at after a detailed examination of extensive geological data that exists in relation to the brine rich lithium aquifer that comprises the Olaroz Salar, including a review of historical exploration in the Olaroz Salar and a detailed review of reported results from geophysical surveys undertaken by Allkem and Lithium Americas, including a number of Gravity and Audio-frequency Magnetotellurics (**AMT**) surveys conducted by Allkem, some of which were undertaken over or closely adjacent to Lithium Energy's Solaroz concessions.

The Exploration Target is based on the interpretation that the alluvial deposits upon which the Solaroz concessions are located (at the North-West corner of the Olaroz Salar) have been deposited relatively recently and lie directly above the productive Deep Sand Unit of the lithium rich aquifer from which Allkem is extracting its brine. The interpretation of the results of a geophysics exploration programme¹⁰ completed by Lithium Energy to date indicate the presence of significant quantities of conductive brines in the Solaroz concession area, with indicated brine thicknesses up to 300 metres and to depths up to 500 metres below surface in sections (as outlined above).¹¹

Lithium Energy notes Allkem's update to their Olaroz Resource released in April 2022¹², 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 concessions held by Lithium Energy.

⁹ Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina

¹⁰ 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.

¹¹ Refer LEL ASX Announcements dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz and 9 May 2022: Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project

¹² 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

BURKE GRAPHITE PROJECT (QUEENSLAND, AUSTRALIA)

(100%)

Burke Tenement - Infill Drilling Programme

Lithium Energy has recently completed an infill drilling programme at the Burke Tenement (EPM 25443), with a total of 29 Reverse Circulation (RC) holes (totalling ~2,600m) and 7 diamond core (metallurgical and geotechnical) holes (totalling ~700m). RC chip and core samples have been submitted for assaying.

The Burke Tenement currently has a 6.3Mt JORC Inferred Mineral Resource Grade of 16% Total Graphitic Carbon (TGC), within which there is a higher-grade component of 2.3Mt @ 20.6% TGC¹³ (**Burke Deposit**). The objective of this infill drilling programme at the Burke Tenement is to upgrade the Burke Deposit from a JORC Inferred Mineral Resource to a higher standard JORC Indicated Mineral Resource category.

The diamond core will also provide representative graphite samples of the Burke Deposit for an extensive metallurgical, Purified Spherical Graphite (PSG) and anode testwork and development programme.

The upgrade in the resource classification of the Burke Deposit and the metallurgical and PSG optimisation testwork will support the planned Engineering Study to assess the viability of establishing a PSG Anode manufacturing facility, using the Burke Graphite as feedstock material.

Figure 12 shows the location of the drillholes on the south-east corner of the Burke Tenement (with the results of the previous Electro Magnetic (EM) surveys¹⁴ also shown).

