Wednesday, 5 April 2023 ASX Code : LEL

MARKET ANNOUNCEMENT

Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence

SUMMARY

- Recently completed drilling program delivers significant increase in size and confidence in Burke Graphite Deposit from previously announced JORC Mineral Resource.
- Burke Graphite Resource tonnage increases by ~ **50% from 6.3Mt to 9.1Mt**.
- Burke Graphite Resource contained graphite tonnage increases by **30% from 1Mt contained to 1.3Mt** contained Graphite.
- Updated Mineral Resource estimate for the Burke Graphite Project:
  - 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; including **7.1 Mt of Graphite at 16.2% TGC** for 1.1Mt of contained graphite at a 10% TGC cut-off grade.
  - Indicated JORC Mineral Resource of 4.5Mt at 14.7% TGC for 670kt of contained graphite.
  - Inferred JORC Mineral Resource of 4.5Mt at 14.2% TGC for 640kt of contained graphite.
- Increase in the Total Mineral Resource allows the Company to consider enhanced scale of development options.
- Significant upside to further resource expansion as the resource remains open to the north and will provide targets for future resource development drilling programmes.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to announce an upgraded JORC Mineral Resource estimate for its 100% owned Burke Graphite Project on EPM 25443 (**Burke Tenement**) located in Queensland, Australia (**Burke Project**).

Executive Chairman, William Johnson:

> *Our Burke Graphite Project continues to grow in value. The outstanding recent drilling results have led to a substantial increase in the 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.*

The recently completed infill drilling campaign[1] at the Burke Tenement has delivered outstanding results, not only converting a significant portion of the previous Inferred JORC Mineral Resource Estimate (**MRE**) to Indicated status, but also increasing the size of the resource by nearly 50% from **6.3Mt at 16.0%TGC**[2] to **9.1Mt at 14.4%TGC**, of which 4.5Mt has been classified as Indicated Mineral Resource (all at a cut-off grade of 5%). The total graphite inventory of the Burke Graphite Resource has accordingly increased from **1Mt of contained graphite to 1.3Mt**.

Within the Total Mineral Resource, the Company has also outlined **7.1 Mt at 16.2% TGC for 1.1 Mt** of contained graphite.

Burke Tenement – Upgraded Mineral Resource Estimate

Table 1 - Burke April 2023 Mineral Resource Estimate (5% TGC Cut-off Grade)

INDICATED MINERAL RESOURCE			
Type	Tonnage	TGC	Cont. Graphite
	Mt	**%**	**kt**
Weathered	0.2	12.5	30
Primary	4.3	14.8	640
Total	**4.5**	**14.7**	**670**
INFERRED MINERAL RESOURCE			
Type	Tonnage	TGC	Cont. Graphite
	Mt	**%**	**kt**
Weathered	0.1	8.1	10
Primary	4.4	14.4	630
Total	**4.5**	**14.2**	**640**
TOTAL MINERAL RESOURCE			
Type	Tonnage	TGC	Cont. Graphite
	Mt	**%**	**kt**
Weathered	0.3	11.1	40
Primary	8.7	14.6	1,270
Total	**9.1**	**14.4**	**1,310**

Notes:

- *Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.*
- *The Statement of Estimates of Mineral Resources has been compiled by Mr. Shaun Searle who is a Director of Ashmore Advisory and a Member of the AIG. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code (2012).*
- *All Mineral Resources figures reported in the table above represent estimates at April, 2023. 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.*
- *Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).*
- *TGC = total graphitic carbon.*

1 Comprising 29 RC holes (totalling ~2,600m) and 7 diamond core (metallurgical and geotechnical) holes (totalling ~700m); 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

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

In addition to the high-grade nature of the deposit, the Burke Graphite Project 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 conducted by Independent Metallurgical Operations Pty Ltd (**IMO**) have confirmed that a concentrate of purity in excess of 95% can be produced using a standard flotation process. Purification testwork was conducted by the CSIRO, using non-hydrofluoric acid chemical process which achieved purities of 99.94% TGC. Further testwork is currently being conducted[3].

The Burke deposit contains graphite from which Graphene Nano Platelets (**GNP**) have been successfully extracted direct from the Burke Graphite deposit via Electrochemical Exfoliation (**ECE**). 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.

The Burke Graphite Project is located in the relatively safe and mining friendly jurisdiction of Queensland, Australia with well-developed transport infrastructure and logistics nearby and Is potentially amenable to low-cost open-pit mining.

