

Lithium extraction piloting test work update

Summary:

- The Vulcan pilot plant team has successfully achieved target specification for Direct Lithium Extraction (DLE) feed into its pilot plant.
- The pilot plant team has also achieved target recovery of greater than 90% for lithium chloride from Upper Rhine Valley brine.
- The Vulcan laboratory team has successfully demonstrated, via the first step of test work, post-treated DLE brine to be materially the same composition, within analytical error, as production brine, excluding extracted lithium and silica. This is in line with Vulcan's strict environmental focus.
- Next steps will include:
 - Ramp up of DLE pilot plant to 24/7 operation.
 - Production of lithium chloride solution to be converted to lithium hydroxide.
 - Production of samples for potential customers/offtakers.
 - Further work on post-treatment of brine.

Managing Director, Dr. Francis Wedin, commented: *"The latest update from our laboratory and pilot plant lithium extraction teams in Germany shows good progress has been achieved in a very short space of time. We will aim to continue this momentum and to continue to rapidly de-risk and scale-up our lithium extraction process in the months to come, as we execute on our strategy to deliver our Zero Carbon Lithium™ Project into production for the European battery electric vehicle market."*

With the International Energy Agency last week declaring the need for annual battery production of 6,600 GWh by 2030, implying an annual lithium chemicals requirement of 22 times current total global production, Vulcan is leading the charge to reduce large carbon emissions currently embodied in the traditional production of lithium. The team at Vulcan is highly motivated to ensure that the global transition to renewables, energy storage and electric mobility is conducted in a sustainable, net zero manner, and we are channelling this motivation into systematically executing on our Zero Carbon Lithium™ Project."

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Highlights

Globally unique **Zero Carbon Lithium™** Project.

Combined lithium chemicals & renewable energy project in the Upper Rhine Valley of Germany.

EU's **largest** lithium resource.

Located at the heart of the EU Li-ion battery industry.

Fast-track development towards supplying the EU's battery & electric vehicle industry.

Corporate Directory

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Non-Executive Director
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About Vulcan

Vulcan is aiming to become the world's first lithium producer with net zero greenhouse gas emissions. Its ZERO CARBON LITHIUM™ Project will produce a battery-quality lithium hydroxide chemical product from its combined geothermal energy and lithium resource, which is Europe's largest lithium resource, in Germany. Vulcan's unique, ZERO CARBON LITHIUM™ Project will produce both renewable geothermal energy, and lithium hydroxide, from the same deep brine source. In doing so, Vulcan will address lithium's EU market requirements by reducing the high carbon and water footprint of production, and total reliance on imports. Vulcan aims to supply the lithium-ion battery and electric vehicle market in Europe, which is the fastest growing in the world. The Vulcan Zero Carbon Lithium™ project has a resource which can satisfy Europe's needs for the electric vehicle transition, from a source with net zero greenhouse gas emissions, for many years to come.





For and on behalf of the Board

Robert Ierace

Chief Financial Officer - Company Secretary

For further information visit www.v-er.eu

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Competent Person Statement:

The information in this report that relates to Mineral Resources is extracted from the ASX announcement made by Vulcan on the 15 December 2020, which is available on www.v-er.com. The information in this presentation that relates to the Pre-Feasibility Study for the Vulcan Lithium Project is extracted from the ASX announcement "Positive Pre-Feasibility Study", released on the 15th of January 2021 which is available on www.v-er.eu. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.