# LITHIUN ENERGY LT

# **QUARTERLY ACTIVITIES REPORT – 31 March 2023**

#### **COMPANY DETAILS**

ABN: 94 647 135 108

#### **PRINCIPAL AND REGISTERED OFFICE**

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#### **SECURITIES ON ISSUE**

95,010,000 shares comprising:

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

36,250,000 unlisted options, including:

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

#### **BOARD OF DIRECTORS**

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

#### **COMPANY SECRETARY**

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#### AUTHORISED FOR RELEASE BY - FOR FURTHER INFORMATION:

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

28 April 2023

#### **HIGHLIGHTS**

#### Solaroz Lithium Brine Project (Argentina)

- Currently drilling Holes 4 and 5 of initial 10 hole, ~5,000m lithium resource definition drilling programme - a third drill rig has been secured to accelerate completion and definition of maiden JORC Mineral Resource, expected ~mid-year.
- Drilling to date has encountered significant intersections of lithium brines in the upper and lower (Deep Sand Unit) aquifers - cumulative ~235m (Hole 1) and ~215m (Hole 3); assays are pending for other holes where significant intersections of conductive brines have also been encountered - ~107m (Hole 2), ~210m+ (Hole 4) and ~201m+ (Hole 5) (with Holes 4 and 5 currently drilling in the targeted Deep Sand Unit).

#### **Burke Graphite Project (Queensland, Australia)**

- Recently completed infill (RC and diamond core) drilling programme at the Burke Tenement has delivered a significant increase in the size and confidence of the Burke Deposit, to a **Total** Indicated and Inferred Mineral Resource of 9.1Mt at 14.4% TGC for a total of 1.3Mt contained graphite (at a 5% TGC cut-off grade).
- Within the mineralisation envelope at Burke, there is included a higher grade Total Indicated and Inferred Mineral Resource of 7.1Mt at 16.2% TGC for 1.1Mt of contained graphite (at a higher 10% TGC cut-off grade).
- Maiden resource definition RC drilling and extensive rock chip sampling programmes completed at Corella Tenement - assays pending (May 2023).
- Chinese Beijing General Research Institute for Mining and Metallurgy Technology Group (BGRIMM) undertaking a comprehensive flowsheet development metallurgical testwork programme on Burke Deposit; results will also support planned Engineering Study to assess the viability of establishing a PSG Anode manufacturing facility.

#### **CHAIRMAN'S REVIEW**

Encountering further substantial intersections of lithium brine mineralisation in our third drillhole at Solaroz, located approximately 15 kilometres from our initial lithium discovery (in the first hole), is highly significant as, together with interpretation of recently conducted geophysics, it supports the potential for the widespread occurrence of lithium mineralisation within the Company's 12,000 hectare Solaroz concessions. The specific yields and porosity also indicate that brine extraction conditions are favourable.

The substantial intersections of conductive brines in our fourth and fifth drill holes are also very encouraging, with assays pending. Having three drill rigs operating concurrently will significantly accelerate the completion of the remaining drill holes and the definition of a maiden JORC lithium mineral resource at Solaroz.

With these positive results, Lithium Energy has commenced work to determine an optimal extraction methodology (including DLE options) for Solaroz. As the Company advances with its resource definition at Solaroz, we are well positioned to fast-track development of Solaroz once we have selected a preferred development pathway.

Our Burke Graphite Project continues to grow in value. The outstanding recent infill drilling results at the Burke tenement have led to a substantial increase in the total mineral resource size and classification confidence, which provides the Company with the opportunity to assess expanded development options in the planned engineering studies that will commence in Q2, 2023.

Corella holds great promise for us to significantly expand the size of our overall graphite inventory. The Company's aim for the Burke Project is to capitalise on the exceptionally high grades of Burke graphite to feed into a proposed vertically integrated anode manufacturing facility based in Queensland.

#### 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.



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LITHIUM ENERGY LIMITED

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# **PROJECTS**

#### SOLAROZ LITHIUM BRINE PROJECT (ARGENTINA)

#### Lithium Resource Definition Drilling Programme

Lithium Energy is progressing towards the completion of its initial 10 hole, 5,000 metre drilling programme by approximately mid-year. Two drill rigs are currently close to completion at Hole 4 (SOZDD004) and 5 (SOZDD005), with a third rig scheduled to commence Hole 6 in early May 2023.

The analysis/testwork results on (brine and core) samples, when compiled with geophysics surveys and geophysical hole logging results, will form the basis 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.

The results from drillholes 1 to 5 to date (including with respect to intersection widths of conductive/lithium brines, chemical composition and geophysical measurements), when taken together with the

interpretation of geophysics surveys undertaken across the Solaroz concessions, support Lithium Energy's geological model of extensive sandstone aquifers hosting lithiumrich conductive brines being present in the northern central section of the Olaroz Salar below substantial portions of the Company's ~12,000 hectare concession holding at Solaroz.



Figure 1: Diamond Drill Rig at Drill Hole 5 (SOZDD005, Chico VI Concession) on Olaroz Salar

By way of background on the drilling programme at Solaroz:

- Sampling of encountered brines are conducted by the use of single packers, double packers and or airlift (pumping), depending on the condition of the drill hole.
- Testing of brines for conductivity, flow rates and density are undertaken in the field, with testing of the chemical composition (ie. Lithium, Potassium, Magnesium concentrations) of brines being undertaken at a local laboratory in Argentina.
- Core samples are also collected for brine extraction and chemical analysis and specific yield and porosity testwork at a US-based laboratory.
- Upon the completion of drilling at each hole, geophysical hole logging is undertaken to provide measurements including porosity, specific yield, conductivity and spectral gamma. The measurements of Total Porosity and Specific Yield relate to the amount of brine which can ultimately be extracted and thus, are key parameters used for calculating a lithium brine resource.
- The assay results (from brine sampling) are reviewed in conjunction with the geophysical hole logging data (and core sampling results, where applicable) to calculate average lithium and magnesium concentrations across the upper and lower aquifers with respect to each hole.

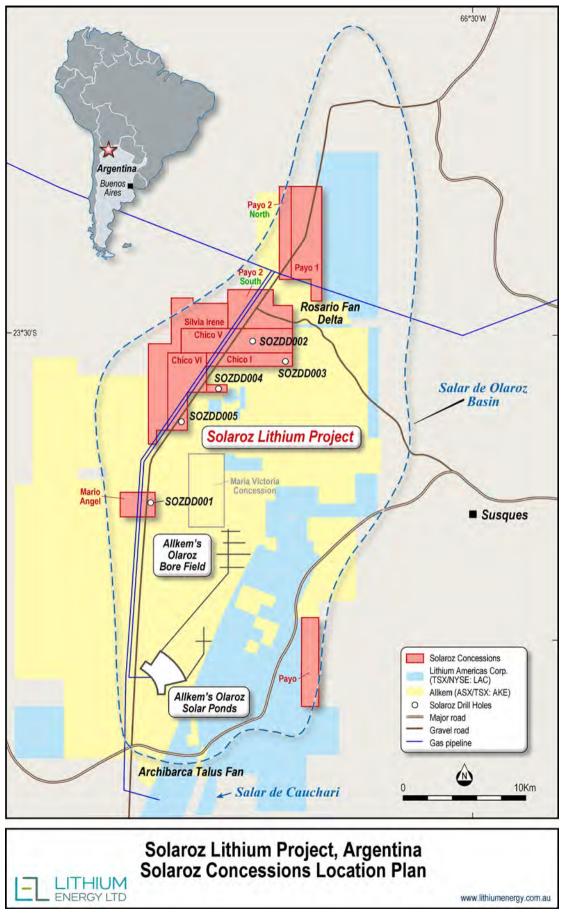


Figure 2: Solaroz Drill Hole Locations within Solaroz Concessions in Olaroz Salar (Adjacent to Allkem and Lithium Americas Concessions)

#### Drillhole 1 – SOZDD001 (Mario Angel concession)

Drilling at the first diamond drill hole (SOZDD001, on the Mario Angel concession, refer Figure 2) was completed to a depth of ~337.5 metres, with cumulative intersections of up ~235 metres of lithium brine mineralisation and 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 packer sampling assay results indicating significant lithium grades generally increasing with depth from 399mg/l at 94 metres to up to 555mg/l at 229 metres depth, averaging of 446 mg/L across the full width of the intersection, with a Specific Yield of 15%.
- A lower aquifer (the Deep Sand Unit) of at least 60 metres thick of mostly uniform lithium brine hosting sandstone units and fine gravels, extending from 265 to 325 metres depth, with packer sampling assay results of up to 517 mg/l lithium sampled at 274 metres depth, averaging 501 mg/L across the full width of the intersection, with a Specific Yield of 11%. Drilling was stopped for operational reasons whilst still in lithium brine mineralisation in the Deep Sand Unit, which remains open at depth.

The upper and lower aquifers are hosted mostly in sandstones and fine gravels with positive Total Porosity and Specific Yield measurements and low Mg/Li ratios also encountered across both aquifers - this is considered highly favourable for potential future brine extraction.

