

7 August 2023

## Liontown strategy and project update - 2023 Diggers and Dealers Mining Forum

Liontown Resources Limited (ASX: LTR) (**Liontown** or the **Company**) is pleased to announce that Managing Director and CEO, Tony Ottaviano, will provide a strategy and Kathleen Valley Project update to the 2023 Diggers and Dealers Mining Forum on Monday 7 August 2023 at 4.05pm Australian Western Standard Time. A copy of the full presentation is attached.

### Highlights of presentation:

- **Kathleen Valley Project Powering to Production:** Liontown's flagship project is now less than 12 months to achieving target of first production in mid-2024, with mining and construction progressing to schedule and materially in line with the capital expenditure estimate, with committed spend for the Project at approximately 60 percent at the end of FY23. The underground mining services and the structural and mechanical piping contracts are on-track to be awarded in the September quarter as scheduled. The award of the underground contract will enable Liontown to finalise its operating cost review this quarter.
- **Direct Shipping Ore (DSO) project sanctioned:** Liontown is proceeding with delivery of a DSO product as an early source of revenue ahead of first concentrate production from the Kathleen Valley Project. Material for DSO has been liberated through mine plan optimisation and is in addition to Ore Reserves. With on-site crushing and supply chain services secured, and customer engagement well advanced, first DSO shipment is targeted by end of calendar year 2023.
- **Government Funding Support:** Liontown has received a joint Letter of Support from the international Export Credit Agencies (ECAs) of Australia, South Korea and the U.S. The letter accompanies three individual Letters of Support/Interest, indicating total non-binding and conditional finance interest for up to A\$300 million to support delivery of the Kathleen Valley Project. Any financial support is subject to the eligibility criteria, and credit and risk requirements outlined in the individual Letters. The collaboration between Export Finance Australia (EFA), and equivalent Korea Trade Insurance Corporation (K-Sure) and Export-Import Bank of the United States (EXIM), reinforces a shared commitment to diversify global battery value chains. While non-binding and conditional, the joint support from the ECAs provides Liontown with a strong foundation as it advances all funding options to conclusion.
- **Downstream Strategy:** Liontown has progressed the "partner" pillar of its downstream strategy through an agreement with Japan's Sumitomo Corporation, a global participant in commodity processing and marketing, to investigate the development of a lithium supply chain between Australia and Japan. The agreement will support a jointly-funded study that explores the feasibility of using Liontown's spodumene, or a future lithium sulphate product produced in a Western Australia based plant, to produce lithium hydroxide in Japan. The study is non-binding and is expected to be undertaken over a period of two years.

**Liontown’s Managing Director and CEO, Tony Ottaviano, said:**

*“Liontown Resources is powering to production and recent achievements reinforce the commitment to realising the full potential for Kathleen Valley and growing our Company. We are on track to award our most significant contract, the underground mining services contract on schedule in the September quarter along with the structural and mechanical piping contract.*

*“Executing the DSO project enables us to realise the dual benefit of unlocking early revenue and de-risking the project by field testing our ore sorting and logistics solutions ahead of first concentrate production.*

*“I commend the work undertaken by Export Finance Australia in collaboration with the K-Sure and US EXIM, who are really leaning-in to jointly support expanding global battery supply chains. Through our offtake partners LG Energy Solutions, Tesla and Ford, our spodumene from Kathleen Valley will be integral in supplying their rapidly expanding Li-ion battery and EV industries. I look forward to this indicated support progressing towards committed funding, and driving all our financing options to completion well ahead of the requirement for additional funds.*

*“We are putting our downstream strategy into action by partnering with Sumitomo Corporation to explore the feasibility of developing downstream lithium products between Australia and Japan – two longstanding and successful partner nations in natural resources.*

*“Liontown really is powering ahead on all fronts, and our flagship Kathleen Valley Project is now less than 12 months from first production.”*

**- ENDS -**

This announcement has been approved for release by the Managing Director and CEO, Mr Tony Ottaviano.

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**About Liontown Resources**

Liontown Resources (ASX:LTR) is an emerging Tier-1 battery minerals producer. Our aim is to be an ESG leader and a globally significant provider of battery minerals for the rapidly growing clean energy market. As we transition from explorer to producer, we are committed to incorporating the right approach and foundation from the outset and ESG principles underpin all decisions. We currently control two major lithium deposits in Western Australia and aim to expand our portfolio through exploration, partnerships and acquisitions. In addition, we look to participate in downstream value-adding where control of the deposit provides a strong competitive advantage. To learn more, please visit: [www.ltresources.com.au](http://www.ltresources.com.au)

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# Powering to production

2023 Diggers and Dealers

Tony Ottaviano  
Managing Director / Chief Executive

ASX: [LTR](#)

[lresources.com.au](http://lresources.com.au)



# Agenda

- 1 Strategic highlights
- 2 Liontown's strategy
- 3 ESG focus
- 4 Lithium market update
- 5 Project update
- 6 Funding update
- 7 Downstream strategy update
- 8 Near term focus

# Important information



## Forward looking statements

This Presentation contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Presentation, are considered reasonable. Such forward-looking statements are not a guarantee of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the management. The Directors cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Presentation will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. The Directors have no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Presentation, except where required by law or the ASX listing rules.

