

# FUTURE BATTERY MINERALS



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## GOLDFIELDS – ESPERANCE MAJOR PROJECTS CONFERENCE



August 2024  
ASX: FBM

# IMPORTANT NOTICES

## Disclaimer

### Competent Persons Statement

The exploration targets or conceptual exploration targets in this presentation or expressed during the course of this presentation are subject to completion of the necessary feasibility studies, permitting and execution of all necessary infrastructure agreements. In relation to any statements pertaining to future exploration targets or conceptual exploration targets, the nature of the exploration target means that the potential quantity and grade is conceptual in nature. This presentation and information, opinions or conclusions expressed in the course of this presentation should be read in conjunction with Future Battery Mineral's other periodic and continuous disclosure announcements lodged with the ASX, which will be available on the Future Battery Minerals website.

The information in this report that relates to Exploration Results is based on information compiled by Mr Robin Cox and represents an accurate representation of the available data. Mr Cox (Member of the Australian Institute of Mining and Metallurgy) is the Company's Chief Geologist and 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 2012. Mr Cox consents to the disclosure of this information in this report in the form and context in which it appears.

The information in this release that relates to Mineral Resources for the Saints Project and the Nepean Nickel Project is based on information compiled by Mr Shaun Searle who is a Member of the Australasian Institute of Geoscientists. Mr Searle is an employee of Ashmore Advisory Pty Ltd and independent consultant to Future Battery Limited. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Mineral Resources for the Leinster Project was reported by Breakaway Resources Ltd to the ASX on 14th April 2008 under JORC Code 2004 (refer <https://www.asx.com.au/asxpdf/20081024/pdf/31d3x55rpn6dxy.pdf>). A Competent Person (as defined in the JORC Code 2012) has not done sufficient work to classify this Mineral Resource in accordance with JORC Code 2012. The information in this report in relation to Mineral Resources for the Leinster Project is an accurate representation of the available data and studies for the project which have been compiled by Mr Robin Cox. Mr Cox is the Company's Technical Director and 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 2012. Mr Cox consents to the disclosure of this information in this report in the form and context in which it appears.

### ASX Listing Rule Information

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 and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the competent persons findings have not been materially modified from the original announcement.

### ASX announcement reference:

▪ New Pegmatite Targets Identified at Miriam	15 August 2024	▪ Exploration Update - Kangaroo Hills Lithium Project	20 April 2023
▪ FBM Significantly Expands Footprint in the Goldfields	5 August 2024	▪ High Grade Lithium Claystone Discovered in Nevada	13 April 2023
▪ Drilling Extends Big Red Pegmatite	9 July 2024	▪ Saints Nickel Project Delivers Positive Scoping Study	11 April 2023
▪ Big Red Extends and New Discovery at KHLF	15 May 2024	▪ Phase 2 Exploration Drilling Underway at Kangaroo Hills	05 April 2023
▪ Key Target Generation Advancing at Miriam Lithium Project	23 April 2024	▪ LCT – Pegmatite Discovery Confirmed at Kangaroo Hills	20 March 2023
▪ Outstanding Maiden Mineral Resource at Nevada Li Project	15 April 2024	▪ Exploration Update – Nevada Lithium Project	07 March 2023
▪ Acquisition of Miriam Lithium Project	25 March 2024	▪ Exploration Update – Kangaroo Hills Lithium Project	21 February 2023
▪ Phase 4 Kangaroo Hills Drilling Commence	11 March 2024	▪ Drilling Commences at Nevada Lithium Project (NLP)	23 January 2023
▪ Large Scale Strike Extension Delivered at NLP	7 March 2024	▪ Drilling Commences at Kangaroo Hills Lithium Project	18 January 2023
▪ Northern Kangaroo Hills Drilling Set to Commence	5 March 2024	▪ LCT Pegmatites Confirmed at Kangaroo Hills	16 January 2023
▪ New Conservation Management Plan for KHLF Approved	28 February 2024	▪ Strategic Claim Staking Increases Footprint At NLP	12 January 2023
▪ Outstanding Metallurgical Results from Kangaroo Hills	5 February 2024	▪ High Grade Lithium Discovered at Nepean	24 November 2022
▪ Final Assays from Phase 3 Drilling at Kangaroo Hills	30 January 2024	▪ Nepean Nickel Project – Exploration Update	15 November 2022
▪ High Grade Intervals Confirm Significant Extension of NLP	22 January 2024	▪ Rock-chip Results Confirm Rare Earths Potential at Arden	19 October 2022
▪ Further Resistivity Results Deliver New Targets at KHLF	18 December 2023	▪ Nevada Lithium Project Update	15 September 2022
▪ Nev Power joins as Non-Executive Director	21 November 2023	▪ Rare Earths Exploration Commences at Arden	17 August 2022
▪ Shallow High-Grade Lithium Intercepts at Kangaroo Hills	16 November 2023	▪ Saints Nickel Project – Resource Update	10 August 2022
▪ Kangaroo Hills High-Grade Lithium System Continues to Grow	17 October 2023	▪ Saints Project Update	7 July 2022
▪ Resource Drilling Underway at Nevada Lithium Project	3 October 2023	▪ Auroch Completes Acquisition of the Nevada Lithium Project	8 June 2022
▪ Aggressive Lithium Exploration Programmes Continuing	21 September 2023	▪ Further High-grade Nickel Sulphides At Saints	5 May 2022
▪ \$7.6m Placement to Accelerate Lithium Exploration Drilling	15 September 2023	▪ Drilling Commences at the Leinster Nickel Project	3 May 2022
▪ Further Spodumene Bearing Pegmatites Intercepted at KHLF	12 September 2023	▪ Auroch to Acquire US Lithium Project	20 April 2022
▪ Managing Director and CEP Appointment	11 September 2023	▪ Drilling Intersects Lithium Mineralisation at Nepean	7 April 2022
▪ New Stacked Spodumene Bearing Pegmatites Confirmed at KHLF	24 August 2023	▪ High-grade Nickel Intersected at Saints	9 March 2022
▪ Acquisition of 20% Interest in Kangaroo Hills Completed	11 August 2023	▪ IP Survey Identifies Priority Drill Targets at Nepean	10 February 2022
▪ FBM Acquires Remaining Interest in Kangaroo Hills	7 August 2023	▪ Saints Diamond Drilling Underway	25 January 2022
▪ Large Scale lithium Discovery Confirmed in Nevada	4 August 2023	▪ Exploration Commences for 2022	07 January 2022
▪ Further High-Grade Lithium Results at Kangaroo Hills	18 July 2023	▪ Lithium Mineralisation Confirmed at Nepean	08 December 2021
▪ Potential Extensions to Li Claystone Identified in Nevada	13 July 2023	▪ Nickel Sulphides Intersected in Nepean Deeps Drilling	25 November 2021
▪ Drilling Underway at Kangaroo Hills Lithium Project	4 July 2023	▪ Ground IP Survey Underway at Nepean	17 November 2021
▪ More High Grade Lithium Assays, New Pegmatite Uncovered	22 June 2023	▪ Diamond Drilling to Commence at Ragless Range Zinc Target	25 October 2021
▪ Completion of Nepean Nickel Project Sale	15 June 2023	▪ Multiple High Priority Drill Targets Identified At Nepean	20 October 2021
▪ 7 New Large Scale LCT Pegmatite Lithium Targets Identified	08 June 2023	▪ Nepean and Saints Scoping Studies Underway	01 September 2021
▪ Phase 2 Drilling to commence at Nevada Lithium Project	23 May 2023	▪ Underwriting to Fund Expanded Nepean Deeps Drilling	19 August 2021
▪ Metallurgical Testwork to commence at Kangaroo Hills	19 May 2023	▪ Results Define New High-priority Drill Targets at Leinster	11 August 2021
▪ Further Thick Spodumene Intersections at Kangaroo Hills	17 May 2023		
▪ Multiple High Grade Assay Results Extend Lithium Discovery	03 May 2023		





# ACKNOWLEDGEMENT OF COUNTRY



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**WE ACKNOWLEDGE  
THE TRADITIONAL CUSTODIANS  
OF THE LAND ON WHICH WE GATHER TODAY  
AND PAY OUR RESPECTS TO THEIR ELDERS  
PAST AND PRESENT**

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# CORPORATE OVERVIEW

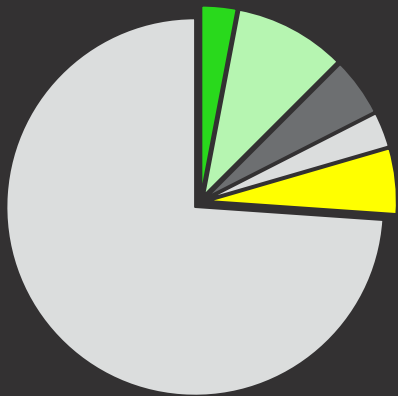
ASX: FBM



## CAPITAL STRUCTURE

Share price <sup>1</sup>	A\$0.02
Total shares on issue <sup>1</sup>	665M
Options and performance rights <sup>1</sup>	216M
Market capitalisation (undiluted)	A\$13.3M
Cash <sup>2</sup>	A\$5.3M
Debt	A\$0M
Enterprise value (undiluted)	A\$8.0M

