Fast charging towards a low carbon future

Diggers and Dealers Mining Forum

ASX:LTR

August 2022

Important Information

Cautionary Statement

The production targets and forecast financial information referred to in the Definitive Feasibility Study (DFS) and Downstream Scoping Study (DSS) were based on Proven Ore Reserves (3.4%), Probable Ore Reserves (79.4%) and Inferred Mineral Resources (17.2%). The Inferred material included in the inventory was 14.3Mt @ 1.1% Li₂O & 120 ppm Ta₂O₅. The Inferred material was scheduled such that less than 10% of the Inferred material is mined in the first ten years, with the remainder mined through to the end of the mine life.

The Inferred material does not have a material effect on the technical and economic viability of the project.

There is a low level of geological confidence associated with inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of indicated Mineral Resources or that the production target itself will be realised.

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 vestors affect the information in the statement information future events or any other factors affect the information contained in this Presentation.

Disclaimer

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Competent person statement

The Information in this Presentation that relates to Exploration Results and 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 <u>www.ltresources.com.au</u>.

The Information in this Presentation that relates to metallurgical testwork and process design, Ore Reserves, Production Target and DFS for the Kathleen Valley Project is extracted from the ASX announcement "Kathleen Valley DFS confirms Tier-1 global lithium project with outstanding economics and sector-leading sustainability credentials" released on 11 November 2021 which is available on www.ltresources.com.au.

The Information in this Presentation that relates to the DSS for the Kathleen Valley Project is extracted from the ASX announcement "Updated Downstream Scoping Study Highlights Next Growth Horizon for Kathleen Valley Project" released on 11 November 2021 which is available on <u>www.ltresources.com.au</u>.

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 <u>www.ltresources.com.au</u>.

As detailed in the ASX announcement "Liontown Board approves development of Kathleen Valley Lithium Project" released on 29 June 2022, as part of the Final Investment Decision, the capital expenditure budget for the Kathleen Valley Project was increased to \$545 million. 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 the updated capital expenditure budget referenced in the announcement dated 29 June 2022 and that all material assumptions and technical parameters underpinning the estimates or production targets or forecast financial information derived from a production target (as applicable) in the relevant market announcements 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

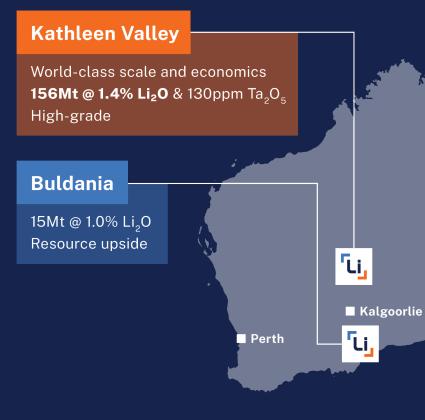
This Presentation has been authorised for release by the Managing Director.



02.	03.	04.
Corporate Strategy	Lithium Market Update	Kathleen Valley Funding Strategy
06.	07.	08.
Downstream Strategy	Investment Proposition	Questions
	Corporate Strategy	Corporate StrategyLithium Market Update06.07.Downstream StrategyInvestment

Foundations Established for a Tier-1 Project

Liontown is focused on the development of the world-class Kathleen Valley Lithium Project



Tier-1 Offtakes Secured

- Offtakes secured for majority of production over first 5-years
- Tier-1 counterparties including Tesla, LG Energy Solution and Ford
- Significant upside exposure via pricing formulas, negotiated in a strong lithium market

Li

Attractive Financing In Place

Liontown

- Low-cost financing
- Creditworthy and **strategically aligned** customer financing
- Kathleen Valley funded to first production
- Additional funding capacity available to manage project through to delivery

Construction Underway

- Experienced team built (with new hires expected) to **drive project delivery**
- Leading engineering firm, Lycopodium appointed to complete EPCM and commissioning services
- **57 of a total 94** vendor packages either awarded or under evaluation

World Class Project

- World-class lithium deposit with significant 156Mt @ 1.4% Li₂O resource driving long-life
- Outstanding economic potential, especially at current prices
- Located in a well-established mining jurisdiction, reducing development risk and accelerating timetable