The results of sampling for SOZDD001 are shown in Tables 1A<sup>1</sup> and 1B<sup>2</sup> below:

	Hole Dept	n Range		Averaged <sup>1</sup>			Averaged <sup>2</sup>	Averaged <sup>2</sup>
			Interval	Li	Averaged <sup>1</sup>	Average	Total	Specific
Zones	From (m)	To (m)	(m)	(mg/l)	Mg (mg/l)	d Mg/Li	Porosity	Yield
Upper Aquifer	55	230	175	446	1016	2.3	26%	15%
Lower Aquifer /								
Deep Sand Unit	265	325	60	501	907	1.8	29%	11%

#### Table 1A : Averaged Lithium Concentrations and Specified Yields in Upper and Lower Aquifers at SOZDD001

Notes:

(1) Averaged Lithium and Magnesium were determined by numerical average of the designated geological unit (ie. aquifer)

(2) Total Porosity and Specific Yield were determined by the Borehole Magnetic Resonance (**BMR**) Probe, with Specific Yield being the portion of the Total Porosity free for brine movement, with the averaged results determined by numerical average of samples 2cm apart through the length of the geophysical log

<sup>1</sup> Refer LEL ASX Announcement dated 10 March 2023: Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project

<sup>2</sup> Refer LEL ASX Announcements dated 16 November 2022: Drilling Completed at Maiden Drillhole at Solaroz Lithium Brine Project, 1 November 2022: Further Significant Lithium Concentrations Encountered in Maiden Drillhole at Solaroz Lithium Brine Project, 19 October 2022: Major Lithium Discovery Confirmed In First Drillhole of Maiden Programme at the Solaroz Lithium Brine Project and 5 October 2022: Significant Intersection of Highly Conductive Brines in Maiden Drillhole at Solaroz Lithium Brine Project

Intersection	Hole Dept	n Range	Li	К	Mg	Mg/Li	Conductivity	Flow Rate	Density
Samples <sup>(A)</sup>	From (m)	To (m)	(mg/l)	(mg/l)	(mg/l)	Ratio	(mS/cm)	(l/min)	(g/ml)
1 <sup>(B)</sup>	72.6	74.1	158	1359	363	2.30	199	14.3	1.132
2 <sup>(B)</sup>	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 <sup>(C)</sup>	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 <sup>(D)</sup>	275	293	485	3581	739	1.52	218.1	8.3	1.193

#### Table 1B : Results of Packer Sampling at SOZDD001

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.<sup>3</sup>

(B) Sampling affected by dilution due to possible packer leakage allowing fresh water to penetrate. The lithium concentration for this section is still to be properly determined

(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

For further information on SOZDD001, refer to the Company's ASX Announcement dated 10 March 2023: Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project.

<sup>3</sup> Refer LEL ASX Announcement dated 21 September 2022: Drilling of First Hole Advancing on Schedule at Solaroz Lithium Brine Project in Argentina

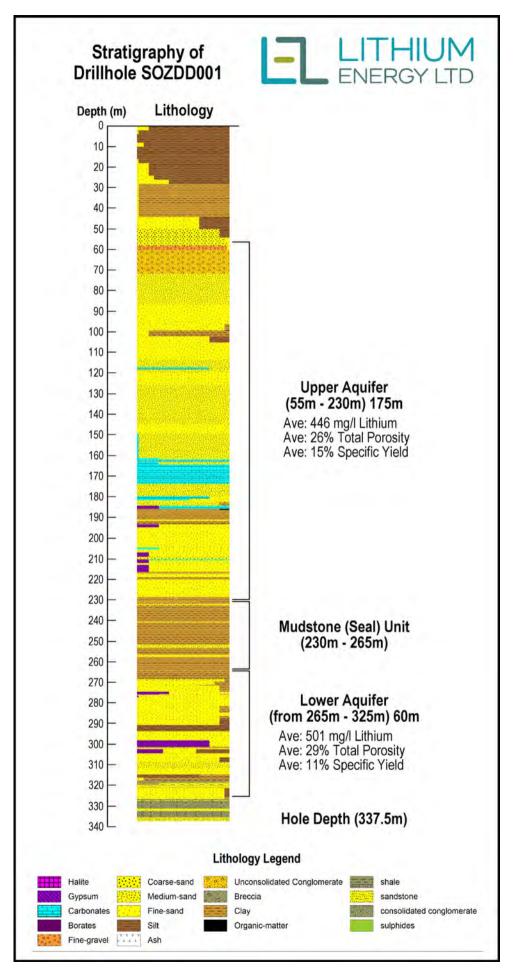


Figure 3: Drillhole Stratigraphy for SOZDD001

#### Drillhole 2 – SOZDD002 (Chico V concession)

Drilling at the second drillhole (SOZDD002, on the Chico V concession, refer Figure 2) encountered a significant intersection of highly conductive brines over an interval of approximately **107 metres** (in the upper aquifer), from a depth of 186 metres to 293 metres (hosted in unconsolidated sands). Drilling continued to encounter conductive brines in fractured shales, to a depth of ~482.5 metres, where the hole was terminated due to unstable drill hole conditions.<sup>4</sup>

Whilst packer samples were taken at SOZDD002 during drilling (which encountered significant intersections of conductive brines – refer Table 2<sup>5</sup>), inconsistencies were observed in a number of reported assays due to potential contamination of samples with fresh water/drilling fluids at the time of sampling.

	Intersection	Hole Dept	h Range	Conductivity	рН	TDS	Flow Rate	Density
Zones	Samples	From (m)	To (m)	(mS/cm)		(g/l)	(l/min)	(g/ml)
Fresh to Brackish Zone	1	185	186	197	7.32	100.6	NA	1.155
	2	186	204	202	7.28	104.7	16	1.175
Upper	3	189	229	214	7.29	106.8	18.2	1.145
Aquifer	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
e a contra da la	7	320	343	214.8	7.21	107.7	10	1.92
Fractured Shales	8	368	391	234.4	7.15	117.2	11	1.2
Sildles	9	392	415	223	7.37	111	5	1.195
	10	416	439	230	7.32	112	5	1.2

#### Table 2 : Results of Field Testing of Packer Sampling at SOZDD002

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

Lithium Energy is planning to take further brine samples (using airlift and pumping) to test for chemical composition (i.e. Lithium, Potassium, Magnesium concentrations) at a local laboratory (in Argentina). Upon conclusion of the Company's review of these assay results and the results of core samples (currently being analysed at a laboratory in the US), lithium concentration levels and related data for SOZDD002 will be released in due course. The Company has revised sampling procedures with its drilling contractors to minimise the risk of such contamination happening in the future.

For further information on SOZDD002, refer to the Company's ASX Announcement dated 31 January 2023: Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project.

<sup>4</sup> Refer LEL ASX Announcement dated 27 February 2023: Drilling Continues to Advance at Solaroz Lithium Brine Project

<sup>5</sup> Refer LEL ASX Announcement dated 31 January 2023: Drilling Continues to Encounter Significant Intersections of Highly Conductive Brines at Solaroz Lithium Project

#### Drillhole 3 – SOZDD003 (Chico I concession)

Drilling at the third hole (SOZDD003, on the Chico I concession, refer Figure 2) was completed to a depth of ~590 metres, with cumulative intersections of **215 metres of lithium brine mineralisation** encountered across the upper and lower aquifers with Lithium brine concentrations encountered, as follows:

- An upper aquifer **125 metres thick** between 158 to 283 metres depth of mostly uniform lithium brine hosting sandstone units and fine gravels, with sampling and assay results indicating significant lithium grades of up to at **397 mg/l** and **averaging 347mg/L**, with a Specific Yield of 18%.
- A lower aquifer (Deep Sand Unit) **at least 90 metres thick** of mostly uniform lithium brine hosting sandstone units and fine gravels, extending (after transitioning from a thick halite (salt unit) layer at between ~283 to 499 metres) from 500 to at least 590 metres depth, with assay lithium grades of up to **395 mg/l** and **averaging 351 mg/L**, with a Specific Yield of 14%.

A **44 metre thick** brine bearing extension in the upper aquifer between **114 to 158 metres** depth was also identified from geophysical hole logging (undertaken post completion of drilling); this zone was not sampled for lithium due to operational reasons and represents a further area of interest to the Company in determining the true thickness of potential lithium bearing brines in SOZDD003.

Whilst drilling was terminated (due to drill rig limitations) at a depth of 590 metres, the hole was still in lithium brine mineralisation (hosted in sandstone units and fine gravels) and the Company is yet to determine the full depth of lithium mineralisation in SOZDD003 to basement.

