



to production mid 2024

2023 Macquarie Australia Conference

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Important information

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Competent person statemen

The Information in this Presentation that relates to Mineral Resources for the Kathleen Valley Project is extracted from the ASX announcement "Strong progress with Kathleen Valley Definitive Feasibility Study as ongoing work identifies further key project enhancements" released on 8 April 2021 which is available on www.ltresources.com.au.

Kathleen Valley Project - Mineral Resource Estimate as at April 2021

Resource category	Million tonnes	Li₂O %	Ta₂O₅ ppm
Measured	20	1.3	145
Indicated	109	1.4	130
Inferred	27	1.3	113
Total	156	1.4	130

Notes: Reported above a Li_2O cut-off grade of 0.55%. Tonnages and grades have been rounded to reflect the relative uncertainty of the estimate.

The Information in this Presentation that relates to Mineral Resources for the Buldania Project is extracted from the ASX announcement "Liontown announces maiden Mineral Resource Estimate for its 100%-owned Buldania Lithium Project, WA" released on the 8 November 2019 which is available on www.ltresources.com.au.

Anna Deposit, Buldania Project – Mineral Resource as at October 2019

Resource category	Million tonnes	Li₂O %	
Indicated	9.1	1.0	
Inferred	5.9	1.0	
Total	15.0	1.0	

Notes: Reported above a Li_2O cut-off grade of 0.5%. Tonnages and grades have been rounded to reflect the relative uncertainty of the estimate

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 that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. 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.

Authorisation

This Presentation has been authorised for release by the Managing Director, Mr Tony Ottaviano.

Corporate overview

A globally significant provider of battery minerals for the rapidly growing clean energy market





Corporate Snapshot

(1 May 2023)

Market Cap

A\$5.96bn

Shareholders



Available Funds¹

A\$305m cash A\$300m debt **Share Price (\$/s)**

A\$2.71

Kathleen Valley

Targeting production **mid 2024**

Buldania

Future valuable source of **lithium supply**

Strategic highlights



Globally signif	ficant
Tier 1 lithium	mine

- Located in premier mining jurisdiction of WA and will provide "US IRA1 and EU CRMA2 compliant" material
- First SC6 production in mid 2024 with long mine life provides medium to long term pathway for customers

Robust lithium thematic

- Significant lithium supply deficits forecast to emerge from 2028 onwards
- Uniquely positioned as one of very few major greenfield mines with offtake optionality to meet increasing demand

Clear long-term strategy with material value upside

- Expanded Kathleen Valley base case and Buldania optionality to take advantage of higher spodumene prices
- Strategic assessment of downstream refining underway to inform value maximising pathway

ESG core to strategy

- Tjiwarl contracting opportunities and meaningful ongoing engagement delivering against native title agreement
- Kathleen Valley to be powered by 95MW renewable-hybrid power station targeting net zero emissions by 2034

Well capitalised with strong flexibility

- Well funded to progress construction of Kathleen Valley for 2023 additional funding options well progressed
- DSO financial and operational assessment is underway early revenue potential

Experienced leadership strongly aligned to shareholders

- Board and Executive Leadership Team with a track-record of delivering success for shareholders
- Strong shareholder alignment with the Board currently holding a collective ~17%

2. European Union Critical Raw Minerals Act

United States of America Inflation Reduction Ac







Kathleen Valley Full Potential

Become a globally significant sustainable supplier of spodumene



Downstream Expansion

Develop integrated Australian operations to capture higher margins, create new supply chains



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Liontown Full Potential

Expand portfolio through organic growth, value accretive M&A and exposure to the circular economy



