ASX / MEDIA ANNOUNCEMENT

29 October 2020

LOH-Max® process technology acquisition & improvements

- **Lepidico has entered into an agreement to acquire the LOH-Max® technology and retain royalty free rights for its own use of the process**
- **Considerable capital cost savings, lithium recovery improvements and lower CO_2 emissions identified when LOH-Max® is employed for spodumene conversion versus conventional processing**
- **Further LOH-Max® process improvements identified from testwork on third party mica feedstock**

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce that it has entered into an agreement with the shareholders of Bright Minz Pty Ltd ("**Bright Minz**"), a company controlled by director, Mr Gary Johnston, for its wholly-owned subsidiary, Lepidico Holdings Pty Ltd, to acquire all of the issued capital of Bright Minz. Bright Minz is the holder of the LOH-Max® process technology which was developed for the production of high purity lithium hydroxide monohydrate from a lithium sulphate intermediate.

The consideration for the acquisition will consist of a trailing royalty in relation to any third party LOH-Max® licences entered into by the Lepidico Group following settlement of the acquisition to the current shareholders of Bright Minz and a cash payment of $10,000 (as reimbursement to the shareholders of Bright Minz for establishment costs incurred by them).

The acquisition is subject to certain conditions precedent including completion of due diligence, receipt of any required regulatory or shareholder approvals and finalising a royalty agreement with the original shareholders of Bright Minz for the trailing royalty stream on any third party LOH-Max® licences referred to above. The Lepidico Group will retain the right to use LOH-Max® royalty free.

Lepidico's Managing Director, Joe Walsh said, "Acquiring LOH-Max® brings all the process technologies employed by the Phase 1 Project under the Lepidico umbrella, thereby streamlining the process for any future third party licences. Strategic Metallurgy has further quantified the considerable potential benefits that LOH-Max® offers for spodumene conversion versus conventional process technology, which includes material reduction in capital and operating costs, improved lithium recovery and reduced carbon footprint. Further LOH-Max® improvements for mica processing have also been identified that will benefit Lepidico's Phase 1 Project, which is on track for a final investment decision in the June 2021 quarter."

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Spodumene conversion

Strategic Metallurgy has completed a desk top evaluation of LOH-Max® benchmarked against third party feasibility study level data for conventional production of lithium hydroxide monohydrate from a lithium sulphate intermediate, sourced from a 6.0% Li_2O spodumene concentrate. This evaluation coupled with results from further LOH-Max® testwork for the Phase 1 Project by Strategic Metallurgy supports a substantial US$52 million capital cost saving estimate (14% of total spodumene converter capital) for a production rate of 20,000tpa LCE (Lithium Carbonate Equivalent), largely due to the elimination of the energy intensive sodium sulphate circuit. This compares with previous advice of US$10 million per 5,000tpa LCE[1], equivalent to US$40 million for 20,000tpa LCE. By not producing sodium sulphate LOH-Max® also eliminates the risk of either attempting to sell or even dispose of sodium sulphate, the market for which is globally mature.

Strategic Metallurgy has also advised that LOH-Max® may also deliver an estimated 4% increase in recovery of lithium from concentrate to final product versus conventional spodumene processing, with an overall recovery estimate of 91% versus 87% respectively, equivalent to approximately an extra 1,000tpa of lithium hydroxide production for a nominal 20,000tpa converter.

LOH-Max® operating costs benefit from lower energy consumption, and lower reagent costs versus conventional conversion. The net benefit calculated showed an estimated reduction in absolute operating cost of US$8 million per year based on the third party feasibility study data for a 20,000tpa spodumene converter and a greater reduction in unit operating costs per tonne of product of approximately 8% due to the increased metal recovery. Furthermore, the lower energy consumption also leads to a reduction in CO_2 emissions when LOH-Max® is employed, which when combined with the increased lithium hydroxide output is expected to result in a meaningful reduction in carbon intensity. Opportunities to further reduce carbon intensity have been identified but require additional work to quantify.

Under the Bright Minz purchase agreement, it is contemplated that Lepidico will seek to licence the LOH-Max® process technology to third parties based on a royalty sharing arrangement.

Why avoid producing sodium sulphate?

Much of the world's new lithium chemical capacity, both committed and under study, sourced from either hard rock or sedimentary hosted deposits, employ sulphur based process chemistries that result in a sodium sulphate by-product. The sodium sulphate market is mature with annual demand growth estimated at just over 1% over the next five years, with most of this growth in China. Demand in many other parts of the world is in decline, in large part due to the shift from powdered to liquid detergents. Against this backdrop, global sodium sulphate supply is expected to rise significantly as new lithium chemical capacity comes on stream over the next ten years. A risk assessment for Lepidico's Phase 1 Plant identified sodium sulphate as a material exposure should demand growth remain stagnant and global production materially increase, thereby necessitating sustainable disposal methods to be found for sodium sulphate, which is highly soluble and doesn't lend itself to disposal with tailings.

Improvements in mica conversion

Testwork undertaken by Strategic Metallurgy on a third party lithium mica feed stock has demonstrated the amenability of this mineralisation to L-Max® and also identified some improvements to the LOH-Max® process. Enhanced washing efficiency allows a lithium hydroxide recycle stream to be eliminated, further simplifying the process with negligible impact on lithium metal recovery. This improvement will be incorporated into the Phase 1 Project front end engineering and design.

[1] ASX Announcement: Lithium Hydroxide process developed, 18 February 2019.

Further Information
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About Lepidico Ltd
Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium chemicals. Lepidico owns the technology to a metallurgical process that has successfully produced lithium carbonate from non-conventional sources, specifically lithium-rich mica minerals including lepidolite and zinnwaldite. The L-Max® Process has the potential to complement the lithium market by adding low-cost lithium carbonate supply from alternative sources. More recently Lepidico has added LOH-Max® to its technology base, which produces lithium hydroxide from lithium sulphate without by-product sodium sulphate. The Company has completed a Definitive Feasibility Study for a nominal 5,000 tonne per annum Lithium Carbonate Equivalent (LCE) capacity Phase 1 lithium chemical plant, targeting commercial production for 2023. The Project incorporate the Company's proprietary L-Max® and LOH-Max® technologies into the chemical conversion plant design. Feed to the Phase 1 Plant is planned to be sourced from the Karibib Project in Namibia, 80% owned by Lepidico where a predominantly Measured and Indicated Mineral Resource of 11.24 Mt grading 0.43% Li_2O, (including Measured Resources of 2.20 Mt @ 0.57% Li_2O, Indicated Resources of 6.66 Mt @ 0.38% Li_2O and Inferred Resources of 2.37 Mt @ 0.43%, at a 0.15% Li_2O cut-off) is estimated. (ASX announcement of 30 January 2020). Ore Reserves total 6.72 Mt @ 0.46% Li_2O, 2.26% rubidium, 2.02% potassium and 320ppm caesium (ASX announcement of 28 May 2020).

Forward-looking Statements
All statements other than statements of historical fact included in this release including, without limitation, statements regarding future plans and objectives of Lepidico, are forward-looking statements. Forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" 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 are expected to take place. Such forward-looking statements are not guarantees 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, its directors and management of Lepidico that could cause Lepidico's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this release will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. Lepidico does not undertake 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 release, except where required by applicable law and stock exchange listing requirements.