Lithium Hydroxide process developed

- **High purity lithium hydroxide produced using a new proprietary process, LOH-Max™, over which Lepidico has entered into a worldwide exclusivity arrangement**
- **LOH-Max™ uses conventional equipment and is expected to have lower capital and operating costs than conventional conversion of lithium sulphate to either lithium carbonate or hydroxide**
- **LOH-Max™ avoids the production of sodium sulphate as a by-product**
- **LOH-Max™ has application in conversion of all hard rock and sedimentary hosted lithium mineral concentrates that employ sulphur based chemistry, including spodumene concentrates**
- **L-Max™ will provide feed to LOH-Max™, which is being integrated into Lepidico's pilot plant development and Phase 1 Plant Project Feasibility Study**

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce that it has produced high purity lithium hydroxide using a new process, LOH-Max™, developed in collaboration with the owners of Strategic Metallurgy Pty Ltd ("Strategic Metallurgy"). A binding exclusivity arrangement has been entered into with the developers of the process technology, whereby Lepidico has the right to use the process and sole rights for marketing the technology to third parties worldwide.

Why Lithium Hydroxide?

Many of the lithium chemical consumers that Lepidico is in discussions with regards off-take have provided feedback that they require lithium hydroxide rather than lithium carbonate. Furthermore, most new lithium projects that were financed in 2018 are designed to produce lithium hydroxide. These, amongst other factors led Lepidico to evaluate the process technology developed by the owners of Strategic Metallurgy for producing lithium hydroxide directly from lithium sulphate, an intermediate product of Lepidico's proprietary L-Max® process. Lithium carbonate however, is expected to continue to be used extensively within the industry and as such Lepidico continues to evaluate new cost effective lithium carbonate processes that do not produce by-product sodium sulphate, as part of its research and development activities.

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%[1] over the next five

[1] Source: Technavio

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. Accordingly, 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 a disposal method be found. This led Lepidico to seek alternative process routes to making lithium chemicals from the L-Max® intermediate, lithium sulphate.

Why LOH-Max™?

LOH-Max™ provides an elegant solution to produce lithium hydroxide – which currently attracts a premium price compared with lithium carbonate and is in strong demand – from lithium sulphate, using conventional industrial equipment and without the production of sodium sulphate. As part of Lepidico's Phase 1 Plant Feasibility Study, cost comparisons have been conducted for LOH-Max™ versus the industry conventional process step to convert lithium sulphate to either lithium carbonate (which is employed by L-Max®) or lithium hydroxide. This work indicates that material reductions in both capital cost – estimated at more than US$10 million for 5,000tpa of lithium hydroxide – and operating cost should be achieved using LOH-Max™. Such cost advantages mean that LOH-Max™ has application in the final processing of a broad range of lithium concentrates sourced from both hard rock, including spodumene and sedimentary hosted deposits. Accordingly, Lepidico sees opportunity for licensing this process technology to the growing number of lithium chemical producers.

The LOH-Max™ technology is held within a special purpose vehicle owned by the principals of Strategic Metallurgy that developed the process. A provisional patent application for this process was recently filed with the Australia Patent Office. Lepidico has entered into a worldwide, binding exclusivity arrangement for LOH-Max™ in exchange for Lepidico funding the development of the process.

Work has commenced to adapt the final process stages of Lepidico's Pilot Plant development to include a LOH-Max™ circuit. The Pilot Plant remains on schedule and within budget and no delay is currently perceived for the commissioning of the facility in April 2019 and operation in May, as a result of incorporating LOH-Max™.

In reviewing the engineering for the Phase 1 Plant Project, completed by Lycopodium in December 2018, a proportion of re-work will be required to integrate the LOH-Max™ process. Strategic Metallurgy is developing the process design criteria for Lycopodium to finalise the design for the new circuit.

Lepidico's Managing Director, Joe Walsh said, "LOH-Max™ is an exciting new development opportunity for Lepidico shareholders, allowing the production of a premium priced lithium chemical at lower operating cost than the production of lithium carbonate. Furthermore, dispensing with the conventional sodium sulphate circuit both reduces capital cost and substantially reduces economic and environmental risks associated with the possible disposal of this material. Lepidico is fast tracking the integration of LOH-Max™ into its development plans."

Further Information
For further information, please contact

Joe Walsh	***Tom Dukovcic***
Managing Director	***Director Exploration***
Lepidico Ltd	***Lepidico Ltd***
+1 647 272 5347	*+61 (0)8 9363 7800*

About Lepidico Ltd

Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium. 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 competitive cost lithium supply from alternative sources. Lepidico is currently building a L-Max® Pilot Plant using small scale industrial equipment that is on schedule for commissioning in April 2019. The Company is also conducting a Feasibility Study for its larger Phase 1 L-Max® Plant Project, targeting commissioning in late 2020. Feed to both the Pilot Plant and Phase 1 Plant is planned to be sourced from the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Grupo Mota. Lepidico has delineated a JORC Code-compliant Inferred Mineral Resource estimate at Alvarrões of 1.5 Mt grading 1.1% Li_2O (see ASX announcement of 7 December 2017).

Lepidico's current exploration assets include a farm-in agreements with Venus Metals Corporation Limited (ASX:VMC) over the lithium mineral rights at the Youanmi Lithium Project in Western Australia. Lepidico has also entered into a Letter of Intent with TSX listed Avalon Advanced Materials Inc. for planned lithium mica concentrate supply from its Separation Rapids Project in Ontario, Canada.

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.