Liontown's Strategy

We aim to be an ESG-leader, and a globally significant provider of battery minerals for the rapidly growing clean energy market

Stage 01

Kathleen Valley Full Potential

Become a globally significant supplier of spodumene

Downstream Expansion

Stage (02)

Develop integrated operations to capture higher margins

Liontown Full Potential

Stage 03

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

Liontown

Kathleen Valley's ESG Focus

Aspirational Net Zero¹ Timeline of 10 Years

X

Environment

- Aspiring to have best-in-class Scope 1 and 2 emissions to minimise impact on local surroundings
- ~60% renewable energy target at startup
- Minimising water usage through recycling



Customers

- Automotive OEMs increasingly demand environmentally-friendly, low-carbon batteries to achieve their emissions targets
- Carbon footprint labelling and transparency will enable end-consumer choice for ESG

Social

Socia

- Native Title Agreement with the Tjiwarl signed on 17th November 2021
- Section 18 Approved May 2022
- Social licence fundamental to sustainable, long-term operation

Gov Gov

Governance

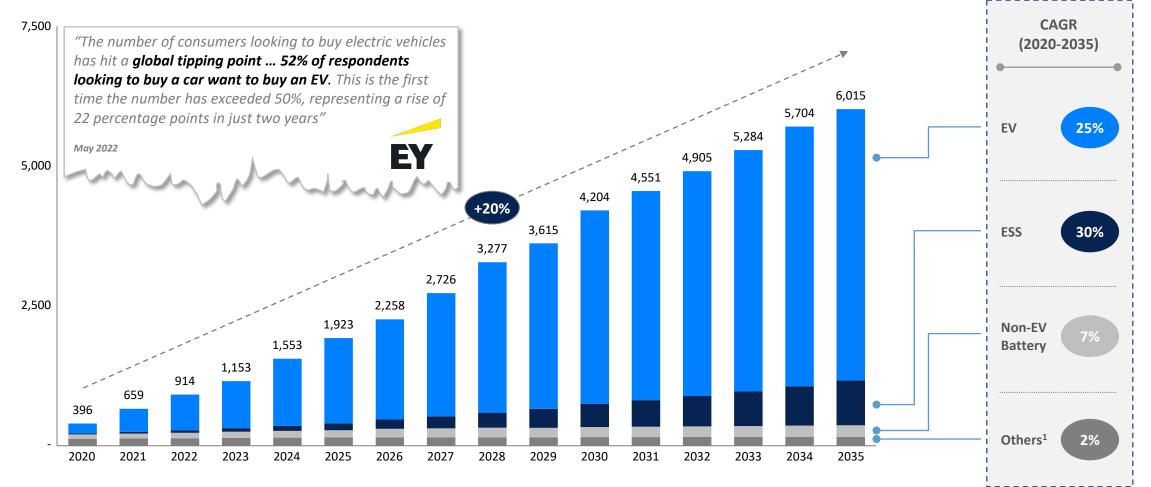
- Best-in-class reporting aligned with GRI², TSM³ and SASB⁴ standards
- First sustainability report released in November 2021
- Auditable climate strategy under development in alignment with TCFDs⁵
- Participating in IRMA⁶ pilot program

1. From start of production production (excludes potential downstream refinery operations) 2. GRI: Global Reporting Initiative. 3. TSM: Towards Sustainable Mining. 4. SASB: Sustainable Accounting Standards Board. 5. TCFD: Task Force on Climate Related Financial Disclosures. 6. IRMA: Initiative for Responsible Mining Assurance.

