





Our Purpose

We will empower a zero carbon future

Vulcan is aiming to become the world's first lithium producer with net zero greenhouse gas emissions. Its Zero Carbon Lithium™ Project intends to 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 aims to produce renewable geothermal energy, and lithium hydroxide, from the same deep brine source. In doing so, Vulcan intends to address the EU market's lithium 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.

A message from the Chair and CEO

Dear Friends,

At Vulcan, the foundation of our business is to enable the decarbonisation of energy supply in Europe, as well as the decarbonisation of battery raw materials for the electrification of transport in Europe. We do this for the benefit of our shareholders, local communities, employees, customers and as part of the solution to the effects of climate change.

As the world has witnessed over the last few weeks, energy security in Europe is being held hostage by Russia, resulting in reverberating geopolitical impacts globally, but more keenly felt in Germany which has built a reliance on Russian energy. European citizens and industry, especially in Germany, recognise the threat to their economy, jobs, well-being, and prosperity, as they see large increases in energy bills. They are demanding from their elected representatives that they regain their energy independence, whilst also decarbonising the same energy supply. Already we are seeing new policies from Germany and Europe prioritising the rapid growth of renewable energy sources in response to the magnitude of the energy threat, including geothermal.

Geothermal renewable energy on a mass scale, combined with lithium extraction from the same deep geothermal source, can and will play an important part in achieving Europe and Germany's energy security and independence. Geothermal heating can reduce reliance on Russian energy.

Fraunhofer, the leading applied research institute in Europe, recently produced a study commissioned by the German government, that showed a quarter of Germany's heating needs could be supplied by deep geothermal reservoirs, while shallow geothermal heating, using heat pumps, could supply more than 60% of Germany heating needs by 2050.

Vulcan Energy Resources is focused on working with the German government and other European governments to support the development and

utilisation of efficient and zero carbon geothermal energy to enhance energy security and neutralise the growing threat on energy and battery metals supply from geopolitical events.

Turning to our results, the first half of FY 2022 has been an important period for Vulcan as we continue to develop our Zero Carbon Lithium™ Project and execute on our plan to build a fully integrated renewable energy and battery-quality lithium chemicals project in Europe. We are swiftly capitalising on strategic opportunities to ensure timely project development.

The Insheim plant acquisition is a significant first step in establishing Vulcan as a revenue generating, renewable energy producer, and Vulcan intends to build several further distributed geothermal renewable energy plants across the Upper Rhine Valley region. Discussions with multiple local stakeholders to provide renewable heating to communities are ongoing. Ultimately, these plants should also provide us with a pathway to sustainable lithium chemicals production for the European electric vehicle industry. We also moved to purchase two deep drilling rigs to ensure we can execute on this large-scale geothermal-lithium development. At a time when Germany is seeking to decarbonise its heating and deploy widespread deep geothermal development, these are strategic assets for Vulcan.

Europe is the world's fastest growing electric vehicle and lithium-ion battery production centre, yet currently has no local production of lithium chemicals. Our binding, definitive lithium offtake agreements with Volkswagen Group, Stellantis, Umicore and Renault Group, and most recently with LG Energy Solution, ensures we have a diversified mix of offtakers from the cathode, battery and automotive sectors. The quality and diversity of our lithium offtakers is unmatched by our peers, a reflection of the environmental and strategic importance of the project. Importantly, the partnerships are consistent with Vulcan's strategy to meet Europe's demand gap, while working with Tier One companies in the EU market.

Our core mission is to build shareholder value by having a materially decarbonising effect on the lithium supply chain for battery electric vehicles, and on energy production in Europe. To do this, we aim to further grow our Zero Carbon Lithium™ Project. Our recent 3D seismic data acquisition, together with the newly granted exploration licenses, give us significant potential to rapidly advance and further scale up our project as the market continues to grow. In response to significant customer demand, we are targeting completion of our Phase 1DFS in H2 2022, to accommodate the inclusion of more project areas into expanded production studies. The DFS is progressing well. However, because of the ongoing invasion of Ukraine and the aftereffects of the pandemic, we are seeing highly disrupted supply chains, as well as rapidly rising inflation, interest rates and commodity prices. We are expecting the cost of some of our materials for our project development to increase in the short term, and supply chain disruption may also influence our planned timeline. Importantly, government prioritisations may minimise potential short-term impacts. We will keep our shareholders informed and will provide an update once we have greater clarity on this fast-moving global dynamic.

The successful production of the first battery quality lithium hydroxide monohydrate (LHM) sample from Vulcan's piloting operations, together with securing the site for our planned Central Lithium Plant (CLP) and opening our new laboratory in Karlsruhe-Durlach, are important milestones and demonstrate our commitment to methodically progress, de-risk and execute on our project plan.

Environmental, Social and Governance matters, or "ESG", are also foundation stones of Vulcan, and we are focused on expanding our ESG goals in the business. We are increasing our engagement with the community, as we seek to build trust and understanding in the regions in which we plan to operate. Our dual listing on the regulated market of the Frankfurt Stock Exchange is part of our concerted strategy to foster widespread public acceptance of our project in the Upper Rhine Valley. Vulcan's peerless environmental credentials are also an important part of building community support. The Zero Carbon Lithium™ Project is designed to have the highest environmental performance, with the lowest impacts, of any lithium project anywhere in the world. This was reconfirmed with our updated Life Cycle Assessment completed in August 2021.

Our uncompromising approach to the climate and the environment, has allowed us to attract and grow a world- leading scientific, commercial and professional organisation. I would like to thank the team who together are working towards what is likely to be the first raw materials and renewable energy project with net zero greenhouse gas emissions in the world. As the global decarbonisation effort ramps up, Vulcan is focused on delivering the Zero Carbon Lithium™ Project, targeting phase one production in 2024. We stand committed to helping ensure Europe's and Germany's energy independence and security of supply of sustainably sourced battery metals.

Gavin Rezos Chair Dr. Francis Wedin Managing Director & Founder-CEO



Zero Carbon Lithium™ Project

H1FY22 milestones



Geothermal plant acquisition Vulcan becomes renewable energy producer



Electric drill rigs Acquired a scarce, strategic asset for Vulcan



Granted license area increased to over 1,000km²

Subsequent to the reporting period



Central Lithium Plant Secured site at one of the largest chemical parks in Europe



First battery quality lithium hydroxide monohydrate from pilot plant, developed in-house by Vulcan



Five binding lithium offtake agreements with Tier One companies in EU market



Industry leading Life Cycle Assessment results with negative CO, emission intensity



Geothermal renewable energy and lithium battery chemicals business units grown to >100



Dual listed on the regulated market (Prime Standard) of the Frankfurt Stock Exhange

Subsequent to the reporting period

Targeting phase one production in 2024



Board of Directors



Gavin Rezos Chairman



Dr. Francis Wedin
Managing Director & Founder-CEO



Dr. Horst Kreuter
Executive Director, Germany



Dr. Heidi Grön Non-Executive Director



Annie Liu Non-Executive Director



Josephine Bush
Non-Executive Director



Ranya Alkadamani Non-Executive Director

 $\bullet \quad \hbox{\it Directors were in office for the entire period unless otherwise stated}.$

About this report

The Directors of Vulcan Energy Resources Limited "Vulcan Energy", "VUL" or "the Company") presents its report, together with the financial statements on the consolidated entity consisting of Vulcan Energy Resources Limited and its controlled entities for the half-year ended 31 December 2021 ("the Period, the Half").

It is recommended that the Directors' Report be read in conjunction with the annual financial statements for the year ended 30 June 2021 and considered together with any public announcement made by the Company during the Period and up to the date of this report.

Leadership team



Dr. Horst Kreuter
Executive Director (Germany)



Dr. Francis Wedin Managing Director & Founder-CEO



Thorsten Weimann Chief Operating Officer



Vincent Ledoux-Pedailles Vice President - Business Development



Dr. Stephen Harrison Chief Technical Officer



Rob lerace
Chief Financial Officer
(Australia)



Markus Ritzauer Chief Financial Officer (Germany)



Daniel Tydde
Company Secretary
Chief Legal Counsel (Australia)



Dr Meinhard Grodde Chief Legal Counsel (Germany)



Beate Holzwarth
Chief Communication Officer
(Germany)



Jessica Bukowski Public & Investor Relations Manager (Australia)



Markus Ruff CEO Global Engineering and Consulting Company



Tobias Hochschild CEO GeoThermal Engineering GmBH



Dr Thomas Aicher Lead Chemical Engineer



Dr Angela Digennaro Lab Manager



Julia Poliscanova
Special Advisor



Review of operations

SAFETY

Vulcan believes that everyone has the right to be safe, and prioritises the health, safety and wellbeing of the Vulcan team, contractors, and stakeholders. As Vulcan's operations across geothermal and lithium divisions expand, and as the Company progresses to the project construction phase, embedding a positive safety culture is critical.