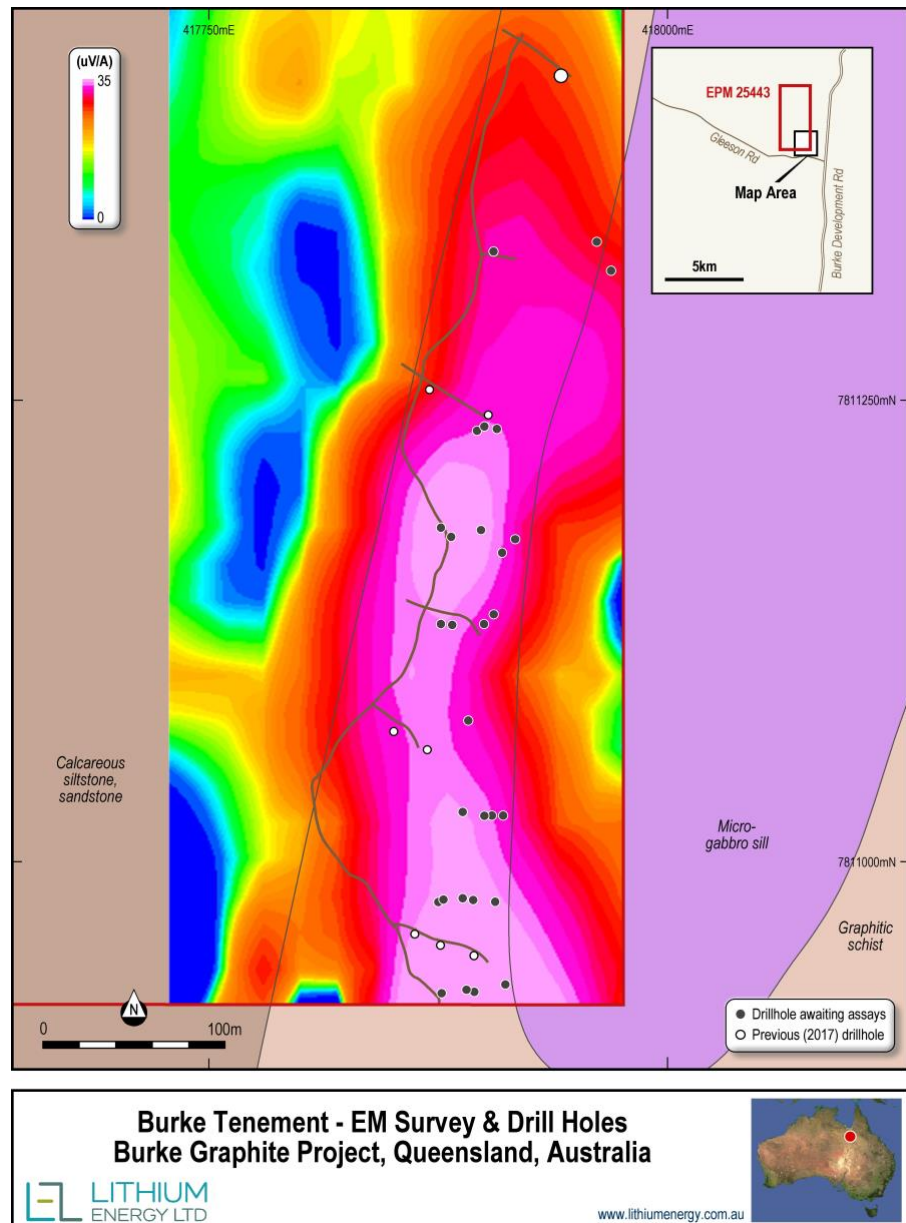


Figure 12: Location of Drillholes on Burke Tenement

13 Refer Strike Resources Limited (ASX:SRK) ASX Announcement dated 13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits

14 Refer SRK ASX Announcement dated 26 June 2018: Burke Graphite Project – New Target Area Identified from Ground Electro-Magnetic Surveys

Corella Tenement - Maiden Drilling Programme

Drilling will now shift to the Corella Tenement (EPM 25696), located ~150km south of the Burke Tenement, where the Company will commence a maiden drilling programme to test the extent of graphite mineralisation (identified through previous sampling and EM surveys¹⁴) with the objective of delineating a maiden JORC Inferred Mineral Resource.

Approximately 2,000 metres of RC drilling and ~200 metres of diamond drilling is planned at the Corella Tenement, which will provide assays and samples for supporting resource development and metallurgical testwork. The Corella drilling programme is expected to commence after the end of the Queensland wet season, in March/April 2023.

An EM survey and surface sampling programme (that indicated multiple occurrences of high grade graphite of up to 14.8% TGC) in the north-east corner of the Corella Tenement (refer Figure 13) identified the potential for significant graphite mineralisation.¹⁴ The Corella Tenement EM survey was carried out over outcropping and sub-cropping Geological Survey of Queensland mapped Graphitic Schists - the “Milo beds” - within the Corella Formation. Graphite grading 5 - 10% TGC is widespread throughout the outcropping Milo beds and the EM survey was carried out to identify higher-grade areas of mineralisation and identify future drill targets. The survey highlighted an area of approximately 1000m x 500m (refer Figure 13) within which conductive features similar to those corresponding to high-grade graphite occurring at the Burke Tenement were identified.