Lithium Demand Breakdown

BCG expects overall lithium demand growth of ~20% p.a. from 2020 to 2035, driven largely from accelerating demand for EV and ESS batteries

Global forecasted primary lithium demand, 2020-35, kt LCE



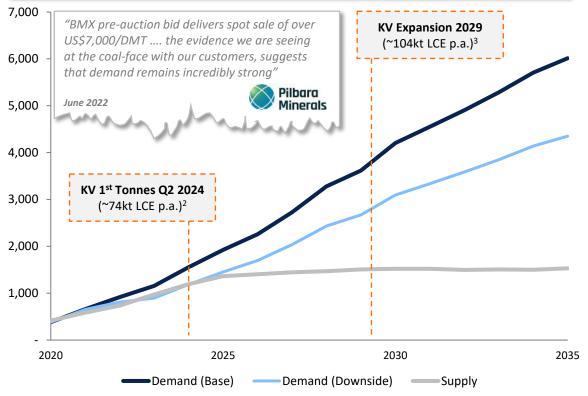
⁻Liontown

Lithium Supply Dynamics

Forecast lithium market deficit is expected to continue and grow out to 2030, driven by tight supply. Lithium has been the best performing battery mineral over the last 3 months

Demand / supply forecast, 2020-35, kt LCE¹

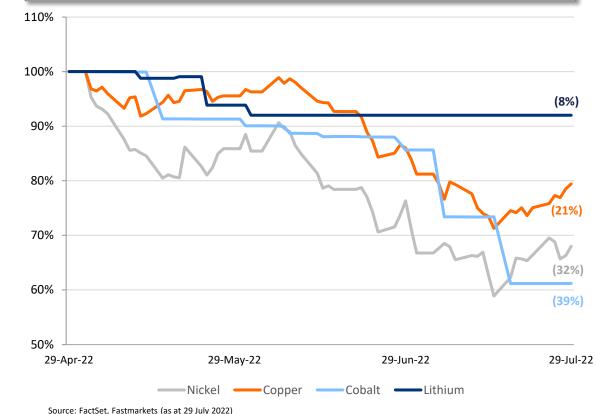
New supply coming from greenfield projects takes between 8 and 10 years to come into first production, with projects globally experiencing permitting, funding and geopolitical hurdles



Battery Minerals Price Movements, %¹

1. Price movements over last three months, rebased to 100%

Lithium prices remain strong despite heavy falls across other battery minerals, driven by strong demand, uncertainty of future supply and lack of substitutability of lithium in battery chemistries



Source: Boston Consulting Group analysis

1. Only costed supply based on current and future known projects taken into account

2. Based on production of 500kt SC6.0 per annum (Calculation: 500kt SC6 * 6.0% Li₂O * 2.473 Conversion Factor = ~74kt LCE) 3. Based on production of 700kt SC6.0 per annum (Calculation: 700kt SC6 * 6.0% Li₂O * 2.473 Conversion Factor = ~104kt LCE)

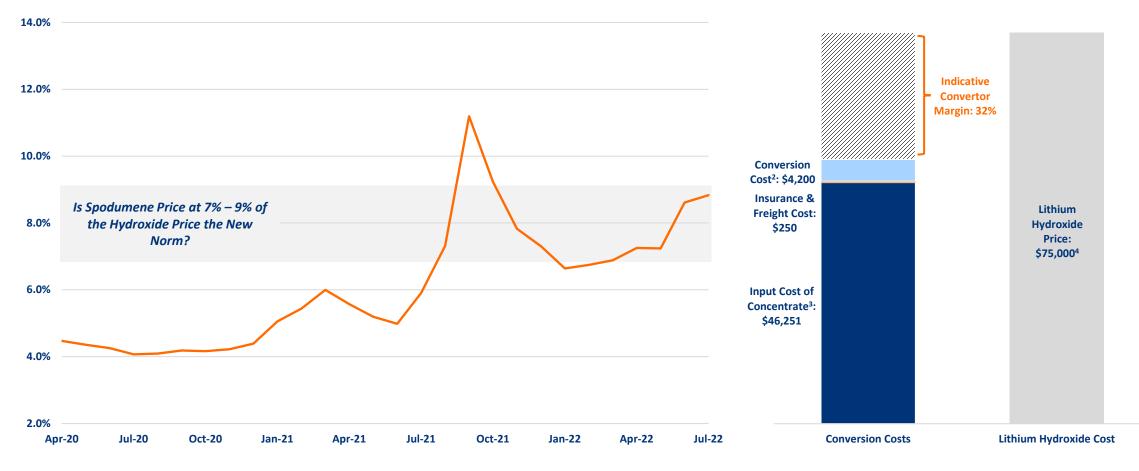
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Spodumene Pricing Evolution