Robust COVID-19 management plans are in place across the global business, in line with relevant government regulation and underpinned by strict hygiene and physical distancing measures. Vulcan continues to assess the impact of COVID-19, including supply chain disruption. The potential for additional cost and delays for equipment for commercial plant construction will be reviewed as part of Vulcan's Phase 1 DFS.

RENEWABLES AND GEOTHERMAL BUSINESS

A significant highlight of the reporting period was the acquisition of the operational geothermal renewable energy power plant in the Upper Rhine Valley at Insheim, Germany (the "Insheim Plant"). The acquisition established Vulcan as a renewable energy producer and is a source of revenue for the Company. The plant currently has the technical ability to produce a maximum of 4.8MW renewable power, equivalent to approximately 8,000 households, with an additional ability to produce heating. The plant is producing 2.9 MW of electricity on average and capitalises on the feed-in tariff for geothermal power.

Vulcan subsidiaries GeoThermal Engineering GmbH and gec-co (Global Engineering & Consulting-Company GmbH) have already been successfully active in the Insheim-Landau area for many years.

The established relationships in the community provide an important foundation for Vulcan, as the company established a new subsidiary, NatürLich Insheim, to be the owner and operator of the Insheim Plant.

All existing local employees have been retained as part of the transition, as Vulcan looks to invest in the expansion and modernisation of the powerplant.



Vulcan acquired two electric drill rigs as part of the Company's Zero Carbon Lithium™ Project. The specialised rigs can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley, Germany. The deep geothermal rigs represent a scarce, strategic asset for Vulcan, as Europe navigates an energy crisis and the increasing need for renewable heating. The electric rigs will ensure drilling can be conducted with minimum greenhouse gas emissions, consistent with Vulcan's strict carbon neutral focus.





LITHIUM DIVISION

Vulcan's lithium team are leaders in their field and continue to realise significant project milestones in the development of Vulcan's sustainable lithium product.

During the period, Vulcan's chemical engineering team successfully produced its first battery quality lithium hydroxide monohydrate (LHM) from piloting operations. The plant sample exceeded traditional battery grade LHM product including best on the market battery grade specifications required from offtake customers, at >56.5% LiOH.H2O and with very low impurities.

Vulcan's pilot has been operating successfully since April 2021 using "live" geothermal brine, coming directly from an operational geothermal plant. Pilot plant and laboratory studies are successfully demonstrating multi-cycle sorption tests on Upper Rhine Valley geothermal brine. Multiple commercially available aluminate-based sorbents have demonstrated >90% lithium recovery. This is in line with commercial Direct Lithium Extraction (DLE) development projects internationally and gives the Zero Carbon Lithium™ Project optionality in the process design.

Building on the success of the pilot plant, engineering and construction of the demonstration plant is progressing. With the view to enter production by mid-2022, Vulcan's demonstration plant will consist of two parts: the DLE plant and the lithium hydroxide production plant. The plant will demonstrate the full process from DLE to lithium hydroxide production including recycle streams. Importantly, technical and operations personnel will train in the plant to develop a comprehensive understanding of the process and its operation prior to the construction of the first commercial plant.

Vulcan's planned Central Lithium Plant (CLP) is a cornerstone of the Company's lithium development plans. During the period, Vulcan secured a site for the CLP at the Höchst Chemical Park (Industriepark Höchst), located just outside Frankfurt. The CLP is intended as a hub to process lithium chloride from multiple combined geothermal and lithium sorption plants into lithium hydroxide monohydrate. Importantly, the location allows for low carbon transport options from Vulcan's nearby project areas, as well as renewable energy to power the proposed plant, which underpins the Company's commitment to minimising its carbon footprint in each step of the process.



LITHIUM DIVISION (CONTINUED)

Subsequent to the end of the reporting period, in January 2022, Vulcan signed an Memorandum of Understanding (MoU) and a term sheet ("Agreement") with Nobian, the fourth largest chlor-alkali producer in Europe. Chlor-alkali uses an electrolysis process which is similar to part of Vulcan's flowsheet. The Agreement bolsters the operational experience and expertise in electrolysis production within the Zero Carbon Lithium™ Project team. Advantageously, one of Nobian's operations is located at the Höchst chemical park near Frankfurt, where Vulcan has secured a plot for the construction of its CLP.

In February, 2022, Vulcan opened its new laboratory in Karlsruhe-Durlach, Germany, as the Company enhances the analytical capability and expertise of its lithium division. With the state-of-the-art equipment, including full in-house ICP and IC analytical capability, the expanded central laboratory will allow for further optimisation of Vulcan's lithium processing.







OFFTAKES

Vulcan seeks to partner with companies with shared sustainability and environmental ambitions, as the Company works to decarbonise the lithium-ion battery and electric vehicle supply chain.

Securing offtakers was a priority for 2021, with Vulcan successfully finalising binding lithium offtake agreements with tier one cathode, battery and automotive companies in Europe. Critical to Vulcan's mission is providing a local source of sustainable lithium to support the European battery metals industry. With this in mind, the Zero Carbon Lithium™ Project's location in Germany is proximate to key factories and manufacturing centres of the Company's offtake partners.

EXPLORATION AND DEVELOPMENT

Vulcan's Upper Rhine Valley Project hosts a JORC 2012-compliant global resource estimation of 15.85 million tonnes (Mt) Lithium Carbonate Equivalent (LCE) at a grade of 181 mg/l Li in the Indicated and Inferred categories as shown in the table below. Vulcan's Pre-Feasibility Study (PFS) from January 2021 was focused solely on Indicated Resources from the Ortenau and Taro licenses. The acquisition of the Insheim Plant also includes 100% ownership of the Insheim production licence.

Following an MoU signed in November 2019, Vulcan had already completed the Maiden Indicated Lithium-Brine Mineral Resource Estimation at the Insheim license in January 2020, reporting an Indicated Mineral Resource of 722,000 t of contained LCE, with a lithium brine grade of 181 mg/I Li. This Resource, combined with the neighbouring Landau Project where Vulcan recently signed a brine offtake agreement, will be incorporated into Vulcan's workflow for Vulcan's Definitive Feasibility Study (DFS), which is currently under way. In addition, Vulcan is looking to conduct further resource estimations, and expand its project pipelines, in its other license areas, including the Mannheim license.

VULCAN'S COMBINED UPPER RHINE VALLEY PROJECT LI-BRINE INDICATED AND INFERRED MINERAL RESOURCE ESTIMATES

Upper Rhine Valley Project (URVP) Resources	Aquifer Volume (km³)	Brine Volume (km³)	Avg. Li Conc. (mg/I Li)	Avg. Porosity (%)	Contained Elemental Li Resource Tonnes	Contained LCE Million Tonnes	
Ortenau Inferred Resource estimation	117.974	11.208	181	9.50	2,029,000	10.80	
Ortenau Indicated Resource estimation	17.001	2.142	181	12.60	388,000	2.06	
Taro Inferred Resource estimation	15.924	1.497	181	9 .5 (Bunt) 9.0 (Rot)	217,000	1.44	
Taro Indicated Resource estimation	8.419	0.861	181	12.6 (BFZ) 9.5 (BHRE) 12.1 (RFZ) 9.0 (RHRE)	156,000	0.83	
Insheim Indicated Resource estimation	8.322	0.749	181	9.00 (P-T)	136,000	0.72	
Total URVP Indicated Resources used in PFS	25.42	3.003	181	1	544,000	2.89	
Total URVP Indicated and Inferred Resource	167.64	16.457	181	1	2,980,000	15.85	

 $Note 1: Mineral \, resources \, are \, not \, mineral \, reserves \, and \, do \, not \, have \, demonstrated \, economic \, via bility. \, determine the contraction of the con$

Note 2: The weights are reported in metric tonnes (1,000 kg or 2,204.6 lbs). Numbers may not add up due to rounding of the resource values percentages (rounded to the nearest 1,000 unit).

Note 3: The total volume and weights are estimated at the average porosities cited in the table. Taro resource abbreviations: Bunt - Buntsandstein Group; Rot - Rotliegend Group; P-T - Permo-Triassic; BFZ - Buntsandstein fault zone; BHRE - Buntsandstein host rock envelope; RFZ - Rotliegend fault zone; RHRE - Rotliegend host rock envelope.

Note 4: The Vulcan Li-brine Project estimation was completed and reported using a lower cutoff of 100 mg/L Li.

Note 5: In order to describe the resource in terms of industry standard, a conversion factor of 5.323 is used to convert elemental Li to Li2CO3, or Lithium Carbonate Equivalent (LCE).

Note 6: The Mineral Resources that underpin the PFS results are reported inclusive of any reserves.

Note 7: There has been no change to this Mineral Resource statement since publication.

