

Vulcan responds to disinformation in online report

Vulcan Energy Resources Ltd. (“Vulcan”, “VUL”, “the Company”) entered a trading halt after the release of a short seller report by “J Capital Research Limited” (the “Report”). The Report contains many claims that are wrong and misleading. Vulcan categorically rejects the claims contained in the Report in detail below. While the wrong and misleading statements in the Report are too numerous to mention, Vulcan’s responses to key claims in the Report are outlined in the following pages, all of which are refuted.

In addition, the Report has been published contrary to ASIC guidelines¹:

- The Report was published without any prior fact checking inquiry to Vulcan.
- The Report in many material respects does not appear to be based on reliable information² and therefore the recommendations and opinions do not appear to be formed on a reasonable basis.
- The Report uses emotive, intemperate and imprecise language, which could mislead investors.

The publisher of the Report discloses that it may realise significant gains from a decline in Vulcan’s share price.

Vulcan Managing Director, Dr. Francis Wedin, stated: *“Vulcan Energy Resources is a world class company dedicated to decarbonisation, with world class technical experts. In the following pages we have detailed in significant technical form why the claims in the Report are misleading and incorrect. Vulcan’s goal is to be a world leader in sustainable lithium production and to create the world’s first fully integrated renewable energy and battery raw minerals company.*

“While any misinformed short selling attack is disappointing, we are buoyed by the support of our leading institutional investors in understanding the project’s technical detail – and risks.

“The following information is a detailed rebuttal to the categorically wrong and misinformed claims in the Report.”

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

Managing Director
Dr Francis Wedin

Chairman
Gavin Rezos

Executive Director Germany
Dr Horst Kreuter

Non-Executive Director
Ranya Alkadamani

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¹ [Activist short selling campaigns in Australia | ASIC - Australian Securities and Investments Commission](#)

² For example, references to news articles, vague references to papers (without pinpoint references) and references to "experts" without naming or attribution to specific persons.

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The Report contains numerous incorrect and misleading assertions, all of which are refuted. The purpose of this announcement is to provide Vulcan's responses in relation to the key assertions in the Report that Vulcan considers to be misleading and which are also refuted. These responses are set out below.

The Zero Carbon Lithium™ Project's approach to lithium extraction: enabling sustainable lithium supply for Germany and Europe

Vulcan is using an aluminate-based sorbent to extract lithium from its brines, as previously announced. We have explained how this process works on numerous occasions, most recently in the Equity Raising Presentation released on 14 September 2021, contrary to the claims of the Report. Similar approaches are used at multiple locations around the world with existing lithium production, including in China and in Argentina. This and other types of similar Direct Lithium Extraction (DLE) techniques are being used in numerous new lithium developments worldwide³. Most legacy versions of these sorbents require the brine to be hot to work effectively⁴. This is the unique advantage of pairing geothermal brines with DLE: they come pre-heated, so that energy is not consumed to heat the brine using fossil fuels. Heat from the geothermal plant can also be used to drive evaporation in a closed loop system, meaning that the lithium chloride eluate produced can be concentrated using clean energy. According to our process models which have been reviewed in our PFS by third party consultants such as Hatch Ltd., geothermal brines are expected to operate profitably with lower lithium grades than salar-type, non-heated counterparts, because of the advantage of built-in renewable energy for improved DLE and lack of need for fossil fuel consumption.

Such sorbents that Vulcan is using are available from multiple vendors, including DuPont who we have announced a technology collaboration with. We are also testing other sorbents, to find the best fit for the brine in the Upper Rhine Graben. We note that such sorbents for lithium extraction have been known about for decades⁵ and have been previously demonstrated to work effectively on geothermal brines far more complex than the Upper Rhine Valley.

Vulcan's team has designed, built, commissioned and is successfully operating a pilot plant at a geothermal plant in the Upper Rhine Graben, in a "live brine" environment⁶. We have successfully demonstrated our lithium extraction process using multiple different commercially available sorbents as announced on 27 September 2021.

