Tuesday, 28 March 2023 ASX Code : LEL

MARKET ANNOUNCEMENT

Maiden Resource Drilling Programme Underway at Corella Graphite Prospect

SUMMARY

- Maiden drilling programme commences at the Corella Tenement on the Burke Graphite Project in North Central Queensland, comprising ~20 RC (totalling ~2,000 metres) and ~2 diamond core (totalling ~200 metres) holes.
- The objective of this programme is to delineate a maiden JORC Mineral Resource for Corella to add to the existing significant graphite resource inventory of the Company.
- The drilling programme will also provide additional graphite material for metallurgical and anode test work that has already commenced from Graphite recovered from the Burke Deposit (located at the Burke Tenement).

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to provide an exploration update in relation to its highly prospective Corella Graphite Prospect (on the EPM 25696 tenement) located in Queensland, Australia (**Corella**), which is part of the Company's 100%-owned Burke Graphite Project (**Burke Project**).

The Company has commenced a maiden drilling programme at Corella, to test the extent of graphite mineralisation (identified through previous surface sampling[1] and Electro Magnetic (**EM**) surveys[2]) with the objective of delineating a significant maiden JORC Inferred Mineral Resource.

The Corella drilling programme will comprise a combination of ~20 reverse circulation (**RC**) holes (totalling ~2,000 metres to a maximum depth of ~90 metres) and ~2 diamond core holes (totalling ~200 metres to maximum depths of ~100 metres).

The delineation of a maiden JORC inferred Resource at Corella is considered to be important in the overall development strategy of the Company's Burke Graphite Project. The Corella Tenement is located only 150km from the Burke Tenement (EPM 25443), where a large JORC Inferred Mineral Resource of **6.3 million tonnes @ 16.0% Total Graphitic Carbon (TGC)** (**Burke Deposit**) has already been defined[3].

1 Refer Strike Resources Limited (ASX:SRK) ASX announcement dated 21 April 2017: Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland

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

3 Refer 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

The Company has recently completed an infill drilling campaign[4] at the Burke Tenement and is awaiting finalisation of an upgrade of the Burke Deposit from its current Inferred status to an Indicated level to provide a higher confidence level for its graphite inventory.

In parallel to this resource upgrade, the Company has commenced a programme of metallurgical test work 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.[5]

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.

Executive Chairman, William Johnson:

> *We are very excited to be at Corella now that weather conditions have permitted our drilling programme to commence. Corella holds great promise for us to significantly expand the size of our overall graphite inventory which could then potentially feed into our overall Burke Graphite Project. Our Project and the aim of the Company is to capitalise on the exceptionally high grades of graphite already discovered by the Company to feed into a proposed vertically integrated anode manufacturing facility based in Queensland. We look forward to the drilling results of this maiden programme being received which could add to the world class nature of our existing graphite assets.*

Corella Tenement

The Corella Tenement (EPM 25696) is located ~40km west of Cloncurry and ~150km south of the Burke Tenement (EPM 25443) (refer Figure 2).

All Heritage and Cultural approvals and access permits have been received and DDH1 Drilling, who also completed the recent infill drilling programme at the Burke Tenement, has commenced drilling.

The RC and diamond core drilling will provide assays and samples for supporting resource development and metallurgical testwork.

Photo: Drill Rig Mobilising on Corella Tenement

4 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

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

A ground EM survey[2] and surface sampling[1] programme (that indicated multiple occurrences of high grade graphite of up to 14.8% TGC) in the north-east corner of the Corella Tenement previously identified the potential for significant graphite mineralisation with the survey highlighting an area of approximately 1000m x 500m within which conductive features similar to those corresponding to high-grade graphite occurring at the Burke Tenement were identified (refer Figure 1). This area will be the focus of the current maiden drilling programme.