A strength of the Upper Rhine Valley region is the extensive exploration historically conducted by oil and gas companies. Vulcan continues to leverage the work performed by the hydrocarbons industry to advance the Zero Carbon Lithium™ Project. During the period, Vulcan signed an agreement with Rhein Petroleum GmbH to purchase 3D seismic and drilling data to assist with additional project generation. The 3D seismic data acquisition consists of two surveys totalling 315 km². The new data assists with understanding of the sub-surface in the areas, allowing the team to target high brine flow zones in a precise, tailored and careful manner, therefore contributing to public acceptance.

Vulcan's in-house geological engineering company, GeoT, continues to advance studies towards the completion of Phase 1 DFS. The studies include reprocessing of 3D seismic data, integrated reservoir characterisation, structural and geomechanical studies, and fluid and heat flow simulation modelling. Once completed, this will be sent to external consultants GLJ Ltd for review and sign off, as part of its incorporation into the DFS. Subject to relevant stakeholder permissions, Vulcan plans to commence drilling in its Phase 1 areas towards the end of 2022. Vulcan acquired two drill rigs during the period, capable of drilling to the depths required, and is in the process of refurbishing these two rigs to be ready for drilling start, under its new drilling subsidiary "Vercana".

Vulcan's team of geological engineering experts continue to use existing 2D seismic data to increase their understanding of the Phase 2 sub-surface areas, ahead of 3D seismic survey-work which will be carried out in advance of drilling. Phase 2 drilling is targeted for 2023.

LOCATION OF VULCAN ZERO CARBON LITHIUM™ PROJECT, GERMANY



Subsequent to the end of the reporting period, Vulcan was awarded new exploration licenses for geothermal energy and lithium in the Upper Rhine Valley, increasing Vulcan's granted license area by nearly 50% to over 1,000km². In addition, Vulcan subsidiary Vulcan Energy Italy Pty Ltd was granted the Cesano Permit, in Italy. The Cesano Permit extends over an area of 11.5 km² and includes an area where a single geothermal well yielded two "hot brine" samples that contained high average lithium-in-brine historical (1976) grades of 350 and 380 mg/ILi.



VULCAN ZERO CARBON LITHIUM™ PROJECT GRANTED LICENSES

Name	State	Area (ha)	Area (km²)	Туре	Expiry date (MM/YYYY)	Ownership at end of reporting period	Change in owenership
Insheim	Rheinland-Pfalz	1,900	19	Production license*	11/2037	100%	100%
Ortenau	Baden- Württemberg	37,360	373.6	Exploration License	06/2023	100%	N/A
Mannheim	Baden- Württemberg	14,427	144.27	Exploration License	06/2024	100%	N/A
Lampertheim	Hessen	10,803	108.03	Exploration License	07/2024	100%	N/A
Taro/Lisbeth	Baden- Württemberg	3,268	32.68	Exploration License	08/2022	100%	N/A
Ludwig	Rheinland-Pfalz	9,641	96.41	Exploration License	12/2024	100%*	100%
Therese	Rheinland-Pfalz	8,109	81.09	Exploration License	12/2024	100%*	100%
Kerner	Rheinland-Pfalz	7,226	72.26	Exploration License	12/2024	100%*	100%
Löwenherz	Rheinland-Pfalz	7,543	75.43	Exploration License	12/2024	100%*	100%
Landau	Rheinland-Pfalz	19,4937	194.94	Production license	N/A	Brine off agreemen owner/op	t with
Cesano*	Italy	1150	11.5	Research Permit	01/2025	100%	100%

^{*} Acquired subsesquent to the end of the reporting period.

Competent Person Statement

The information in this report that relates to Mineral Resources and Ore Reserves (respectively) of the Company's Zero Carbon LithiumTM Project is extracted from the ASX announcements made by Vulcan on 15 December 2020 ("Updated Ortenau Indicated and Inferred Resource") and 15 January 2021 ("Positive Pre-Feasibility Study"), which are available on www.v-er.eu. The information in this report that relates to Insheim's Mineral Resources is extracted from the ASX announcement made by Vulcan on 20 January 2020 ("Maiden Indicated Resource Insheim Vulcan Zero Carbon Lithium"), which is available on http://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.

CORPORATE

Vulcan's corporate priorities focus on accelerating and expanding the Company's integrated renewable energy and lithium development strategy.

During the period, Vulcan successfully raised A\$200 million ($\ensuremath{\in} 123.7$ million) via a well-supported placement from existing and new institutional investors including ESG-focused institutions. This built on the successful raise of A\$120 million in the first half of 2021, which was an important launchpad for the Zero Carbon Lithium Project.

The September 2021 Placement (Placement) positioned Vulcan to pursue the targeted acquisition and upgrade of existing brownfield energy and brine infrastructure, to de-risk and grow development plans, as well as to increase the production pipeline from existing license areas. It also facilitated the targeted acquisition and refurbishment of exploration equipment.

Vulcan also undertook a non-underwritten Share Purchase Plan (SPP) to allow existing shareholders the opportunity to invest in the company at the same price as the Placement. The SPP raised A\$3.1 million (€2million) through the issue of 228,434 new fully paid ordinary shares in the Company.

The Placement coincided with Vulcan's inclusion in the S&P/ASX300 index.

Subsequent to the reporting period, Vulcan was officially listed on the regulated market (Prime Standard) of the Frankfurt Stock Exchange (FSE) following the German Federal Financial Supervisory Authority's (Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)) approval of the Company's listing prospectus (Prospectus).

The dual listing on the FSE is an important step in expanding Vulcan's European investor base and international exposure, while also fostering public and community acceptance of the Zero Carbon Lithium $^{\text{TM}}$ Project in the Upper Rhine Valley.

During the period, Vulcan partnered with external experts who, together with the Company's in-house teams, will drive the DFS output ahead of the report being finalised in the second half of 2022.

Hatch Ltd. was appointed as engineering consultant responsible for the lithium chemicals part of the DFS including the engineering and execution planning for the Direct Lithium Extraction (DLE) plants and CLP.

GLJ Ltd. was appointed as engineering consultant responsible for compiling the overall report, economic modelling and signing off on the geological engineering and geothermal renewable energy part of the DFS.

BNP Paribas will work on the Bankability Review in the lead up to the DFS. Upon completion of the DFS, Vulcan will continue to work with BNP Paribas on the structuring and execution of financing for the Zero Carbon LithiumTM Project.





ESG

As a zero-carbon business, Vulcan's raison d'être is to be a leader in Environmental, Social and Governance (ESG) ensuring sustainability goals are not merely aspirations but govern the way Vulcan operates in practice.

The Company's public ESG strategy is being finalised, and enhanced reporting frameworks are being implemented ahead of publishing the Annual Sustainability Report later this year.

In the interim, an update on the core ESG matters that Vulcan continues to engage with follows.

TEAM VULCAN

Proudly disruptive, Vulcan's diverse team comes from all over the globe, united by a passion for environmentalism and science. The Vulcan team continues to grow across geothermal renewable energy and lithium battery chemicals business units, and totalled around 100 people at the end of the period.

Demonstrating the Company's commitment to diversity, women represent 35% of the workforce, while 67% of Vulcan's Board of Directors are female.





PARTNERSHIPS

Vulcan also entered into a partnership agreement with Mr. Nico Rosberg and the Rosberg X Racing (RXR) electric racing team in the sustainability-focused Extreme-E competition. Mr. Rosberg, a German national who was Formula One World Champion 2016, is a prominent sustainability entrepreneur, and founder of the popular Greentech Festival, as well as the RXR Extreme-E team.

Extreme E was created to highlight the impact of climate change and human activity on some of the world's most remote locations while promoting sustainability and the adoption of electric vehicles to help protect the planet.

The Partnership Agreement saw Vulcan Energy become an Official Partner of RXR. RXR and Mr Rosberg became shareholders in Vulcan, in return for advertising and promotional rights for the 2021 and 2022 racing seasons.

Nico Rosberg and RosbergXRacing won the 2021 inaugural Extreme E live Championships!

Subsequent to the reporting period, Vulcan was accepted into the UN Global Compact.



ENVIRONMENT

Vulcan is developing the Zero Carbon Lithium™ Project to have the highest environmental performance, with the lowest impacts of any lithium project anywhere in the world. The Company seeks to comply with all relevant environmental laws and regulations, and it has suffered no prosecutions or fines for environmental practices since the inception of the Company.

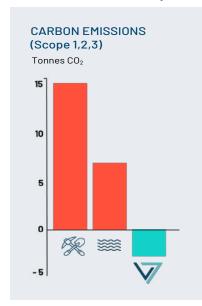
The rapidly growing Vulcan team is focused on the process development of the Zero Carbon Lithium Project with a strict exclusion of fossil fuels to power the process, while demonstrating best-in class environmental credentials through independent study and verification.

