

# Lepidico Ltd (LPD)

Rating: Buy | Risk: High | Price Target: \$0.06

## Resource upgrade expected in October, FEED now expected in November

### Key Information

Current Price (\$ps)	0.02
12m Target Price (\$ps)	0.06
52 Week Range (\$ps)	0.02 - 0.05
Target Price Upside (%)	185.4%
TSR (%)	185.4%
Reporting Currency	AUD
Market Cap (\$m)	136.7
Sector	Materials
Avg Daily Volume (m)	6.8
ASX 200 Weight (%)	0%

### Fundamentals

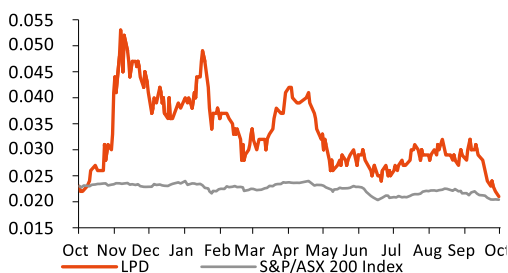
YE 30 Jun (AUD)	FY22A	FY23E	FY24E	FY25E
Sales (\$m)	0.0	0.0	115.8	252.1
NPAT (\$m)	(7.9)	(6.6)	48.1	126.1
EPS (cps)	(0.1)	(0.1)	0.5	1.4
EPS Growth (%)	nm	32.5%	730.9%	162.0%
DPS (cps) (AUD)	0.0	0.0	0.0	0.0
Franking (%)	0%	0%	0%	0%

### Ratios

YE 30 Jun	FY22A	FY23E	FY24E	FY25E
P/E (x)	(20.7)	(24.8)	3.9	1.5
EV/EBITDA (x)	(18.3)	(33.3)	1.5	0.7
Div Yield (%)	0.0%	0.0%	0.0%	0.0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%

### Price Performance

YE 30 Jun	1 Mth	2 Mth	3 Mth	1 Yr
Relative (%)	(22.2%)	(17.6%)	(16.8%)	2.6%
Absolute (%)	(27.6%)	(25.0%)	(19.2%)	(8.7%)
Benchmark (%)	(5.4%)	(7.4%)	(2.4%)	(11.3%)



Price performance indexed to 100

Source: FactSet

### Major Shareholders

Strategic Metallurgy	6.0%
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### Event

Lepidico has announced further strong exploration results at its Namibian lithium project and is progressing the Front End Engineering and Design (FEED) on its lithium hydroxide chemical plant in Abu Dhabi which is now expected to be complete in November 2022. The exploration results are likely to result in a resource upgrade and life-extension for the Phase 1 plant. Lepidico has identified potential improvements and efficiencies to the chemical plant design which will be incorporated into the FEED, which have delayed its release by two months, but will optimize and enhance the project.

### Highlights

- Lepidico has developed proprietary technology (L-Max<sup>®</sup> & LOH-Max<sup>™</sup>) to produce lithium hydroxide from mica minerals (lepidolite). The company is starting with a relatively small scale mine in Namibia and chemical plant in Abu Dhabi, however if successful, Lepidico will be pioneering a new, low-cost source of lithium.
- Lepidico has announced further exploration results at Helikon 4 which have extended the mineralisation down dip and along strike to the east. The recent drilling has identified higher grade zones (e.g. 34.8m @ 1.25% LiO<sub>2</sub>) which is likely to result in a material upgrade to the Helikon mineral resource estimate (MRE) which is expected to be released later this month.
- The two month delay in the release of the FEED for the Abu Dhabi chemical plant is understandable given the current environment and the relative inexperience of Lycopodium in the design and construction of facilities in Abu Dhabi. Lepidico has assembled a highly experienced team of local site managers who are working with Lycopodium to integrate their design and procurement strategies with the on-the-ground realities of operating in Abu Dhabi. Substantial savings are expected.
- As well as the high-grade results at Helikon, Lepidico recently discovered a new lepidolite bearing pegmatite at the Homestead prospect. These results add value in three ways; 1) Adding mine-life to Phase 1, 2) adding higher grade in the early years of the project, and 3) potentially identifying sufficient resource to underpin a Phase 2 20,000tpa plant.
- The L-Max<sup>®</sup> process involves leaching of lithium mica in a concentrated sulphuric acid at atmospheric pressure and relatively low temperatures. It differs from the processing of spodumene, which requires high temperature decrepitation and sulphate roasting prior to lithium recovery. The L-Max<sup>®</sup> process is expected to have lower energy requirements than existing lithium recovery processes.
- Lepidico released a Definitive Feasibility Study (DFS) in 2020 showing attractive economics for a Phase 1 5,000tpa lithium hydroxide project, with pre-production capex of US\$139m, an NPV<sub>8</sub> of US\$221m and an IRR of 31%.
- The company is expected to release updated financials from the DFS in 4Q22. Capex and opex are likely to increase in-line with global inflationary pressures, but lithium prices have surged higher which should more than offset the higher costs. In our modelling, we now assume opex is 15% higher and capex is 20% higher than the DFS.