Spodumene producers are increasingly moving towards formula-based pricing for offtake contracts as a way of determining price and capturing greater margin share within the lithium supply chain. Even at current spot spodumene prices, convertors are maintaining healthy margins based on the prevailing lithium hydroxide prices

Spodumene Price % of Hydroxide Price¹

Illustrative Convertor Margin at Current Prices (US\$/t)



Source: Fastmarkets. All prices displayed in USD

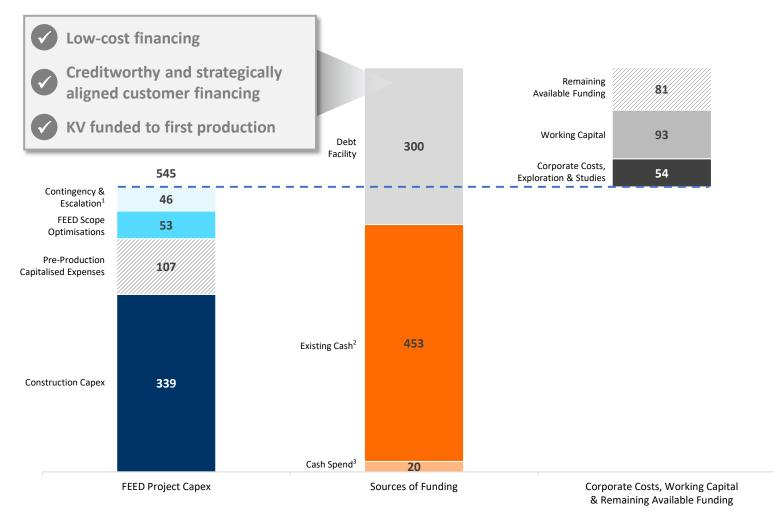
1. Monthly average of Fastmarkets' Spodumene min 6% Li₂O spot price, CIF China, \$/tonne index as a % of Fastmarkets' Lithium hydroxide monohydrate LiOH.H₂O 56.5% LiOH min, battery grade, spot price CIF China, Japan & Korea, \$/kg (converted to \$/tonne) 2. Assumed conversion cost allowance of up to A\$6,000/t at exchange rate of 0.70 (as at 29 July 2022)

3. Input cost implied from SC6 to LHM multiplier of 6.98, based on assumed conversion recovery as low as 85%. Indicative calculation: 6.98 x US\$6,625/dmt (July 2022 monthly average of Fastmarkets' Spodumene min 6% Li₂O spot price, CIF China, \$/tonne)

4. July 2022 monthly average Fastmarkets' Lithium hydroxide monohydrate LiOH.H₂O 56.5% LiOH min, battery grade, spot price CIF China, Japan & Korea, \$/kg (converted to \$/tonne)

Kathleen Valley Funded To First Production

Debt facility provided by Ford, along with proceeds from Liontown's A\$463m capital raise in December 2021, means Kathleen Valley is now funded to first production