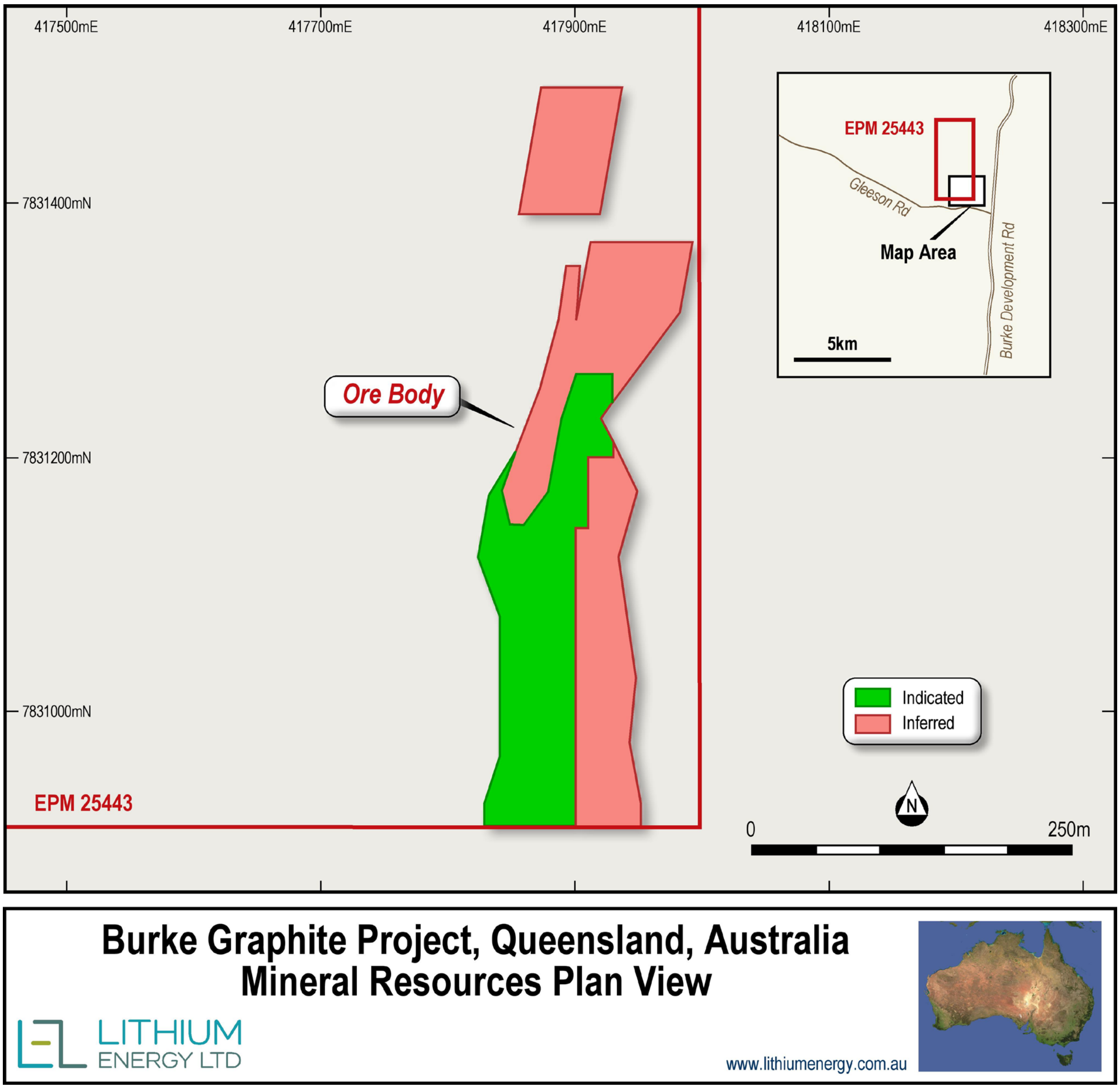

Figure 1: Burke Graphite Project Mineral Resources Plan View

3 Refer LEL ASX Announcement dated 16 March 2023: Burke Graphite Metallurgical Testwork Programme Commences in China

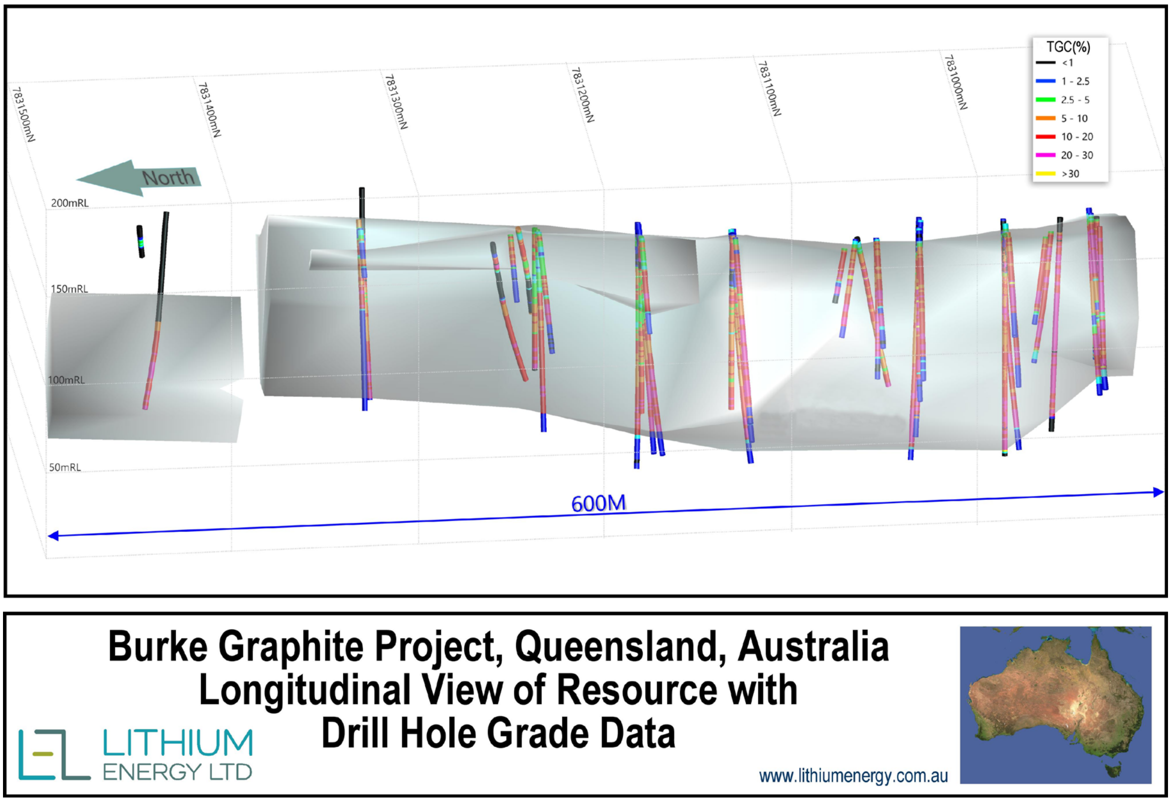

Figure 2: Burke Graphite Project Mineral Resource Longitudinal View

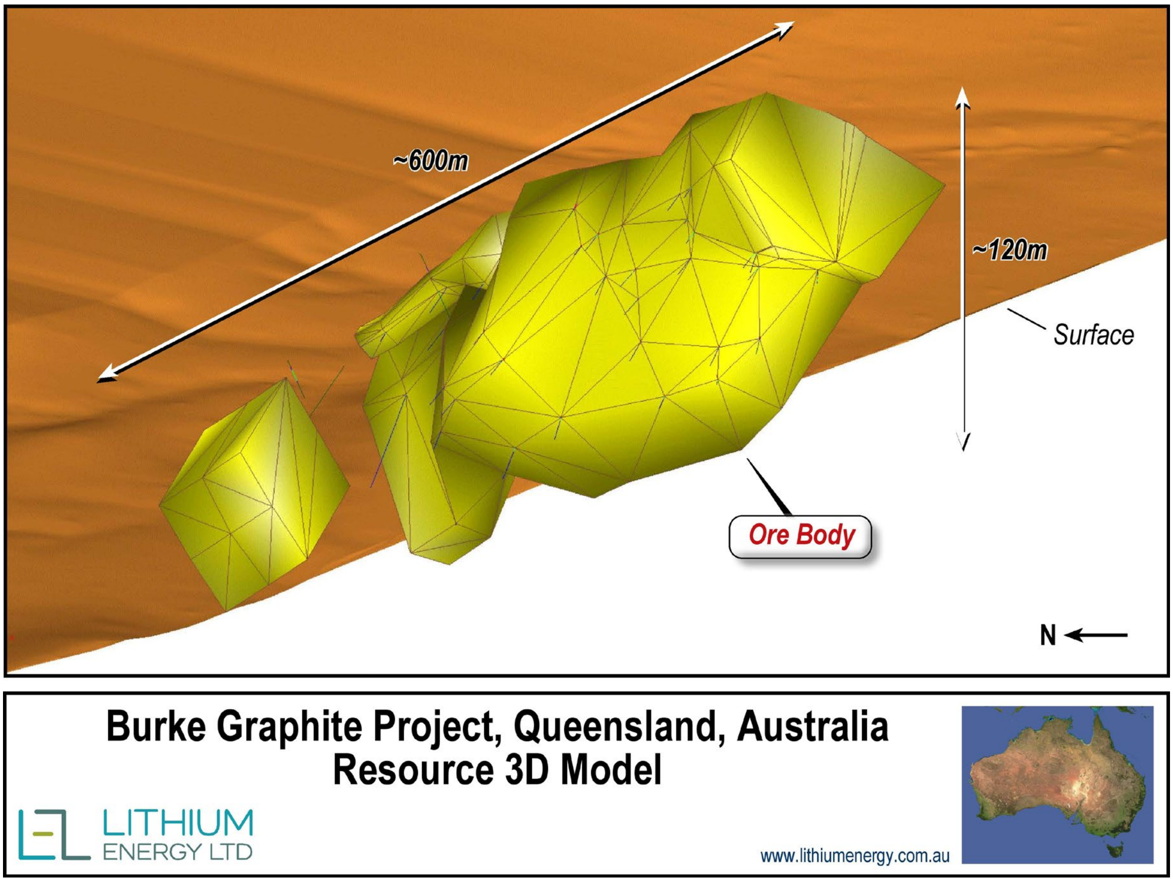