## REGISTER COMPOSITION

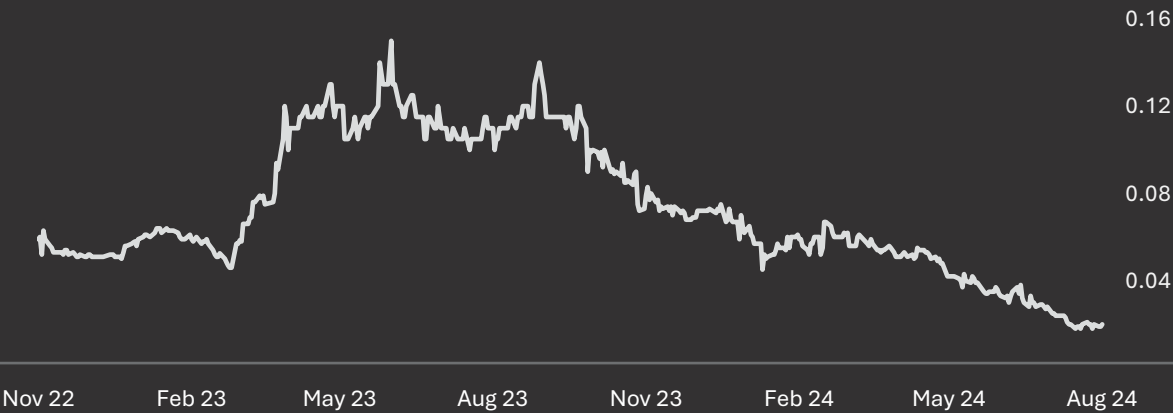


- BOARD AND MANAGEMENT 3.0%
- INSTITUTIONAL 9.5%
- **HANCOCK** PROSPECTING 5.0%
- CORPORATE 3.0%
- BROKERS 5.6%
- OTHER 73.9%

<sup>1</sup> At 21 August 2024

<sup>2</sup> Cash balance as at 30 June 2024

## SHARE PRICE CHART



## BOARD AND MANAGEMENT



**NEV POWER**  
Non-Executive  
Chairman



**ROBIN COX**  
Technical Director



**ROB WAUGH**  
Non-Executive  
Director



**NICK RATHJEN**  
CEO and  
Managing Director



**SILFIA MORTON**  
Company Secretary  
and CFO

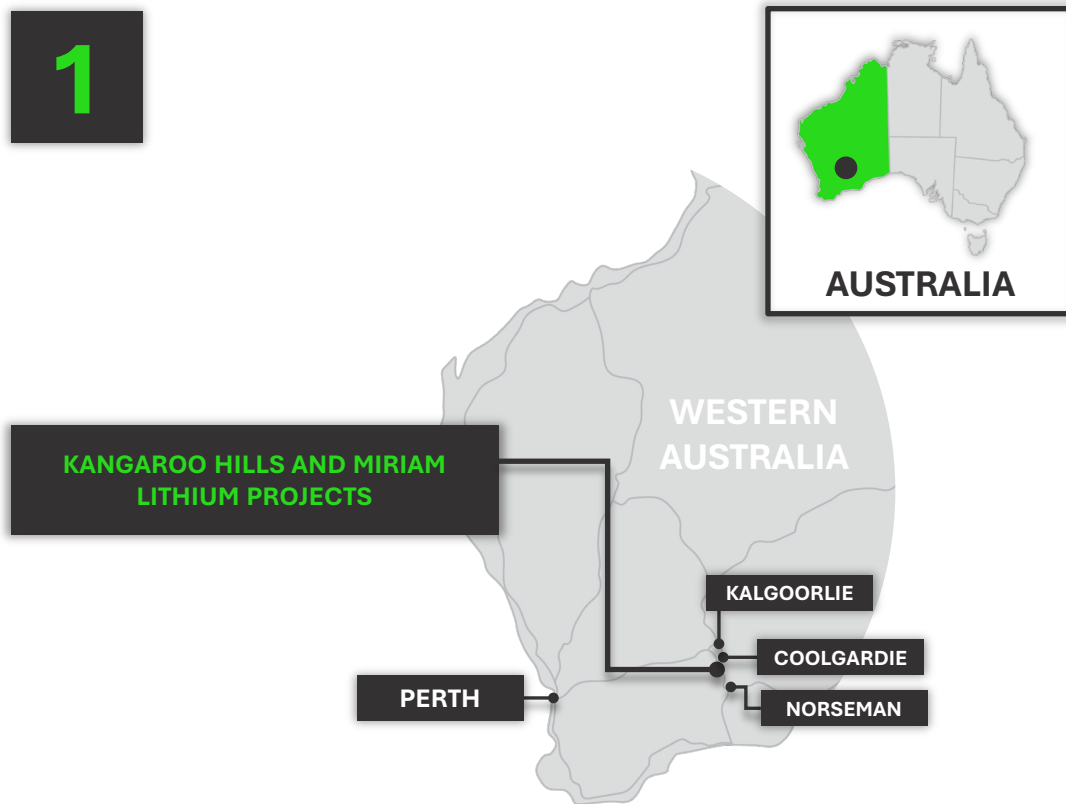




# TWO EXCITING LITHIUM DISCOVERIES IN 12 MONTHS

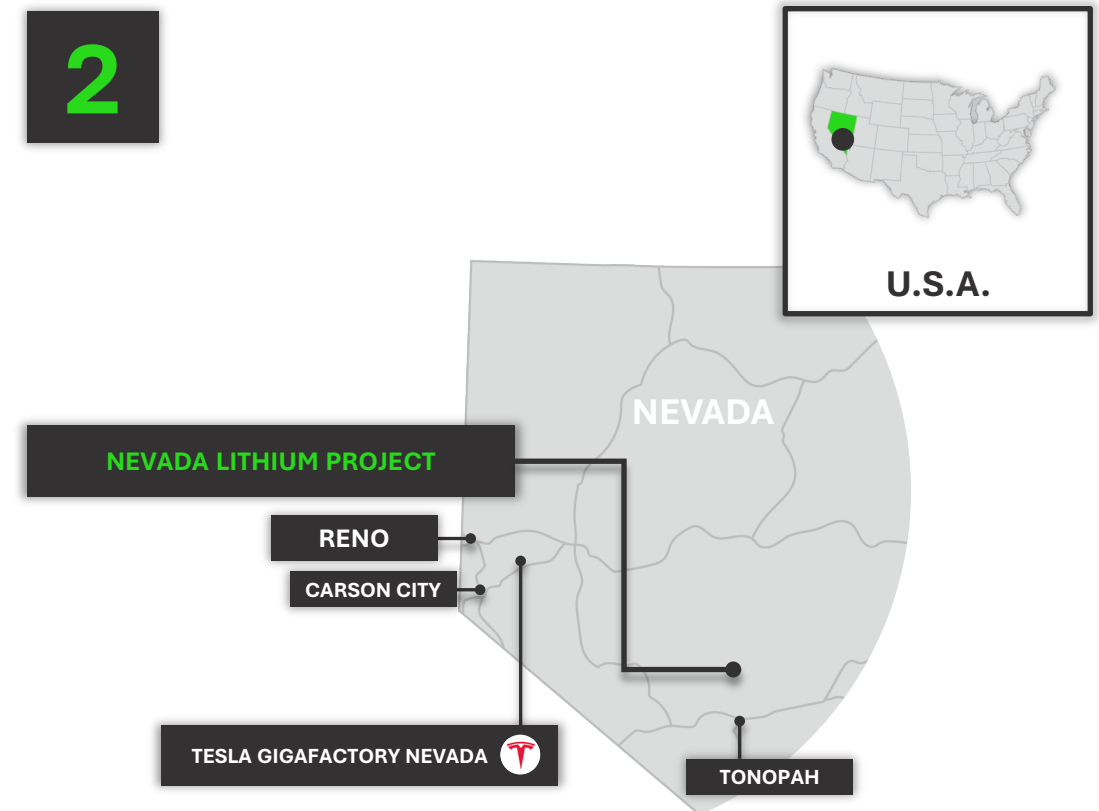


1



**KANGAROO HILLS AND MIRIAM LITHIUM PROJECTS**  
High-grade LCT pegmatite discovery  
31m at 1.13%  $\text{Li}_2\text{O}$ , including 20m at 1.43%  $\text{Li}_2\text{O}$