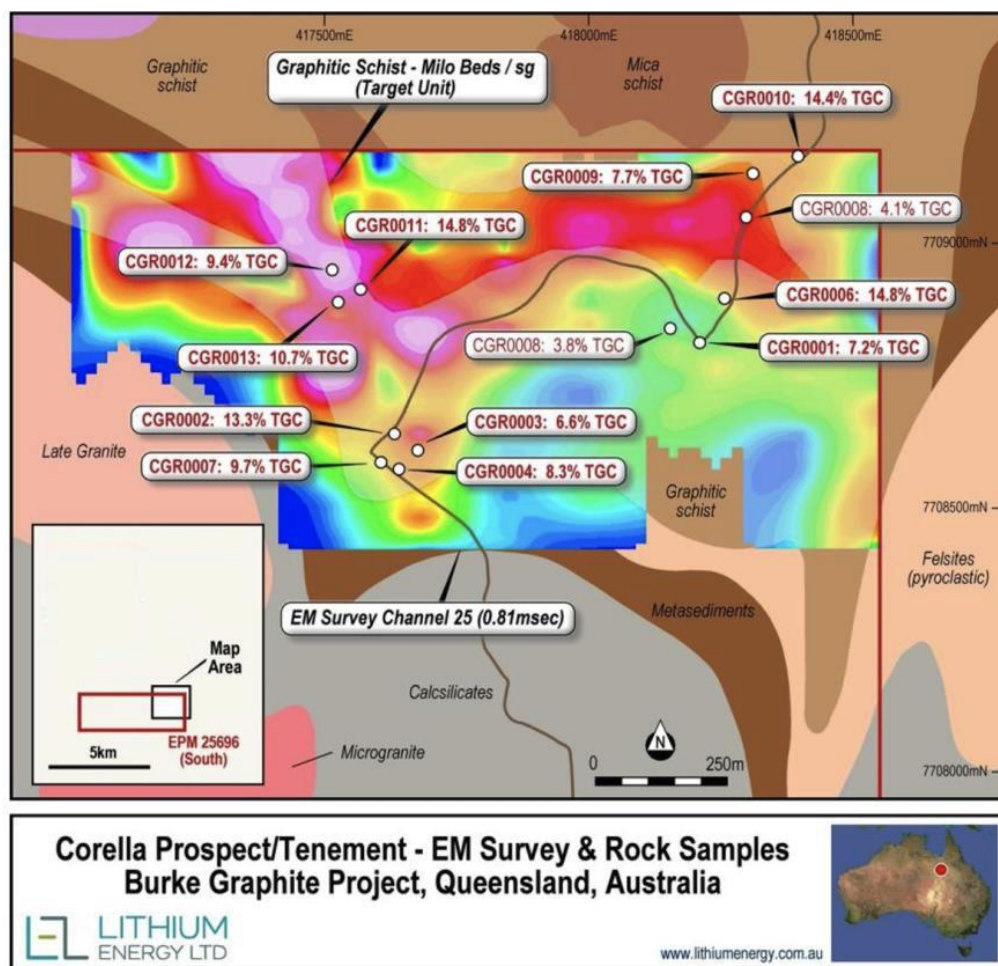


Figure 13 - EM Survey - Corella Prospect, Burke Graphite Project

The conductive features identified at the Corella Tenement appear to be shallow to flat-lying and occur in areas of outcropping and sub-cropping graphite that have rock chips of up to 14.85% TGC¹⁵.

15 Refer SRK ASX announcement dated 21 April 2017: Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland

CSIRO Testwork - Li ion Battery Anode Material from the Burke Graphite Deposit

CSIRO has undertaken characterisation, purification and spheronisation testwork on natural Burke Graphite to determine its suitability for use as a battery anode material.¹⁶ This work was partially funded under CSIRO's (research related) Kick Start Programme.

In-depth characterisation of Burke Graphite concentrate (produced from previous drill core samples taken from the Burke Tenement using laboratory flotation) was firstly conducted by CSIRO to determine the concentration of various impurity elements, via XRF, as well as using an automated mineralogy analyser to determine the mineralogy of the residual impurities within the natural graphite concentrate (> 95 % TGC).

