



Prospectus

dated 11 February 2022

for the admission to trading on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment of the regulated market with additional post-admission obligations (Prime Standard)

of

131,645,090 existing ordinary shares with no par value

of

Vulcan Energy Resources Limited

Perth, Australia

(Registered in Australia under the Corporations Act 2001 (Cth))

Australian Company Number (ACN): 624 223 132
International Securities Identification Number (ISIN): AU0000066086
German Securities Code (*Wertpapierkennnummer, WKN*): A2PV3A
Trading Symbol: VUL

Listing Agent

Berenberg

Warning regarding the validity of the Prospectus

The validity of this Prospectus will expire at the end of 15 February 2022. The obligation to supplement the Prospectus in the event of significant new factors, material mistakes or material inaccuracies does not apply when the Prospectus is no longer valid.

This document does not constitute a prospectus or disclosure document for the purposes of the Corporations Act 2001 (Cth) of Australia.

TABLE OF CONTENTS

	PAGE
I. SUMMARY	1
1. SUMMARY OF THIS PROSPECTUS	1
1.1 Introduction and warnings.....	1
1.2 Key information on the issuer	1
1.3 Key information on the securities	6
1.4 Key information on the offer of securities and the admission to trading on a regulated market	7
2. GERMAN TRANSLATION OF THE SUMMARY / ZUSAMMENFASSUNG DIESES PROSPEKTS	8
2.1 Einleitung und Warnhinweise	8
2.2 Basisinformationen über den Emittenten	8
2.3 Basisinformationen über die Wertpapiere	14
2.4 Basisinformationen über das Angebot von Wertpapieren und die Zulassung zum Handel an einem regulierten Markt.....	15
II. MAIN PART OF THE PROSPECTUS.....	1
1. RISK FACTORS	1
1.1 Industry Specific Risks.....	1
1.2 Business Risks	4
1.3 Financing Risks and Financial Disclosure Risks	11
1.4 Regulatory Risks	13
1.5 Legal and Tax Risks.....	15
1.6 Risks related to the Shares.....	16
1.7 Risks related to the Listing	17
2. GENERAL INFORMATION	21
2.1 Responsibility for the content of this Prospectus.....	21
2.2 General disclaimers	21
2.3 Approval of the Prospectus.....	21
2.4 Purpose of this Prospectus	21
2.5 Information on the FSE Listing.....	22
2.6 Forward-looking statements	22
2.7 References regarding mineral resources, ore reserves and production targets.....	23
2.8 Notes concerning currency and financial information	23
2.9 Notes concerning sources of market data and information provided by third parties	24
2.10 Documents available for inspection	25
3. INFORMATION ABOUT THE SHARES	27
3.1 Voting rights, dividend rights, rights in the event of liquidation	27
3.2 Form and representation of the Shares	27
3.3 ISIN/WKN/Trading symbol	28
3.4 Transferability of the Shares.....	28
3.5 Paying agent	29
3.6 Designated Sponsor	29
3.7 Taxation	30
4. DIVIDEND RIGHTS AND DIVIDEND POLICY	34
4.1 Dividend rights	34
4.2 Dividend policy and dividends per Share	34
5. CAPITALISATION AND INDEBTEDNESS	35
5.1 Statement of capitalisation.....	35
5.2 Statement of indebtedness.....	36
5.3 Indirect and contingent indebtedness	36
5.4 Statement concerning working capital	36
6. MANAGEMENT'S DISCUSSION AND ANALYSIS OF NET ASSETS, FINANCIAL POSITION AND RESULTS OF OPERATIONS.....	37
6.1 Overview	37
6.2 Key factors affecting Vulcan Group's results of operations	38
6.3 Recent Accounting Pronouncements	47
6.4 Segment information	47
6.5 Description of key line items.....	47
6.6 Results of operations	49
6.7 Assets, equity and liabilities	56
6.8 Liquidity and financial resources	59

6.9	Qualitative and quantitative disclosure on market risks	64
6.10	Key accounting and valuation principles involving estimates or judgements.....	64
7.	PRO FORMA FINANCIAL INFORMATION	65
7.1	Introduction	65
7.2	Historical financial information	66
7.3	Basis of preparation	67
7.4	Pro Forma Financial Information as of 30 June 2021	70
7.5	Pro Forma Financial Information as of 30 September 2021	78
7.6	Auditor's report to the Pro Forma Financial Information	84
8.	INDUSTRY OVERVIEW	85
8.1	Overview of Lithium Industry.....	85
8.2	Global trends and developments affecting lithium demand	86
8.3	Competitive Landscape	88
9.	BUSINESS	89
9.1	Introduction	89
9.2	Competitive Strengths	95
9.3	Strategy	98
9.4	Principal business areas	100
9.5	Lithium business	101
9.6	Renewable energy business.....	104
9.7	Property.....	105
9.8	Research and Development	107
9.9	Marketing.....	107
9.10	Employees	108
9.11	Intellectual Property	108
9.12	Information Technology	108
9.13	Insurance.....	109
9.14	Litigation.....	109
9.15	Material Agreements	109
10.	GENERAL INFORMATION ABOUT THE COMPANY	112
10.1	Company name, incorporation, registered office and financial year.....	112
10.2	History of the Company	112
10.3	Group structure	112
10.4	Subsidiaries.....	113
10.5	Statutory auditors	114
10.6	Announcements	114
11.	REGULATORY FRAMEWORK	116
11.1	EU.....	116
11.2	Germany.....	118
12.	INFORMATION ON THE COMPANY'S CAPITAL.....	123
12.1	Issued capital and Shares	123
12.2	Development of the share capital over the past three years.....	123
12.3	Details of unquoted securities	126
12.4	General provisions on changes in the share capital.....	129
12.5	General provisions on changes in share rights	129
12.6	General provisions on dividend payments and distributions out of capital	129
12.7	General provisions on the liquidation of the Company	129
12.8	Regulation of Australian takeovers	130
12.9	Takeover bids	131
12.10	Scheme of Arrangement	132
12.11	Squeeze-out of minority shareholders.....	133
12.12	Notification and reporting requirements for shareholdings	133
12.13	Managers' / Directors' transactions.....	135
12.14	Short selling regulation (ban on naked short selling)	136
13.	INFORMATION ON THE GOVERNING BODIES OF THE COMPANY	138
13.1	Overview	138
13.2	Board of Directors	138
13.3	General meetings of shareholders	148
13.4	Corporate Governance	152
14.	MAJOR SHAREHOLDERS	154
15.	TRANSACTIONS AND LEGAL RELATIONSHIPS WITH RELATED PARTIES.....	155
15.1	Transactions and relationships with members of the Board of Directors	155
15.2	Transactions and relationships with related parties of members of the Board of Directors	156

16.	RECENT DEVELOPMENTS AND OUTLOOK	157
16.1	Recent developments	157
16.2	Outlook.....	157
17.	DEFINITIONS	159
18.	FINANCIAL INFORMATION.....	F-1
18.1	Financial Statements for the three month period ended 30 September 2021	F-2
18.2	Financial Statements 2021	F-16
18.3	Financial Statements 2020	F-59
18.4	Financial Statements 2019	F-90
19.	ANNEX: COMPETENT PERSONS' REPORT	A-1

I. SUMMARY

1. SUMMARY OF THIS PROSPECTUS

1.1 Introduction and warnings

Name and international securities identification number (ISIN) of the securities - This prospectus (the "**Prospectus**") relates to the existing ordinary shares with no par value of Vulcan Energy Resources Limited ("**Shares**") with the International Securities Identification Number ("**ISIN**") AU0000066086.

Identity and contact details of the issuer, including its legal entity identifier (LEI) - The issuer of the Shares is Vulcan Energy Resources Limited, headquartered in Perth, Australia (registered office: Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Telephone: +61 8 6189 8767, website: www.v-er.eu), legal entity identifier ("**LEI**") 8945006OYFHQ9HE4XE54 (hereinafter the "**Company**" and together with its consolidated subsidiaries, "**Vulcan Group**").

Identity and contact details of the person asking for admission to trading on a regulated market, including its legal entity identifier (LEI) - The Company and Joh. Berenberg, Gossler & Co. KG, Hamburg, Germany (Neuer Jungfernstieg 20, 20354 Hamburg, Telephone +49 (0)40 350 600, website: www.berenberg.de), LEI 529900UC2OD7II24Z667 ("**Berenberg**"), in its capacity as listing agent (the "**Listing Agent**"), has applied for the admission of the Company's Shares to trading on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment of the regulated market with additional post-admission obligations (Prime Standard).

Identity and contact details of the competent authority approving the Prospectus and date of the approval of the Prospectus - This Prospectus has been approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* - "**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Germany, tel.: +49 228 4108 0, www.bafin.de, on 11 February 2022. BaFin only approves this Prospectus as meeting the standards for completeness, comprehensibility and consistency imposed by Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC, as amended ("**Prospectus Regulation**").

Warnings - This summary (the "**Summary**") should be read as an introduction to this Prospectus. Any decision to invest in the securities should be based on a consideration of the Prospectus as a whole by the investor. The investor could lose all or part of the invested capital. Where a claim relating to the information contained in the Prospectus is brought before a court, the plaintiff investor might, under national law, have to bear the costs of translating the Prospectus before the legal proceedings are initiated. Civil liability attaches only to those persons who have tabled the Summary including any translation thereof, but only where the Summary is misleading, inaccurate or inconsistent when read together with the other parts of the Prospectus, or where it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in such securities.

1.2 Key information on the issuer

1.2.1 Who is the issuer of the securities?

Issuer Information - The issuer is Vulcan Energy Resources Limited, a public company limited by shares incorporated in Australia under the Corporations Act 2001 (Cth) of Australia ("**Australian Corporations Act**") with registered office at Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Australia, and governed by the laws of Australia. The Company is admitted to the official list of ASX Limited ("**ASX**") and the Company's Shares are quoted on the securities exchange operated by ASX under the ticker code "VUL". The Company's LEI is 8945006OYFHQ9HE4XE54 and its Australian Company Number ("**ACN**") is 624 223 132.

Principal Activities - The Company is the parent company of Vulcan Group. As the parent company of Vulcan Group, the Company performs certain group management functions including strategic planning and public relations. Vulcan Group is an Australian headquartered lithium battery chemicals and renewable energy group with a clear goal to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint. With its Zero Carbon Lithium™ Project Vulcan Group intends to combine the operations of extracting lithium-rich geothermal brines in the Upper Rhine Valley of Germany, of upgrading lithium through electrolysis to a high purity lithium hydroxide monohydrate and/or lithium carbonate (Vulcan Group's lithium business), and the production of hydrogeothermal energy (Vulcan Group's renewable energy business) (the "**Zero Carbon Lithium™ Project**"). Vulcan Group's Zero Carbon Lithium™ Project intends to produce a battery-quality lithium chemical product from its combined geothermal renewable energy and lithium resource located in the Upper Rhine Valley, which is estimated to be Europe's largest lithium resource, as estimated and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("**JORC Code**") (source: Vulcan Energy Resources Ltd, ASX Release 15 December 2020; Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study 15 January 2021; based on lithium focused peers in Europe with comparable project size and stage and published resource information). Vulcan Group aims

to supply the battery electric vehicle ("**BEV**") market in Europe, which is among the fastest growing in the world (source: S&P Global Platts 1), and is currently reliant on imports of lithium chemicals given the lack of domestic supply. The Zero Carbon Lithium™ Project has been designed from its inception to help decarbonise the German electrical and local heating grids and lithium supply chain simultaneously and has the lowest planned carbon footprint in the lithium industry compared to any previously published life cycle assessment results (source: Vulcan Energy Resources Ltd, ASX Release 4 August 2021; Minviro). An essential part of the Zero Carbon Lithium™ Project involves the use of thermal water as the principal heat source to drive the lithium extraction, which means that lithium is expected to be extracted from the brine with a net zero carbon footprint without polluting the environment with waste material or toxic substances prior to the brines being re-injected in a closed loop, circular system. In order to advance its lithium and geothermal exploration activities as well as its renewable energy business, Vulcan Group has recently undertaken several strategic acquisitions in Germany. In particular, Vulcan Group acquired two geothermal engineering companies in July 2021, which has brought significant surface and sub-surface geothermal operating expertise into Vulcan Group, and in December 2021, Vulcan Group acquired Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH), a company that owns and operates a geothermal renewable energy plant and has an exploitation licence for the property of the plant site in Insheim, Germany. Moreover, in November 2021, the Company acquired two electric drill rigs as part of Vulcan Group's Zero Carbon Lithium™ Project which can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley of Germany.

Vulcan Group holds eight exploration licences in the Upper Rhine Valley of Germany encompassing an area of 983.77 km² (98,377 hectares) within the German states of Baden-Württemberg, Rhineland-Pfalz and Hessen, as well as an exploitation licence at the Insheim geothermal plant bringing the total licence area to over 1,000 km². In addition, Vulcan Group holds an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20 km from the city of Rome. An exploration licence is needed for exploring freely mineable resources, and an exploitation licence (also referred to as a production licence) gives the right to extract freely mineable resources. Vulcan Group is currently at the exploration and development stage and is targeting commencement of commercial production by 2024 at one of its exploration licence areas, capitalising on its proprietary method for the manufacture of battery-grade lithium hydroxide with a net zero carbon footprint and zero use of fossil fuels to power the extraction process.

As of the date of this Prospectus, Vulcan Group has entered into agreements for the sale of battery grade lithium hydroxide with Umicore N.V. (in an amount between 28,000 metric tonnes and 42,000 metric tonnes of battery grade lithium hydroxide), Renault Group (in an amount between 29,000 metric tonnes and 49,000 metric tonnes of battery grade lithium hydroxide), Stellantis N.V. (in an amount between 81,000 metric tonnes and 99,000 metric tonnes of battery grade lithium hydroxide), Volkswagen AG (in an amount between 34,000 metric tonnes and 42,000 metric tonnes of battery grade lithium hydroxide) and LG Energy Solution (in an amount between 41,000 metric tonnes and 50,000 metric tonnes of battery grade lithium hydroxide) for initial five year or six year periods, as applicable, with commercial delivery scheduled to commence in 2025 or 2026, as applicable. Together, the volumes of lithium hydroxide to be delivered under these five offtake agreements exceed the estimated 40,000 metric tonnes referenced as annual production target in Vulcan Group's Pre-Feasibility Study ("**PFS**") upon the completion of a first phase, consisting of the construction of two geothermal plants and direct lithium extraction ("**DLE**") plants for each geothermal plant and a central lithium plant (targeting commercial production in 2024) ("**Phase One**"), and a second phase, consisting of the construction of three additional geothermal plants and three additional DLE plants and a second central lithium plant (targeting commercial production in 2025) ("**Phase Two**"), of the Zero Carbon Lithium™ Project, subject to change in Vulcan Group's Definitive Feasibility Study ("**DFS**"). The DFS which includes, inter alia, the commissioning and construction of a pilot plant and of a larger demonstration plant is anticipated to be completed by the second half of 2022. In addition, in November 2021, Vulcan Group entered into a binding offtake agreement with geox GmbH ("**geox**"), an operator of a geothermal power plant in Landau in der Pfalz, regarding the provision to Vulcan Group of brine from the geothermal plant operated by geox for the purpose of extracting the lithium contained in the brine for an initial term of 20 years with an offtake start date of 30 December 2024.

