

29 September 2023

## Kathleen Valley Project Update

Liontown Resources Limited (ASX : LTR) (**Liontown** or the **Company**) announces an update on the estimates of the Kathleen Valley Lithium Project (**Kathleen Valley** or the **Project**) capital cost to first production, operating costs and the acceleration of the previously announced expansion to 4 Mtpa.

### Highlights

- Kathleen Valley remains on schedule to commence first production of spodumene by mid-2024
- Award of all major construction and mining contracts has enabled finalised estimates of Project capital costs to first production of A\$951 million
- Award of underground mining and supply chain logistic contracts has enabled a comprehensive review of operating costs, with an average cash cost (C1) expected to be A\$651 per SC6<sup>1</sup> tonne over the initial 10-years of production
- Completion of mine design work and the appointment of Byrnegut has underpinned confidence to bring forward expansion capital to develop new mining fronts, support ramp up and accelerate 4 Mtpa production by two years
- Liontown is well advanced in discussions with a syndicate of commercial banks and government credit agencies to obtain the funding it requires through to the expected generation of positive net cash flows
- Albemarle continues to progress due diligence as previously announced and has been provided the updated estimates of Project capital cost and operating costs

### Updated estimate of Project Capital Cost

Following the award of all major contracts the Company now estimates that the Project capital cost to first production (including capitalised mining costs) will be A\$951 million<sup>2</sup> (**Capital Cost**). This represents a ~six per cent increase from the \$895 million estimate announced in January 2023.

The updated Capital Cost estimate includes:

- incorporation of awarded contract rates and quantities for all major mining and process plant scope
- adopting a multi-contractor strategy to further de-risk plant execution and maintain schedule, including scope adjustments to the Structural Mechanical Piping package
- higher specification materials, lining and equipment that will reduce future maintenance requirements, which are reflective of the Company's commitment to deliver a world-class project<sup>3</sup>
- retention of A\$25 million contingency

The updated Capital Cost estimate excludes:

- costs of A\$26 million for early mine development and acceleration of the 4Mtpa expansion
- A\$37 million associated with building the 567,000 tonne pre first production ROM stockpiles from the mining operations (which will be included in the Company's operating cost once spodumene sales commence)

<sup>1</sup> Six percent spodumene concentrate.

<sup>2</sup> Real basis.

<sup>3</sup> LTR ASX announcement 13 September 2023 "Liontown awards Structural Mechanical Piping contract".

With all major contracts for construction and mining now awarded, together with demonstrable progress on site, Liontown has reinforced confidence in delivering production in mid-2024.

### Updated Operating Cost estimates

The award of underground mining and supply chain logistics contracts,<sup>4</sup> given their significance to overall operating costs (**Opex**), has enabled a comprehensive review of Opex estimates. The review reflects market-wide escalation across the key inputs two years since publishing initial operating costs estimates in the DFS.

The Company estimates a 10-year average cash cost (C1) of **A\$651** per SC6 tonne, excluding royalties:

|                                 | From 1 January 2025 <sup>5</sup> | 10-year average |
|---------------------------------|----------------------------------|-----------------|
| Mining                          | \$/dmt SC6                       | 449             |
| Processing                      | \$/dmt SC6                       | 157             |
| G&A (site and processing)       | \$/dmt SC6                       | 39              |
| Transport and logistics         | \$/dmt SC6                       | 89              |
| Tantalum credit                 | \$/dmt SC6                       | (60)            |
| Inventory movement              | \$/dmt SC6                       | (23)            |
| <b>C1 FOB (excl. royalties)</b> | \$/dmt SC6                       | <b>(651)</b>    |

To facilitate external comparisons, the Opex estimates listed above are presented in ‘units of concentrate production’ and compare competitively to existing lithium operators. To allow further benchmarking, mining costs (the largest cost driver) when converted into ‘units of mine production’ results in a 10-year ‘average underground mining cost’ of A\$73 per dry metric tonne (**dmt**) of underground ore mined. This benchmarks well against comparable underground operations of similar size and scale.

It should also be noted that Opex unit rates may be higher than the average in the ramp up period and early in the first year as production increases and fixed costs are diluted.

With the information received from ongoing operational readiness planning and recruiting coupled with the award of the underground mining contract and other key operating contracts,<sup>6</sup> the Company can provide an updated estimate of working capital and corporate costs of A\$152 million<sup>7</sup> to the expected generation of positive net cash flows.

<sup>4</sup> LTR ASX Announcement 19 July 2023 “Liontown awards Spodumene Concentrate haulage contract”, 28 September 2023 “Liontown executes Underground Mining Services contract”.

<sup>5</sup> (1) Cash costs excludes sustaining capex, growth capex, exploration and corporate costs and are based on production inventory (2) Mining excludes pre-strip and capitalised deferred waste expenditure (3) Liontown has not incorporated the impact of AASB16 into the C1 cost calculation.

<sup>6</sup> LTR ASX Announcement 19 July 2023 “Liontown awards Spodumene Concentrate haulage contract”, 28 September 2023 “Liontown executes Underground Mining Services contract”.

<sup>7</sup> Excludes A\$26 million early mine development and acceleration of the 4Mtpa expansion and A\$37 million associated with building the 567,000 tonne pre first production ROM stockpiles from the mining operations.