Market overview

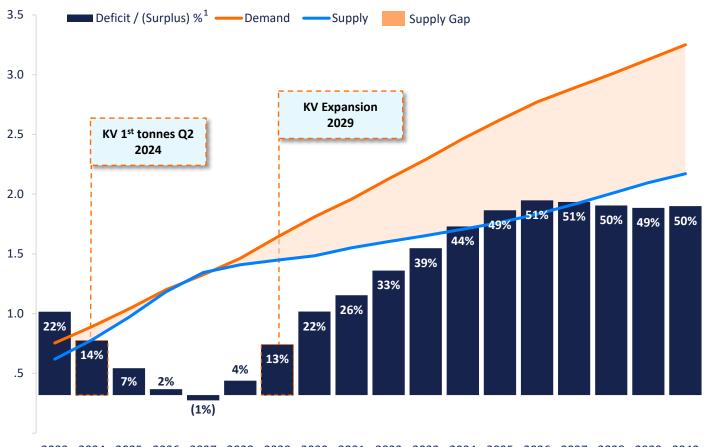
- Strong demand with supply side risks
- Government policy is changing the game

Market demand strong but new supply will cost more and be harder to deliver



Forecast lithium market deficit is expected to grow out to 2040, driven by significant demand and tight supply

Demand / Supply Forecast, 2023-40, kt LCE (Battery Grade)



2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040

Source: Wood Mackenzie – Global Lithium Investment Horizon Outlook (Q4 2022)

- . As a percent of supply
- Albemarle Strategic Update, January 2023

Demand

- Consensus shifting significant demand gap emerging ~2030
- EV penetration expected to reach ~50% by 2030, equating to 5.5x growth

Supply

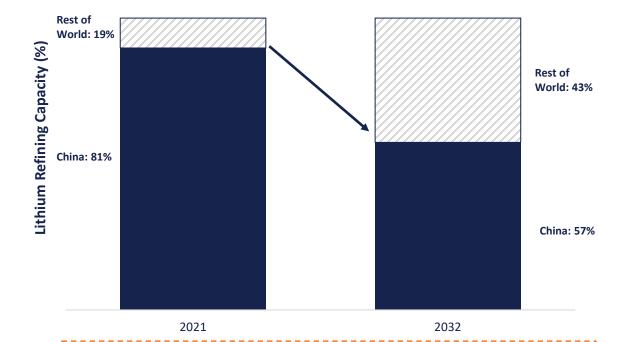
- Over ~100 new projects needed by 2030 to support demand²
- Near-term supply-side risk as many development peers extend project timelines
- Significant shortage of high-quality, high-grade product expected. Lower-grade, higher-cost projects likely required to fill demand gap²
- Market-wide cost escalation impacting developers and operators
- Government policy influence US and EU Policy, Chile nationalisation, Canada ownership laws

Market demand... its global!



Global demand for high quality lithium is expected to diversify rapidly by 2031 as countries increasingly aim to localise battery manufacturing capacity to meet electric vehicle demand

Lithium Refining Capacity by Country, 2021-32¹ % of kt LCE



Lithium mining and refining is moving away from the historical market producer to more globally diverse demand universe for raw lithium material by 2032

Battery Cell Capacity² (GWh)



EV future is not just a China-led story. US and EU Government policy to expand localised supply chains coupled with strong EV demand expected to increase lithium demand in new growth regions

McKinsey & Company Australian Lithium Perspective December 2022

^{2.} Benchmark Mineral Intelligence Battery Megafactory Assessment, October 2022. 2031 battery cell capacity in China estimated at ~5,200GWh



Location matters! IRA and EU Critical Raw Minerals Act

Unprecedented public investment committed to diversify global battery supply chains, led by the United States, European Union and pan- Asia nations (inc. Japan and Korea). This presents valuable opportunities for 'qualified' battery material providers

IRA has changed the game with major incentives to invest in – and alongside – the US... or risk being left behind

"[In the 7 months] since enactment of the Inflation Reduction Act, over US\$45 billion in investments across at least 75 facilities have been announced across all segments of the domestic battery supply chain..."

– White House communique (March 2023)¹

"The Inflation Reduction Act (IRA) will significantly aid in lowering EV production costs/prices in the U.S. should qualifying terms be met..." – BMO Capital Markets (March 2023)²

"We may start to see two market prices for IRA-approved and non-approved production. Australia is well positioned to leverage this trend..."

