

## ASX ANNOUNCEMENT

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## Lithium Australia subsidiary VSPC awarded federal government grant in \$5 million battery development programme

### HIGHLIGHTS

- VSPC Ltd ('VSPC') is to be part of a \$5 million programme to develop fast-charge batteries for trams, under the auspices of the federal government's Co-operative Research Centres Projects ('CRC-P').
- Working with Australia's Commonwealth Scientific and Industrial Research Organisation ('CSIRO'), The University of Queensland ('UQ') and Soluna Australia ('Soluna'), VSPC will develop advanced cathode materials.
- As part of CRC-P Round 8, VSPC will receive a grant totalling \$1.6 million for its participation (CSIRO, UQ and Soluna contributions will be in-kind).

### Overview

Lithium Australia NL (ASX: LIT) is pleased to announce the participation of its 100%-owned subsidiary VSPC – together with CSIRO, UQ and Soluna – in a \$5 million CRC-P programme to develop fast-charge lithium-ion ('Li-ion') batteries for use in new-generation trams. (Battery-powered trams eliminate the need for overhead power lines, which are expensive, visually polluting and potentially hazardous.)

As well as expertise in the design of Li-ion batteries, CSIRO already has specific experience and intellectual property relating to fast-charge batteries for application in trams and other forms of transport (such as e-buses, ferries and military applications). VSPC will partner with battery researchers at CSIRO's Clayton site in Victoria to design, manufacture and test fast-charge Li-ion battery prototypes.

The UQ team at the Faculty of Engineering, Architecture and Information Technology – led by Professor Lianzhou Wang from the Australian Institute for Bioengineering and Nanotechnology – has extensive capabilities with respect to the analysis of advanced materials. VSPC will work with the UQ team on both the characterisation and optimisation of VSPC's battery materials.

Soluna, meanwhile, will advise on manufacturing and also lead commercialisation of the fast-charge battery products developed.



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## Comment from CSIRO principal research scientist Adam Best

“CSIRO has over 35 years’ experience with batteries, and more than 15 years of working in the lithium battery field. We’re excited to be applying our significant capabilities and expertise to this project, in conjunction with VSPC and UQ, for the design, manufacture and testing of next-generation fast-charge batteries that incorporate VSPC’s advanced cathode materials.”

## Comment from VSPC executive director Mike Vaisey

“This project is a tremendous opportunity to bring together Australia’s technological capabilities – including VSPC’s advanced cathode materials, CSIRO’s battery expertise and UQ’s analytical abilities – to develop new battery systems using VSPC cathode material. Light rail is experiencing a resurgence worldwide as cities modernise, and fast-charge batteries are critical to avoiding the poles and wires of the past.”

## Comment from Lithium Australia managing director Adrian Griffin

“This is an unparalleled opportunity to combine VSPC’s battery-materials technology with some of the world’s leading research. The aim is to deliver an Australian product that puts this country at the forefront of battery development ... and there’s more to it than trams; successful application of what is currently at our fingertips will lead to myriad other fast-charge applications, many of them not yet thought of.”

Authorised for release by the Board.

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## 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 spent lithium-ion batteries to create new is intrinsic to this plan. While rationalising its portfolio of lithium projects/alliances, the Company 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, the Company seeks to vertically integrate lithium extraction, processing and recycling.

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## About VSPC

VSPC Ltd, 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 Li-ion cathode powders applicable to all Li-ion battery chemistries, including lithium-ferro-phosphate ('LFP') and lithium-nickel-cobalt-manganese-oxide (NCM). VSPC's processes can be characterised as follows.

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

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