

Quarterly Activities Report June 2020

Highlights

- Vulcan continued its momentum by commencing a Pre-Feasibility Study (PFS) on its globally unique Zero Carbon Lithium™ Project"
 - Lithium extraction testwork was commenced as part of the PFS, with initial results to be reported imminently.
 - Agreement to acquire an existing package of seismic data was signed, to accelerate project development and save costs.
 - The Company is targeting completion of its PFS by end 2020, on schedule, with minimal COVID-19 related disruption.
- Vulcan's team was bolstered by the following key Board and Senior Executive appointments:
 - o Lithium chemistry expert Dr. Katharina Gerber.
 - Strategic communications and ESG investment expert Ranya Alkadamani.
 - o Engineering experts Dr. Thomas Aicher and Stefan Trummer.
- Vulcan ensured it is fully funded for its PFS by completion of:
 - Oversubscribed \$4.8m institutional and ESG investor equity placement, and;
 - o Agreement for a direct investment by EU-backed EIT InnoEnergy, both at a premium to 30-day VWAP.
 - Vulcan is now well-funded with cash of \$6.4m at 30 June.

• EU-backing:

- Vulcan expects its Zero Carbon Lithium™ Project to be a key part of the EU's plans for battery supply chain independence, as well as efforts to be climate neutral by 2050.
- Vulcan presented to European Commission Vice President Maros Sefcovic and the European Investment Bank.
- Vulcan subsequently announced an agreement with EUbacked EIT InnoEnergy to assist with project development.

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Highlights

Aiming to be the world's first **Zero Carbon Lithium**™ producer.

Large, lithium-rich geothermal brine project, in the Upper Rhine Valley of Germany.

Europe's **largest** JORC-compliant lithium resource.

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

Fast-track development of project under way towards production.

Corporate Directory

Managing Director Dr Francis Wedin

> Chairman Gavin Rezos

Executive Director Dr Horst Kreuter

Non-Executive Director Ranya Alkadamani

Non-Executive Director Dr Katharina Gerber

CFO-Company Secretary Robert Ierace

Fast Facts

Issued Capital: 67,217,755 Market Cap (@47c): \$32m

Contact

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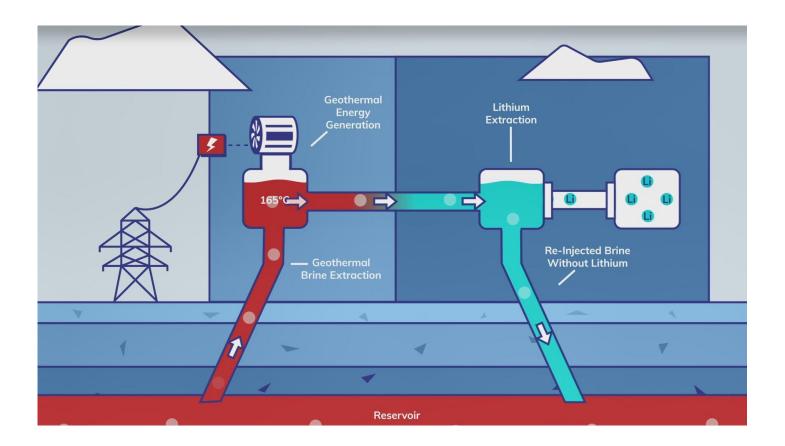
> www.v-er.com info@v-er.com > @VulcanEnergyRes



About Vulcan

Vulcan Energy Resources is aiming to become the world's first Zero Carbon Lithium^{\mathbb{M}} producer, by producing a battery-quality lithium hydroxide chemical product with net zero carbon footprint from its combined geothermal and lithium resource, which is Europe's largest lithium resource, in the Upper Rhine Valley of Germany. Vulcan will use its unique Zero Carbon Lithium^{\mathbb{M}} process to produce both renewable geothermal energy, and lithium hydroxide, from the same deep brine source. In doing so, it will fix lithium's current problems for the EU market: a very high carbon and water footprint of production, and total reliance on imports, mostly from China. Vulcan aims to supply the lithium-ion battery and electric vehicle market in Europe, which is the fastest growing in the world. With a resource of 13.95 Mt contained lithium carbonate equivalent (LCE), Vulcan has a resource which can satisfy Europe's needs for the electric vehicle transition, from a zero carbon source, for many years to come.

According to leading lithium industry analyst RK Equity, Vulcan Energy Resources has been the best performing lithium company worldwide in 2020, with a year to date share price appreciation of 253%, despite COVID-19. This is in line with ESG and impact-focused companies outperforming the market index.





