

MARKET ANNOUNCEMENT

Burke Graphite Project - Update

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to provide an update on proposed activities for its Burke Graphite Project (**Burke**) comprising Burke Tenement (EPM 25443) and Corella Tenement (EPM 25696).

The Burke Tenement contains one of the highest-grade graphite deposits globally, with 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 Corella Tenement contains widespread outcropping graphite with a previous electromagnetic 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 have been identified, which now requires follow up drilling to delineate graphite resource size and grade.

As reported in its ASX announcement of 21 October 2021², Lithium Energy is advancing with studies to confirm the commercial viability of establishing a Purified Spherical Graphite (**PSG**) manufacturing operation using its very high grade graphite from the Burke Tenement as a feedstock material, to be potentially located at or near to the North Queensland Townsville Energy Chemicals Hub.

In this regard, Lithium Energy is pleased to report on the current status of a range of activities for Burke as detailed below.

CSIRO Testwork

Test work previously announced by the Company³ to optimise the potential production of battery grade graphite is progressing well. Using a laboratory flotation process, high purity graphite concentrate from previous drill core samples taken from the Burke Tenement is currently being produced. This graphite concentrate will be used by CSIRO to undertake a programme of spheronisation and purification testwork required to demonstrate to potential graphite purchasers the benefits of the natural flake graphite from the Burke Tenement for use in lithium ion batteries. This CSIRO work is being 50% funded by CSIRO through the Kick-Start Program.

This current CSIRO programme of test work is expected to be completed during the first quarter of 2022.

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- 1 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
 - 2 Refer LEL ASX Market Announcement dated 21 October 2021: Lithium Energy to Pursue Downstream Graphite Processing Opportunity at Emerging Townsville Battery Hub
 - 3 Refer LEL ASX Market Announcement dated 27 September 2021: High Grade Burke Graphite to be Optimised for Lithium Battery Application



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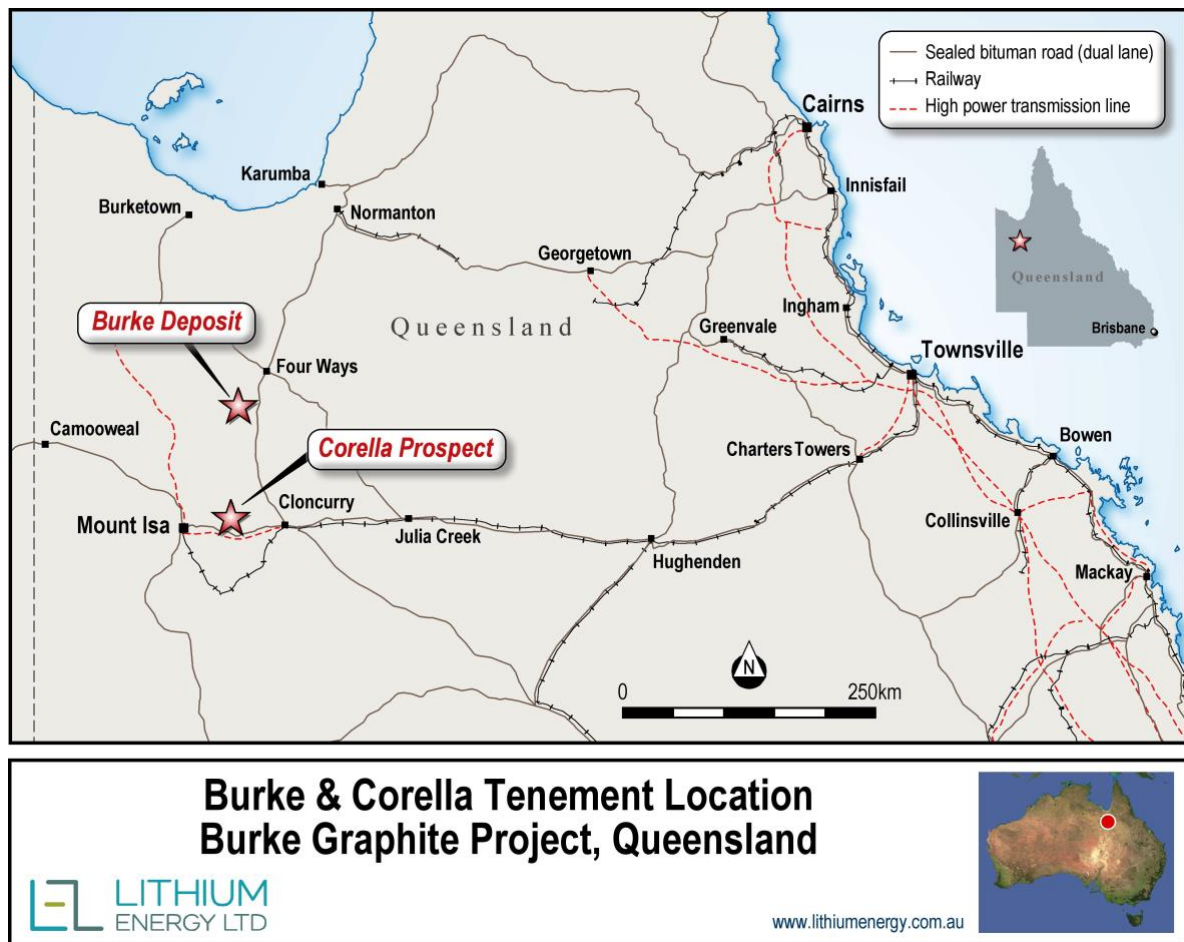
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Drilling at Burke Tenement (EPM 25443)

