

## ASX ANNOUNCEMENT

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## Lithium Australia improves battery performance with proprietary refining process.

### HIGHLIGHTS

- **Lithium phosphate produced by processing mica using SiLeach®.**
- **Proprietary process used to refine the phosphate generating a high-purity battery chemical suitable for the production of batteries.**
- **Veracity of the product proved in battery production.**

Lithium Australia NL (ASX: LIT, or 'the Company') has successfully generated lithium phosphate from waste materials using its 100% owned SiLeach® process. Furthermore, LIT has, together with ANSTO, developed an elegant and simple means of removing impurities from the lithium phosphate resulting in an exceptionally high-purity refined product, suitable for the manufacture of lithium ion batteries (LIBs), and in particular, those with lithium iron phosphate (LFP) chemistry.

The Company has successfully produced LFP batteries from unrefined, SiLeach® generated lithium phosphate ([21 November 2018](#)). The lithium phosphate refining process was developed to ensure consistency of quality for the production of high performance LFP batteries. The performance of batteries made from the refined lithium phosphate product has been tested at LIT's wholly owned VSPC cathode powder pilot plant in Brisbane, Australia.

The refined lithium phosphate was used to manufacture cathode powder and subsequently LFP coin cells which were then subjected to a standard testing regime and the results compared with industry benchmarks and VSPC's most advanced cathode powders. The results indicate the refined lithium phosphate is an ideal component for the manufacture of high-performance LFP cathode powders.

LIT is confident that LFP products produced using lithium phosphate, refined with the process developed by LIT/ANSTO will have significant advantages when compared with those produced using a more conventional lithium carbonate, or lithium hydroxide precursor.

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## Comment from managing director Adrian Griffin

“The lithium phosphate refining process is cheap, effective and provides the means to produce high-purity materials with consistent quality. These properties are of paramount importance as we work with leading Chinese battery producer, DLG, to commercialize VSPC cathode powder.

When compared with other lithium chemicals, high-purity lithium phosphate is a winner when it comes to producing LFP batteries, providing two of the fundamental components for the generation of the cathode while simultaneously eliminating the requirement for lithium carbonate or lithium hydroxide. This is a real winner.”

### Adrian Griffin

Managing Director

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## About Lithium Australia NL

Lithium Australia aspires to 'close the loop' on the energy-metal cycle in an ethical and sustainable manner. To that end, it has amassed a portfolio of projects and alliances and developed innovative extraction processes to convert *all* lithium silicates (including mine waste) to lithium chemicals. From these chemicals, the Company plans to produce advanced components for the lithium-ion battery industry. The final step for Lithium Australia involves the recycling of spent batteries and e-waste. By uniting resources and the best available technology, the Company aims to establish a vertically integrated lithium processing business.

### Media contacts

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