### Recommendation

We retain our BUY recommendation and price target of 6.0cps. Lepidico is pioneering an alternative source of lithium to the traditional brine and spodumene producers. If successful, our 6.0c target, which is based only on the Phase 1 plant is likely to prove very conservative.

Andrew Hines | Head of Research

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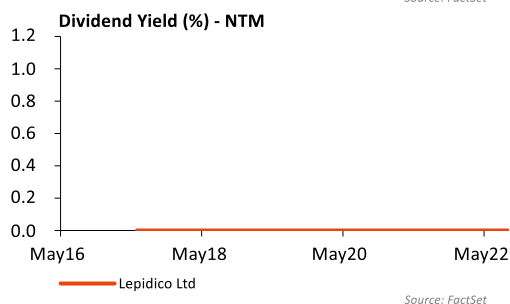
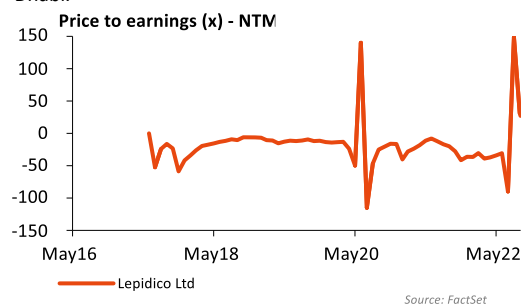
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**Lepidico Ltd**  
**Materials**  
**Materials**  
**FactSet: LPD-AU / Bloomberg: LPD AU**

Key Items	Data
Recommendation	BUY
Risk	HIGH
Price (\$ps)	0.02
Target Price (\$ps)	0.06
52 Week Range (\$ps)	0.02 - 0.05
Shares on Issue (m)	6,507.2
Market Cap (\$m)	136.7
Enterprise Value (\$m)	136.7
TSR (%)	185.4%

**Company Description**

Lepidico is a mining and chemical processing company focussed on producing lithium hydroxide from mica minerals. The company is developing a mining operation at Karibib in Namibia which will produce a lithium, caesium, rubidium and potassium concentrate from pegmatites in which the dominant lithium minerals are lepidolite, lithium-mica and petalite. Lepidico intends to process this concentrate using its proprietary L-Max and LOH-Max technology at a chemical plant to be constructed in Abu Dhabi.