The four major impurities in the Burke Graphite concentrate identified were micas, feldspars, clay minerals and silica, which are typical of graphite deposits.

CSIRO then conducted several different purification techniques and processes on the Burke Graphite concentrate to remove these impurities, with preliminary results achieving a purity of 99.94 % TGC, which closely compares to typical industry requirements of +99.95% TGC for anode material.

Spheronising test work was conducted on unpurified Burke Graphite in a bench scale NARA NHS-0 Hybridiser, successfully producing spheronised graphite particles with a d_{50} ¹⁷ of between 15 – 17 μm and a Tap density of 0.92 g/cm³, which is equivalent to the typical industry benchmark for Tap Density of anode ready material for this size distribution.

This unpurified spheronised material was then used for the preparation of natural graphite anodes for electrochemical testing. These electrodes showed electrochemical capacity of 344 - 356 mAh/g at 0.1C¹⁸ cycle rate, which compares with the typical commercial electrode baseline results of >350 mAh/g.

These preliminary results achieved by the CSIRO testwork are consider highly encouraging as they closely approach or meet the relevant industry benchmarks typically required for lithium-ion battery anode material. Furthermore, the Company considers these results particularly positive given that the electrochemical testing of natural graphite anodes was made from spheronised Burke Graphite without the benefit of final purification or any coating material being applied, both of which would typically improve cell performance even further.

Based on these excellent preliminary results, the Company is planning further anode development testwork, with the objective of producing samples of purified spherical graphite (PSG) material which meet or exceed relevant industry performance benchmarks, for prospective customers to evaluate for use as anode material in lithium-ion batteries.

Burke Graphite Project Background

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) (refer Figure 14).

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.

16 Refer LEL ASX Announcement dated 1 December 2022: Burke Graphite Shows Excellent Lithium-Ion Battery Anode Potential

17 d_{50} means the median particle size

18 0.1C means that the cycling rate for the discharge was 10 hours (ie. 1C = 1hour, 0.1C = 10 hours)

