

ASX ANNOUNCEMENT

25 September 2025

Acquisition of Mt Dromedary Graphite Project

SUMMARY

- Lithium Energy has acquired 100% of the Mt Dromedary Natural Graphite Project in Queensland from NOVONX for \$2 Million cash.
- The Mt Dromedary Graphite Project is directly adjoining Lithium Energy's Burke Graphite Project and the acquisition has led to the consolidation of a substantial, world class **combined 4.42Mt** inventory of high-grade natural graphite, comprising:
 - **Mt Dromedary Deposit:** Total Indicated and Inferred Mineral Resource of **12.7Mt graphite at 14.5% TGC**, for a total **1.83Mt of contained graphite**;
 - **Burke Deposit:** Total Indicated and Inferred Mineral Resource of **9.1Mt at a grade of 14.4% TGC for 1.31Mt of contained graphite**; and
 - **Corella Graphite Deposit:** Total Inferred Mineral Resource of **13.5Mt at 9.5% TGC for 1.3Mt of contained graphite**.
- The combination of the adjoining Burke and Mt Dromedary high grade graphite deposits creates the potential for significant operational synergies and economies of scale in the development of a vertically-integrated Battery Anode Material (BAM) Manufacturing Facility based in Queensland.
- The +14% TGC average grades of the Burke and Mt Dromedary Deposits are significantly higher than most global peers, with potential for resource expansion as graphite mineralisation is open to the north and south and in between the currently defined Mt Dromedary and Burke Deposits.
- With the acquisition of the Mt Dromedary Project from NOVONIX in place of the previously proposed joint Axon Graphite spin-out and IPO, the Company is reviewing various alternative funding strategies and development pathways for the establishment of a vertically integrated BAM business in Queensland.
- In-fill resource development drilling (comprising RC and diamond core (including metallurgical and geotechnical) holes) proposed for Q4 2025 on the Burke and Mt Dromedary Tenements, with a focus on areas in between the existing Burke and Mt Dromedary Deposits.

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or the **Company**) is pleased to announced that it has completed the acquisition of the high-grade Mt Dromedary Graphite Project in Queensland (**Mt Dromedary**) from NOVONIX Limited (ASX:NVX) (**NOVONIX**) in consideration of \$2 million cash (**Mt Dromedary Acquisition**). Mt Dromedary is located directly adjacent to and is a continuation of the graphite mineralisation within the Lithium Energy's Burke Graphite Deposit.

This Mt Dromedary Acquisition is being undertaken instead of the previously proposed spin-out of the natural graphite assets held by Lithium Energy and NOVONIX via an Initial Public Offering (**IPO**) by Axon Graphite Limited (**Axon Graphite**) (a subsidiary of Lithium Energy), which, in light of prevailing market conditions and following consultation with the Lead Manager, Lithium Energy and NOVONIX determined not to proceed with.¹

¹ Refer LEL Announcements dated LEL Announcement dated 3 April 2024: Merger of Lithium Energy and NOVONIX Natural Graphite Assets and Proposed Axon Graphite Limited Spin-Out and IPO and 31 July 2025: Quarterly Activities and Cash Flow Report – 30 June 2025

By consolidating these adjacent graphite assets, Lithium Energy now holds a substantial, world class inventory of high-grade graphite. Since the Mt Dromedary and Burke Graphite Deposits form part of the same graphite mineralisation zone, there is potential for significant operational synergies and economies of scale arising from the creation of a single, larger scale open-pit mining operation.

Executive Chairman of Lithium Energy, William Johnson:

The consolidation of the adjacent high-quality Burke and Mt Dromedary graphite deposits will create a world-class inventory of high-grade graphite to support the Company’s plans to develop an Australian-based, vertically integrated battery anode material (BAM) business. We expect significant operational synergies and economies of scale will be gained from the consolidation of these adjacent graphite deposits.

Funding for the development of the BAM business was previously contemplated through a spin-out and IPO of the combined Lithium Energy and NOVONIX natural graphite assets, following which the Company would have retained a 22% to 29% shareholding interest (depending upon the quantum of funds raised in the IPO) in the newly listed vehicle, Axon Graphite Limited.

With Lithium Energy now successfully securing a 100% interest in the same combined graphite assets, the Company will now consider a range of potential development pathways and alternative funding strategies for the BAM development.

Burke, Mt Dromedary and Corella Graphite Projects

The Burke and Mt Dromedary Graphite Projects are located ~130km by road north of Cloncurry in North Central Queensland, where there is access to well-developed transport, including airports at Cloncurry and Mount Isa (located ~250km by road from Burke/Mt Dromedary) and a Port in Townsville (located ~783km by road or rail from Cloncurry).

The Corella Graphite Project is located ~40km by road west of Cloncurry and ~170km by road south of the Burke/Mt Dromedary Tenements, adjacent to the Barkly Highway that links Mount Isa to Cloncurry.

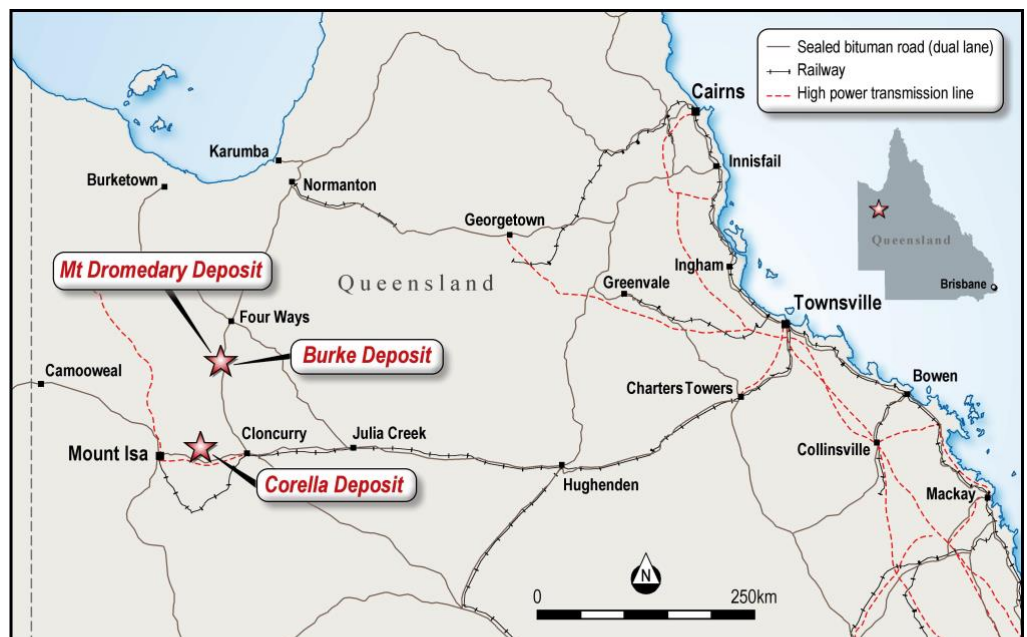
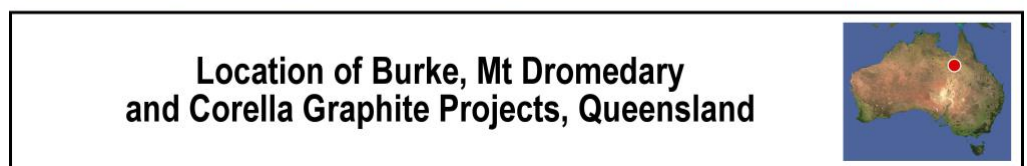


Figure 1: Location of Burke, Mt Dromedary and Corella Graphite Projects in Queensland, Australia



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Figure 2: Mt Dromedary, Queensland