– Bank of America Securities (April 2023)³

High thresholds to qualify, with Liontown supply well placed to extract value

New Clean Vehicle Credit (CVC) eligibility criteria under US IRA4		
~	Compliant Procurement Chain Critical materials 'extracted, processed or recycled' through US or Free Trade Agreement (FTA) country	US\$3,500
/	Qualified Critical Material At least 50% extracted or processed in US or FTA	+
~	Battery Content Value 50% of total incremental value derived from North America location	US\$3,500
~	No Foreign Entities of Concern Foreign Entity of Concern (FEC) cannot hold majority (>25%) direct or indirect voting interest	Disqualified (from 2024)
		= <u>US\$7,500</u> (Max. credit)

The White House, Treasury Releases Guidance to Drive Investment in Critical Minerals & Battery Supply Chains in America, 31 March 2023.
 Bank of America Securities, PLS – Reinstating coverage of Australia's largest lithium pure play with a Buy, 5 April 2023



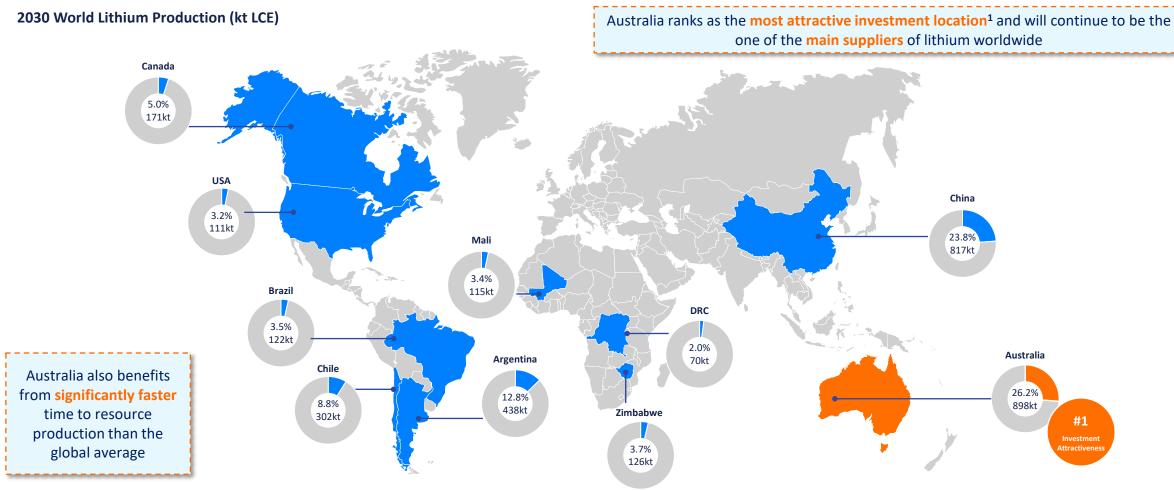
The full potential of Kathleen Valley

- Tier 1 jurisdiction
- Kathleen Valley on track for production
- Optimising the Kathleen Valley base case

Kathleen Valley Located in Tier 1 jurisdiction



Australia is the world's most attractive mining jurisdiction due to high levels of political stability, government policy, mineral reserves and commercial operability – there is significant scarcity value in a lithium resource of Kathleen Valley's quality, scale and location