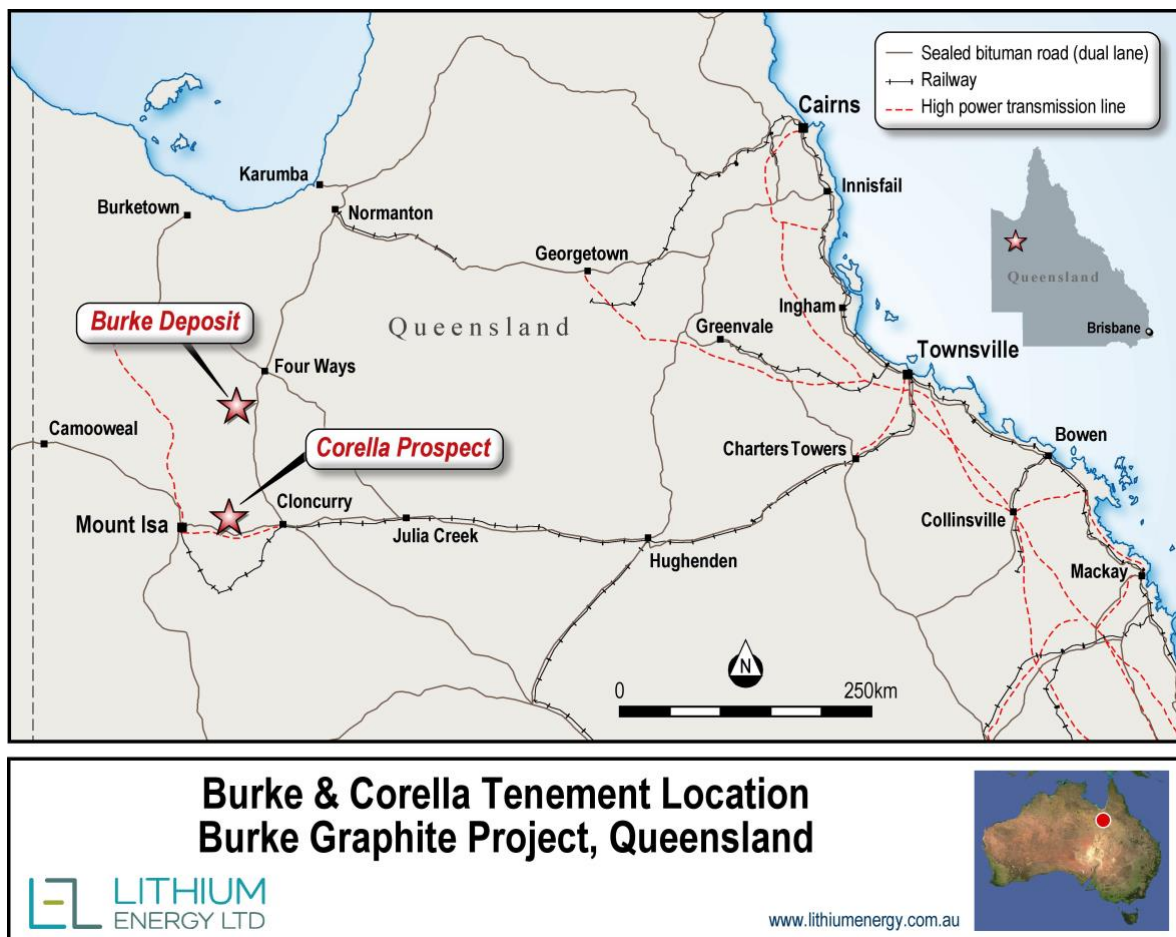


Figure 14: Burke Graphite Project Tenement Locations in North Central Queensland

Burke Deposit

A Mineral Resource Estimate (MRE) for the Burke Tenement has defined a maiden Inferred Mineral Resource (Burke Deposit) of:

- **6.3 million tonnes @ 16.0% TGC** (with a TGC cut-off grade of 5%) for **1,000,000 tonnes** of contained graphite;
- Within the mineralisation envelope there is included higher grade material of **2.3 million tonnes @ 20.6% TGC** (with a TGC cut-off grade of 18%) for **464,000 tonnes** of contained graphite which will be investigated further.

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 Deposit presents the opportunity for Lithium Energy to participate in the anticipated growth in demand for graphite and graphite related products particularly with respect to the production of Lithium-ion batteries where graphite is the largest single component by weight.

In addition to the high-grade nature of the deposit, the Burke Deposit:

- Comprises natural graphite that has been demonstrated to be able to be processed by standard flotation technology to international benchmark product categories. The flotation tests previously conducted have confirmed that a concentrate of purity **in excess of 95% and up to 99% TGC** can be produced using a standard flotation process.¹⁹
- Contains graphite from which Graphene Nano Platelets (**GNP**) have been successfully extracted direct from the Burke Deposit via Electrochemical Exfoliation (**ECE**).¹⁵ The ECE process is relatively low cost and environmentally friendly compared to other processes, yet it can produce very high purity Graphene products. The ECE process is however not applicable to the vast majority of worldwide graphite deposits as it requires a TGC of over 20% and accordingly the Burke Deposit has potentially significant processing advantages over other graphite deposits.
- Is located in the relatively safe and mining friendly jurisdiction of Queensland, Australia with well-developed transport infrastructure and logistics nearby.
- Is favourably located relative to the Lansdown Eco-Industrial Precinct near Townsville in North Queensland, which is emerging as an important precinct for the production of critical materials for battery technologies in Australia.
- Is potentially amenable to low-cost open-pit mining.

Potential Value Adding Processing Facility

Lithium Energy believes that:

- The high-grade nature of the Burke Deposit, its location in Queensland (including relative to the Lansdown Eco-Industrial precinct near Townsville) and the prior test work indicating its potential suitability for use in lithium-ion batteries, affords the Company a highly advantageous position to expand the scope of its proposed graphite operations from that of a pure graphite miner.
- There are significant advantages in creating an in-country vertically integrated operation that will encompass a mine, a concentrator and a downstream processing operation to produce Purified Spherical Graphite (**PSG**) for sale to lithium-ion battery anode manufacturers.