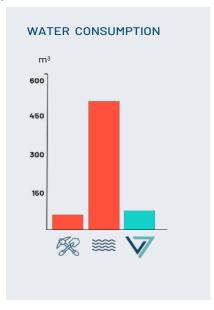
In August 2021, Vulcan commissioned Minviro Ltd., to update its world-first, independent Life Cycle Assessment (LCA). The study used Vulcan's Pre-Feasibility Study (PFS) data and considered the environmental footprint of lithium hydroxide monohydrate (LHM) production. It was estimated that negative 2.9 tonnes of CO_2 emitted per tonne of LHM would be produced from the Zero Carbon Lithium Project, including Scope 1, 2 and 3 emissions.

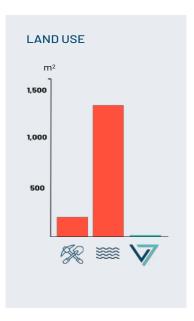
Vulcan's negative CO_2 emission intensity is a product of the significant impact offset generated by renewable geothermal energy production as well as use of geothermal heat to drive lithium processing. This is underpinned by Vulcan's industry-leading move to strictly exclude fossil fuels as an energy source from its planned operations.

LEADING ENVIRONMENTAL CREDENTIALS

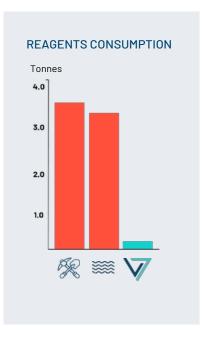
Per tonne of lithium hydroxide produced

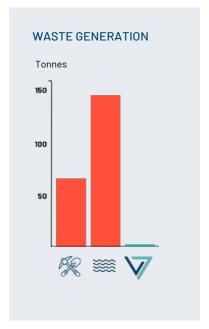






It was estimated that negative 2.9 tonnes of CO₂ emitted per tonne of LHM would be produced from the Zero Carbon Lithium™ Project, including Scope 1, 2 and 3 emissions.





Hard rock mining 60% of world lithium production

Evaporation ponds
40% of world lithium production



Source: Minviro Life Cycle Analysis 2021 & Vulcan Energy's Pre-Feasibility Study

Note 1: The Company's environmental credentials set out in this slide (and elsewhere in this Presentation) are based on the Company's Pre-Feasibility Study.

There is no guarantee that the Company will be able to achieve the targeted metrics.

STAKEHOLDER ENGAGEMENT



Stakeholder engagement and community and public relations are an important part of Vulcan's project development. For every decarbonisation or renewable energy project, it is vital that there is a tangible benefit to communities. To that end, Vulcan will leverage its local knowledge and expertise to make a positive contribution to the energy transition in the region. Discussions with multiple stakeholders to provide renewable heating to communities and renewable power to the German grid are ongoing, as Vulcan intends to build distributed geothermal renewable energy plants across the Upper Rhine Valley region.

The Company has support from many federal politicians as it highlights the positive social and environmental impacts that the Zero Carbon Lithium™ Project can bring at a regional level including renewable energy and heat, local employment and local lithium for the electric vehicle industry.

Following the German federal elections, the coalition parties signed their coalition agreement on 7 December 2021 in which the parties expressed their intention to focus on transforming the automotive industry, including a pledge to phase out the sale of internal combustion vehicles by 2035, the intention to make greater use of the potential of geothermal energy for energy supply and to generate 50% of heat in a climate-neutral way by 2030.

At a state level, government support for geothermal technology and the expansion of renewable energy projects continues to grow, including in the three states in which Vulcan is operating in the Upper Rhine Valley. To accelerate the expansion of renewable energy technologies in the region, the state government of Baden-Württemberg has launched a task force aimed at halving the planning and approval timeline for the commissioning of new projects.

This follows state governments in the Upper Rhine Graben voicing their support for geothermal lithium project development in the region, including the Greens-CDU Coalition in Baden-Württemberg. Against this backdrop, Vulcan has successfully engaged with representatives from a range of political parties including CDU and the Greens, with recent visits to Vulcan's pilot and laboratory operations.



COMMUNITY OUTREACH

Vulcan's communications strategy, the cornerstone of the Company's community engagement, is centred around education, collaboration and inclusion. Engagement with the community members, local and municipal councils, state and federal governments, as well as regional media, was significantly strengthened during the period. Regional managers were appointed in Ortenau, Südpfalz and Kurpfalz and will work with the community to ensure Vulcan's mission and the Zero Carbon Lithium™ Project is understood and accepted.

As Vulcan continues to expand its community outreach, a priority is the development of a 'show truck', targeting local events and markets to inform the community about geothermal, lithium and the Zero Carbon Lithium $^{\text{TM}}$ Project.

Education, collaboration and inclusion to build trust and understanding.



The Company is also opening information centres in regions where it hopes to operate, to enable face-to-face interactions with the community. In addition digital information and presentation formats continue to be available to inform community representatives, nature conservancy associations, regional community groups and the general public.



Financial results

The financial results of the Consolidated Entity for the half-year ended 31 December 2021 are:

	31 December 2021	30 June 2021
Cash and cash equivalents (€)	134,547,644	72,494,107
Net assets (€)	206,392,545	81,522,492
	31 December 2021	31 December 2020
Revenue from continuing operations (€)	689,999	-
Net loss after tax (€)	(6,277,033)	(3,642,118)

Auditor's Independence Declaration

The Auditor's Independence Declaration under section 307C of the Corporations Act 2001 is included within this financial report.

This report is made in accordance with a resolution of directors, pursuant to section 306(3)(a) of the Corporations Act 2001.

On behalf of the directors

Gavin Rezos

Non-Executive Chairman

Perth, Western Australia

Dated 10 March 2022



RSM Australia Partners

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AUDITOR'S INDEPENDENCE DECLARATION

As lead auditor for the review of the financial report of Vulcan Energy Resources Limited for the half-year ended 31 December 2021, I declare that, to the best of my knowledge and belief, there have been no contraventions of:

- (i) the auditor independence requirements of the Corporations Act 2001 in relation to the review; and
- (ii) any applicable code of professional conduct in relation to the review.

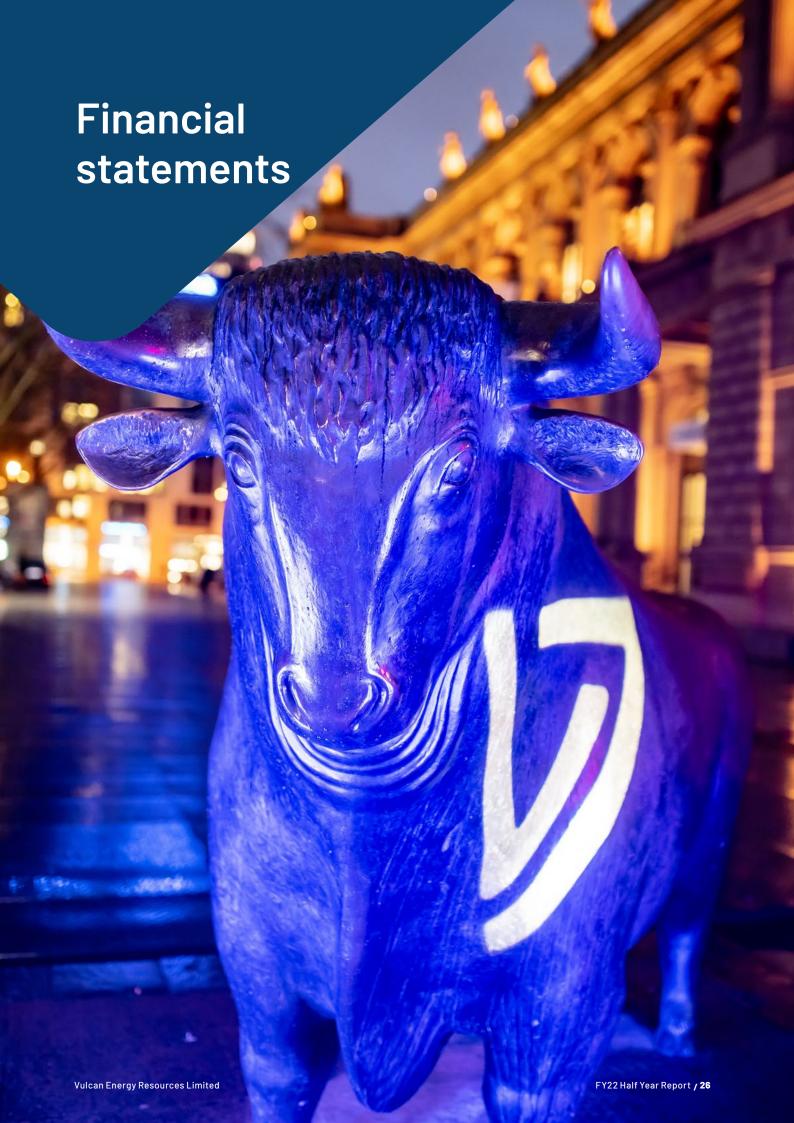
RSM RSM AUSTRALIA PARTNERS

TUTU PHONG

Partner

Perth, WA Dated: 10 March 2022

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Consolidated Statement of Profit or Loss and Other Comprehensive Income For the half-year ended 31 December 2021