The results of sampling for SOZDD003 are shown in Tables 3A and 3B below<sup>6</sup>:

		Hole D Ran					Averaged	Averaged <sup>2</sup>	Averaged <sup>2</sup>
Zones		From (m)	To (m)	Interval (m)	Averaged <sup>1</sup> Li (mg/l)	Averaged <sup>1</sup> Mg (mg/l)	Mg/Li Ratio	Total Porosity	Specific Yield
Upper	Unsampled	114	158	44	Not Sa	mpled and A	ssayed	28%	18%
Aquifer	Sampled	158	283	125	367	715	2.1	28%	18%
Lower Aq / Deep Sa	uifer and Unit	500	590	90	351	656	1.9	23%	14%

Table 3A : Averaged Lithium Concentrations and Specific Yields in Upper and Lower Aquifers at SOZDD003

Notes:

(1) Averaged Lithium and Magnesium were determined by numerical average of the designated geological unit (ie. aquifer)

(2) Total Porosity and Specific Yield were determined by the BMR Probe, with Specific Yield being the portion of the Total Porosity free for brine movement, with the averaged results determined by numerical average of samples 2cm apart through the length of the geophysical log

<sup>6</sup> Refer LEL ASX Announcement dated 14 March 2023: Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project

Zones	Intersection	Hole Depth	Ŭ	Li		Mg/Li	Conductivity		TDS	Flow Rate	Density
zones	Samples <sup>(A)</sup>	From (m)	mg/l	mg/l	mg/I	Ratio	(mS/cm)	рН	(g/l)	(I/min)	(g/ml)
	1 <sup>(B)</sup>	158	176	227	479	2.11	172.9	6.85	86.71	NA	1.161
	2	177.9	194	299	587	1.96	201	6.87	101	13	1.164
	3	195.5	212	342	607	1.77	206	6.76	103	16	1.18
Upper Aquifer	4	215.5	230	389	821	2.11	207	6.88	103	8	1.181
	5	231.5	248	397	866	2.18	204	6.75	102	8	1.189
	6	246.5	266	390	863	2.21	209.5	6.91	104.8	4.2	1.189
	7	266.5	284.5	387	780	2.01	216	6.64	92.3	4.2	1.19
Halite (Salt) Layer	8	458.5	488.5	59	133	2.25	225	7.23	112	1.5	1.195
	<b>9</b> (C)	518.5	539.5	249	481	1.93	229	6.73	114.7	4	1.195
	10	539.5	557.5	349	659	1.89	235	6.65	119.7	10	1.22
	11	557.5	575.5	350	651	1.86	241.5	6.65	120.9	6	1.22
Deep Sand Unit (Lower	12	557	589	383	704	1,83	240	6.72	120.1	9	1.2
Aquifer)	13	570	571.2	372	696	1.87	235	6.72	117.7	5	1,2
	14	550	551.2	395	728	1.84	235	6.81	117.8	5.5	1.2
	15	530	531.2	359	671	1.86	232	6.74	116	8	1.2
	16 <sup>(C)</sup>	510	511.2	76	158	2.08	239.4	6.98	119.7	8	1.2

#### Table 3B : Results of Packer Sampling at SOZDD003

Notes:

(A) A tri-cone 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

(B) Sample 1 was an airlift sample collected to determine the presence of conductive brines below the pre collar (airlift samples contain a blend of brines and drilling mud, which tend to dilute assay results); Samples 2 to 12 were collected from single packers; Samples 13 to 16 were collected from double packers

(C) Samples 9 and 16 had suspected packer sampling leakage (leading to a dilution of assay results) caused by a wider annulus forming in the hole from a portion of the halite (salt unit) dissolving during the drilling/sampling process; the lithium concentrations for these sections are still to be properly determined

For further information on SOZDD003, refer to the Company's ASX Announcement dated 14 March 2023: Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project.

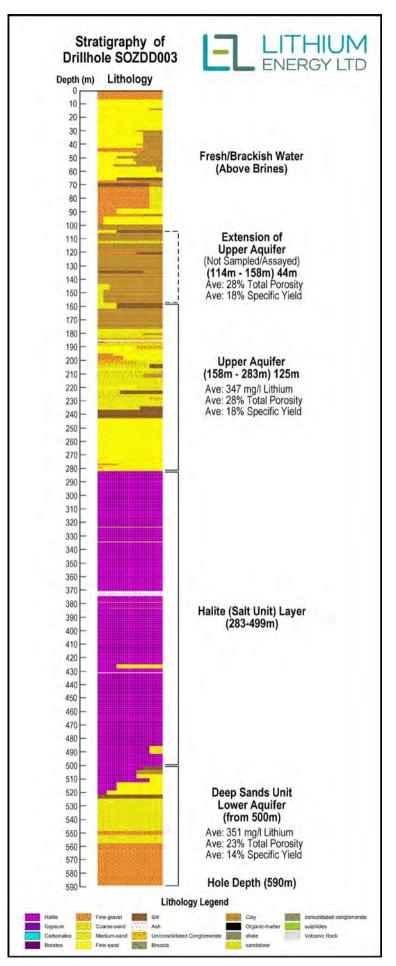


Figure 4: Drillhole Stratigraphy for SOZDD003

#### Drillhole 4 – SOZDD004 (Chico I concession)

Drillhole 4 (SOZDD004, on the Chico I concession, refer Figure 2) has intersected a current total of **210 metres of conductive brines** (across the upper and lower aquifers) to date (with drilling ongoing) (as announced on 19 April 2023<sup>7</sup>), as follows:

- Significant **158 metre intersection** of **conductive brines** encountered across the **upper aquifer**, from a depth of 120 to 278 metres.
- Massive halite (salt unit) layer of 42 metres encountered, from 278 to 332 metres.
- Beneath the halite layer, drilling has entered the targeted Deep Sand Unit (lower aquifer), intersecting 52 metres of conductive brines from 332 to 384 metres (to the depth of the last packer sample taken to date).
- Conductive brines are generally increasing in conductivity and density at depth, as ongoing drilling progresses into the Deep Sand Unit, with a current hole depth of ~400 metres
- Target hole depth to basement is expected to be approximately 580 to 630 metres.
- Sampling for lithium mineralisation in the conductive brines are being progressively undertaken with interim assay results pending.



Figure 5: Drill Rig at SOZDD004 (Chico I Concession)

Zones	Intersection	Hole Dept	h Range	Conductivity	рН	TDS	Flow Rate	Density
	Samples	From (m)	To (m)	(mS/cm)		(g/l)	(l/min)	(g/ml)
Fresh to Brackish	1	91	100	169	7.5	84.4	14.3	1.1
Zone	2	111	120	208	7.2	104	14.3	1.146
	3	121	144	218	7.0	108.5	50	1.157
	4	145	168	214	7.0	107.1	14.3	1.16
Upper	5	168	192	219.7	6.95	110	40	1.16
Aquifer	6	193	216	223.5	6.8	111.8	33	1.17
	7	241	264.5	214.3	6.71	107.3	33	1.17
	8	265	287.5	219.5	6.85	110.3	22	1.187
Halite (Salt) Layer	9	288	312	220	7.15	110	25	1.85
	10	313	336	223	7.28	112.2	15.4	1.194
Deep Sand Unit	11	337	360	212.7	6.8	106.4	20	1.2
(Lower Aquifer)	12	360	384	221	6.84	111.3	15.4	1.21

#### Table 4 : Results of Field Testing of Packer Samples at SOZDD004

Drilling continuing ahead in brines with current depth at ~400m (19 April 2023); further sampling ongoing

Notes:

- (1) A tri-cone pre-collar has been isolated at a drill hole depth of ~35 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.
- (2) Sampling of encountered brines were conducted by the use of single packers; additional sampling via double packers may be undertaken after the completion of drilling to basement/hole depth.
- (3) Testing of brines were undertaken in the field.

<sup>7</sup> Refer LEL ASX Announcement dated 19 April 2023: Holes 4 and 5 Encounter Significant Intersections of Conductive Brines at Solaroz Lithium Project

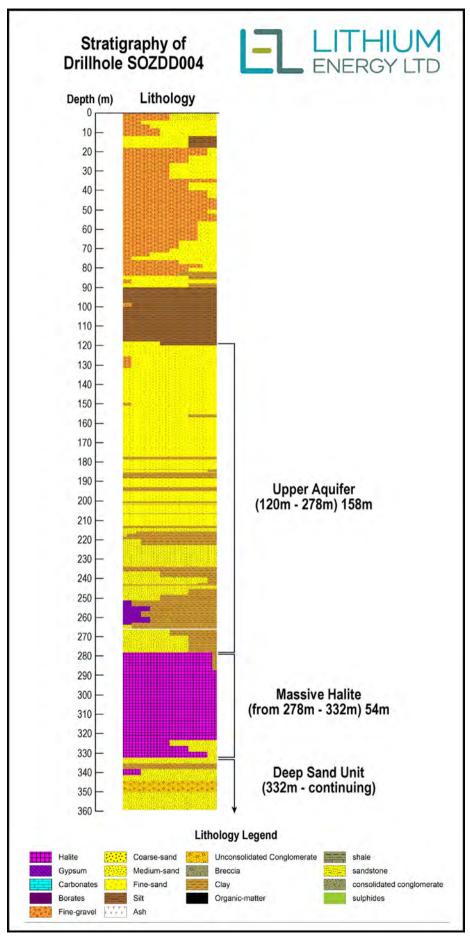


Figure 6: Drillhole (SOZDD004) Stratigraphy to a depth of ~360 metres (19 April 2023)

#### Drillhole 5 – SOZDD005 (Chico VI concession)

Drillhole 5 (SOZDD005, on the Chico VI concession, refer Figure 2) has intersected a current total of **201.5 metres of conductive brines** (across the upper and lower aquifers) to date (with drilling ongoing) (as announced on 19 April 2023<sup>7</sup>), as follows:

- Significant 163 metre intersection of conductive brines encountered across the upper aquifer, from a depth of 110 to 273 metres.
- Massive halite layer of 39 metres encountered, from 273 to 312 metres.
- Beneath the halite layer, drilling has entered the Deep Sand Unit (lower aquifer) intersecting 38.5 metres of conductive brines from 312 to 350.5 metres (to the depth of the last packer sample taken to date).
- Conductive brines are generally increasing in conductivity and density at depth, as ongoing drilling progresses into the Deep Sand Unit, with a current hole depth of ~360 metres.
- Target hole depth to basement is expected to be approximately 530 to 580 metres.
- Sampling for lithium mineralisation in the conductive brines are being progressively undertaken with interim assay results pending.