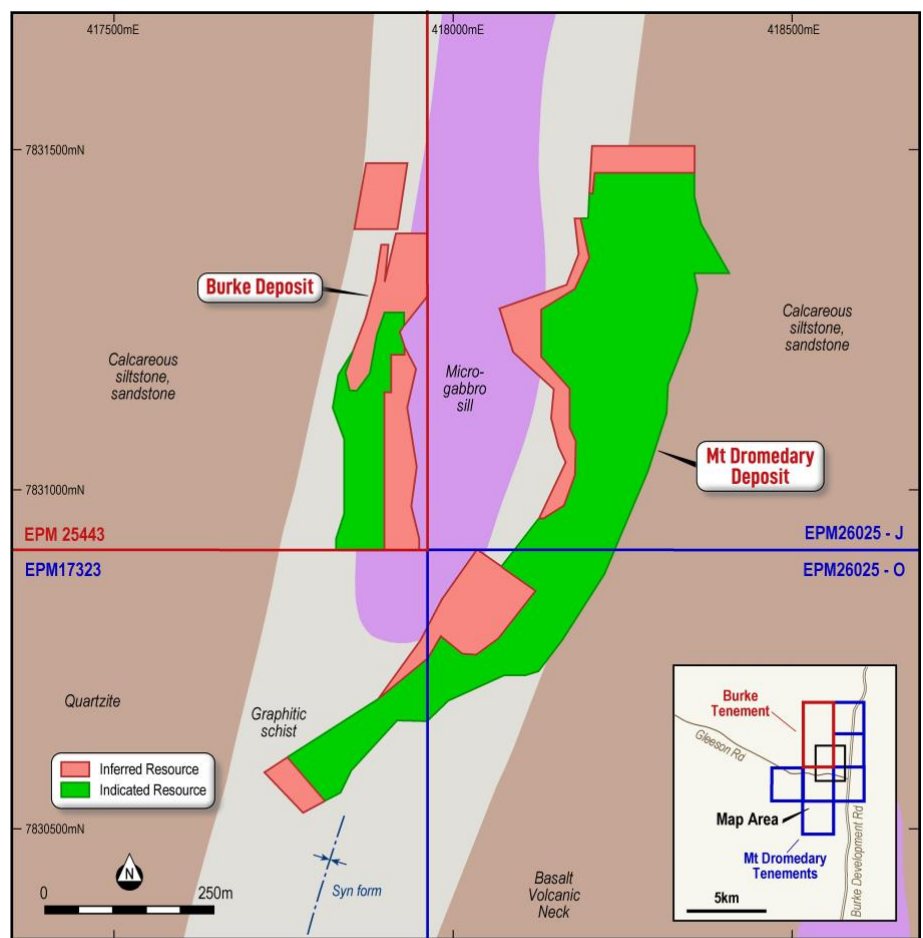
As a result of the Mt Dromedary Acquisition, Lithium Energy will hold a direct 100% interest in three high grade graphite deposits in Queensland with access to key infrastructure, including ports and transport links facilitating potential future export to major international markets (refer Figure 1).

Lithium Energy’s graphite deposits have an initial **combined contained graphite inventory of 4.42Mt** comprising:

- Mt Dromedary Graphite Deposit** - total JORC Indicated and Inferred Graphite Mineral Resource of **12.7Mt graphite at 14.5% Total Graphitic Carbon (TGC)**, for a total **1.83Mt** of contained graphite²;
- Burke Graphite Deposit** - total JORC Indicated and Inferred Mineral Resource of **9.1Mt at 14.4% TGC**, for **1.31Mt** of contained graphite³; and
- Corella Graphite Deposit** – total Inferred Mineral Resource of **13.5Mt at 9.5% TGC**, for **1.28Mt** of contained graphite⁴.

The Burke and Mt Dromedary Deposits comprise resources of graphite with average (>14% TGC) grades significantly higher than most global peers.

Graphite mineralisation is also open to the north and south and in between the currently defined Mt Dromedary and Burke Deposits (refer Figure 3).



Mineral Resources Plan View & Geology Burke & Mt Dromedary Graphite Projects

Figure 3: Burke and Mt Dromedary Deposits - Indicated and Inferred Mineral Resources Plan View and Geology

2 Refer Joint LEL and NVX ASX Announcement dated 10 September 2024: Axon Graphite Limited Update – Mt Dromedary Graphite Mineral Resources Review
 3 Refer LEL ASX Announcement dated 5 April 2023: Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence
 4 Refer LEL ASX Announcement dated 16 June 2023: Maiden Corella Graphite Mineral Resource Delivers Doubling of Graphite Inventory

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Lithium Energy is preparing to undertake in-fill resource development drilling (comprising reverse circulation (RC) and diamond core (including metallurgical and geotechnical) holes) on the Burke and Mt Dromedary Tenements (with a focus on the area between the existing Burke and Mt Dromedary Deposits) to delineate a combined upgraded Mineral Resource for the Burke/Mt Dromedary Deposits.

Further details on the Mt Dromedary Graphite Project (including JORC Mineral Resources and tenement details) are in Annexure B.

Further details on the Burke and Corella Graphite Projects (including JORC Mineral Resources, tenement details and metallurgical and BAM testwork results on the Burke Deposit) are in Annexure C.

Battery Anode Material (BAM) Manufacturing Business – Development Strategy

The acquisition of the adjoining Mt Dromedary Graphite Project which has delivered a significant high grade graphite inventory, allows Lithium Energy to now evaluate the development of a vertically integrated BAM business utilising high-grade graphite from its consolidated graphite deposits as feedstock material to a BAM Facility located in Queensland.

Lithium Energy envisages mining graphite initially from the combined Mt Dromedary/Burke Deposits and producing a +95% TGC graphite flake concentrate at the mine site. The graphite flake concentrate will then be transported to a BAM Facility for processing. The BAM Facility is expected to firstly mechanically shape and spheronise the graphite flakes followed by chemical purification to form spherical purified graphite (SPG), which could be additionally surface coated to produce coated spherical purified graphite (CSPG), which are both high quality BAM products. It is proposed that these SPG/CSPG products will be sold for use in the manufacturing of lithium-ion batteries or battery energy storage solutions.

Further details on the proposed BAM development strategy (including associated work programs) are in Annexure D.

Acquisition of Mt Dromedary Project

Axon Graphite (being a wholly-owned subsidiary of Lithium Energy) has acquired NOVONIX's wholly-owned subsidiary, MD South Tenements Pty Ltd (**MDCo**), in consideration of \$2 million cash pursuant to a Share Sale and Purchase Agreement (dated 24 September 2025). MDCo holds and has contractual interests in the Mt Dromedary Tenements (referred to in Annexure B). The tenements comprising the Burke and Corella Graphite Projects are held by Burke Minerals Pty Ltd (**BMPL**), a wholly-owned subsidiary of Axon Graphite.

Lithium Energy's corporate structure in relation to the ownership of the Burke, Corella and Mt Dromedary Projects is outlined in Annexure A.

Lithium Energy has also repaid \$250k advanced by NOVONIX under an 'IPO Funding Deed' with Axon Graphite, being NOVONIX's contribution towards 50% of the IPO related costs incurred by Axon Graphite.

AUTHORISED FOR RELEASE - FOR FURTHER INFORMATION:

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JORC CODE (2012) COMPETENT PERSONS' STATEMENTS

(a) JORC Code Competent Persons' Statements – Burke Graphite Project (Queensland)

(i) 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 Lithium Energy Limited dated:

- 5 April 2023 entitled "Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence"

The information in the original announcement is based on information compiled by Mr Shaun Searle, a Competent Person who is a Member of the Australian 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 being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the **JORC Code**). 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).

(ii) The information in this document that relates to test work Exploration Results in relation to the Burke Graphite Project is based on information compiled by Mr Graham C. Fyfe, including information extracted from the following ASX announcements made by Lithium Energy dated:

- 11 March 2024 entitled "Exceptional Battery Testing Results Achieved with Burke Spherical Purified Graphite";
- 27 November 2023 entitled "Testwork Results Highlight Exceptional Potential of Burke Graphite as Battery Anode Material"; and
- 24 May 2023 entitled "Excellent Metallurgical Testwork Results at Burke Graphite Project Pave Way for Commencement of PFS".

Mr Fyfe is a Member of AusIMM and was an employee of Lithium Energy (between October 2021 and 5 September 2025). Mr Fyfe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in 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 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).

(iii) The information in this document that relates to other Exploration Results in relation to the Burke Graphite Project is based on information compiled by Mr Peter Smith, including information extracted from the following ASX announcements made by 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"; and
- 3 February 2023 entitled "Multiple Exceptional Drilling Results for Burke Graphite Deposit"

Mr Smith is a Member of AIG and also a Director of Lithium Energy (since 18 March 2021). Mr Smith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in 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 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).

(b) JORC Code Competent Person's Statement – Corella Graphite Project (Queensland)

The information in this document that relates to Mineral Resources in relation to the Corella Graphite Project is extracted from the following ASX market announcements made by Lithium Energy Limited dated:

- 16 June 2023 entitled "Maiden Corella Graphite Mineral Resource Delivers Doubling of Graphite Inventory"

The information in the original announcements is based on information compiled by Mr Shaun Searle, a Competent Person who is a Member of the 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 being undertaken to qualify as a Competent Person as defined in 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).