Figure 3: Burke Graphite Project Resource 3D Model

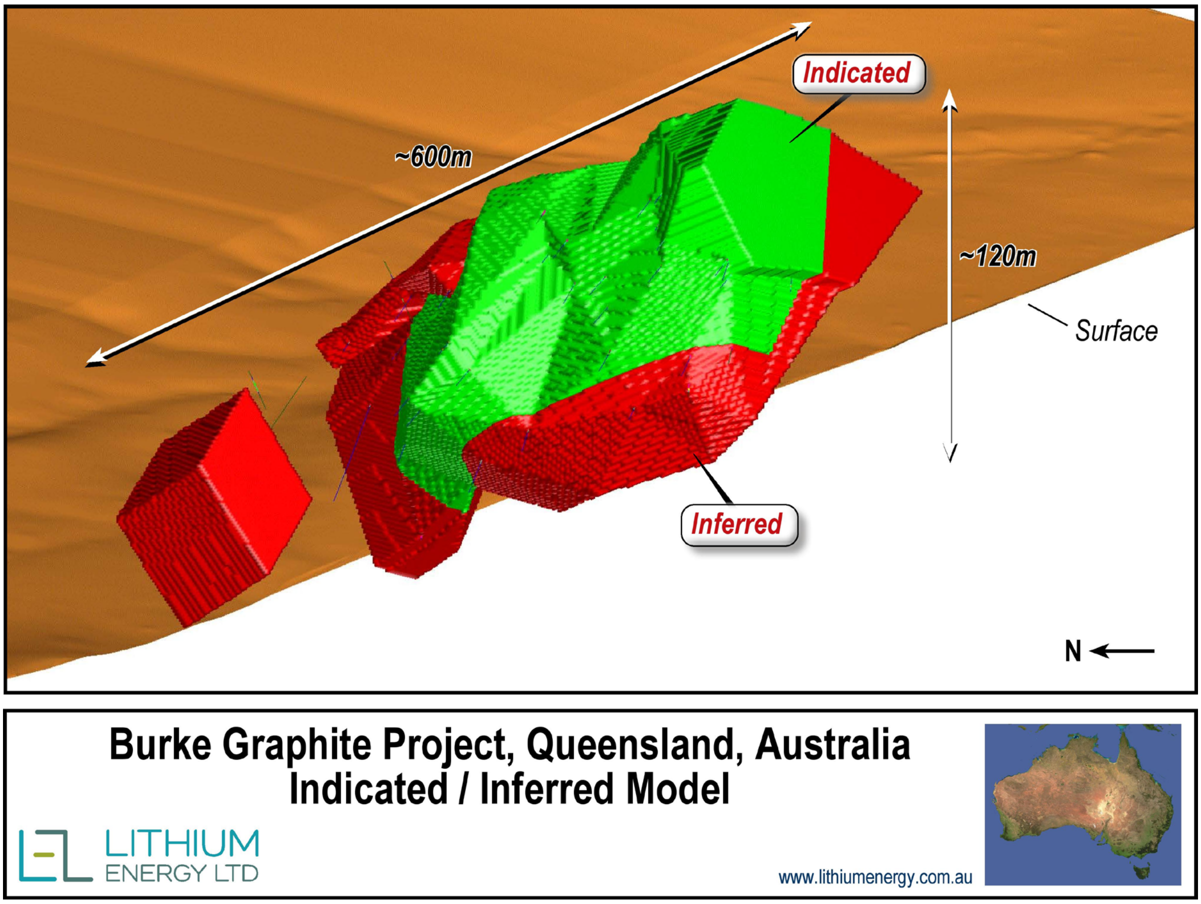

Figure 4: Burke Graphite Project Indicated/Inferred 3D Model

In parallel to this resource upgrade, the Company has commenced a programme of metallurgical test work in China on graphite recovered from the Burke Deposit, the results from which will be used to support an Engineering Study for a proposed anode manufacturing facility based in Queensland to produce high value Purified Spherical Graphite (**PSG**) material for use in lithium-ion batteries.[4]

Burke Graphite Project Background

The Burke Graphite Project comprises 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 5).

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.

