

# Kathleen Valley Project Update

## ASX Announcement

20/1/2023

**On-site construction continues to ramp up, with a clear pathway to deliver first tonnes on-schedule by mid-2024. Ongoing optimisation has identified an opportunity to expand initial plant capacity, with an updated capital estimate reflecting scope changes and industry-wide cost escalation.**

### Highlights

- Plant capacity design optimised to deliver a 20% increase in the initial plant throughput rate to 3Mtpa (up from 2.5Mtpa), driving increased SC6.0 production to take advantage of strong short- and medium-term forecast lithium pricing.
- Early revenue potential identified through a Direct Shipping Ore (DSO) opportunity designed to monetise material not previously expected to be processed.
- Optimisations and scope adjustments, coupled with continued macro-level and industry-wide cost escalation, have resulted in a revised capital estimate of \$895m to first production (including \$40m in contingency). Capital requirements will continue to be refined as remaining contracts are awarded and as part of the Company's ongoing optimisation program.
- Project delivery timelines have been prioritised in a competitive construction market to maximise shareholder value. The Kathleen Valley Project remains on-track for first production from the process plant in mid-2024, with prudent scope adjustments made early in the construction schedule to further de-risk and maintain this timing.
- Liontown has spent ~\$73m on the Project to date, with ~\$685m of remaining funds comprising ~\$385m in existing cash reserves and \$300m via a debt facility. The Company is progressing a range of potential further funding options, with additional funding not currently expected to be required until the end of 2023.

Liontown Resources Limited (ASX: LTR) (**Liontown** or the **Company**) provides an update on development progress, key outcomes and scope changes stemming from an ongoing optimisation program for its 100%-owned Kathleen Valley Lithium Project (**Kathleen Valley** or the **Project**) in Western Australia.

Kathleen Valley is one of the most significant new long-life lithium projects being constructed anywhere in the world and, with a portfolio of three Tier-1 foundation customers, is ideally positioned to capitalise on strong forecast demand for lithium raw materials over short- and medium-term.

### Project Update

After declaring a Final Investment Decision (**FID**) in June 2022 and receipt of requisite approvals, Liontown commenced on-site construction activities at Kathleen Valley in October 2022. The Company has since made rapid progress across all aspects of the Project and remains on schedule to deliver first production from the process plant to market by the middle of next year.

Key site-based contracts including the accommodation village, earth works, concrete supply and installation, Tailings Storage Facility and the Power Purchase Agreement have been awarded, along with preliminary works for the open pit mining contract. Site works including installation of the accommodation village, concrete installation and preparation for the commencement of open pit mining are progressing rapidly.

Structural Mechanical Piping (**SMP**) and concentrate transport packages have also been put to tender, with proposals received and currently under assessment for award.

Tender requests for the underground mining contract and Mine Services Area (**MSA**) design and construct contract are being prepared and are expected to go to market in Q1, 2023. Commencement of underground mine development is targeted for Q4, 2023.

In light of its strong focus on delivering first production from the process plant by mid-2024, Liontown has made prudent investments at an early stage in the construction timeline to de-risk and maintain this schedule. This has included Liontown's decision to invest in a ~60% increase in on-site accommodation capacity to support increased labour resources and de-risk schedule.

### Capacity Expansion

The Company's November 2021 Definitive Feasibility Study (**DFS**) contemplated initial plant throughput of 2.5Mtpa, increasing to 4Mtpa in year six of operations (refer ASX Announcement "*Kathleen Valley DFS confirms Tier-1 global lithium project with outstanding economics and sector-leading sustainability credentials*" dated 11 November 2021 (**DFS Announcement**)).

Since the DFS, the Company has sought to debottleneck and optimise engineering design and project delivery, with the objective of maximising near term production. Liontown now expects initial plant throughput capacity to be 3Mtpa.

This expanded throughput capacity is expected to result in additional SC6.0 product being available early in the Project life for sale on the spot market or through incremental off-take arrangements, enabling Liontown to benefit from attractive lithium pricing expectations over the short- and medium-term.

The detailed open pit mine plan has been completed as part of the tender process, while the detailed underground mine plan for the first five years of operation is in the process of being finalised. Accordingly, the Company has a high degree of confidence that mining activities can meet the increased plant throughput requirements based on the existing Ore Reserves (refer DFS Announcement).

### Mining Optimisation

As previously detailed, mine plan optimisation work undertaken recently has reduced the operational complexity of the DFS mine plan from both an open pit and underground mining perspective. Open pit designs have been modified with the Kathleen's Corner pit expanded to produce more ore than assumed in the DFS and the Mount Mann pit reduced to a large box-cut, which is completed prior to underground portal establishment and subsequent decline development.

Optimisation of the underground mine plan has focussed on initial stope production from the steep to moderately dipping, high tonnes per vertical metre (up to 180kt/m) Mount Mann orebody, supplemented by increasing production from the North West Flats.

The larger Kathleen's Corner open pit will result in more material being moved over the initial project period increasing costs, but this may be offset through the potential unlocking of direct ship ore.

### Direct Ship Ore (DSO) Opportunity

As stated above, the revised mine plan has liberated additional material which would have been stockpiled. The strong market conditions provide a potential opportunity to monetise this material as a DSO product and deliver early revenue during Kathleen Valley's pre and post-commissioning phase.

The Company has commenced discussions with a range of existing and prospective customers and will now work to further assess the suitability of the available material for DSO. Updates and further detail will be provided as this opportunity progresses.