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## Competent person statement

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](http://www.ltresources.com.au).

Kathleen Valley Project – Mineral Resource Estimate as at April 2021

Resource category	Million tonnes	Li <sub>2</sub> O %	Ta <sub>2</sub> O <sub>5</sub> ppm
Measured	20	1.3	145
Indicated	109	1.4	130
Inferred	27	1.3	113
<b>Total</b>	<b>156</b>	<b>1.4</b>	<b>130</b>

Notes: Reported above a Li<sub>2</sub>O 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](http://www.ltresources.com.au).

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

Resource category	Million tonnes	Li <sub>2</sub> O %
Indicated	9.1	1.0
Inferred	5.9	1.0
<b>Total</b>	<b>15.0</b>	<b>1.0</b>

Notes: Reported above a Li<sub>2</sub>O 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.

# Strategic highlights

**Globally significant Tier 1 lithium mine**  
Located in premier mining jurisdiction  
Will produce "US IRA<sup>1</sup> and EU CRMA<sup>2</sup> compliant" material

**Robust lithium thematic**  
Significant lithium supply deficits on the horizon

**Driving project to completion**  
Recent award of major contracts aligned to schedule and budget

**ESG core to DNA**  
On track for 60% renewable power from day one

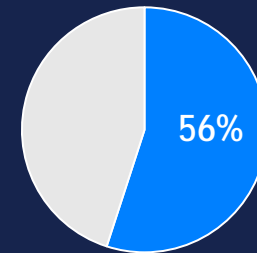
**Clear strategy with material value upside**  
Expanded Kathleen Valley, Buldania and Downstream ambition

**Leadership strongly aligned to shareholders**  
Experienced Board and Executive with track-record of success

**A\$6.07bn\***

Market Capitalisation

Shareholders\*



**Top 20**

(incl. ~17% held by Board and Management)

**Less than 12 months to production**

1. United States of America Inflation Reduction Act  
2. European Union Critical Raw Minerals Act  
\*28 July 2023

# Liontown's strategy

Our pathway to become a globally significant provider of battery minerals as the world transitions to a low-carbon future



## 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



## Liontown Full Potential

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

# ESG - good for the company, good for stakeholders

## Environmental

- ü Delivering one of Australia's **largest off-grid hybrid renewable** power stations > 60% renewable-power from day one
- ü Actively **limiting our disturbance** and waste footprint
- ü **Drone technology** and **AI** integrated to manage biodiversity impacts



Minimised footprint at the wind turbine farm

## Social

- ü Committed to **Tjiwarl partnership**, through ongoing consultation and monitoring
- ü **Co-design** of Jones Creek crossing and the uniqueness of Dragonfly Village is collaboration in action
- ü **Indigenous contract awards** and capacity-building ongoing



Dragonfly Village

## Governance

- ü Aspiring to be a leader in the **responsible mining supply of lithium**
- ü **3rd ESG report** aligned with GRI standard to be published September quarter
- ü Progressing self-assessment under the **Initiative for Responsible Mining Assurance (IRMA)**