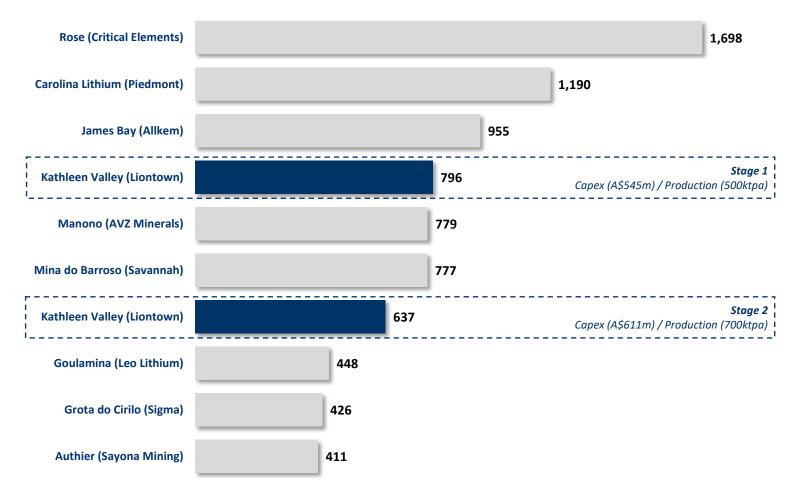
Liontown

- A\$300m Ford debt facility announced in June 2022 represents remaining funding requirement to first production
 - Low-cost facility with fixed margin of 1.5% (above BBSW)
 - Flexible repayment commencement to support ramp-up of operations
- Debt facility and the proceeds from Liontown's A\$463 million capital raise, also provide for:
 - Working capital to support start-up and operational requirements
 - Corporate and exploration expenditure
 - Overrun reserve available to support unforeseen adjustments to capital requirements
- Liontown now one of few development projects fully funded to first production, supported by one of the world's leading OEMs

Kathleen Valley's Capital Intensity

Kathleen Valley's capital intensity has been benchmarked with peers. Liontown has built an experienced team and established a Project Committee to manage delivery of the project on budget

Capital Intensity of Comparable Projects (US\$/tpa)¹



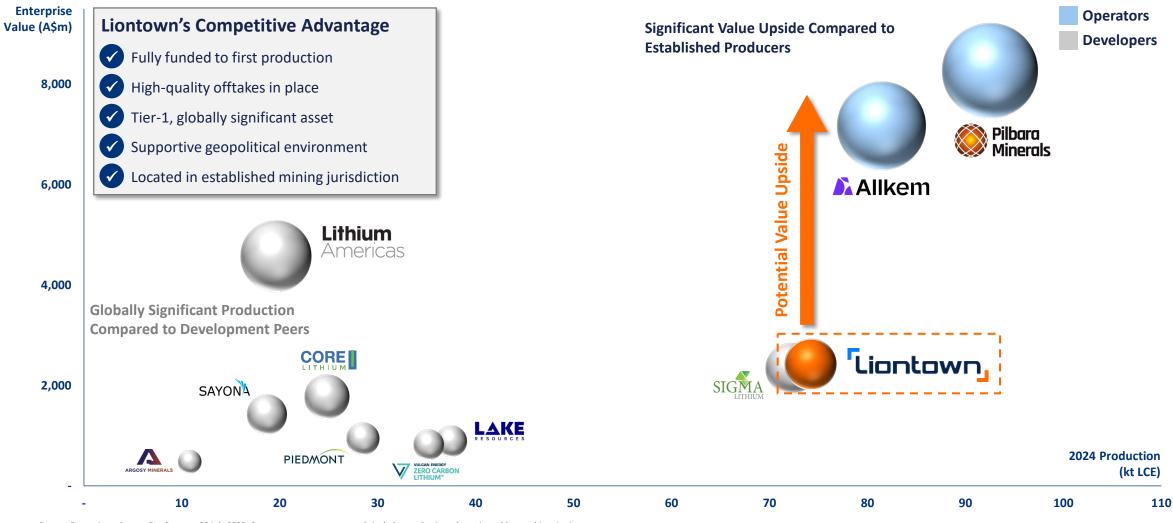
Liontown

- Kathleen Valley's Stage 1 capital intensity is realistically placed relative to comparable projects
 - 4Mtpa expansion has a very attractive capital intensity position
- Simplicity of Liontown's circuit design supports ability to deliver project on budget
- Designing construction to incorporate modularization and panelization design concepts will reduce costly site labour requirements
- Kathleen Valley's location within a well serviced mining region removes risks associated with isolated projects