The Report states: *"Research by the U.S. Department of Energy published in May 2021 states that the cost to produce a ton of lithium carbonate using DLE will be around \$4,000. That would put Vulcan's project in the highest quartile of cost. Every expert we spoke to believes costs will be at the high end of the cost curve."* The Report also shows Vulcan on a lithium cost curve. This is incorrect on several fronts. Firstly, our PFS details our expected cost position, which is to produce lithium hydroxide monohydrate, not lithium carbonate. Vulcan published a cost per tonne of \$2,640, not \$2,000 as shown in the Report's cost curve. Secondly, even a cost per tonne of \$4,000 would not be "in the highest quartile of cost", but still the lowest quartile of cost for lithium carbonate for current production. The author of the Report does not

³ [Standard Lithium Ltd. \(SLI\), Technology | EnergySource Minerals \(esminerals.com\), Lake Resources - Lake Resources](#)

⁴ <https://patents.google.com/patent/US5389349A>

⁵ [US4348295A - Crystalline lithium aluminates - Google Patents](#)

⁶ [Lithium extraction piloting test-work update \(irmau.com\)](#)



disclose who this “expert” is, but we encourage the author to speak to a respected lithium analyst to better understand lithium cost curves. For an informed view, we direct readers to Canaccord Genuity’s recent research on Vulcan⁷, which contains detailed technical appraisal of the project’s merits.

We used a lithium recovery rate of 88.2% in our PFS. The Report misleadingly mentions a research project which is researching a novel recovery method, not any commercial projects which are well known, as its reference lithium recovery rate of 70%. It should be noted that recovery rates up to and over 90% are commonly reported in commercial DLE development projects worldwide, including those working on geothermal brines⁸, and in fact are one of the main benefits of using DLE versus other methods. As we continue upscaling our piloting activities during the course of the coming months, we look forward to keeping shareholders informed of our progress.

The Report mentions the Upper Rhine Valley as having much lower lithium grades than in the Salton Sea, when in fact they are similar⁹. The Report also mentions that DLE is implemented on a brine with 1,200 ppm Li content in Chile, when in reality it has been implemented on a brine with 600 ppm Li content in Argentina¹⁰, thus the author demonstrates a total lack of understanding of the current lithium industry. The Report shows its lack of technical understanding by also missing the importance of impurities in the brine, a strength of Upper Rhine Valley brine which has very low impurities compared to others.

Leveraging Vulcan’s experienced technical teams toward Zero Carbon Lithium™ Project development

Dr. Horst Kreuter, Co-Founder of Vulcan and Executive Director in Germany, is a consultant to the World Bank on geothermal, has served on the board of the International Geothermal Association (IGA) and was the Vice President of the German geothermal association in charge of deep geothermal. He is a member of the IGA Reserves and Resources Committee. Dr. Kreuter has provided geothermal expertise for the German Federal Government for which he has represented on many delegation visits to various parts of the world. HotRock, the geothermal company which was co-founded by Dr. Horst Kreuter in 1999, pioneered the first 2D seismic and 3D seismic surveys for geothermal in the Upper Rhine Valley. 3D seismic is now a standard for geothermal exploration in the Upper Rhine Valley and elsewhere. Dr. Kreuter has built up a “best-in-class” scientific team in the field of sub-surface geothermal geology and engineering, within the engineering consulting company “GeoT”. GeoT has been awarded numerous research and development grants by the German Federal Government and is part of four EU Horizon2020 projects (S4CE, MEET, Crowdthermal, and Georisk). GeoT is the main consultant for the Upper Rhine Valley with customers being private investors and utility companies.

Mr. Thorsten Weimann, COO of Vulcan, consults to the German Federal Government on the topic of geothermal energy, and is Technical Manager of the German Geothermal Association (Bundesverband Geothermie e.V.). Mr. Weimann started a geothermal engineering consultancy, “gec-co”, building a team of above-surface geothermal plant engineers. GeoT and gec-co have been involved with a large number of geothermal project developments both in Germany and worldwide, as well as leading a number of leading-edge research projects including with the German Ministry of Finance, gaining unique

⁷[Canaccord-20-Oct-2021.pdf \(v-er.eu\)](#)

⁸ [Technology | EnergySource Minerals \(esminerals.com\)](#)

⁹ [High lithium and low impurities from bulk brine sampling \(irmau.com\)](#)

¹⁰ <https://www.nsenenergybusiness.com/projects/fenix-lithium-mine-salar-del-hombre-muerto/>



experience. A list of geothermal projects that gec-co has been involved, by way of example, follows in the **Appendix 1** provided.

