

MARKET ANNOUNCEMENT

Completion of RC Infill Drilling at Burke Graphite Deposit

SUMMARY

- The Reverse Circulation (RC) component of the drilling programme has been completed at the Burke Deposit in North Central Queensland, with 23 RC holes totalling 2,306 metres drilled.
- Samples from the RC drill holes have been submitted for assaying, with results expected through the course of late January/February 2023.
- Drilling of 6 diamond core (metallurgical and geotechnical) drill holes (totalling ~600 metres) will commence at the Burke Deposit in early-mid January 2023.
- Following completion of drilling at the Burke Deposit, a ~2,200 metre (RC and diamond) drilling programme will commence at the Corella Tenement, to test the extent of graphite mineralisation identified through previously conducted sampling and EM surveys.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to provide an update on its drilling programme at its highly prospective 100%-owned Burke Graphite Project located in Queensland, Australia (**Burke Project**).

The Burke Deposit (on the Burke Tenement (EPM 25443)) currently has a 6.3Mt JORC Inferred Mineral Resource Grade of 16% Total Graphitic Carbon (**TGC**), within which there is a higher-grade component of 2.3Mt @ 20.6% TGC.¹

The objective of the infill drilling programme at the Burke Tenement is to upgrade the Burke Deposit from a JORC Inferred Mineral Resource to a higher standard JORC Indicated Mineral Resource category. The drilling programme comprises a combination of reverse circulation (**RC**), diamond core and geotechnical holes.

DDH1 Drilling has completed the RC component of the drilling programme at the Burke Tenement, with 2,306 metres drilled across 23 holes. Samples have been submitted for assaying, with results expected to be received through the course of late January/February 2023.

1 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





Figure 1: RC Drill Rig at the Burke Tenement

DDH1 will begin the next component of the drilling programme at the Burke Tenement in early-mid January 2023 (subject to weather), comprising diamond core and geotechnical holes totalling ~600 metres across ~6 holes, to maximum depths of ~120 metres.

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

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



Figure 2: Material from RC drill hole at Burke Tenement

After the completion of the drilling programme at the Burke Tenement in January 2023, DDH1 will mobilise to the Corella Tenement (EPM 25696), located ~150km south of the Burke Tenement. .

The drilling programme at the Corella Tenement will test the extent of graphite mineralisation (identified through previous sampling and Electro Magnetic (EM) surveys²) with the objective of delineating a maiden JORC Inferred Mineral Resource.

Approximately 2,000 metres of RC drilling and ~200 metres of diamond drilling is planned at the Corella Tenement, which will provide assays and samples for supporting resource development and metallurgical testwork.

Burke Graphite Project Background

The Burke Graphite Project comprises two granted Exploration Permits for Minerals (**EPM**) totalling approximately 26 square kilometres located in the Cloncurry region in North Central Queensland, where there is access to well-developed transport infrastructure to an airport at Mt Isa (~122km) and a port in Townsville (~783km) (refer Figure 3).

The Burke EPM 25443 tenement (**Burke Tenement**) is located 125km north of Cloncurry adjacent to the Mt Dromedary Graphite Project held by Novonix Limited (ASX: NVX). The Corella EPM 25696 tenement (**Corella Tenement**) is located 40km west of Cloncurry near the Flinders Highway that links Mt Isa to Townsville.

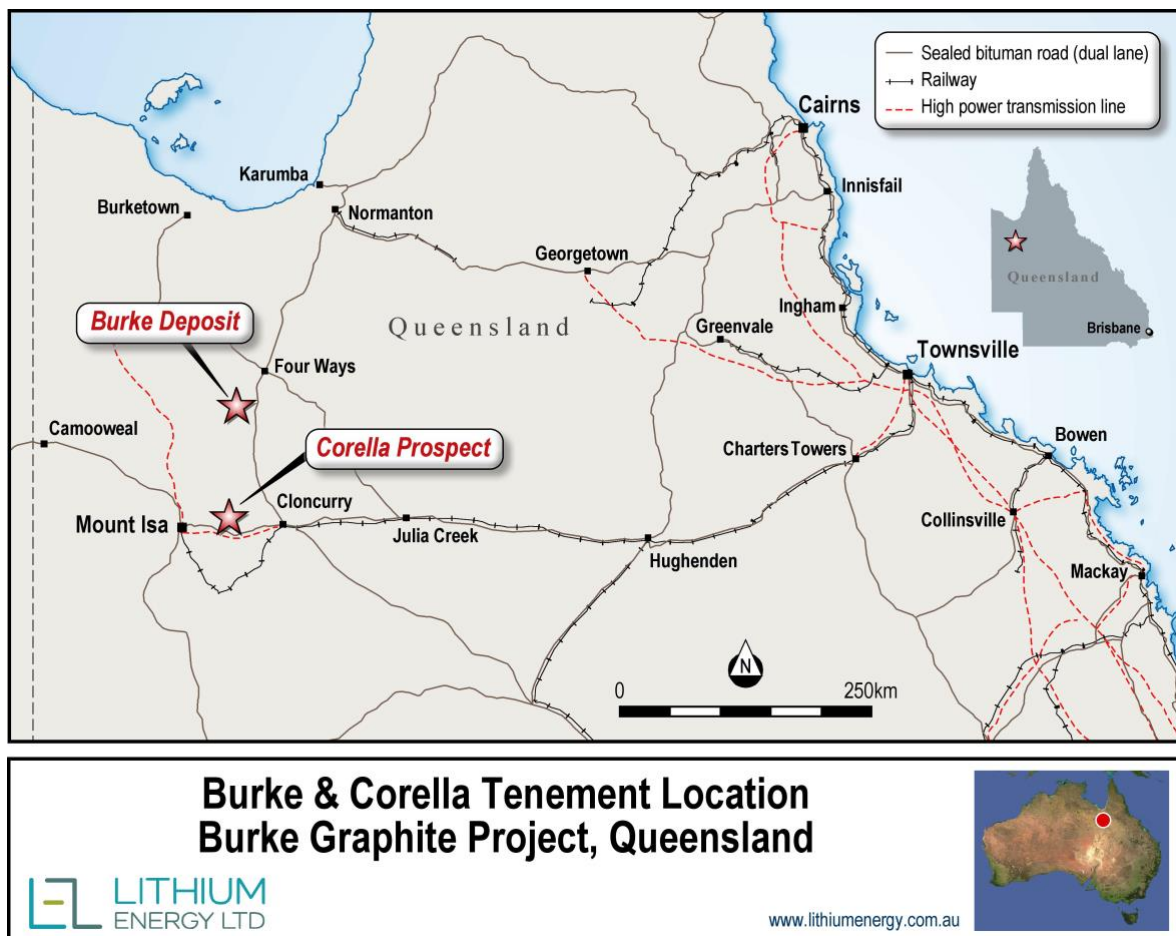


Figure 3: Burke Graphite Project Tenement Locations in North Central Queensland

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

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)

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ABOUT LITHIUM ENERGY LIMITED (ASX:LEL)

Lithium Energy Limited is an ASX listed battery minerals company which is developing its flagship Solaroz Lithium Brine Project in Argentina and the Burke Graphite Project in Queensland. The Solaroz Lithium Project (LEL:90%) comprises 12,000 hectares of highly prospective lithium mineral 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 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:

- 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.