Vulcan Group believes that the following competitive strengths will allow it to execute its business strategy and will set it apart from its competitors in the future:

- Clear goal and strategy built around implementing the world's first net zero carbon footprint lithium production project;
- A well-balanced business model with potential for dual revenue sources planned through lithium and renewable energy business;
- Access to a strategically located and scalable lithium raw materials resource, estimated by the Company to be the largest lithium resource in Europe;
- Potential to be a very low operating cost lithium business, according to Vulcan Group's PFS;

- Well-positioned to capitalise on the expected dynamic transition to electric mobility and renewable energy in Europe, through the ability to offer a sustainable lithium product from its Zero Carbon Lithium™ Project; and
- Access to capital markets, proven ability to obtain funding to execute its business strategy and to implement the Zero Carbon Lithium™ Project and distinct international profile.

Vulcan Group is aiming to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint targeting commencement of commercial production in 2024. With its Zero Carbon Lithium™ Project, Vulcan Group intends to produce a battery-quality lithium chemical product and geothermal energy from the same deep brine source. In order to achieve this, Vulcan Group has adopted a strategy designed to capitalise on its competitive strengths. The key elements of Vulcan Group's strategy are as follows:

- Ensure local support from stakeholders for the Zero Carbon Lithium™ Project;
- Grow the business by investing in the expansion of Vulcan Group's team;
- Build-out in a modular fashion to accelerate growth and minimise disruption by capitalising on the teams' experience during project execution;
- Further improve Vulcan Group's research and development and innovation capabilities;
- Continue to develop solid and long-standing customer relationships and strong ties with the latest developments in lithium end-markets; and
- Develop next generation lithium compounds and advance circular economy approaches to lithium, in line with Vulcan Group's core sustainability values.

Subsidiaries - Vulcan Group consists of the Company and its ten wholly-owned subsidiaries: Vulcan Energy Resources Europe Pty Ltd. (Australia), Vulcan Energy Italy Pty Ltd. (Australia), Vulcan Energie Ressourcen GmbH (Germany), gec-co Global Engineering & Consulting-Company GmbH (Germany), Global Geothermal Holding UG (Germany), GeoThermal Engineering GmbH (Germany), Vulcan Geothermal GmbH (Germany), VER GEO LIO GmbH (Germany), VERCANA GmbH (Germany) and Natürlich Insheim GmbH (Germany).

Major Shareholders – As of the date of this Prospectus, the following individuals/entities (in aggregate with their associates) have a relevant interest* in 5% or more of the Shares:

- Dr Francis Wedin (16,458,561 Shares, being approximately 12.51%)**
- Vivien Enterprises Pte Ltd (7,598,727 Shares, being approximately 5.77%)*
- Hancock Prospecting Pty Ltd ("**HPPL**") and subsidiaries of HPPL (7,424,534 Shares, being approximately 5.64%)*

* Under Australian law, a person has a relevant interest in a security if, among other things, the person is the holder of that security, has the power to dispose of, or control the exercise of a power to dispose of, that security, has the power to exercise, or control the exercise of, the right to vote in respect of that security, or controls or has voting power above 20% of a body corporate that has a relevant interest in that security.

** The Shares in which Dr Francis Wedin holds a relevant interest comprise (i) 15,646,061 Shares held by Dr Wedin directly, and (ii) 812,500 Shares held by Magni Associates Pty Ltd. Katy and Francis Wedin are the directors of Magni Associates Pty Ltd and it is 100% owned by Wedin Pty Ltd as trustee for the Wedin Family Trust.

*** The sole shareholder of Vivien Enterprises Pte Ltd is Ms. Joanne Ellen Rezos, the spouse of Mr Gavin Rezos, and Vivien Enterprises Pte Ltd is an associate of Mr Gavin Rezos.

**** Under Australian law, each of Georgina Hope Rinehart and Bianca Hope Rinehart (in her capacity as trustee of the Hope Margaret Hancock Trust) are also considered to have a relevant interest in those Shares because each of them has greater than 20% of the voting power in HPPL.

Board of Directors – As of the date of this Prospectus the members of the Company's board of directors (the "**Board of Directors**" and its members the "**Directors**") are Mr Gavin Rezos (Non-Executive Chairman), Dr Francis Wedin (Managing Director/CEO), Ms Annie Liu (Non-Executive Director), Dr Heidi Grön (Non-Executive Director), Ms Josephine Bush (Non-Executive Director) and Ms Ranya Alkadamani (Non-Executive Director).

Statutory Auditors – The Company's statutory auditor is RSM Australia Partners, Level 32, 2 The Esplanade, Perth WA 6000, Australia ("**RSM**").

1.2.2 What is the key financial information regarding the issuer?

The following financial information is taken or derived from the unaudited condensed consolidated interim financial statements of the Company prepared in accordance with Australian Accounting Standards and Interpretations ("AASI") issued by the Australian Accounting Standards Board ("AASB") and the Australian Corporations Act as of and for the three months ended 30 September 2021 (the "**Consolidated Interim Financial Statements September 2021**"), the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2021 (the "**Consolidated Annual Financial Statements 2021**"), the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2020 (the "**Consolidated Annual Financial Statements 2020**") and the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2019 (the "**Consolidated Annual Financial Statements 2019**" and together with the Consolidated Annual Financial Statements 2021 and the Consolidated Annual Financial Statements 2020, the "**Consolidated Annual Financial Statements**" and the Consolidated Annual Financial Statements together with the Consolidated Interim Financial Statements September 2021 the "**Consolidated Financial Statements**"). The Consolidated Financial Statements comply with International Financial Reporting Standards ("**IASB IFRS**") as developed and published by the International Accounting Standards Board ("**IASB**") and, in the case of the Consolidated Interim Financial Statements September 2021, IASB IFRS on interim financial reporting (IAS 34). According to Art. 1 a) of the Commission Decision of 12 December 2008 (2008/961/EC), IASB IFRS are to be regarded as equivalent to the IFRS adopted under Regulation (EC) No 1606/2002 ("**EU IFRS**"), provided that the notes to the audited financial statements contain an explicit and unreserved statement that these financial statements comply with "International Financial Reporting Standards in accordance with IAS 1 Presentation of Financial Statements". The Consolidated Annual Financial Statements were audited by RSM, who in each case issued an unqualified independent audit report thereon.

1.2.2.1 Selected financial information from the consolidated statements of profit or loss

	Three-month period ended 30 September		Financial year ended 30 June		
	2021	2020	2021	2020	2019
	EUR	EUR	A\$	A\$	A\$
	(unaudited)		(audited)		
Revenue from continuing operations ..	109,202	-	-	-	-
Other income	141,955	166,726	631,542	95,342	56,055
Loss before income tax expense	(1,519,322)	(660,339)	(10,744,614)	(3,553,359)	(836,664)
Total comprehensive loss for the period attributable to the owners of Vulcan Energy Resources Limited	(2,135,428)	(718,589)	(10,844,607)	(3,575,375)	(836,664)

1.2.2.2 Selected financial information from the consolidated statements of financial position

	Three-month period ended 30 September		Financial year ended 30 June		
	2021	2020	2021	2020	2019
	EUR	A\$	A\$	A\$	A\$
	(unaudited)		(audited)		
Total assets	206,738,404	131,744,081	9,107,961	3,910,060	3,910,060
Total equity	201,859,906	128,984,547	8,886,039	3,793,116	3,793,116

1.2.2.3 Selected financial information from the consolidated statements of cash flow

	Three-month period ended 30 September		Financial year ended 30 June		
	2021	2020	2021	2020	2019
	EUR	EUR	A\$	A\$	A\$
	(unaudited)		(audited)		
Net cash provided by (used in) operating activities	(2,047,406)	(47,745)	(2,841,145)	(1,332,049)	(361,507)
Net cash provided by (used in) investing activities	(2,095,247)	(1,388,730)	(7,145,227)	(1,218,732)	(439,281)
Net cash provided by (used in) financing activities	119,225,797	672,234	118,267,924	5,645,765	101,875

1.2.2.4 Selected financial information from the pro forma financial statements

Vulcan Energie Ressourcen GmbH ("**Vulcan Energie**") acquired gec-co Global Engineering & Consulting GmbH ("**Gec-co**") and Geothermal Engineering GmbH ("**GeoT**") on 2 July 2021. Vulcan Energie also acquired Global

Geothermal Holding UG ("**GGH**") on 2 July 2021. In addition, VER GEO LIO GmbH ("**VER GEO**") acquired Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**")) on 31 December 2021. The acquisitions of Gec-co, GeoT and Natürlich Insheim are hereinafter referred to as "**Acquisitions**". Additionally, by way of a spin-off, the Company lost control ("**Loss of Control**") of its subsidiary Kuniko Limited ("**Kuniko**") on 17 August 2021. The Company initially retained an interest of 25.85% which has since been diluted to 24.34%.

As the Company expects the Acquisitions and the Loss of Control to have a material impact on the net assets, financial position, and results of the operations of the Company, the Company has prepared pro forma financial information, comprising a pro forma statement of financial position as of 30 June 2021 and as of 30 September 2021 as well as a pro forma statement of profit or loss for the period from 1 July 2020 to 30 June 2021 and for the three-month period from 1 July 2021 to 30 September 2021 as well as accompanying pro forma notes (together "**Pro Forma Financial Information**"). The Pro Forma Financial Information was prepared on the basis of the IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (IDW Rechnungslegungshinweis: Erstellung von Pro-Forma-Finanzinformationen (IDW RH HFA 1.004)), as promulgated by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer in Deutschland e.V. – IDW) and in accordance with the ESMA Guidance on disclosure requirements under the Prospectus Regulations issued on 4 March 2021.

The purpose of the Pro Forma Financial Information is to show the material effects that the Acquisitions and the Loss of Control would have had on the consolidated statement of profit or loss of Vulcan Group as if the Acquisitions and the Loss of Control had taken place on 1 July 2020 and the statement of financial position of Vulcan Group as if the Acquisitions and the Loss of Control were in effect as of 30 June 2021. Among the Acquisitions and the Loss of Control, the Company expects the acquisition by VER GEO of Natürlich Insheim GmbH to have a particularly material impact on the net assets, financial position, and results of the operations of the Company.

1.2.2.4.1 Selected financial information from the pro forma statement of profit or loss

Period from 1 July 2020 to 30 June 2021	Currency Translation	Pro Forma Financial Information
	Vulcan Energy Resources Limited (audited) A\$ thousand	Vulcan Energy Resources Limited (audited) EUR thousand
Revenue from continuing operations	-	7,946
Other income	632	1,093
Profit/(loss) before income tax	(10,745)	(4,976)
Total comprehensive income/(loss) attributable	(10,845)	(5,639)

Three-month period from 1 July 2021 to 30 September 2021	Vulcan Energy Resources Limited (unaudited) EUR thousand	Pro Forma Financial Information EUR thousand
Revenue from continuing operations	109	1,070
Other income	142	150
Profit/(loss) before income tax	(1,519)	(1,703)
Total comprehensive income/(loss) attributable	(2,135)	(2,248)

1.2.2.4.2 Selected financial information from the pro forma statement of financial position

As of 30 June 2021	Historical financial information	Pro Forma Financial Information
	Currency Translation	
	Vulcan Energy Resources Limited (audited) A\$ thousand	Vulcan Energy Resources Limited (audited) EUR thousand
Total assets	131,744	121,612
Total equity	128,985	84,722

As of 30 September 2021	Vulcan Energy Resources Limited (unaudited) EUR thousand	Pro Forma Financial Information EUR thousand

Total assets	206,738	240,151
Total equity	201,860	201,860

1.2.3 What are the key risks that are specific to the issuer?

- Mineral and geothermal energy exploration and development are high-risk undertakings and there is no assurance that Vulcan Group's exploration activities will result in the commercial extraction of lithium or sustainable production of geothermal renewable energy.
- General demand for lithium may decrease as a result of new market or technology developments and other factors. Any such factors resulting in a decrease in the general demand for lithium may have a detrimental effect on Vulcan Group's business.
- Vulcan Group's estimated exploration, development and operating costs are based on certain assumptions and no assurance can be given that Vulcan Group's cost estimates and the underlying assumptions to extract lithium chemicals from brine and renewable geothermal energy on commercially viable terms will be realised in practice.
- Vulcan Group with its limited operating history as an exploration and development business has incurred operating losses since its incorporation. No assurance can be given that Vulcan Group will achieve commercial viability through its projects. Until Vulcan Group is able to realise value from its projects, it will not generate revenues from the production and sale of lithium and is likely to continue to incur ongoing operating losses.
- The resource estimates relating to Vulcan Group's current and future projects are subject to certain assumptions and interpretations which may prove to be inaccurate. Any material deviations may result in alterations to development plans which may, in turn, adversely affect Vulcan Group's operations.
- Vulcan Group's geothermal projects are subject to seismicity risks.
- There is no guarantee that Vulcan Group will be able to obtain all required approvals, licences and permits for lithium and geothermal renewable energy production in time or at all.
- Vulcan Group's projects may face opposition from local residents and other stakeholders, which may result in delays, additional costs, discontinuation of construction or operations and uncertainty.
- Significant future funding will be required by Vulcan Group to support the further implementation of its Zero Carbon Lithium™ Project. If Vulcan Group is unable to obtain additional financing as needed on acceptable terms or at all, it may need to abandon its development plans or reduce and/or change their scope which may, in turn, adversely affect Vulcan Group's operations.
- As it is envisaged to incur significant debt in the future, an increase in interest rates would likely increase Vulcan Group's costs for its future debt financing arrangements.
- Lithium prices are subject to unpredictable fluctuations, driven in part by changes in the balance of global supply and demand. Any decrease in the price of or demand for lithium will have a detrimental effect on Vulcan Group's business.
- Vulcan Group may lose its directors or other key personnel or may be unable to recruit or retain qualified personnel for key positions. Without such directors or key personnel Vulcan Group may not be able to successfully manage, develop and operate its business.
- Vulcan Group's risk management or compliance systems may not have been, or may not be, sufficient to adequately prevent or detect legal, tax and operational risks.

1.3 Key information on the securities

1.3.1 What are the main features of the securities?

The Prospectus relates to 131,645,090 Shares with no par value, being all of the fully paid ordinary shares in the Company.

Number and Nature of Shares - As of the date of this Prospectus, 131,645,090 Shares are outstanding. All of the Shares are fully paid ordinary shares.

ISIN and Denomination - The ISIN of the Shares is AU00000066086 and the Shares are denominated in Australian dollars (A\$).

Rights Attached to the Shares and Transferability - All Shares are governed by the Company's constitution, the Australian Corporations Act, the ASX Listing Rules and Australian general law. All Shares carry full dividend rights from 1 July 2021. Each Share carries one vote at the Company's shareholders' meeting. Except for the restrictions set forth in the lock-up agreements of the Company and certain of the Directors and certain existing shareholders, the Shares are freely transferable, subject to formal requirements, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of either the Australian Corporations Act or the ASX Listing Rules. In the case of insolvency, a person's liability as a shareholder is limited to any amount unpaid on their Shares.

Dividend Policy - The Company does not intend to pay dividends for the foreseeable future. Any future determination as to the payment of dividends by the Company will be at the discretion of the Board of Directors and will depend on the financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Board of Directors.