Activities During the Quarter

Team Appointments

German lithium chemistry & geothermal lithium expert joins the Vulcan Board

During the Quarter Dr. Katharina Gerber joined the Vulcan Zero Carbon Lithium™ team as a Non-Executive Director. Dr. Gerber was awarded her chemistry PhD on cathode materials for lithium-ion batteries magna cum laude (with great distinction) at the University of Bonn, Germany.

She is currently a Project Leader at the California Energy Commission (CEC) focussed on lithium extraction from geothermal brines, life-cycle assessments of energy storage technologies, California State energy and environmental policies and management of grant funding opportunities. Dr. Gerber participates in multiple interagency working groups, including the "California Lithium"

Valley" initiative and has a unique combination of expertise in lithium-ion battery chemistry and lithium extraction from geothermal brines.



Appointment of strategic communications expert Ranya Alkadamani to the Vulcan Board



During the Quarter, Ranya Alkadamani joined the Vulcan Board as Non-Executive Director. Ranya was formerly Strategic Communications and External Affairs Director of Andrew Forrest's Minderoo Foundation and Minderoo Group, Press Secretary to former Australian Prime Minister, the Hon. Kevin Rudd during his time as Australian Foreign Minister, a spokesperson for the Australian Department of Foreign Affairs and Trade and a driving force in the global launches of the Walk Free Global Slavery Index, which reached more than 1 billion people. Ranya is currently the Founder and CEO of Impact Group International, focused on strategic communications advice for ethical/impactful organisations as well as a Director of the Impact Investment Summit, Asia Pacific and an Advisory Board member at Murdoch University.



Dr. Thomas Aicher and Stefan Trummer

Subsequent to the Quarter, Vulcan announced the appointment of two expert chemical & mechanical engineers to the Vulcan Zero Carbon Lithium $^{\text{\tiny TM}}$ team.



Leading chemical engineering expert Dr. Thomas Aicher has joined Vulcan's project development team in Karlsruhe, Germany. Dr. Aicher has 25 years' experience in chemical process innovation and industrial scale-up across a range of industries. Awarded a PhD and MSc in Chemical Engineering from the world-renowned Karlsruhe Institute of Technology (KIT), Dr. Aicher was also a visiting scientist at the Massachusetts Institute of Technology (MIT). Dr. Aicher was Head of

Group at Fraunhofer Institute, one of the most prestigious organisations of applied sciences in Europe, and Process Engineer at Fortune 500 engineering company Fluor Inc.

Vulcan has also been joined by Stefan Trummer as Project Manager. Mr. Trummer is a mechanical engineer with 25 years' global experience in project management, technical and commercial project development. He has an MBA from Henley Business School. Mr. Trummer worked with Siemens for 18 years, including in geothermal plant engineering.





Funding for PFS

Completion of \$4.8m institutional and ESG investor equity placement

During the Quarter, Vulcan Energy Resources Ltd raised \$4.8m (before costs) through the issue of 12,000,000 fully paid ordinary shares at an issue price of 40 cents per share.

The Placement was significantly oversubscribed and strongly supported by ESG-focused sophisticated investors, as well as new institutional and sophisticated investors based in Australia and Europe.

The funds raised from the Placement will be used to accelerate the advancement of the Company's Zero Carbon Lithium™ Project, in particular:

- Completion of a PFS at the Project, including engineering studies and bench-scale lithium extraction testwork.
- Purchase of seismic data to fast-track siting and development of geothermal production wells.

The Placement price was undertaken at nil discount to the 15-day Volume Weighted Average Price ("VWAP"), and an 8% premium to the 30-day VWAP.

EU Backing

Agreement with European Union-backed body to launch Vulcan Project

Following a presentation to European Commission and European Investment Bank VPs, Vulcan signed a binding agreement with EU-backed EIT InnoEnergy, as part of the Business Investment Platform (BIP) of the European Commission's European Battery Alliance (EBA) initiative.

Through the agreement, EIT InnoEnergy will assist Vulcan with:

- Securing project funding, including the use of applicable EU, national or regional grant schemes, and liaising with EU project finance and development banks.
- Driving relationships with European lithium off-takers, aimed at the entering of binding off-take agreements.
- Obtaining and fast-tracking necessary licenses for Vulcan's operations in Germany and services with respect to societal/environmental acceptance of the project

Compensation for all services are entirely success-based.

Subsequent to the end of the quarter EIT InnoEnergy signed an investment agreement for staged cash investments totalling €250,000 into Vulcan, with an initial tranche of €150,000 valued at A\$0.51/share, equivalent to the 15-day VWAP and at an 8.5% premium to 30-day VWAP, subject to shareholder approval.