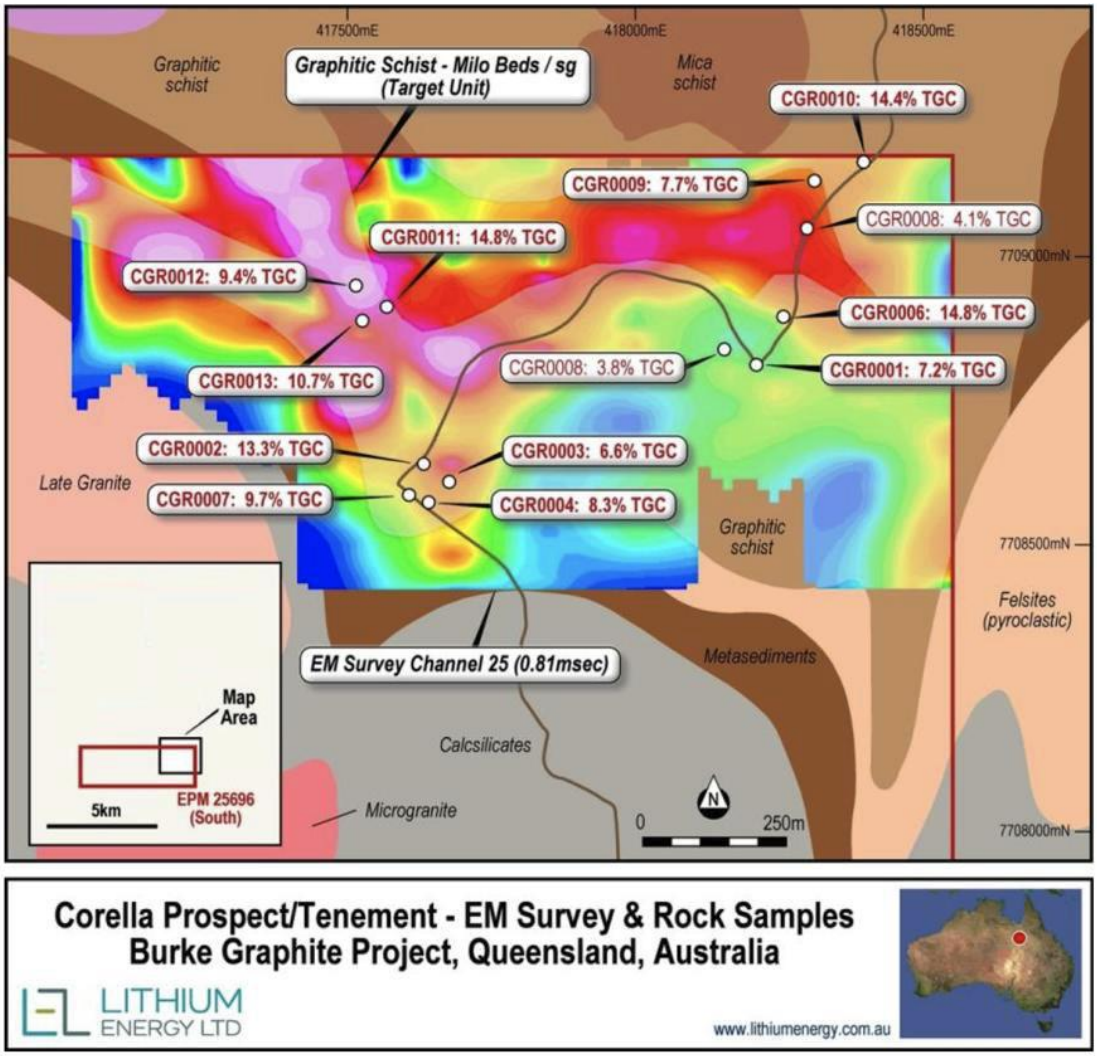

Figure 1 - EM Survey - Corella Prospect, Burke Graphite Project

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 2).

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.