GeoT and gec-co also consult to the other geothermal developers in the Upper Rhine Graben that are mentioned in the Report. Vulcan strategically acquired GeoT and gec-co after completing its PFS, bringing these expert teams in-house, giving Vulcan a unique market advantage. Vulcan notes that in its PFS, independent external consultants APEX Geoscience Ltd. reviewed and signed off on the Mineral Resources, GLJ Ltd. reviewed and signed off on the geothermal brine production study and lithium Reserves, and Hatch Ltd. authored the lithium section of the PFS report. Vulcan reports on its estimates of Mineral Resources and Ore Reserves in compliance with the JORC Code, the ASX Listing Rules and applicable regulation.

On the lithium side of the business, we have highly experienced chemical engineers and chemists such as Dr. Stephen Harrison, Dr. Angela Digennaro, and Dr. Thomas Aicher leading our chemicals and chemical engineering teams. Across the Vulcan group of approximately 80 personnel, 13 of whom have PhDs, we are proud to be a scientific leader in the fields that we are working in as well as encouraging gender diversity with a 40% female composition. We have a highly respected, multi-disciplinary Board of considerable international standing in the fields of renewable energy, chemical engineering, project finance, battery raw materials and ESG.

We stand by every one of our employees, many of whom are highly respected globally and do not have a “record of failure”, as stated in the Report.

As Vulcan stated 11 times within its PFS publication, we have not drilled any geothermal wells into our greenfields development areas, and until we do so, as we have already stated on numerous occasions, risks around flow rate will remain. Vulcan believes it has an appropriate level of confidence around its assumptions surrounding flow rates, based on the experience of its team, and state-of-the-art scientific tools, data and studies as elaborated below.

Vulcan is targeting high-flow fault zones within its sedimentary reservoir units, which are predominantly the Bunter Sandstone, using state-of-the-art seismic data. When exploration for geothermal brines first began in the Upper Rhine Valley, no seismic data was used, or the data was 2D seismic only, to get a picture of the sub-surface. The industry has seen a steady progression of understanding and improvements in exploration over time, including the use of 3D seismic, and a corresponding increase in flow rates, as would be expected.

In our estimation of flow rates, we have conducted detailed studies using modelling information derived from seismic data in our areas. The Upper Rhine is a sedimentary graben system, geologically similar to hydrocarbon systems with permeable formations confined by impermeable rock – in fact, the Upper Rhine Graben also hosts hydrocarbon plays, and therefore contrary to the claim of the Report, seismic data is the appropriate tool to be used for exploration prior to drilling. This differs to other types of geothermal plays, such as volcanic-hosted, where the systems are more complex, in general less permeable and seismic data is less useful.

As well as targeting high flow rate fault zones, as mentioned in the PFS we also factor in techniques well known in the oil and gas industry to increase flow, such as double completion of wells and multi-



reservoir completion as recently promoted by Schlumberger and Engie¹¹. We have always been very clear that we will not use so-called “fracking” to stimulate flow, contrary to the Report, which would not and should not be permissible in any case.

Vulcan has, based on its detailed analysis and the various factors mentioned above, used between 100 and 120l/s as assumed flow rates for its projects in its PFS. The Report incorrectly suggests that Vulcan should base its flow rates off some of the first wells drilled in the area, including a well drilled 41 years ago in 1980, without the benefit of 3D seismic data and industry best practice and learnings. A public list of flow rates achieved at deep geothermal wells in and around Germany can be found in a 2014 report compiled for the German Federal Ministry of the Economy (BMWi) at the following link, P.13-14, Table 2.1: https://www.grs.de/sites/default/files/pdf/grs-316_teilb.pdf. Wells displaying flow rates greater than 100l/s are common in the list, including at Brühl in the Upper Rhine Graben, with some projects reaching up to 150l/s.