	Note	31-Dec-21	31-Dec-20
		€	€
Revenue from continuing operations		689,999	-
Other income		221,553	227,775
Gain on deconsolidation	5	1,975,185	-
Other own work capitalised		1,821,266	-
Raw materials and purchased services		(594,004)	-
Administrative expenses		(2,019,611)	(135,055)
Compliance and regulatory expenses		(369,478)	(58,965)
Consulting and legal fees		(1,826,886)	(112,884)
Depreciation		(221,067)	-
Employee benefit expenses		(2,544,974)	(151,960)
Investor relations expenses		(345,579)	(215,332)
Impairment expenses		(21,518)	(140,010)
Occupancy costs		(101,282)	(8,043)
Share-based payments expense		(2,408,475)	(3,033,027)
Share of loss from associate accounted for using the equity method	5	(280,013)	-
Other expenses		(540,848)	(14,725)
Foreign currency gain/(loss)		188,069	108
Loss before income tax expense		(6,377,663)	(3,642,118)
Income tax benefit/ (expense)		100,630	_
Loss after income tax for the period		(6,277,033)	(3,642,118)
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations		4,717,714	112,177
Total comprehensive loss for the period (net of tax)		(1,559,319)	(3,529,941)
Total comprehensive loss for the period attributable to the		(1,559,319)	(3,529,941)
owners of Vulcan Energy Resources Limited		(1,555,515)	(0,020,041)
Loss per share for the period attributable to the owners of Vulcan Energy Resources Limited			
Basic and diluted loss per share (cents)		(6.52)	(5.07)

The Consolidated Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the notes to the financial statements.

Consolidated Statement of Financial Position as at 31 December 2021

	Note	31-Dec-21	30-Jun-21
Assets		€	€
Current assets		17/ 5/7 0//	70 / 0 / 107
Cash and cash equivalents Trade and other receivables		134,547,644 4,690,304	72,494,107 756,818
Inventories		4,690,304 371,098	/30,010
Contract assets		415,670	_
Financial assets		10,256,500	_
Total current assets		150,281,216	73,250,925
Non-current assets			
Exploration and evaluation expenditure		13,950,165	8,722,293
Plant and equipment		40,639,300	935,433
Right-of-use		1,112,082	357,867
Investment in Associate accounted for using the equity method	5	1,428,974	-
Intangible assets		4,225,128	-
Deferred tax assets		1,747,242	
Total non-current assets		63,102,891	10,015,593
Total Assets		213,384,107	83,266,518
1 *- 1.202.			
Liabilities			
Current liabilities Lease liabilities		208,433	39,430
Trade and other payables		3,932,928	1,335,425
Loans and borrowings		62,087	1,000,420
Provisions		71,052	55,353
Total Current liabilities		4,274,500	1,430,208
i otal current liabilities		4,274,500	1,430,200
Non-current liabilities			
Lease liabilities		893,392	313,818
Loans and borrowings		139,183	-
Provisions		54,500	-
Deferred tax liabilities		1,629,987	
Total non-current liabilities		2,717,062	313,818
Total Liabilities		6,991,562	1,744,026
Net Assets		206,392,545	81,522,492
Equity		200,002,040	01/022/ 1 02
Share capital	3	209,049,378	85,271,678
Reserves	J	13,191,482	5,822,096
Accumulated losses		(15,848,315)	(9,571,282)
Total Equity		206,392,545	81,522,492
i otal Equity		200,332,343	01,322,432

The Consolidated Statement of Financial Position should be read in conjunction with the notes to the financial statements.

Consolidated Statement of Changes in Equity For the half-year ended 31 December 2021

Consolidated	Issued Capital	Reserves	Foreign Currency Reserve	Accumulated Losses	Total
	€	€	€	€	€
At 1 July 2021	85,271,678	4,995,425	826,671	(9,571,282)	81,522,492
Loss for the period Other comprehensive income	-	-	- 4,717,714	(6,277,033) -	(6,277,033) 4,717,714
Total comprehensive loss for the period after tax	-	-	4,717,714	(6,277,033)	(1,559,319)
Transactions with owners in their capacity as owners:					
Issue of share capital	128,156,870	-	-	-	128,156,870
Share issue costs	(4,379,170)	-	-	-	(4,379,170)
Share-based payments		2,651,672		-	2,651,672
Balance at 31 December 2021	209,049,378	7,647,097	5,544,385	(15,848,315)	206,392,545
Consolidated	lssued Capital	Reserves	Foreign Currency Reserve	Accumulated Losses	Total
	€	€	€	€	€
At 1 July 2020	7,233,432	1,064,665	(22,432)	(2,845,257)	5,430,408
Loss for the period Other comprehensive income	-	-	- 112,177	(3,642,118)	(3,642,118) 112,177
Total comprehensive loss for the period after tax	-	-	112,177	(3,642,118)	(3,529,941)
Transactions with owners in their capacity as owners:					
	2,823,137	-	-	-	2,823,137
as owners: Issue of share capital Share issue costs	2,823,137 -	-	-	-	-
as owners: Issue of share capital	2,823,137 - - 10,056,569	- - 2,887,496 3,952,161	- - - 89,745	- - - (6,487,375)	2,823,137 - 2,887,496 7,611,100

The Consolidated Statement of Changes in Equity should be read in conjunction with the notes to the financial statements.

Consolidated Statement of Cash Flows

For the half-year ended 31 December 2021

	31-Dec-21	31-Dec-20
	€	€
Cash flows from operating activities		
Receipts from customers	589,999	-
Payments to suppliers and employees	(5,903,899)	(431,424)
Interest received	84,583	3,347
Other income	136,970	224,419
Interest paid	(81,358)	_
Net cash used in operating activities	(5,173,705)	(203,658)
Cash flows from investing activities		
Payments for exploration and evaluation expenditure	(5,411,067)	(2,025,150)
Payment for plant and equipment	(12,557,585)	(276,267)
Payment to acquire subsidiary	(32,684,814)	-
Cash acquired upon acquisition of subsidiary	994,000	-
Investment in financial assets	(10,256,500)	_
Net cash used in investing activities	(59,915,966)	(2,301,417)
Cash flows from financing activities		
Cash received pending allotment of shares	-	122,588
Proceeds from issue of shares	126,228,454	2,109,587
Share issue costs	(4,379,170)	-
Lease repayments	(73,530)	-
Repayment of shareholder loan	(70,000)	-
Net cash from financing activities	121,705,754	2,232,176
Net increase/(decrease) in cash and cash equivalents	56,616,083	(272,900)
Cash and cash equivalents at beginning of the period	72,494,107	3,924,213
Effect of exchange rate fluctuations	5,437,454	5,127
Cash and cash equivalents at end of the period	134,547,644	3,656,440

The Consolidated Statement of Cash Flows should be read in conjunction with the notes to the financial statements.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation

These general purpose interim financial statements for the half-year ended 31 December 2021 have been prepared in accordance with the requirements of the Corporations Act 2001 and Australian Accounting Standard AASB 134 "Interim Financial Reporting". Compliance with AASB 134 ensures compliance with International Accounting Standard 34 "Interim Financial Reporting".

These general-purpose financial statements do not include all the notes of the type normally included in annual financial statements. Accordingly, these financial statements are to be read in conjunction with the annual report for the year ended 30 June 2021 and any public announcements made by the company during the interim reporting period in accordance with the continuous disclosure requirements of the Corporations Act 2001.

The financial statements are presented in Euros, which is Vulcan Energy Resources Limited's presentation currency.

The principal accounting policies adopted are consistent with those of the previous financial year and the corresponding interim reporting period. New accounting policies adopted in the current period are as follows;

Change in Presentation Currency and Foreign Currency Translation

Vulcan Energy Resources Limited changed its presentation currency from Australian dollars to Euro effective from 1 July 2021. The functional currency remains Australian dollars.

Foreign currency transactions

Foreign currency transactions are translated into Euro using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at financial year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

Foreign operations

The assets and liabilities of foreign operations are translated into Euro using the exchange rates at the reporting date. The revenues and expenses of foreign operations are translated into Euro using the average exchange rates, which approximate the rates at the dates of the transactions, for the period. All resulting foreign exchange differences are recognised in other comprehensive income through the foreign currency reserve in equity.

The foreign currency reserve is recognised in profit or loss when the foreign operation or net investment is disposed of.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT.)

Contract assets

An entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the entity's future performance).

Business combinations

The acquisition method of accounting is used to account for business combinations regardless of whether equity instruments or other assets are acquired.

The consideration transferred is the sum of the acquisition-date fair values of the assets transferred, equity instruments issued or liabilities incurred by the acquirer to former owners of the acquiree and the amount of any non-controlling interest in the acquiree. For each business combination, the non-controlling interest in the acquiree is measured at either fair value or at the proportionate share of the acquiree's identifiable net assets. All acquisition costs are expensed as incurred to profit or loss.