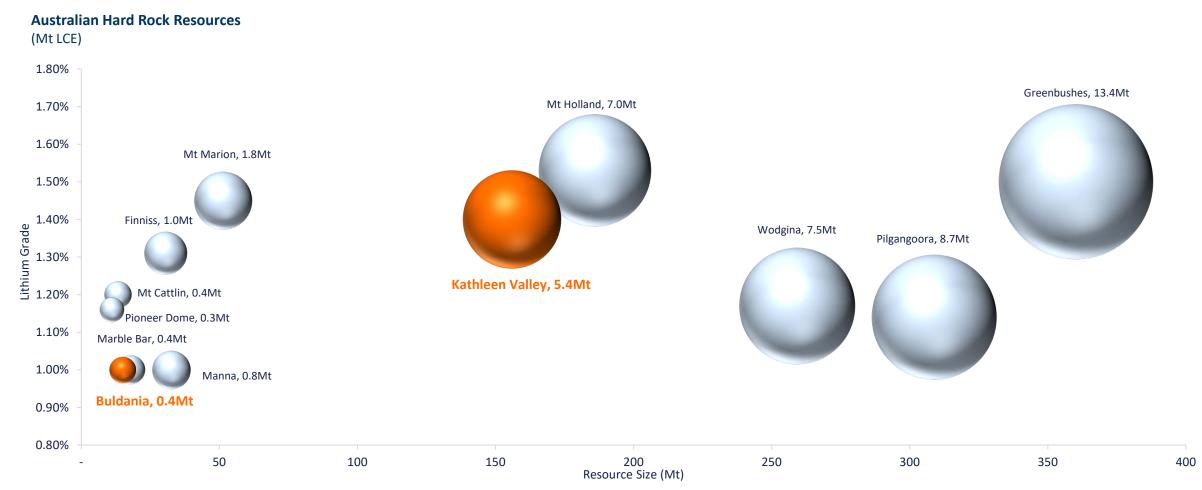
Source: IEA World Energy Outlook Special Report, Fraser Institute, UBS Global Commodities & Mining

^{1.} Out of 84 mining jurisdictions surveyed with considerations to mineral potential, regulations, taxation, infrastructure and other policy matters. Investment attractiveness ranking of the most attractive jurisdiction in the country if there are multiple



Ore bodies of Kathleen Valley scale and quality are scarce

Kathleen Valley is the largest and highest quality hard rock lithium resource in Australia that is not already partly or wholly owned by an existing major global lithium player



Kathleen Valley construction ramping up ...





Approaching peak construction phase

- 444 camp rooms now online
- Key build contracts awarded inc.
 Camp, earthworks, civil, structural steel erection, equip. and piping install for crushing area, process plant buildings
- Detailed design phase nearing completion
- Power Station build commenced
- Tails dam construction underway
- Multiple operational contracts awarded or in final stages, inc. power, concentrate transportation and gas

...with critical path fronts on track...



Big push on plant build

SAG mill on site

- 3,500m³ plant structural concrete poured on schedule
- First structural steel on site for erection 81% under fabrication
- Equipment deliveries on track critical path SAG mill on site
- 400+ staff and contractors mobilised



...and mining progressing at pace





Mine development underway

- Open pit mining contractor mobilised with first pit blast milestone in January 2023
- Kathleen's Corner and Mt Mann pits well advanced
- 771k BCM moved in March Qtr
- Mill ore feed being stockpiled, plus DSO material
- Underground mining tender bids now closed – Award mid year

Direct Shipping Ore opportunity

^Lliontown

DSO being pursued as early cashflow potential

- Additional material not part of the ore inventory
- Samples sent to customers and commercial engagements ongoing
- Discussions underway with contactors to prepare material for sale
- Study to be concluded in the June quarter
- First sales targeted for Dec 2023 quarter subject to Board approval