2



**NEVADA LITHIUM PROJECT**  
Large-scale initial Mineral Resource Estimate  
1.5 Bt at 783 ppm Li for 6.2 Mt LCE

Refer to FBM ASX announcements on 15 May 2024 and 15 April 2024







1

# COOLGARDIE

## LITHIUM PROJECTS

- ▶ KANGAROO HILLS (100%)
- ▶ MIRIAM (85%)





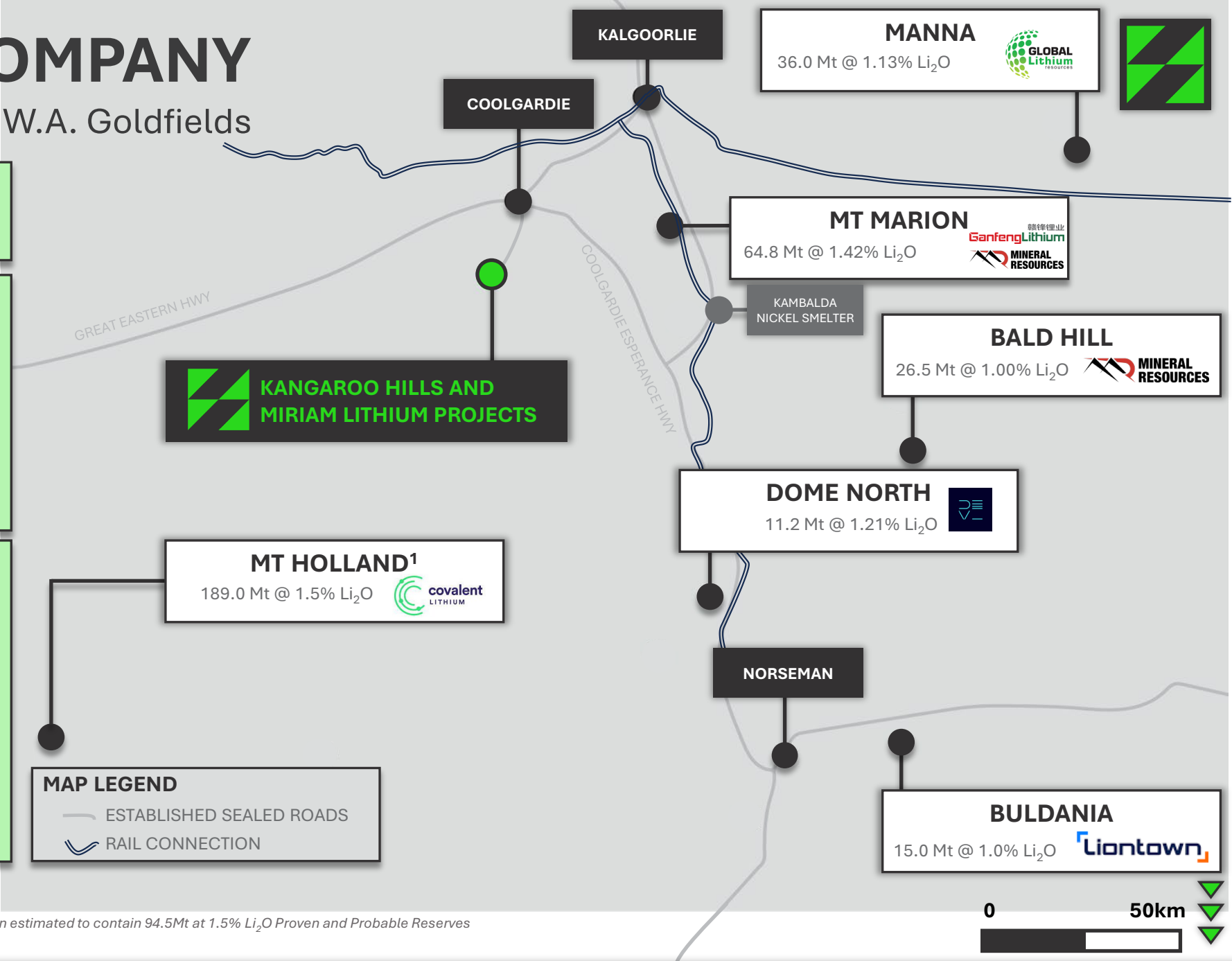
# IN EXCELLENT COMPANY

Situated in the lithium-endowed W.A. Goldfields

LOCATED JUST 17KM SOUTH OF COOLGARDIE

PROXIMATE TO WELL ESTABLISHED INFRASTRUCTURE INCLUDING SEALED ROAD ACCESS PLUS MULTIPLE LITHIUM OPERATIONS

PROVEN TO POSSESS THICK, HIGH-GRADE LITHIUM-CAESIUM-TANTALUM PEGMATITES FROM SURFACE WITH BELT SCALE POTENTIAL



Refer Appendix A for full resource details.  
1 Mount Holland Mineral Resource Estimate shown, the lithium mine has been estimated to contain 94.5Mt at 1.5% Li<sub>2</sub>O Proven and Probable Reserves



# Coolgardie Lithium Project Highlights

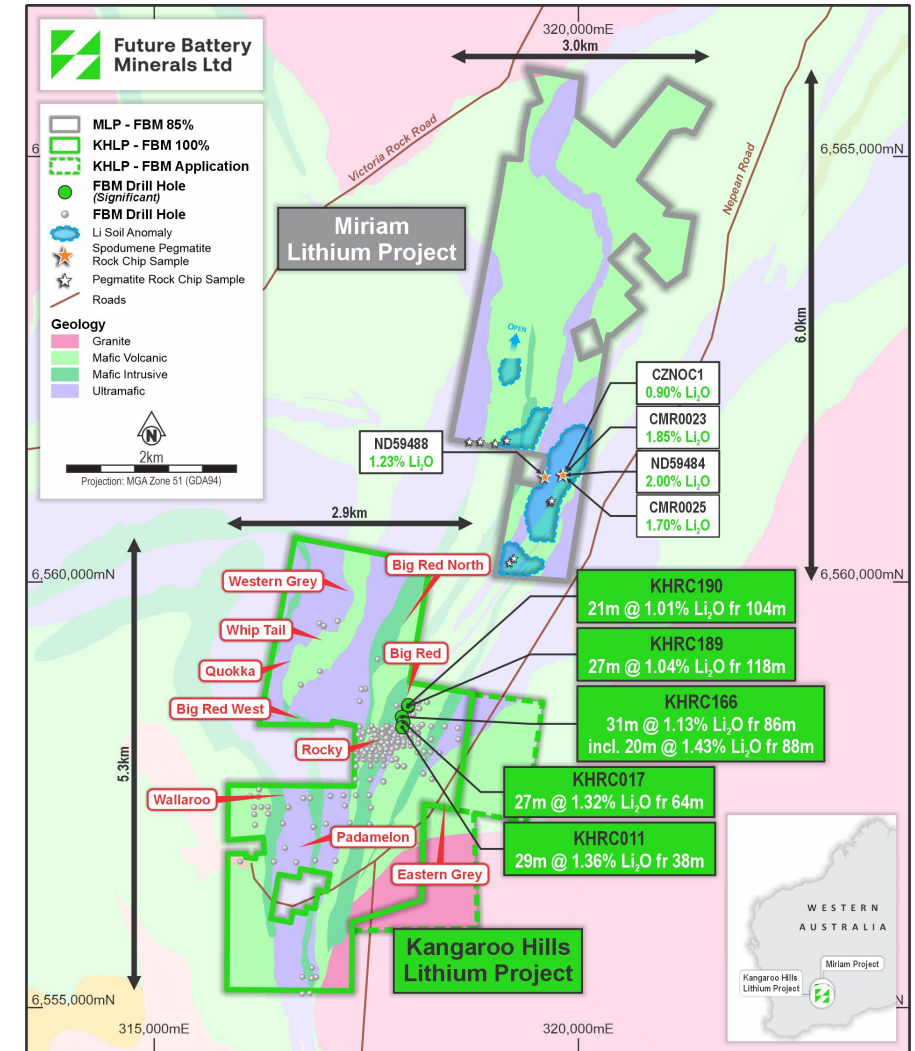
Over 4km of spodumene mineralisation at surface

## Kangaroo Hills

- Spodumene bearing pegmatites from surface
- 31,000m of drilling to date, with best intercepts of:
  - 29m @ 1.36%  $\text{Li}_2\text{O}$**  from 38m (KHRC0011)<sup>1</sup>, and
  - 31m @ 1.13%  $\text{Li}_2\text{O}$**  from 86m, incl. 20m at 1.43%  $\text{Li}_2\text{O}$  (KHRC116)<sup>2</sup>
- 900m of known mineralisation, with all pegmatites remaining open along strike and 5 additional untested targets
- Metallurgical testwork demonstrates amenability to convention Dense Media Separation (DMS) and Froth Floatation