On the acquisition of a business, the consolidated entity assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic conditions, the consolidated entity's operating or accounting policies and other pertinent conditions in existence at the acquisition-date.

Where the business combination is achieved in stages, the consolidated entity remeasures its previously held equity interest in the acquiree at the acquisition-date fair value and the difference between the fair value and the previous carrying amount is recognised in profit or loss.

Contingent consideration to be transferred by the acquirer is recognised at the acquisition-date fair value. Subsequent changes in the fair value of the contingent consideration classified as an asset or liability is recognised in profit or loss. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity.

The difference between the acquisition-date fair value of assets acquired, liabilities assumed and any non-controlling interest in the acquiree and the fair value of the consideration transferred and the fair value of any pre-existing investment in the acquiree is recognised as goodwill. If the consideration transferred and the pre-existing fair value is less than the fair value of the identifiable net assets acquired, being a bargain purchase to the acquirer, the difference is recognised as a gain directly in profit or loss by the acquirer on the acquisition-date, but only after a reassessment of the identification and measurement of the net assets acquired, the non-controlling interest in the acquiree, if any, the consideration transferred and the acquirer's previously held equity interest in the acquirer.

Business combinations are initially accounted for on a provisional basis. The acquirer retrospectively adjusts the provisional amounts recognised and also recognises additional assets or liabilities during the measurement period, based on new information obtained about the facts and circumstances that existed at the acquisition-date. The measurement period ends on either the earlier of (i) 12 months from the date of the acquisition or (ii) when the acquirer receives all the information possible to determine fair value.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT.)

Investment in Associate

An associate is an entity that is neither a subsidiary nor a joint arrangement, over which the Group has significant influence. Significant influence is presumed to exist where there is neither control nor joint control and the Group has over 20% of the voting rights, unless it can be clearly demonstrated that this is not the case. Significant influence can arise where the Group holds less than 20% of the voting rights if it has the power to participate in the financial and operating policy decisions affecting the entity. Investments in associates are accounted for using the equity accounting method. Under the equity accounting method the investment is recorded initially at cost to the Group, including any goodwill on acquisition. In subsequent periods the carrying amount of the investment is adjusted to reflect the Group's share of the EAUs' retained post-acquisition profit or loss and other comprehensive income.

Other own work capitalised

Global Engineering and Consulting GmbH and GeoThermal Engineering GmbH provide services to Vulcan Energie Ressourcen GmbH, a wholly owned subsidiary of Vulcan Energy Resources Limited which have been capitalised to exploration and evaluation expenditure and property, plant and equipment. These services are disclosed in the statement of profit or loss and other comprehensive income as other own work capitalised. The expenses incurred by Global Engineering and Consulting Gmbh and GeoThermal Engineering GmbH to provide these services are disclosed in the statement of profit or loss and other comprehensive income as employee benefit expenses.

(b) Critical accounting judgements, estimates and assumptions

Business combinations

As discussed above, business combinations are initially accounted for on a provisional basis. The fair value of assets acquired, liabilities and contingent liabilities assumed are initially estimated by the consolidated entity taking into consideration all available information at the reporting date. Fair value adjustments on the finalisation of the business combination accounting is retrospective, where applicable, to the period the combination occurred and may have an impact on the assets and liabilities, depreciation and amortisation reported.

(c) New or amended Accounting Standards and Interpretations adopted

The consolidated entity has adopted all of the new or amended Accounting Standards and Interpretations issued by the Australian Accounting Standards Board that are mandatory for the current reporting period.

Any new or amended Accounting Standards or interpretations that are not yet mandatory have not been early adopted.

NOTE 2 SEGMENT INFORMATION

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision makers. The chief operating decision makers, who are responsible for allocating resources and assessing performance of the operating segments, have been identified as the Board of Directors.

It was determined that the Consolidated Entity operates in four operating segments being, lithium and renewable energy exploration and development, consultancy services, investment and administration. This is the basis in which internal reports are provided to the Directors for assessing performance and determining the allocation of resources within the Consolidated Entity.

(i) Segment performance

(i) Operating Segment	Exploration & Development [Germany]	Consultancy Services [Germany]	Investment [Norway]	Administration [Australia]	Total
31-Dec-21	€	€	€	€	€
Revenue					
Revenue from continuing operations	-	689,999	-	-	689,999
Other own work capitalised	-	1,821,266	-	-	1,821,266
Interest income	-	-	-	84,583	84,583
Other income	50,177	-	-	86,793	136,970
Gain on deconsolidation	-	-	1,975,185	-	1,975,185
Total segment revenue	50,177	2,511,265	1,975,185	171,376	4,708,003
Net profit/(loss) before tax from continuing operations	(2,741,240)	134,170	1,975,185	(5,745,778)	(6,377,663)
Income tax benefit/(ex	pense)				100,630
Net profit/(loss) after	tax from continui	ng operations		-	(6,277,033)

NOTE 2 SEGMENT INFORMATION (CONT.)

Geographical Information

(ii) Segment assets				
	Germany	Norway	Australia	Total
31-Dec-21	€	€	€	€
Total segment assets	86,215,602	1,425,256	125,743,249	213,384,107
(iii) Segment liabilities	Germany	Norway	Australia	Total
31-Dec-21	€	€	€	€
Total segment liabilities	5,613,786	-	1,377,776	6,991,562

NOTE 2 SEGMENT INFORMATION (CONT.)

(i) Operating Segment	Exploration & Development [Germany]	Consultancy Services [Germany]	Investment [Norway]	Administration [Australia]	Total
31-Dec-20	€	€	€	€	€
Revenue					
Interest income	-	-	-	3,349	3,349
Other income	224,426	-	-	-	224,426
Total segment revenue	224,426	-	-	3,349	227,775
Net profit/(loss) before tax from continuing operations	123,680	-	(145,694)	(3,620,104)	(3,642,118)
Income tax benefit/(ex	•	g operations			(3,642,118)
Geographical Informa	tion				
(ii) Segment assets	G	ermany	Norway	Australia	Total
31-Dec-20		€	€	€	€
Total segment assets		4,138,342	126,068	4,038,303	8,302,713
(iii) Segment liabiliti		ermany	Norway	Australia	Total

€

355,821

€

6,103

31-Dec-20

Total segment liabilities

€

329,687

€

691,611

NOTE 3 CONTRIBUTED EQUITY

	30-Dec-21		30-Jun-21	
	No.	€	No.	€
Fully paid ordinary shares	131,607,598	209,049,378	108,422,717	85,271,678

Ordinary shares entitle the holder to participate in dividends and the proposed winding up of the Company in proportion to the number and amount paid on the share hold.

a) Movement reconciliation

	Date	Number	Issue Price €	€
At 1 July 2021		108,422,717		85,271,678
Shares issued as consideration for acquisition of Gec-co.	6/07/2021	325,000	5.04	1,637,295
Shares issued as consideration for acquisition of GGH	6/07/2021	11,396	5.04	57,411
Shares issued for services rendered	19/08/2021	32,251	7.84	252,862
Placement	22/09/2021	14,814,815	8.35	123,680,002
Share Purchase Plan	18/10/2021	228,434	8.64	1,974,287
Exercise of warrants	1/12/2021	521,304	-	-
Placement	17/12/2021	65,317	8.50	555,013
Exercise of performance shares	17/12/2021	4,400,000	-	-
Exercise of performance rights	17/12/2021	2,786,364	-	-
Less capital raising costs				(4,379,170)
At 31 December 2021	-	131,607,598		209,049,378

NOTE 4 SHARE-BASED PAYMENTS

Recognised share-based payment transactions	31-Dec-21 €	31-Dec-20 €
Performance rights issued to employees during the period (i)	128,478	2,074,513
Performance rights issued to Directors and employees in prior periods	2,017,854	172,927
Performance shares issued to Vendors of acquisition	135,357	331,248
Performance shares issued as consideration for acquisition of subsidiary GGH (refer to note 6)	363,307	-
Warrants issued to InnoEnergy	126,786	82,210
Unlisted options issued	-	226,402
Shares issued to Directors	-	145,727
Shares issued for consideration of services	252,862	208,182
<u>-</u>	3,024,664	3,241,209
Represented by:	31-Dec-21	31-Dec-20
	€	€
Share-based payment expense	2,408,475	3,033,027
Investor relations expense	252,862	208,182
Exploration and evaluation assets	363,307	-
·	3,024,644	3,241,209

(i) Details of new issues during the period:

On 16 December 2021, the company issued 204,000 performance rights to Chief Financial Officer in Germany, Company Secretary and Communications Manager to align their interests to that of the Company's shareholders and assist as an effective means of retaining staff.

Details of performance rights vesting conditions:

Class P:

The Company announcing before 31 December 2022 a positive definitive Feasibility Study in relation to Project confirming it is commercially viable with and expiry date of 1 December 2023.

