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MILESTONE: START OF COMMISSIONING AT DOWNSTREAM LITHIUM HYDROXIDE OPTIMISATION PLANT

Vulcan Energy Resources Limited (Vulcan, ASX: VUL, FSE: VUL, the Company) is pleased to announce the start of commissioning at the Company's 100%-owned lithium hydroxide optimisation plant, designated CLEOP¹. This represents a key milestone as the Company progresses towards delivery of Europe's first battery-grade lithium hydroxide product sourced from a European lithium resource.

Highlights

- Vulcan's downstream CLEOP facility is located just outside of Frankfurt, in the Höchst Chemical Park, where Vulcan will also construct its commercial Central Lithium Plant (CLP)
- The main building and utility systems have been completed to allow first energisations to take place. Power has been fed to the plant for the first time through the main switchboard, a critical step for the electrolysis plant
- Start of production of first lithium hydroxide and first production of battery-grade lithium hydroxide monohydrate (LHM) will be the forthcoming milestones
- Once in operation, CLEOP will convert Lithium Chloride (LiCl) from the Company's upstream Lithium Extraction Optimisation Plant (LEOP) to battery grade LHM. This will represent the first fully domestically produced LHM, from raw materials to final product, in Europe
- LEOP and CLEOP will serve as important process optimisation and training facilities, in preparation for the Company's commercial operations.

Managing Director and CEO Cris Moreno stated: "The start of commissioning of Vulcan's downstream lithium optimisation facility is a significant milestone for Europe's critical raw material independence, and for its electric vehicle supply chain independence."

"In the coming months, Vulcan will begin to transport the first LiCl parcels from our upstream facility through to CLEOP for production of the first battery-grade lithium hydroxide products in Europe, all from a European lithium resource."

"We look forward to welcoming senior German and EU government ministers and dignitaries to an official opening of this important facility for the German and European battery industry."

¹ Central Lithium Electrolysis Optimisation Plant

CLEOP – Vulcan’s downstream lithium optimisation plant

CLEOP is the Company’s pre-commercial downstream optimisation plant. At CLEOP, LiCl solution produced from Vulcan’s 100%-owned upstream operations will be converted to battery specification LHM.

Vulcan will use the CLEOP facility to train personnel and optimise processes in a pre-commercial setting ahead of construction of the commercial CLP.

The Company also expects LHM production from CLEOP will allow for significant progress in LHM product qualification required by offtake partners, reducing the potential for delay and fast-tracking product to market once commercial production has commenced.

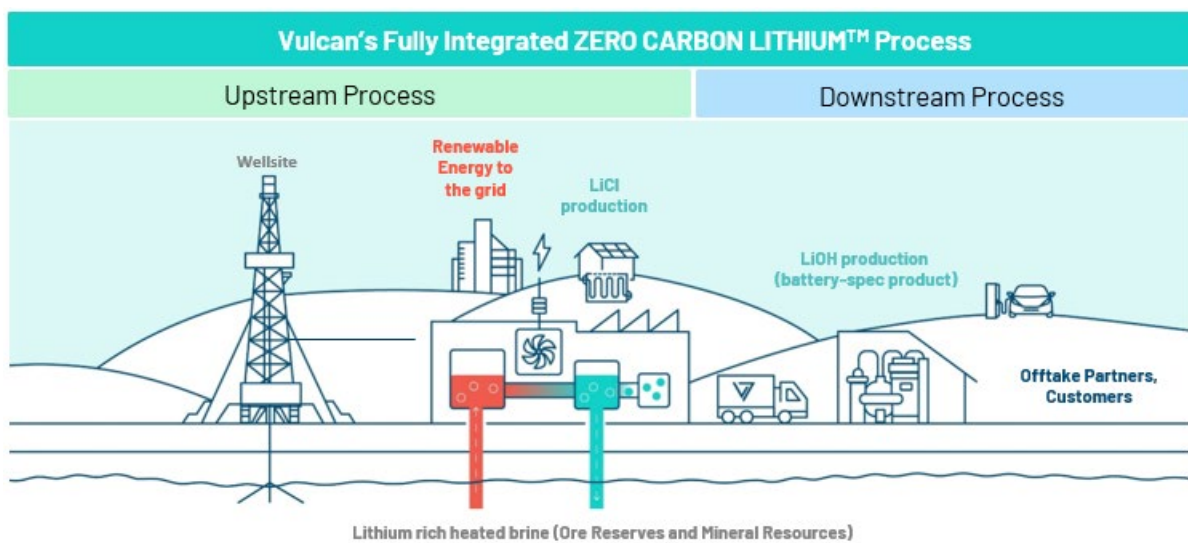


Figure 1: Vulcan’s CLEOP facility is part of Vulcan’s downstream process, where LiCl is converted to battery specification LHM for offtake partners and customers.