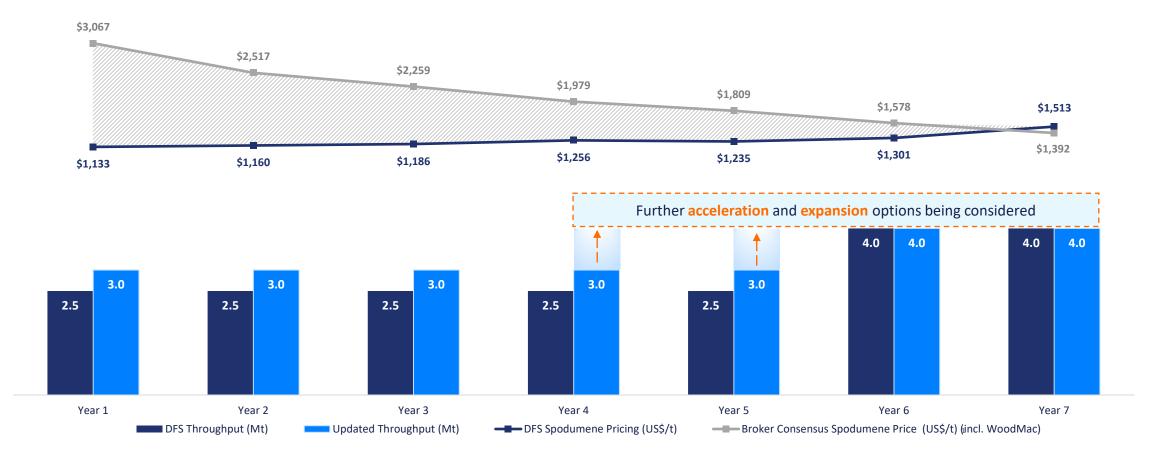


Optimised base case – further upside potential



Base case mine throughput has been expanded since the DFS, with further expansion and acceleration options being explored to capture a higher share of the favourable expected pricing environment in the near to mid-term.

Mine Throughput (Mt) vs Consensus Pricing (US\$/t)





The full potential of Liontown Resources

- Downstream optionality
- Buldania well located in emerging lithium district
- Creating further value





Given the long life and quality of Kathleen Valley, Liontown has a compelling, and unique, opportunity to unlock value through becoming an integrated producer and refiner of lithium products

Value Maximising

Strategically Compelling

Full Optionality

Liontown progressing strategic review upfront to assess place, product and partner - Hatch engaged to assist







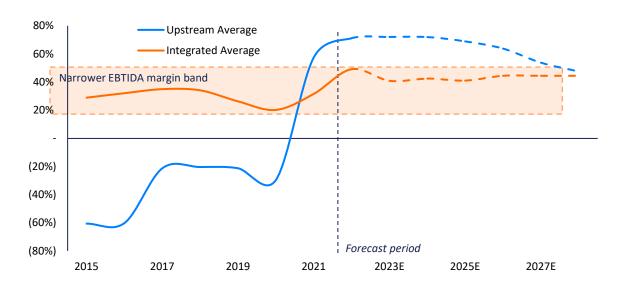
Maximise value - benefits of an integrated model



An integrated model provides robust and stable margins throughout the cycle, access to an expanding conversion premium for downstream products, and the ability to capture a larger share of the value chain

An integrated model enhances margin stability through the cycle...

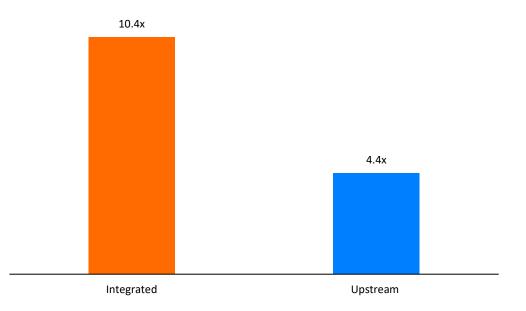
Lithium Peers EBITDA margin (%)¹



...and integrated peers attract higher valuations

EV/NTM EBITDA multiple²

(average over the last 12 months, x)



Source: UBS Global Research and Evidence Lab

ote:

Integrated calculated as the average of Albemarle and Livent. Upstream calculated as the average of Allkem, Pilbara Minerals and IGO

^{1.} Upstream peers include Allkem, Pilbara Minerals, IGO (since 2020 given acquisition of Greenbushes) and integrated peers include Albemarle, Livent, Ganfeng, SQM. Based on forecast broker consensus