1.3.2 Where will the securities be traded?

The Company is admitted to the official list of ASX and its Shares are quoted on the securities exchange operated by ASX under the ticker code "VUL". In addition to the existing listing on the ASX, an application has been filed for admission of the Shares to trading on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard) (the "**FSE Listing**") which will result, upon granting of the admission, in a dual-listing of the Shares on ASX and the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

1.3.3 What are the key risks that are specific to the securities?

- Future capital increases could lead to a substantial dilution of shareholders' interests in the Company and their voting rights and may adversely affect the market price of the Shares.
- The market price and trading volume of the Shares could fluctuate considerably, also as between the Australian Securities Exchange and the Frankfurt Stock Exchange, which may result in substantial losses for investors. Differences in market price, trading volume, settlement and clearing systems, trading currencies and transaction costs between the ASX and the FSE may hinder the transferability of the Shares between the ASX and the FSE.

1.4 Key information on the offer of securities and the admission to trading on a regulated market

1.4.1 Under which conditions and timetable can I invest in this security?

Listing - The Company, together with the Listing Agent, has applied for the FSE Listing of the Shares on 8 February 2022. The Shares are expected to be admitted to trading on or about 14 February 2022 without a public offering of Shares in Germany, Australia or any other jurisdiction. Trading of the Shares is expected to commence on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on or about 15 February 2022. The Company's Shares are already quoted on ASX.

1.4.2 Who is the offeror and the person asking for admission to trading?

Admission to Trading - The Company has applied for the FSE Listing. The application has been filed together with the Listing Agent for the purpose of the FSE Listing.

1.4.3 Why is this Prospectus being produced?

Reason for the FSE Listing - The Company intends to pursue the FSE Listing to achieve better access to the capital markets in the geographic region, Germany and Europe, in which the Company's main commercial activities are located.

Material Conflicts of Interest - There are no conflicting interests with respect to the FSE Listing.

2. GERMAN TRANSLATION OF THE SUMMARY / ZUSAMMENFASSUNG DIESES PROSPEKTS

2.1 Einleitung und Warnhinweise

Bezeichnung und internationale Wertpapier-Identifikationsnummer (ISIN) der Wertpapiere – Dieser Prospekt (der "**Prospekt**") bezieht sich auf die bestehenden Stammaktien ohne Nennwert von Vulcan Energy Resources Limited ("**Aktien**") mit der internationalen Wertpapierkennnummer ("**ISIN**") AU0000066086.

Identität und Kontaktdaten des Emittenten, einschließlich der Rechtsträgerkennung (LEI) – Die Emittentin der Aktien ist Vulcan Energy Resources Limited mit Hauptsitz in Perth, Australien (eingetragener Sitz: Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Telefon: +61 8 6189 8767, Website: www.v-er.eu), Rechtsträgerkennung (*legal entity identifier*) ("**LEI**") 8945006OYFHQ9HE4XE54 (im Folgenden die "**Gesellschaft**" und zusammen mit ihren konsolidierten Tochtergesellschaften der "**Vulcan-Konzern**").

Identität und Kontaktdaten der die Zulassung zum Handel an einem Regulierten Markt betragenden Person, einschließlich der Rechtsträgerkennung (LEI) – Die Gesellschaft und Joh. Berenberg, Gossler & Co. KG, Hamburg, Deutschland (Neuer Jungfernstieg 20, 20354 Hamburg, Telefon +49 (0)40 350 600, Website: www.berenberg.de), LEI 529900UC2OD7II24Z667 ("**Berenberg**"), in ihrer Eigenschaft als Börsenzulassungsbeauftragter (der "**Börsenzulassungsbeauftragte**"), haben die Zulassung der Aktien der Gesellschaft zum Handel im regulierten Markt an der Frankfurter Wertpapierbörse und gleichzeitig zum Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) beantragt.

Identität und Kontaktdaten der zuständigen Behörde, die den Prospekt billigt, und Datum der Billigung des Prospekts – Dieser Prospekt wurde von der Bundesanstalt für Finanzdienstleistungsaufsicht ("**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Deutschland, Tel: +49 228 4108 0, www.bafin.de, am 11. Februar 2022 gebilligt. Die BaFin billigt diesen Prospekt lediglich dahingehend, dass er den Anforderungen an die Vollständigkeit, Verständlichkeit und Kohärenz gemäß der Verordnung (EU) 2017/1129 des Europäischen Parlaments und des Rates vom 14. Juni 2017 betreffend den Prospekt, der beim öffentlichen Angebot von Wertpapieren oder bei deren Zulassung zum Handel an einem geregelten Markt zu veröffentlichen ist, und zur Aufhebung der Richtlinie 2003/71/EG in der jeweils geltenden Fassung ("**Prospektverordnung**") entspricht.

Warnhinweise – Diese Zusammenfassung (die "**Zusammenfassung**") sollte als Einführung in diesen Prospekt gelesen werden. Jede Entscheidung, in die Wertpapiere zu investieren, sollte auf der Grundlage einer Prüfung des gesamten Prospekts durch den Anleger erfolgen. Der Anleger könnte sein investiertes Kapital ganz oder teilweise verlieren. Wird ein Gericht mit einer Klage im Zusammenhang mit den im Prospekt enthaltenen Informationen befasst, könnte der klagende Anleger nach nationalem Recht die Kosten für die Übersetzung des Prospekts vor Einleitung des Gerichtsverfahrens tragen müssen. Zivilrechtlich haftet nur derjenige, der die Zusammenfassung einschließlich einer etwaigen Übersetzung davon vorgelegt hat, allerdings nur dann, wenn die Zusammenfassung irreführend, unrichtig oder widersprüchlich ist, wenn sie zusammen mit den anderen Teilen des Prospekts gelesen wird, keine Schlüsselinformationen enthält, die den Anlegern bei der Entscheidung über eine Anlage in diese Wertpapiere helfen sollen, wenn sie zusammen mit den anderen Teilen des Prospekts gelesen wird.

2.2 Basisinformationen über den Emittenten

2.2.1 Wer ist die Emittentin der Wertpapiere?

Angaben zur Emittentin – Die Emittentin ist Vulcan Energy Resources Limited, eine Aktiengesellschaft, die in Australien nach dem australischen Unternehmensgesetz 2001 (Cth) ("**Australisches Unternehmensgesetz**") gegründet wurde und ihren eingetragenen Sitz in Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Australien, hat und australischem Recht unterliegt. Die Gesellschaft wurde in die offizielle Liste der ASX Limited ("**ASX**") aufgenommen. Die Aktien der Gesellschaft werden an der von der ASX betriebenen Wertpapierbörse unter dem Tickerkürzel "VUL" notiert. Der LEI der Gesellschaft lautet 8945006OYFHQ9HE4XE54 und ihre australische Unternehmensnummer ("**ACN**") lautet 624 223 132.

Haupttätigkeiten – Die Gesellschaft ist die Muttergesellschaft des Vulkan-Konzerns. Als Muttergesellschaft des Vulkan-Konzerns nimmt die Gesellschaft Geschäftsführungsaufgaben, strategische Planungsaufgaben und Aufgaben der Öffentlichkeitsarbeit wahr. Der Vulkan-Konzern ist ein australischer Konzern für Lithium Batterie-Chemikalien und erneuerbare Energien, der es sich zum Ziel gesetzt hat, der weltweit erste Produzent von Lithiumchemikalien und erneuerbarer Energie mit einem Netto-Null-Kohlenstoff-Fußabdruck zu werden. Mit seinem Zero Carbon Lithium™ Projekt beabsichtigt der Vulkan-Konzern, die Gewinnung von lithiumreicher geothermischer Sole im Oberrheintal in Deutschland, die Verarbeitung von Lithium durch Elektrolyse zu hochreinem Lithiumhydroxid-Monohydrat und/oder Lithium-Carbonat (das Lithiumgeschäft des Vulkan-Konzerns) und die Produktion von hydrogeothermischer Energie (das Geschäft des Vulkan-Konzerns mit erneuerbaren Energien) zu kombinieren (das "**Zero Carbon Lithium™ Projekt**"). Das Zero Carbon Lithium™ Projekt des Vulkan-Konzerns zielt darauf ab, ein chemisches Produkt aus Lithium in Batteriequalität aus einer kombinierten erneuerbaren geothermischen Energie- und Lithiumressource im Oberrheingraben zu produzieren, bei der es sich, wie in Übereinstimmung mit der Ausgabe 2012 des Australasian Code for Reporting of Exploration Results, Mineral

Resources and Ore Reserves ("**JORC Code**") geschätzt und berichtet, um die geschätzt größte Lithiumressource Europas handelt (Quelle: Vulcan Energy Resources Ltd, ASX Release 15. Dezember 2020; Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study 15. Januar 2021; basierend auf lithiumfokussierten vergleichbaren Unternehmen in Europa mit vergleichbarer Projektgröße und -phase und veröffentlichten Ressourceninformationen). Der Vulcan-Konzern beabsichtigt, den Markt für batteriebetriebene Elektrofahrzeuge ("**BEV**") in Europa zu beliefern, der zu den am schnellsten wachsenden Märkten der Welt gehört (Quelle: S&P Global Platts 1) und derzeit auf Importe von Lithiumchemikalien angewiesen ist, da es keine inländische Versorgung gibt. Das Zero Carbon Lithium™-Projekt wurde von Anfang an so konzipiert, dass es zur gleichzeitigen Dekarbonisierung der deutschen Strom- und Nahwärmenetze und der Lithium-Lieferkette beiträgt, und weist im Vergleich zu allen bisher veröffentlichten Ökobilanzergebnissen den niedrigsten geplanten Kohlenstoff-Fußabdruck in der Lithiumindustrie auf (Quelle: Vulcan Energy Resources Ltd, ASX Release 4 August 2021; Minviro). Ein wesentlicher Bestandteil des Zero Carbon Lithium™-Projekts ist die Verwendung von Thermalwasser als Hauptwärmequelle für die Lithiumextraktion, was bedeutet, dass Lithium mit einem Netto-Null-Kohlenstoff-Fußabdruck aus der Sole extrahiert werden soll, ohne die Umwelt mit Abfallmaterial oder toxischen Substanzen zu belasten, bevor die Sole wieder in ein geschlossenes Kreislaufsystem eingeführt wird. Um seine Lithium- und Geothermie-Explorationsaktivitäten sowie sein Geschäft mit erneuerbaren Energien voranzutreiben, hat der Vulcan-Konzern kürzlich mehrere strategische Akquisitionen in Deutschland getätigt. Insbesondere erwarb der Vulcan-Konzern im Juli 2021 zwei Geothermie-Ingenieurbüros, wodurch der Vulcan-Konzern nunmehr über ein beträchtliches Fachwissen im Bereich der ober- und unterirdischen Geothermie verfügt, und im Dezember 2021 erwarb der Vulcan-Konzern Pfalzwerke geofuture GmbH (jetzt Natürlich Insheim GmbH), eine Gesellschaft, die eine geothermische Erneuerbare-Energie-Anlage besitzt und betreibt und über eine Gewinnungserlaubnis für das Grundstück des Anlagenstandorts in Insheim, Deutschland, verfügt. Darüber hinaus erwarb der Vulcan-Konzern im November 2021 im Rahmen des Zero Carbon Lithium™-Projekts zwei elektrische Tiefbohrgeräte, mit denen die für Tiefengeothermie-Bohrungen im Oberrheintal (Deutschland) erforderliche Zieltiefe erreicht werden kann.

Der Vulcan-Konzern besitzt acht Aufsuchungserlaubnisse im Oberrheingraben in Deutschland, die eine Fläche von 983,77 km² (98.377 Hektar) in den Bundesländern Baden-Württemberg, Rheinland-Pfalz und Hessen umfassen, sowie eine Betriebsgenehmigung für das Geothermiekraftwerk Insheim, wodurch sich die Gesamtfläche der Erlaubnisse auf über 1.000 km² beläuft. Außerdem hält der Vulcan-Konzern eine Aufsuchungserlaubnis mit einer Fläche von 11,46 km² (1.146 Hektar) im Cesano Geothermiefeld im Vulkangebiet Monti Sabatini in Italien, etwa 20 km von der Stadt Rom entfernt. Eine Aufsuchungserlaubnis berechtigt zur Aufsuchung bergfreier Bodenschätze und eine Gewinnungserlaubnis (oder Produktionslizenz) gewährt das Recht zur Gewinnung bergfreier Bodenschätze. Der Vulcan-Konzern befindet sich derzeit in der Explorations- und Entwicklungsphase und strebt die Aufnahme der kommerziellen Produktion bis 2024 in einem ihrer Aufsuchungserlaubnisgebiete an. Dabei macht er sich seine geschützte Methode zur Herstellung von Lithiumhydroxid in Batteriequalität mit einem Netto-Null-Kohlenstoff-Fußabdruck und ohne Verwendung fossiler Brennstoffe für den Gewinnungsprozess zunutze.

Zum Datum dieses Prospekts hat der Vulcan-Konzern mit Umicore N.V. (zwischen 28.000 Tonnen und 42.000 Tonnen Lithiumhydroxid in Batteriequalität), der Renault Group (zwischen 29.000 Tonnen und 49.000 Tonnen Lithiumhydroxid in Batteriequalität), Stellantis N.V. (zwischen 81.000 Tonnen und 99.000 Tonnen Lithiumhydroxid in Batteriequalität), der Volkswagen AG (zwischen 34.000 Tonnen und 42.000 Tonnen Lithiumhydroxid in Batteriequalität) und LG Energy Solution (zwischen 41.000 Tonnen und 50.000 Tonnen Lithiumhydroxid in Batteriequalität) Verträge über den Verkauf von Lithiumhydroxid in Batteriequalität für einen Zeitraum von zunächst fünf bzw. sechs Jahren abgeschlossen, wobei die kommerzielle Lieferung im Jahr 2025 bzw. 2026 beginnen soll. Die im Rahmen dieser fünf Abnahmevereinbarungen zu liefernden Mengen an Lithiumhydroxid übersteigen insgesamt das in der vorläufigen Machbarkeitsstudie ("**PFS**") des Vulcan-Konzerns geschätzte Produktionsziel von 40.000 Tonnen pro Jahr nach Abschluss einer ersten Phase, bestehend aus dem Bau von zwei geothermischen Anlagen und Anlagen zur direkten Lithiumextraktion ("**DLE**") für jede geothermische Anlage sowie einer zentralen Lithiumanlage (Ziel: Beginn der kommerziellen Produktion im Jahr 2024) ("**Phase Eins**"), und einer zweiten Phase, bestehend aus dem Bau von weiteren drei geothermischen Anlagen und weiteren drei DLE-Anlagen und einer zweiten zentralen Lithiumanlage (Ziel: Beginn der kommerziellen Produktion im Jahr 2025) ("**Phase Zwei**"), des Zero Carbon Lithium™-Projekts, vorbehaltlich Änderungen durch die endgültige Machbarkeitsstudie ("**DFS**") des Vulcan-Konzerns. Die DFS, die unter anderem den Aufbau einer Pilotanlage und einer größeren Demonstrationsanlage umfasst, soll voraussichtlich in der zweiten Jahreshälfte 2022 abgeschlossen werden. Darüber hinaus schloss der Vulcan-Konzern im November 2021 einen verbindlichen Abnahmevertrag mit der geox GmbH ("**geox**"), einem Betreiber eines Geothermiekraftwerks in Landau in der Pfalz, über die Bereitstellung von Sole aus dem von geox betriebenen Geothermiekraftwerk für den Vulcan-Konzern zum Zwecke der Gewinnung des in der Sole enthaltenen Lithiums für eine anfängliche Laufzeit von 20 Jahren, wobei der Beginn der Abnahme für 30. Dezember 2024 geplant ist.