Accordingly, Lithium Energy is investigating the establishment of a dedicated, environmentally sustainable manufacturing facility potentially within the 22,000-hectare Lansdown Eco-Industrial precinct located 40 kilometres south of Townsville (where Queensland Pacific Minerals is also proposing to construct the Townsville Energy Chemicals Hub (TECH) Project) to purify and spheronise graphite sourced from the Burke Deposit for use as anode material in lithium-ion batteries.²⁰

19 Refer SRK ASX Announcement dated 16 October 2017: Test-work confirms the potential suitability of Burke graphite for Lithium-ion battery usage and Graphene production

20 Refer LEL ASX Market Announcement dated 21 October 2021: Lithium Energy to Pursue Downstream Graphite Processing Opportunity at Emerging Townsville Battery Hub

CORPORATE

Securities on Issue

Class of Security	Quoted on ASX	Unlisted	Total
Fully paid ordinary shares	60,150,000	34,860,000	95,010,000
Executive Options (\$0.30, 18 Mar 2024) ²¹	-	10,000,000	10,000,000
Broker Options (\$0.30, 4 May 2024) ²²	-	4,000,000	4,000,000
Executive Options (\$1.39, 29 Nov 2024) ²³	-	3,500,000	3,500,000
SIP Options (\$1.595, 15 February 2025) ²⁴	-	100,000	100,000
Broker Options (\$1.50, 20 September 2025) ²⁵	-	750,000	750,000
Executive Options (\$1.06, 4 October 2025) ²⁶	-	17,500,000	17,500,000
SIP Options (\$1.32, 30 November 2025) ²⁷	-	400,000	400,000

The Company issued the following unlisted options during the quarter:

Class of Unlisted Options	Issue Date	Exercise Price	Expiry Date	Number of options
Executive Options (\$1.06, 4 October 2025)	5 Oct 2022	\$1.06	4 Oct 2025	17,500,000
SIP Options (\$1.32, 30 November 2025)	1 Dec 2022	\$1.32	30 Nov 2025	400,000

The Executive Options (\$1.06, 5 October 2025) were issued after receipt of shareholder approval at the Company's annual general meeting held on 5 October 2022.²⁸

Restricted Securities

Class of Security	Number	Escrow Period
Fully paid ordinary shares	34,860,000	19 May 2023 (24 months from date of quotation)
Executive Options (\$0.30, 18 March 2024)	10,000,000	19 May 2023 (24 months from quotation)
Broker Options (\$0.30, 4 May 2024)	4,000,000	19 May 2023 (24 months from quotation)

- 21 Refer Section 16.3 (Rights Attaching to Executive Options) of the Company's Prospectus (dated 30 March 2021) for terms and conditions of the Executive Options
- 22 Refer Section 16.2 (Rights Attaching to Broker's Options) of the Company's Prospectus (dated 30 March 2021) for terms and conditions of the Broker Options
- 23 Refer LEL Announcement dated 2 December 2021: Notification regarding unquoted securities – LEL and Annexure B (Terms and Conditions of New Executive Options) of LEL's Notice of Annual General Meeting and Explanatory Statement dated 18 October 2021 and released on ASX on 28 October 2021
- 24 Refer LEL Announcement dated 18 February 2022: Notification regarding unquoted securities – LEL
- 25 Refer LEL Announcement dated 21 September 2022: Notification regarding unquoted securities – LEL
- 26 Refer LEL Announcement dated 5 October 2022: Notification regarding unquoted securities – LEL and Annexure B (Terms and Conditions of Executive Options) of LEL's Notice of Annual General Meeting and Explanatory Statement dated 22 August 2022 and released on ASX on 2 September 2022
- 27 Refer LEL Announcement dated 5 December 2022: Notification regarding unquoted securities – LEL
- 28 Refer LEL Announcement dated 5 October 2022: Results of 2022 Annual General Meeting and LEL's Notice of Annual General Meeting and Explanatory Statement dated 22 August 2022 and released on ASX on 2 September 2022

Summary of Expenditure Incurred²⁹

A summary of expenditure incurred by Lithium Energy during the quarter, in relation to cash flows from operating and investing activities reported in the accompanying Appendix 5B Cash Flow Report is as follows:

For Quarter ending 31 December 2022	Expenditure Incurred / Cash Outflows		
	Operating	Investing	Total
		\$'000	
Exploration and evaluation expenditure and tenements	-	7,741	7,741
Personnel expenses	133	-	133
Occupancy expenses	16	-	16
Corporate expenses	82	-	82
Administration expenses	78	-	78
Total Expenditure	309	7,741	8,050

There were no mining production and development activities during the quarter.