## Miriam

- 2 spodumene bearing pegmatites from surface, with similar geochemistry to Kangaroo Hills Big Red pegmatite
- 13 new pegmatite targets across 6km of tenement strike
  - Primary target is approximately 1.6 km in strike, with a second trend spanning approximately 600 metres<sup>3</sup>



<sup>1</sup> Refer to FBM ASX Announcement on 20 March 2023

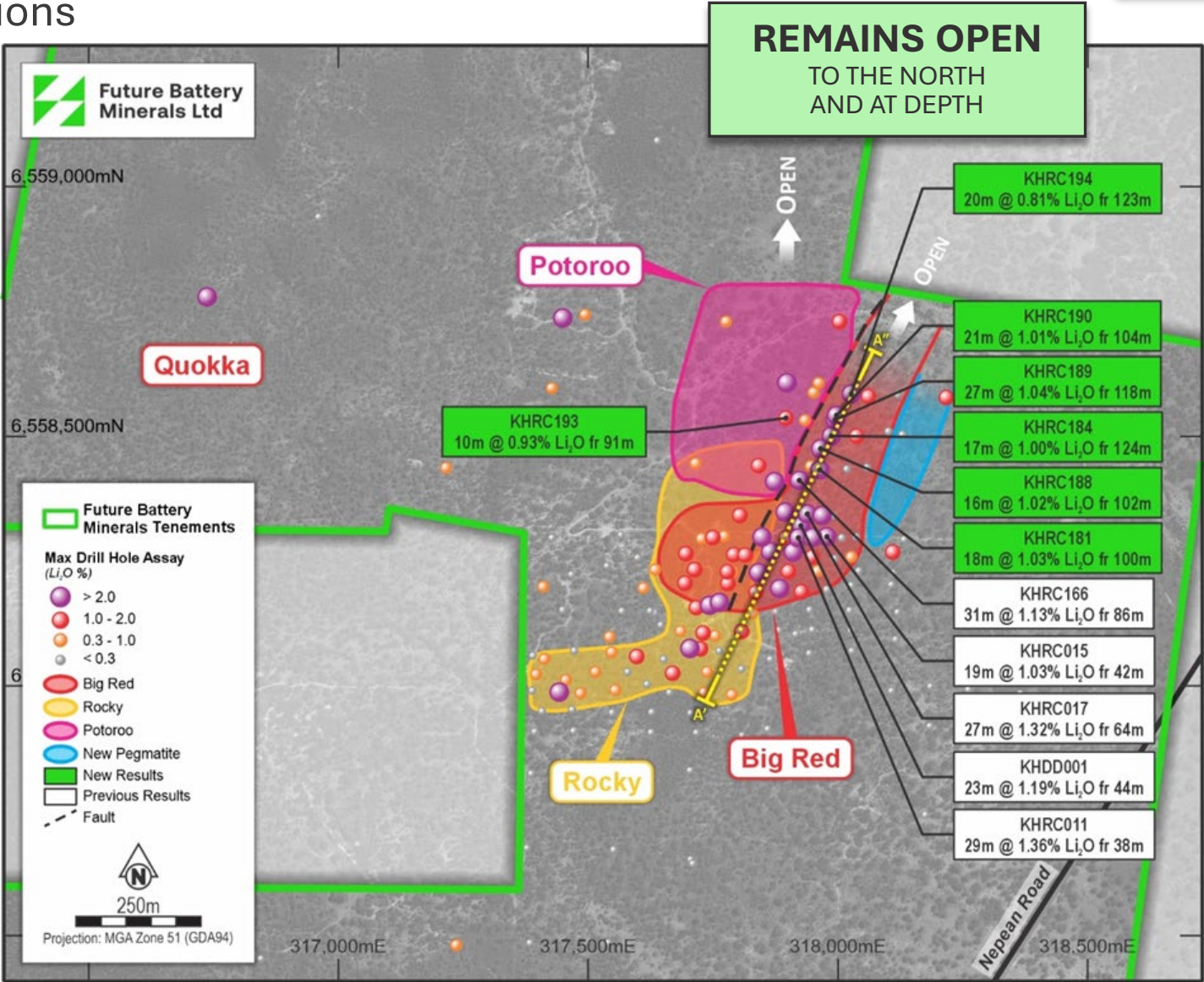
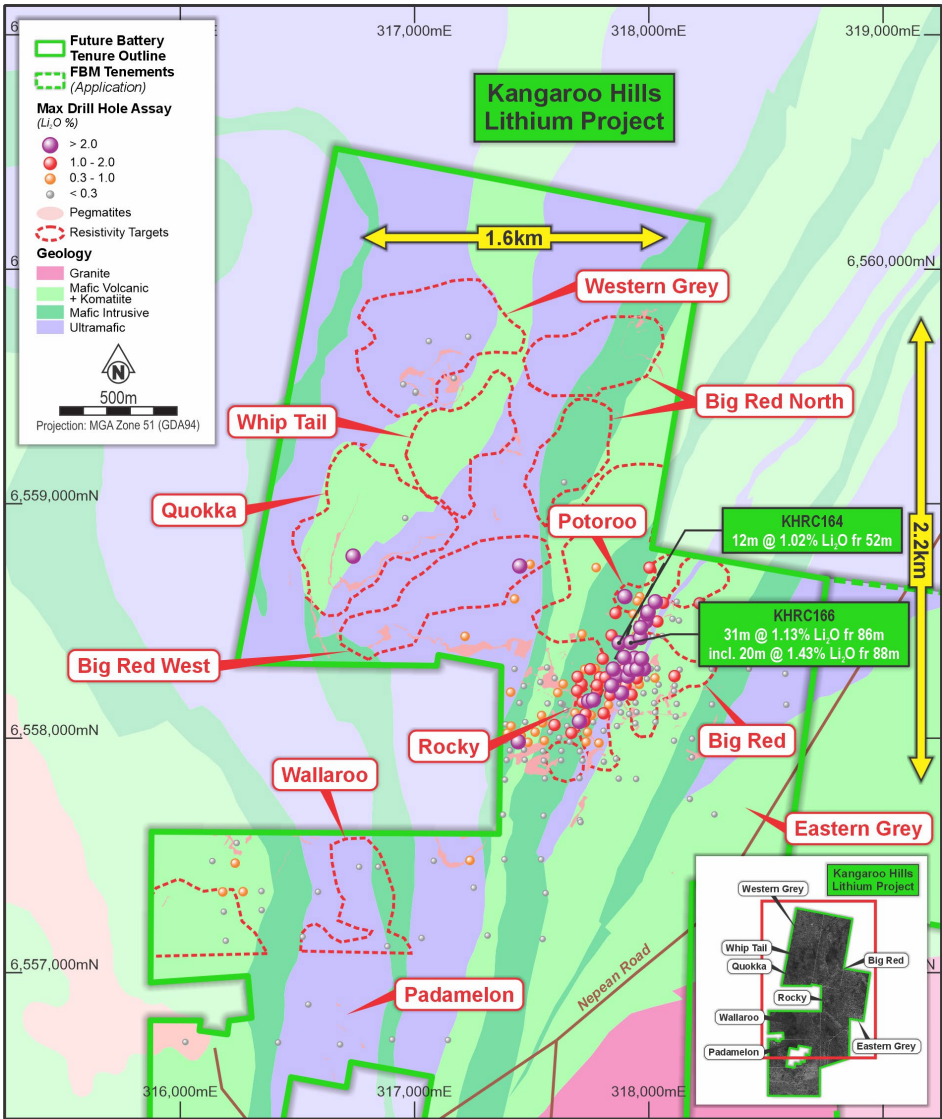
<sup>2</sup> Refer to FBM ASX Announcement on 15 May 2024