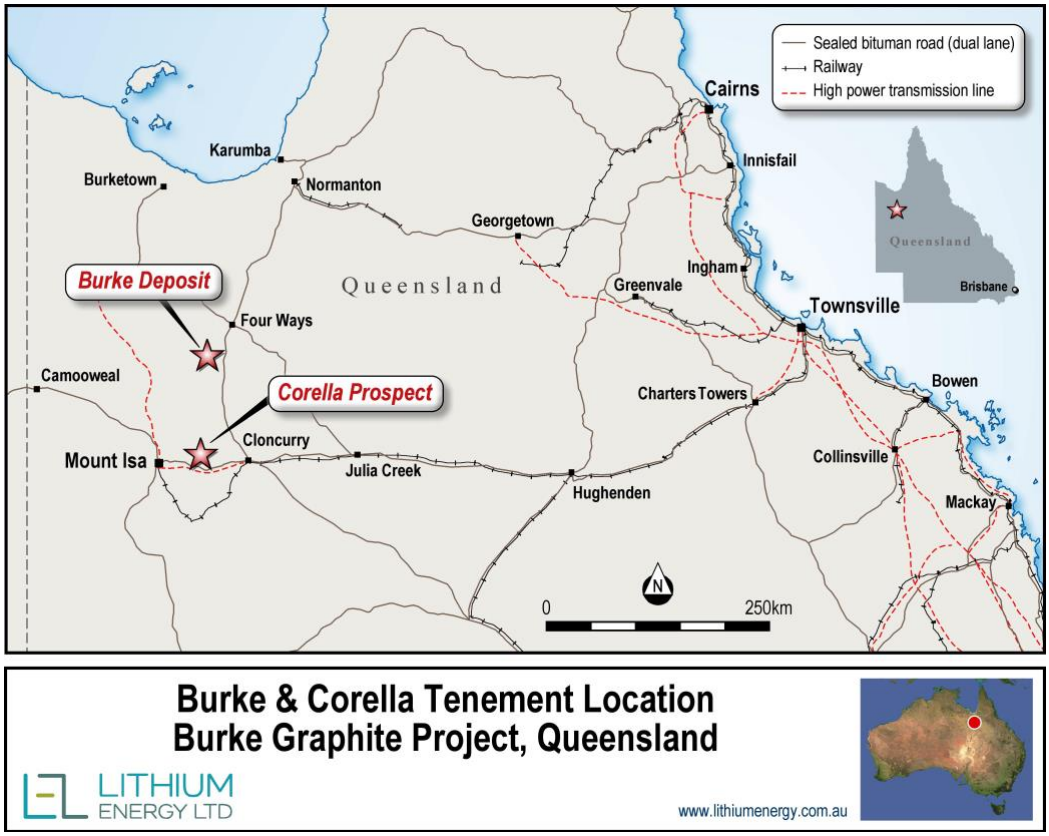

Figure 2: Burke Graphite Project Tenement Locations in North Central Queensland

Burke Deposit

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

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

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

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

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

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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

Peter Smith
Executive Director
T | (08) 9214 9737
E | cosec@lithiumenergy.com.au

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

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 Graphite Project is extracted from the following ASX market announcement made by Strike dated:

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

The information in the original announcement (including the CSA Global MRE Technical Summary in Annexure A) that relates to these Mineral Resources is based on information compiled by Mr Grant Louw under the direction and supervision of Dr Andrew Scogings. Dr Scogings takes overall responsibility for this information. Dr Scogings 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 2012 Edition of the JORC Code. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement (referred to above).

(b) The information in this document that relates to metallurgical test work results in relation to the Burke Graphite Project is extracted from the following ASX market announcements made by Strike dated:

- 16 October 2017 entitled "Test-work confirms the potential suitability of Burke graphite for lithium-ion battery usage and Graphene production".
- 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".

The information in the original announcements that relates to these metallurgical test work matters is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of AusIMM. Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who had been engaged by Strike to provide metallurgical consulting services. Mr Adamini has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements (referred to above).

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

(i) Lithium Energy dated:

- 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.