Class T:

The Company being issued a building permit for the first geothermal power plant or, in the case of pure heating project with no electricity production, the transfer station, on or before the Expiry Date of 1 December 2024.

Class V:

The Company is being granted a permit according to BlmSchG for the first lithium refinery, on or before the Expiry Date 1 December 2024.

NOTE 4 SHARE-BASED PAYMENTS (CONT.)

Class Y:

The Company announcing successful listing of Vulcan Energy on the regulated market of the Frankfurt Stock Exchange on or before the expiry date of 1 December 2024.

Class Z:

Performance Rights will vest upon the Company obtaining project finance for the first commercial plant, on or before the Expiry Date of 1 December 2024.

The value of performance rights was determined using Black Scholes model.

	Fair value of each right	Grant date	Price at grant date	Expiry date	Number of rights	Total value of rights	Share based payment expense
Class P	7.54	16/12/2021	7.54	1/12/2023	58,000	437,320	11,554
Class T	7.54	16/12/2021	7.54	1/12/2024	18,000	135,720	4,201
Class V	7.54	16/12/2021	7.54	1/12/2024	18,000	135,720	1,477
Class Y	7.54	16/12/2021	7.54	1/12/2024	60,000	452,400	108,145
Class Z	7.54	16/12/2021	7.54	1/12/2024	50,000	377,000	3,101
							128,478

NOTE 5 INVESTMENT IN ASSOCIATE

On 24 August 2021, Kuniko Limited successfully completed an initial public offering listing on the Australian Stock Exchange (ASX:KNI), thereby completing the spin-off of the Norwegian assets announced in June 2021. On the 17 August 2021, the initial public offering shares were issued, with the Company retaining a 25.85% shareholding. The loss of control of Kuniko Limited by the Company resulted in €1,975,185 gain on deconsolidation.

The following table summarises the deconsolidation of Kuniko Limited:

Gain on deconsolidation	1,975,185
Revaluation of interest in Kuniko Limited	1,708,987
Net liabilities on deconsolidation of Kuniko Limited	266,198

The Company's interest in Kuniko Limited is recognised as an investment in associate accounted for using the equity method, resulting in €1,708,987 investment in associate at deconsolidation. Subsequently, the Company's share of Kuniko Limited's loss for the period was offset against the investment resulting in the amount recognised as investment in associate as follows:

Investment in associate	1,428,974
Share of loss in Kuniko Limited for the period 17 August to 31 December 2021	(280,013)
Initial carrying value on deconsolidation	1,708,987
	€

NOTE 6 ACOUISITION OF SUBSIDIARY

Global Geothermal Holding UG

On 2 July 2021 Vulcan Energie Ressourcen GmbH, a subsidiary of Vulcan Energy Resources Limited, acquired 100% of the shares in Global Geothermal Holding UG ('GGH') with an effective date on 2 July 2021 (closing-date). Dr Horst Kreuter, CEO of Vulcan Energie Ressourcen GmbH, and a related party of Vulcan Energy Resources Limited, and Mr Thorsten Weimann, Chief Operating Officer and a related party of Vulcan Energy Resources Limited were the sole shareholders of GGH.

With a share price at closing date of $\[\]$ 5,04 (AUD7.90), the agreed purchase price for 11,396 ordinary shares amounted to $\[\]$ 57,411.

Additionally, 91,174 performance shares with a fair value €363,307 has been recognised as deferred consideration, based on management's assessment of the probability of achieving the performance milestones. The performance shares were issued in equal number to Dr Horst Kreuter and Mr Thorsten Weimann. Milestones as follows:

The Performance Shares will convert into Shares upon achievement of any of the following in relation to any of the licenses held by GGH:

- (a) the Company (or any of its subsidiaries) obtaining a positive approval for geothermal brine production from the relevant governmental authority following a provisional environmental impact assessment;
- (b) the Company (or any of its subsidiaries) obtaining approval for the construction and operation of a main operating plant under Germany's Federal Mining Act (BBergG);
- (c) the Company (or any of its subsidiaries) obtaining the first approval for a special operating plan in accordance with BBergG;
- (d) the Company (or any of its subsidiaries) the first approval or pre-approval from the relevant governmental authority for the construction of a geothermal organic Rankine cycle plant; or
- (e) the Company (or any of its subsidiaries) obtaining the first approval or pre-approval from the relevant governmental authority for the construction of a direct lithium extraction (lithium conveying) plant.

NOTE 6 ACOUISITION OF SUBSIDIARY (CONT.)

Purchase Consideration:	€
Shares issued (refer to note 3)	57,411
Performance shares issued (refer to note 4)	363,307
Net consideration	420,718
Net Assets Acquired:	€
Fair value of net liabilities acquired	(1,193)
Exploration and evaluation expenditure	421,911
Net assets acquired	420.718

Management has determined that the acquisitions do not meet the definition of a business within AASB 3 Business Combinations. The transactions have been accounted for as an asset acquisition.

Since GGH is an entity which holds exploration licences including Taro where the majority of the indicated resources is generated from, the acquisition of GGH is considered an asset acquisition rather than a business combination.

NOTE 7 INTERESTS IN SUBSIDIARIES

The following companies were founded by Vulcan Energy Resources GmbH ('Vulcan GmbH') since 30 June 2021:

Entity	Location	Primary activity	Date of foundation	Shares (%)
Global Geothermal Holding UG	Karlsruhe	Group holding	July 2, 2021	100 (indirect)
GeoThermal Engineering GmbH	Karlsruhe	Operating entity	July 2, 2021	100 (indirect)
Gec-co Global Engineering and Consulting GmbH	Augsburg	Operating entity	July 2, 2021	100 (indirect)
Vulcan Geothermal GmbH	Karlsruhe	Group holding	July 09, 2021	100 (indirect)
VER GEO LIO GmbH	Karlsruhe	Group holding	July 12, 2021	100 (indirect)
Vercana GmbH	Karlsruhe	Operating entity	December 09, 2021	100 (indirect)
Natürlich Insheim GmbH	Karlsruhe (previously: Ludwigshafen)	Operating entity	December 31, 2021	100 (indirect)

All companies are fully consolidated in the present consolidated interim financial statements from the time of their foundation.

NOTE 8 BUSINESS COMBINATIONS

Natürlich Insheim GmbH (previously: Pfalzwerke Geofuture GmbH)

VER GEO LIO GmbH, an indirect subsidiary of Vulcan Energy Resources Limited, acquired 100% shares in Natürlich Insheim GmbH ('Natürlich Insheim'), in accordance with the Share Purchase Agreement, with an effective date on 31 December 2021 (closing-date).

The preliminary purchase price for the acquisition of Natürlich Insheim amounted to &32,684,814 and was paid in cash. The preliminary purchase price is expected to be adjusted by &1,410,417 based on the purchase price adjustments stated in the Share Purchase Agreement. Therefore, the expected adjusted purchase price will amount to &31,274,397.

Natürlich Insheim owns and operates a geothermal power plant in Insheim, Germany.

Details of the acquisition are as follows:

	€
Cash	922,299
Trade and other receivables	754,943
Inventory	137,933
Property, plant & equipment	28,297,945
Deferred tax asset	1,747,242
Trade and other payables	(893,877)
Other provisions	(50,000)
Fair value of net assets acquired	30,916,485
Intangibles acquired on acquisition	1,548,912
Deferred tax liabilities arising on acquisition	(1,191,000)
Acquisition-date fair value of total consideration	31,274,397
Representing:	
	€
Cash paid	32,684,814
Loan repayment to Pfalzwerke Geofuture GmbH	(1,300,000)
Profit transfer adjustment	(110,417)
Acquisition costs capitalised	31,274,397

The fair values of Natürlich Insheim's assets and liabilities have been measured provisionally. If new information is obtained within one year of the date of acquisition about facts and circumstances that existed at the date of acquisition identifies adjustments to the amounts above, the accounting for the acquisition will be revised.

NOTE 8 BUSINESS COMBINATIONS (CONT.)

Gec-co Global Engineering & Consulting-Company GmbH

Vulcan Energie Ressourcen GmbH, a subsidiary of Vulcan Energy Resources Limited, acquired 100% of geothermal surface consultancy company, Global Engineering and Consulting GmbH ('Geo-co'), in accordance with the Share Purchase Agreement, with an effective date on 2 July 2021 (closing-date). Mr Thorsten Weimann, Chief Operating Officer and a related party of Vulcan Energy Resources Limited is the sole shareholder of Gec-co.

325,000 fully paid ordinary shares of Vulcan Energy Resources Limited were issued, totalling to €1,637,295 based on a share price at closing date of €5,04 (AUD7.90).

Additionally, a cash payment of €862,750 linked to project development milestones of the Vulcan Zero Carbon Lithium Project has been recognised as deferred consideration, based on management's assessment of the probability of achieving the milestones. Milestones as follows:

- (a) The first building permit for the construction of an ORC (geothermal) plant is granted;
- (b) The first building permit or approval pursuant to the German Federal Immission Control Act (BlmSchG) for the construction of a DLE (lithium extraction) plant is granted.