(c) JORC Code Competent Person's Statement – Mt Dromedary Graphite Project (Queensland)

The information in this document that relates to Mineral Resources in relation to the Mt Dromedary Graphite Project is extracted from the following ASX market announcement made jointly by Lithium Energy Limited and NOVONIX Limited (ASX:NVX) dated:

- 10 September 2024 entitled "Axon Graphite Limited Update – Mt Dromedary Graphite Mineral Resources Review"

The information in the original announcement is based on information compiled by Mr Shaun Searle, a Competent Person who is a Member of the AIG. Mr Searle is an employee of Ashmore Advisory Pty Ltd, an independent consultant to Axon Graphite Limited (a subsidiary of 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 being undertaken to qualify as a Competent Person as defined in 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).

The Lithium Energy ASX market announcements referred to above may be viewed and downloaded from the Company's website: www.lithiumenergy.com.au or the ASX website: www.asx.com.au under ASX code "LEL".

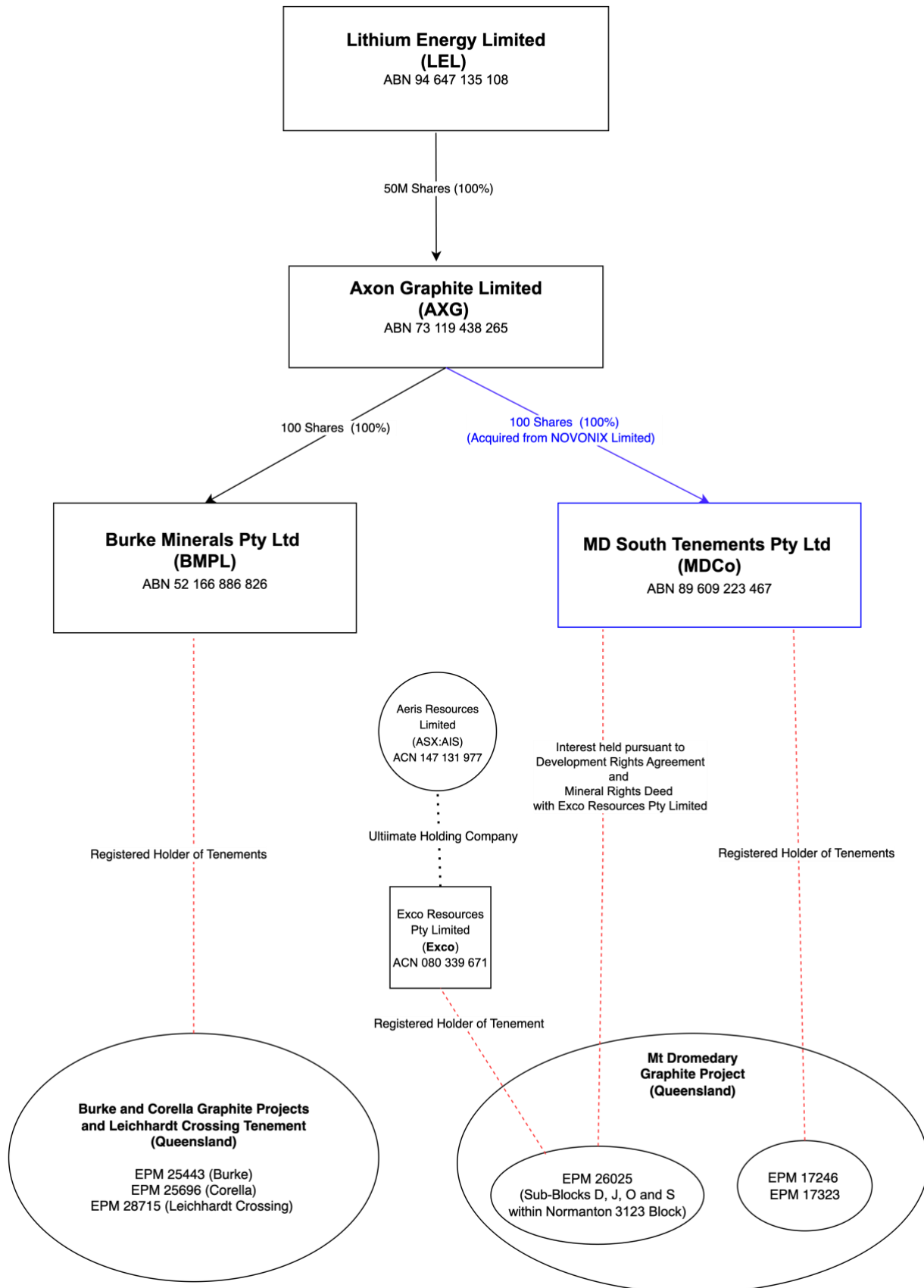
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FORWARD LOOKING STATEMENTS

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.

OWNERSHIP STRUCTURE OF GRAPHITE PROJECTS

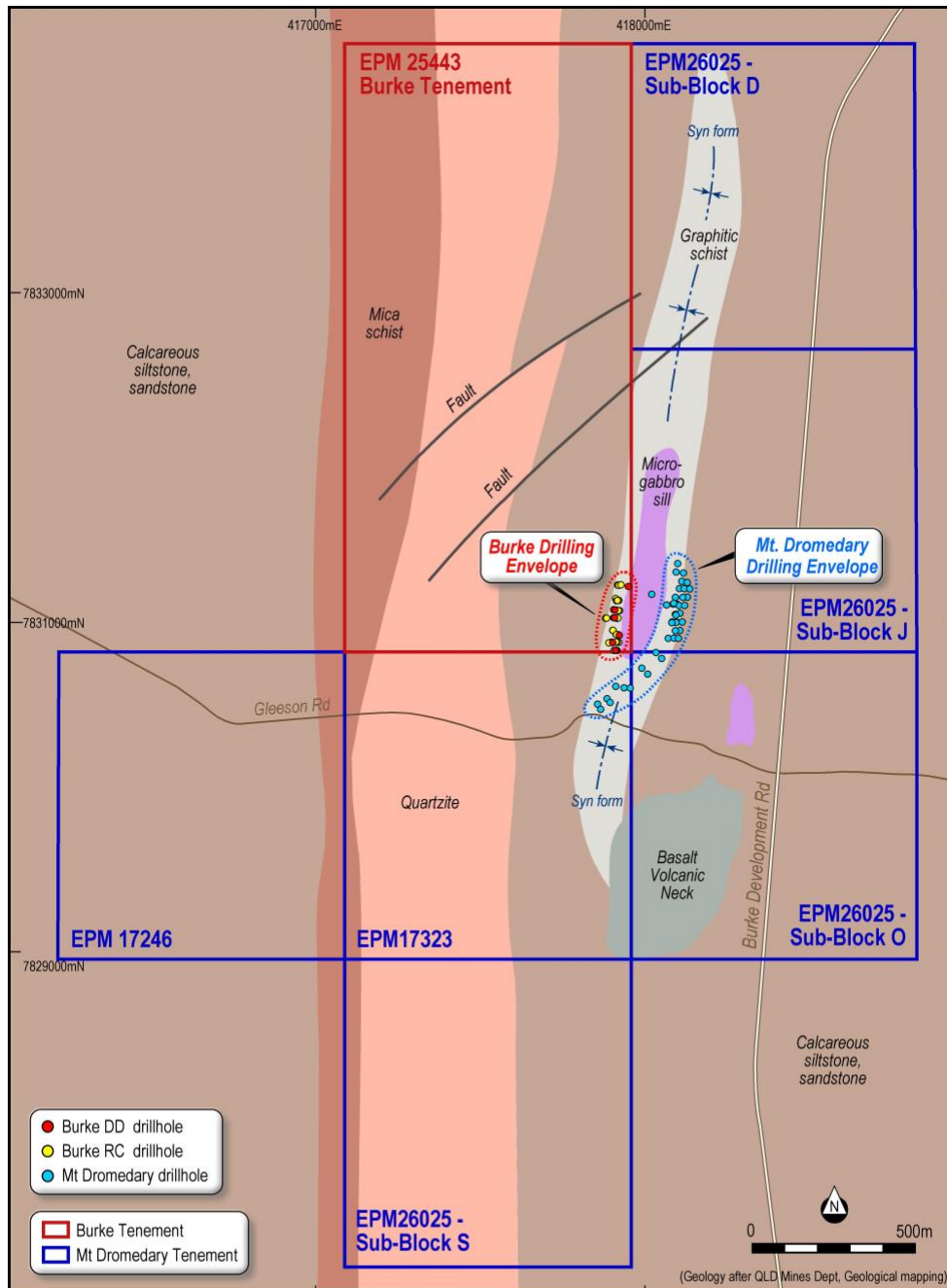
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ABOUT MT DROMEDARY GRAPHITE PROJECT

The **Mt Dromedary Graphite Project** comprises the Mt Dromedary Tenements (of 19.41km²), which are contiguous to the Burke Tenement located in the Cloncurry region in North Central Queensland (refer Figure 1).