4 Refer LEL ASX Announcement dated 16 March 2023: Burke Graphite Metallurgical Testwork Programme Commences in China

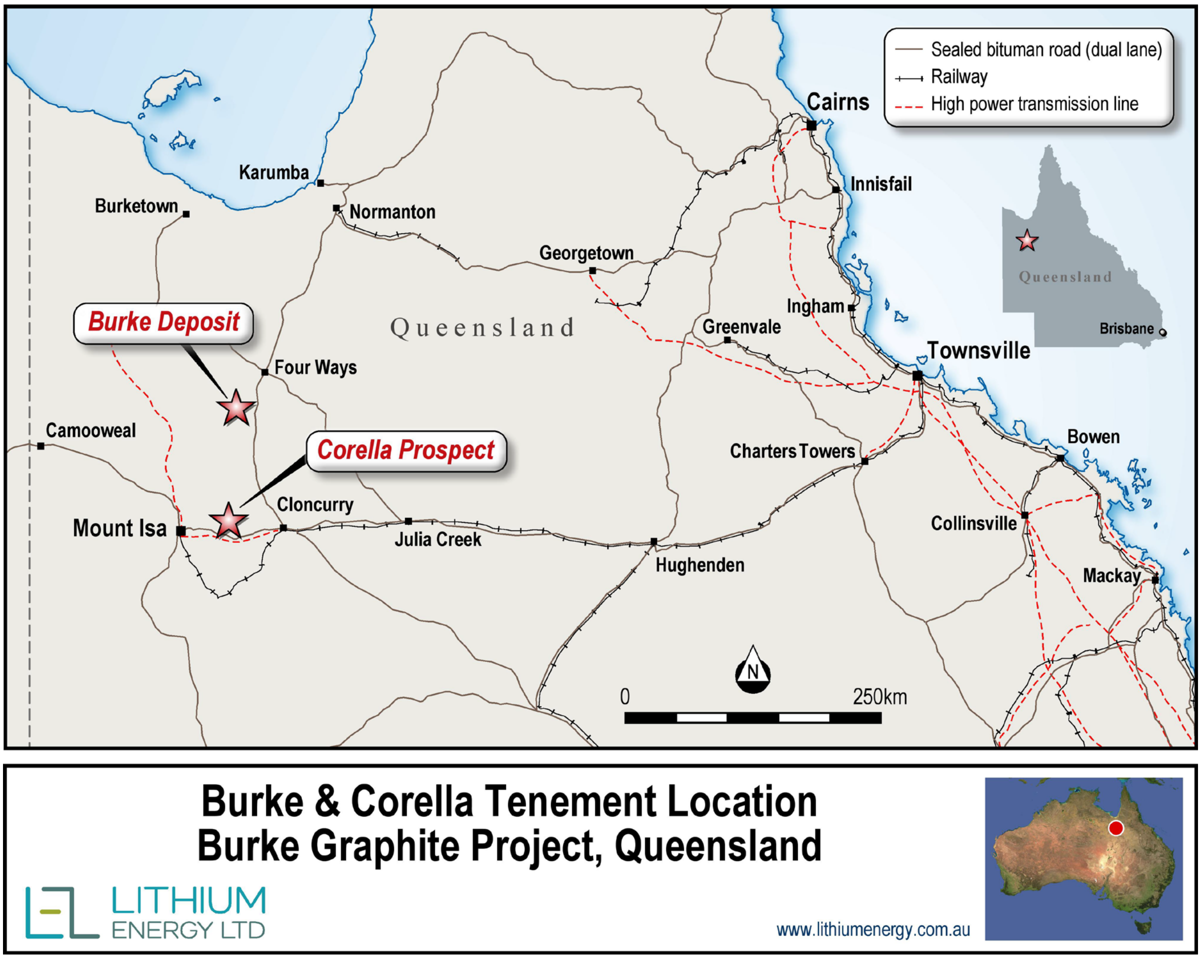

Figure 5: Burke Graphite Project Tenement Locations in North Central Queensland

The Burke Graphite Project is located in the relatively safe and mining friendly jurisdiction of Queensland, Australia with well-developed transport infrastructure and logistics nearby and is potentially amenable to low cost open-pit mining.

Geology and Geological Interpretation

The Burke Graphite Project (Lithium Energy 100%) is located in the Cloncurry region in North Central Queensland, where there is access to well-developed transport infrastructure with local airports at Mt Isa, and Cloncurry, and railway lines from Cloncurry directly to the port in Townsville. The Project is hosted by a mapped graphitic schist as a sub-unit of the Corella Formation, within the Mary Kathleen Group and is of Proterozoic age. The graphitic schists within the Burke Minerals EPM 25443, are intruded by the Black Mountain (1,685-1,640Ma) gabbro, and sills, with subsequent metamorphism to amphibolite grade during the Isan Orogeny 1,600-1,580Ma. The style of mineralisation is crystalline graphite within graphitic schists.

Sampling and Sub-Sampling Techniques

For diamond drilling, HQ and PQ triple tube diamond core was selected as the optimum sampling method for drilling the graphite mineralised zones at the Burke Graphite Project, on the basis of maximising recovery of graphite, as the method minimises disturbance to core, limiting potential losses in drilling water. Drill core was oriented with a Reflex Act III orientation tool. DD holes were sampled at 1m intervals or to geological contacts. Core was cut in half with a core saw.

For reverse circulation (**RC**) drilling, holes were sampled at 1m intervals with a rig mounted combined cyclone and sample splitter unit. The cyclone collected a 75% bulk sample in a big calico bag and a 25% sample in a small calico bag. RC drilling was 5 ¼ inch in diameter.

Drilling Techniques

For diamond drilling, DDH1 Drilling undertook the diamond drilling programme and supplied a UDR650 multi-purpose track mounted rig.

For RC drilling, DDH1 Drilling undertook the RC drilling programme and supplied a UDR650 multi-purpose track mounted rig. A larger diameter RC hammer was used to drill an initial pre-collar of 4m in the soil-colluvium profile, which was then cased off using PVC pipe to avoid unconsolidated material falling behind the drill rods.

Classification Criteria

The Burke Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced RC and DD drilling of less than 50m by 25m, and where the continuity and predictability of the lode positions was good. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 50m by 25m, where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.

Sample Analysis Method

One-metre intervals of quarter-split drill core and RC drill chips were submitted into Intertek sample preparation laboratory in Townsville. Geochemical analysis was subsequently performed at Intertek laboratory in Perth. Samples were analysed for TGC (%) by Intertek method C73/CSA and for TC (%) by Intertek method CSA01. Sulphur was assayed on drill core by Intertek method FP1/OM.

Estimation Methodology

The mineralisation was constrained by wireframes prepared using a nominal 2.5% TGC cut-off grade, plus geological logging. Following a review of the population histograms and log probability plots and noting the low coefficient of variation statistics, it was determined that the application of high-grade cuts was not warranted.

The block model parent block dimensions used were 12.5m NS by 5m EW by 5m vertical with sub-cells of 3.125m by 0.625m by 0.625m. The parent block size dimension was selected on the results obtained from KNA that suggested this was the optimal block size for the dataset. The Mineral Resource block model was created and estimated in Surpac using Ordinary Kriging (**OK**) grade interpolation. An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography. Up to three passes were used for each domain. First pass had a range of 50m, with a minimum of 10 samples. For the second pass, the range was extended to 100m, with a minimum of 6 samples. For the third pass, the range was extended to 200m, with a minimum of 2 samples. A maximum of 20 samples was used for all passes, with a maximum of 4 samples per hole.

A total of 144 bulk density measurements were taken on core samples collected from diamond holes drilled at the deposit using the dry weight / wet weight technique. Bulk densities were assigned averages based on lithology and weathering. Values for the mineralisation assigned in the block were 2.25t/m3 for weathered material and 2.55t/m3 for fresh material. Average waste densities were assigned based on lithology and weathering from measurements.

Cut-off Grade

The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 5% total graphitic carbon (**TGC**).

Table 2 - Burke Graphite Project Mineral Resource Estimate

Grade Range	Incremental Resource			Cut-off Grade	Cumulative Resource		
TGC%	Tonnage t	TGC %	Contained Graphite (t)	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

Mining and Metallurgical Methods and Parameters

It is assumed that the Burke deposit can be mined using open pit techniques.

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 conducted by Independent Metallurgical Operations Pty Ltd (**IMO**) have confirmed that a concentrate of purity in excess of 95% TGC can be produced using a standard flotation process.

Purification testwork was conducted by the CSIRO, using non-hydrofluoric acid chemical process which achieved purities of 99.94% TGC.

The Burke deposit contains graphite from which Graphene Nano Platelets (**GNP**) have been successfully extracted direct from the Burke Graphite deposit via Electrochemical Exfoliation (**ECE**). 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. Further testwork is currently being conducted[5].