<sup>3</sup> Refer to CZN ASX Announcement on 29 March 2023



# KANGAROO HILLS A TRANSFORMATIONAL LCT DISCOVERY

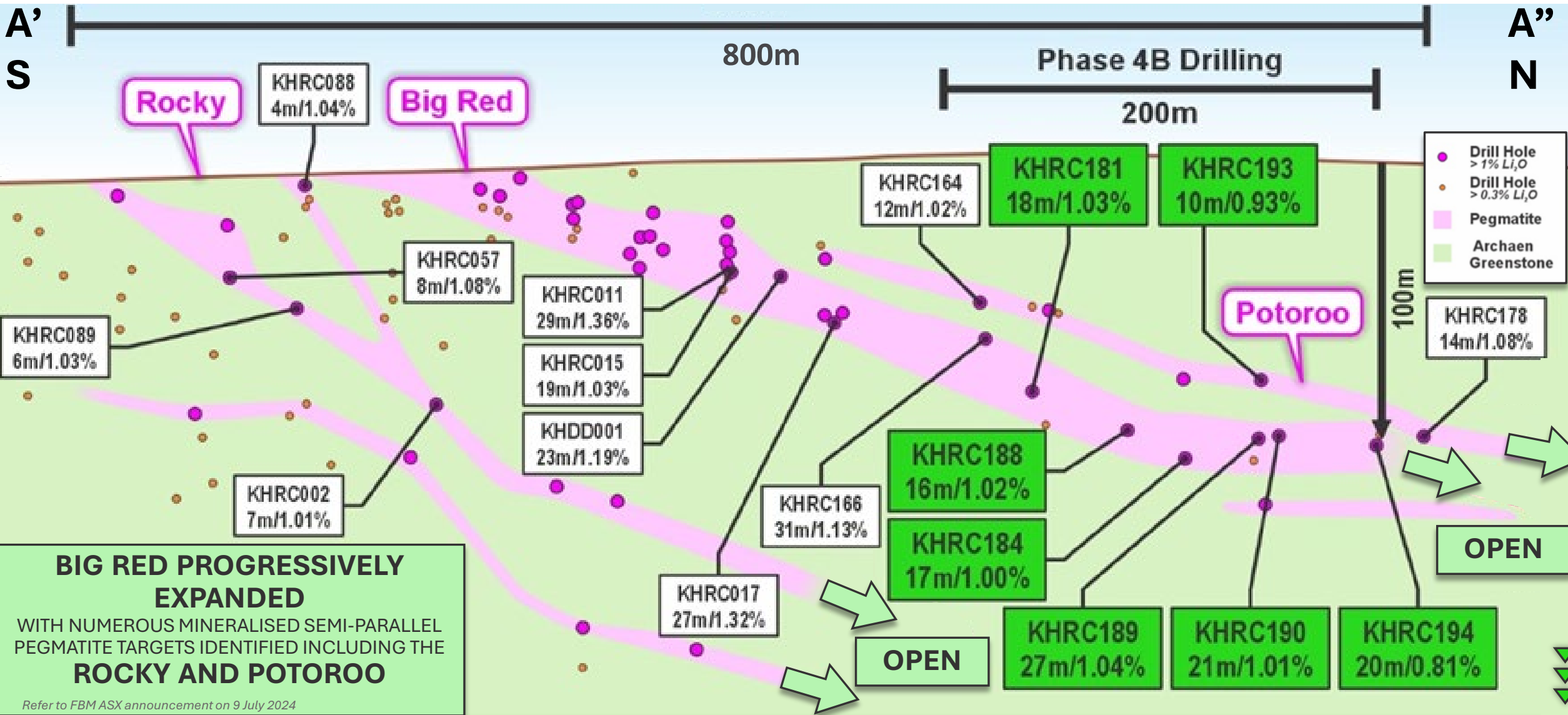
Wide, high-grade, near-surface  $\text{Li}_2\text{O}$  intersections



Refer to FBM ASX announcements on 9 July 2024, 15 May 2024, 30 January 2024 and 18 December 2023

# MINERALISED SYSTEM CONTINUES TO GROW

Stacked, mineralised system defined across **Big Red, Rocky and Potoroo**



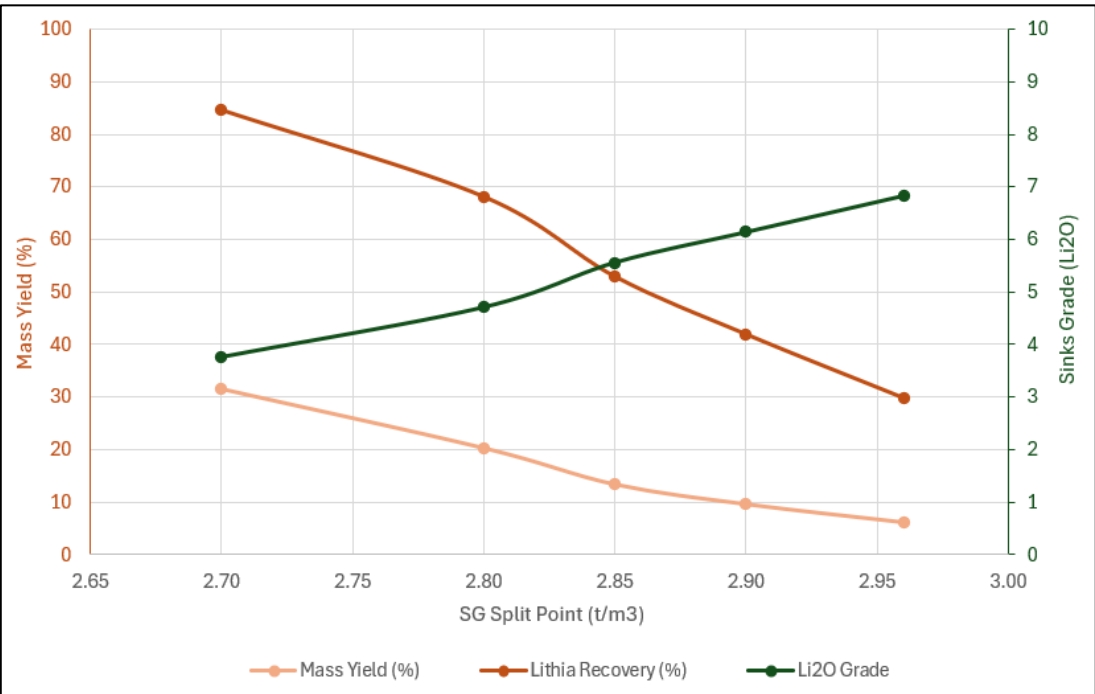


# OUTSTANDING INITIAL METALLURGICAL RESULTS



With additional optimisation to offer further potential recovery enhancement

- Test results confirm spodumene is the predominant lithium mineral (~90% of the Li<sub>2</sub>O) in Big Red pegmatite
- Demonstrates Big Red is readily amenable to conventional Dense Media Separation and Froth Flotation separation techniques
- Hybrid flowsheet design (DMS + float) expected to maximise process outcomes
- Next phase metallurgical test work to follow Phase 4 drilling at Kangaroo Hills



HLS staged recovery results

Slimes		Mags		Global Floatation Concentrate Recovery (%Li <sub>2</sub> O)		
Grade (Li <sub>2</sub> O)	Recovery (%Li <sub>2</sub> O)	Grade (Li <sub>2</sub> O)	Recovery (% Li <sub>2</sub> O)	@ 6.0% Li <sub>2</sub> O	@ 5.5% Li <sub>2</sub> O	@ 5.0% Li <sub>2</sub> O
1.09	14.92	2.27	1.72	69.03	76.94	78.07