Figure 4 shows the Burke Tenement and Mt Dromedary Tenements (against background geology) and the drill holes and drilling envelopes in support of their respective Mineral Resource Estimates (shown in Figure 3).



**Drill Holes & Tenements
Burke & Mt Dromedary Graphite Projects, Queensland**



Figure 4: Burke and Mt Dromedary Graphite Projects: Tenements, Geology, Drill Holes and Drilling Envelopes

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Mt Dromedary Deposit Mineral Resource Estimate

The Mt Dromedary Deposit (on the Mt Dromedary Tenements) has the following Mineral Resource Estimate:⁵

- Total Mineral Resource of 12.7Mt at 14.5% TGC for a total of 1.83Mt contained graphite (at a 5% TGC cut-off grade), comprising:
 - Indicated Mineral Resource of 8.3Mt at 15.2% TGC for 1,260kt of contained graphite; and
 - Inferred Mineral Resource of 4.3Mt at 13.2% TGC for 570kt of contained graphite; and
- within the mineralisation envelope, there is included a higher grade Total Mineral Resource of 8.5Mt at 18.4% TGC for 1.56Mt of contained graphite (at a 10% TGC cut-off grade).⁶

Category	Weathering State	Resource (Mt)	TGC (%)	Contained Graphite (kt)
Indicated Mineral Resource	Weathered	1.5	14.8	230
	Primary	6.8	15.2	1,030
	Sub-total	8.3	15.2	1,260
Inferred Mineral Resource	Weathered	0.3	11.8	30
	Primary	4.1	13.3	540
	Sub-total	4.3	13.2	570
Total Indicated and Inferred Mineral Resource	Weathered	1.8	14.3	260
	Primary	10.8	14.5	1,570
	TOTAL	12.7	14.5	1,830

Note:

- (1) Mineral Resource estimates are reported above a cut-off grade of 5% TGC; Mineral Resources reported on a dry in-situ basis; totals may differ due to rounding.

Mt Dromedary Tenements

Tenement Holder	Tenement Name	Tenement Type and No.	Grant Date	Expiry Date	Area (sub-blocks)	Area (km ²)
MD South Tenements Pty Ltd	Pigeon South	EPM 17246	26/10/2010	25/10/2027	1	3.235
	Pigeon South	EPM 17323	20/10/2010	19/10/2027	1	3.235
Exco Resources Pty Limited	Boomarra Consolidation	EPM 26025	14/12/2015	13/12/2025	4 (Normanton Sub-Blocks only)	12.94

Notes:

- (1) **Normanton Sub-Blocks** comprise Sub-Blocks D, J, O and S within Normanton 3123 Block.
- (2) Interest in EPM 26025 is held pursuant to:
 - (a) Mount Dromedary Development Rights Agreement between NOVONIX (then known as Graphitecorp Limited) and Exco Resources Pty Limited ACN 080 339 671 (then known as Exco Resources Limited) (**Exco**) dated 29 August 2016 (**DRA**) – refer also, NOVONIX ASX Announcement dated 29 August 2016: Washington H. Soul Pattinson and Company to Merge JV Interest into GraphiteCorp; the DRA was assigned by NOVONIX to MDCo under the MRD.
 - (b) Mineral Rights Deed (Mt Dromedary MDL) between NOVONIX, MDCo and Exco 23 February 2024 (**MRD**).
- (3) EPM 17246 was granted on 26 October 2010 for an initial period of 5 years; was renewed for a further period of 3 years in 2015, 2 years in 2018, 2 years in 2020, 2 years in 2022 and 3 years on 12 August 2024; is able to be renewed for a further 3 years (to 2030) prior to its expiry in 2027; the tenement will expire on 25 October 2030.
- (4) EPM 17323 was granted on 20 October 2010 for an initial period of 5 years; was renewed for a further period of 2 years in 2014, 4 years in 2016, 2 years in 2020, 2 years in 2022 and 3 years on 12 August 2024; is able to be renewed for a further 3 years (to 2030) prior to its expiry in 2027; the tenement will expire on 19 October 2030.
- (5) EPM 26025 was granted on 14 December 2015 for an initial period of 5 years; was renewed for further 5 years (approved on 14 December 2020) and is currently subject to an application for renewal for 5 years (to 2030) (lodged on or about 12 September 2025) (with a 50% relinquishment of its current 105 sub-blocks); the tenement will expire on 13 December 2030.

⁵ Refer Joint LEL and NVX ASX Announcement dated 10 September 2024 titled “Axon Graphite Limited Update – Mt Dromedary Graphite Mineral Resources Review”

⁶ Refer Mineral Resource estimates at different %TGC cut-off grades reported in Table 3 of Joint LEL and NVX ASX Announcement dated 10 September 2024 titled “Axon Graphite Limited Update – Mt Dromedary Graphite Mineral Resources Review”

ABOUT BURKE AND CORELLA GRAPHITE PROJECTS

Lithium Energy’s graphite projects are located in the Cloncurry region in North Central Queensland (refer Figure 1):

- (1) the **Burke Graphite Project** comprises EPM 25443 (the **Burke Tenement** or **Burke**) (of ~6.47km²), located ~130km by road north of Cloncurry, adjacent to the Burke Development Road and adjacent to the Mt Dromedary Graphite Project.
- (2) the **Corella Graphite Project** comprises EPM 25696 (the **Corella Tenement** or **Corella**) (of ~19.41km²), located ~40km by road west of Cloncurry and ~170km by road south of the Burke/Mt Dromedary Tenements, adjacent to the Barkly Highway that links Mount Isa to Cloncurry.

Lithium Energy also has the Leichhardt Crossing Tenement (EPM 28715) (of ~97km²) located ~40km by road north north-west of the Burke/Mt Dromedary Tenements, adjacent to the Kajabbi Kamilaroi Road, where the Company is targeting outcropping limestone required for potential graphite processing operations.

The projects have access to well-developed transport infrastructure, including airports at Cloncurry and Mount Isa (located ~250km by road from Burke/Mt Dromedary) and a Port in Townsville (located ~783km by road or rail from Cloncurry) (refer Figures 1 and 5).