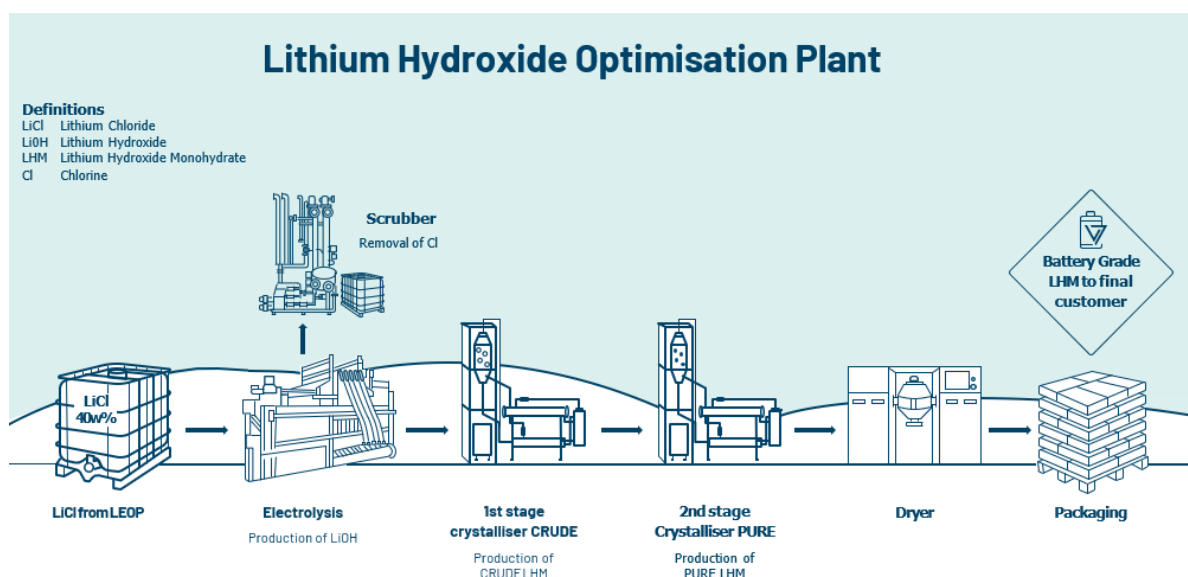


Figure 2: CLEOP process for conversion of LiCl to battery specification LHM for offtake partners and customers.