**Financial Year End: 30 June**

Investment Summary (AUD)	FY21A	FY22A	FY23E	FY24E	FY25E
EPS (Reported) (cps)	0.0	(0.1)	(0.1)	0.5	1.4
EPS (Underlying) (cps)	0.0	(0.1)	(0.1)	0.5	1.4
EPS (Underlying) Growth (%)	102.2%	nm	32.5%	730.9%	162.0%
PE (Underlying) (x)	nm	(20.7)	(24.8)	3.9	1.5
EV / EBIT (x)	(439.4)	(17.4)	(33.3)	1.9	0.8
EV / EBITDA (x)	nm	(18.3)	(33.3)	1.5	0.7
DPS (cps) (AUD)	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Franking (%)	0%	0%	0%	0%	0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Profit and Loss (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
Sales	0.0	0.0	0.0	115.8	252.1
Sales Growth (%)	n/a	n/a	n/a	n/a	117.8%
Other Operating Income	4.1	0.0	0.0	0.0	0.0
EBITDA	0.0	(7.5)	(4.1)	89.8	191.0
EBITDA Margin (%)	nm	nm	nm	77.6%	75.8%
Depreciation & Amortisation	(0.3)	(0.4)	0.0	(16.0)	(15.7)
EBIT	(0.3)	(7.9)	(4.1)	73.8	175.4
EBIT Margin (%)	nm	nm	nm	63.8%	69.6%
Net Interest	0.0	0.0	(4.7)	(9.7)	(7.3)
Pretax Profit	(0.3)	(7.9)	(8.8)	64.2	168.1
Tax	0.6	(0.1)	2.2	(16.0)	(42.0)
Tax Rate (%)	(190.7%)	1.0%	(25.0%)	(25.0%)	(25.0%)
NPAT Underlying	0.3	(7.9)	(6.6)	48.1	126.1
Significant Items	0.0	0.0	0.0	0.0	0.0
NPAT Reported	0.3	(7.9)	(6.6)	48.1	126.1
Cashflow (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
EBIT	(0.3)	(7.9)	(4.1)	73.8	175.4
Tax Paid	0.0	0.0	(0.1)	2.2	(16.0)
Net Interest	0.0	0.0	0.2	0.1	1.8
Change in Working Capital	0.0	(0.9)	0.0	(20.0)	(22.2)
Depreciation & Amortisation	0.3	0.4	0.0	16.0	15.7
Other	1.1	2.0	(4.9)	(9.8)	(9.1)
Operating Cashflow	1.0	(6.4)	(8.8)	62.4	145.5
Capex	(0.1)	(0.1)	(232.5)	(5.5)	(5.4)
Acquisitions and Investments	(1.0)	(3.1)	(2.0)	0.0	0.0
Disposal of Fixed Assets/Investments	0.0	0.0	0.0	0.0	0.0
Other	0.5	(5.5)	0.0	0.0	0.0
Investing Cashflow	(0.6)	(8.6)	(234.5)	(5.5)	(5.4)
Equity Raised / Bought Back	14.7	7.4	100.0	0.0	0.0
Dividends Paid	0.0	0.0	0.0	0.0	0.0
Change in Debt	(5.2)	0.0	140.0	0.0	(20.0)
Other	0.0	0.0	0.0	0.0	0.0
Financing Cashflow	9.5	7.4	240.0	0.0	(20.0)
Net Change in Cash	10.0	(7.6)	(3.3)	56.9	120.1
Balance Sheet (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
Cash	14.7	8.0	4.7	61.6	181.7
Accounts Receivable	0.2	2.2	2.2	9.5	20.7
Inventory	0.0	0.0	0.0	14.3	31.1
Other Current Assets	0.0	0.0	0.0	0.0	0.0
PPE	1.7	8.6	241.1	230.6	220.4
Total Assets	85.3	95.3	326.5	394.4	532.3
Accounts Payable	1.0	2.0	2.0	3.6	9.4
Short Term Debt	0.0	0.0	0.0	0.0	0.0
Long Term Debt	0.0	0.0	140.0	140.0	120.0
Total Liabilities	10.4	11.8	149.5	169.4	181.1
Total Shareholder Equity	75.0	76.4	169.9	218.0	344.1
Ratios	FY21A	FY22A	FY23E	FY24E	FY25E
ROE (%)	0.5%	(11.5%)	(5.6%)	25.7%	45.9%
Gearing (%)	(27.5%)	(13.0%)	45.3%	27.0%	(22.3%)
Net Debt / EBITDA (x)	460.6	1.1	(33.0)	0.9	(0.3)

### Key risks

- The lithium price is volatile and is relatively difficult to forecast and the actual price may differ substantially from our forecasts.
- The caesium and rubidium markets are opaque and price discovery is difficult. Actual prices may differ substantially from our forecasts.
- The Karibib mine and concentrator and Abu Dhabi Plant are not yet constructed and there is a risk that Lepidico is unable to bring the operation in to production. The project may cost more than expected to build and may not operate as expected.
- Lepidico is intending to operate in non-OECD locations (Namibia and Abu Dhabi) which can carry more sovereign risk.
- Smaller companies carry more significant 'key personnel' risk than larger organisations. If senior management depart the company then it could delay projects or exacerbate operational risks.