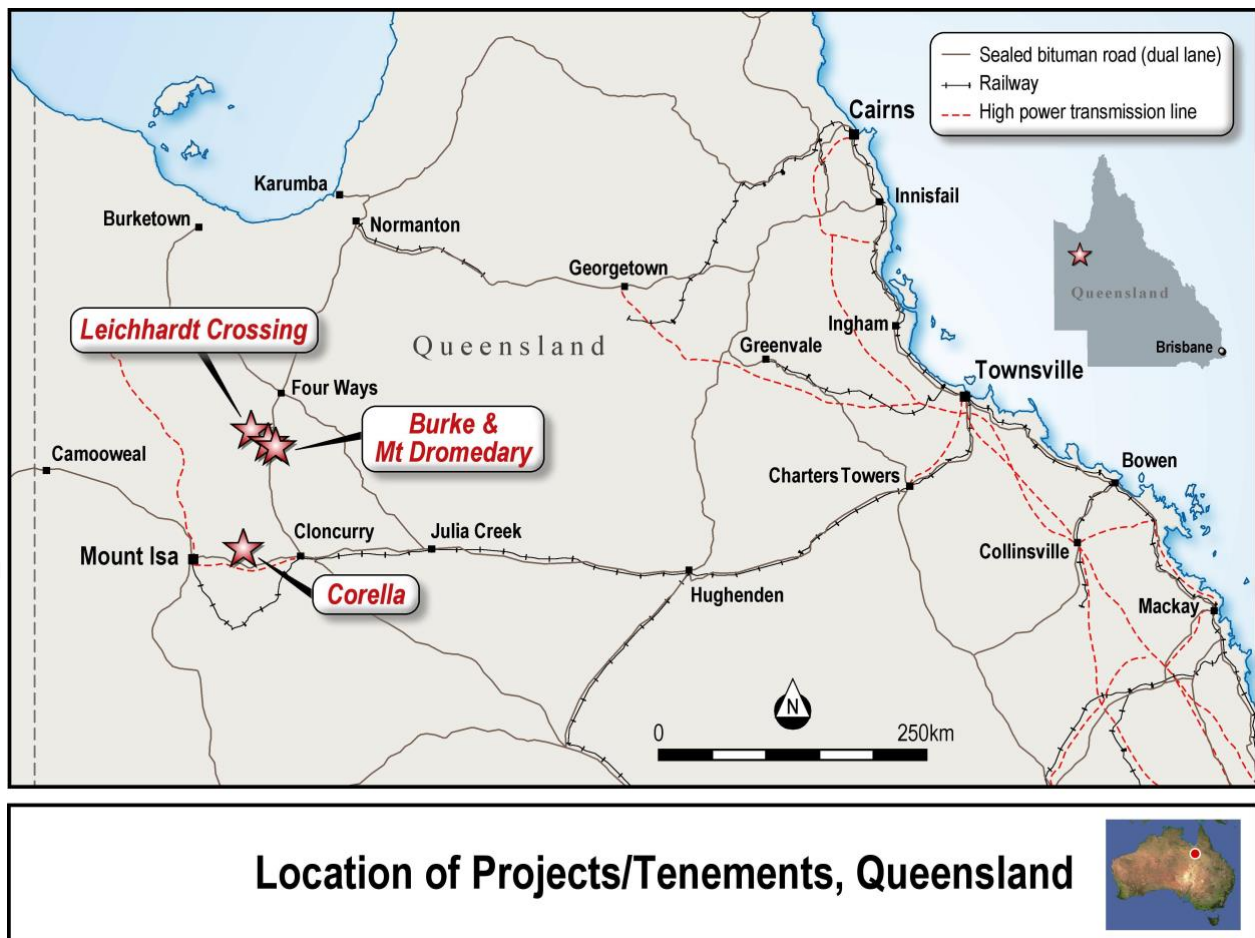


Figure 5: Location of Burke/Mt Dromedary and Corella Graphite Projects and Leichhardt Crossing Tenement in Queensland, Australia

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Burke Deposit Mineral Resource Estimate

The Burke Deposit (on the Burke Tenement) has the following Mineral Resource Estimate (MRE):⁷

- total Mineral Resource of 9.1Mt at 14.4% TGC for a total of 1.3Mt contained graphite (at a 5% TGC cut-off grade), comprising:
 - Indicated Mineral Resource of 4.5Mt at 14.7% TGC for 670kt of contained graphite; and
 - Inferred Mineral Resource of 4.5Mt at 14.2% TGC for 640kt of contained graphite.
- within the mineralisation envelope, there is included a higher grade Total Mineral Resource of 7.1Mt at 16.2% TGC for 1.1Mt of contained graphite (at a 10% TGC cut-off grade).⁸

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

Note:

- (a) Mineral Resource estimates are reported above a cut-off grade of 5% TGC; Mineral Resources reported on a dry in-situ basis; Totals may differ due to rounding.

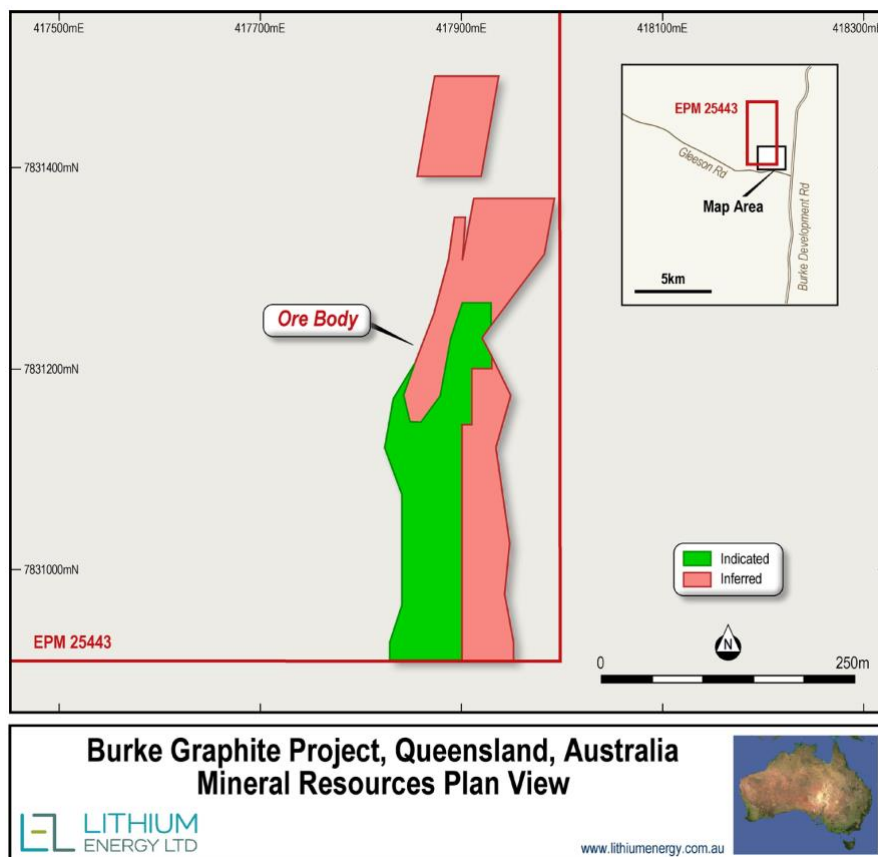


Figure 6: Burke Tenement JORC Indicated and Inferred Mineral Resources Plan View

7 Refer LEL ASX Announcement dated 5 April 2023 titled “Burke Graphite Mineral Resource Upgrade Delivers Significant Increases in Size and Confidence”

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

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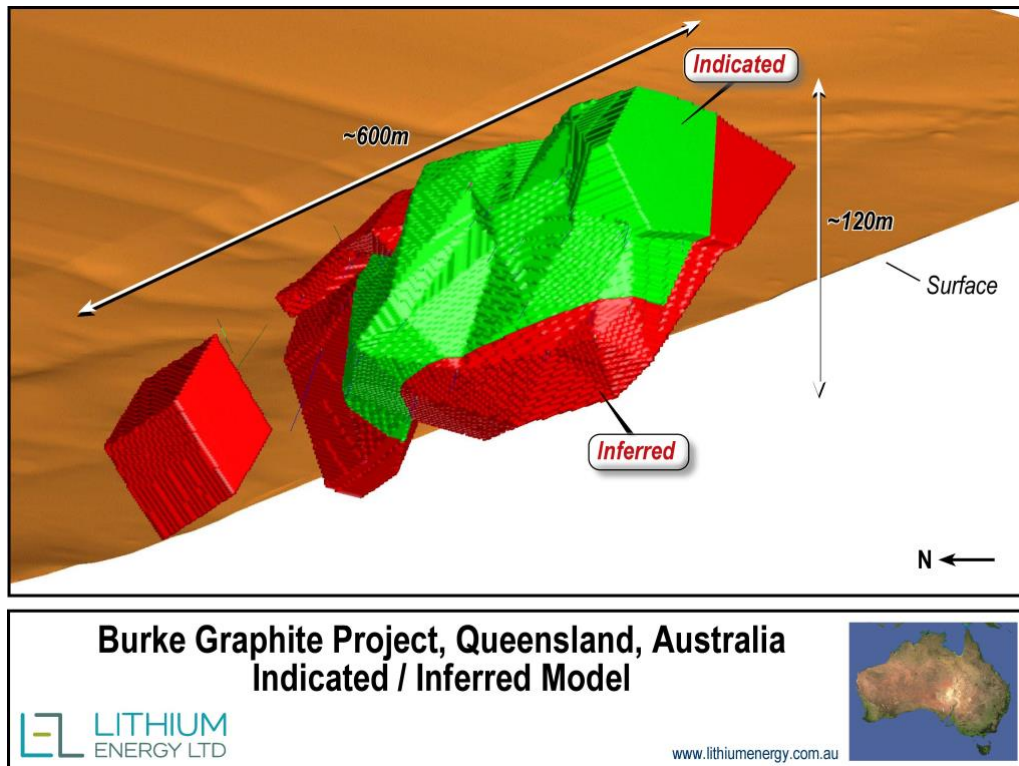


Figure 7: Burke Graphite Project Indicated/Inferred 3D Model

Burke Deposit Test Work

(a) Metallurgical Test Work Program

The Beijing General Research Institute of Mining and Metallurgy (**BGRIMM**) in China has completed a comprehensive flowsheet development metallurgical test work program (on a ~one (1) tonne representative sample of graphite from the Burke Deposit recovered from diamond core drilling undertaken in January 2023) to assess and develop an optimised flake concentrator flowsheet, with key results as follows:⁹

- (i) achieved key objectives of grade (>95% TGC) and recovery (>85%) using standard flotation and regrind milling technology;
- (ii) completed concentrator process flowsheet optimisation test work;
- (iii) produced >95% TGC graphite flake concentrate suitable for use as test feedstock material; and
- (iv) defined key concentrator design input metrics including reagent dosing rates and types, flotation and regrind and flotation cell residence times, for feasibility study purposes.