Der Vulcan-Konzern ist der Ansicht, dass die folgenden wettbewerblichen Stärken ihm die Umsetzung seiner Geschäftsstrategie ermöglichen und ihn in Zukunft von seinen Konkurrenten unterscheiden werden:

- Klares Ziel und klare Strategie rund um die Umsetzung des weltweit ersten Lithium-Produktionsprojekts mit einem Netto-Null-Kohlenstoff-Fußabdruck;
- Ein ausgewogenes Geschäftsmodell mit zwei geplanten potenziellen Einnahmequellen durch ein Lithiumhydroxidgeschäft und ein Geschäft mit erneuerbaren Energien;

- Zugang zu strategisch günstig gelegener, skalierbarer und nach Einschätzung der Gesellschaft europaweit größter Lithium-Rohstoffressource;
- Potenzial, ein Lithiumhydroxidgeschäft mit sehr niedrigen Betriebskosten zu entwickeln, ausweislich der PFS des Vulcan-Konzerns;
- Gut positioniert, um vom erwarteten dynamischen Übergang zur Elektromobilität und vom Umstieg auf erneuerbare Energien in Europa zu profitieren, indem es ein nachhaltiges Lithiumprodukt aus seinem Zero Carbon Lithium™-Projekt anbieten kann; und
- Zugang zu den Kapitalmärkten, nachgewiesene Fähigkeit zur Beschaffung von Finanzmitteln für die Umsetzung der Geschäftsstrategie und des Zero Carbon Lithium™-Projekts sowie ausgeprägtes internationales Profil.

Der Vulcan-Konzern will der weltweit erste Produzent von Lithiumchemikalien und erneuerbarer Energie mit einem Netto-Null-Kohlenstoff-Fußabdruck werden und strebt die Aufnahme kommerzieller Produktion im Jahr 2024 an. Mit seinem Zero Carbon Lithium™-Projekt beabsichtigt der Vulcan-Konzern, ein chemisches Produkt aus Lithium in Batteriequalität und geothermische Energie aus derselben tiefen Solequelle zu produzieren. Um dies zu erreichen, hat der Vulcan-Konzern eine Strategie entwickelt, die darauf abzielt, seine wettbewerblichen Stärken zu nutzen. Die Schlüsselemente der Strategie des Vulcan-Konzerns sind wie folgt:

- Sicherstellung der Unterstützung von örtlichen Interessengruppen für das Zero Carbon Lithium™-Projekt;
- Unternehmenswachstum durch Investitionen in den Ausbau der Belegschaft des Vulcan-Konzerns;
- Modularer Aufbau, um das Wachstum zu beschleunigen und Störungen zu reduzieren, indem die Erfahrung der Mitarbeiter bei der Projektdurchführung genutzt wird;
- Weitere Verbesserung der Forschungs-, Entwicklungs- und Innovationskapazitäten des Vulcan-Konzerns;
- Weiterhin solide und langjährige Kundenbeziehungen und starke Verbindungen zu den neuesten Entwicklungen in den Lithium-Endmärkten aufbauen; und
- Entwicklung von neuen Lithiumanwendungen und Vorantreiben von Kreislaufwirtschaftsstrategien betreffend Lithium in Übereinstimmung mit den zentralen Nachhaltigkeitswerten des Vulcan-Konzerns.

Konzerngesellschaften – Der Vulcan-Konzern besteht aus der Gesellschaft und ihren zehn hundertprozentigen Tochtergesellschaften: Vulcan Energy Resources Europe Pty Ltd. (Australien), Vulcan Energy Italy Pty Ltd. (Australien), Vulcan Energie Ressourcen GmbH (Deutschland), gec-co Global Engineering & Consulting-Company GmbH (Deutschland), Global Geothermal Holding UG (Deutschland), GeoThermal Engineering GmbH (Deutschland), Vulcan Geothermal GmbH (Deutschland), VER GEO LIO GmbH (Deutschland), VERCANA GmbH (Deutschland) und Natürlich Insheim GmbH (Deutschland).

Hauptanteilseigner – Zum Datum dieses Prospekts halten die folgenden Personen/Gesellschaften (zusammen mit ihren verbundenen Unternehmen) eine maßgebliche Beteiligung* von 5 % oder mehr an den Aktien:

- Dr Francis Wedin (16.458.561 Aktien, d.h. etwa 12,51 %)**)
 - Vivien Enterprises Pte Ltd (7.598.727 Aktien, d. h. ca. 5,77 %)***
 - Hancock Prospecting Pty Ltd ("**HPPL**") und Tochtergesellschaften von HPPL (7.424.534 Aktien, d. h. ca. 5,64 %)****

* Nach australischem Recht hat eine Person eine maßgebliche Beteiligung an einem Wertpapier, unter anderem wenn sie Inhaber dieses Wertpapiers ist, die Verfügungsgewalt über dieses Wertpapier hat oder die Ausübung der Verfügungsgewalt kontrolliert, das Stimmrecht in Bezug auf dieses Wertpapier ausüben kann oder dessen Ausübung kontrolliert oder mehr als 20 % der Stimmrechte einer juristischen Person kontrolliert, die eine maßgebliche Beteiligung an diesem Wertpapier hält.

** Die Aktien, an denen Dr Francis Wedin eine maßgebliche Beteiligung hält, umfassen (i) 15.646.061 Aktien, die von Dr Wedin direkt gehalten werden, und (ii) 812.500 Aktien, die von Magni Associates Pty Ltd. gehalten werden. Katy und Francis Wedin sind die Direktoren von Magni Associates Pty Ltd, das sich zu 100 % im Besitz von Wedin Pty Ltd als Treuhänder des Wedin Family Trust befindet.

*** Die alleinige Gesellschafterin von Vivien Enterprises Pte Ltd ist Joanne Ellen Rezos, die Ehefrau von Herrn Gavin Rezos, und Vivien Enterprises Pte Ltd ist ein verbundenes Unternehmen von Herrn Gavin Rezos.

**** Nach australischem Recht halten Georgina Hope Rinehart und Bianca Hope Rinehart (in ihrer Eigenschaft als Treuhänderin des Hope Margaret Hancock Trust) ebenfalls eine maßgebliche Beteiligung an diesen Aktien, da jede von ihnen mehr als 20 % der Stimmrechte an HPPL hält.

Verwaltungsrat (Board of Directors) – Zum Datum dieses Prospekts sind die Mitglieder des Verwaltungsrats (Board of Directors) der Gesellschaft (der "**Verwaltungsrat**" und seine Mitglieder die "**Verwaltungsratsmitglieder**") Herr Gavin Rezos (nicht geschäftsführender Vorsitzender), Dr Francis Wedin (geschäftsführendes Verwaltungsratsmitglied/CEO), Frau Annie Liu (nicht geschäftsführendes Verwaltungsratsmitglied), Dr Heidi Grön (nicht geschäftsführendes Verwaltungsratsmitglied), Frau Josephine Bush (nicht geschäftsführendes Verwaltungsratsmitglied) und Frau Ranya Alkadamani (nicht geschäftsführendes Verwaltungsratsmitglied).

Abschlussprüfer – Der Abschlussprüfer der Gesellschaft ist RSM Australia Partners, Level 32, 2 The Esplanade, Perth WA 6000, Australien ("**RSM**").

2.2.2 Welche sind die wesentlichen Finanzinformationen über die Emittentin?

Die folgenden Finanzinformationen wurden dem ungeprüften verkürzten konsolidierten Zwischenabschluss der Gesellschaft entnommen oder daraus abgeleitet, der in Übereinstimmung mit den vom Australian Accounting Standards Board ("**AASB**") herausgegebenen Australian Accounting Standards and Interpretations ("**AASI**") und dem Australian Corporations Act zum und für die drei Monate bis zum 30. September 2021 erstellt wurde (der "**konsolidierte Zwischenabschluss September 2021**"), dem geprüften konsolidierten Jahresabschluss der Gesellschaft, der in Übereinstimmung mit dem AASI und dem Australian Corporations Act zum und für das Geschäftsjahr bis zum 30. Juni 2021 erstellt wurde (der "**Konzernabschluss 2021**"), dem geprüften konsolidierten Jahresabschluss der Gesellschaft, der in Übereinstimmung mit dem AASI und dem Australian Corporations Act zum und für das Geschäftsjahr zum 30. Juni 2020 erstellt wurde (der "**Konzernabschluss 2020**") und dem geprüften konsolidierten Jahresabschluss der Gesellschaft, der in Übereinstimmung mit dem AASI und dem Australian Corporations Act zum und für das Geschäftsjahr zum 30. Juni 2019 erstellt wurde (der "**Konzernabschluss 2019**" und zusammen mit dem konsolidierten Abschluss 2021 und dem konsolidierten Abschluss 2020 die "**Konzernabschlüsse**" und die konsolidierten Abschlüsse zusammen mit dem konsolidierten Zwischenabschluss September 2021 die "**konsolidierten Finanzberichte**"). Die konsolidierten Finanzberichte entsprechen den International Financial Reporting Standards ("**IASB IFRS**"), wie sie vom International Accounting Standards Board ("**IASB**") entwickelt und veröffentlicht wurden, und im Falle des konsolidierten Zwischenabschlusses September 2021 den IASB IFRS zur Zwischenberichterstattung (IAS 34). Gemäß Art. 1 a) der Entscheidung der Kommission vom 12. Dezember 2008 (2008/961/EG) sind die IASB IFRS als gleichwertig mit den nach der Verordnung (EG) Nr. 1606/2002 übernommenen IFRS ("**EU-IFRS**") anzusehen, sofern der Anhang des geprüften Abschlusses eine ausdrückliche und uneingeschränkte Erklärung enthält, dass dieser Abschluss den "International Financial Reporting Standards in Übereinstimmung mit IAS 1 Darstellung des Abschlusses" entspricht. Die konsolidierten Abschlüsse wurden von RSM geprüft, die jeweils einen uneingeschränkten Bestätigungsvermerk des unabhängigen Abschlussprüfers erteilt haben.

2.2.2.1 Ausgewählte Finanzinformationen aus der Konzern-Gewinn- und Verlustrechnung

	Dreimonatszeitraum zum 30. September		Geschäftsjahr zum 30. Juni		
	2021	2020	2021	2020	2019
	EUR	EUR	A\$	A\$	A\$
	(ungeprüft)		(geprüft)		
Umsatzerlöse aus laufenden Geschäften	109.202				
Anderes Einkommen	141.955	166.726	631.542	95.342	56.055
Verluste vor Einkommenssteuer	(1.519.322)	(660.339)	(10.744.614)	(3.553.359)	(836.664)
Den Anteilseignern von Vulcan Energy Resources Limited zuzurechnendes					
Gesamtergebnis	(2.135.428)	(718.589)	(10.844.607)	(3.575.375)	(836.664)

2.2.2.2 Ausgewählte Finanzinformationen aus der Konzernbilanz

	Dreimonatszeitraum zum 30. September		Geschäftsjahr zum 30. Juni		
	2021	2020	2021	2020	2019
	EUR	EUR	A\$	A\$	A\$
	(ungeprüft)		(geprüft)		
Gesamtvermögen	206.738.404		131.744.081	9.107.961	3.910.060
Eigenkapital	201.859.906		128.984.547	8.886.039	3.793.116

2.2.2.3 Ausgewählte Finanzinformationen aus der Konzern-Kapitalflussrechnung

	Dreimonatszeitraum zum 30. September		Geschäftsjahr zum 30. Juni		
	2021 EUR	2020 EUR	2021 A\$	2020 A\$	2019 A\$
	(ungeprüft)			(geprüft)	
Nettomittelzufluss/(-abfluss) aus betrieblicher Tätigkeit	(2.047.406)	(47.745)	(2.841.145)	(1.332.049)	(361.507)
Nettomittelzufluss/(-abfluss) aus Investitionstätigkeit	(2.095.247)	(1.388.730)	(7.145.227)	(1.218.732)	(439.281)
Nettomittelzufluss/(-abfluss) aus Finanzierungstätigkeit	119.225.797	672.234	118.267.924	5.645.765	101.875

2.2.2.4 Ausgewählte Finanzinformationen aus den Pro-Forma-Finanzberichten

Vulcan Energie Ressourcen GmbH ("**Vulcan Energie**") erwarb am 2. Juli 2021 die gec-co Global Engineering & Consulting GmbH ("**Gec-co**") und die Geothermal Engineering GmbH ("**GeoT**"). Außerdem erwarb Vulcan Energie am 2. Juli 2021 die Global Geothermal Holding UG ("**GGH**"). Außerdem erwarb die VER GEO LIO GmbH ("**VER GEO**") am 31. Dezember 2021 die Pfalzwerke geofuture GmbH (jetzt Natürlich Insheim GmbH ("**Natürlich Insheim**"). Die Akquisitionen von Gec-co, GeoT und Natürlich Insheim werden im Folgenden als "**Akquisitionen**" bezeichnet. Darüber hinaus verlor die Gesellschaft im Rahmen einer Abspaltung am 17. August 2021 die Kontrolle ("**Kontrollverlust**") über ihre Tochtergesellschaft Kuniko Limited ("**Kuniko**"). Die Gesellschaft behält zunächst einen Anteil von 25,85 % an Kuniko, welcher inzwischen auf 24,34 % verwässert wurde.

Da die Gesellschaft davon ausgeht, dass die Akquisitionen und der Verlust der Kontrolle wesentliche Auswirkungen auf die Vermögens-, Finanz- und Ertragslage der Gesellschaft haben werden, hat die Gesellschaft Pro-forma-Finanzinformationen erstellt, bestehend aus einer Pro-Forma-Bilanz zum 30. Juni 2021 und zum 30. September 2021 sowie einer Pro-Forma-Gewinn- und Verlustrechnung für den Zeitraum vom 1. Juli 2020 bis zum 30. Juni 2021 und für den Dreimonatszeitraum vom 1. Juli 2021 bis zum 30. September 2021 sowie begleitenden Pro-Forma-Anhängen (die "**Pro-Forma-Finanzinformationen**"). Die Pro-Forma-Finanzinformationen wurden auf der Grundlage des IDW Rechnungslegungshinweises: Erstellung von Pro-Forma-Finanzinformationen (IDW RH HFA 1.004) erstellt, wie er vom Institut der Wirtschaftsprüfer in Deutschland e.V. (IDW) veröffentlicht wurde, und in Übereinstimmung mit der ESMA-Leitlinie zu den Offenlegungsanforderungen gemäß der Prospektverordnung vom 4. März 2021.

Der Zweck der Pro-Forma-Finanzinformationen besteht darin, die wesentlichen Auswirkungen aufzuzeigen, die die Akquisitionen und der Kontrollverlust auf die Konzern-Gewinn- und Verlustrechnung des Vulcan-Konzerns gehabt hätten, wenn die Akquisitionen und der Kontrollverlust am 1. Juli 2020 stattgefunden hätten, und die Konzernbilanz des Vulcan-Konzerns, wenn die Akquisitionen und der Kontrollverlust zum 30. Juni 2021 wirksam gewesen wären. Unter den Akquisitionen und dem Kontrollverlust erwartet die Gesellschaft, dass der Erwerb von Natürlich Insheim GmbH durch VER GEO besonders wesentliche Auswirkungen auf die Vermögens-, Finanz- und Ertragslage der Gesellschaft haben wird.

