

# ASX / MEDIA ANNOUNCEMENT



21 November 2019

## 2019 Annual General Meeting Chairman's Address to Shareholders

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The 2019 year was transformational for Lepidico. Acquisition of its first directly owned lepidolite Mineral Resource at Karibib, development of a new proprietary process technology for the production of lithium hydroxide and the successful piloting of L-Max<sup>®</sup> represent huge advancements in Lepidico's strategy to become a globally significant lithium chemical producer.

Market conditions for both lithium chemical prices and lithium equities continued to be weak throughout fiscal 2019. Despite this Lepidico successfully raised over \$19 million, mainly due to the overwhelming support that eligible shareholders continue to show the Company. Proceeds from these issues were deployed to acquire the Karibib Lithium Project in Namibia, build and operate an L-Max<sup>®</sup> Pilot Plant and to fund the expanded Feasibility Study for its vertically integrated Phase 1 mine, concentrator and chemical plant Project.

In order to take advantage of new value add opportunities Lepidico has struck a balance between business flexibility and locking down the scope for the Phase 1 Project Feasibility Study. This meant that the timing to complete the Study has been extended to accommodate the newly developed LOH-Max<sup>™</sup> lithium hydroxide technology, as well as the integration of the Karibib Lithium Project as a lepidolite concentrate feed source. Both these opportunities are expected to enhance the economics and sustainability characteristics of the Project when complete.

Electric vehicle manufacturers have in recent years progressively moved towards higher nickel content lithium-ion battery cathodes, which require lithium hydroxide in their manufacture rather than lithium carbonate. As a result, most new lithium chemical projects that were financed in 2018 and into 2019 are designed to produce lithium hydroxide.

Also, most hard rock lithium conversion processes employ sulphur based chemistries that result in a sodium sulphate by-product, irrespective of the lithium chemical produced. The sodium sulphate market is mature yet supply is set to rise dramatically as new hard rock sourced lithium chemical capacity is forecast to come on stream over the next ten or more years.

These two trends led Lepidico to seek an alternative process for making more sought after lithium hydroxide without a sodium sulphate by-product. In early 2019 the LOH-Max<sup>™</sup> process was developed, which achieves this dual objective. As part of Lepidico's Phase 1 Plant Feasibility Study, cost comparisons were conducted for LOH-Max<sup>™</sup> versus the industry conventional process step to convert

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lithium sulphate to either lithium carbonate (employed by L-Max<sup>®</sup>) or lithium hydroxide. This work indicates that material reductions in both capital cost and operating cost should be achieved using LOH-Max<sup>™</sup>. Lepidico has the right to use LOH-Max<sup>™</sup> and sole rights for marketing the technology to third parties worldwide, in exchange for funding its development.

Short logistics routes, affordable supply of key consumables, established local markets for L-Max<sup>®</sup> by-products and streamlined permitting processes are important elements in the evaluation of a strategic location for a lithium conversion plant. In fiscal 2019 study work identified the United Arab Emirates as having all of these attributes and more, and therefore being a favourable location for Lepidico's Phase 1 hybrid L-Max<sup>®</sup>-LOH-Max<sup>™</sup> lithium chemical plant.

Subsequently, Lepidico entered into a memorandum of understanding with Abu Dhabi based Gulf Fluor LLC, the largest manufacturer of sulphuric acid in the region. The Phase 1 Plant Feasibility Study is now evaluating the building of the chemical conversion plant adjacent to Gulf Fluor's facilities, allowing acid to be piped directly to the L-Max<sup>®</sup> plant, thereby negating the requirement for trucking. Gulf Fluor is also well placed to support Lepidico in the marketing of sulphate of potash and amorphous silica by-products.

Since inception Lepidico's business strategy has acknowledged the merits of a vertically integrated business, with quality lithium mica concentrate feed sourced from a majority owned and Lepidico operated upstream asset. The Rubicon and Helikon deposits, situated within the Karibib Mining Licence area, host JORC Code compliant lepidolite-rich Mineral Resources that have been evaluated as being capable of providing concentrate feed to Lepidico's planned Phase 1 Plant for approximately 14 years. Mineralisation outcrops at surface, which should allow for a favourable strip ratio in the early years of operation. Importantly these deposits are covered by a granted Mining Licence for the development of both mines and a concentrator, allowing for rapid development. These deposits have yet to be closed off by drilling and represent excellent targets for expanding the Mineral Resource base to support Lepidico's growth ambitions. Furthermore, numerous pegmatite occurrences have been identified within the larger 1,054km<sup>2</sup> land package, which will become the focus of a regional exploration programme for its lithium mica and gold potential in fiscal 2020.