Approximately 52kg of +95% TGC flake concentrate was produced by BGRIMM's in-house pilot plant¹⁰ – 15kgs of this was used as test feedstock material for a BAM test work program (outlined below) to define the metallurgical and process conditions required to produce BAM suitable for use in Lithium-ion battery anodes.

⁹ Refer LEL ASX Announcement dated 23 May 2023 titled "Excellent Metallurgical Testwork Results at Burke Graphite Project Pave Way for Commencement of PFS"

¹⁰ Refer LEL ASX Announcement dated 28 July 2023 titled "Burke and Corella Graphite Projects Testwork Update"



Figure 8: Photos of graphite from the Burke Deposit recovered from core drilling in January 2023¹¹

(b) BAM Test Work Programs

ProGraphite GmbH in Germany has completed spheronising and purification test work on ~15kg of 95.6% TGC graphite concentrate produced by BGRIMM using graphite from the Burke Deposit.

This BAM test work has defined:¹²

- (i) the process flowsheet requirements to produce a high purity 99.97% TGC SPG product, which will be suitable as feedstock for the battery anode production process; and
- (ii) the metallurgical and process design criteria (including key metrics such as reagent consumption, product size, product recovery and purification conditions) to be used as inputs to the BAM Facility process design for feasibility study purposes.

(i) Spheronisation Test Work

Four spheronised products (three primary and one secondary) were produced from the ~15kg of 95.6% TGC graphite concentrate (using graphite from the Burke Deposit) to assess the effectiveness and impact of the mechanical shaping process on the Burke Graphite concentrate. The primary materials produced comprise three alternate product sizes, designated SPG15, SPG16 and SPG20. A secondary material produced from the concentrate, designated SPG10, was a by-product from the primary spheronisation processes that produced the primary SPG16 product.

The Company notes that the ability to generate multiple products results in a greater overall graphite recovery and provides a diversity in product size and value for future marketing and sale purposes.

¹¹ Refer LEL ASX Announcements dated 28 April 2023 titled "Quarterly Activities and Cash Flow Reports – 31 March 2023", 22 February 2022 titled "Update - Infill Drilling Results at Burke Graphite Deposit.", 16 February 2023 titled "Significant High Grade Graphite Intercepts Continue at Burke Graphite Deposit", 9 February 2023 titled "Burke Graphite Deposit Continues to Deliver Exceptional Drilling Results", 3 February 2023 titled "Multiple Exceptional Drilling Results from Burke Graphite Deposit" and 22 December 2022 titled "Completion of RC Infill Drilling at Burke Graphite Deposit"

¹² Refer LEL ASX Announcement dated 27 November 2023 titled "Testwork Results Highlight Exceptional Potential of Burke Graphite as Battery Anode Material"

The table below shows the analytical results from the spheronisation test work:

Metric	Units	Primary Products			Secondary Product
		SPG15	SPG16	SPG20	SPG10
d ₁₀ ⁽¹⁾ SPG	µm	9.1	10.2	12.5	6.8
d ₅₀ ⁽²⁾ SPG	µm	14.7	16.3	20.1	10.5
d ₉₀ ⁽³⁾ SPG	µm	24.2	25.3	31.7	16
Ratio d ₉₀ : d ₁₀		2.66	2.49	2.55	2.4
Tap Density ⁽⁴⁾	kg/l	0.92	0.91	0.94	0.85
BET ⁽⁵⁾	m ² /g	8.1	7.3	6.6	8.7
Yield SPG	%	51	52	52	11 ⁽⁶⁾

Notes:

- (1) d₁₀ means the portion of particles with diameters smaller than this value is 10%.
- (2) d₅₀ means the portion of particles with diameters smaller and larger than this value are 50%; also known as the median diameter.
- (3) d₉₀ means the portion of particles with diameters below this value is 90%.
- (4) Tap density refers to the density attained after mechanical tapping a container containing a material.
- (5) The Brunauer-Emmett-Teller (BET) method is used to calculate the specific surface area of a material.
- (6) Yield reported for SPG10 is in terms of overall yield, being a yield of 22.5% of the balance of the material not recovered in the primary spheronisation step, which is equivalent to 11% of the total feed material.

The two-product spheronising process achieved an overall recovery of 63%, which compares with general industry standards of between 45% to 55% recovery. The Tap densities and BET values achieved fall within the medium range of typically accepted SPG products – which will be a focus of further test work and BAM Pilot Plant test work to optimise the same by varying the spheronising equipment speeds, durations and loading.

(ii) Purification Test Work

Two non-hydrofluoric purification processes were conducted on the spheronised concentrate produced using graphite from the Burke Deposit with each process conducted at different temperatures, durations and reagents. The low temperature process produced positive results as shown in the table below:

Mineral Elements	Unit	Feed Material	Low Temp. Process	Industry Std ⁽¹⁾
Total Graphitic Carbon (TGC)	%	95.5	99.97	≥99.95%
Iron (Fe)	ppm	2,056	6.8	≤30
Silicon (Si)	ppm	10,549	29.8	≤30
Aluminium (Al)	ppm	6,203	4.7	≤10
Nickel (Ni)	ppm	<15	0.7	≤10
Lead (Pb)	ppm	199	<0.1	≤5
Chromium (Cr)	ppm	<16	<0.1	≤10

Note:

- (1) Based on the Chinese Spherical Graphite Standard Specification GB/T 38887-2020.

Corella JORC Mineral Resource

The Corella Deposit (on the Corella Tenement) has an initial maiden MRE as follows:¹³

- Inferred Mineral Resource of 13.5Mt at 9.5% TGC for 1.3Mt contained graphite (at a 5% TGC cut-off grade).
- within the mineralisation envelope, there is included a higher grade Inferred Mineral Resource of 4.5Mt at 12.7% TGC for 0.57Mt of contained graphite (at a 10% TGC cut-off grade).¹⁴

Mineral Resource Category	Weathering State	Resource (Mt)	TGC (%)	Contained Graphite (kt)
Inferred Mineral Resource	Weathered	4.5	9.7	440
	Primary	9.0	9.3	840
TOTAL		13.5	9.5	1,280

Note:

- (a) Mineral Resource estimates are reported above a cut-off grade of 5% TGC; Mineral Resources reported on a dry in-situ basis; Totals may differ due to rounding.