Figure 7: Diamond Drill Rig at SOZDD005, Chico VI Concession on Olaroz Salar

	Intersection	Hole Dept	h Range	Conductivity		TDS	Flow Rate	Density
Zones	Samples	From (m)	To (m)	(mS/cm)	рН	(g/l)	(l/min)	(g/ml)
Fresh to								
Brackish Zone	1	86.5	110.5	194.7	6.8	97.4	20	1.134
	2	110	134.5	218.6	6.7	109.8	11	1.16
	3	134	158.5	219	6.75	109.7	13.3	1.165
Upper	4	158.5	182.5	220.3	6.77	110.2	18.2	1.17
Aquifer	5	182.5	206.5	222.5	6.75	111.0	8	1.17
	6	230.50	254.5	226	6.72	113	11.1	1.18
	7	254	278	225	6.6	113.1	7.9	1.19
Halite (Salt) Layer	8	278.5	302.5	232.4	6.42	116.3	2.7	1.195
Deep Sand	9	302.5	326	231.5	6.9	115.8	7	>1.2
Unit (Lower Aquifer)	10	326.5	350.5	221	6.7	111.1	10	>1.2

#### Table 5 : Results of Field Testing of Packer Samples at SOZDD005

Drilling continuing ahead in brines with current depth at ~360m (19 April 2023); further sampling ongoing

Notes:

(1) A tri-cone pre-collar has been isolated at a drill hole depth of ~45 metres, to separate the fresh/brackish water and to prevent dilution with the sampling and assaying of the deeper brines.

- (2) Sampling of encountered brines were conducted by the use of single packers; additional sampling via double packers may be undertaken after the completion of drilling to basement/hole.
- (3) Testing of brines were undertaken in the field.

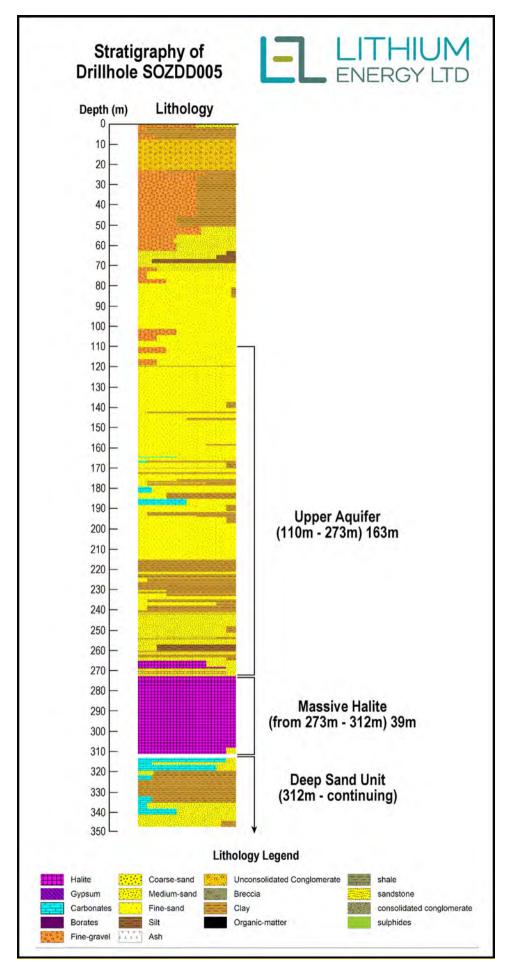


Figure 8: Drillhole (SOZDD005) Stratigraphy to a depth of ~350 metres (19 April 2023)

For further information on SOZDD004 and SOZDD005, refer to the Company's ASX Announcement dated 19 April 2023: Holes 4 and 5 Encounter Significant Intersections of Conductive Brines at Solaroz Lithium Project.

#### **Development Options for Solaroz Lithium Brines**

With the positive initial results from the drilling programme at Solaroz, Lithium Energy has commenced work to determine the optimal processing methodology for Solaroz lithium brines. As part of this work, the Company will undertake a trade-off study to develop alternative flowsheet configurations (for the processing and upgrading of lithium brines and production of battery grade lithium carbonate), including the following:

- (1) A conventional brine evaporation pond process design as implemented by Solaroz neighbours in the Salar de Olaroz basin, the Olaroz Lithium Facility of Allkem Limited (ASX/TSX:AKE) and the Cauchari-Olaroz Project being developed by Lithium Americas Corporation (TSX/NYSE:LAC), and others; and
- (2) Direct Lithium Extraction (**DLE**) options, which replaces the use of evaporation ponds DLE consists of several chemical processes that can bypass the need for large evaporation ponds for the production of lithium from brines.

The Company recently completed a trip to China to visit operating DLE Lithium plants and commence preliminary commercial discussions with experienced and internationally recognised DLE plant suppliers and operators. These organisations are able to offer, in effect, 'turn-key' solutions for the engineering/design, manufacture, supply, installation and operation of DLE plants (with modular capacities to process lithium brines to produce 2,000 to 10,000kt pa of Lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) end product).

DLE technology is being considered by the Company as a potential alternative to the use of evaporation ponds for the extraction of lithium from lithium brines at Solaroz, as the technology has the potential to offer benefits with regard to capital cost, development time and environmental sustainability (as referred to above).

Representative samples of lithium brines from Solaroz will be provided to these organisations for preliminary assessment (locally in Argentina) and subject to these results, further testwork may be undertaken to optimise the application of this technology for the Company's lithium brines at Solaroz.

The processing trade-off study will occur in parallel to the ongoing resource definition drilling and evaluations currently being undertaken at Solaroz.

#### Solaroz Lithium Brine Project Background

Lithium Energy's flagship Solaroz Lithium Brine Project (LEL:90%) 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 9) 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 Limited<sup>8</sup>) (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 9: 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 2). 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.<sup>9</sup> Lithium Americas' Cauchari-Olaroz Project is located in the Olaroz Salar and neighbouring Salar de Cauchari adjacent to Allkem's Olaroz Lithium Facility.<sup>10</sup>

The location of Lithium Energy's Solaroz concessions is outlined in Figure 2.

<sup>8</sup> Orocobre Limited (former ASX:ORE) changed its name to Allkem Limited (ASX:AKE) with effect on 6 December 2021

<sup>9</sup> Source: Allkem ASX announcements

<sup>10</sup> Source: Lithium America's public releases

#### **Solaroz Exploration Target**

Lithium Energy has established a conceptual Exploration Target for the Solaroz Project of<sup>11</sup>:

# 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	Thickness of Deep	Lithium	Average Specific	Brine Volume	Contained	Contained
(km²)	Sand Unit (m)	(mg/L)	Yield (Sy) (%)	(million m <sup>3</sup> )	Lithium (Mt)	LCE (Mt)
Upper A	ssumption Estimate					
78	150	700	20	2334	1.6	8.70
Lower A	ssumption Estimate					
78	75	500	10	584	0.3	1.5

#### **Table 6 : Solaroz Exploration Target**

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.

- 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  $Li_2CO_3$  ((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 programme<sup>12</sup> 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.<sup>13</sup>

<sup>11</sup> Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina

<sup>12</sup> 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.