Lithium Energy has prepared a drilling programme to upgrade part of the JORC Inferred Mineral Resource at its Burke Tenement to a higher standard JORC Indicated Mineral Resource category.

This resource upgrade will facilitate the completion of the planned studies which are being undertaken by the Company to confirm the commercial viability of establishing a PSG manufacturing operation using its very high grade Burke Tenement graphite as feedstock material. In particular, the resource upgrade is required to finalise the annualised production capacity of the proposed manufacturing facility using the Burke Tenement graphite.

The drilling programme is expected to commence in the first quarter of 2022, once necessary access permits and approvals have been received. Lithium Energy expects to drill approximately 2,000 metres across 15 holes, to a maximum depth of 150 metres. The Company is also optimising the drill programme using 3D modelling and pit optimisation studies.



**Burke & Corella Tenement Location
Burke Graphite Project, Queensland**

Figure 1: Burke Graphite Project Tenement Locations in North Central Queensland

Drilling at Corella Tenement (EPM 25696)

In addition to the drilling on the Burke Tenement, Lithium Energy is also planning a drilling programme at the Corella Tenement located approximately 150km south of the Burke Tenement.

A ground Electro Magnetic (EM) survey was completed in June 2018 at the north east corner of the Corella Tenement, covering outcropping and sub-cropping Geological Survey of Queensland mapped Graphitic Schists - the “Milo beds” - within the Corella Formation.⁴

The Milo beds (Graphitic Schist) form a shallow dipping sequence within the Tommy Creek block of the Mt. Isa Inlier. They form part of the Corella Formation which have been intruded by gabbro dykes and sills and with subsequent metamorphism to amphibolite grade during the Isan Orogeny.