### Capital Cost Estimate

Kathleen Valley's engineering design and project delivery has been significantly refined and optimised since the completion of the DFS in November 2021 and FID in June 2022. As part of this process, several optimisation and scope changes have been made, including the 20% increase in initial throughput capacity to 3Mtpa, which have impacted the capital estimate for the Project.

Time to market and safe delivery of the Project to schedule remain a priority focus, with scope additions to de-risk the Project including:

- ~60% increase in on-site accommodation capacity to support increased labour resources and de-risk schedule;
- bringing certain critical infrastructure in house (e.g. mine workshops, changerooms and administration facilities);
- changing the location and increasing the number of wind turbines to optimise the contribution of wind in our renewables mix necessitating additional site works; and
- increasing water exploration and piping works for plant water to meet the new 3Mtpa plant production rate.

In addition, the Company has now awarded several key contracts on a schedule of quantities basis (fixed rate), with tender submissions for the SMP and Site Facilities packages currently under review. More than 80% of long lead equipment by value has been ordered on a fixed cost basis and are on or ahead of schedule for delivery to site. These awards and assessments made to-date have provided the Company with updated information on the likely overall capital cost of the Project and have informed the estimates for packages yet to be tendered.

As is being seen across the industry, Liontown has experienced substantial escalation in rates across all site-based labour-intensive contracts with some tenders experiencing price increases greater than 30%. In addition to market-wide price escalation, a reduction in both productivity rates of, and the number of contractors willing to bid, has also been evident impacting tendered package prices.

The combination of optimisation, additional scope and cost escalation has resulted in Kathleen Valley's estimated capital cost to first production from the process plant increasing to \$895m inclusive of \$40m in contingency.

The estimate provided is current as at the date of this announcement and remains subject to further refinement and optimisation in the future. The Company continues to tender, assess and award the remaining major construction, equipment and operational packages of work. The Company remains committed to delivering the Project in a cost-effective manner, consistent with previously stated safety and schedule priorities, and will continue to apply prudent and efficient capital expenditure processes.

### Project Funding

Liontown has spent ~\$73m on the Project to date, with ~\$685m of remaining funds comprising ~\$385m in existing cash reserves and \$300m in debt via a facility (refer ASX Announcement "*Liontown executes Binding Offtake Agreement with Ford*" dated 20 June 2022) available for future deployment. Whilst the Company does not currently anticipate additional funds will be required until the end of 2023, it is confident in the potential funding sources available and is progressing with a range of prospective funding providers. As noted above, the Company will also continue to investigate the potential for generating early revenue from the DSO opportunity and the impact that this may have on the level of future funding required.

**Liontown's Managing Director and CEO Tony Ottaviano commented:**

*"We have said from the outset that our overriding commitment is to deliver Kathleen Valley to its full potential – safely, on time and fully optimised for early tonnes and long-term value. The scope adjustments announced today will allow us to increase the initial project throughput by 20 per cent to 3Mtpa, bringing forward additional SC6.0 tonnes into a market which remains extremely short of lithium units and continues to see very strong pricing outcomes.*

*"This, together with the exciting new DSO opportunity we have identified during project and mine schedule optimisation, opens up the potential for increased tonnages and revenues at an early stage in the mine life – an attractive opportunity given strong pricing and market conditions.*

*"The updated capital estimates provided today incorporate these important changes as well as the macro reality of rapidly changing pricing and cost assumptions. Our team continues to do a fantastic job in working to mitigate these forces and maintain cost control and discipline across the organisation. However, we need to be realistic about what we can and can't control – with the overriding objective of meeting our schedule while maintaining the highest possible standards of safety for our people.*

*"We are also continuing to make important progress with our downstream strategy and we are working to develop and implement a value-maximising pathway that unlocks the full value of the Kathleen Valley asset. We look forward to providing further updates on this growth pathway in parallel with continued project updates and milestones throughout the course of 2023."*

**Investor and Media Call and Webcast**

Liontown Managing Director and CEO, Tony Ottaviano, will host a live webcast and simultaneous investor teleconference call to discuss the Kathleen Valley Project Update at **9.30am (AWST)/12.30pm (AEDT)** today, **Friday 20 January 2023**.

*Webcast*

Shareholders and investors who wish to listen to the live webcast can join via the following link:  
<https://kapara.rdbk.com.au/landers/e49b6a.html>

Participants in the webcast can submit written questions via the webcast platform.

*Teleconference*

Brokers, fund managers, analysts and representatives of the media who wish to participate in the live, interactive Teleconference, including the opportunity to ask questions over the phone, can do so via the following link:

<https://s1.c-conf.com/diamondpass/10028211-hd81w1.html>

Please note that it is recommended that you log on at least five minutes before the scheduled commencement time.

**ENDS**

This announcement has been authorised for release by the Board of Directors.



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Managing Director

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**Forward Looking Statements**

This announcement contains forward-looking statements (including as it relate to capital costs) 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 announcement, are considered reasonable. Such forward-looking statements (including as it relates to capital costs) 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 announcement 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 announcement, except where required by law or the ASX listing rules.

**Important information**

The capital cost estimates in this announcement for the Kathleen Valley Project are indicative only, based on the Company's studies and budgeting and the Kathleen Valley Project economic model. It is developed in the context of an uncertain operating environment including in respect of COVID-19 related risks (community distribution and supply chain disruption), the general global macro-economic environment, and market factors impacting materials and installation costs, including inflation, foreign currency exchange rates and labour constraints. Moreover, the Company has yet to formally award a number of material contracts, the estimates regarding the final costs of which remain uncertain due to the impact of the above factors. The information is provided as an indicative guide to assist investors with modelling of the Company. It should not be relied upon as a predictor of future performance.

**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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