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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5 Refer LEL ASX Announcement dated 16 March 2023: Burke Graphite Metallurgical Testwork Programme Commences in China

ABOUT LITHIUM ENERGY LIMITED (ASX:LEL)

Lithium Energy Limited is an ASX listed battery minerals company which is developing its flagship Solaroz Lithium Brine Project in Argentina and the Burke Graphite Project in Queensland. The Solaroz Lithium Project (LEL:90%) comprises 12,000 hectares of highly prospective lithium mineral concessions located strategically within the Salar de Olaroz Basin in South America's "Lithium Triangle" in north-west Argentina. The Solaroz Lithium Project is directly adjacent to or principally surrounded by mineral concessions being developed into production by Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC). The Burke Graphite Project (LEL:100%) contains a high grade graphite deposit and presents an opportunity to participate in the anticipated growth in demand for graphite and graphite related products.

JORC CODE (2012) COMPETENT PERSON STATEMENTS

The information in this document that relates to the April 2023 Mineral Resources Estimate for the Burke Tenement (EPM 25443) is based on information compiled by Mr Shaun Searle, who is a Member of the Australasian Institute of Geoscientists (**AIG**). Mr Searle is an employee of Ashmore Advisory Pty Ltd, an independent consultant to Lithium Energy Limited. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves' (**JORC Code (2012)**). Mr Searle consents to the inclusion in this document of the matters based on this 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 the November 2017 Mineral Resource Estimate for the Burke Tenement 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 and Mr Louw are both former employees 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 the Australasian 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 JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information (pertaining to the November 2017 Mineral Resource Estimate) included in the original market announcement. 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 Tenement 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:

- 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 from 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:

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

The information in the original announcements is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Peter Smith (BSc (Geophysics) (Sydney) AIG ASEG). Mr Smith is a Member of AIG, a consultant to Strike and also a Director of the Company (since 18 March 2021). Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements (referred to above).

FORWARD LOOKING STATEMENTS

This document contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Lithium Energy, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Lithium Energy and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.

Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. Lithium Energy believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Lithium Energy does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.

ANNEXURE A

JORC CODE (2012 EDITION)
CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA
FOR EXPLORATION RESULTS

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Sampling Methodology – Diamond Drill Core: detailed geochemical sampling was routinely conducted on a 1-metre interval basis of Quarter-Split Triple Tube HQ drill core collected from the Burke Graphite Project. • The HQ and PQ triple tube drill core was initially split 50% using a diamond core saw cutting machine. The half-core was then split 50% into quarter-core, again using a manual core saw. The quarter-split core was routinely submitted for geochemical analysis. The remaining quarter-split core is being retained initially as a visual reference. • Samples were analysed for %TGC by Intertek method C73/CSA and for %TC by Intertek method CSA01. Sulphur was assayed on drill core by Intertek method FP1/OM. • The remaining Half-Split Core was used as a metallurgical sample. • Selective Petrological sampling of some lithological units identified in drill core was undertaken. These petrology samples are by necessity a small sample but were selected on the basis of being "typical" of the lithological unit from which they were collected. • Sampling Methodology – Reverse Circulation: sampling of the RC drilling was done via a Cyclone with splitter unit attached to the drill rig, with samples taken every 1m. • Samples were analysed for %TGC by Intertek method C73/CSA and for %TC by Intertek method CSA01. Sulphur was assayed on drill core by Intertek method FP1/OM.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond Drill Core: DDH1 Drilling undertook the diamond drilling programme and supplied a UDR650 multi-purpose track mounted rig. • HQ and PQ Triple Tube diamond core was selected as the optimum sampling method for drilling the graphite mineralised zones at the Burke Graphite Project, on the basis of maximising recovery of graphite, as the method minimises disturbance to core, limiting potential losses in drilling water. • Drill core was oriented with a Reflex Act III orientation tool.

Criteria	JORC Code explanation	Commentary
		• Reverse Circulation: DDH1 Drilling undertook the reverse circulation (RC) drilling programme and supplied a UDR650 multi-purpose track mounted rig. A larger diameter RC hammer was used to drill an initial pre-collar of 4m in the soil-colluvium profile, which was then cased off using PVC pipe to avoid unconsolidated material falling behind the drill rods. • A combined Cyclone and Sample Splitter unit was fitted to the side of the drill rig. The Cyclone collected a 75% bulk sample in a big calico bag and a 25% sample in a small calico bag.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Diamond Drilling: Diamond Drill Core recovery was routinely recorded every drill run (core barrel of 3m), with overall recovery of > 92.5% achieved for the drillhole. • RC Drilling: Recovery from the Graphitic Schist zone was 100%. • No relationship exists between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Logging Drill Core: Core was initially cleaned to remove drill mud and greases. • The core was then orientated using "Top of Core" marks from the Reflex orientation tool, marked into 1m intervals and the core recovery recorded. The core was then photographed using high-resolution digital camera and then geologically logged. • Geological logging of Drill Core was routinely undertaken on a systematic one-metre interval basis, recording the following geological data: 1. Core Recovery 2. Rock Lithology 3. Colour 4. Minerals 5. Texture 6. Hardness 7. Minerology 8. Oxidation 9. Graphite Content • Geotechnical data was collected, including Rock Quality Designation (RQD), Fracture Density and orientations of structures such as faults, fractures, joints, foliation, bedding, veins recorded. • The Specific Gravity was collected using an Archimedes Principle water displacement device. • The core was then split into one half and then into 2x quarters using a manual core saw. One ¼ split core was used for geochemical analysis and the other ¼ split core used for bulk Variability metallurgical testing.