<sup>13</sup> 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

#### BURKE GRAPHITE PROJECT (QUEENSLAND, AUSTRALIA)

#### Burke Deposit – JORC Resource Upgrade

The recently completed infill drilling programme at the Burke Tenement (EPM 25443) has delivered a significant increase in the size and confidence of the **Burke Deposit**, with an upgraded JORC Mineral Resource Estimate as follows<sup>14</sup>:

- Total Mineral Resource of 9.1Mt at 14.4% Total Graphitic Carbon (TGC) for a total of 1.3Mt contained graphite (at a 5% TGC cut-off grade), comprising:
  - Indicated Mineral Resource of 4.5Mt at 14.7% TGC for 670kt of contained graphite; and
  - Inferred Mineral Resource of 4.5Mt at 14.2% TGC for 640kt of contained graphite.
- Within the mineralisation envelope there is included a higher grade **Total Mineral Resource** of **7.1Mt** at **16.2% TGC** for **1.1Mt of contained graphite** (at a 10% TGC cut-off grade).<sup>15</sup>

#### Table 6 : Upgraded Mineral Resource Estimate for Burke Tenement (the Burke Deposit)

Mineral Resource Category	Weathering State	Resource (Mt)	Total Graphitic Carbon (TGC) (%)	Contained Graphite (kt)
	Weathered	0.2	12.5	30
Indicated Mineral Resource	Primary	4.3	14.8	640
	Sub-total	4.5	14.7	670
	Weathered	0.1	8.1	10
Inferred Mineral Resource	Primary	4.4	14.4	630
	Sub-total	4.5	14.2	640
	Weathered	0.3	11.1	40
Total Indicated and Inferred	Primary	8.7	14.6	1,270
Mineral Resource	Total	9.1	14.4	1,310

Notes:

- Mineral Resource estimates are constrained by the mineralisation solids and reported above a cut-off grade of 5% TGC; Mineral Resources reported on a dry in-situ basis; Totals may differ due to rounding.
- Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.
- For further details, refer to LEL ASX Announcement dated 5 April 2023 entitled "Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence"

<sup>14</sup> Refer LEL ASX Announcement dated 5 April 2023: Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence

<sup>15</sup> Refer Mineral Resource estimates at different %TGC cut-off grades reported in Table 2 of LEL ASX Announcement dated 5 April 2023: Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence

#### Quarterly Activities Report for quarter ending 31 March 2023

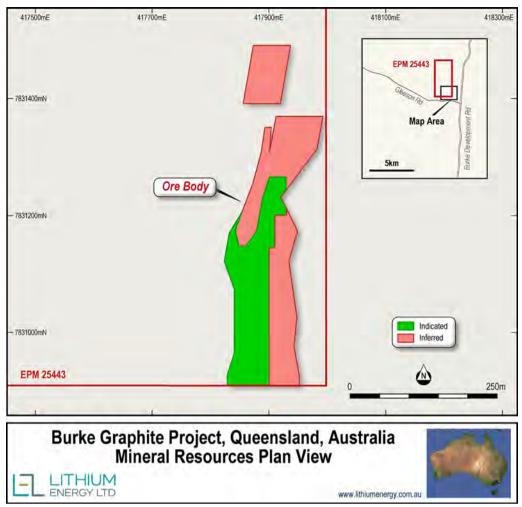


Figure 10: Plan View of Burke Deposit - JORC Indicated and Inferred Mineral Resources

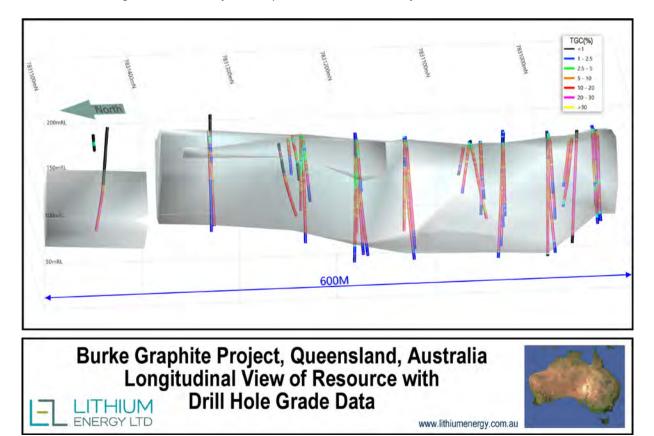
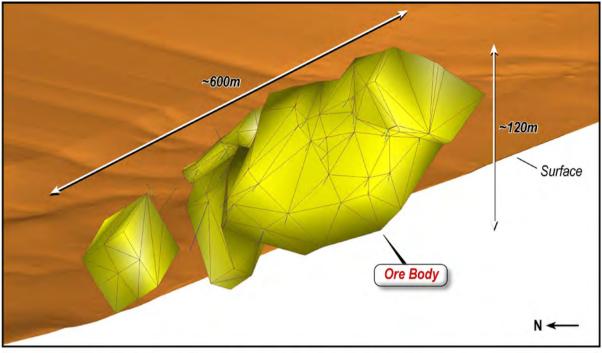
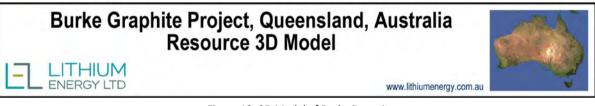


Figure 11: Longitudinal View of Burke Deposit (with Drill Hole Intersections showing %TGC Grades)





#### Figure 12: 3D Model of Burke Deposit

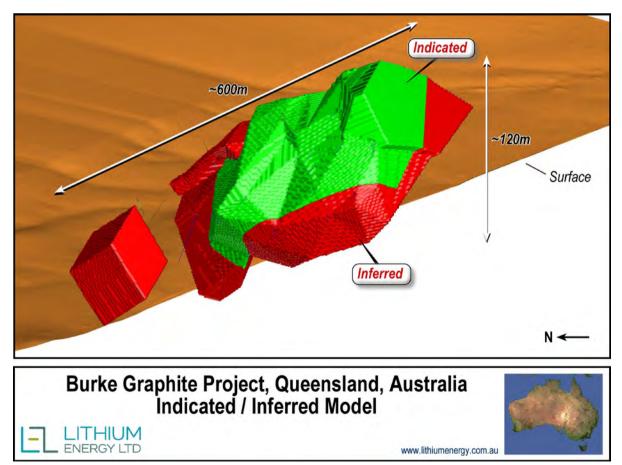


Figure 13: 3D Model of Burke Deposit - JORC Indicated and Inferred Mineral Resources

Grade	Inci	remental	Mineral Resource	Cut-Off	Cumulative	Total Mir	neral Resource
Range TGC%	Tonnage t	TGC %	Contained Graphite (t)	Grade TGC%	Tonnage t	TGC %	Contained Graphite (t)
1.5 -> 2.0	1,616	1.77	29	1.5	9,284,717	14.19	1,317,725
2.0 -> 2.5	2,854	2.22	63	2.0	9,283,101	14.19	1,317,697
2.5 -> 3.0	9,489	2.72	258	2.5	9,280,247	14.20	1,317,634
3.0 -> 3.5	28,215	3.22	910	3.0	9,270,758	14.21	1,317,376
3.5 -> 4.0	44,534	3.77	1,678	3.5	9,242,543	14.24	1,316,466
4.0 -> 4.5	59,458	4.24	2,522	4.0	9,198,009	14.29	1,314,788
4.5 -> 5.0	78,921	4.75	3,747	4.5	9,138,551	14.36	1,312,267
5.0 -> 6.0	212,551	5.49	11,675	5.0	9,059,630	14.44	1,308,520
6.0 -> 7.0	300,426	6.55	19,687	6.0	8,847,079	14.66	1,296,845
7.0 -> 8.0	392,089	7.52	29,488	7.0	8,546,653	14.94	1,277,157
8.0 -> 9.0	496,488	8.53	42,338	8.0	8,154,564	15.30	1,247,669
9.0 -> 10.0	556,562	9.49	52,809	9.0	7,658,076	15.74	1,205,331
10.0 -> 11.0	543,521	10.51	57,103	10.0	7,101,514	16.23	1,152,522
11.0 -> 12.0	618,747	11.49	71,111	11.0	6,557,993	16.70	1,095,419
12.0 -> 13.0	587,090	12.49	73,347	12.0	5,939,246	17.25	1,024,308
13.0 -> 14.0	556,033	13.51	75,095	13.0	5,352,156	17.77	950,961
14.0 -> 15.0	530,771	14.51	76,992	14.0	4,796,123	18.26	875,866
15.0 -> 16.0	441,777	15.49	68,413	15.0	4,265,352	18.73	798,875
16.0 -> 17.0	491,195	16.51	81,079	16.0	3,823,575	19.10	730,461
17.0 -> 18.0	632,147	17.55	110,928	17.0	3,332,380	19.49	649,382
18.0 -> 19.0	803,255	18.52	148,750	18.0	2,700,233	19.94	538,454
19.0 -> 20.0	921,424	19.48	179,525	19.0	1,896,978	20.54	389,704
20.0 -> 22.5	790,143	20.97	165,668	20.0	975,554	21.54	210,178
22.5 -> 25.0	150,324	23.64	35,532	22.5	185,411	24.01	44,510
25.0 -> 27.5	35,087	25.59	8,978	25.0	35,087	25.59	8,978

#### Table 7 : Burke Deposit Total Mineral Resource Estimates at Different Cut-Off Grades

For information on the upgraded Mineral Resource Estimate for the Burke Deposit, refer to the Company's ASX Announcement dated: 5 April 2023: Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence.

#### **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).<sup>16</sup>

The results from this drilling programme was used to increase the size of and upgrade the Burke Deposit from a JORC Inferred Mineral Resource to a higher standard JORC Indicated Mineral Resource category (as referred to above). Core samples were also recovered from the diamond holes for an extensive metallurgical and Purified Spherical Graphite (**PSG**) testwork and development programme (referred to below).

