Liontown

Fast charging towards a low carbon future

Paydirt Presentation

ASX:LTR

APRIL 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 forwardlooking 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 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 www.ltresources.com.au.

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 www.ltresources.com.au.

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.

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 or production targets or forecast financial information derived from a production target (as applicable) 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.

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

Agenda

Investment Highlights

Downstream Strategy

02.

Corporate Overview and Strategy

06.

Investment Proposition 03. Lithium Market Update Questions

Kathleen Valley Project

Liontown,

Investment Highlights





Globally significant Tier 1 project



Foundational offtake agreements with LG Energy Solution and Tesla



Clear long-term strategy with material value upside



ESG core to strategy



Well capitalised with strong flexibility



Robust lithium thematic, timed to perfection



Experienced leadership strongly aligned to shareholders

Liontown Corporate Overview

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

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





Corporate Snapshot

(4 April 2022)

Market Cap

Share price (\$/s)

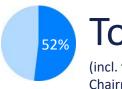
A\$4.6bn

A\$2.12

Shares on issue

Major Shareholders

2,192m



Top 20 (incl. ~15% held by Chairman - Tim Goyder)

Cash and term deposits¹

Research coverage

A\$474m











Board & Management





Board of Directors



Tim Goyder Chairman

+40 years (Mining Executive) Founder of Chalice Mining



Anthony Cipriano Lead Independent Director

+30 years (Chartered Accountant) ormer Senior Partner at Deloitte



Steven Chadwick Non-Executive Director

+40 years (Metallurgist) Director of Lycopodium Limited



Craig Williams Non-Executive Director

+40 years (Geologist) Founder and CEO of **Equinox Minerals**



Jennifer Morris Non-Executive Director

+20 years (Corporate Executive) Director of Fortescue Metals and Sandfire Resources



Tony Ottaviano Managing Director

+30 years (Mech. Engineer) Former BHP, Rio Tinto, and Wesfarmers executive

Executive Leadership



Tony Ottaviano | Managing Director

+30 years (Mech. Engineer) Former BHP, Rio Tinto, and Wesfarmers executive



Adam Smits | Managing Director

+20 years (Mech. Engineer) Former COO Nzuri Copper



Craig Hasson | CFO

+15 years (Chartered Accountant) Commercial & Financial experience

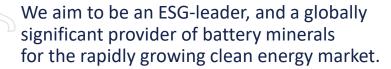


Clint McGhie | Company Secretary

+15 years (Chartered Secretary and Chartered Accountant) Commercial & Governance experience

Liontown's Strategy





Stage 02

Downstream **Expansion**

Develop integrated operations capture higher margins

Liontown **Full Potential**

Stage 03

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

Kathleen Valley **Full Potential**

Stage 01

Become a globally significant supplier of spodumene

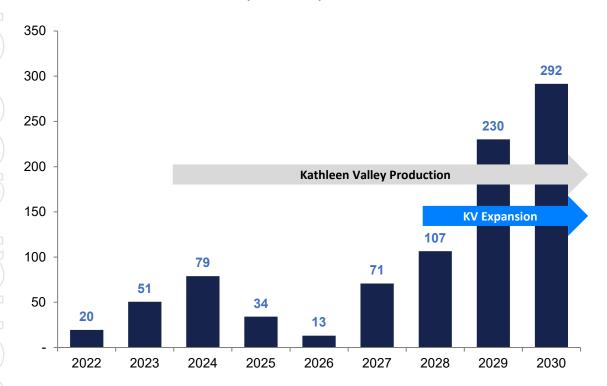




Lithium Market Update

Forecast lithium market deficit is expected to continue and grow out to 2030. There is currently no substitute for lithium in Li-ion cathodes

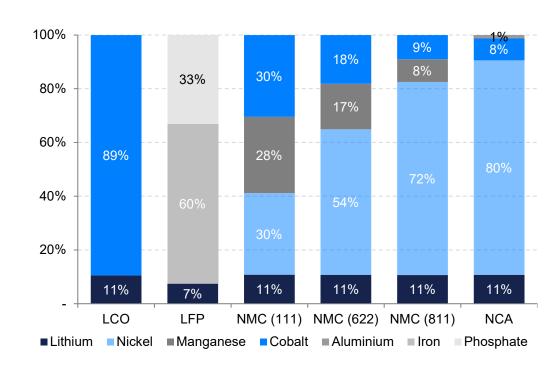
Global lithium market deficit, 2022-30, kt LCE