The Report incorrectly picks an arbitrary 40% for its estimation of failure rate for Vulcan’s planned geothermal well drilling, and references a World Bank report¹², mentioning Vulcan’s “differing geology”. The referenced World Bank report states: *“The key finding of this report is that overall, for those wells for which status could be verified, 78 percent of wells drilled were successful. ...average success rates in this phase have been improving over the last several decades. This may be related to improving technologies and techniques in geothermal surveys, resulting in more accurate targeting of exploration wells: which would suggest that adherence to international best practice during the exploration phase can make a significant contribution to reducing exploration risks....The geology of the resource also appears to affect the success of a well, with fields in a sedimentary basin, in which drilling is above the basement, having the highest success rates.”* Vulcan’s Upper Rhine Graben projects are in a sedimentary basin which has been explored for geothermal energy and hydrocarbons for many years, so contrary to the Report one would expect Vulcan, based on this World Bank report, to have high success rates.

The Report incorrectly states that there are no projects in Germany “with three production and three injection wells”, as planned by Vulcan. This is incorrect, new projects¹³ currently being developed include multi-well, high-flow rate projects, as the trend in the industry is towards larger projects with greater economies of scale, as per the projects Vulcan is developing.

The Report correctly states that *“Geothermal energy use in Europe is forecast to expand over the next 10 years”*, and that most of the new capacity will be for heating, which geothermal is uniquely positioned to provide. We are in discussions with multiple local stakeholders to provide renewable heating as well as renewable power to the grid, as per Page 49 in our Annual Report:

“Vulcan intends to increasingly evaluate the production and sale of heat as well as power from its planned geothermal projects, as heating is expected to play a bigger part in decarbonisation in Europe.”

The Report then incorrectly states that *“geothermal heating can be sourced from 200 metres”*. The Report thus confuses shallow, low temperature geothermal (< 20°C), which can be used for single homes or

¹¹ [Multidrain geothermal wells - Solar Impulse Efficient Solution](#)

¹² [World Bank Document](#)

¹³ [180905 Pressefahrt Bundesverband Geothermie](#)



smaller complexes with floor heating, with district heating, which requires temperatures of >80°C, and requires deep geothermal drilling in the Upper Rhine Graben and elsewhere.

The Report provides a misleading inference that gec-co's report on geothermal to the German Federal Government, and gec-co's work in Vulcan's PFS, is somehow contradictory. gec-co stated that subsidies are necessary to make geothermal projects viable in Europe. The very same subsidies, namely the Feed-in Tariff for geothermal power in Germany of 0.252c/kWh, are what gec-co was referring to, and have been used in Vulcan's PFS. These subsidies and government assistance for geothermal are to provide a stable framework for geothermal power development in Germany, supplying carbon free baseload power.

Vulcan's development timetable is a target, and we continue to keep the market abreast of developments. Our presentations contain our expected timeline to which we are delivering to. We have flagged in the PFS under "Project Risks and Opportunities" that, like any new project, there is and will remain the risk of delays, including for technical reasons, supply chain delays and for permitting. On the 26th of October 2021 the Governor of Baden-Württemberg (BW), Winfried Kretschmann, announced that a task force has been set up to reduce permitting times for renewable energy projects by half, allow state property easy access and reduce the influence of pressure groups against renewable energy projects. We will continue to keep our stakeholders updated on the timetable, and if anything gives us reason to believe the timetable will change, we will inform the market appropriately in accordance with our disclosure obligations.