<sup>16</sup> Refer LEL ASX Announcements dated 22 February 2023: Update – Infill Drilling Results at Burke Graphite Deposit and 16 February 2023: Significant High Grade Graphite Intercepts Continue at Burke Graphite Deposit

Figure 16 shows the location of RC Holes BGRC010 to BGRC038 (with Holes BGRC015 to BGRC034 identified, where assays have been announced) and the location of cross-section lines (encompassing BGRC015 to BGRC034) on the south-east corner of the Burke Tenement (with the results of the 2018 Electro Magnetic (**EM**) surveys<sup>17</sup> also shown):

- Cross-Section Line 7831170mN, for Holes BGRC015 to BGRC018<sup>18</sup> (shown in Figure 17);
- Cross-Section Line 7831125mN, for Holes BGRC019 to BGRC021<sup>18</sup> (shown in Figure 18);
- Cross-Section Line 7831020mN, for Holes BGRC022 to BGRC027<sup>18</sup> (shown in Figure 19);
- Cross-Section Line 7830975mN, for Holes BGRC028 to BGRC031<sup>19</sup> (shown in Figure 20); and
- Cross-Section Line 7830930mN, for Holes BGRC032 to BGRC034<sup>19</sup> (shown in Figure 21).



Figure 14: RC Drill Rig at the Burke Tenement







Figure 15: Photos of Burke Graphite Recovered from Core Drilling, January 2023

<sup>17</sup> Refer SRK ASX Announcement dated 26 June 2018: Burke Graphite Project – New Target Area Identified from Ground Electro-Magnetic Surveys

<sup>18</sup> Refer LEL ASX Announcement dated 22 February 2023: Update – Infill Drilling Results at Burke Graphite Deposit

<sup>19</sup> Refer LEL ASX Announcement dated 16 February 2023: Significant High Grade Graphite Intercepts Continue at Burke Graphite Deposit

ENERGY LTD

For further details on the drilling results in relation to Holes BGRC010 to BGRC038, refer to the Company's ASX Announcements dated:

- 22 February 2023: Update Infill Drilling Results at Burke Graphite Deposit
- 16 February 2023: Significant High Grade Graphite Intercepts Continue at Burke Graphite Deposit

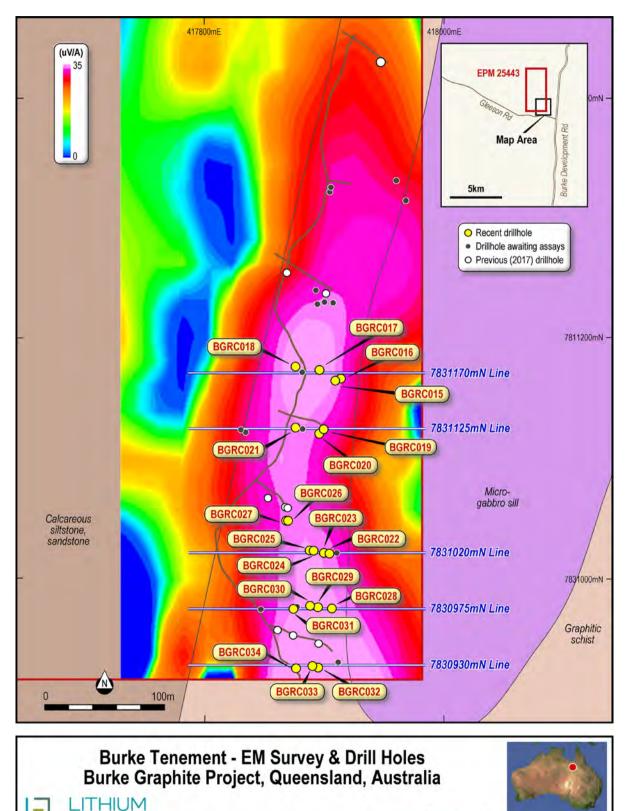


Figure 16: Location of Drillholes on Burke Tenement

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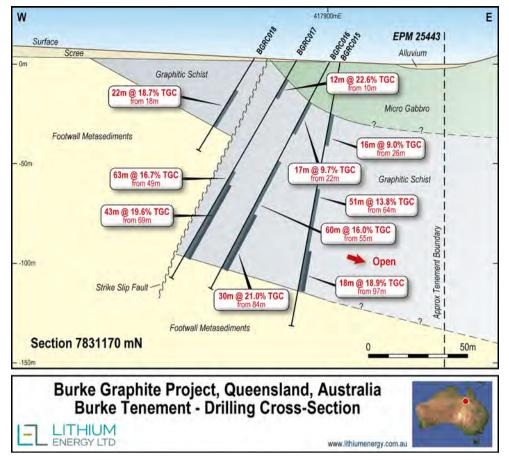


Figure 17: Cross-Section Line (7831170mN) Showing Holes BGRC015 to BGRC018 on Burke Tenement

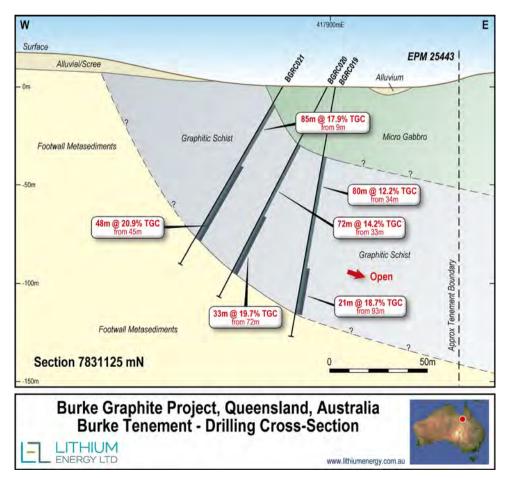


Figure 18: Cross-Section Line (7831125mN) Showing Holes BGRC019 to BGRC021 on Burke Tenement

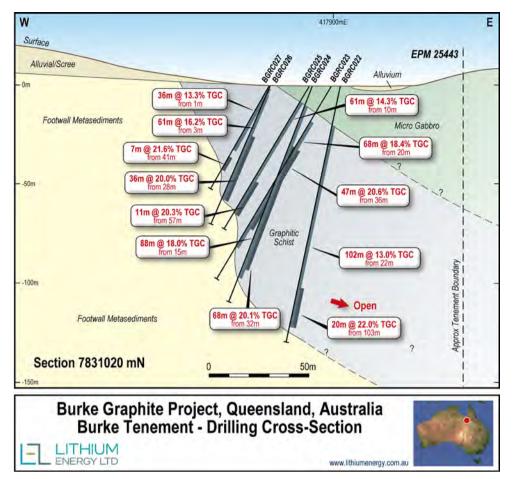


Figure 19: Cross-Section Line (7831020mN) Showing Holes BGRC022 to BGRC027 on Burke Tenement

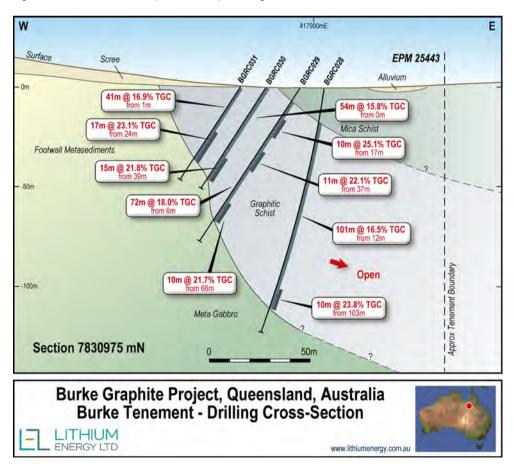


Figure 20: Cross-Section Line (7830975mN) Showing Holes BGRC028 to BGRC031 on Burke Tenement

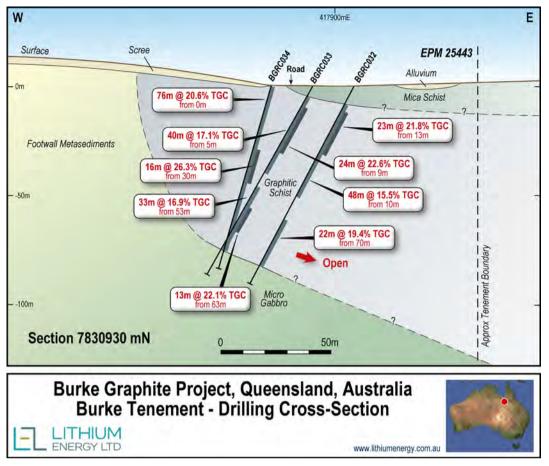


Figure 21: Cross-Section Line (7830930mN) Showing Holes BGRC032 to BGRC034 on Burke Tenement

#### **Corella Tenement - Maiden Resource Drilling Programme**

Lithium Energy has recently completed a maiden drilling programme at its highly prospective Corella Tenement (EPM 25696), comprising 16 RC holes totalling 1,594 metres.

An extensive rock chip sampling programme was also completed across Corella at the same time to build a better resource model for graphite mineralisation within the tenement. This current exploration programme builds upon the previous surface sampling<sup>20</sup> and Electro Magnetic (**EM**) surveys<sup>21</sup> that indicated multiple occurrences of high grade graphite in the north-east corner of the Corella Tenement (refer also Figure 23).

The RC drilling and surface rock-chip samples have been submitted for assaying, with the results pending receipt and review/analysis by the Company (expected to be finalised in May 2023). Lithium Energy will, after receipt of assay results for this drilling programme, endeavour to delineate a maiden JORC Inferred Mineral Resource estimate for Corella.