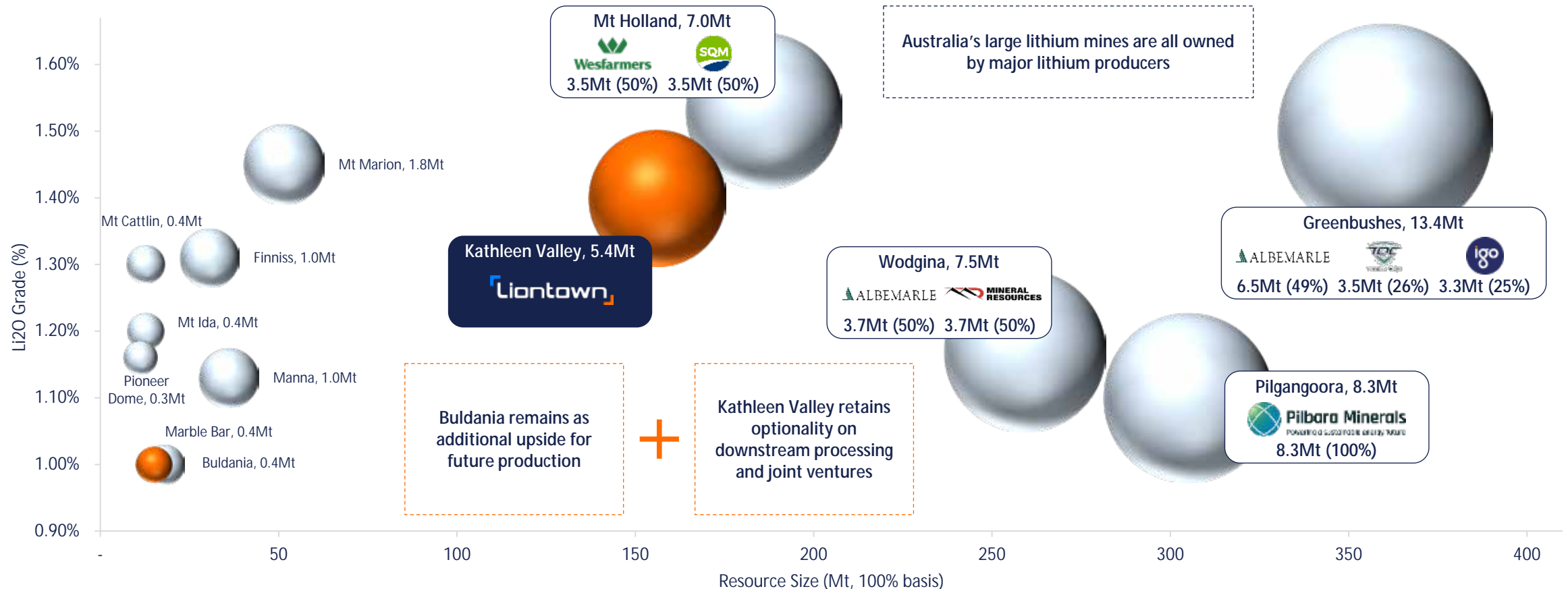
Committed to disclosing sustainability and social impact



# Kathleen Valley – scale, grade, independent...

Kathleen Valley is uniquely positioned as a wholly-owned, large and high-quality hard rock lithium resource in Australia, with Tier-1 offtake customers from South Korea and the United States

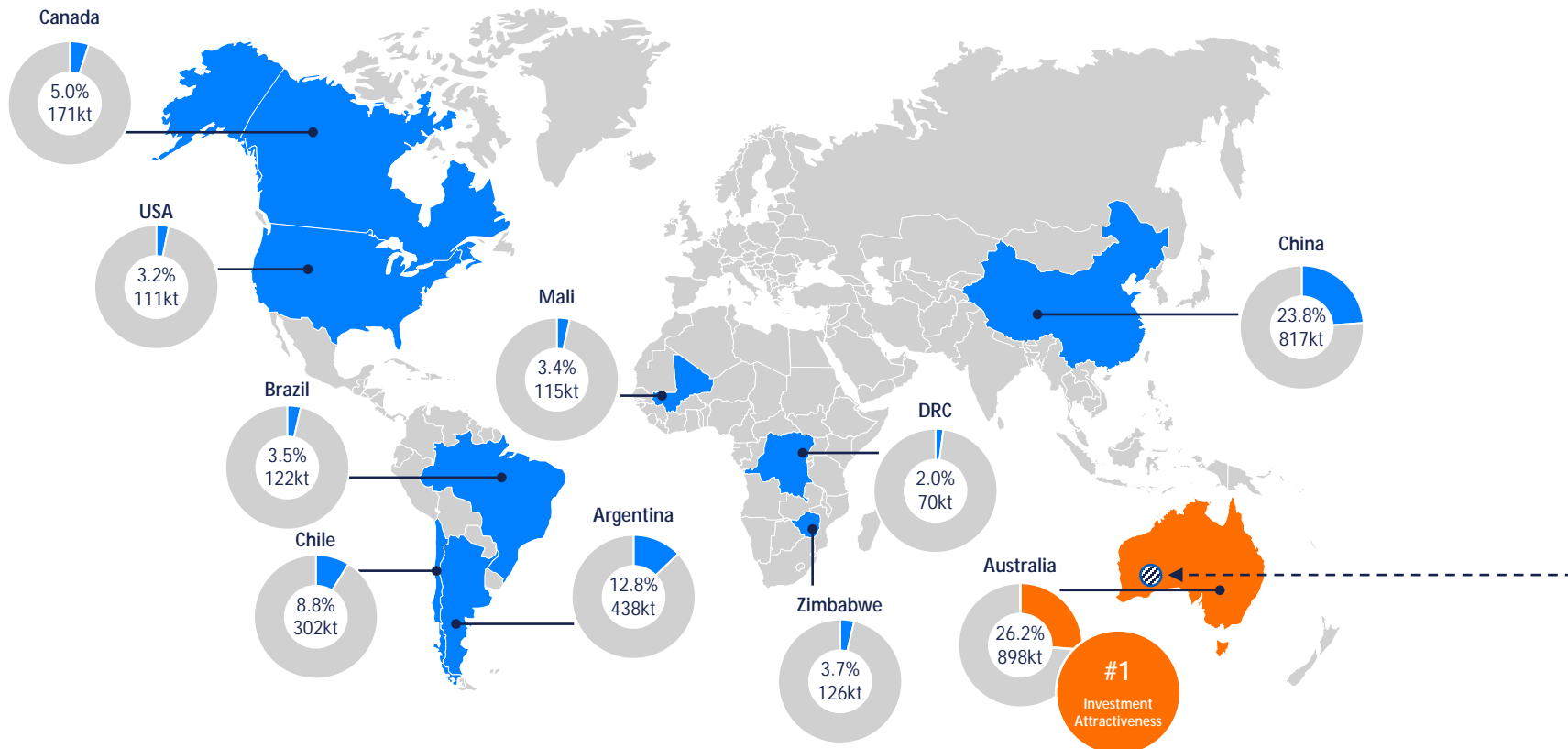
Australian Hard Rock Resources (Mt LCE)



