



Lithium Australia – can recycling waste reduce the cost of battery production?

VSPC Limited ('VSPC'), a subsidiary of Lithium Australia NL (ASX: LIT, 'the Company'), is currently evaluating the use of cost-competitive inputs in the production of lithium ferro phosphate ('LFP') batteries. (LFP is considered the 'safe' lithium-ion battery ('LIB') chemistry, with negligible fire risk.)

The VSPC programme is part-funded by a federal government Advanced Manufacturing Growth Centre (i.e. AMGC) grant. VSPC's initial results indicate the potential to reduce the cost of battery manufacture by 20-30%, which could create a much more competitive environment for LIB production in Australia.

So far, VSPC's research has evaluated lithium sources that include mine waste and spent LIBs.

The feed material from spent LIBs was recovered as mixed metal dust by Company recycling subsidiary [Envirostream Australia Pty Ltd](#), while the mine waste used as feed included:

- lithium mica (the lithium was recovered as lithium phosphate ('LP') via the Company's patented SiLeach® process), and
- fine and low-grade spodumene normally rejected by conventional lithium concentrate producers (the lithium was also recovered as LP via the Company's proprietary LieNA® process).

Both SiLeach® and LieNA® have the potential to not only reduce the cost of battery manufacture but also improve resource sustainability and enhance national energy security.

VSPC's results are timely in that the Western Australian government recently announced [incentives for cathode powder production](#) within the state.

The manufacture of advanced cathode powder materials is nothing new to VSPC, which has been using its advanced nanotechnology to do so for years. Technology aside, though, the art lies in getting the price right, and VSPC's low-cost inputs go a long way to achieving that. What's more, the production of LP rather than lithium carbonate or lithium hydroxide can reduce the number of steps in the battery

manufacturing process, and Lithium Australia has patents pending to achieve just that.

In the video below, Company MD Adrian Griffin comments on Lithium Australia technology advances that could create a more competitive environment for battery production in Australia.



Regards
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