The delineation of a maiden JORC inferred Resource at Corella is considered to be important in the overall development strategy for the Burke Graphite Project. The Corella Tenement is located only 150km from the Burke Tenement, where the recently completed infill drilling programme delivered a significant increase in the size and confidence of the Burke Deposit. Should a significant maiden JORC Mineral Resource of graphite be defined at Corella, it offers the potential to add to the overall graphite inventory of the Burke Project and thus provide the Company with expanded development options that could include graphite sourced from Corella.

<sup>20</sup> Refer Strike Resources Limited (ASX:SRK) ASX announcement dated 21 April 2017: Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland

<sup>21</sup> Refer SRK ASX Announcement dated 26 June 2018: Burke Graphite Project – New Target Area Identified from Ground Electro-Magnetic Surveys



Figure 22: RC Drill Rig Mobilising on Corella Tenement

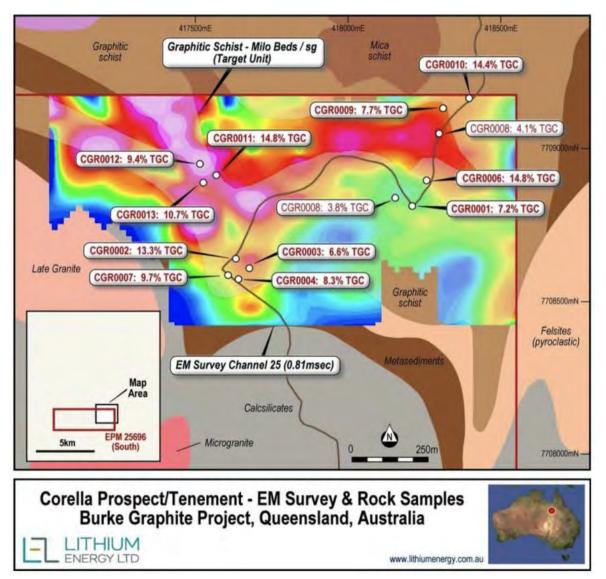


Figure 23 - Surface Sampling (2017) and EM Survey (2018) - Corella Tenement

#### Burke Graphite Metallurgical Testwork Programme in China

The Beijing General Research Institute for Mining and Metallurgy Technology Group (**BGRIMM**) in China is undertaking a comprehensive flowsheet development metallurgical testwork programme on a ~one tonne representative sample of the Burke Deposit, to assess all aspects of the Burke graphite and develop an optimised flake concentrator flowsheet, including:

- Assessing and optimising flotation conditions;
- Conducting open circuit flowsheet development testwork to optimise the concentrator flowsheet;
- Conducting closed loop circuit testwork to optimise flowsheet recovery.

BGRIMM is a 'Tier 1' research and design institute in mining and metallurgy, providing technical and engineering services in mineral resource development and the utilisation of advanced material technologies, and has extensive experience in developing processing solutions for graphite.

BGRIMM will also utilise their in-house Pilot Plant to produce bulk flake concentrate which will be used as test feedstock material for a planned Anode development testwork programme to define and optimise the metallurgical and process conditions to produce Purified Spherical Graphite (PSG) suitable for use in Lithium-ion battery anodes.

These testwork results will be used as key inputs to a planned Engineering Study for the manufacture of PSG from graphite sourced from the Company's Burke Project.





Figure 24: Photos of Metallurgical Test work Undertaken by BGRIMM

#### 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 (as part of the proposed Engineering Study referred to above) 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 to purify and spheronise graphite sourced from the Burke Deposit for use as anode material in lithium-ion batteries.<sup>22</sup>

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

<sup>22</sup> Refer LEL ASX Market Announcement dated 21 October 2021: Lithium Energy to Pursue Downstream Graphite Processing Opportunity at Emerging Townsville Battery Hub

#### Leichhardt Crossing EPM 28715

Lithium Energy recently received the grant of (~97km<sup>2</sup>) Leichhardt Crossing EPM 28715 in April 2023 (**Leichhardt Crossing Tenement**), located on freehold land approximately 25 kilometres north north-west of the Burke Tenement, adjacent to (and straddling, in areas) the Leichhardt River.

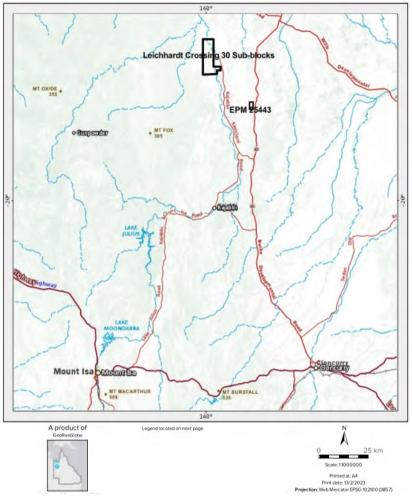


Figure 25: Leichhardt Crossing Tenement Location in North Central Queensland

Lithium Energy's primary target for the Leichhardt Crossing Tenement is limestone (outcropping above the oil shale in the Cretaceous Toolebuc Formation), which is required for potential graphite processing operations in relation to the Burke/Corella Tenements.

The Company proposes a detailed evaluation of previous data followed by geological mapping (including via drone radiometric surveys) and sampling and drilling or excavations (as appropriate). An existing borrow pit will also be investigated for a source of suitable limestone and as a potential site for a quarry.

Lithium Energy notes that the tenement lies within the Mt Isa Province which is host to several world class base metal deposits; the Company believes that the Oil Shale unit in the Toolebuc Formation is also prospective for Vanadium exploration. Accordingly, the Company will also pursue (where appropriate) other targets identified from its initial exploration programme on the tenement.

#### **Burke Graphite Project Background**

The Burke Graphite Project comprises key EPM 25443 (the **Burke Tenement**) and EPM 25696 (the **Corella Tenement**) being 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 26).

The Burke Tenement is located ~125km north of Cloncurry adjacent to the Mt Dromedary Graphite Project held by Novonix Limited (ASX: NVX). The Corella Tenement is located ~40km west of Cloncurry near the Flinders Highway that links Mt Isa to Townsville. The Leichhardt Crossing Tenement (EPM 28715) is located ~25km north north-west of the Burke Tenement.

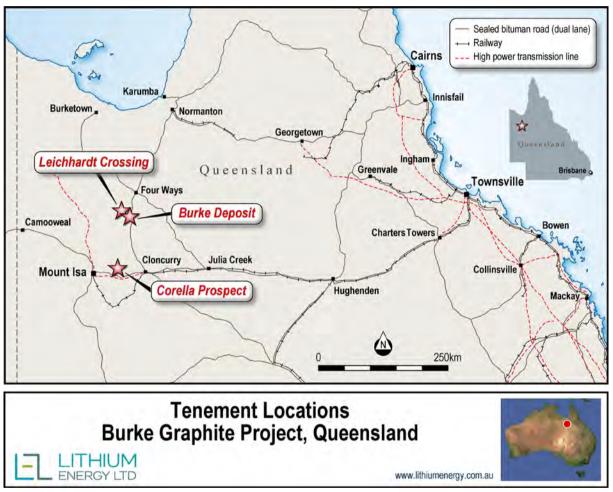


Figure 26: Burke Graphite Project Tenement Locations in North Central Queensland

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 Lithiumion batteries where graphite is the largest single component by weight. In addition to the exceptionally high-grade nature of its graphite, 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%** can be produced using a standard flotation process.<sup>23</sup>
- Contains graphite from which Graphene Nano Platelets (GNP) have been successfully extracted direct from the Burke Deposit via Electrochemical Exfoliation (ECE).<sup>24</sup> 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.
- Has highly encouraging preliminary results from CSIRO testwork (to determine its suitability for use as a battery anode material), including achieving a purity of 99.94% TGC, which closely compares to typical industry requirements of +99.95% TGC for lithium-ion battery anode material.<sup>25</sup>
- Is favourably located with well-developed transport infrastructure and logistics and 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.