Lithium Market Deficit

Metals content of Li-ion battery cathodes by mass¹

Share of total (%)

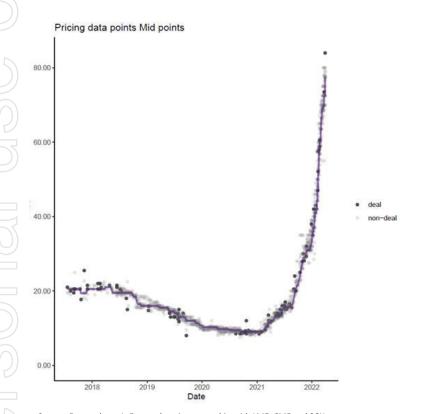




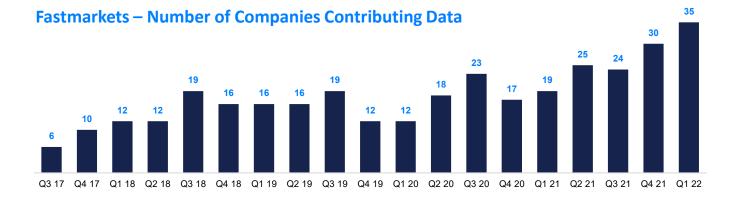
How do we price our product?

Liontown believes price transparency will continue to evolve and underpin reliable pricing for lithium hydroxide and spodumene

LiOH Seaborne Prices (Fastmarkets, US\$/kg)







Source: Fastmarkets. 1. Fastmarkets in partnership with LME, CME and SGX.

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.

Spodumene Price as % of Hydroxide Price¹





- Spodumene prices have historically been 4.0% 4.5% of the lithium hydroxide price
- This ratio increased to 11.2% in September 2021, sitting at 6.7% in February 2022
- Market volatility demonstrates search for a new equilibrium or reference
- There is an inherent relationship between the lithium hydroxide price and spodumene price, given spodumene is the key raw material input for lithium hydroxide
- A more liquid and transparent spodumene index will be developed over time, which more accurately reflects supply and demand
- Value chain "rent" will be reapportioned resulting in increased margin share to spodumene producers
- Until such an index is developed, Liontown's offtakes will be determined with a formula-based pricing structure

^{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)





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





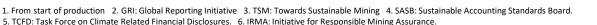
Social

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



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

















Kathleen Valley Project Update – DFS Economics

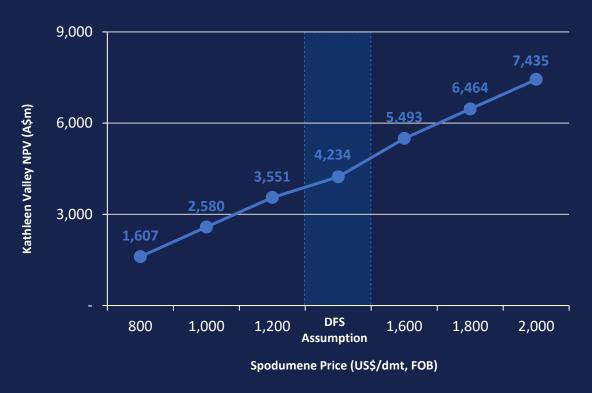
Kathleen Valley Project delivers compelling economics at prices well below current spot of US\$5000/dmt

November 2021 DFS Key Metrics

Based on April 2021 MRE – 156Mt @ 1.4% Li₂O and 130ppm Ta₂O₅

NPV¹ (post-tax)	A\$4.2B
IRR / Payback	57% / 2.3 years
Product	6.0% Spodumene Concentrate
SC6 Opex Years 1-5² (FOB)	US\$402/dmt US\$314/dmt (excl. royalties)
SC6 Opex Years 1-10 ² (FOB)	US\$417/dmt US\$319/dmt (excl. royalties)
Avg. SC6 Price Years 1-10 ⁴ (FOB)	US\$1,287/dmt (Based on Roskill price)
AISC Years 1-10³ (FOB)	US\$452/dmt
Capex ⁵	A\$473M (incl. \$107M Pre-production)

Kathleen Valley NPV at Various Spodumene Prices



^{1.} Real discount rate of 8%, AUD:USD of 0.73. 2. Operating costs include all mining, processing, transport, state and private royalties, freight to port, port costs and site administration and overhead costs (includes tantalum credits), exclude sustaining capital. 3. All in Sustaining Capital Costs (AISC), as referred to in this announcement, are cash operating costs including all mining, processing, transport, freight to port, port costs, site administration/ overhead costs, tantalum credits, state and private royalties and sustaining capital. 4. Based on Roskill November 2021 price forecasts. 5. Project totals exclude working capital, finance costs, sustaining capital and corporate costs associated with project development



Kathleen Valley Project – Underground Mining

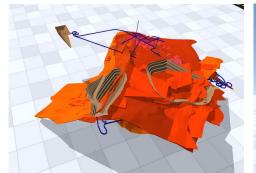
We have a bias to underground mining since it significantly enhances ore selectivity whilst minimizing our surface footprint.

