ASX ANNOUNCEMENT

ACN: 126 129 413
ASX: LIT

Level 1
677 Murray St
West Perth WA 6005

PO Box 1088
West Perth WA 6872

Phone +61 (0) 8 6145 0288
Fax +61 (0) 8 9475 0847

info@lithium-au.com
lithium-au.com

27 October 2021

VSPC joins research and development of solid-state lithium metal battery

HIGHLIGHTS

- **VSPC Ltd has reached agreement to join research and development ('R&D') for solid-state lithium metal battery technology: the next generation of lithium batteries.**
- **R&D to be conducted under Australian Research Council ('ARC') Grant awarded to the University of Technology Sydney (Centre for Clean Energy Technologies) ('UTS') in conjunction with Industry Partner Advanced Battery Technologies Pty Ltd ('ABT').**

Agreement to support Industry Partner for ARC Grant

VSPC Ltd ('VSPC') is a wholly owned subsidiary of Lithium Australia NL (ASX: LIT, 'the Company'). VSPC recognises the importance of R&D for continuing improvements to battery components and performance. VSPC has agreed to fund a research program which will focus on key innovations around battery design components to be used in conjunction with Lithium metal anodes. VSPC has committed to provide industry support funding of up to $250,000 over 3 years (with an initial investment of $30,000) for ARC Grant LP200200926 entitled Solid-State Lithium Batteries Using Phase-Stabilised Electrolytes ('the ARC Grant').

Research and development on solid-state lithium metal batteries

R&D under the ARC Grant will be conducted by UTS which will focus on key innovations for solid-state lithium metal batteries. R&D will focus on three areas including investigations on:

- Performance characteristics of batteries using three of the most prospective solid-state electrolytes identified to date,
- Two cathode types, and
- The use electrode interface controls that protect electrolytes with the aim of significantly increasing cell cycle life.

Why solid-state lithium batteries?

All-solid-state lithium metal batteries are recognised in the industry as the most likely path to achieving the next step-change performance increase above the potential of lithium-ion battery ('LIB') technology. An all-solid-state, lithium-sulphur ('Li-S') battery potentially offers 2-3 times the specific-energy values compared to LIBs. Also targeted are major improvements in the chemical stability and toxicity of electrolytes, operating life and overall safety.

ASX ANNOUNCEMENT

Comment from Lithium Australia managing director Adrian Griffin

"If this R&D is successful, it provides VSPC with an opportunity to produce all three of the battery components: cathode, anode and electrolyte, and influence battery design to maximise critical materials and overall recyclability. It also allows VSPC to partner with UTS's world-class research team and support development of Australian leadership in solid-state battery technologies development. The collaboration is a further step on the path of Lithium Australia's engagement in realising the most effective solutions for the renewable energy transition underway in Australia and globally."

Authorised for release by the Board.

Adrian Griffin
Managing Director
Mobile +61 (0) 418 927 658
Adrian.Griffin@lithium-au.com

Barry Woodhouse
Company Secretary
Mobile +61 (0) 438 674 259
Barry.Woodhouse@lithium-au.com

Forward-looking statements

This announcement contains forward-looking statements. Forward-looking statements are subject to a variety of risks and uncertainties that it is beyond the Company's ability to control or predict and which could cause actual events or results to differ materially from those anticipated in such forward-looking statements.

About Lithium Australia NL

Lithium Australia aims to ensure an ethical supply of energy metals to the battery industry by creating a circular battery economy that enhances both sustainability and resource security. Reprocessing spent lithium-ion batteries to create new ones is intrinsic to this plan, with the Company operating Australia's only fully integrated mixed-battery recycling business.

Having rationalised its portfolio of lithium projects/alliances, Lithium Australia continues its research into, and the development of, proprietary extraction processes for the conversion of *all* lithium silicates (including mine waste), and of fines generally discarded during conventional spodumene conversion, to lithium chemicals, from which it will produce advanced cathode materials for the battery industry globally.

The Australian federal government has recognised the Company's progress through the awarding of substantial research grants designed to progress the nation's advanced battery capabilities.

By uniting resources and innovation, Lithium Australia seeks to vertically integrate lithium extraction, processing and recycling.

Media contact

Adrian Griffin, Lithium Australia NL 08 6145 0288 | +61 (0) 418 927 658