### Core drivers and catalyst

- Strong growth in lithium demand (~29% CAGR to 2030) due to the growth in lithium-ion batteries for electric vehicles, mobile devices and grid storage.
- Lepidico's proprietary technology opens-up a new processing route for lithium from mica minerals.
- The L-Max<sup>®</sup> process is expected to have lower energy requirements than existing lithium recovery processes.
- LOH-Max<sup>TM</sup> produces lithium hydroxide without the production of sodium sulphate. The process provides significant capex and opex advantages over conventional processes and so Lepidico sees opportunity for licensing this process technology to the growing number of lithium chemical producers. Cornish Lithium paid C\$4m to Lepidico in Dec-2020 to licence its technology for the Trelavour hard rock lithium project.
- The processing of lithium micas also allows the production of valuable potassium, caesium and rubidium by-products, which will significantly offset the operating costs and make Lepidico one of the world's lowest cost producers of lithium hydroxide or lithium carbonate.
- There are very few sources of caesium and rubidium, which have been identified as critical minerals by the US government. Existing sources of caesium are depleting and Lepidico's planned production will be of strategic value to offtake partners, particularly in US.
- Lepidico has released a Definitive Feasibility Study (DFS) showing attractive economics for a Phase 1 5,000tpa lithium hydroxide project, with pre-production capex of US\$139m, an NPV8 of US\$221m and an IRR of 31%.
- Lepidico has already begun scoping work for a Phase 2 Plant which is planned to have capacity of 20,000tpa lithium carbonate equivalent (LCE).

## Rating Classification

<b>Buy</b>	Expected to outperform the overall market
<b>Hold</b>	Expected to perform in line with the overall market
<b>Sell</b>	Expected to underperform the overall market
<b>Not Rated</b>	Shaw has issued a factual note on the company but does not have a recommendation

## Risk Rating

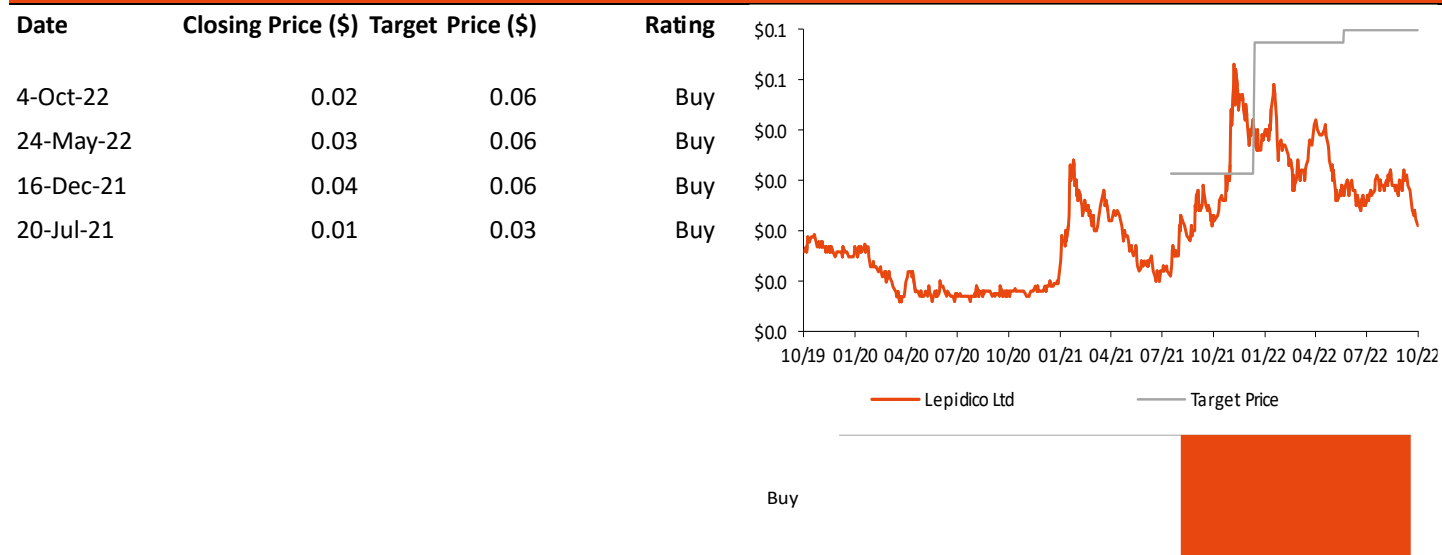
<b>High</b>	Higher risk than the overall market – investors should be aware this stock may be speculative
<b>Medium</b>	Risk broadly in line with the overall market
<b>Low</b>	Lower risk than the overall market

**RISK STATEMENT:** Where a company is designated as ‘High’ risk, this means that the analyst has determined that the risk profile for this company is significantly higher than for the market as a whole, and so may not suit all investors. Clients should make an assessment as to whether this stock and its potential price volatility is compatible with their financial objectives. Clients should discuss this stock with their Shaw adviser before making any investment decision.

### Distribution of Investment Ratings

Rating	Count	Recommendation Universe
Buy	115	89%
Hold	14	11%
Sell	0	0%

### History of Investment Rating and Target Price - Lepidico Ltd



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