Reconciliation of Expenditure to Utilisation of Funds Statement in Prospectus³⁰

	Proposed Utilisation of Funds Disclosed in Prospectus ³¹	Actual Expenditure (Cash Outflows) to 31 Dec 2022	Variance
		\$'000	
Exploration and Evaluation Expenditure	5,235	2,723	2,512
Cash Consideration Payments to Solaroz Owner	1,750	5,994	(4,244)
Expenses of the IPO	765	829	(64)
Balance: Corporate Overheads/Working Capital	1,250	1,593	(343)
Total	9,000	11,139	(2,139)

The Utilisation of Funds disclosed in Lithium Energy's Prospectus is an aggregate estimate over a 2 year period (as at the date of the Prospectus – 30 March 2021). The reported Actual Expenditure (above) is based on cumulative cash outflows from 14 January 2021 (the date of incorporation of the company) to 31 December 2022 and as reported in the Company's Appendix 5B Cash Flow Reports for the quarters ending 30 June 2021 to 31 December 2022.

The proposed exploration expenditure programme (and allocation across Lithium Energy's projects) (as outlined in the Prospectus) will be refined according to the results of the programmes as they are undertaken/develop, to meet working capital allocation priorities, and potentially for new project generation. All exploration expenditure is subject to change, as they are of necessity highly dependent on results achieved.

Payments to Related Parties³²

During the quarter, Lithium Energy paid a total of \$55k in respect of Directors' remuneration, comprising salaries, PAYG remittances to the ATO and statutory employer superannuation contributions. This is disclosed in Item 6 of the accompanying Appendix 5B Cash Flow Report.

²⁹ Per ASX Listing Rule 5.3.1

³⁰ Per ASX Listing Rule 5.3.4

³¹ Refer Section 6.1 (Utilisation of Funds) of the Company's Prospectus (dated 30 March 2021)

³² Per ASX Listing Rule 5.3.5

LIST OF MINERAL TENEMENTS

Lithium Energy has interests in the following mineral tenements as at the end of the quarter and currently:

Solaroz Lithium Brine Project (Argentina)

(90%)

Tenement Name	Area (Ha)	Province	File No
Mario Ángel	543	Jujuy	1707-S-2011
Payo	990	Jujuy	1514-M-2010
Payo 1	1,973	Jujuy	1516-M-2010
Payo 2	2,193	Jujuy	1515-M-2010
Chico I	835	Jujuy	1229-M-2009
Chico V	1,800	Jujuy	1312-M-2009
Chico VI	1,400	Jujuy	1313-M-2009
Silvia Irene	2,465	Jujuy	1706-S-2011

Burke Graphite Project (Queensland, Australia)

(100%)

Tenement No.	Grant Date	Expiry Date	Area (blocks)	Area (km ²)
Burke EPM 25443	4/9/2014	3/9/2024	2 sub-blocks	~6.58
Corella EPM 25696	2/4/2015	1/4/2025	6 sub-blocks	~19.74

JORC MINERAL RESOURCES

Burke Graphite Project (Queensland, Australia)

(100%)

The Burke Deposit (on the Burke EPM 25443 tenement) has a JORC Code (2012 Edition) compliant Mineral Resource:

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).

JORC CODE COMPETENT PERSON'S STATEMENTS

JORC Code (2012) Competent Person Statement – Solaroz Lithium Project (Argentina)

The information in this document that relates to Exploration Results and Exploration Targets in relation to the Solaroz Lithium Project is extracted from the following ASX market announcements made by Lithium Energy dated:

- 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"
- 1 November 2022 entitled "Further Significant Lithium Concentrations Encountered in Maiden Drillhole 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"
- 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).