Source: Company filings, see Appendix. Bubble size represents resource size (Mt LCE) based on company-disclosed cut-off grades

# ...and location matters – IRA compliant

## 2030 World Lithium Production (kt LCE)



## Kathleen Valley

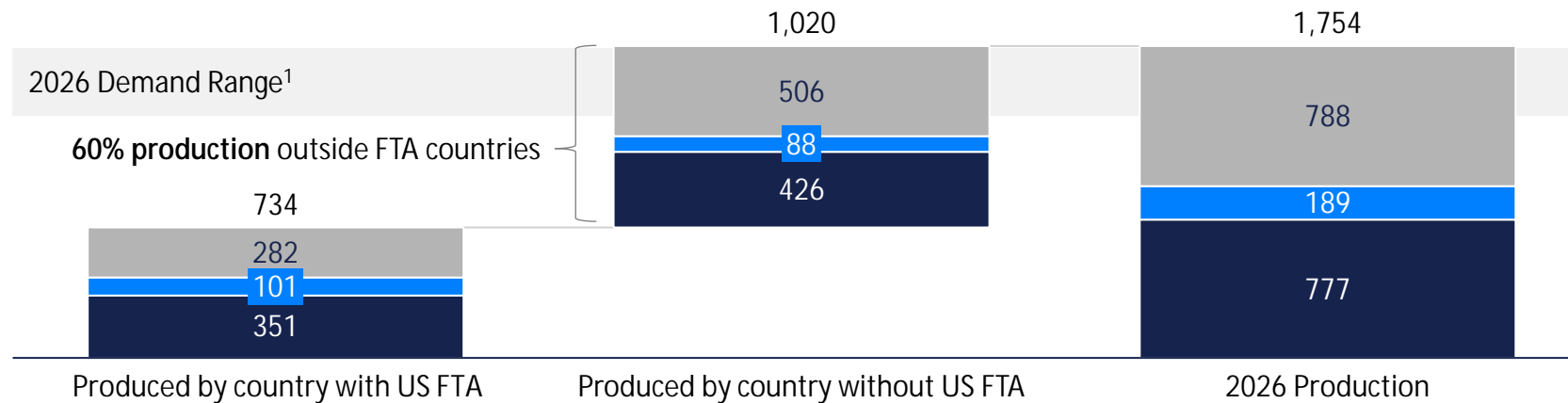
- Australia is a Tier 1 location, ranked #1 in terms of investment attractiveness
- Less than 12 months to production
- Significant new source of 'IRA compliant' material, ie US FTA aligned

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

# The challenge: 42 projects in 3 years to meet demand

■ New mines and major expansion ■ Ramp Ups ■ 2022 Production

## Lithium Mine Production growth 2022-2026, kt LCE



## Number of major growth projects

- Australia (6)<sup>4</sup>
- Canada (2)
- Mexico (1)
- Argentina (11)
- China (9)
- Zimbabwe (8)
- Brazil (2)
- Mali, Bolivia, and Namibia (1 each)

- Total new projects (42)**
- ~300kt from China and Africa

- Price to remain strong in the short to medium term
- Mining projects are typically delayed by at least 7 months and up to 2.5 years<sup>2</sup>
- ~60% supply is expected from countries without a US FTA, and will be challenged to qualify as 'IRA compliant'
- ~30% of new supply is expected from OFAC and FEC<sup>3</sup> sanctioned countries, which cannot be used to manufacture EVs receiving IRA subsidies

1. Base to high case demand of 1,380 to 1,760 kt LCE  
 2. Optimizing mining feasibility studies: The \$100 billion opportunity, M. Dussud et. al.  
 3. Office of Foreign Assets Control (OFAC) and Foreign Entity of Concern (FEC)  
 4. Includes Kathleen Valley, Mt Holland Wesfamers FID ASX announcement (17/2/2021), Greenbushes expansion (CGP3) IGO Quarterly activities report 31/7/23, Mount Marion Expansion completed June-23, Mineral Resources ASX announcement (26/7/23), Pilgangoora Stage 2 Jun 2023 Quarterly Activities Presentation, Finnis commenced production 2023, per Q4 FY23 update  
 Source: MineSpans Lithium Perspective 2023 Certain and Probable projects

