



San Andreas (2015), Warner Bros

Battery Metals: Liontown aims to ride the next big lithium demand wave in 2024

A ~\$240m lithium mine at Kathleen Valley will net [Liontown Resources \(ASX:LTR\)](#) \$1.94 billion in free cashflow over an initial 26-year mine life, based on a long-term average price of \$US690/t (\$1,019/t) for spodumene concentrate.

Next generation hard rock lithium hopeful Liontown has released a pre-feasibility study (PFS) on a 295,000-tonne-a-year spodumene concentrate operation at Kathleen Valley in WA.

Miners usually undertake three different types of studies to see whether or not a resource can be mined economically. These are, in order of importance, scoping, preliminary feasibility (PFS), and definitive feasibility (DFS)/bankable feasibility (BFS).

Liontown has pencilled in first production for 2024, when lithium demand is expected to [climb out of its current malaise](#).

READ: [In 2023, there's only enough battery grade lithium for VW and Tesla](#)

Forecast pricing for 2024 to 2040 results in an average price of \$US720/t.

But Liontown has subtracted \$US30/t from that number (\$US690/t) to reflect the added cost of shipping to China – even though the final destination is not known at this stage.

That's because future production from Kathleen Valley "remains 100 per cent uncommitted in order to maintain maximum flexibility over funding and development options", the company says.

Still, this will net Liontown an average \$84m a year in clear profit over the initial 26-year production life.

And this life is expected to increase. A 15,000-25,000m drilling blitz is happening right now; the results of which will be incorporated into the upcoming DFS.

This pre-production capital expenditure of \$240.5m also includes a \$31.1m contingency (emergency funds) just in case this go marginally pear-shaped.

Operational cash costs (which includes costs at site level but excludes things like head office expenditures) will be a very respectable ~\$US406/t (\$564) of spodumene concentrate.

Liontown says there's a few ways it is looking to improve these numbers heading into the DFS. One – includes additional revenue from the recovery and sale of a tantalum byproduct.

Two — increase the size of the ore reserve, and three — look at integrating a potential underground operation to expand production and bring forward higher grade material in the mining plan.

Liontown managing director David Richards says this PFS provides investors with a snapshot of the first of a new generation of Australian hard rock lithium projects, timed to benefit from the next wave of lithium demand.

"The PFS outlines a robust 2mtpa project capable of delivering strong financial returns from an initial open pit mining operation," he says. "Kathleen Valley has all the ingredients to underpin a world-class battery metals business that we believe will deliver substantial returns and value for our shareholders for many decades to come."

The stock, which is up about 280 per cent over the past 12 months, dipped 7 per cent to 8.7c per share in morning trade.