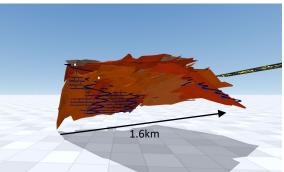
Distinct Benefits of Kathleen Valley

- Long hole opening stoping mining method well established and understood. Less than 4% of reserves will be room and pillar.
- Importantly, Kathleen Valley is shallow relative to other underground mines with high tonnes per vertical metre (100-206 kt/m and a max depth of 450m)
- Ground conditions are very conducive to UG mining Geotech analysis (backed by 5km of drilling) shows hard competent ground
- Significant reduction in dilution— ore/waste interface is clearly defined (grey) versus white) - underground mining significantly more selective than open pit peers

Mining Costs

- Mining costs have been derived from multiple tenders received based **on the actual mine schedule**, not just unit rates applied to volumes
- Liontown's mining costs are A\$56/t ore mined (all in), and supported by analysis of comparable projects

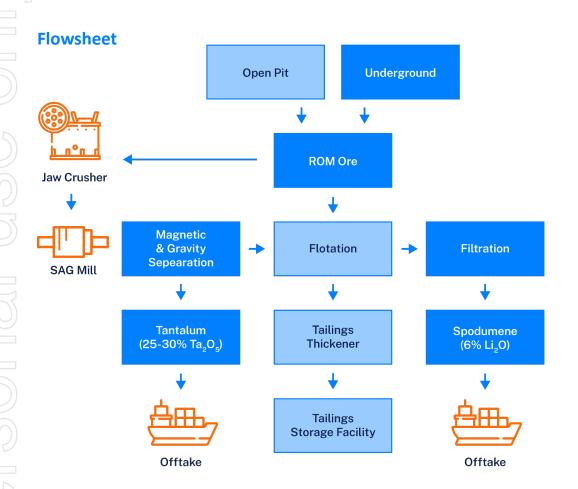






Processing Strategy

Conventional mining method, proven and reliable technology with a flowsheet grounded in evidence based design

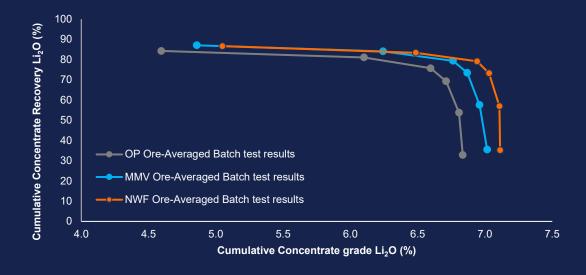




WOF Processing Strategy

- Simple flowsheet better operability and reliability
- KV ore has outstanding metallurgical properties
- Test work has repeatedly achieved greater than 80% Lithia recovery and >6.0% concentrate grade
 - Supported by 140+ staged float tests and variability analysis
 - 78% has been conservatively assumed for financial modelling

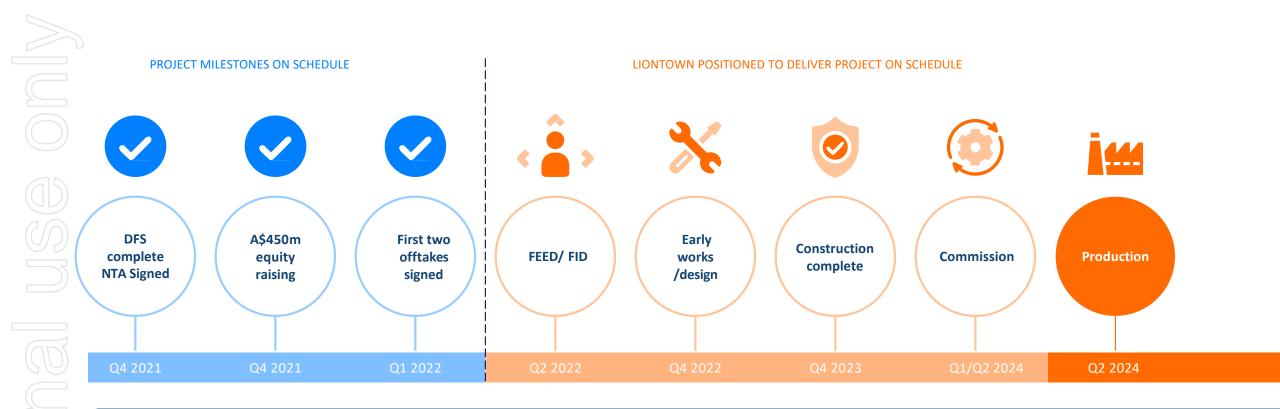
Cumulative Grade vs. Recovery – Avg. of multiple Batch Tests¹