Globally Significant Production Supports Value Upside

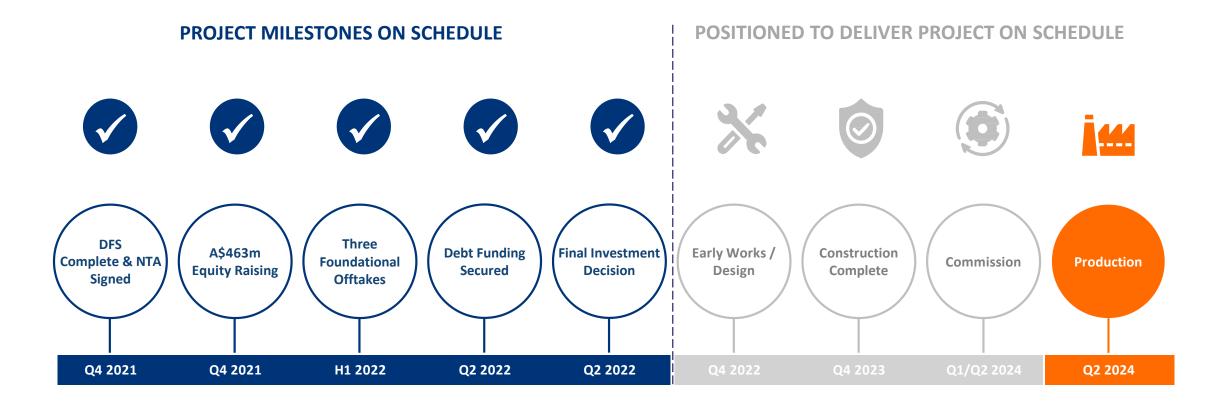
Liontown's expected production is greater than the majority of development peers, in line with established producers, supporting potential for a material re-rate in market value given the de-risked nature of Kathleen Valley, now that financing and offtakes are in place and construction is underway



Source: Enterprise value per FactSet as at 29 July 2022. Company announcements, only includes production where timetable to achieve is given. Please refer to appendix for peer comparison information. Bubble size determined by enterprise value.



2024 Production Target



Continued assessment of growth and downstream processing options

Project Execution Strategy

Relentless pursuit of the basics to strive for good safety and execution discipline – The Liontown Way!

Cost Management

Rapid award of key contracts to high-quality vendors with a focus on locking in long lead items

- 75% of mechanical equipment by value ordered prior to FID
- DFS and FEED completed within last 12 months, lowers overrun risk
- Commitments to date of \$125m, 85% is on a fixed price basis
- ~40% of total project spend is expected to be fixed price basis

Execution

Personnel continuity, quality and recruitment of owner's team the key priority to execution

- EPCM awarded to leading engineering firm, Lycopodium
- Owner's project execution team ~80% recruited
- Traditional owners **extensively involved** in the execution process
- Key approvals expected to be granted in line with project schedule



Project Execution Strategy – cont.

Relentless pursuit of the basics to strive for good safety and execution discipline – The Liontown Way!

Design & Schedule

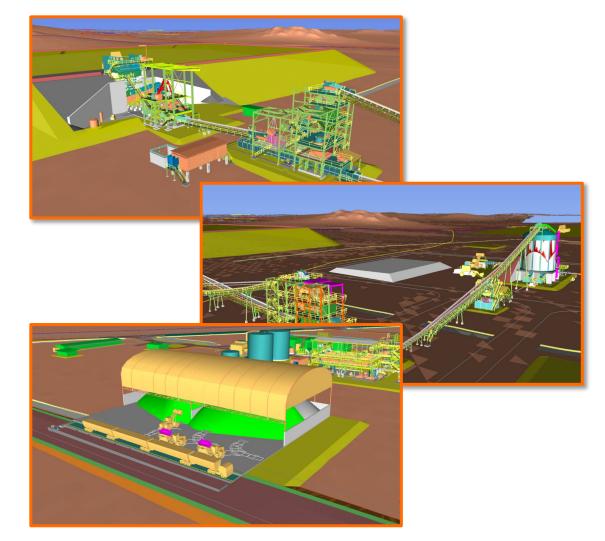
Work to date and continued focus on design positions Liontown to drive hard to execution

- Long lead items ordered, mechanical design at **50% completion**
- 57 of a total 94 vendor packages awarded or under evaluation
- Key works packages such as CAMP **awarded**, and installation works have commenced on site