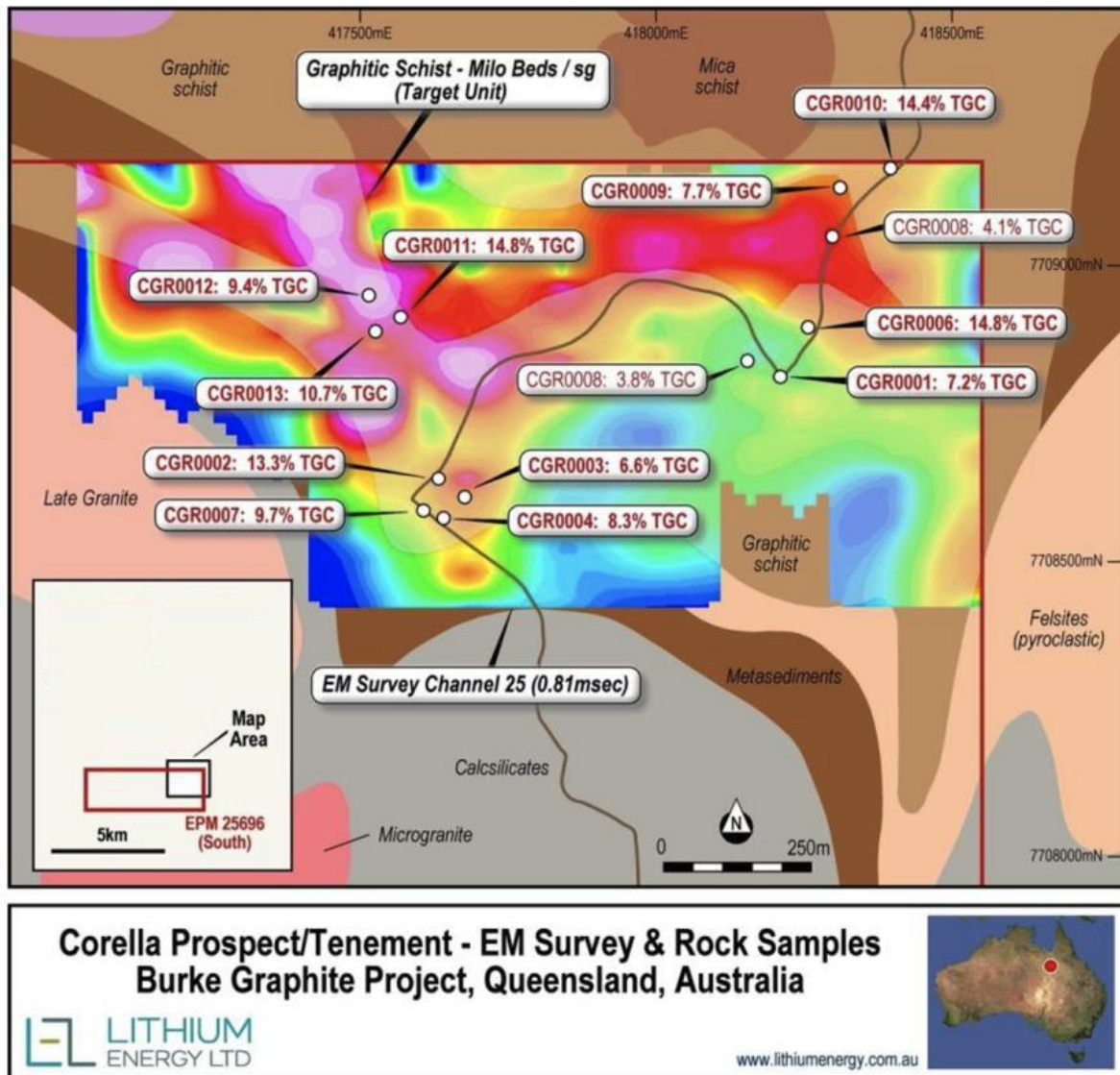


Figure 2 - EM Survey - Corella Prospect, Burke Graphite Project

Graphite grading 5 -10% TGC is widespread throughout the outcropping Milo beds and the EM survey was carried out to identify higher-grade areas of mineralisation and identify future drill targets.

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

The survey highlighted 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.

The conductive features identified at the Corella Tenement appear to be shallow to flat-lying and occur in areas of outcropping and sub-cropping graphite that have rock chips of up to 14.85% TGC⁵.

The drilling programme at the Corella Tenement will be designed to test the extent of graphite mineralisation identified through the previously conducted EM survey. Drilling is again expected to commence in the first quarter of 2022, once necessary access permits and approvals have been received. The programme is expected to comprise 2,000 metres of Reverse Circulation (RC) drilling and may include Metallurgical sampling using Diamond Core drilling.

Studies on Purified Spherical Graphite (PSG) Manufacturing

Lithium Energy has received submissions from a number of engineering companies to assist with the advancement of the studies relating to the establishment of a PSG manufacturing facility using the graphite deposit on the Burke Tenement.

Lithium Energy expects to formally appoint an engineering company to advance these studies, once the drilling on the Burke Tenement is complete and the JORC Mineral Resource is upgraded to a level allowing suitable production targets to be determined.

THE BURKE TENEMENT

The Burke Tenement is located in the Cloncurry region of North Central Queensland, adjacent to the Mt Dromedary graphite deposit held by Novonix Limited (ASX: NVX).

The Burke Tenement contains a defined Inferred Mineral Resource of graphite as follows:

- **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

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

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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 tenements 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 tenements being developed into production by Orocobre Limited (ASX/TSX:ORE) 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. LEL was spun out of Strike Resources Limited (ASX:SRK) via a \$9 million IPO; Strike remains a major (43%) shareholder of the Company.

JORC CODE COMPETENT PERSON'S STATEMENTS

Some of the Competent Persons named below have been previously engaged by Strike Resources Limited (ASX:SRK) (**Strike or SRK**), 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 (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement (referred to above).

- (b) The information in this document that relates to metallurgical test work results in relation to the Burke Graphite Project is extracted from the following ASX market announcements made by Strike dated:
- 16 October 2017 entitled "Test-work confirms the potential suitability of Burke graphite for lithium-ion battery usage and Graphene production".
 - 13 November 2017 entitled "Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest-Grade Natural Graphite Deposits".

The information in the original announcements that relates to these metallurgical test work matters is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of AusIMM. Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who had been engaged by Strike to provide metallurgical consulting services. Mr Adamini has 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 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 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 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 the Company, 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 the Company 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. The Company 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. The Company does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.