Whole-of-Ore Flotation global results

Refer to FBM ASX announcement 5 February 2024

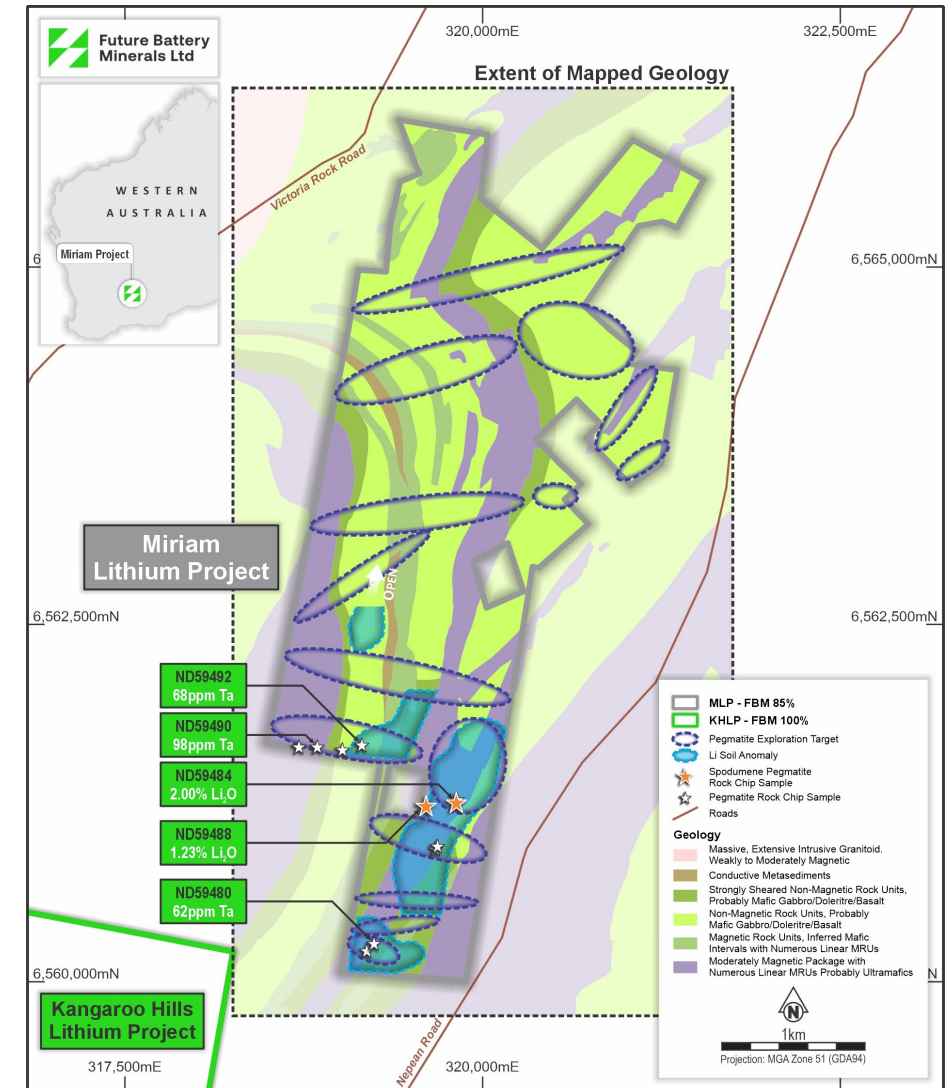


# MIRIAM TARGET GENERATION WELL ADVANCED



Four discrete target zones identified, varying from 350m to 1.6km in strike length

- 6km of untested strike length
- Recent field mapping successful identifies **11 discrete outcropping pegmatite units**
- Additional sampling of the known spodumene-bearing outcrop previously identified by Corazon has generated a further **2.0% Li<sub>2</sub>O rock chip assay**
- **Additional spodumene-bearing outcrop, approximately 250m west of the known spodumene-bearing outcrop returned a rock chip assay of 1.23% Li<sub>2</sub>O**
- Geophysical review of the Miriam Project identifies 13 new pegmatite targets across the 6 kilometre tenement strike.
- Geophysical targets include five discrete structures coincident with 1.6-kilometre soil anomaly and outcropping spodumene-bearing pegmatite.



Refer to FBM ASX announcement 15 August 2024

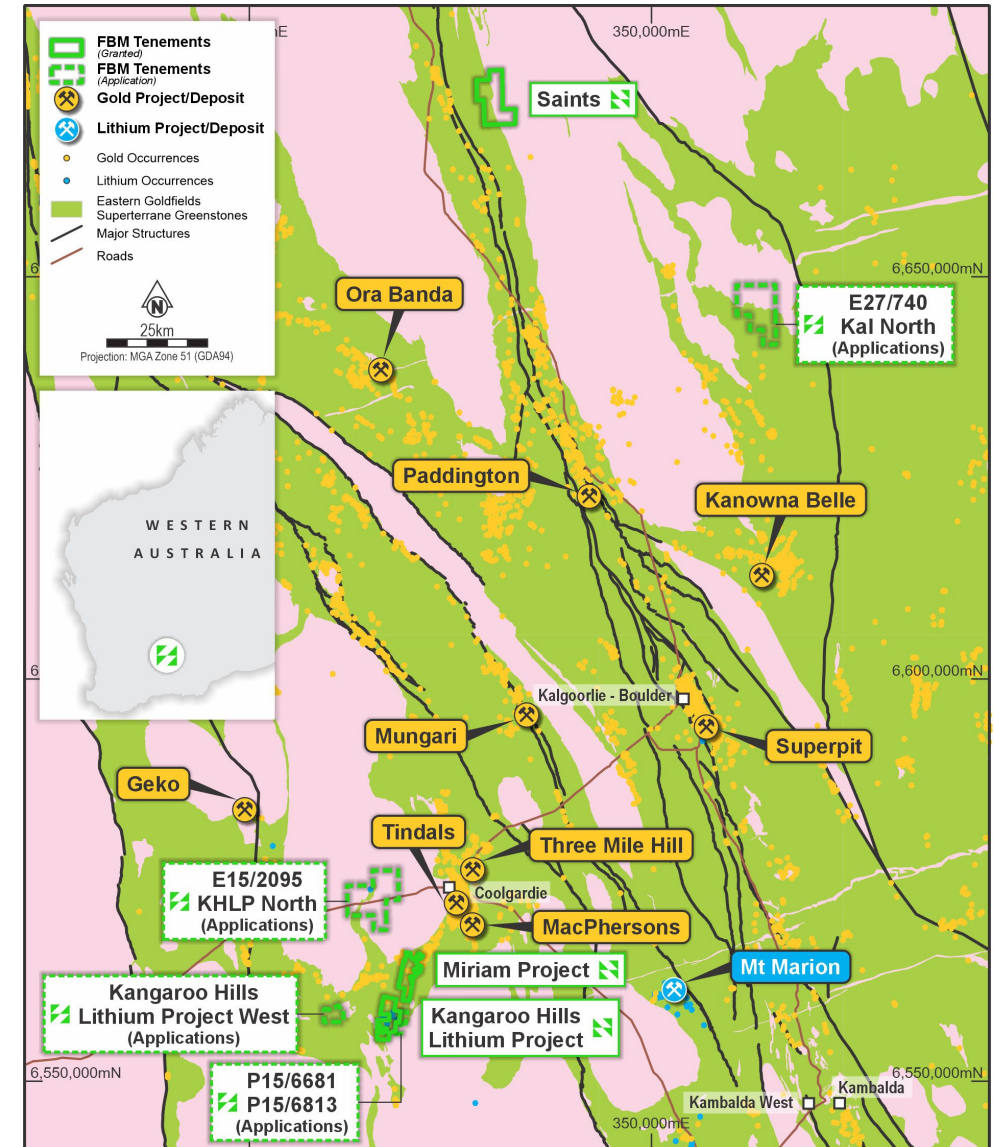


# INCREASE FOOTPRINT ACROSS THE GOLDFIELDS



Exploration and Prospecting Lease Applications submitted for additional tenure

- Expands prospective landholding proximate to Kangaroo Hills and Miriam by 160%
- All tenure overlies Archean Greenstone lithologies in the Eastern Goldfields Archean & Super Turrane
- Considered highly prospective for LCT pegmatites and other commodities
- Increased footprint to existing Kangaroo Hills project
- Discovery potential for both lithium and gold mineralisation at new tenure
- Heritage Protection Agreements under negotiation with relevant native title parties



Refer to FBM ASX announcement 5 August 2024





# Project Advancement – Next Steps

Proven lithium potential with exploration and development upside

- Mapping and field work underway across new goldfields tenure for multi-element prospectivity
- Disciplined and well capitalised
- Business development – continuing to assess opportunities

## Miriam

- EIS application submitted
- Soil sampling results due October 2024
- Ground gravity survey due late Q4 2024
- Initial drill program planned for H1 CY2025

## Kangaroo Hills

- Progressing Mining Lease application
- Fully permitted and drill ready for:
  - Open extensions of Big Red and Potoroo pegmatites; and
  - Systematic testing of Big Red North, Western Grey, Quokka and Whiptail