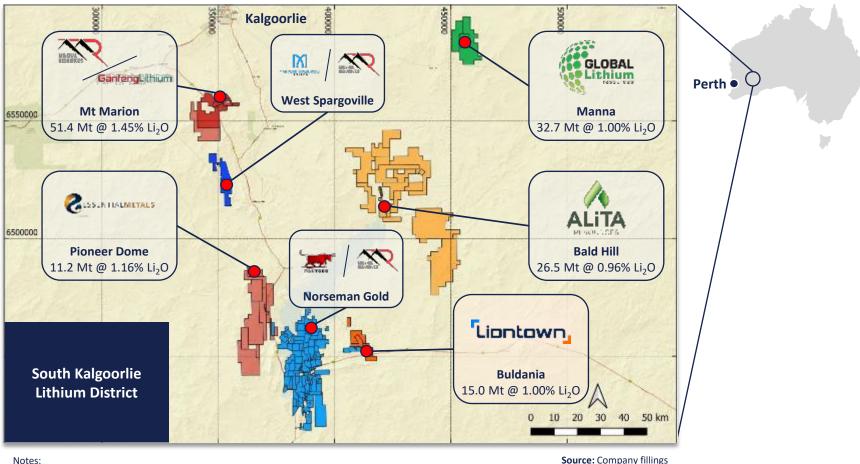


Buldania – in the heart of the South Kalgoorlie lithium district

Exploration completed at the Anna deposit to improve definition and infill the Mineral Resource

Mineral Resource update scheduled for September 2023 quarter

Exploration focus now moving to test the North-West area on 100m spaced sections



Pantoro: 14 December 2021 Mineral Resources to earn up to 65% across Norseman Gold Project Marquee Resources: 2 June 2022 Mineral Resources to earn up to 70% over the West Spargoville Project

Global Lithium: Mineral Resources 9.7% ownership Essential Metals: Mineral Resources 19.55% ownership

Upcoming highlights to create further value



Katheen Valley de-risked

Award remaining key contracts and finalise well-advanced funding options

Reserves upside

Kathleen Valley Reserves and Resource update in September quarter

DSO

Study outcomes and conclusion of commercial discussions

Further capacity expansion

Study commenced to increase throughput above current planned rates

Buldania

Quality asset with potential to become a valuable source of future supply

Downstream

Pre-feasibility study to determine place, product and partner to maximise value



Kathleen Valley – on track for first production mid 2024





QUESTIONS



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APPENDIX





Mine	Ownership	Resource (Mt)	Grade (%)	LCE (Mt) ¹	Source
Greenbushes	Albemarle (49%) / TLEA ² (51%)	360.2	1.50%	13.36	ASX Announcement (IGO): Greenbushes Lithium Operation Site Visit Presentation, July 2022
Pilgangoora	Pilbara Minerals	308.9	1.14%	8.71	ASX Announcement: Substantial increase in Pilgangoora Resource to 309Mt confirms its status as the world's premier hard rock lithium project, September 2021
Wodgina	Albemarle (50%) / Mineral Resources (50%)	259.2	1.17%	7.50	ASX Announcement: Lithium Mineral Resources and Reserve Update, October 2022
Mt Holland	Wesfarmers (50%) / SQM (50%)	186.0	1.53%	7.04	Company Announcement (SQM): Technical Report Summary, April 2022
Kathleen Valley	Liontown	156.0	1.40%	5.40	ASX Announcement: Kathleen Valley DFS confirms Tier-1 global lithium project, November 2021
Mt Marion	Mineral Resources (50%) / Ganfeng (50%)	51.4	1.45%	1.84	ASX Announcement: Lithium Mineral Resources and Reserve Update, October 2022
Finniss	Core Lithium	30.6	1.31%	0.99	ASX Announcement: Finniss Mineral Resource increased by 62%, April 2023
Manna	Global Lithium	32.7	1.00%	0.81	ASX Announcement: Manna delivers increased exploration upside, March 2023
Marble Bar	Global Lithium	18.0	1.00%	0.45	ASX Announcement: Manna delivers increased exploration upside, March 2023
Mt Cattlin	Allkem	13.3	1.20%	0.39	ASX Announcement: Mt Cattlin Resource, Reserve and Operations Update, August 2022
Buldania	Liontown	15.0	1.00%	0.37	ASX Announcement: Kathleen Valley DFS confirms Tier-1 global lithium project, November 2021
Pioneer Dome	Essential Metals	11.2	1.16%	0.32	ASX Announcement: Scheme Booklet, March 2023

Source: Company fillings

1. LCE equivalent based on conversion factor of 2.473 2. Tianqi Lithium Energy Australia (49% IGO / 51% Tianqi Lithium)