# Kathleen Valley less than 12 months to production

- **On schedule for first production mid-2024**
  - Construction and mining rapidly progressing
- **Project expenditure materially tracking to budget**
  - ~60% spend committed as at 30 June
  - Underground contract and SMP to be awarded September quarter
- **Executing DSO as early revenue source**
  - Tonnage is additional to current ore reserves
- **Funding options advancing well ahead of requirement**
  - Joint indicative support from Government Export Credit Agencies
- **Pursuing future value**
  - Agreement with Sumitomo to progress downstream processing in Australia and Japan

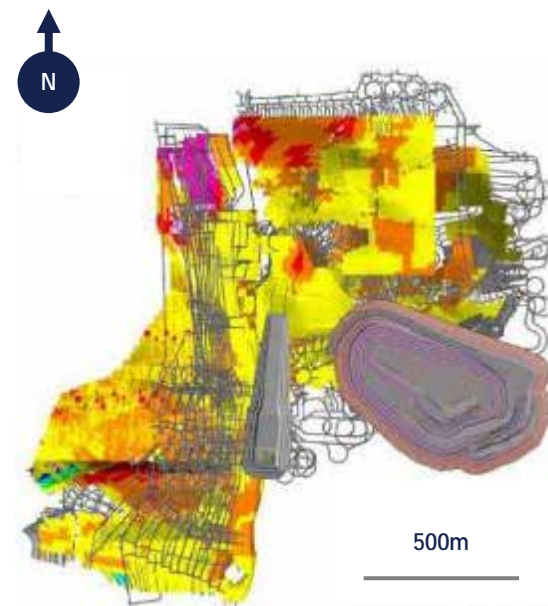


# Kathleen Valley underground – two ore bodies, one mine

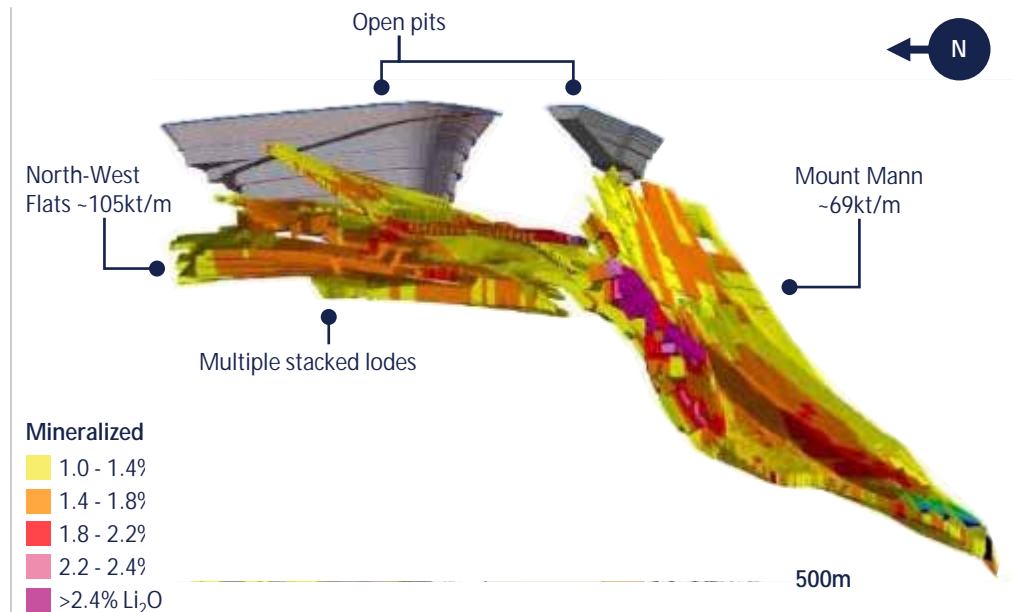
- Kathleen Valley has two orebodies each with their own declines: 2 x 2 Mtpa operations
- Established mining method of **long-hole open stoping**, will support **extremely high tonnes per vertical metre**
- Duplicated UG access (Up/ Down) to allow for **higher traffic flows**, facilitate meeting extraction rates and **ramp-up timing**
- **Underground Mining Services contract** award imminent
- Significant **upfront investment** in equipment and personnel by contractor

## Kathleen Valley Mine Plan

Plan View – our mine from above



Underground Isometric View – rich mineral resources beneath the surface



# Direct Shipping Ore - creating value and testing our supply chain

DSO  
Project  
Sanctioned

Technical specifications confirmed



Haulage secured



Preferred customers shortlisted



Offtake contract negotiation underway

First shipment expected in Q4 2023

Bringing forward 'new value'



DSO stockpile

# Driving funding to completion well ahead of requirement

Funding options advancing to conclusion, with significant interest from counterparties to support the Kathleen Valley Project. Additional funds, to cover remaining capital expenditure, working capital and any reserve requirements to first production, are not expected to be required until CY2024.

