## ASX ANNOUNCEMENT

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# Lithium Australia subsidiary VSPC signs MoU to commercialise its cathode technology

#### HIGHLIGHTS

- VSPC Ltd ('VSPC') and Beijing Saideli Technology Incorporated Company Ltd ('SDL') have signed a memorandum of understanding ('MoU') to commercialise VSPC cathode material.
- Terms of the MoU include the low-capital establishment of a supply chain for VSPC cathode material in China, and collaboration on a feasibility study for an international cathode material project using VSPC technology.
- The MoU was agreed following significant technical review and discussions around VSPC's Lithium-Ferro-Phosphate ('LFP') cathode product.
- Demand for LFP batteries is expected to grow significantly over the next decade.

### **Background to the transaction**

A wholly owned subsidiary of Lithium Australia NL (ASX: LIT, 'the Company'), VSPC is a developer of advanced cathode materials. With patented processes for the production of lithium-ion battery ('LIB') cathode materials, VSPC has a strong focus on the application of LFP in energy-storage and transport applications.

The MoU signed by VSPC and SDL will see the parties collaborate on a staged plan for VSPC to commercialise production of its LFP cathode material. This includes the establishment of a supply chain for VSPC customers in China, as well as a joint feasibility study for LFP production and supply outside China using VSPC proprietary process technology.

SDL has considerable expertise in the design and manufacture of process equipment and extensive experience in the construction, commissioning and operation of chemical process plants, including those for the production of LIB cathode powders.

#### LFP cathode material

The market for LFP cathode material is forecast to grow strongly over the next decade. In addition to core applications for ebus and stationary storage, significant demand is expected through substitution (existing) and displacement (expanding) in applications traditionally the domain of lead acid batteries; including but not limited to 12V and 48V applications for micro and mild hybrid powertrains, LSEV (low speed electric vehicles), datacentre UPS and 5G tower backup. Attributes of LFP that make it the ideal LIB chemistry for energy-storage applications include the following.

Deep discharge.



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- Fast charging rates.
- High power delivery.
- Long operating life.
- Low cost.
- Wide operational temperature range.
- Safety (no thermal runaway).

Further, LFP is ideally suited to other applications in which the energy density of the battery is less critical, as with, for example, e-buses, light rail, trucks and military and marine applications.

## Comment from Lithium Australia managing director Adrian Griffin

"We see partnering with SDL – which has a demonstrated track record in process development and high-tech process plant delivery – as a great opportunity. VSPC's MoU with SDL provides Lithium Australia with a low-capital pathway to the commercialisation of VSPC cathode powders, in order to meet targets set by our other partners in China. We look forward to working with SDL, with a specific focus on the anticipated growth of LFP cathode materials for transport and energy-storage applications."

Authorised for release by the Board.

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## About VSPC

VSPC, a wholly owned subsidiary of Lithium Australia, has an R&D and pilot plant facility in Brisbane, Queensland. There, it has developed advanced processes for the manufacture of LIB cathode powders applicable to all LIB chemistries, including LFP and lithium-manganese-cobalt-oxide (NCM). VSPC's processes can be characterised as follows.

- Simple nanotechnology for superior battery cathodes.
- Precise control of composition and particle size.
- Unparalleled quality control.
- Low-cost production.

VSPC will in the first instance commercialise its process technology for the manufacture of cathode material for LFP batteries.



### **About Lithium Australia**

Lithium Australia aims to ensure an ethical and sustainable supply of energy metals to the battery industry (enhancing energy security in the process) by creating a circular battery economy. The recycling of old LIBs to new is intrinsic to this plan. While rationalising its portfolio of lithium projects/alliances, Lithium Australia continues with R&D on its proprietary extraction processes for the conversion of all lithium silicates (including mine waste), and of unused fines from spodumene processing, to lithium chemicals. From those chemicals, Lithium Australia plans to produce advanced components for the battery industry globally, and for stationary energy storage systems within Australia. By uniting resources and innovation, Lithium Australia seeks to vertically integrate lithium extraction, processing and recycling.

#### **About SDL**

SDL, a public company (with the code NEEQ: 430097), was listed on the Chinese overthe-counter (OTC) market in 2015. A national high-tech enterprise, SDL specialises in chemical process development, equipment design and manufacture, and the delivery of highly automated chemical plants for industries that include LIB cathode production, paint and pigment materials and biopharmaceuticals.

SDL's experience encompasses overall planning, process design, equipment manufacturing, procurement, installation, commissioning, inspection, training, production technical support and after-sales service for complete sets of automated process equipment.

SDL holds patents in a number of process technology applications, as well as intellectual property and copyright for process industry software.