Figure 3: Vulcan's constructed Lithium Hydroxide Optimisation Plant



Figure 4: Process Mezzanine



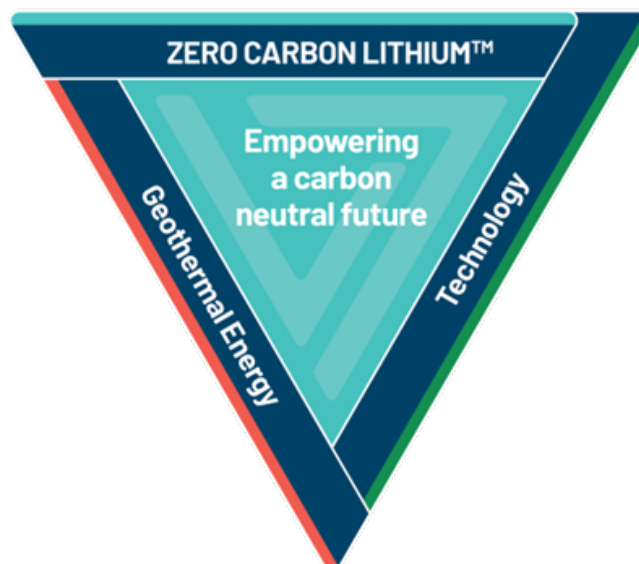
Figure 5: Crystalliser Package



Figure 6: Electrolyser Package

About Vulcan

Founded in 2018, Vulcan's unique **Zero Carbon Lithium™²** Project aims to decarbonise lithium production, through developing the world's first carbon neutral lithium business, with the co-production of renewable geothermal energy on a mass scale. By adapting existing technologies to efficiently extract lithium from geothermal brine, Vulcan aims to deliver a local source of sustainable lithium for Europe, built around a carbon neutral strategy with exclusion of fossil fuels. Already an operational renewable energy producer, Vulcan will also provide renewable electricity and heat to local communities. Vulcan's combined geothermal energy and lithium resource is the largest in Europe³, with license areas focused on the Upper Rhine Valley, Germany. Strategically placed in the heart of the European electric vehicle market to decarbonise the supply chain, Vulcan is rapidly advancing the Zero Carbon Lithium™ Project to target timely market entry, with the ability to expand to meet the unprecedented demand that is building in the European markets. Guided by our **Values of Climate Champion, Determined and Inspiring**, and united by a passion for the environment and leveraging scientific solutions, Vulcan has a unique, world-leading scientific and commercial team in the fields of lithium chemicals and geothermal renewable energy. Vulcan is committed to partnering with organisations that share its decarbonisation ambitions and has binding lithium offtake agreements with some of the largest cathode, battery, and automakers in the world. As a motivated disruptor, Vulcan aims to leverage its multidisciplinary expert team, leading geothermal technology and position in the European EV supply chain to be a global leader in producing zero fossil fuel, carbon neutral lithium while being nature positive. Vulcan aims to be the largest, most preferred, strategic supplier of lithium chemicals and renewable power and heating from Europe, for Europe; to empower a carbon neutral future.



² Please see page 13 of our Sustainability Report FY2023 for how we define Zero Carbon Lithium™

³ According to public, JORC-compliant data. See Upgrade of Zero Carbon Lithium™ Project Resources, 29 September 2023

Corporate Directory

Executive Chair	Dr. Francis Wedin
Managing Director and CEO	Cris Moreno
Group Chief Financial Officer	Felicity Gooding
Deputy Chair	Gavin Rezos
Non-Executive Director	Ranya Alkadamani
Non-Executive Director	Annie Liu
Non-Executive Director	Dr. Heidi Grön
Non-Executive Director	Josephine Bush
Non-Executive Director	Dr. Günter Hilken
Chief Representative GER	Dr. Horst Kreuter
Company Secretary	Daniel Tydde

For and on behalf of the Board

Daniel Tydde | Company Secretary

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Reporting calendar

12 September 2024	Half Year Report
29 October 2024	September Quarterly
30 January 2025	December Quarterly
28 March 2025	Annual Report
28 March 2025	Sustainability Report

Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Vulcan operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Vulcan's control.

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Vulcan has carried out a definitive feasibility study ("DFS") and bridging engineering study ("Bridging Study") for Phase One of its Zero Carbon Lithium™ Project ("Project"), the results of which were announced to the ASX in the announcements "Zero Carbon Lithium Project Phase 1 DFS Results" dated 13 February 2023 ("DFS Announcement") and "Positive Zero Carbon Lithium™ Project Bridging Study Results" on 16 November 2023 ("Bridging Study Announcement"). This announcement may include certain information relating to the DFS and the Bridging Study. The DFS and Bridging Study are based on the material assumptions and parameters outlined in their respective announcements. While Vulcan considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Bridging Study or DFS will be achieved. This presentation may also include certain information relating to Phase 2 of its Project, Vulcan has not yet carried out a definitive feasibility study for Phase Two of its Project.

Competent Person Statement

The information in this announcement that relates to estimates of Mineral Resources and Ore Reserves is extracted from the Bridging Study Announcement which is available to view on Vulcan's website at www.v-er.eu. Vulcan confirms, that in respect of the estimates of Mineral Resources and Ore Reserves included in this announcement:

- a) it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed;
- b) the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement; and
- c) all material assumptions underpinning the production targets (and the forecast financial information derived from such production targets) included in this announcement continue to apply and have not materially changed.