JORC Code (2012) Competent Person Statement - Burke Graphite Project Mineral Resources

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 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 metallurgical test work results in relation to the Burke Graphite Project is extracted from the following ASX market announcements made by Strike dated:
- 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”.

The information in the original announcements that relates to these metallurgical test work matters is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of AusIMM. Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who had been engaged by Strike to provide metallurgical consulting services. Mr Adamini 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).

- (c) 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).

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”.

Strike’s ASX Announcements may be viewed and downloaded from the Company’s website: www.strikeresources.com.au or the ASX website: www.asx.com.au under ASX code “SRK”.

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.

Appendix 5B

Mining Exploration Entity or Oil and Gas Exploration Entity Quarterly Cash Flow Report

Name of entity

LITHIUM ENERGY LIMITED (ASX:LEL) and its controlled entities

ABN

94 647 135 108

Quarter Ended (current quarter)

31 December 2022

Consolidated statement of cash flows

	Current Quarter Dec-2022 \$A' 000	Year to Date 6 months \$A' 000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(133)	(231)
(e) administration and corporate costs	(176)	(365)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	71	79
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(238)	(517)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	(5,994)	(6,167)
(c) property, plant and equipment	(9)	(9)
(d) exploration & evaluation	(1,747)	(2,203)
(e) investments	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows	Current Quarter Dec-2022 \$A' 000	Year to Date 6 months \$A' 000
2.2 Proceeds from the disposal of:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material)	-	-
2.6 Net cash from / (used in) investing activities	(7,750)	(8,379)
3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	15,000
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	-	-
3.4 Transaction costs related to issues of equity securities or convertible debt securities	(32)	(1,022)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
3.10 Net cash from / (used in) financing activities	(32)	13,978
4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	19,798	6,672
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(238)	(517)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(7,750)	(8,379)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	(32)	13,978
4.5 Effect of movement in exchange rates on cash held	(170)	(146)
4.6 Cash and cash equivalents at end of period	11,608	11,608

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		Current Quarter \$A' 000	Previous Quarter \$A' 000
5.1 Bank balances		1,358	17,798
5.2 Call deposits		10,250	2,000
5.3 Bank overdrafts		-	-
5.4 Other (provide details)		-	-
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)		11,608	19,798

6. Payments to related parties of the entity and their associates		Current Quarter \$A' 000
6.1 Aggregate amount of payments to related parties and their associates included in item 1		(55)
6.2 Aggregate amount of payments to related parties and their associates included in item 2		-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7. Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		Total facility amount at quarter end \$A' 000	Amount drawn at quarter end \$A' 000
7.1 Loan facilities		-	-
7.2 Credit standby arrangements		-	-
7.3 Other (please specify)		-	-
7.4 Total financing facilities		-	-

7.5 Unused financing facilities available at quarter end	-
---	---

Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

Nil

8. Estimated cash available for future operating activities	\$A' 000
8.1 Net cash from / (used in) operating activities (item 1.9)	(238)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1,747)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,985)
8.4 Cash and cash equivalents at quarter end (item 4.6)	11,608
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	11,608
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	5.85

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Not applicable

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Not applicable

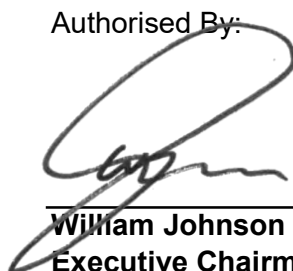
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Not applicable

Compliance statement

1. This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
2. This statement gives a true and fair view of the matters disclosed.

Authorised By:



William Johnson
Executive Chairman

31 January 2023

See Chapter 19 of ASX Listing Rules for defined terms

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee"
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

William Johnson
Executive Chairman
T | (08) 9214 9737
E | chair@lithiumenergy.com.au

Victor Ho
Company Secretary
T | (08) 9214 9737
E | cosec@lithiumenergy.com.au