## Government Export Bank Financing

- Joint letters of support received from Australian, Korean and US Export Credit Agencies<sup>1</sup>
- Total Indicative non-binding finance for up to A\$300m
- Strong alignment to diversify battery supply chains

## Commercial Bank Financing

- Received EOIs from several commercial lenders with attractive terms expected to be secured
- Lending syndicate currently undertaking due diligence

## Customer Financing

- Multiple potential customers with interest in securing offtake in exchange for financing



Progressing expeditiously, well ahead of funding requirement

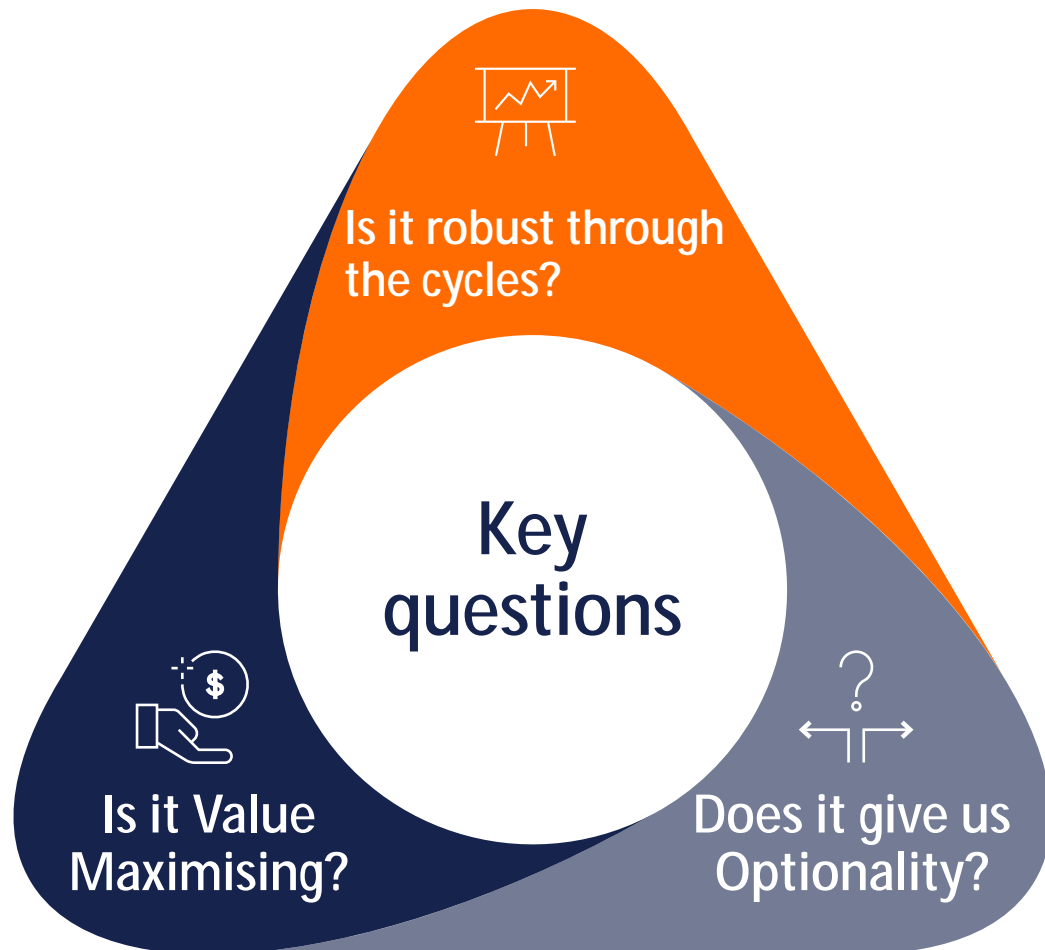


Liontown preference to retain optionality over future tonnes given long-term strength in lithium market outlook

<sup>1</sup> Non-binding joint letter received from Export Finance Australia (EFA), Korea Trade Insurance Corporation (K-Sure) and Export-Import Bank of the United States (EXIM). Joint Letter accompanies three non-binding and conditional Letters of Support/Interest. Any financial support is subject to the eligibility criteria, and credit and risk requirements outlined in the individual Letters.