To become a globally significant lithium chemical company a series of projects will be required, in part to diversify business risk. The Alvarrões Lepidolite Mine in Portugal represents an opportunity for a separate source of lepidolite concentrate feed. To this end, a more definitive arrangement to the current ore offtake agreement between Lepidico and Grupo Mota is being developed, with the intention of providing a sustainable framework for operations. Drilling at Alvarrões met with considerable success this past year, as Mineral Resource tonnes increased by 290% and contained lithium rose by approximately 210%, versus the previous estimate. Mining studies are now focused on a modest scale open pit operation complemented by underground extraction of a newly discovered, deeper lepidolite-rich pegmatite sill.

Another major achievement in fiscal 2019 was the successful development of the L-Max<sup>®</sup> pilot plant, which was completed on schedule and within budget before contingency. The continuous operation phase for Campaign 1 on lepidolite concentrate sourced from Alvarrões completed in July 2019. The Campaign had to be adapted from the original plan in order to stockpile lithium sulphate intermediate as a feed source for the planned LOH-Max<sup>™</sup> pilot plant circuit that is scheduled to be constructed in the first half of fiscal 2020. Importantly Campaign 1 confirmed the chemistry underlying the L-Max<sup>®</sup> process through to production of high purity lithium carbonate, thereby achieving its primary objective.

Furthermore, average lithium extraction of 94% to lithium sulphate was realised, an excellent result, and opportunities for improvements were also identified. Subsequent to year end lithium carbonate of extremely high purity of 99.95% was produced from the pilot plant, demonstrating that lepidolite can be a source for high quality lithium chemical production.

By-product SOP fertilizer and amorphous silica were also successfully produced from the pilot plant providing the first samples for testing by prospective customers. Of particular note, high purity SOP grading 52.2% K<sub>2</sub>O was produced. A research and development testwork programme has also started for the manufacture of a range of caesium and rubidium products sourced from one of the pilot plant streams, with encouraging initial results.

Looking forward, priorities for fiscal 2020 are to complete the integrated mine, concentrator and chemical plant Phase 1 Project Feasibility Study, as well as secure product offtake commitments and financing for development. Considerable advances have already been made in the permitting and approvals required in Namibia and Abu Dhabi, and other preparatory work that includes business systems development will continue to transition the business to construction.

We are committed to developing a sustainable business that makes quality products for the needs of the twenty first century. Implicit in this are industry best practice protocols in the areas of health, safety, the environment, human resources, sustainability, and stakeholder engagement. Lepidico is also striving to be an industry leader in minimising waste generation and emissions, with the objective of the Phase 1 chemical plant ultimately being a zero-waste facility and the Company's mines not requiring dedicated tailings storage facilities.

Short-term headwinds associated with an oversupply of lithium chemical are expected to give way in the medium term to a lithium market in fundamental deficit as new supply is unable to keep pace with the dramatic demand growth many forecasters are predicting for electric vehicle manufacture. Benchmark Mineral Intelligence is tracking the planned development of more than 100 lithium-ion battery "megafactory" manufacturing plants, which it estimates could consume over 2 million tonnes of lithium carbonate equivalent by 2028, versus production of approximately 260,000 tonnes in 2018.

As announced last month, Mr Tom Dukovcic voluntarily elected not stand for re-election as an Executive Director at the General Meeting today but will remain a valued Executive of Lepidico in his capacity as General Manager Geology. Since 1999 Tom has played a critical role in the growth and transformation of the publicly listed company which today is called Lepidico. Over the past four years Tom's energy and technical insight have been instrumental in the Company's evolution from a metals and minerals explorer to a vertically integrated lithium development company on the cusp of its next transition to an operating platform. On behalf of Lepidico's Board I sincerely thank Tom for his dedication and valuable contribution as a Director of the Company.

Lepidico continually strives to make improvements in corporate governance and business sustainability. Currently the company has four Non-Executive Directors (NED's), of which two are independent NED's, with the ASX recommending a minimum of three independent NED's on Board Committees. To this end the Company envisages the appointment of a further independent NED at an appropriate time in the future.

Finally, we thank shareholders for another year of tremendous support on our quest to build a new, vertically integrated lithium chemical company fuelled by non-traditional lithium minerals.

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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<sup>®</sup> 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<sup>™</sup> to its technology base, which produces lithium hydroxide from lithium sulphate without by-product sodium sulphate. The Company is currently conducting a Feasibility Study for a 5,000 tonne per annum (LCE) capacity Phase 1 lithium chemical plant, targeting commercial production for 2021. Work is currently being undertaken to evaluate the incorporation of LOH-Max<sup>™</sup> into the Phase 1 Plant Project flow sheet. Feed to the Phase 1 Plant is planned to be sourced from the Karibib Lithium Project in Namibia, 80% owned by Lepidico where a Mineral Resource of 8.8 Mt grading 0.56% Li<sub>2</sub>O and 59ppm Ta<sub>2</sub>O<sub>5</sub> is estimated (ASX announcement of 16 July 2019) and/or the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Grupo Mota (ASX announcement of 7 December 2017).

### **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.