PFS Progress

Agreement to acquire 3D seismic package to accelerate project development

Vulcan signed an option agreement to acquire a data package over several of its license application areas, within the Vulcan Zero Carbon Lithium™ Project in the Upper Rhine Valley, Germany, consisting of:

- A 3D seismic survey of approx. 50km² size.
- Eight 2D seismic lines of a total length of 80 km.
- Several reports and studies on the geology of the explored area.

With this acquisition Vulcan can save over a year of exploration time and approximately 70% of the survey cost. Under the agreement there is an upfront option payment of €30,000, with final €570,000 purchase price to be made at Vulcan's election.

The data is to be used as part of modelling and estimation work to grow Vulcan's resource and target selection for production test well drilling as well as selection of additional 3D seismic exploration areas based on the 2D seismic lines acquired. Production test well drilling could commence 12 months after internal data evaluation.

Commencement of lithium extraction test work for PFS

Following positive results from the recently completed Scoping Study on the Vulcan Project, Vulcan is progressing with its test work programme to advance its innovative Zero Carbon LithiumTM flowsheet.

The Scoping Study showed the potential for production of battery-quality lithium hydroxide monohydrate products from the Project, which could be produced with a uniquely net zero carbon footprint. Based on the EU's commitment to net zero emissions and decarbonisation, and specifically with the green focused post COVID recovery, the Company believes this will be a premium, highly desirable product for the European electric vehicle market.

The testwork programme includes the following steps:

- Geothermal brine from the Project will be used for Direct Lithium Extraction (DLE) test work, initially conducted offsite.
- Well-developed DLE extraction methods previously piloted on geothermal brines will be demonstrated with a focus on process routes which will enable Zero Carbon Lithium[™] production and minimal operating cost.
- DLE will be demonstrated at bench scale in preparation for pilot scale testwork on-site in Germany. Results will be incorporated into Vulcan's PFS.

Initial results from this testwork programme are expected imminently.



Update on Norwegian Projects

The Company continued to review its extensive copper-zinc mineral exploration portfolio located in the Trøndelag region of Norway. Vulcan is reviewing options to best extract value for shareholders for these projects.

Additional ASX Disclosure Information

- 1. **ASX Listing Rule 5.3.1**: Exploration and Evaluation Expenditure during the quarter was \$387k. The majority of this expenditure was predominately spent on data acquisition, lithium extraction testwork as well as engineering studies towards the PFS on the Vulcan Lithium Project.
- 2. **ASX Listing Rule 5.3.2**: There was no substantive mining production and development activities during the quarter.
- 3. **ASX Listing Rule 5.3.4**: Actual expenditure, since admission to the ASX, versus estimated expenditure on items within the use of funds statement in the Prospectus.

Report on IPO Prospectus Use of Funds Variances

		Use of Funds					
Funds Available		Statement		Actual		Variance	
Exisiting cash reserves	\$	440,000	\$	440,000	\$	-	
Funds raised from the Offer	\$	4,500,000	\$	4,500,000	\$	-	
Total	\$	4,940,000	\$	4,940,000	\$	-	
			Actual Expenditure		Variance		
Allocation of Funds			to June 2020				
Exploration expenditure and							
assessment of the Lokken,							
Killingdal,Storwatz,Tverrfjellet,							
Mygruva,and Grimsdale Projects	\$	2,630,000	\$	604,608	\$	2,025,392	
Cost of acquisition of the Lokken,							
Killingdal,Storwatz,Tverrfjellet,							
Mygruva,and Grimsdale Projects	\$	20,000	\$	17,400	\$	2,600	
Working capital and							
administration costs	\$	1,807,525	\$	1,694,890	\$	112,635	
Costs of the Offer	\$	482,475	\$	475,211	\$	7,264	
Total	\$	4,940,000	\$	2,792,109	\$	2,147,891	

Notes

The material variance relating to exploration expenditure of its Norwegian energy metals assets was principally due to the following:



- Following the IPO, the Company significantly expanded its landholding in Norway. Field reconnaissance and surface sampling was conducted at all prospects. EM surveys were completed at Killingdal and Grimsdal. The Company was unsuccessful in securing drilling permits at the Grimsdal project from the National Park authorities, despite multiple submissions over an extended period of time. No drilling targets were identified at Killingdal, with the EM surveys producing only weak response (Quarterly Activities Report Q3 2018).
- Subsequent to the September 2018 quarter, the Company chose not to renew tenements related
 to the Lokken, Killingdal, Storwatz, and Flottum projects following a review of their
 prospectivity, enabling resources to be fully focused on the Tverfjellet, Undal, Grimsdal and
 Vangrofta projects, as well as reviewing potential acquisitions and investments across a range
 of commodities and jurisdictions.
- The Company complemented its European energy metals strategy by adding German exploration licenses at the Vulcan Project to its portfolio in July 2019, as approved by shareholders in September 2019.
- The Company continued geochemical surveys and field reconnaissance at the Tverfjellet, Undal, Grimsdal and Vangrofta projects up to the close of the last field season (Quarterly Activities Report Q4 2019), but there was insufficient exploration success to warrant drilling. Vulcan retains these projects and is reviewing options to best extract value for shareholders.
- Given the exploration success at the Vulcan Project since acquisition, the primary focus of the Company has become the advancement of this project.

4. ASX Listing Rule 5.3.5:

Payments to related parties of the Company and their associates during the quarter per Section 6.1 of the Appendix 5B total \$66k. This is comprised of an allocation of the Managing Director remuneration of \$12k, Non-Executive Director fees of \$28k as well as corporate advisory fees to Viaticus Capital Ltd of \$26k, a company related to the Non-Executive Chairman. Please see the Remuneration Report in the Annual Report for further details on Director's Remuneration.

Payments to related parties of the Company and their associates during the quarter per Section 6.2 of the Appendix 5B total \$164k. This is comprised of Executive Director remuneration of \$36k as well as to payments to GeoThermal Engineering GmbH of \$79k, a company related to an Executive Director, for engineering consulting carried out by contractor geologists, geochemists and geophysicists. Also included in this amount is an allocation of the Managing Director's remuneration of \$49k for work done on exploration activities associated with the Vulcan Lithium Project. Please see the Remuneration Report in the Annual Report for further details on Director's Remuneration.



This announcement has been approved for release by the Board

Robert Ierace

Chief Financial Officer - Company Secretary

For further information visit www.v-er.com

Zero Carbon LithiumTM

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.

Vulcan does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Vulcan, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement. This announcement is not an offer, invitation or recommendation to subscribe for, or purchase securities by Vulcan. Nor does this announcement constitute investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.

Competent Person Statement

The information in this report that relates to Mineral Resources for the Vulcan Geothermal-Lithium Project is extracted from the ASX announcements "maiden JORC (2012) Mineral Resource Estimate for its Ortenau licence" and "Maiden Indicated Resource Insheim Vulcan Zero Carbon Lithium" released on the 4th of December 2019 and 20th of January 2020, and the information in this report that relates to Vulcan's Scoping Study is extracted from the ASX announcement "Positive Scoping Study" released on the 21st of February 2020, which are available on www.v-er.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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.



Appendix One: Vulcan Zero Carbon Lithium™ Project License Summary

Name	Area (ha)	Status	Date Granted / Applied for	Ownership at Start of Quarter	Change in Ownership
Ortenau	37,360	Granted	03/2019	100%	N/A
Mannheim	14,427	Granted	06/2019	100%	N/A
Taro	3,268	Application	03/2019	Earn-in to 80%	N/A
Ludwig	17,716	Application	04/2019	Earn-in to 80%	N/A
Heßbach (formerly Rheinaue)	5,848	Application	04/2019	Earn-in to 80%	N/A
Insheim (held by Pfalzwerke geofuture)	1,900	Granted		MoU to earn in to 80% after formation of formal JV	N/A

Appendix Two: Norwegian Projects License Summary

Name	Area (km2)	Status	Date Granted	Permit Type	Ownership at Start of Quarter	Change in Ownership
Grimsdalen	9.86	Granted	7/07/2017	Exploration	100%	N/A
Tverrfjellet	9.99	Granted	7/07/2017	Exploration	100%	N/A
Undal 101	10.0	Granted	5/07/2018	Exploration	100%	N/A
Undal 102	10.0	Granted	5/07/2018	Exploration	100%	N/A
Nyberget 101	10.0	Granted	5/07/2018	Exploration	100%	N/A
Nyberget 102	10.0	Granted	5/07/2018	Exploration	100%	N/A
Innerdalen 104	10.0	Granted	5/07/2018	Exploration	100%	N/A
Vangrofta 102	9.8	Granted	27/08/2018	Exploration	100%	N/A
Tverrfjellet 102	10.0	Granted	27/08/2018	Exploration	100%	N/A
Tverrfjellet 103	9.02	Granted	23/01/2019	Exploration	100%	N/A
Grimsdalen 101	9.0	Granted	5/03/2019	Exploration	100%	N/A
Grimsdalen 102	10.0	Granted	7/09/2018	Exploration	100%	N/A