Ramp-up Timing

Starting key activities early ensures a smooth and effective ramp-up to deliver production on time

- Owner's mining team already building capacity with **key leadership** roles filled
- Mining planned to commence 1+ year ahead of processing
- Grade control drilling for initial pits already **50% complete** ahead of mining commencing in early 2023



Downstream Strategy

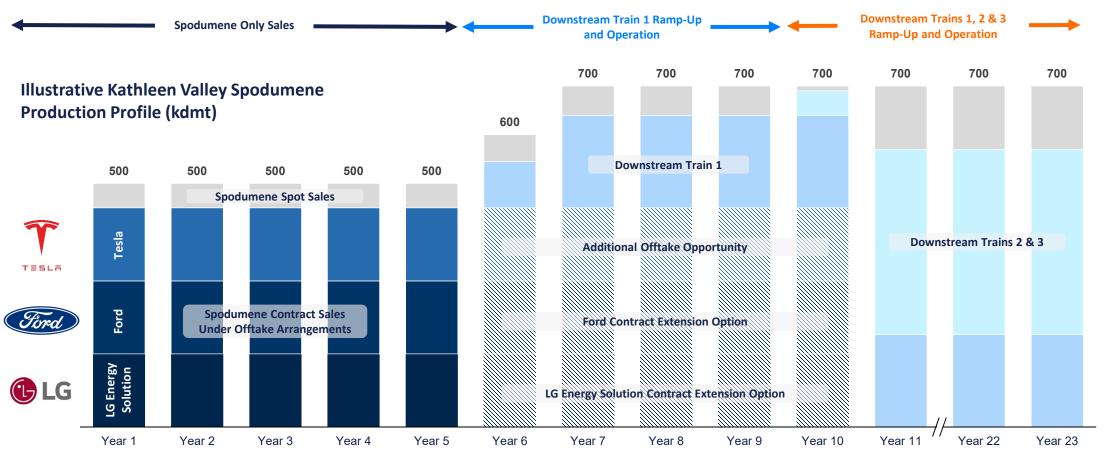
The **2021 updated DSS confirmed**: Value maximizing pathway for Liontown is a staged-build, integrated mining, processing and refining operation producing downstream lithium products

Value Maximising	Strategically Compelling	Full Optionality
Value maximising pathway with significant NPV value upside	Capture highly favourable market share of the EV market thematic	Exploring downstream location optionality in pre-feasibility study
Exposure to higher margin end-product, more quickly	Unlock additional partnership and customer opportunities	Second mover advantage , ability to learn from refineries in construction today
Intermediate product may deliver capital and operating cost efficiencies	Control value chain carbon footprint by leveraging Liontown's high renewables ambition	Considering both finished and intermediary products
Transport a high grade and low waste product, in smaller volumes	Adaptive to evolution in battery chemistries and changing regulation	Leverage Tier-1 geography optionality and supply reliability



Downstream Strategy – Transitioning The Customer Base

Liontown is currently undertaking a pre-feasibility study for development of the downstream operation, which will deliver optionality early on in the project life to capture higher margins from a refined lithium product



Initial ~23 year LOM

Liontown's Investment Proposition



Tier-1 Asset

Kathleen Valley is a worldclass lithium deposit, with exceptional economics and growth optionality



Timed to Perfection

Significant supply deficits forecast to emerge from 2024, which is expected to align with start of production at Kathleen Valley



ESG-Positive

Clear net zero aspirations, with a climate strategy roadmap under development prior to start-up



Integrated Opportunity

Integrated, long-term lithium producer, positioned to capture value from mine to end-use in the electric vehicle market

Liontown

Near Term Priorities

Continue to award major contracts (including Power Purchase Agreement, freight logistics and bulk earthworks) to established and highquality contractors

Continue to advance detailed engineering and permitting

2022

Accommodation village build and construction – first occupants Q4



Continue to develop downstream strategy

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Peer Comparison Information – Capital Intensity