The Vulcan Zero Carbon Lithium™ Project stands to benefit multiple stakeholders at a local, state and national level in Germany, as well as at the EU level. State governments in the Upper Rhine Graben have already voiced their support for geothermal lithium project development in the region, including the Greens-CDU Coalition in Baden-Württemberg, who stated in their Coalition Contract: *"We support sustainable approaches for the extraction of lithium in the Upper Rhine Graben."*¹⁴

We are on a mission to make a better world with our project, and community is at the heart of what we do. Our team is largely based locally. Vulcan has an experienced public relations team, headed in Germany by local resident Beate Holzwarth, who was previously with Daimler-Mercedes. The Report incorrectly states that Vulcan is "silent" on public acceptance. As with virtually any sort of new development especially for infrastructure projects, we expect there may be some opposition - as has been seen with wind and solar in Germany. We detailed these in the Risk Factors section of our presentation from September¹⁵, where we also discussed Vulcan's pursuit of geothermal industry best practice, including community engagement and reduction of seismicity risk. We also note that the examples included in the Report of seismicity issues in geothermal projects relate to projects where industry best practice was not followed: drilling was conducted into a granite and the wells were over-pressurised, neither of which Vulcan will be doing. Public acceptance is a process and multi-faceted with multi-track strategies: we have had a range of feedback to our development plans from our initial

¹⁴ https://www.baden-wuerttemberg.de/fileadmin/redaktion/dateien/PDF/210506_Koalitionsvertrag_2021-2026.pdf

¹⁵ Vulcan September [PowerPoint Presentation \(irmau.com\)](#)



outreach activities, as can be expected. We will continue to work alongside communities and governments to ensure all stakeholders come on the journey together with us.

Other miscellaneous inaccuracies and falsehoods within the report

The Report also incorrectly labels a photo as being of Vulcan Executive Dr. Horst Kreuter. Dr. Kreuter is not the person shown in the photograph in the Report, nor indeed is anyone from Vulcan. Whilst it is not improper for an employee or director of a public company to sell shares, the Report incorrectly suggests Dr. Kreuter sold \$10m worth of Vulcan shares, which is incorrect. Dr. Kreuter's holdings are outlined in our Annual Report. These facts could easily have been corrected had Vulcan been granted the opportunity to fact check the Report prior to its release, as contained in ASIC's guidance.

Appendix 1. Examples of geothermal projects worked on by gec-co, part of the Vulcan group.

Owner's engineer	Year	Client
Geothermal power and heat generation Taufkirchen, Germany	2015 – 2016	Axpo Holding GmbH
Geothermal power and heat generation Traunreut, Germany	2010 – 2016	Geothermische Kraftwerksgesellschaft Traunreut mbH
Procedural and technical plant planning		
Planning of the geothermal power plant portfolio of DEW (four power plants), Germany	Since 2020	Deutsche Erdwärme GmbH
Planning of the geothermal power plant in Landau, Germany	Since 2020	ecoprime GmbH
Planning of the Palling geothermal power plant, Germany	Since 2020	ecoprime GmbH
Planning and project management of a geothermal heating plant in Beerse, Belgium	Since 2019	Janssen Pharmaceutica NV
Preliminary enquiry and feasibility study for the geothermal project in Palling, Germany	2019	ecoprime GmbH
Planning of the Air-Lift System for testing the drilling of the geothermal power plant in Aksaray, Turkey	Since 2019	3S Kale Enerji Üretim A.Ş.
Planning of the geothermal plant in The Hague, Netherlands	Seit 2019	Verkade Klimaat B.V.
Planning of the high-enthalpy geothermal power plant (35 MWe) in Alaşehir, Turkey	2018 – 2020	ENPRODE Engineering & Construction Ltd.
Pre-Engineering and Basic Engineering of the heat plant Haagse Aardwarmte Leyweg, Netherlands	2017 – 2018	Hague Geothermal Leyweg B.V.
Extension of the geothermal plant Kirchweidach with a modular power plant, Germany	2016 – 2020	GEOenergie Kirchweidach GmbH
Geothermal power and heat generation Taufkirchen, Germany	2015 – 2016	GeoEnergie Taufkirchen GmbH & Co. KG
Separator for well-testing, Netherlands	2017	Bakker Groep Coevorden B.V.
Geothermal heat plant Aardwarmte Vogelaer, Netherlands	2016 – 2017	Verkade Klimaat B.V.
Geothermal power and heat generation Traunreut, Germany	2010 – 2017	Geothermische Kraftwerksgesellschaft Traunreut mbH
Basic-Engineering of the geothermal heat generation Trias Westland, Netherlands	2016	Trias Westland B.V.