Details of the acquisition are as follows:

	€
Cash	245,515
Trade and other receivables	557,225
Contract assets	192,233
Other assets	122,171
Trade and other payables	(371,249)
Loans and borrowings	(348,056)
Fair value of net assets acquired	397,839
Intangibles acquired on acquisition	2,488,485
Deferred tax liabilities arising on acquisition	(386,279)
Acquisition-date fair value of total consideration	2,500,045
Representing:	€
Shares issued (refer to note 3)	1,637,295
Deferred consideration	862,750
Acquisition costs capitalised	2,500,045

The fair values of Gec-co's assets and liabilities have been measured provisionally. If new information is obtained within one year of the date of acquisition about facts and circumstances that existed at the date of acquisition identifies adjustments to the amounts above, the accounting for the acquisition will be revised.

NOTE 8 BUSINESS COMBINATIONS (CONT.)

GeoThermal Engineering GmbH

Vulcan Energie Ressourcen GmbH, a subsidiary of Vulcan Energy Resources Limited, acquired 100% of the shares in GeoThermal Engineering GmbH ('GeoT') in accordance with the Share Purchase Agreement, with effective date on 2 July 2021 (closing-date). Dr Horst Kreuter, CEO of Vulcan Energie Ressourcen GmbH, and a related party of Vulcan Energy Resources Limited, was the sole shareholder of GeoT.

The acquisition costs for 100% of the shares in GeoT were payable in cash. The agreed purchase price was €1.

GeoT is an independent planning and consulting company for the development of deep geothermal projects worldwide. In cooperation with partners and investors, GeoT develops national and international projects in regions that offer favourable conditions for a sustainable heat and/or power production from geothermal energy. Furthermore, GeoT designs optimally adapted exploration programs for each project by individual composing of the different exploration methods.

Details of the acquisition are as follows:

	€
Cash	62,150
Trade and other receivables	151,854
Other assets	134,223
Trade and other payables	(156,342)
Loans and borrowings	(285,330)
Fair value of net liabilities acquired	(93,445)
Intangibles acquired on acquisition	134,614
Deferred tax liabilities arising on acquisition	(41,168)
Acquisition-date fair value of total consideration	1
Representing:	
	€
Cash paid or payable to vendor	1
Acquisition costs capitalised	1

The fair values of GeoT's assets and liabilities have been measured provisionally. If new information is obtained within one year of the date of acquisition about facts and circumstances that existed at the date of acquisition identifies adjustments to the amounts above, the accounting for the acquisition will be revised.

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NOTE 9 LOSS PER SHARE

	31-Dec-21	31-Dec-20
	€	€
Net Loss for the year	(6,277,033)	(3,642,118)
Weighted average number of ordinary shares for basic and diluted loss per share	96,219,633	71,834,923
Basic and diluted loss per share (cents)	(6.52)	(5.07)

NOTE 10 DIVIDENDS

No dividend has been declared or paid during the interim period ended 31 December 2021(30 June 2021: Nil), and the Directors do not recommend the payment of a dividend in respect of the half-year ended 31 December 2021.

NOTE 11 CONTINGENCIES

Vulcan Group's contingent liability as at 30 June 2021 was deferred consideration in the form of 4,400,000 Performance Shares issued to the vendors of Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd), to be converted to 4,400,000 fully paid ordinary shares of the Company upon the Company announcing that it has secured an offtake agreement representing a minimum of 30% of the production volume over a three year term, or a downstream joint venture partner making a minimum 4\$10,000,000 investment in relation to the Vulcan Zero Carbon LithiumTM Project within 34 months of completion of the acquisition).

On 17 December 2021, these Performance Shares vested as a result of the milestone being satisfied by the recent binding offtake agreements Vulcan Group signed with Stellantis, Volkswagen, Renault Group and Umicore, and have been converted into the fully paid ordinary capital.

There are no contingent assets or contingent liabilities at 31 December 2021.

NOTE 12 COMMITMENTS

Below are the commitments in relation to exploration and evaluation assets.

	31-Dec-21	30-Jun-21
	€	€
Commitment 1 year	2,819,167	1,589,594
Commitment 2-5 year	5,210,833	2,155,391
Total	8,030,000	3,744,985

Included in the commitment amounts at 31 December 2021 also include the licences granted in the Upper Rhine Valley, Germany which were announced on 4 January 2022 (refer to note 13).

There have been no other changes to commitments since 30 June 2021.

NOTE 13 EVENTS SUBSEQUENT TO THE REPORTING PERIOD

On 4 January 2022 Vulcan Energy Resources Ltd announced it had been granted four new exploration licenses for geothermal energy, and lithium in the Upper Rhine Valley, Germany. The licenses cover 325km2 of area which is considered by Vulcan to be prospective for deep geothermal and lithium brine, and increases Vulcan's granted license area by nearly 50% to over 1,000km2.

In January 2022, Vulcan has signed an MOU and a term sheet ("Agreement") with Nobian, a European leader in the production of essential chemicals, which employs approximately 1,600 people and had revenues in 2020 of €1 billion. Nobian is the fourth largest chlor-alkali producer in Europe after Inovyn, Dow and Covestro, and has extensive electrolysis operational experience. Chlor-alkali uses an electrolysis process which is similar to part of Vulcan's flowsheet. Vulcan and Nobian will assess the feasibility of a joint project for the development, construction and operation of the CLP, including the electrochemical conversion process of lithium chloride to battery quality lithium hydroxide.

Vulcan subsidiary Vulcan Energy Italy Pty Ltd has been granted a new Research Permit in Italy, named "Cesano" located 20 km NNW of Rome. The Cesano Permit extends over an area of 11.5 km2 and includes an area where a single geothermal well yielded two "hot brine" samples that contained high average lithium-in-brine historical (1976) grades of 350 and 380 mg/l Li.

Following the binding term sheet signed on 18 July 2021, conditional on the execution of a Definitive Agreement, Vulcan has signed a binding lithium hydroxide offtake agreement ("Agreement") with LG Energy Solution ("LGES"). LGES is the second largest battery maker in the world with over 20% market share and supplies its products to leading global Original Equipment Manufacturers (OEMs)

On 15 February 2022 Vulcan Energy Resources Ltd commenced trading on the Prime Standard regulated market of the Frankfurt Stock Exchange (FSE), following the submission of the application to dual list on 8 February 2022.

Director's Declaration

In the Directors' opinion:

- the attached financial statements and notes comply with the Corporations Act 2001, Australian Accounting Standard AASB 134 'Interim Financial Reporting', the Corporations Regulations 2001 and other mandatory professional reporting requirements;
- the attached financial statements and notes give a true and fair view of the consolidated entity's financial position as at 31 December 2021 and of its performance for the financial half-year ended on that date; and
- there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of directors made pursuant to section 303(5)(a) of the Corporations Act 2001.

On behalf of the directors

Gavin Rezos

Non-Executive Chairman 10 March 2022





RSM Australia Partners

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INDEPENDENT AUDITOR'S REVIEW REPORT TO THE MEMBERS OF VULCAN ENERGY RESOURCES LIMITED

Report on the Half-Year Financial Report

We have reviewed the accompanying half-year financial report of Vulcan Energy Resources Limited which comprises the statement of financial position as at 31 December 2021, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the half-year ended on that date, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at the half-year end or from time to time during the half-year.

Directors' Responsibility for the Half-Year Financial Report

The directors of the company are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity*, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including: giving a true and fair view of the consolidated entity's financial position as at 31 December 2021 and its performance for the half-year ended on that date; and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*. As the auditor of Vulcan Energy Resources Limited, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual financial report.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

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Independence

In conducting our review, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Vulcan Energy Resources Limited, would be in the same terms if given to the directors as at the time of this auditor's review report.

Conclusion

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of Vulcan Energy Resources Limited is not in accordance with the *Corporations Act 2001*, including:

- (a) giving a true and fair view of the consolidated entity's financial position as at 31 December 2021 and of its performance for the half-year ended on that date; and
- (b) complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations* 2001.

KSM

RSM AUSTRALIA PARTNERS

Perth, WA

Dated: 10 March 2022

TUTU PHONG Partner



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Company Secretary

Daniel Tydde

Stock Exchange Listings

Australian Securities Exchange (ASX Code: VUL)

Regulated market (Prime Standard) of the Frankfurt Stock Exchange (FSE Code: VUL) As of 15 February 2022

Share Registry

Automic Share Registry

Level 2, 267 St Georges Terrace Perth WA 6000

Telephone: 1300 288 664

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Ashurst

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Auditors

RSM Australia Partners

Level 32, 2 The Esplanade Perth WA 6000

Bankers

Westpac Banking Corporation

Level 4, Brookfield Place, Tower Two 123 St Georges Terrace Perth WA 6000