<sup>23</sup> 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

<sup>24</sup> Refer SRK ASX announcement dated 21 April 2017: Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland

<sup>25</sup> Refer LEL ASX Announcement dated 1 December 2022: Burke Graphite Shows Excellent Lithium-Ion Battery Anode Potential

# 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) <sup>26</sup>	-	10,000,000	10,000,000
Broker Options (\$0.30, 4 May 2024) <sup>27</sup>	-	4,000,000	4,000,000
Executive Options (\$1.39, 29 Nov 2024) <sup>28</sup>	-	3,500,000	3,500,000
SIP Options (\$1.595, 15 February 2025) <sup>29</sup>	-	100,000	100,000
Broker Options (\$1.50, 20 September 2025) <sup>30</sup>	-	750,000	750,000
Executive Options (\$1.06, 4 October 2025) <sup>31</sup>	-	17,500,000	17,500,000
SIP Options (\$1.32, 30 November 2025) <sup>32</sup>	-	400,000	400,000

#### **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)

#### Summary of Expenditure Incurred<sup>33</sup>

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:

	Expenditure Incurred / Cash Outflow		
	Operating	Investing	Total
For Quarter ending 31 March 2023	\$'000		
Exploration and evaluation expenditure and tenements	-	3,265	3,265
Personnel expenses	291	-	291
Occupancy expenses	5	-	5
Corporate expenses	25	-	25
Administration expenses	19	-	19
Total Expenditure	340	3,265	3,605

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

<sup>26</sup> 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

<sup>27</sup> 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

<sup>28</sup> 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

<sup>29</sup> Refer LEL Announcement dated 18 February 2022: Notification regarding unquoted securities – LEL

<sup>30</sup> Refer LEL Announcement dated 21 September 2022: Notification regarding unquoted securities – LEL

<sup>31</sup> 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

<sup>32</sup> Refer LEL Announcement dated 5 December 2022: Notification regarding unquoted securities – LEL

<sup>33</sup> Per ASX Listing Rule 5.3.1

#### Reconciliation of Expenditure to Utilisation of Funds Statement in Prospectus<sup>34</sup>

	Proposed Utilisation of Funds Disclosed in Prospectus) <sup>35</sup>	Actual Expenditure (Cash Outflows) to 31 Mar 2023 \$'000	Variance (Actual less Proposed)
Exploration and Evaluation Expenditure	5,235	5,987	752
Cash Consideration Payments to Solaroz Owner	1,750	5,994 <sup>36</sup>	4,244
Expenses of the IPO	765	829	64
Balance: Corporate Overheads/Working Capital	1,250	1,932	682
Total	9,000	14,742	5,742

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 March 2023 and as reported in the Company's Appendix 5B Cash Flow Reports for the quarters ending 30 June 2021 to 31 March 2023.

The Company notes that:

- \$9 million (before costs) was raised (at \$0.20 per share) under the Prospectus in May 2021; and
- \$15 million (before costs) was raised (at \$1.00 per share) under a share placement in September 2022.<sup>37</sup>

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 Parties<sup>38</sup>

During the quarter, Lithium Energy paid a total of \$127k 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.

<sup>34</sup> Per ASX Listing Rule 5.3.4

<sup>35</sup> Refer Section 6.1 (Utilisation of Funds) of the Company's Prospectus (dated 30 March 2021)

<sup>36</sup> Refer LEL ASX Announcement dated 31 October 2022: Early Exercise of Option to Acquire Solaroz Lithium Brine Project Concessions

<sup>37</sup> Refer LEL Announcement dated 21 September 2022: Application for quotation of securities - LEL

<sup>38</sup> 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)**

Tenement Name	Area (Ha)	Province	File No
Mario Ángel	543	Jujuy	1707-S-2011
Рауо	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)

Tenement No.	Grant Date	<b>Expiry Date</b>	Area (blocks)	Area (km²)
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
Leichhardt Crossing EPM 28715	12/4/2023	11/4/2028	30-sub-blocks	~97

# **JORC MINERAL RESOURCES**

#### Burke Graphite Project (Queensland, Australia)

The Burke Deposit (on the Burke EPM 25443 tenement) has a JORC Code (2012 Edition) compliant Mineral Resource (initially defined in 2017<sup>39</sup> and upgraded in April 2023<sup>40</sup>):

Mineral Resource Category	Weathering State	Resource (Mt)	Total Graphitic Carbon (TGC) (%)	Contained Graphite (kt)
	Weathered	0.2	12.5	30
Indicated Mineral Resource	Primary	4.3	14.8	640
	Sub-total	4.5	14.7	670
	Weathered	0.1	8.1	10
Inferred Mineral Resource	Primary	4.4	14.4	630
	Sub-total	4.5	14.2	640
	Weathered	0.3	11.1	40
Total Indicated and Inferred	Primary	8.7	14.6	1,270
Mineral Resource	Total	9.1	14.4	1,310

Notes:

- Mineral Resource estimates are constrained by the mineralisation solids and reported above a cut-off grade of 5% TGC; Mineral Resources reported on a dry in-situ basis; Totals may differ due to rounding.
- Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.
- For further details, refer to LEL ASX Announcement dated 5 April 2023 entitled "Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence"

(100%)

(100%)

(90%)

<sup>39</sup> 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

<sup>40</sup> Refer LEL ASX Announcement dated 5 April 2023: Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence

## 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:

- 19 April 2023 entitled "Holes 4 and 5 Encounter Significant Intersections of Conductive Brines at Solaroz Lithium Project"
- 14 March 2023 entitled "Further Significant Lithium Discovery Extends Mineralisation at Solaroz Lithium Brine Project"
- 10 March 2023 entitled "Positive Specific Yields and Significant Averaged Lithium Concentrations in SOZDD001 at Solaroz Lithium Brine Project"
- 27 February 2023 entitled "Drilling Continues to Advance at Solaroz Lithium Brine Project"
- 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 (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).

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

The information in this document that relates to Exploration Results in relation to the Leichhardt Crossing Tenement (EPM 28715) within the Burke Graphite Project is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Smith, BSc (Geophysics) (*Sydney*) AIG ASEG, who is a Member AIG. Mr Smith is a Director of the Company (since 18 March 2021). Mr Smith 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 JORC Code (2012). Mr Smith has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Some of 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 Tenement (EPM 25443) within the Burke Graphite Project is extracted from the following ASX market announcement made by Lithium Energy dated:
  - 5 April 2023 entitled "Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence".

The information in the original announcement is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Shaun Searle, who is a Member of AIG. Mr Searle is an employee of Ashmore Advisory Pty Ltd, an independent consultant to Lithium Energy Limited. Mr Searle 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 announcement (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented has 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:
  - 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".
  - 16 October 2017 entitled "Test-work confirms the potential suitability of Burke graphite for lithium-ion battery usage and Graphene production".

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:
    - 22 February 2023 entitled "Update Infill Drilling Results at Burke Graphite Deposit"
    - 16 February 2023 entitled "Significant High Grade Graphite Intercepts Continue at Burke Graphite Deposit"
    - 9 February 2023 entitled "Burke Graphite Deposit Continues to Deliver Exceptional Drilling Results"
    - 3 February 2023 entitled "Multiple Exceptional Drilling Results for Burke Graphite Deposit"
    - 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:
    - 26 June 2018 entitled "Burke Graphite Project New Target Area Identified from Ground Electro-Magnetic Surveys".
    - 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".
    - 16 October 2017 entitled "Test-work confirms the potential suitability of Burke graphite for lithiumion battery usage and Graphene production".
    - 21 June 2017 entitled "Further High-Grade Intersection Encountered at Burke Graphite Project".
    - 13 June 2017 entitled "Extended Intersections of High-Grade Graphite Encountered at Burke Graphite Project".
    - 21 April 2017 entitled "Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland".

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 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.

Rule 5.5

# Appendix 5B Mining Exploration Entity or Oil and Gas Exploration Entity Quarterly Cash Flow Report

	e of entity IUM ENERGY LIMITED (ASX:LEL) and its controlled entities		
ABN	Qu	uarter Ended (c	. ,
94 64	47 135 108	31 Marc	ch 2023
Cor	nsolidated statement of cash flows	Current Quarter Mar-2023 \$A' 000	Year to Date 9 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 (e) administration and corporate costs	- - (291) (49)	- - (521) (414)
1.4 1.5	Dividends received (see note 3) Interest received Interest and other costs of finance paid Income taxes paid Government grants and tax incentives Other (provide details if material)	- 50 - - -	- 129 - - - -
1.9	Net cash from / (used in) operating activities	(290)	(806)
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:(a) entities(b) tenements(c) property, plant and equipment(d) exploration & evaluation(e) investments(f) other non-current assets	- (1) (3,265) - -	- (6,167) (10) (5,468) - -

Со	nsolidated statement of cash flows	Current Quarter Mar-2023 \$A' 000	Year to Date 9 months \$A' 000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	<ul><li>(d) investments</li><li>(e) other non-current assets</li></ul>	-	-
0.0		_	-
2.3 2.4	Cash flows from loans to other entities Dividends received (see note 3)	-	-
2.4	Other (provide details if material)	-	-
2.0			
2.6	Net cash from / (used in) investing activities	(3,266)	(11,645)
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt	-	15,000
	securities)		
	Proceeds from issue of convertible debt securities	-	-
	Proceeds from exercise of options Transaction costs related to issues of equity securities or convertible	- 5	- (1,017)
0.4	debt securities	5	(1,017)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
	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	5	13,983
4.	Net increase / (decrease) in cash and cash equivalents for		
4.1	<b>the period</b> Cash and cash equivalents at beginning of period	11,608	6,672
4.1	Net cash from / (used in) operating activities (item 1.9 above)	(290)	(806)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(3,266)	(11,645)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	5	13,983
4.5	Effect of movement in exchange rates on cash held	(8)	(155)
4.6	Cash and cash equivalents at end of period	8,049	8,049

5.	<b>Reconciliation of cash and cash equivalents</b> 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	999	1,358
5.2	Call deposits	7,050	10,250
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should	8,049	11,608
	equal item 4.6 above)	0,049	11,000

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	(127)
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.	<b>Financing facilities</b> 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.	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)	(290)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(3,265)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(3,555)
8.4	Cash and cash equivalents at quarter end (item 4.6)	8,049
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	8,049
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.26

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 28 April 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