Criteria	JORC Code explanation	Commentary
		• The core was then stored in a secured container in Mt Isa. • Logging – Reverse Circulation Drilling: Geological logging of reverse circulation drill chips was routinely undertaken for each 1-metre interval using similar procedures to core logging (described above). • Visual record samples were collected from the large bulk sample and contents placed into a 20-compartment plastic tray. Each chip tray was photographed using a high-resolution digital camera. • The logging is of a detailed nature and of sufficient detail to support the current reporting of a Mineral Resource.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• One-metre intervals of quarter-split drill core and RC drill chips were submitted into an Intertek sample preparation laboratory in Townsville, Queensland. Geochemical analysis was subsequently performed at an Intertek laboratory in Perth, Western Australia. • Samples were analysed for %TGC by Intertek method C73/CSA and for %TC by Intertek method CSA01. Sulphur was assayed on drill core by Intertek method FP1/OM. • No work has been completed to determine if sample size is appropriate to the grain size of the material being sampled, with grain size of the graphite being determined post drilling by combination of metallurgical analysis.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Geochemical Analysis: One-metre intervals of Quarter-Split Drill Core and RC Drill Chips were submitted into Intertek sample preparation laboratory in Townsville. Geochemical analysis was subsequently performed at Intertek laboratory in Perth. • The laboratory inserted its own standards, Certified Reference Material (CRM) plus blanks and completed its own QAQC. Whilst company standards, duplicates and blanks were routinely inserted every 10th sample. • No geophysical methods or hand-held XRF units have been used for determination of grades in the Mineral Resource.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections were visually field verified by company geologists and Shaun Searle of Ashmore during the 2023 site visit. • The QA/QC protocols adopted for Burke Graphite drilling programme involved routinely inserting a Certified Graphite Reference Standard (7 different Standards used), duplicates or Blank sample into the tag book number sequence every 10 samples.

Criteria	JORC Code explanation	Commentary
		• The QA/QC sample density is considered to be more than adequate and is very robust. Additional QA/QC controls were also provided by internal laboratory repeats and standards. • Laboratory performance and all reported analytical results was statistically evaluated using QA/QC monitoring software. All Certified Reference Materials reported within 1 Standard Deviation of the Certified value. • No adjustments have been made to the assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• M.H. Lodewyk Pty Ltd licensed surveyors of Mt Isa were contracted to accurately survey each drillhole collar to sub-metre accuracy, using a Differential Positioning System (DGPS) instrument, in the MGA Zone 54 projection. • Downhole surveys were routinely collected every 18m, using a Reflex Gyro after completion of the hole, with surveying carried out both going into the hole (inside of rods), and also coming out of the hole. Results were averaged to determine the final drillhole deviation information.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data was routinely collected on a continuous one-metre interval basis. Samples were collected at one-metre intervals down each hole. • Samples were composited to 1m intervals prior to estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drill Hole Orientation: Drill holes were designed to intersect graphite mineralisation at perpendicular to strike observed in outcrop. • Core Orientation: Core orientation was routinely undertaken during drilling using a Reflex ACT III tool. The unit is attached to the top of the core inner tube barrel and initialised. The unit is removed and the orientation marked on the Top of Core using a coloured paint marker or chinagraph pencil. • No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected by company consultants, retaining chain of custody until delivery to laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Shaun Searle of Ashmore reviewed drilling and sampling procedures during the 2023 site visit and found that all procedures and practices conform to industry standards.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• Exploration Permit for Minerals (EPM) No. 25443 "Mt Dromedary" (Burke Tenement) was lodged with the Queensland Government Department of Mines and Energy on 2 December 2013. The tenement was granted on 4 September 2014 to Burke Minerals Pty Ltd (BMPL), for an initial period of five years, which was renewed for a further 5 years in October 2019 (expiring on or about 4 September 2024). Lithium Energy Limited (ASX:LEL) (LEL) is the ultimate parent company of BMPL. • The tenement is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Mt Dromedary graphite occurrences were first identified by Bill Bowes in the 1970's. Mr Bowes was the manager of the nearby Coolullah Station. A few small pits were excavated and no further work was carried out. • The Mt Dromedary area was explored by Nord Resources (Pacific) Pty Ltd (EPM 6961) from 1991-1999, Nord collected numerous rock chips and submitted them for petrological and preliminary metallurgical appraisal by Peter Stitt and Associates. The preliminary flotation studies were encouraging and indicated 60-70% flake graphite (>75um size), whilst the floatation techniques utilised failed to achieve suitable recoveries. • CRAE Exploration entered into a JV with Nord focusing on Copper exploration, and also did further rock chip sampling and trenching. CRAE's internal Advanced Technical Development division did a brief petrographical review which indicated the samples were predominately < 75um. Based on this advice exploration activity by CRAE for Graphite ceased.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Mt Dromedary graphite project on EPM25443 was identified by previous exploration dating back to the 1970's, and is hosted by a mapped graphitic schist (Qld Dept NRM) as a sub unit of the Corella Formation, within the Mary Kathleen Group and is of Proterozoic age. The graphitic schists within the Burke Minerals EPM 25443, are intruded by the Black Mountain (1,685-1,640Ma) gabbro, and sills, with subsequent metamorphism to amphibolite grade during the Isan Orogeny 1,600-1,580Ma.

Criteria	JORC Code explanation	Commentary
		• The Corella graphite project on EPM 25696 also covers a sequence of mapped graphitic schists within the Corella Formation, which also have been intruded by gabbro dykes and sills, with subsequent metamorphism to amplibolite grade during the Isan Orogeny 1,600-1,580Ma. • At both projects, the style of mineralisation sought is crystalline graphite within the graphitic schists.

Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• All drill hole information in the Burke database has been utilised in the estimation of the Burke Mineral Resource.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results are not being reported. • Not applicable as a Mineral Resource is being reported. • No metal equivalent values are being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Foliation structural data from the borehole televiewer and structural core measurements indicates the graphite mineralisation was intersected orthogonally down-dip and is close to true width. • The graphite schist is relatively undisturbed other than broad folding, offset faulting and the foliation is interpreted to represent original bedding. • Intercept widths are down hole widths.

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All hole collars were surveyed in MGA94 Zone 54 grid using differential GPS. All RC holes were down-hole surveyed with a Reflex Gyro tool. • Exploration results are not being reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions. • Geological observations are included in the report. • Multi-element assay suites have been analysed.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Follow up drilling, metallurgical test work, and mining studies are planned. • There is potential for possible extensions in the strike (to the north) and down dip position to the current mineralisation. • Drill spacing is currently considered adequate for the current level of interrogation of the project.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The data base has been systematically audited by LEL geologists. • All drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the data base a report of the collar, down-hole survey, geology, and assay data are produced. This is then checked by a LEL geologist, and any corrections are completed by the data base manager.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was conducted by Shaun Searle of Ashmore during January 2023. Shaun inspected the deposit area, drill chips and subcrop. During this time, notes and photos were taken. Discussions were held with site personnel regarding drilling and sampling procedures. No major issues were encountered. • A site visit was conducted, therefore not applicable.

Criteria	JORC Code explanation	Commentary
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is considered to be good and is based on visual confirmation in the open pit and within drill hole intersections. • Geochemistry and geological logging has been used to assist identification of lithology and mineralisation. • The Project is hosted by a mapped graphitic schist as a sub unit of the Corella Formation, within the Mary Kathleen Group and is of Proterozoic age. The style of mineralisation is crystalline graphite within graphitic schists. Infill drilling has supported and refined the model and the current interpretation is considered robust. • Observations from the open pit of mineralisation and host rocks; as well as infill drilling, confirm the geometry of the mineralisation. • Infill drilling has confirmed geological and grade continuity.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Burke Mineral Resource area extends over a north-south strike length of 585m (from 7,830,910mN – 7,831,495mN), has a maximum width of 125m (417,825mE – 417,950mE) and includes the 140m vertical interval from 150mRL to 10mRL.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.*	• Using parameters derived from modelled variograms, Ordinary Kriging (“OK”) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Burke Mineral Resource due to the geological control on mineralisation. The extrapolation of the lodes along strike and down-dip has been limited to 50m. Zones of extrapolation are classified as Inferred Mineral Resource. • TGC, TC, S, Al and Si were interpolated into the block model. Further studies are required to determine deleterious elements. • The parent block dimensions used were 12.5m NS by 5m EW by 5m vertical with sub-cells of 3.125m by 0.625m by 0.625m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the dataset. • An orientated ‘ellipsoid’ search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography. Up to three passes were used for each domain. First pass had a range of 50m, with a minimum of 10 samples.

Criteria	JORC Code explanation	Commentary
	• *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	For the second pass, the range was extended to 100m, with a minimum of 6 samples. For the third pass, the range was extended to 200m, with a minimum of 2 samples. A maximum of 20 samples was used for each pass with a maximum of 4 samples per hole. • No assumptions were made on selective mining units. • Correlation analysis was conducted on the domains. • The mineralisation was constrained by wireframes prepared using a nominal 2.5% TGC cut-off grade, plus geological logging. • Statistical analysis was carried out on data from three domains on 1m composite data. Following a review of the population histograms and log probability plots and noting the low coefficient of variation statistics, it was determined that the application of high grade cuts was not warranted. • Validation of the model included detailed visual validation, comparison of composite grades and block grades by northing and elevation and a nearest neighbour check estimate. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 5% TGC. Further geological, geotechnical, engineering and metallurgical studies are recommended to further define the graphite mineralisation.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Ashmore has assumed that the deposit could be mined using open pit mining techniques.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider*	• 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.

Criteria	JORC Code explanation	Commentary
	potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	The flotation tests conducted by Independent Metallurgical Operations Pty Ltd ("IMO") have confirmed that a concentrate of purity in excess of 95% TGC can be produced using a standard flotation process. • Purification testwork was conducted by the CSIRO, using non-hydrofluoric acid chemical process which achieved purities of 99.94% TGC. • The Burke deposit contains graphite from which Graphene Nano Platelets (GNP) have been successfully extracted direct from the Burke Graphite deposit via Electrochemical Exfoliation (ECE). 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. • Further testwork is currently being conducted (refer to ASX release "Burke Graphite Metallurgical Testwork Programme Commences in China", dated 16th March 2023 for further information).
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No assumptions have been made regarding environmental factors. LEL will work to mitigate environmental impacts as a result of any future mining or mineral processing.

Criteria	JORC Code explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A total of 144 density measurements were taken from diamond drill core at the deposit, analysed using the dry weight / wet weight technique. • It is assumed there are minimal void spaces in the rocks within the deposit. • Bulk densities for the oxide mineralisation were assigned in the block model based on the average of the measurements of 2.25t/m^3. Bulk densities for fresh mineralisation assigned in the block model based on the average of the measurements of 2.55t/m^3. Average waste densities were assigned based on lithology and weathering from measurements.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced RC and DD drilling of less than 50m by 25m, and where the continuity and predictability of the lode positions was good. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 50m by 25m, where small isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones. • The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The geometry and continuity has been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. • The Mineral Resource statement relates to global estimates of tonnes and grade.