# Downstream - getting the strategy right upfront

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



## Place

- Geopolitically attractive
- Optimal capital and opex environment
- Skilled workforce



## Product

- Optimal product chemistry
- Managing transport and prequalification



## Partner

- Engagement with strategically-aligned and technically advanced partners

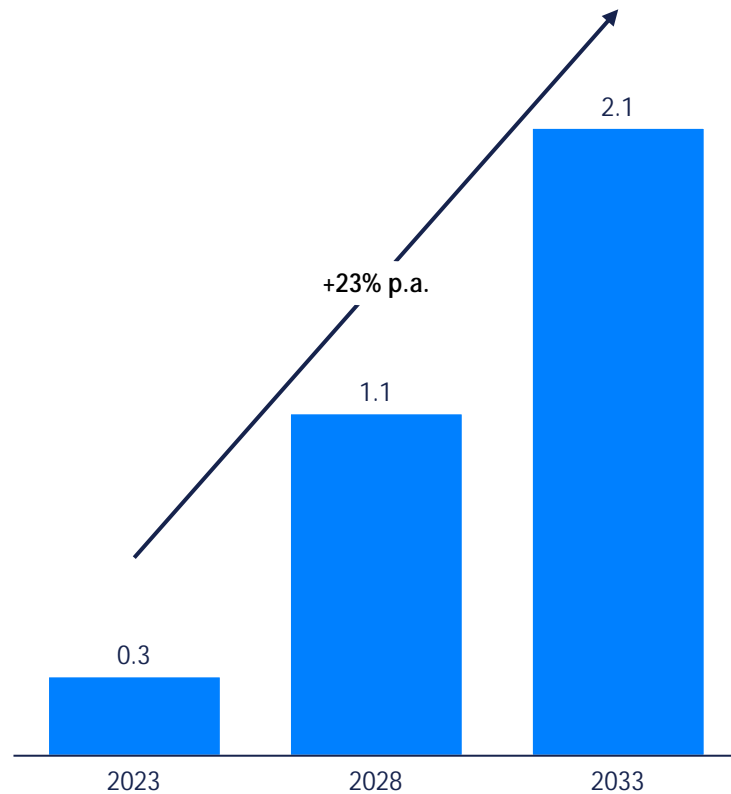
Liontown progressing strategic review upfront to assess place, product and partner - Hatch engaged to assist



# Building the case for vertical integration

## A decarbonised world needs lithium products...

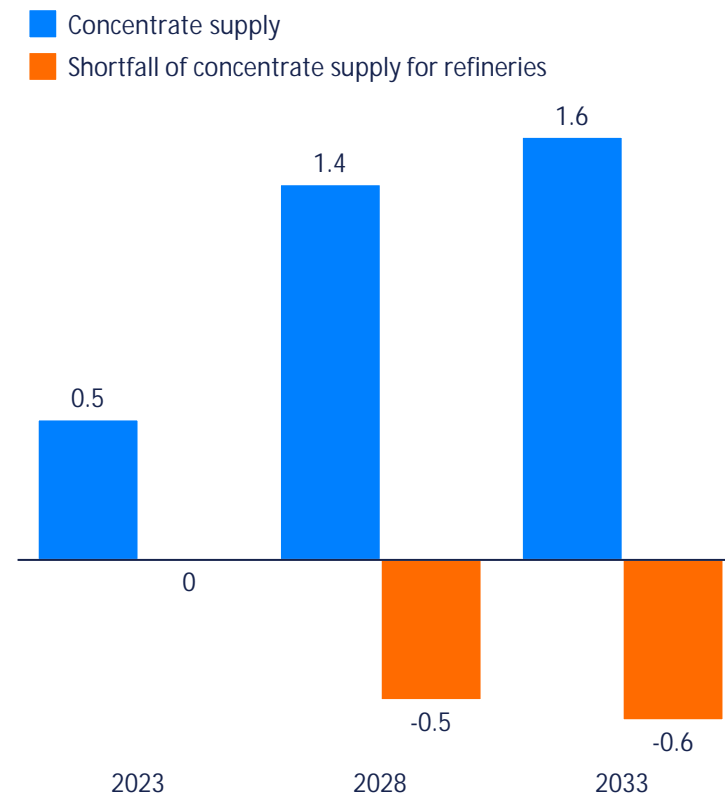
Lithium hydroxide demand, 2023-2033  
Mt LCE



1. Spodumene price add 90th percentile conversion opex from concentrate to hydroxide, corrected for losses  
 2. Illustrative, assumes CAPEX of ~US\$20,000/tpa LiOH, excludes corporate overhead costs and tax  
 Source: Data from MineSpans 2023 Lithium Perspective and Fastmarkets

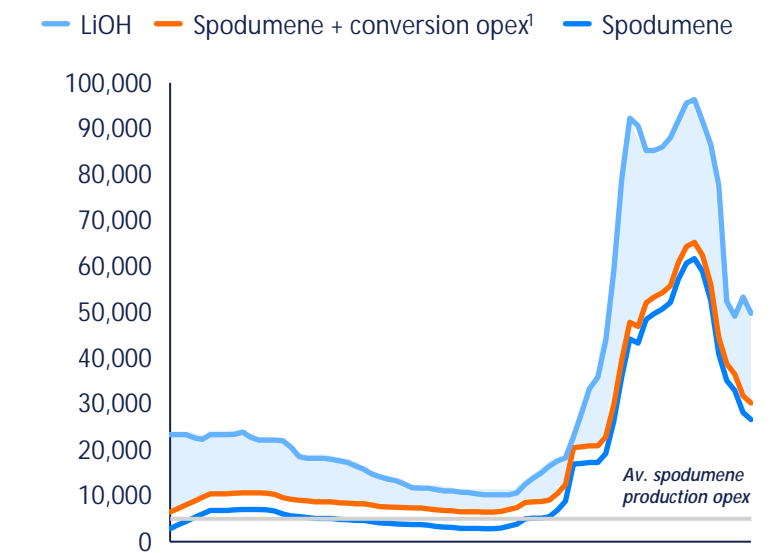
## ...miners could decide where spodumene goes...