2

# NEVADA

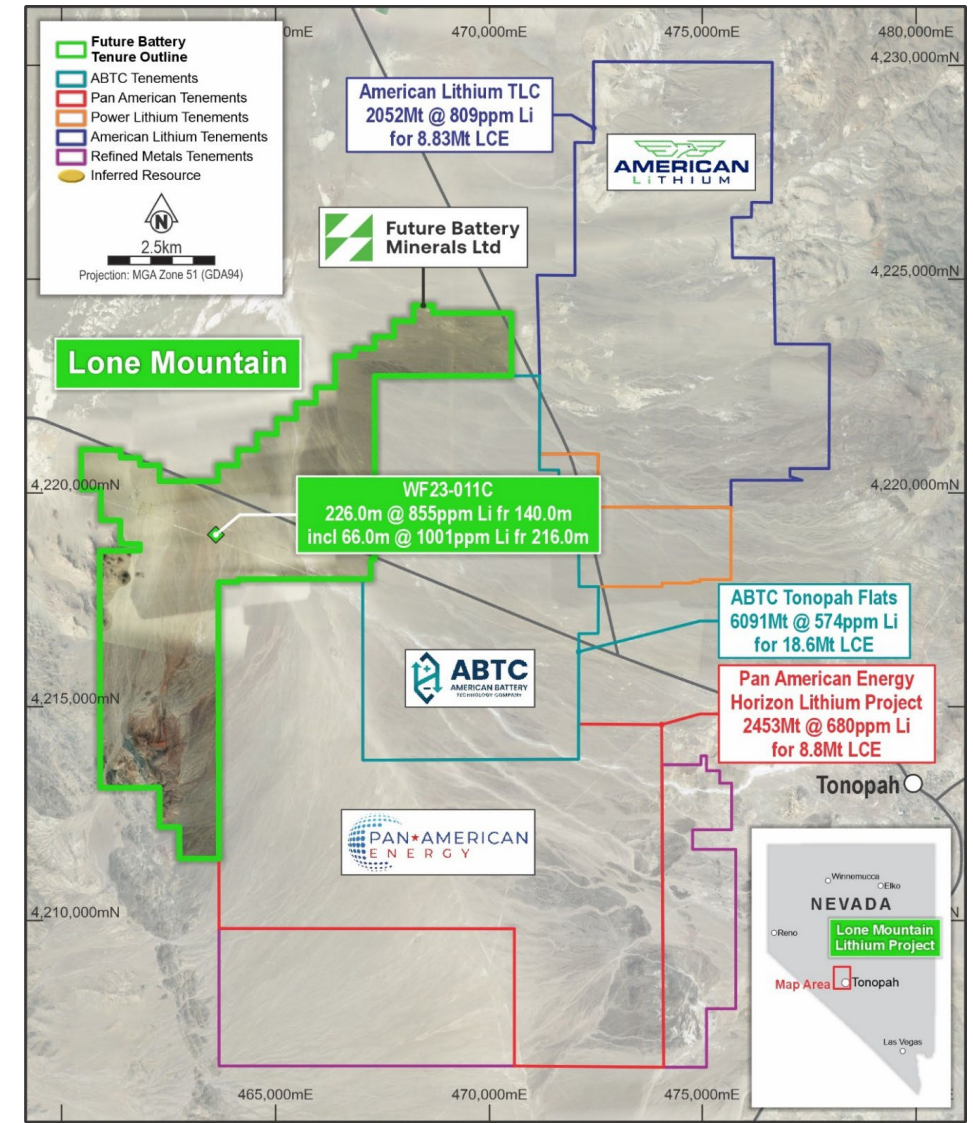
LITHIUM PROJECT (80%)



# LARGE LITHIUM CLAYSTONE PROJECT

In a region home to large sedimentary-hosted lithium deposits

- Five compelling prospect areas within a land holding of more than 90km<sup>2</sup>
- Located southeast of Tesla's Nevada Gigafactory
- Multiple advanced lithium projects within 50km of the prospect areas, including the Tonopah Flats Lithium Project and TLC Lithium Project
- Feeding development of domestic lithium production, now an important U.S. government priority:
  - President Biden announced US\$7.5B to build EV chargers and US\$7B for Critical Minerals Supply Chains – June 2022<sup>1</sup>
  - US\$40B available to US Department of Energy Innovative Technology Loan Guarantee<sup>2</sup>



Refer to <https://www.whitehouse.gov/briefing/2022-03-31>

Refer to <https://www.whitehouse.gov/briefing/2022-06-09>



# INITIAL MINERAL RESOURCE ESTIMATE

Large-scale initial MRE (March 2024)

1.5 Bt at 783 ppm Li for 6.2 Mt LCE

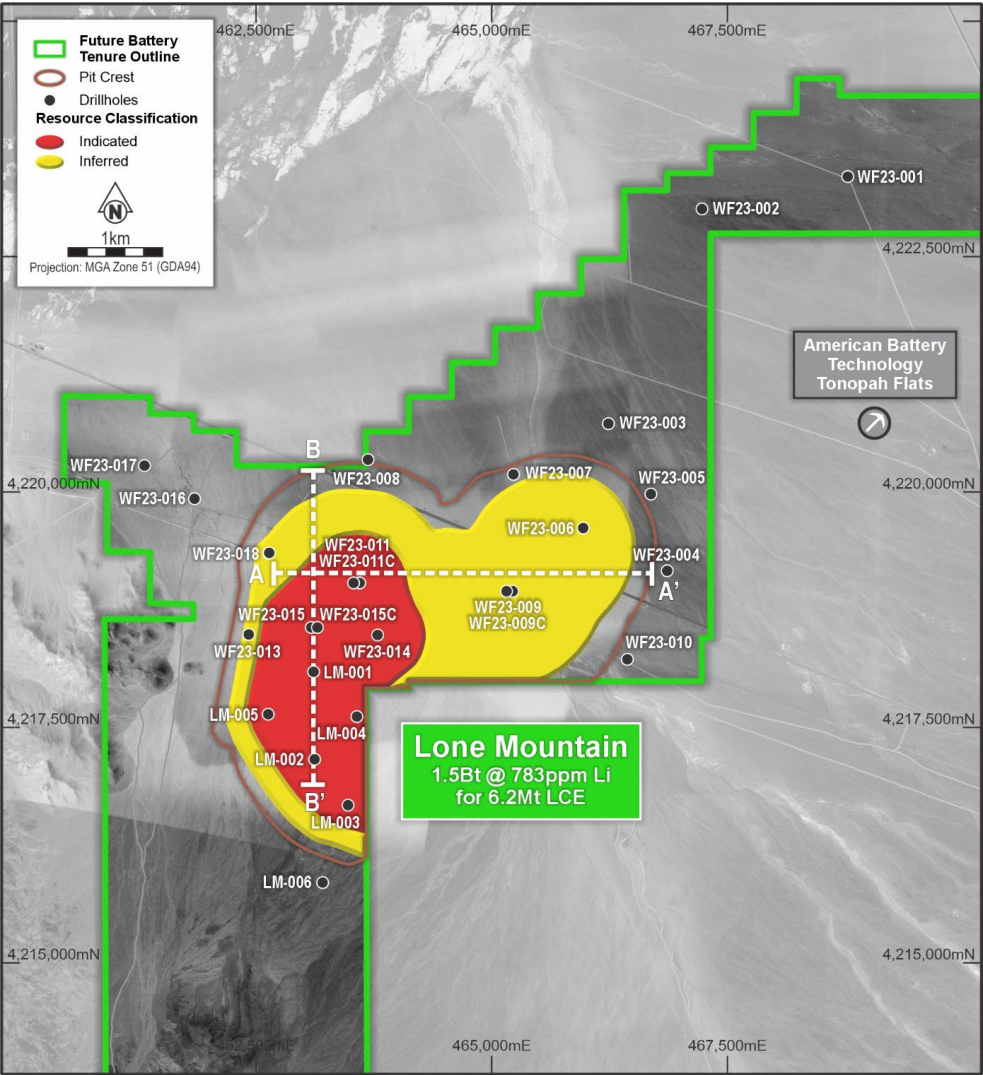
LONE MOUNTAIN DEPOSIT

- ▶ Lone Mountain defined over north-south strike extent of over 3km
- ▶ Deposit begins at just 35m below surface, and is consistently very thick across the entirety of the strike extent
- ▶ Over 42% of contained lithium resides in the Indicated classification
- ▶ **Evaluation phase for commercialisation routes underway**

Category	Volume	Tonnes	Li			
	Mm <sup>3</sup>	Mt	Ppm	Li	Li <sub>2</sub> CO <sub>3</sub> (LCE)	LiOH.H <sub>2</sub> O (LHE)
Indicated	375	638	774	494	2,627	2,988
Inferred	504	857	789	676	3,597	4,091
Total	879	1,495	783	1,170	6,224	7,079

NLP initial MRE (March 2024) at 500 ppm Li cut-off grade

For full Mineral Resource details, refer to FBM ASX release dated 15 April 2024, Outstanding Maiden Mineral Resource at Nevada Li Project. FBM confirms that it is not aware of any new information or data that materially affects the Mineral Resource estimate information included in that release. All material assumptions and technical parameters underpinning the Mineral Resource estimate in that release continue to apply and have not materially changed.