Company	Project	Capital Cost (US\$m ¹)	Annual Spodumene Production (Kt)	Grade (%)	Capital Intensity (US\$/t) ²	Information Source
Liontown	Kathleen Valley (Stage 1)	398	500	6.00%	796	ASX Announcement – Investor Presentation Offtake, Funding & Project Update, 30 June 2022
Liontown	Kathleen Valley (Stage 1 & 2)	446	700	6.00%	637	ASX Announcement – Kathleen Valley DFS Presentation, 11 November 2021
Piedmont	Carolina Lithium	288 ³	242	6.00%	1,190	ASX Announcement – Piedmont Completes BFS of the Carolina Lithium Project, 15 December 2021
Sayona Mining	Authier	69	168	6.00%	411	ASX Announcement – Positive Pre-feasibility Study Enhances NAL Value, 23 May 2022
Critical Elements	Rose	357	225	5.61% ⁴	1,698	TSX Announcement – Critical Elements Files Technical Report for the Rose Lithium-Tantalum Feasibility Study, 27 July 2022
Allkem	James Bay	286	321	5.60%	955	ASX Announcement – Strategy Presentation, 5 April 2022
AVZ Minerals	Manono	545	700	6.00%	779	ASX Announcement – Capital Raising Presentation, 10 December 2021
Savannah	Mina do Barroso	136	175	6.00%	777	LSX Announcement – Scoping Study for the Mina do Barroso, 14 June 2018
Leo Lithium	Goulamina	325	726	6.00%	448	ASX Announcement – Leo Lithium Investor Presentation, 23 June 2022
Sigma	Grota do Cirilo	207	531	5.50%	426	Sigma Lithium Website – Technical Report, 25 May 2022

1: AUD USD assumption of 0.73 per Liontown DFS

2: Adjusted for comparable grade of 6.0%

3. Includes mine, concentrator and by-product capex

Weighted average



Peer Comparison Information – 2024 LCE Production

Company	Project	2024 Spodumene Production, Grade & Ownership (Kt, %) ^{1, 2}	2024 LCE Production (Kt LCE) ³	Information Source
Liontown Resources	Kathleen Valley	500kt, 6.0%, 100%	74	ASX Announcement – Kathleen Valley DFS Presentation, 11 November 2021
Pilbara Minerals	Pilgangoora	680kt, 5.5%, 100%	92	ASX Announcement – Final Investment Decision to Increase Pilgangoora Production Capacity, 29 June 2022
Allkem	Various	n.a.	814	ASX Announcement – Strategy Presentation, 5 April 2022
Lithium Americas Corp.	Various	n.a.	20	Lithium Americas Website – Corporate Presentation, July 2022
Sigma Lithium Corporation	Grota do Cirilo	531kt, 5.5%, 100%	72	Sigma Lithium Website – Corporate Presentation, July 2022
Core Lithium	Finniss	173kt, 5.8%, 100%	25	ASX Announcement – Definitive Feasibility Study Investor Presentation, 26 July 2021
Sayona Mining	Authier	168kt, 6.0%, 75%	19	ASX Announcement – Positive Pre-feasibility Study Enhances NAL Value, 23 May 2022
Diadaa at Lithiuwa	Authier	168kt, 6.0%, 25%	20	ASX Announcement – PLL Partner SYA Announces Positive PFS for NAL, 25 May 2022
Piedmont Lithium	Ewoyaa 300kt, 6.0%, 50%	ASX Announcement – Corporate Presentation, 16 June 2022		
Lake Resources	Kachi	n.a.	38	ASX Announcement – LKE Presentation Benchmark Minerals, 26 April 2022
Argosy Minerals	Rincon	n.a.	11	ASX Announcement – 2022 AGM Presentation, 31 May 2022
Vulcan Energy Resources	Various	n.a.	35	ASX Announcement – Corporate Presentation, 12 July 2022

1: Included for informational purposes where the company is a spodumene producer only

2: Example calculation for spodumene producers: 500kt Spodumene * 6.0% Li2O * 2.473 Conversion Factor = ~74kt LCE

3: Attributable production

4: Average of FY24 and FY25 attributable proudction taken to equate to CY24 production