Global spodumene mining supply vs. requirements, 2023-33, Mt LCE

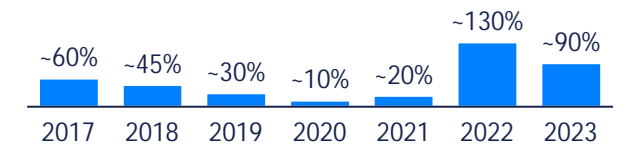


## ... with substantial value sitting downstream

Lithium commodity prices  
US\$/t LCE



Implied refining pre-tax ROIC,<sup>2</sup> %



# Validating technical and economics with a strategic partner

## Announcing Liontown – Sumitomo Downstream Partnership



- Joint feasibility study into an Australia-Japan lithium supply chain
- Exploring intermediate and finishing plant opportunities in Australia and Japan
- Unique partnership with a major Japanese industrial corporation to maximize future value options



Increasing technical complexity and specialist capability requirements



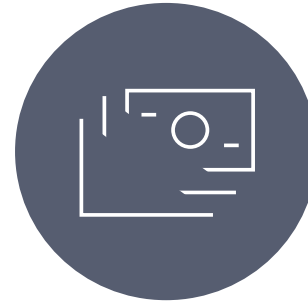
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Secure last remaining contracts underpinning capex – Underground & SMP



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Finalise operating cost and working capital requirements



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Secure financing arrangements



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Commence planning for commissioning and ramp-up

# Kathleen Valley project update



Video Link: <https://youtu.be/jPxxgypTHdQ>

on  
Tjiwarl Country



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DragonFly accommodation Village taking shape

# APPENDIX

# Australian Hard Rock Resources

Mine	Ownership	Resource (Mt)	Grade (%)	LCE (Mt) <sup>1</sup>	Source
Greenbushes	Albemarle (49%) / TLEA <sup>2</sup> (51%)	360.2	1.50%	13.36	<b>ASX Announcement (IGO):</b> Greenbushes Lithium Operation Site Visit Presentation, July 2022
Pilgangoora	Pilbara Minerals	305.0	1.10%	8.30	<b>ASX Announcement:</b> PLS 2022 Annual Report, October 2022
Wodgina	Albemarle (50%) / Mineral Resources (50%)	259.2	1.17%	7.50	<b>ASX Announcement:</b> Lithium Mineral Resources and Reserve Update, October 2022
Mt Holland	Wesfarmers (50%) / SQM (50%)	186.0	1.53%	7.04	<b>Company Announcement (SQM):</b> Technical Report Summary, April 2022
Kathleen Valley	Liontown	156.0	1.40%	5.40	<b>ASX Announcement:</b> Kathleen Valley DFS confirms Tier-1 global lithium project, November 2021
Mt Marion	Mineral Resources (50%) / Ganfeng (50%)	51.4	1.45%	1.84	<b>ASX Announcement:</b> Lithium Mineral Resources and Reserve Update, October 2022
Manna	Global Lithium	36.0	1.13%	1.01	<b>ASX Announcement:</b> Manna Lithium Project Resource Grows, July 2023
Finniss	Core Lithium	30.6	1.31%	0.99	<b>ASX Announcement:</b> Finniss Mineral Resource increased by 62%, April 2023
Marble Bar	Global Lithium	18.0	1.00%	0.45	<b>ASX Announcement:</b> Manna delivers increased exploration upside, March 2023
Mt Cattlin	Allkem	12.8	1.30%	0.41	<b>ASX Announcement:</b> Mt Cattlin Resource Update with Higher Grade, April 2023
Mt Ida	Delta Lithium	12.7	1.20%	0.38	<b>ASX Announcement:</b> Mt Ida Maiden Lithium Resource 12.7Mt at 1.2% Li <sub>2</sub> O, October 2022
Buldanina	Liontown	15.0	1.00%	0.37	<b>ASX Announcement:</b> Investor Presentation - 2023 Macquarie Australia Conference, May 2023
Pioneer Dome	Essential Metals	11.2	1.16%	0.32	<b>ASX Announcement:</b> Scheme Booklet, March 2023

1. LCE equivalent based on conversion factor of 2.473

2. Tianqi Lithium Energy Australia (49% IGO / 51% Tianqi Lithium)

Source: Company filings