2.2.2.4.1 Ausgewählte Finanzinformationen aus der Pro-Forma-Gewinn- und Verlustrechnung

Zeitraum vom 1. Juli 2020 bis 30. Juni 2021	Währungsumrechnung		Pro-Forma- Finanzinformation
	Vulcan Energy Resources Limited (geprüft) A\$ Tausend	Vulcan Energy Resources Limited (geprüft) EUR Tausend	EUR Tausend
Umsatzerlöse aus laufenden Geschäften	-	-	7.946
Anderes Einkommen	632	395	1.093
Gewinn/(Verlust) vor Einkommenssteuer	(10.745)	(6.726)	(4.976)
Den Anteilseignern von Vulcan Energy Resources Limited zuzurechnendes Gesamtergebnis	(10.845)	(6.789)	(5.639)
Dreimonatszeitraum vom 1. Juli 2021 bis 30. September 2021	Vulcan Energy Resources Limited (ungeprüft) EUR	Pro-Forma-Finanzinformation EUR	
Umsatzerlöse aus laufenden Geschäften	109	1.070	
Anderes Einkommen	142	150	
Gewinn/(Verlust) vor Einkommenssteuer	(1.519)	(1.703)	

Den Anteilseignern von Vulcan Energy
Resources Limited zuzurechnendes
Gesamtergebnis

(2.135)

(2.248)

2.2.2.4.2 Ausgewählte Finanzinformationen aus der Pro-Forma-Konzernbilanz

Zum 30. Juni 2021	Historische Finanzinformationen		Pro-Forma-
	Währungsumrechnung		Finanzinformation
	Vulcan Energy Resources Limited (geprüft) A\$ Tausend	Vulcan Energy Resources Limited (geprüft) EUR Tausend	
Gesamtvermögen	131.744	83.267	EUR Tausend 121.612
Eigenkapital	128.985	81.552	84.722
Zum 30. September 2021	Vulcan Energy Resources Limited (ungeprüft) EUR Tausend	Pro-Forma-Finanzinformation EUR Tausend	
Gesamtvermögen	206.738	240.151	
Eigenkapital	201.860	201.860	

2.2.3 Welche sind die zentralen Risiken, die für die Emittentin spezifisch sind?

- Die Aufsuchung und Gewinnung von Mineralien und geothermischer Energie ist ein risikoreiches Unterfangen und es gibt keine Garantie dafür, dass die Aufsuchungsaktivitäten des Vulcan-Konzerns zu einer kommerziellen Gewinnung von Lithium oder zur nachhaltigen Produktion von erneuerbarer geothermischer Energie führen werden.
- Die allgemeine Nachfrage nach Lithium kann infolge neuer Markt- oder Technologieentwicklungen und anderer Faktoren zurückgehen. Alle diese Faktoren, die zu einem Rückgang der allgemeinen Nachfrage nach Lithium führen, können sich nachteilig auf das Geschäft des Vulcan-Konzerns auswirken.
- Die geschätzten Explorations-, Entwicklungs- und Betriebskosten des Vulcan-Konzerns beruhen auf bestimmten Annahmen, und es kann nicht zugesichert werden, dass die Kostenschätzungen des Vulcan-Konzerns und die zugrunde liegenden Annahmen zur Gewinnung von Lithiumchemikalien aus Sole und erneuerbarer geothermischer Energie zu wirtschaftlich vertretbaren Bedingungen in der Praxis realisiert werden.
- Der Vulcan-Konzern mit kurzer operativer Unternehmensgeschichte als ein Explorations- und Entwicklungsunternehmen hat seit seiner Gründung Betriebsverluste erwirtschaftet. Es ist nicht gesichert, dass der Vulcan-Konzern mit seinen Projekten wirtschaftliche Rentabilität erreichen wird. Solange der Vulcan-Konzern nicht in der Lage ist, den Wert seiner Projekte zu realisieren, wird er keine Einnahmen aus der Produktion und dem Verkauf von Lithium erzielen und wahrscheinlich weiterhin Betriebsverluste erwirtschaften.
- Die Ressourcenschätzungen in Bezug auf die aktuellen und zukünftigen Projekte des Vulcan-Konzerns unterliegen bestimmten Annahmen und Interpretationen, die sich als ungenau erweisen können. Jegliche wesentliche Abweichung kann zu Änderungen der Entwicklungspläne führen, was sich wiederum nachteilig auf die Geschäftstätigkeit des Vulcan-Konzerns auswirken kann.
- Die geothermischen Projekte des Vulcan-Konzerns unterliegen einem Erdbebensrisiko.
- Es gibt keine Garantie dafür, dass der Vulcan-Konzern in der Lage sein wird, alle erforderlichen Genehmigungen, Erlaubnisse und Zulassungen für die Lithium- und geothermische erneuerbare Energieproduktion rechtzeitig oder überhaupt zu erhalten.
- Die Projekte des Vulcan-Konzerns könnten auf den Widerstand von Anwohnern und anderen Interessengruppen stoßen, was zu Verzögerungen, zusätzlichen Kosten, einer Baueinstellung oder einer Einstellung des Betriebs und zu Unsicherheit führen kann.
- Der Vulcan-Konzern wird in Zukunft beträchtliche Finanzmittel benötigen, um die weitere Umsetzung ihres Zero Carbon Lithium™-Projekts zu unterstützen. Sollte der Vulcan-Konzern nicht in der Lage sein, zusätzliche Finanzmittel zu annehmbaren Bedingungen oder überhaupt zu erhalten, könnte er gezwungen sein, seine Entwicklungspläne aufzugeben oder deren Umfang einzuschränken und/oder zu ändern, was sich wiederum nachteilig auf die Geschäftstätigkeit des Vulcan-Konzerns auswirken könnte.

- Da beabsichtigt ist, in der Zukunft erhebliche Schulden zu machen, würde ein Anstieg der Zinssätze die Kosten des Vulcan-Konzerns für seine zukünftigen Fremdfinanzierungsvereinbarungen wahrscheinlich erhöhen.
- Die Lithiumpreise sind unvorhersehbaren Schwankungen unterworfen, die teilweise auf Veränderungen im Verhältnis von globalem Angebot und Nachfrage zurückgehen. Jeder Rückgang des Lithiumpreises oder der Nachfrage nach Lithium wird sich nachteilig auf das Geschäft des Vulcan-Konzerns auswirken.
- Der Vulcan-Konzern könnte seine Direktoren oder anderes Schlüsselpersonal verlieren oder möglicherweise nicht in der Lage sein, qualifiziertes Personal für Schlüsselpositionen zu gewinnen oder zu behalten. Ohne solche Direktoren oder Schlüsselpersonen wäre der Vulcan-Konzern möglicherweise nicht in der Lage, ihr Geschäft erfolgreich zu führen, zu entwickeln und zu betreiben.
- Die Risikomanagement- oder Compliance-Systeme des Vulcan-Konzerns waren oder sind möglicherweise nicht ausreichend, um rechtliche, steuerliche und operative Risiken angemessen zu verhindern oder aufzudecken.

2.3 Basisinformationen über die Wertpapiere

2.3.1 Welche sind die wichtigsten Merkmale der Wertpapiere?

Der Prospekt bezieht sich auf 131.645.090 nennwertlose Aktien, bei denen es sich um alle voll eingezahlten Stammaktien der Gesellschaft handelt ("**Bestehende Aktien**").

Anzahl und Art der Aktien - Zum Datum dieses Prospekts sind 131.645.090 Aktien ausgegeben. Bei allen Aktien handelt es sich um voll eingezahlte Stammaktien.

ISIN und Währung - Die ISIN der Aktien lautet AU0000066086 und die Aktien lauten auf Australische Dollar (A\$).

Mit den Aktien verbundene Rechte und Übertragbarkeit - Alle Aktien unterliegen der Satzung der Gesellschaft, dem Australischen Unternehmensgesetz, den ASX- Börsenzulassungsregeln und dem allgemeinen australischen Recht. Alle Aktien sind ab dem 1. Juli 2021 voll dividendenberechtigt. Jede Aktie gewährt eine Stimme in der Hauptversammlung der Gesellschaft. Abgesehen von den Beschränkungen, die in den Lock-up-Vereinbarungen der Gesellschaft und mit bestimmten Verwaltungsratsmitgliedern sowie bestimmten bestehenden Aktionären festgelegt sind, sind die Aktien frei übertragbar, vorbehaltlich formeller Erfordernisse, dass die Eintragung der Übertragung nicht zu einem Verstoß gegen die Bestimmungen eines australischen Gesetzes führt und dass die Übertragung nicht gegen das australische Unternehmensgesetz oder die ASX-Börsenzulassungsregeln verstößt. Im Falle einer Insolvenz ist die Haftung einer Person als Aktionär auf den Betrag beschränkt, der für ihre Aktien nicht eingezahlt wurde.

Dividendenpolitik - Die Gesellschaft beabsichtigt in absehbarer Zukunft nicht, Dividenden zu zahlen. Jede künftige Entscheidung über die Zahlung von Dividenden durch die Gesellschaft liegt im Ermessen des Verwaltungsrats und hängt von der finanziellen Lage der Gesellschaft, dem künftigen Kapitalbedarf und dem allgemeinen Geschäftsverlauf sowie anderen Faktoren ab, die der Verwaltungsrat für relevant hält.

2.3.2 Wo werden die Wertpapiere gehandelt?

Die Gesellschaft ist zur offiziellen Liste der ASX zugelassen und ihre Aktien sind an der von der ASX betriebenen Wertpapierbörse unter dem Tickercode "VUL" notiert. Zusätzlich zur bestehenden Notierung an der ASX ist ein Antrag auf Zulassung der Aktien zum Handel im Regulierten Markt der Frankfurter Wertpapierbörse und gleichzeitig zum Teilbereich mit weiteren Zulassungsfolgepflichten (Prime Standard) (die "**FWB-Notierung**") gestellt worden, was nach Erteilung der Zulassung zu einer Doppelnotierung der Aktien an der ASX und dem Regulierten Markt der Frankfurter Wertpapierbörse führen wird.

2.3.3 Welche sind die zentralen Risiken, die für die Wertpapiere spezifisch sind?

- Künftige Kapitalerhöhungen könnten zu einer erheblichen Verwässerung der Aktien der Aktionäre an der Gesellschaft und ihrer Stimmrechte führen und sich negativ auf den Marktpreis der Aktien auswirken.
- Der Marktpreis und das Handelsvolumen der Aktien können erheblich schwanken, auch zwischen der australischen Wertpapierbörse und der Frankfurter Wertpapierbörse, was zu erheblichen Verlusten für die Anleger führen kann. Unterschiede im Marktpreis, im Handelsvolumen, in den Abrechnungs- und Clearingsystemen, in den Handelswährungen und in den Transaktionskosten zwischen der ASX und der FWB können die Übertragbarkeit der Aktien zwischen der ASX und der FWB beeinträchtigen.

2.4 Basisinformationen über das Angebot von Wertpapieren und die Zulassung zum Handel an einem regulierten Markt

2.4.1 Zu welchen Konditionen und nach welchem Zeitplan kann ich in dieses Wertpapier investieren?

Börsennotierung – Die Gesellschaft hat zusammen mit dem Börsenzulassungsbeauftragten am 8. Februar 2022 die Börsenzulassung betreffend die Aktien an der FWB beantragt. Die Aktien werden voraussichtlich am oder um den 14. Februar 2022 zum Handel zugelassen, ohne ein öffentliches Angebot von Aktien in Deutschland, Australien oder einem anderen Land durchzuführen. Der Handel der Aktien wird voraussichtlich am oder um den 15. Februar 2022 im regulierten Markt der Frankfurter Wertpapierbörse aufgenommen. Die Aktien der Gesellschaft sind bereits an der ASX notiert.

2.4.2 Wer ist der Anbieter und die die Zulassung zum Handel beantragende Person?

Zulassung zum Handel - Die Gesellschaft hat die Börsenzulassung an der FWB beantragt. Der Antrag wurde zusammen mit dem Börsenzulassungsbeauftragten für die Zwecke der FWB-Notierung gestellt.

2.4.3 Weshalb wird dieser Prospekt erstellt?

Gründe für die FWB-Notierung – Die Gesellschaft beabsichtigt, die Börsennotierung an der FWB anzustreben, um einen besseren Zugang zu den Kapitalmärkten in der geografischen Region Deutschland und Europa zu erhalten, in der sich die Hauptgeschäftsaktivitäten der Gesellschaft befinden.

Wesentliche Interessenkonflikte - Es gibt keine Interessenkonflikte in Bezug auf die FWB-Notierung.

II. MAIN PART OF THE PROSPECTUS

1. RISK FACTORS

*An investment in the shares of Vulcan Energy Resources Limited (hereinafter the "**Company**" and together with its consolidated subsidiaries, "**Vulcan Group**") (each a "**Share**" and together the "**Shares**") is subject to a number of risks. In addition to the other information contained in this prospectus (the "**Prospectus**"), investors should carefully consider the following risks associated with an investment in Shares and Vulcan Group when deciding whether to invest in the Shares.*

According to article 16 of the Prospectus Regulation, the risk factors featured in a prospectus must be limited to risks which are specific to the issuer and/or to the securities and which are material for taking an informed investment decision. The following risk factors are categorised into subcategories based on their respective nature. In each category the two most material risk factors are mentioned first based on the Company's current assessment with respect to the probability of their occurrence and the expected magnitude of their negative impact.

1.1 Industry Specific Risks

1.1.1 Mineral and geothermal energy exploration and development are high-risk undertakings and there is no assurance that Vulcan Group's exploration activities will result in the commercial extraction of lithium or sustainable production of geothermal renewable energy.

Vulcan Group intends to combine the operations of extracting lithium-rich geothermal brines in the Upper Rhine Valley of Germany, of upgrading lithium through electrolysis to a high purity lithium hydroxide monohydrate and/or lithium carbonate (Vulcan Group's lithium business), and the production of hydrogeothermal energy (Vulcan Group's renewable energy business) (the "**Zero Carbon Lithium™ Project**"). As part of its lithium business, Vulcan Group is exploring opportunities to extract lithium-rich geothermal brines at various locations throughout the Upper Rhine Valley of Germany with the aim to produce a battery-quality lithium hydroxide chemical product. With the exception of its recently acquired operational geothermal renewable energy plant, Vulcan Group's property interests are at the exploration and development stage, and the Company is currently targeting – subject to obtaining further necessary funding, permits and further licences – commencement of commercial production of lithium chemicals in 2024. Accordingly, it is not envisaged that Vulcan Group will generate material revenues or realise profits in the lithium business in the short term, and the Company cannot assure you that Vulcan Group will realise profits in its lithium and renewable energy business in the medium to long term or at all. Any future profitability of Vulcan Group's lithium business and renewable energy business will be dependent upon the development of an economically recoverable mineral and renewable energy resource and further exploration and development of other economically recoverable mineral deposits and geothermal resources. The Company cannot assure you of the existence of an economically recoverable mineral or geothermal resource at this time, nor about the quantity or grade of any mineral or energy resource. Any quantity or grade of lithium reserves or geothermal resources the Company indicates on its project areas must be considered as estimates only until such reserves are actually extracted and processed. Any material change in the quantity or grade of lithium reserves or geothermal resources may affect the economic viability of Vulcan Group's projects.