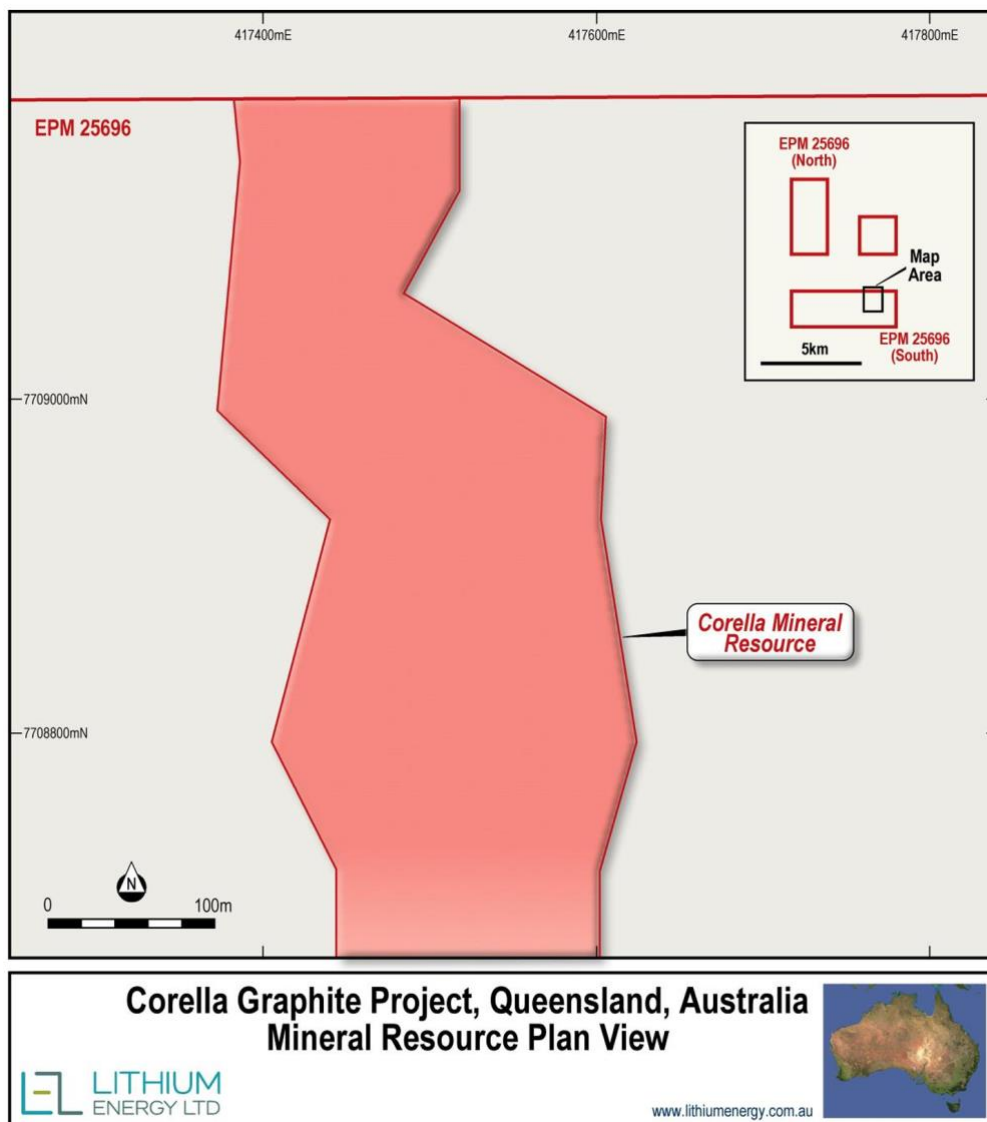


Figure 9: Corella Tenement JORC Inferred Mineral Resources Plan View

¹³ Refer LEL ASX Announcement dated 16 June 2023 titled “Maiden Corella Graphite Mineral Resource Delivers Doubling of Graphite Inventory”

¹⁴ Refer Mineral Resource estimates at different %TGC cut-off grades reported in Table 3 of LEL ASX Announcement dated 16 June 2023: Maiden Corella Graphite Mineral Resource Delivers Doubling of Graphite Inventory

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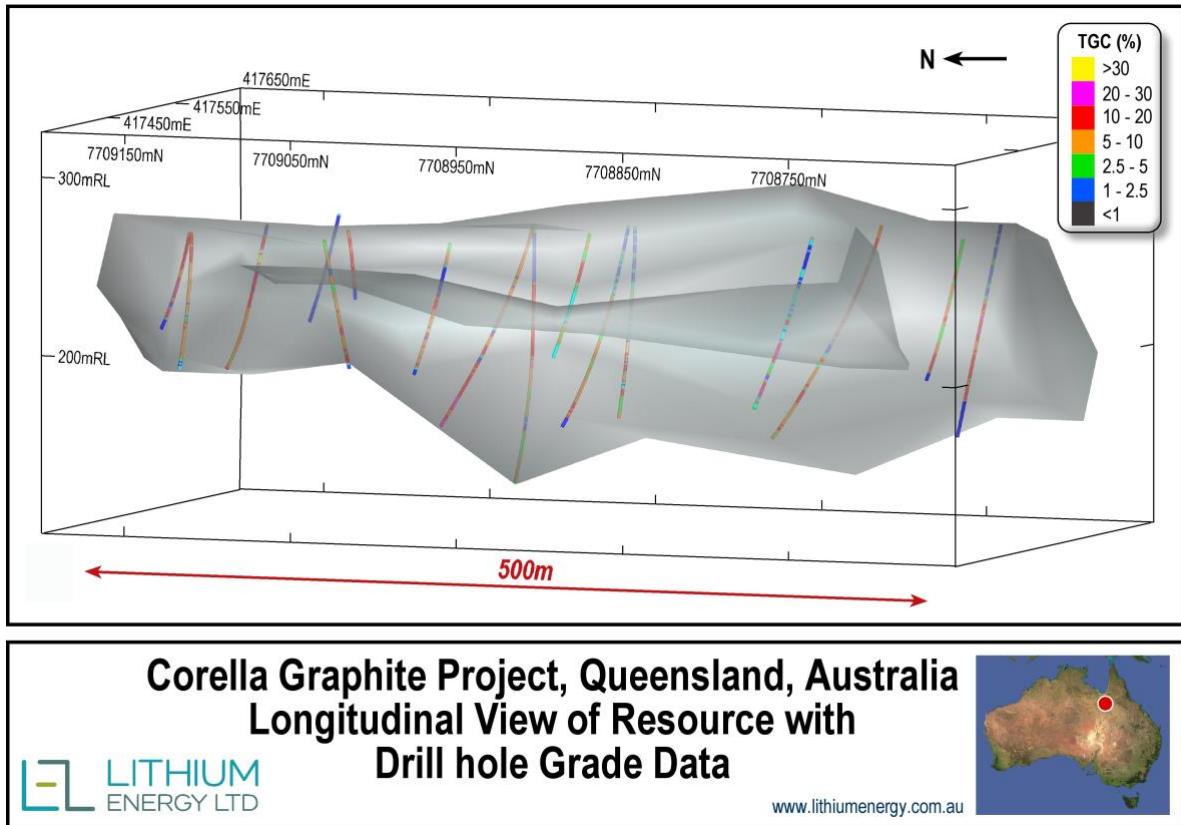


Figure 10: Corella JORC Inferred Mineral Resource – 3D Longitudinal View also Showing Drill Holes and %TGC Results

Tenement Details

Tenement Holder	Tenement Name	Tenement Type and No.	Grant Date	Expiry Date	Area (sub-blocks)	Area (km ²)
Burke Minerals Pty Ltd (BMPL)	Burke	EPM 25443	4/9/2014	3/9/2028	2	6.47
BMPL	Corella	EPM 25696	2/4/2015	1/4/2025	6	19.41
BMPL	Leichhardt Crossing	EPM 28715	12/4/2023	11/4/2028	30	97.05

Notes:

- (1) EPM 25443 was granted on 4 September 2014 for an initial period of 5 years; was renewed for a further period of 5 years (approved on 30 October 2019) and again for a further period of 5 years (approved on 12 August 2024); is able to be renewed for a further 5 years (to 2034) prior to its expiry in 2029; the tenement will expire on 3 September 2034.
- (2) EPM 25696 was granted on 2 April 2015 for an initial period of 5 years; was renewed for a further period of 5 years (approved on 21 January 2020); is able to be renewed for 5 years (to 2030) prior to its 2025 expiry date and again (if renewed in 2025) for a further 5 years (to 2035) prior to its expiry in 2030 (with a 50% relinquishment of its current 6 sub-blocks); the tenement will expire on 1 April 2035.
- (3) EPM 28715 was granted on 12 April 2023 for an initial period of 5 years; is able to be renewed for 5 years (to 2033) prior to its 2028 expiry date (with a 50% relinquishment of its current 30 sub-blocks); and again (if renewed in 2028) for a further 5 years (to 2038) prior to its expiry in 2033 (with a 50% relinquishment of sub-blocks); the tenement will expire on 11 April 2038.
- (4) The renewals and expiry of all tenements are pursuant to the transitional arrangements under the *Natural Resources and Other Legislation Amendments Act 2019* (Qld).

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ABOUT BATTERY ANODE MATERIAL (BAM) DEVELOPMENT STRATEGY

Lithium Energy intends to evaluate the potential development of a vertically integrated BAM business through the establishment of a BAM manufacturing facility in Queensland (**BAM Facility**), fed by high quality graphite to be mined and concentrated from the high-grade Burke/Mt Dromedary and Corella Graphite Deposits. With the acquisition of the Mt Dromedary Project, Lithium Energy will advance a BAM development strategy taking into account the much larger graphite inventory, expected operational synergies and economies of scale gained by combining the Burke and Mt Dromedary Graphite Deposits.