1. OP = Open Pit, MMV = Mount Mann Vertical, NWF = NorthWest Flats

2024 Production Target





Continued assessment of growth and downstream processing options

Liontown

Kathleen Valley Project Update – FID is approaching



Remain on track for FID by end of 1H 2022 and early works in the 2H 2022



Detailed engineering commenced



Key contracts issued for tendering, with bids under review



Early procurement of long lead-time equipment underway



Project team expanding to plan, with new hires to support project ramp-up



Financing well advanced with domestic and international commercial banks



Offtakes in place with tier-1 customers for >50% of production over first five years



Liontown,

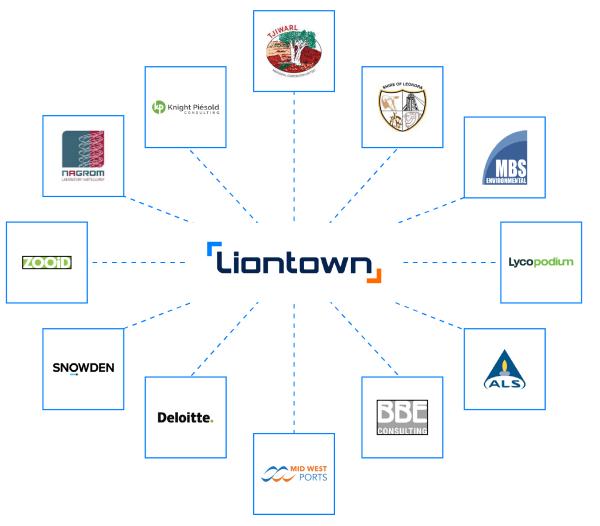
Kathleen Valley Project Update

Procurement Update and Partnership Model

Working collaboratively with stakeholders and partners will help streamline development of Kathleen Valley Project and ensure on time and on budget delivery – Work with the best and deliver the best!

Detailed Design Procurement Status

Responsibility	Estimated Total Packages	IFT Packages Issued		Tender Packages Received		PO Contract
		Planned	Actual	Planned	Actual	Award
Contracts	3	0	0	0	0	0
Civil	2	1	0	0	0	0
Structural	1	1	1	1	1	0
Platework	1	0	0	0	0	0
Mechanical	59	25	30	18	24	6
Piping	11	0	0	0	0	0
Electrical and Instrumentation	25	0	1	0	0	0
Total	102	27	32	19	25	6



Liontown

Tier 1 Offtake Partners Secured

Tesla and LG Energy Solution confirmed as cornerstone offtake partners

Target Customers & End Markets

Source: FactSet, LG Energy Solution website, Tesla Website



Our Offtake Partners





	LG Energy Solution		
Largest EV automotive company globally ¹	Second largest battery manufacturer globally ¹		
US\$1,184bn	US\$84bn		
99,000+	20,000+		
Ŷ T≡5Lñ	STELLONTIS General Motors		
5 years	5 years + 5 year extension option		
100ktpa Yr 1 150ktpa Yr 2 – 5	100ktpa Yr 1 150ktpa Yr 2 – 5		
Formula-based mechanism referencing market prices for lithium hydroxide			
	US\$1,184bn 99,000+ TESLA 5 years 100ktpa Yr 1 150ktpa Yr 2 – 5 Formula-based mechan		