Further, the Company cannot assure you that, even if an economically recoverable mineral and geothermal resource is located on its project areas, any lithium and/or geothermal energy can be commercially extracted from Vulcan Group's property interests. The exploration and development of mineral and geothermal deposits involves a high degree of technical, operational, commercial and financial risk over a significant period of time, which may not be eliminated even with the combination of careful evaluation, experience and knowledge of the management team. It is impossible to ensure that Vulcan Group's current exploration programs will result in profitable commercial lithium and geothermal renewable energy extraction operations. The profitability of Vulcan Group's operations will be, in part, directly related to the cost and success of its exploration and development programs. Higher than expected expenditures may be required to establish reserves which are sufficient for commercial extraction and to construct, complete and install the necessary facilities and infrastructure (including geothermal plants, direct lithium extraction facilities and central processing facilities) in those project areas that are actually developed.

In addition, exploration projects like Vulcan Group's Zero Carbon Lithium™ Project, have no proven operating history upon which to base estimates of future operating costs and capital requirements

and there are no existing operating lithium extraction businesses in the Upper Rhine Valley comparable to Vulcan Group's. Any future estimates of reserves, lithium extraction recoveries or cash operating costs of Vulcan Group's exploration projects, will, to a large extent, be based upon the interpretation of geologic data, obtained from a limited number of sampling techniques and preliminary feasibility studies. Actual operating costs and economic returns of Vulcan Group's exploration projects may materially differ from the costs and returns estimated in the Company's feasibility studies, in particular in the early-stage feasibility studies.

Any of the above developments could result in a delay to entering into the production phase or in not being able to enter into the production phase at all, or could significantly add to the project costs, any of which could have a material adverse effect on Vulcan Group's ability to generate revenues or realise profits from its lithium business and/or renewable energy business and on its business, prospects, financial condition and results of operations.

1.1.2 General demand for lithium may decrease as a result of new market or technology developments and other factors. Any such factors resulting in a decrease in the general demand for lithium may have a detrimental effect on Vulcan Group's business.

Provided it commences commercial production, Vulcan Group intends to generate a substantial majority of its future revenues from the extraction and sale of lithium. If Vulcan Group achieves commercial production of lithium hydroxide and/or lithium carbonate, the marketability of and demand for any chemicals produced may be affected by numerous factors beyond the control of Vulcan Group. These factors include new market developments and technological advancements, each of which may negatively impact the demand for the mineral commodities Vulcan Group may produce. While lithium and its derivatives are currently preferred raw materials for certain industrial applications, such as rechargeable lithium batteries, many materials and technologies are being researched and developed with the goal of making batteries lighter, more efficient and less expensive. Some of these materials and technologies could be successful which could lead to a reduced demand for lithium hydroxide, and, accordingly, adversely affect Vulcan Group's business. For example, more efficient application methods or the development of more desirable substitutes for lithium batteries in electric and hybrid vehicles, consumer electronics and other applications may reduce overall demand for lithium. Also, new technologies may emerge to lower the cost of production for such substitutes which would place cost pressures on Vulcan Group and impact its ability to competitively produce and market lithium. The Company cannot predict which new materials or technologies may ultimately prove to be commercially viable and in what time-frame. In addition, alternatives to lithium may become more economically attractive as global commodity prices shift. Any of these events could adversely affect demand for lithium, thereby resulting in a material adverse effect on the economic feasibility of extracting and processing any mineralisation Vulcan Group discovers.

1.1.3 Vulcan Group's estimated exploration, development and operating costs are based on certain assumptions and no assurance can be given that Vulcan Group's cost estimates and the underlying assumptions to extract lithium chemicals from brine and renewable geothermal energy on commercially viable terms will be realised in practice.

Vulcan Group's exploration costs are based on certain assumptions with respect to the timing and the method of exploration, including the expected advantages of the method used in the Zero Carbon Lithium™ Project over other exploration methods used worldwide. These estimates and assumptions are subject to uncertainties and inflation and, accordingly, the actual costs may materially differ from these estimates and assumptions. There is no guarantee that the cost estimates and the underlying assumptions will be realised in practice or that Vulcan Group will achieve commercial viability through the development of its Zero Carbon Lithium™ Project (see section "1.2.1 Vulcan Group with its limited operating history as an exploration and development business has incurred operating losses since its incorporation. No assurance can be given that Vulcan Group will achieve commercial viability through its projects. Until Vulcan Group is able to realise value from its projects, it will not generate revenues from the production and sale of lithium and is likely to continue to incur ongoing operating losses."). Should the actual costs differ materially from the estimates and assumptions on which Vulcan Group's exploration costs are based, this may materially adversely affect the prospects of Vulcan Group's business and operations.

1.1.4 Mineral exploration and development companies face risks along the entire value chain to extract and produce minerals which may result in substantial

delays or operational shut-downs, may require significant capital outlays or may result in an inadequate return or loss on invested capital.

Mineral exploration and development companies such as the Company operate along a value chain to extract and produce minerals. As a result, such companies face risks along the entire value chain. Current and expected future operations of Vulcan Group include a broad range of activities including exploration, appraisal, development and possible production activities. These activities may be affected by a range of factors, including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation and heat, geological conditions, receiving the necessary approvals from all relevant authorities and parties, seasonal weather patterns and workforce availability, as well as risks arising from unanticipated technical and operational difficulties encountered in extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services, and the ongoing COVID-19 pandemic and any other possible future outbreaks of diseases or pandemics. In addition, if Vulcan Group commences production, its operations may be disrupted by a variety of risks and hazards, many of which are beyond the control of Vulcan Group. Examples of events which could have such an impact include unscheduled plant shutdowns or other processing problems, mechanical failures, the unavailability of materials and equipment or labour, poor or unexpected geological or metallurgical conditions, poor water condition, interruptions to electricity supplies, human error and adverse weather conditions. While the exact effect of these factors cannot be accurately predicted, each of these factors (or a combination thereof) may result in substantial delays or operational shut-downs, may require significant capital outlays or may result in an inadequate return or loss on invested capital. In addition, the materialisation of any such risk may, adversely affect Vulcan Group's future earnings and competitive position and its business, prospects, financial condition and results of operations.

1.1.5 Lithium prices are subject to unpredictable fluctuations, driven in part by changes in the balance of global supply and demand. Any decrease in the price of or demand for lithium will have a detrimental effect on Vulcan Group's business.

Provided it commences commercial production, Vulcan Group intends to generate a substantial majority of its future revenues from the extraction and sale of lithium chemicals, with such sales to be made at prevailing market prices for lithium chemicals, as calculated by reference to market recognised price reporting agencies' contract-based indices. The price of lithium chemicals may, however, fluctuate widely and is affected by numerous factors beyond Vulcan Group's control, including international, economic and political trends, government policies, regulatory developments to promote electric vehicles, currency exchange fluctuations, interest rates, global or regional consumptive patterns, speculative activities, increased production due to new extraction developments and improved extraction and production methods and technological changes in the markets for the end products, such as the market for rechargeable batteries. The general demand for lithium may also be volatile due to factors beyond Vulcan Group's control, including the factors referred to in the previous sentence (see section "1.1.2 General demand for lithium may decrease as a result of new market or technology developments and other factors. Any such factors resulting in a decrease in the general demand for lithium may have a detrimental effect on Vulcan Group's business."). Any decrease in the price of or general demand for lithium chemicals will have an adverse effect on Vulcan Group's future earnings, competitive position, financial viability and results of operations.

1.1.6 Any increase in the production of lithium hydroxide and lithium carbonate from current or new competitors in the lithium markets could adversely affect prices or Vulcan Group's competitive position.

In recent years, new and existing competitors globally have increased the supply of lithium hydroxide and lithium carbonate, which has affected the lithium price. Further production increases could negatively affect prices. There is limited information on the status of new lithium hydroxide production capacity expansion projects being developed by current and potential competitors, particularly in the Company's main market of Europe and, as such, the Company cannot make accurate projections regarding the capacities of possible new entrants into the market and the dates on which they could become operational. If these potential projects are completed in the short term, the increase in lithium supply could adversely affect the market price of lithium, thereby resulting in a material adverse effect on the economic feasibility of extracting and processing lithium chemicals

from brine in Vulcan Group's project areas and reducing or eliminating any reserves Vulcan Group may identify from time to time.

In addition, current and potential competitors may have larger financial resources or governmental support and, accordingly, may be able to launch new or expand existing lithium hydroxide production operations faster or on a broader scale than Vulcan Group. New and existing competitors may also establish themselves in the Upper Rhine Valley of Germany, where Vulcan Group is currently conducting its exploration activities at various locations, and attempt to replicate Vulcan Group's business model of extracting lithium from geothermal brines. Should any of these scenarios materialise, this could have a material adverse effect on the Company's competitive position and future earnings.

1.1.7 Any decrease in the price or demand for geothermal energy may have a detrimental effect on Vulcan Group's business.

Vulcan Group's business model includes developing, owning and operating geothermal plants within its project areas. In December 2021, Vulcan Group acquired Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**")). Natürlich Insheim owns and operates a deep geothermal power plant in Insheim, Germany (the "**Insheim Plant**"). The Insheim Plant produces renewable energy and the revenues from the produced electricity are subject to the subsidised remuneration regime under the German Renewable Energy Act (*Erneuerbare-Energien-Gesetz*) until 2023 for which currently a regulated tariff of EUR cent 25.20 / kWh is paid. The regulated tariff applies for a remuneration period of 20 full years plus the year of commissioning of a geothermal plant (in the case of the Insheim Plant: 2012). After the expiry of this remuneration period in 2033, the Insheim Plant's future revenues will depend upon the applicable market price for renewable energy at that time.

Additionally, Vulcan Group anticipates constructing five additional geothermal plants as part of its Zero Carbon Lithium™ Project. The brine from these plants will be utilised in Vulcan Group's lithium business; however, they will also produce electricity and heat. Vulcan Group intends to use a portion of this heat as an energy supply for its own business, and to sell the remainder of the energy as heat or electricity to the grid and local third-party customers, the latter which Vulcan Group expects will primarily consist of local municipalities and businesses (subject to the existence of necessary infrastructure). Accordingly, provided the Zero Carbon Lithium™ Project reaches commercial production, Vulcan Group's economic exposure to the prices of electricity and heat will increase.

The market prices of energy may fluctuate widely and are affected by numerous factors beyond Vulcan Group's control, including international, economic and political trends, regulatory developments to promote renewable energy, currency exchange fluctuations, interest rates, global or regional consumptive patterns and speculative activities. Any material decrease in price or demand for renewable energy may have an adverse effect on Vulcan Group's earnings.

1.2 Business Risks

1.2.1 Vulcan Group with its limited operating history as an exploration and development business has incurred operating losses since its incorporation. No assurance can be given that Vulcan Group will achieve commercial viability through its projects. Until Vulcan Group is able to realise value from its projects, it will not generate revenues from the production and sale of lithium and is likely to continue to incur ongoing operating losses.

The Company was incorporated in February 2018 and acquired Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd) which held the flagship Zero Carbon Lithium™ Project in September 2019. Vulcan Group has a limited operating and financial history. Vulcan Group is exploring opportunities to extract lithium chemicals and produce geothermal energy from brine at various locations throughout the Upper Rhine Valley of Germany (Zero Carbon Lithium™ Project). As a business which is still in the exploration and development stage, Vulcan Group has not generated any meaningful revenues. Moreover, due to its investments including, in particular, in company acquisitions, acquisition of seismic data, undertaking feasibility studies and pilot testing works, Vulcan Group has incurred significant operating losses. Vulcan Group has so far only carried out a pre-feasibility study ("**PFS**") relating to its Zero Carbon Lithium™ Project. Vulcan Group may therefore at this stage not have sufficient data to address and properly assess the risks frequently encountered by mineral and geothermal companies with a limited operating history, including its ability to:

- establish and develop its Zero Carbon Lithium™ Project;
- complete a definitive feasibility study in a manner that does not delay project timeline materially;
- conduct profitable lithium extraction and processing operations, as well as geothermal renewable energy operations; and
- anticipate and adapt to any changes in relation to government regulation relating to its Zero Carbon Lithium™ Project.

The operations of Vulcan Group may be affected by various factors, including delays with obtaining necessary permits to conduct its business; failure to locate or identify mineral and geothermal deposits; operational failures and delays as a result of exploration and exploitation activities being carried out in geological fault zones; failure to achieve predicted grades in exploration and brine extraction; failure to achieve estimated flow rates and heat from geothermal wells; difficulties in commissioning and operating plant and equipment; mechanical failure or plant breakdown; unanticipated metallurgical problems which may affect extraction rates and costs; adverse weather conditions; industrial and environmental accidents; the ongoing COVID-19 pandemic and any other possible future outbreaks of diseases or pandemics; industrial disputes; and unexpected shortages or increases in the costs of labour, consumables, spare parts, plant and equipment. No assurances can be given that Vulcan Group will achieve commercial viability through the successful exploration and/or processing activities of its Zero Carbon Lithium™ Project.

Vulcan Group is attempting to develop a new type of operation, involving direct extraction of lithium from geothermal brines with a net zero carbon footprint. The Company believes this process is commercially unique, and therefore carries a high degree of risk, and may not technically or commercially succeed. In addition, Vulcan Group's targeted timeline for development of its geothermal and lithium operations is tight, and contemplates that all technical development and scale-up activities will proceed without any delays to permitting or construction. This includes a shorter development timeline than has historically been the case for developing geothermal projects in Germany, and Vulcan Group also has the added complexity of the novel lithium extraction operation (set apart by, among other things, lithium hydroxide production via electrolysis), with even conventional lithium projects worldwide often suffering considerable delays and setbacks. Vulcan Group may not obtain the necessary brine flow rates or may encounter difficulties surrounding the timely completion of the construction of geothermal wells.

The prospects of Vulcan Group must be considered in light of the risks, expenses and difficulties frequently encountered by companies in their early stage of feasibility, which have a high level of inherent uncertainty. No assurance can be given that Vulcan Group will achieve commercial viability through the successful exploration and/or processing of its Zero Carbon Lithium™ Project. Until Vulcan Group is able to realise value from its Zero Carbon Lithium™ Project, it is likely to continue to incur ongoing operating losses.

1.2.2 The resource estimates relating to Vulcan Group's current and future projects are subject to certain assumptions and interpretations which may prove to be inaccurate. Any material deviations may result in alterations to development plans which may, in turn, adversely affect Vulcan Group's operations.

Technical studies (such as pre-feasibility studies and definitive feasibility studies) are often used to demonstrate the technical and economic viability of a mineral deposit. Typically, a company will first undertake a "preliminary feasibility study" (or "pre-feasibility study") of a mineral deposit to determine what portion of the mineral resources may be converted to ore reserves. Following the preliminary feasibility study, a company may undertake further technical and economic studies of the project (generally known as a "definitive feasibility study") to demonstrate that, at the time of reporting, the project is economically mineable. A "definitive feasibility study" is of a higher level of confidence than a pre-feasibility study, and the results of the study often serve as the basis for a final decision by the company to proceed with, or a financial institution to finance, the development of the project. Both pre-feasibility studies and definitive feasibility studies include economic and financial analyses based on certain assumptions relating to extraction, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors, as well as any other relevant factors as determined by a qualified minerals industry professional (known as a "competent person"). Many factors are involved in the determination of the economic viability of a mineral deposit, including the achievement of satisfactory ore reserve estimates, the level of

estimated metallurgical recoveries, water consumption and water supply, capital and operating cost estimates and the estimate of future metals prices. As a result, technical studies are subject to material uncertainties, in particular in early-stage exploration projects, as in the case of Vulcan Group's Zero Carbon Lithium™ Project. The information relating to resource estimates in this Prospectus is based on Vulcan Group's PFS (a pre-feasibility study) and a competent persons' report prepared by GLJ Ltd. and APEX Geoscience Ltd. ("**Competent Persons' Report**") and is therefore subject to such uncertainties.