### Early mine development and acceleration works

In January 2023 Liontown announced an increase in plant capacity at start-up from 2.5 Mtpa to 3 Mtpa,<sup>8</sup> with a further expansion to 4 Mtpa planned for year six of operations (announced in the November 2021 Definitive Feasibility Study<sup>9</sup>).

Open pit mining, which commenced in January, is well advanced with ROM stockpiles building as a key source of ore for the processing plant over three years. Production from the open pits and the ROM stockpile will help derisk the ramp up of the underground operations to its target 3 Mtpa production rate.

The optimised underground mine plan, ‘two orebodies, one mine strategy’,<sup>10</sup> finalised as part of the underground mining contract with Byrnegut Australia Pty Ltd (**Byrnegut**),<sup>11</sup> has delivered additional mining work fronts by advancing development in the Northwest Flats orebody, which will support both the initial 3 Mtpa ramp up and accelerate the path to 4 Mtpa to commence in year four (2027).

The 4 Mtpa expansion works for the process plant will be the subject of a future decision by the Company. This new optimised base case is expected to deliver additional SC6 production to market sooner. The incremental SC6 production volume will provide optionality, allowing Liontown to sell additional tonnes into the spot market, enter incremental off-take arrangements, or direct this material into a potential downstream lithium hydroxide refinery.

### Funding

The Company is well advanced in discussions with a lender syndicate of commercial banks and government credit agencies to obtain the funding it requires to meet its final funding requirements.

Engagement with the lender syndicate continues to progress towards credit approved term sheets, adding to the previously announced joint letter of support from the government export credit agencies.<sup>12</sup> The Company expects a funding solution in place by the end of the calendar year, with additional funding not required until the commencement of CY2024.

The size of the debt package is yet to be finally determined but, at a minimum, it is anticipated to cover the \$450 million required to fund the Capital Costs, early mine development for acceleration, costs associated with building the pre first production ROM stockpiles, corporate costs and working capital requirements through to the expected generation of positive net cash flows.

The Company may also seek to increase the size of the debt funding sought to provide an additional liquidity buffer and reserve.

<sup>8</sup> LTR ASX Announcement 20 January 2023 “Kathleen Valley Project Update”.

<sup>9</sup> LTR ASX Announcement 11 November 2021 “Kathleen Valley DFS confirms Tier-1 global lithium project”.

<sup>10</sup> LTR ASX Announcement 5 August 2023 “Liontown strategy and project update - 2023 Diggers and Dealers Mining Forum”.

<sup>11</sup> LTR ASX Announcement 17 August 2023 “Liontown Awards Underground Mining Contractor”.

<sup>12</sup> LTR ASX Announcement 5 August 2023 “Liontown strategy and project update - 2023 Diggers and Dealers Mining Forum”.

### Direct Shipping Ore (DSO) Project Update

The Company previously announced its intention to proceed with delivery of Direct Shipping Ore (DSO) product to provide an early source of revenue ahead of the first concentrate production at the Kathleen Valley Lithium Project.<sup>13</sup>

Further to this announcement, the Company has undertaken ore sorting test work and achieved positive results. The results confirm the potential to process contact ore (mineralised material that previously carried too much host rock), also known as DSO, into ore that could be added to the process plant stockpile or sold as DSO if market conditions improve.

With lithium prices softening, the Company is now planning to ore sort the DSO and add it to our stockpile to be processed by our own plant in the future. However, the Company retains the option to sell this DSO material if market conditions improve.

The DSO crushing and sorting programme will also assist in the design of a potential large-scale sorting circuit which could support the planned 4 Mtpa process plant expansion.

### Albemarle Non-binding Proposal

The Company refers to its previous announcement in relation to Albemarle's non-binding indicative offer and notes due diligence is ongoing.<sup>14</sup>

### Liontown's Managing Director and CEO, Tony Ottaviano, said:

*"With 50 percent of the work completed on site and construction work accelerating, we have clear line of sight to delivering first production from the world-class Kathleen Valley Lithium Project on schedule in mid-2024.*

*"Mining operations are well underway with Mt Mann pit completed and ready for the underground early works, and Kathleen's Corner pit production increasing. We are also pleased to have secured the services of Tier-1 mining contractor Byrnegut who, in partnership with our own highly capable operational team, will bring its global expertise in starting and operating underground mines of the size and scale of the Kathleen Valley operations, making it a success.*

*"Notwithstanding one of the toughest markets to construct and operate seen in recent years, our Capital Costs are materially in line with our previous forecast. Our Operating Costs are based on contracted market prices and have received a tremendous amount of review and benchmarking, both internally and by third parties.*

*"I am very confident that the collective capability and multi-commodity experience of the team we have assembled will navigate these challenges and safely deliver this world-class project for our shareholders.*

*"In addition to our priority focus on project delivery we continue to assist Albemarle with due diligence and to work through our funding options. Further updates on both these processes will be provided in due course."*

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

<sup>13</sup> LTR ASX Announcement 2 August 2023 "Liontown moves forward with DSO opportunity".

<sup>14</sup> LTR ASX Announcement 11 September 2023 "Albemarle indicative proposal – due diligence to commence".

## Further Information

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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 and operating 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 and operating 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 the general global macro-economic environment, and market factors impacting materials and installation costs, including inflation, foreign currency exchange rates and labour constraints. The information is provided as an indicative guide to assist investors make their own assessment of and satisfy their own enquiries regarding the Company's future performance. It should not be relied upon as a predictor or guarantee 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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