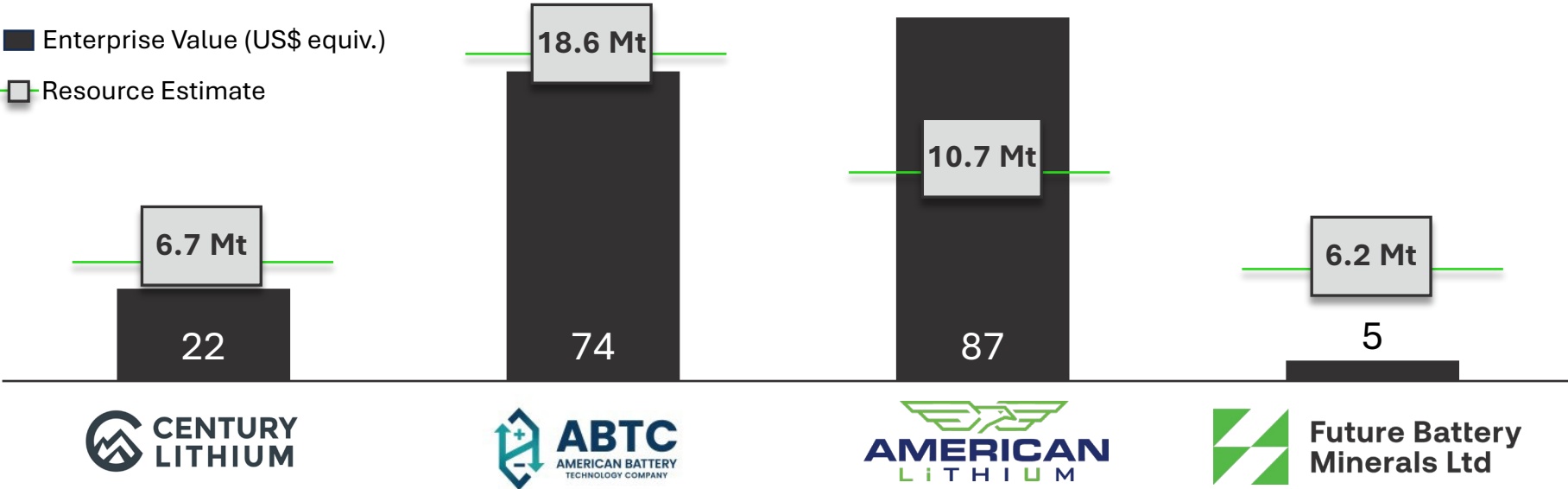


# PROXIMATE CLAYSTONE PROJECTS

Initial Mineral Resource represents comparable scale and grade as near neighbours



REAL AND  
SUBSTANTIAL  
RE-RATE  
POTENTIAL



Location	Nevada, USA	Nevada, USA	Nevada, USA and Peru	Nevada, USA and Australia
Project	Clayton Valley	Tonopah Flats	TLC Lithium	Nevada Lithium
Stage	Exploration – PFS	Exploration – PEA	Exploration – PEA	Exploration – PEA
Resource Size (LCE)	6.7 Mt	18.6 Mt	10.7 Mt	6.2 Mt
M:l:l ratio	65:26:09	12:40:48	39:43:18	0:43:57
Cut-off grade	200 ppm	300 ppm	500 ppm	500 ppm
Li Grade	950 ppm	574 ppm	792 ppm	783 ppm



# INVESTMENT HIGHLIGHTS

ASX: FBM



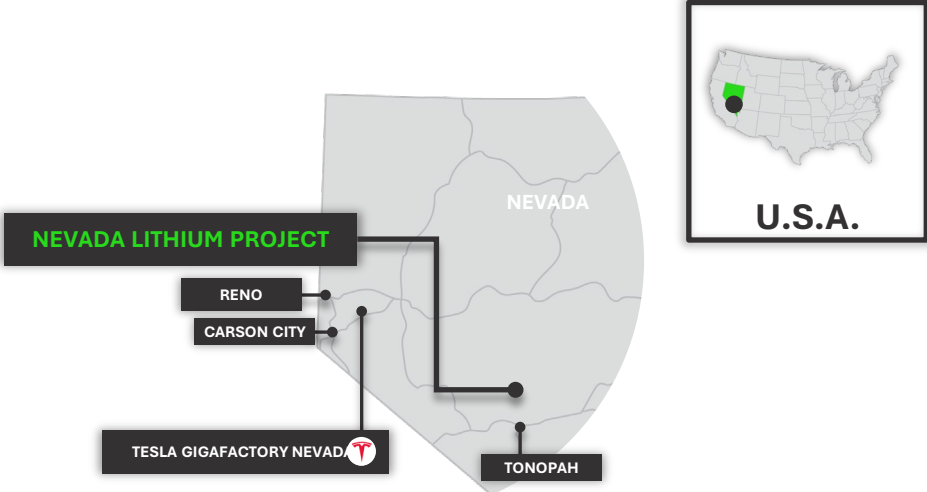
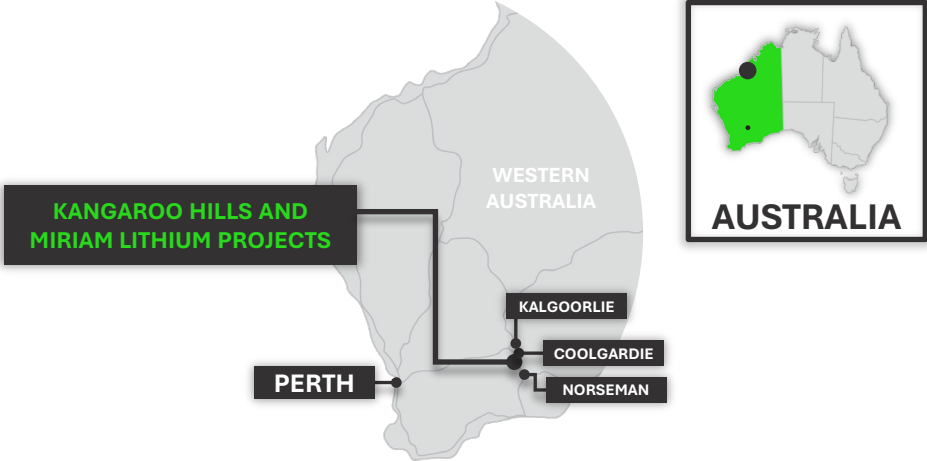
**PROVEN LITHIUM EXPLORATION AND  
DEVLEOPMEN TEAM**  
**LARGE-SCALE, HIGH-GRADE DISCOVERIES  
ACROSS TWO LITHIUM DISTRICTS IN 12 MONTHS**



**ACCELERATED 2024 DRILLING ACTIVITIES**  
**SIGNIFICANT GROWTH-FOCUSSED PROGRAMS  
AT NORTHERN KANGAROO HILLS AND MIRIAM**



**RAPID ADVANCEMENT PATHWAY**  
**EXPANDED METALLURGICAL TESTING AND  
SHARP COMMERCIALISATION FOCUS**



# CONTACT DETAILS



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Technical Director

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# APPENDIX A

## Kangaroo Hills Lithium Project regional lithium discoveries

Prospect/project	Ownership	Phase	Resource	M:I:I <sup>1</sup>	Reference
Bald Hill	Mineral Resources	Production	26.5 Mt	0:54:46	ASX Announcement (TAW): Lithium Ore Reserve Increase of 105% at Bald Hill, 6 June 2018
Buldanía	Liontown Resources	Exploration; MRE	15.0 Mt	0:61:39	ASX Announcement (LTR): Annual Report to shareholders, 29 September 2023
Dome North	Develop Global	Exploration; Scoping Study	11.2 Mt	0:76:24	ASX Announcement (ESS): Development Update – Pioneer Dome Lithium Project, 5 September 2023
Manna	Global Lithium	Exploration; Scoping Study	36.0 Mt	0:56:44	ASX Announcement (GL1): Manna Lithium Project Resource Grows, 26 July 2023
Mt Holland	Covalent Lithium (50:50 JV between SQM and Wesfarmers)	In development	189.0 Mt	35:56:9	ASX Announcement (KDR): Substantial Increase in Earl Grey Lithium Mineral Resource Estimate, 19 March 2018
Mt Marion	50% JV Mineral Resources and Jiangxi Ganfeng	Production	64.8 Mt	0:65:35	ASX Announcement (MIN): Mineral Resources and Ore Reserves update, 22 September 2023

<sup>1</sup> Ratio of MRE in Measured, Indicated and Inferred categories



# APPENDIX B

## Proximate claystone projects

Company Name	Asset	Resource	M:I:I <sup>1</sup>	SOI	Market Cap <sup>2</sup>	Debt <sup>2</sup>	Cash <sup>2</sup>	Reference
American Battery Technology Company	Tonopah Flats	18.6 Mt Li <sub>2</sub> CO <sub>3</sub>	0:0:100	47.3 M	111.6 M	24.8 M	5.4 M	Corporate Presentation, November 2023, December Quarterly Report Updated initial Assessment and Economic Analysis for its Tonopah Lats Lithium Project for One of the Largest Identified Lithium Resources in the U.S.
American Lithium	TLC Lithium	10.69 Mt Li <sub>2</sub> CO <sub>3</sub>	39:43:18	214.7 M	138.7 M	NIL	9.7 M	Corporate Presentation, April 2024, Interim Financial Statements ended 31 November 2023
Century Lithium	Clayton Valley	6.7 Mt Li <sub>2</sub> CO <sub>3</sub>	0:0:100	148.7 M	40.9 M	NIL	11.1 M	Corporate Presentation, May 2024

1 Ratio of MRE in Measured, Indicated and Inferred categories  
2 All monetary values in US\$ or converted at an exchange rate of 0.742 US\$:C\$ as at 10 May 2024