Vulcan Group's Zero Carbon Lithium™ Project geologically represents an early-stage exploration and development project. While Vulcan Group has geological information from existing wells within some of its project licence areas, Vulcan Group, in line with standard practice for deep geothermal projects, has not yet drilled a geothermal production well and there are no operating wells that have sampled the brines in its project areas, with the exception of the Insheim Plant which is not included in Vulcan Group's PFS. Accordingly, one uncertainty of Vulcan Group's PFS relates to the lack of current access to deep-seated subsurface brine within the boundaries of Vulcan Energy's licences. This has led to several assumptions in the resource estimation process in Vulcan Group's PFS, such as porosity measurements or water consumption. In deep geothermal brine projects in the Upper Rhine Valley of Germany, exploration is typically conducted with seismic data acquisition and interpretation, with the first well drilled as the first production or re-injection well. Due to the unique nature of the deep geothermal brine-type deposit, exploration drilling has not been conducted within Vulcan Group's licence areas, with the exception of the Insheim Plant, and Vulcan Group's lithium resources have been estimated using 2D and 3D seismic data, historical oil and gas wells with lithological information inside and outside Vulcan Group's licence areas, and lithium grades measured from proximate geothermal wells outside Vulcan Group's licence areas. Estimates of the tonnes, grade and overall mineral content of a deposit in Vulcan Group's PFS are not precise calculations, but are based on interpretation of samples from sparse brine sampling at off-property wells. Accordingly, localised grade variability may exist, which could result in deviations from production expectations. More advanced data will only be available once the resources have been further explored by first production drilling of geothermal wells and gathering of additional exploration data (including evaluation of geophysical data and enhanced geological analysis to develop a more detailed geological model and resource estimate), the latter of which Vulcan Group intends to execute as part of the normal course of the definitive feasibility study. Since the first exploration wells are also used as production or re-injection wells because of their high capital cost, Vulcan Group will be relying on seismic data analysis and interpretations, and existing well data (for example from the Insheim Plant) for its definitive feasibility study and will only drill its first exploration/production wells after the definitive feasibility study is completed. Until Vulcan Group has drilled its own exploration/production wells, there is an added degree of uncertainty on the lithium grades in the brine, and the brine flow rate of Vulcan Group's planned operation, which could have an adverse effect on the commercial viability of Vulcan Group's proposed activities (including the Zero Carbon Lithium™ Project).

By their very nature, estimates of Vulcan Group's mineral resources and ore reserves are imprecise and depend to some extent on assumptions and interpretations, which may prove to be inaccurate. In addition, such estimates are expressions of judgement based on knowledge, experience and industry practice. Estimates which were valid when originally calculated may alter significantly when new information or techniques become available. As further information becomes available through additional fieldwork and analysis, the estimates are likely to change. This may result in alterations to development plans which may, in turn, adversely affect Vulcan Group's operations and financial performance and the Company's Share price. In addition, if a project is developed, actual operating results may differ from those anticipated in technical studies (such as pre-feasibility studies and definitive feasibility studies).

1.2.3 There is no guarantee that Vulcan Group will be able to obtain all required approvals, licences and permits for lithium and geothermal renewable energy production in time or at all.

Vulcan Group currently holds all exploration licences required to undertake its exploration programs, and an exploitation licence for geothermal energy at the Insheim Plant. However, many of the lithium and geothermal energy rights and interests held by Vulcan Group are subject to the need for ongoing or new governmental approvals, licences and permits as the project advances and the scope of Vulcan Group's operations changes. For example, Vulcan Group will need, in various locations, permits to conduct seismic exploration and drilling. The granting and renewal of such approvals, licences and permits are, as a practical matter, subject to the discretion of applicable government agencies or officials. Also, governmental approval processes and Vulcan Group's own stakeholder

engagement procedures often allow for a form of participation of the general public which may consume substantial time and cost, and add an element of uncertainty to the process. If the Company pursues development of what it believes to be an economically viable lithium and geothermal energy deposit, it will, among other things, require various approvals, permits and licences before it will be able to produce minerals from the deposit, and will need to satisfy certain environmental approval processes (see section "1.2.4 *Vulcan Group's projects may face opposition from local residents and other stakeholders, which may result in delays, additional costs, discontinuation of construction or operations and uncertainty.*"). The maintenance or issue of any such approvals must be in accordance with the laws of the relevant jurisdiction and, in particular, the relevant mining legislation. Conditions imposed by such legislation must also be complied with.

No guarantee can be given that approvals, licences or permits will be maintained or granted (at all or in a timely fashion), or, if they are maintained or granted, that Vulcan Group will be in a position to comply with all conditions that are imposed or that they will not be challenged by third parties. The approvals, licences or permits may be subject to prior unregistered agreements or transfers or title may be affected by undetected defects or other claims. The materialisation of any of these risks could adversely affect Vulcan Group's operations and financial performance.

1.2.4 Vulcan Group's projects may face opposition from local residents and other stakeholders, which may result in delays, additional costs, discontinuation of construction or operations and uncertainty.

Geothermal renewable energy and mineral exploration, development and extraction businesses, such as that carried out by Vulcan Group, often face concerns and/or opposition from local residents, members of the local community, non-governmental organisations, environmental protection groups or other stakeholders, potentially during all phases of project implementation but particularly during construction and operation, regarding actual or potential breaches of regulatory conditions, health and safety risks, or environment or other issues. Such stakeholders may choose to voice their concerns and opposition during the public consultation and participation process as part of the administrative procedures relating to the granting of approvals, licences and permits or, if unsuccessful, in court, each of which may result in substantial delays, additional costs, reputational risk and uncertainty as to the outcome of such procedures. Moreover, such stakeholders may decide to pursue their interests outside of formal channels by means of public protests, sit-ins or otherwise, in each case resulting in additional delays, costs, reputational risk and uncertainty. For example, in 2021, Vulcan Group's seismic exploration based on its licence near the City of Offenburg (the "**Ortenau Licence**") was met with opposition, which prompted Vulcan Group to pause the application process for conducting the seismic exploration and allocate time to address local stakeholder concerns. Drillings in connection with geothermal projects in the Upper Rhine Valley and the proximity thereof have encountered opposition from and have been discontinued as a result of, inter alia, local opposition. Each such risk, if it materialises, could result in the delayed commencement of operations or the temporary or permanent prevention or discontinuation of operations in their entirety and, thus, adversely affect Vulcan Group's business. Accordingly, the success of Vulcan Group's operations is in part dependent on the support of local and regional stakeholders including, in particular, local communities and civil society.

1.2.5 Vulcan Group has entered into offtake agreements with various customers which rely upon Vulcan Group's ability to produce certain quantities of lithium chemicals to certain specifications within a certain time frame. Should the counterparty of any such offtake agreement terminate such agreement as a result of Vulcan Group's failure to meet these or other obligations, Vulcan Group would be unable to realise the economic benefits of such agreement, which could adversely affect Vulcan Group's operations and financial performance.

Provided Vulcan Group commences commercial production, a substantial majority of its future revenues are intended to be generated from the extraction and sale of lithium chemicals. The lithium chemicals will be marketed and sold through binding offtake agreements concluded with various customers (in some instances, entered into well in advance of Vulcan Group's entering into the production phase). As of the date of this Prospectus, Vulcan Group has entered into agreements for the sale of battery grade lithium hydroxide with five customers. Vulcan Group's ability to generate revenues from any such agreements is subject to certain conditions, risks and uncertainties, which could materially impact the economic value of these agreements to Vulcan Group or even result in their termination. Among these conditions are, inter alia, Vulcan Group's ability to produce lithium chemicals in sufficient quantities and to the required specification in accordance with an agreed

timetable. The offtake agreements entered into by Vulcan Group generally contain termination rights in favour of the counterparty in the event that Vulcan Group fails to produce the agreed-upon quantities of lithium chemicals to the required specification in the timeframe set out therein. There can be no assurance that Vulcan Group will be able to produce such quantities of lithium chemicals at the required specification in the applicable time frame or that Vulcan Group will reach the production phase at all. Delays in achieving the required level of production in the applicable time frame may occur in connection with obtaining necessary permits, failure to locate or identify mineral deposits or failure to achieve predicted grades in exploration and brine extraction (see section "1.2.1 *Vulcan Group with its limited operating history as an exploration and development business has incurred operating losses since its incorporation. No assurance can be given that Vulcan Group will achieve commercial viability through its projects. Until Vulcan Group is able to realise value from its projects, it will not generate revenues from the production and sale of lithium and is likely to continue to incur ongoing operating losses.*"). Should the counterparty to any offtake agreement concluded with Vulcan Group decide to terminate or re-negotiate the terms of such offtake agreement as a result of any such delay or Vulcan Group's inability to produce the agreed-upon quantities of lithium chemicals at the required specification in the pre-agreed time frame, Vulcan Group would be unable to realise the economic benefits of such agreement, which could adversely affect Vulcan Group's operations and financial performance. Also, there can be no assurance that Vulcan Group will be able to enter into new offtake agreements at similar or more favourable terms with other counterparties. Additionally, there is no guarantee that Vulcan Group will be able to enter into a sufficient number of offtake agreements to satisfy Vulcan Group's lithium production capacity on an ongoing basis.

1.2.6 The Company may be unable to achieve the expected benefits from past acquisitions or successfully execute future acquisitions that it may pursue to execute its strategy and development plans.

Since its incorporation, the Company has completed several acquisitions of businesses. In 2018, the Company completed the acquisition of Koppar Resources Europe Pty Ltd (later renamed Kuniko Limited). In 2019, the Company completed the acquisition of Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd). In July 2021, the Company completed the acquisition of Global Geothermal Holding UG ("**GGH**"), which holds an exploration licence for geothermal energy (the "**Taro Licence**") and exploration licence applications for geothermal energy and lithium, near the southwest German cities of Mannheim, Karlsruhe, Speyer and Neustadt. Also in July 2021, the Company completed the acquisition of two engineering companies, GeoThermal Engineering GmbH ("**Geot**"), an engineering company focused on the sub-surface development of deep geothermal projects, and gec-co Global Engineering & Consulting-Company GmbH ("**Gec-co**"), an engineering company focused on the above-surface development of geothermal power and heating plants, in Europe and worldwide. In December 2021, Vulcan Group acquired Natürlich Insheim, which owns and operates the Insheim Plant. The Company may also in the future analyse and ultimately execute potential opportunities regarding acquisitions of existing companies, businesses, assets or technologies. However, there can be no assurance that the Company will be able to discover suitable acquisition targets at reasonable prices or at all. Should the Company be successful in making an acquisition, it may have to incur substantial expenditure, in the form of cash, shares or otherwise, incur debt, take on loss-making business divisions or take on other types of expenses. In particular, any such future acquisitions may result in increased indebtedness, substantial commitment of management capacity and resources and, in cases in which the consideration is fully or partially paid in shares, a dilution of the Company's shareholders. Further, the Company might fail to achieve the capacity expansion, cost savings, synergies or other benefits that it expects to realise from such acquisitions. There is no assurance that the implementation of any future acquisitions will yield benefits to the Company at a level sufficient to justify the expenses incurred in completing such acquisitions. Any integration process following any such acquisition might be complicated by the loss of key personnel, negative changes in the course of ongoing business processes and relationships with customers and employees. As a result, any such integration process may require more time, expenses and management capacity and resources than expected. In addition, the Company may be unable to carry out sufficient due diligence and any failure by the Company to identify, or to correctly assess, all of the problems, issues, liabilities or other shortcomings or challenges of a target company, business or technology, including issues related to intellectual property, data protection, regulatory compliance, accounting practices or employee or customer issues, could harm the Company's business, and the Company could incur extraordinary or unexpected legal, regulatory, contractual, labour or other costs as a consequence of any such acquisition.

1.2.7 *Vulcan Group will be dependent on third-party suppliers and contractors for various services and products as well as on transportation channels and other infrastructure required for its business operations.*

During development, construction and once the Zero Carbon Lithium™ Project advances to the stage of commercial production, Vulcan Group will rely on third-party suppliers and contractors for various goods and services including utilities, electricity for its electrolysis plant, chemicals, operation services and construction services in line with industry practice. Vulcan Group may be unable to monitor the performance of its contractors and other third parties as directly and efficiently as it can its own employees. Therefore, Vulcan Group is exposed to the risk that its third-party service providers fail to perform their obligations, which may in turn adversely affect Vulcan Group's business operations. In addition, qualified contractors and other third parties may not always be readily available when needs for outsourcing arise. If Vulcan Group is unable to hire qualified contractors and other third parties, its ability to complete projects or other contracts could be impaired. If the amounts Vulcan Group is required to pay to contractors and other third parties exceed what has been estimated, Vulcan Group may suffer losses. Outsourcing also exposes Vulcan Group to risks associated with non-performance, delayed performance or sub-standard performance by contractors or other third parties. As a result, Vulcan Group may incur additional expenses due to delays or to higher costs.

Vulcan Group's production operations will be dependent on access to adequate transportation channels and other infrastructure. Vulcan Group will be reliant on readily available and functioning transportation, inter alia, for deliveries to the central lithium plant ("CLP") planned to be constructed at the Höchst Chemical Park (*Industriepark Höchst*), located in Frankfurt am Main, and from the CLP to customers. There can be no assurance that the existing transportation networks will be sufficient to meet Vulcan Group's transportation requirements. Furthermore, any disruption to, or decrease in, the availability or capacity of the transportation networks, such as an earthquake, major rail or highway accidents, strikes, seasonal congestion during holidays or any significant rise in transportation costs, could materially and adversely affect Vulcan Group's ability to deliver its products to customers and have a material adverse effect on its overall processing and manufacturing business and results of operations.

Any of the above events could have a material adverse impact on Vulcan Group's operations, financial performance and reputation.

1.2.8 *Vulcan Group's geothermal projects are subject to seismicity risks.*

Vulcan Group is focused on developing a deep geothermal-lithium brine deposit in the Upper Rhine Valley of Germany. While the geothermal industry in Germany has a good system of controlling seismicity to an acceptable threshold, some geothermal brine projects have been associated with seismicity events beyond the acceptable threshold in the past, which has resulted in projects being shut down or being scrutinised by the competent mining authorities. Should Vulcan Group's projects, once more advanced, cause or be associated with seismicity events, they could be scrutinised by the competent authorities which could issue all necessary orders to reduce resulting risks and to exclude such events going forward. Such orders could potentially include, amongst others, increased seismicity monitoring obligations, operational restrictions or (as preliminary measures or last resort) a partial or temporary, or even a complete shut-down of the relevant projects, depending on the specific circumstances. Furthermore, the operator of the facility is obliged to pay compensation for resulting damages and violations of permit provisions can be penalised as administrative offences or even criminal offences. The materialisation of any of the above risks could disrupt the operations of Vulcan Group and, accordingly, have a material adverse effect on Vulcan Group's operations and financial performance.

1.2.9 *Vulcan Group's geothermal projects are subject to climate change risks.*

There are a number of climate-related factors that may affect the operations and proposed activities of Vulcan Group. Climate change may cause certain physical and environmental risks that cannot be predicted by the Company, including events such as increased severity of weather patterns and incidence of extreme weather events, as well as longer-term physical risks such as shifting climate patterns. In particular, higher temperatures prevailing over increasing periods of time, as a result of the anticipated global warming, may negatively impact the efficiency of the processes in geothermal plants used in the energy production business of Vulcan Group. The materialisation of any of these risks could have a material adverse effect on Vulcan Group's operations and financial performance.