Troubleshooting and recommending catalogue of measures for an existing geothermal project, Netherlands	2016	ECW Netwerk B.V.
Pre-Planning of the geothermal power plants Etwilen, Haute-Sorne and Avenches, Switzerland	2013 – 2016	GeoEnergie Suisse AG
Research and development project for a new generation drilling and casing system, Netherlands	2010 – 2016	Shell Exploration & Production Company, Inc.
Development and production of a downhole tool for cold-forming of tubes, Netherlands	2015	A.Hak Drillcon B.V.
Geothermal power plants Etwilen, Haute-Sorne, Pfaffenau and Triengen, Switzerland	2013 – 2014	GeoEnergie Suisse AG
Test box: Experimental procedures for boreholes, Germany	2011 – 2014	Shell Exploration & Production Company, Inc.
Drill string catcher, Netherlands	2013	Shell Exploration & Production Company, Inc.
Pre-Planning of geothermal district heating networks in Oftringen, Switzerland	2013	Gruneko AG
Basic-Engineering of a wellhead-generator, Tansania	2012	Geothermal Power Tanzania Ltd.
Development of a modular power plant technology, Germany	2011	Exorka GmbH
Flow control pipe for drill mud with sealing section (Flow Return), Netherlands	2011	Shell Exploration & Production Company, Inc.
Geothermal power and heat generation Taufkirchen, Germany	2010 - 2011	Exorka GmbH
Geothermal power and heat generation Sauerlach, Germany	2008 – 2010	Exorka GmbH
Management		
Geothermal power and heat generation Traunreut, Germany	2016 – 2017	Geothermische Kraftwerksgesellschaft Traunreut mbH
Geothermal heat generation Kirchweidach, Germany	2016 – 2019	Geoenergie Kirchweidach GmbH
Geothermal power and heat generation Landau*, Germany	2003 – 2009	geox GmbH
Extension of the geothermal plant Neustadt-Glewe by a power generation plant with ORC-process*, Germany	2002 – 2006	Erdwärme Kraft GbR
Geothermal heat generation Neustadt-Glewe*, Germany	1991 – 2006	Erdwärme Neustadt-Glewe GmbH
Well-site planning		
Geothermal power plant Etwilen, Haute-Sorne, Pfaffenau and Triengen, Switzerland	2013 – 2014	GeoEnergie Suisse AG
Geothermal power and heat generation Oftringen, Switzerland	2013	Gruneko AG
Geothermal power and heat generation Traunreut, Germany	2010	Geothermische Kraftwerksgesellschaft Traunreut mbH
Innovation		
GeoThermScaling - Development and evaluation of advanced iron-boride-based corrosion protection coatings with high resistance to corrosion and scaling for deep geothermal applications	Since 2019	AiF / BMWi (Federal Ministry of Economics and Energy)



CROWDTHERMAL - Application of the program Renewalyzer for the calculation of economic efficiency of geothermal projects	Since 2019	GeoThermal Engineering GmbH within the framework of Horizon 2020
Effgeo: Increasing the efficiency of geothermal power plants by optimization of the condensation process, Germany	Since 2018	BMWi (Federal Ministry for Economic Affairs and Energy)
Integration of steam-jet coolers in power plants, Turkey	Since 2017	DEG Deutsche Investitions- und Entwicklungsgesellschaft mbH (German Investment Corporation)
PETher: Physical properties of thermal water under in-situ-conditions, Germany	2015 – 2017	BMWi (Federal Ministry for Economic Affairs and Energy)
Research project: Application of a pressure retention valve in hydraulic systems, Germany	2015 – 2017	BMWi (Federal Ministry for Economic Affairs and Energy)
Development of a pressure retention valve, Germany	2010 – 2016	BMU (Federal Ministry of the Environment, Nature Conservation and Nuclear Safety)
Note: <i>*project was managed by an employee before starting with gec-co GmbH</i>		

For and on behalf of the Board

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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.



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.

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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.eu. 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.