Downstream Processing Opportunity

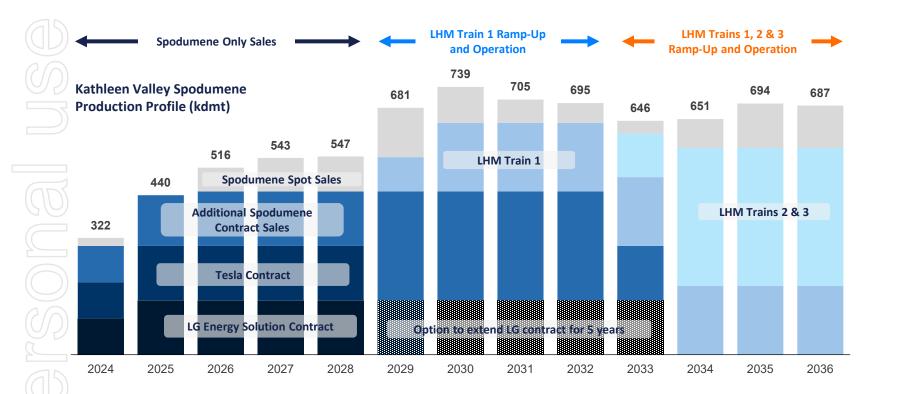
The 2021 updated DSS confirmed: Value maximizing pathway for Liontown is a staged-build, integrated mining, processing and refining operation producing Lithium Hydroxide Monohydrate ("LHM")



The Integrated Project has the potential to make Liontown the 3rd largest supplier of LHM in the world (based on 2031 Roskill LHM projections) producing ~86ktpa LHM



Refinery will be included in our Climate Strategy Roadmap and benefit from the energy renewables developed during the operation of KV reducing its incremental carbon footprint



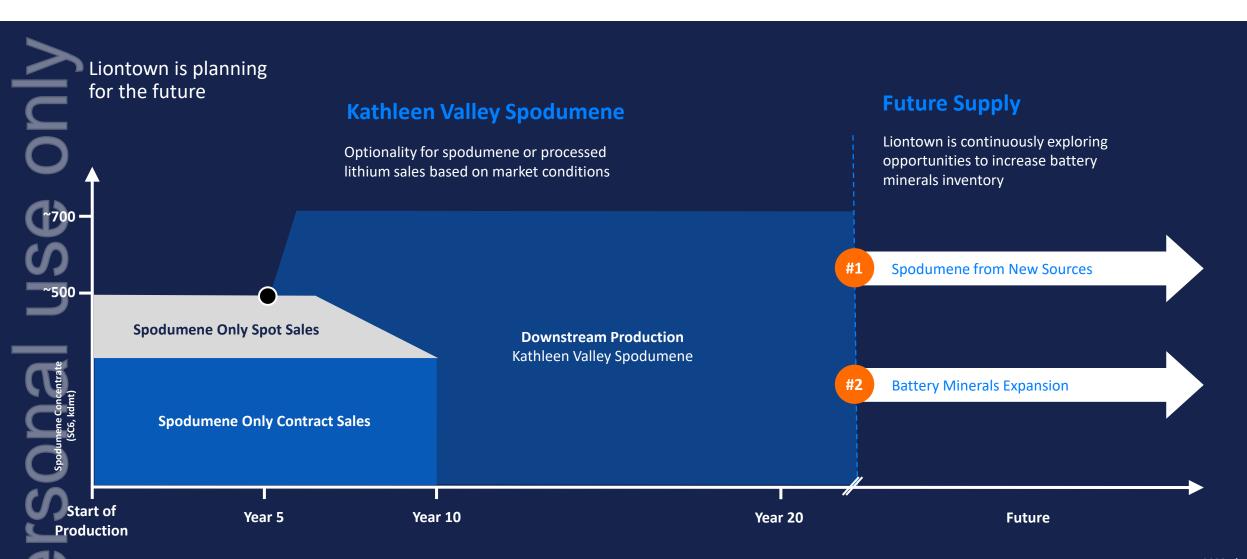


Value Maximising Pathway

- Exposure to higher margin end-product more quickly
- Capture highly favourable market environment
- Unlocks additional off-takers (particularly OEMs) with potential for nearer-term discussions
- Value maximising pathway with significant NPV value upside
- Liontown progressing to pre-feasibility study phase for downstream opportunity

Liontown's Long-Term Strategy





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

Near Term Priorities

- 1 Continue to execute attractive offtake agreements to support FID
- Progress and finalise project funding
- Continue to secure long-lead items and permitting
- 4 Appoint industry leading EPCM contractor to spearhead Kathleen Valley development
- Continue to develop downstream strategy



^rLiontown<u></u>

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