Lithium Energy envisages mining graphite initially from the combined Mt Dromedary and Burke Deposits and producing a +95% TGC graphite flake concentrate at the mine site. The graphite flake concentrate will then be transported to a BAM Facility for processing. The BAM Facility is expected to firstly mechanically shape and spheronise the flakes followed by chemical purification to form spherical purified graphite (**SPG**), which could be additionally surface coated to produce coated spherical purified graphite (**CSPG**), which are both high quality BAM products. It is proposed that these SPG or CSPG products will be sold as a battery anode material for use in the manufacturing of lithium-ion batteries or battery energy storage solutions.

BAM Pilot Plant and BAM Facility Development

A key aspect of Lithium Energy's development plan is to establish a product qualification pathway for the BAM proposed to be produced at its BAM Facility, which is likely to be required to facilitate securing offtake agreements. To achieve this, Lithium Energy plans to design and construct a BAM Pilot Plant at a suitable industrial site. Lithium Energy proposes to use the encouraging results from the laboratory BAM test work (on the Burke Deposit) to provide design and target data to develop the BAM Pilot Plant which will produce a SPG product.

The BAM Pilot Plant will include feed storage, microniser, spheroniser and caustic and acid purification modules. Lithium Energy intends to collect bulk samples (totalling ~50 to 100t) of graphite ore from the Burke and/or Mt Dromedary Deposits and produce +95% TGC flake graphite concentrate (via a third-party) as feedstock material to the BAM Pilot Plant.

The key objectives and outcomes of the BAM Pilot Plant are:

- (a) to undertake further BAM test work to refine and optimise the spheronising and purification processes;
- (b) to conduct SPG product optimisation;
- (c) to provide scale up metrics to facilitate design (in connection with feasibility studies) for the BAM Facility; and
- (d) to produce high quality BAM products for product validation, pre-qualification and marketing with potential customers to support offtake agreements.

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The Battery Anode Material (BAM) Strategy

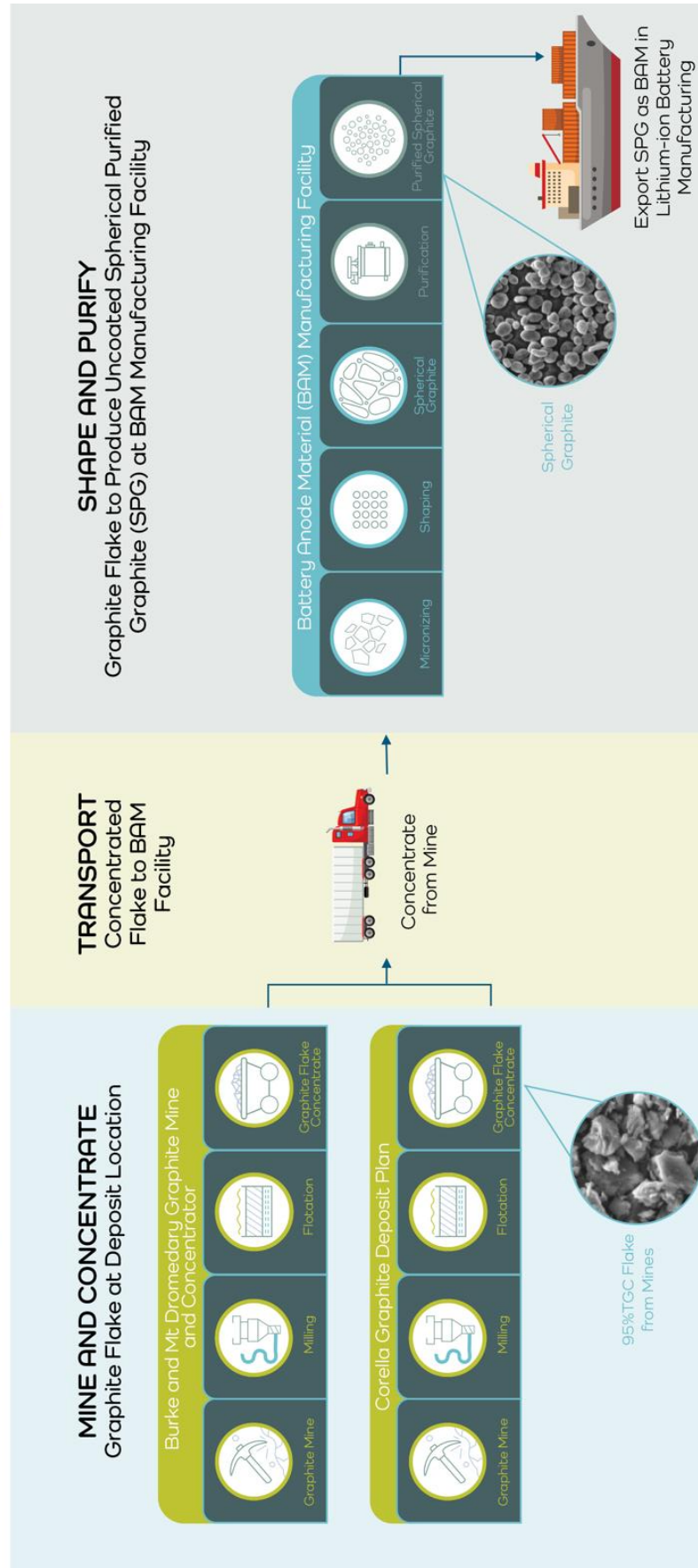


Figure 11: Illustrative Vertically Integrated Operations from Graphite Mine to Manufacturing of BAM Product

Proposed Work Programs

Lithium Energy's proposed development strategy for the combined Burke/Mt Dromedary and Corella Projects includes the following work programs:

- (a) undertake resource development drilling (comprising reverse circulation (RC) and diamond core (including metallurgical and geotechnical) holes) on the Burke and Mt Dromedary Tenements to delineate a combined Mineral Resource for the Burke/Mt Dromedary Deposits and facilitate the derivation of an Ore Reserve from these Mineral Resources (as part of the completion of relevant feasibility studies);
- (b) undertake metallurgical and BAM test work on samples from the Mt Dromedary Tenements to assess the Mt Dromedary Deposit against the same test work undertaken on the Burke Deposit;
- (c) engaging with the Australian Commonwealth and Queensland State Governments to access joint development funding and/or grants or incentives available for critical minerals development projects;
- (d) undertake a bulk sample from the Burke and Mt Dromedary Tenements for the production of +95% TGC flake graphite concentrate;
- (e) production of SPG and potentially CSPG samples from the +95% TGC flake graphite concentrate produced from the Burke/Mt Dromedary Deposits;
- (f) validation and qualification of (SPG/CSPG) BAM products produced using graphite from the Burke and/or Mt Dromedary Deposits and marketing of these products with potential customers;
- (g) secure land and infrastructure access for the BAM Pilot Plant and BAM Facility;
- (h) design, construct and operate a BAM Pilot Plant to produce SPG/CSPG products from graphite flake concentrate produced using graphite from the Burke and/or Mt Dromedary Deposits;
- (i) undertake resource development drilling (comprising RC and diamond core (metallurgical and geotechnical) holes) on the Corella Tenement to collect samples for test work and to increase and/or upgrade the existing Mineral Resource for the Corella Deposit;
- (j) undertake metallurgical and BAM test work on core/bulk samples taken from the Corella Tenement and production of SPG/CSPG samples to assess the graphite/BAM product(s) from the Corella Deposit in comparison to the graphite/BAM products from the Burke/Mt Dromedary Deposits;
- (k) undertake feasibility studies on the combined Burke and Mt Dromedary Project mining and graphite concentrator operations;
- (l) undertake feasibility studies on the BAM Facility using graphite concentrate produced using graphite from the Burke and/or Mt Dromedary Deposits; and
- (m) undertake environmental, flora, fauna and related and ancillary assessments (as required) to facilitate the securing of a mining lease (and other regulatory approvals) over the Burke and Mt Dromedary Tenements (for mining and graphite concentrator operations) and securing regulatory approvals for the proposed BAM Facility.

The proposed work program referred to above is a statement of current intentions, which may change depending on various intervening events and new circumstances, including the outcome of exploration, evaluation and development activities (including exploration, evaluation and development success or failure), regulatory developments and market and general economic conditions. Accordingly, individual work programs may be re-prioritised, delayed, suspended or altered and new work programs may be initiated.