1.2.10 Vulcan Group's operations are subject to supply chain risk and other risks arising from the ongoing COVID-19 pandemic and any other possible future outbreaks of contagious diseases or pandemics, which may have a significant adverse effect on Vulcan Group.

The ongoing COVID-19 pandemic and any other possible future outbreaks of contagious diseases or pandemics may have a significant adverse effect on Vulcan Group. The spread of such diseases amongst Vulcan Group's management, employees, contractors and suppliers, as well as any quarantine and isolation requirements, may affect Vulcan Group's ability to efficiently operate. In particular, the imposition of any mobility restrictions may adversely affect all or parts of the supply chain in the development of Vulcan Group's Zero Carbon Lithium™ Project, such as the materials required for the commercial plant construction, which could cause delays in the development of the Zero Carbon Lithium™ Project and potentially affect the commercial viability of the Zero Carbon Lithium™ Project. For example, Vulcan Group has experienced some delays on construction of its demonstration plant due to supply chain disruption. This risk is exacerbated by the fact that the Zero Carbon Lithium™ Project is located in Germany, whilst Vulcan Group's head office, as well as some of Vulcan Group's key management team members, are located in Perth, Western Australia.

More broadly, Vulcan Group may also be affected by the macroeconomic effects and ensuing financial volatility resulting from the COVID-19 pandemic and any other possible outbreaks of contagious diseases or pandemics. While the final effects of the COVID-19 pandemic or other possible disease outbreaks are difficult to assess, it is possible that they will have a substantial negative effect on the economies in which Vulcan Group operates and could have an adverse effect on Vulcan Group's operations and financial performance.

1.2.11 Vulcan Group may lose its directors or other key personnel or may be unable to recruit or retain qualified personnel for key positions. Without such directors or key personnel Vulcan Group may not be able to successfully manage, develop and operate its business.

Vulcan Group has a strong management team across its different business sectors with longstanding industry experience, experienced non-executive directors as well as a capable and experienced technical team across the fields of geothermal energy development, including geology and engineering, and lithium extraction (chemistry and chemical engineering). The Company believes that Vulcan Group's success greatly depends on the performance of its directors and its other key personnel, including engineers, consultants, managers and other staff, who are experts in the sector and markets in which it operates. In particular, Vulcan Group depends upon the services and the established personal networks of Dr Francis Wedin, the Managing Director/CEO of the Company and a geologist with a background in lithium exploration, and Dr Horst Kreuter, the managing director of Vulcan Energie Ressourcen GmbH ("**Vulcan Energie**"), the Company's direct subsidiary in Germany, and a geologist with an extensive background in geothermal project development, to successfully manage, develop and operate its business.

There can be no assurance that Vulcan Group's efforts to retain and motivate its directors and key employees or attract and retain other highly qualified technical personnel will be successful. Industry demand for highly qualified technical personnel, especially in the lithium sector, exceeds the number of personnel available, and the competition for attracting and retaining these employees is intense. Competition for qualified staff is particularly intense in Germany, where Vulcan Group employs 115 employees (full-time equivalents) as of the date of this Prospectus, and salaries paid to such staff in Germany are relatively high compared to other jurisdictions. The loss of any directors or key employees, or failure to attract new qualified employees, including qualified technical personnel, could impair Vulcan Group's further development. In order to achieve its strategic goals, Vulcan Group is targeting an increase in staff to roughly four times the current size of the workforce over the next three to five years. If Vulcan Group is unable to attract personnel to meet these requirements, it may be unable to achieve its strategy in the time frame contemplated.

1.2.12 Vulcan Group could incur substantial losses from damage not covered by, or exceeding the coverage limits of, its insurance policies.

While Vulcan Group is insured against fire, natural disasters, operational interruptions, enterprise accident and third-party liability, its insurance policies are subject to exclusions and limitations of liability both in amount and with respect to the insured events. As a result, Vulcan Group's facilities or its employees may suffer physical damage resulting in losses that may not be covered by

insurance, either fully or at all. In addition, there are certain types of losses, generally of a catastrophic nature or pandemic events, that may be uninsurable or are not economically insurable.

There can be no assurance that Vulcan Group's assessment that it is sufficiently insured in accordance with industry practice against contingencies is accurate. In addition, there can be no assurance that Vulcan Group will be able to maintain its current level and scope of coverage or obtain replacement insurance on acceptable terms or at all. Should an uninsured loss or a loss in excess of insured limits occur, Vulcan Group may lose capital invested or revenues or incur substantial costs which will not be recouped. Even where Vulcan Group has obtained sufficient insurance coverage, its insurance providers could become insolvent, requiring Vulcan Group to bear any liabilities and losses. If Vulcan Group suffers a loss or incurs a liability against which it is uninsured or insufficiently insured, this could adversely affect Vulcan Group's business, net assets, financial condition, cash flow, and results of operations.

1.3 Financing Risks and Financial Disclosure Risks

1.3.1 Significant future funding will be required by Vulcan Group to support the further implementation of its Zero Carbon Lithium™ Project. If Vulcan Group is unable to obtain additional financing as needed on acceptable terms or at all, it may need to abandon its development plans or reduce and/or change their scope which may, in turn, adversely affect Vulcan Group's operations.

Significant future funding will be required by Vulcan Group to support the further implementation of its Zero Carbon Lithium™ Project. According to Vulcan Group's PFS, such funding is estimated to amount to approximately EUR 700 million (including contingencies) for the development of a first phase, consisting of the construction of two geothermal plants and direct lithium extraction ("**DLE**") plants for each geothermal plant and a central lithium plant (targeting commercial production in 2024) ("**Phase One**"), and a further EUR 1,138 million (including contingencies) for the development of a second phase, consisting of the construction of three additional geothermal plants and three additional DLE plants and a second central lithium plant (targeting commercial production in 2025) ("**Phase Two**"), subject to change as part of further updates of Vulcan Group's PFS and of Vulcan Group's DFS. However, the exact amount of future capital requirements may significantly deviate from Vulcan Group's estimates, and additional funds may be needed to fully develop the Zero Carbon Lithium™ Project and drill-out, extract and process the lithium and geothermal energy (see section "*1.1.1 Mineral and geothermal energy exploration and development are high-risk undertakings and there is no assurance that Vulcan Group's exploration activities will result in the commercial extraction of lithium or sustainable production of geothermal renewable energy.*"). Vulcan Group expects to finance the Zero Carbon Lithium™ Project through a combination of green financing and equity, syndicated senior debt, hybrid debt and equity at the project level. The ability to develop the Zero Carbon Lithium™ Project will depend on the future availability of further funding.

Management will consider the most appropriate options for obtaining further funding at the relevant times. Any additional equity financing may be dilutive to the Company's shareholders, and debt financing, if available at acceptable terms or at all, may involve restrictions on financing and operating activities, including the future potential payment of dividends, and result in a material interest expense. If Vulcan Group is unable to obtain additional financing as needed on acceptable terms or at all, it may be required to reduce the scope of its development plans which may, in turn, adversely affect Vulcan Group's operations.

1.3.2 As it is envisaged to incur significant debt in the future, an increase in interest rates would likely increase Vulcan Group's costs for its future debt financing arrangements.

Historically, Vulcan Group's finance costs have been minimal. Significant future funding will, however, be required by Vulcan Group to support the further implementation of its Zero Carbon Lithium™ Project. The Company anticipates that the proportionate mix of debt and equity financing will vary depending on the part of the business to which the funding relates. Based on Vulcan Group's PFS, and subject to change as part of further updates of Vulcan Group's PFS and of Vulcan Group's DFS, the Company expects the funding for the development of the renewable energy business (which represents a more mature industry) to amount to approximately EUR 226 million of the Phase One funding requirement, with funding for the development of the lithium business expected to amount to approximately EUR 474 million of the Phase One funding requirement. In addition, the Company expects the funding for the development of the renewable energy business to amount to approximately EUR 438 million of the Phase Two funding requirement and the funding for the

development of the lithium business to amount to approximately EUR 700 million of the Phase Two funding requirement. Each of these funding requirements is expected to be comprised of a combination of debt and equity financing. Although Vulcan Group has not yet entered into or agreed the terms of any debt facility, the Company expects that, once entered into, Vulcan Group will have a material interest expense, which may be at a variable rate. As such, the amount of interest payable by the Company would ultimately be a function of the prevailing interest rates available to Vulcan Group. A material increase in interest rates during the development phase or once commercial production commences could ultimately lead to a higher interest expense than that which is currently forecast. In the absence of any material revenue before the commencement of commercial production, these finance costs would generate additional losses before taxation for the foreseeable future. These losses may be compounded if the Company is forced to incur more debt than currently expected, for example, if the Company is required to finance cost overruns in connection with the Zero Carbon Lithium™ Project.

1.3.3 Vulcan Group is exposed to foreign currency exchange risks.

Vulcan Group's Consolidated Annual Financial Statements included in this Prospectus are presented in Australian dollars, which was the Company's presentational currency until the end of the financial year ended 30 June 2021. Therefore, Vulcan Group has had significant translational exchange rate risk as a result of its presentational currency being Australian dollars while a material part of its business is carried out in currencies other than Australian dollar, in particular in euro as the material assets of Vulcan Group are located in Germany.

Vulcan Group announced the change of its presentational currency to euro for all future reporting following the end of the financial year ended 30 June 2021. Following the change of Vulcan Group's presentational currency to euro, the translational exchange rate risk mainly relates to cash held by Vulcan Group in Australian dollars. Although Vulcan Group has hedged a significant portion of this residual exchange rate risk in relation to Australian dollar cash reserves through the conversion of Australian dollar reserves into euro, it has retained approximately A\$87 million in Australian dollar cash reserves as of the date of the Prospectus.

Vulcan Group expects that lithium hydroxide sales will be principally to European customers and denominated in EUR (which is Vulcan Group's presentational currency from the financial year ending 30 June 2022), although it is possible that Vulcan Group may export a portion of its lithium hydroxide outside of Europe, in which case the associated revenues may be denominated in other currencies, principally the US dollar. Vulcan Group's costs have to date been incurred in a combination of Australian dollars, euro and Norwegian krone (the latter relating mainly to the Kuniko business); however, as Vulcan Group's Zero Carbon Lithium™ Project in Germany ramps up towards construction and production, Vulcan Group's costs may increasingly be incurred in euro. Until the change of Vulcan Group's presentational currency to euro, Vulcan Group's financial performance was, therefore, subject to fluctuations as a result of foreign currency exchange rate movements whenever financial information was translated from non-Australian dollar currencies and, subsequent to the change of Vulcan Group's presentational currency to euro, Vulcan Group's financial performance is subject to the translation of financial information from non-euro currencies.

In addition to the translational impact of exchange rate fluctuations, Vulcan Group is exposed to transactional exchange rate risk, which arises as a result of payments Vulcan Group makes or receives in local currencies. For the financial year ended 30 June 2020 and the financial year ended 30 June 2021 (during which years Vulcan Group did not earn material revenue), approximately nil and 52%, respectively, of Vulcan Group's revenue was earned in currencies other than Australian dollars and approximately 10% and 13%, respectively, of Vulcan Group's expenses were incurred in currencies other than Australian dollars. Vulcan Group expects that, going forward, a degree of transactional exchange rate risk will remain as certain materials will need to be imported from outside the euro area, with costs in currencies other than euro.

Moreover, pricing under the offtake agreements concluded by Vulcan Group is a mix of fixed price and indexation based on market prices calculated by reference to certain indices. The indices commonly used are Price Reporting Agency ("PRA") contract indices as provided by, for example, Fastmarkets. Both indices are currently quoted in US dollars, exposing Vulcan Group to a transactional exchange rate risk. While Vulcan Group expects that by the time it commences commercial production indices quotes in euro may become available for the European market, there can be no assurance that this will be the case. Foreign currency transactions are translated into the functional currency 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 period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

1.4 Regulatory Risks

1.4.1 Vulcan Group's risk management or compliance systems may not have been, or may not be, sufficient to adequately prevent or detect legal, tax and operational risks.

Vulcan Group's business is subject to various laws and regulations relating to, among other things, compliance with capital markets, environmental, mining, energy, antitrust, data protection, employment and tax laws and regulations. While Vulcan Group is not aware of any material breaches of applicable laws and regulations, it can neither guarantee that it has always been in full compliance with such laws and regulations in the past in the jurisdictions in which it operates, nor that it will be able to fully comply with them in the future. Vulcan Group is reliant on the compliance of its directors and employees with applicable laws and compliance policies implemented by Vulcan Group and there can be no assurance that directors or employees of Vulcan Group or third parties acting on Vulcan Group's behalf, have not engaged in or will not engage in criminal, unlawful or unethical behaviour. Existing risk management and internal compliance procedures and controls may not be sufficient to prevent or detect inadequate practices, fraud or violations of law by its directors, its employees or third parties acting on its behalf. The laws and regulations in the areas and jurisdictions in which Vulcan Group currently operates or may operate in the future are evolving. Consequently, such laws and regulations may change and sometimes may conflict with each other, making it more difficult to observe and comply with them. Moreover, following the dual listing in Germany, the Company will be subject to additional requirements which will require it to enhance its compliance procedures and controls. Revising or enhancing risk management and internal compliance procedures and controls to accommodate changed or additional laws and regulations may require the Company to incur significant cost and take significant management time, and there can be no assurance that the procedures and controls will adequately protect the Company from legal and operational risks.

In addition, effective internal controls are necessary for Vulcan Group to provide accurate and reliable financial reports. However, an internal control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the internal control system are met. Accordingly, there can be no assurance that all issues will be detected and Vulcan Group cannot be certain that it will be successful in maintaining adequate internal control over its financial reporting and financial processes. Furthermore, Vulcan Group will be required to comply with stringent obligations in connection with the planned admission of its Shares to trading on the regulated market in Germany. As Vulcan Group continues to grow its business, its internal controls will need to become more complex and it will require more resources to ensure its internal controls remain effective. Additionally, the existence of any material weakness or significant deficiencies could require management to devote significant time and incur significant expense to remediate any such material weaknesses or significant deficiencies and management may not be able to remediate any such material weaknesses or significant deficiencies in a timely manner. If Vulcan Group's internal controls are insufficient to prevent errors in Vulcan Group's financial statements, it would be required to restate its financial statements, causing it to fail to meet its reporting obligations and potentially causing shareholders to lose confidence in its reported financial information, all of which could have an adverse effect on the price of the Shares as well as Vulcan Group's reputation, business, net assets, financial condition, cash flow, and results of operations. This could also cause the price of the Shares to fall, in which case investors could lose some or all of their investment.

Inadequate risk management or compliance measures may cause irregularities that could lead to, among other things, losses or delays in the development of Vulcan Group's business, or to official investigations or third-party claims against Vulcan Group, which in turn could have significant financial, reputational and other consequences. These consequences could include significant penalties, damage claims and sanctions, including sanctions imposed by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) in connection with potential breaches of post-listing obligations, as well as considerable damage to Vulcan Group's reputation. If Vulcan Group suffered any of these consequences, it could have an adverse effect on its business, net assets, financial condition, cash flow, and results of operations.

1.4.2 Non-compliance with existing laws and regulations, in particular environmental laws or foreign investment laws, or changes in any such laws

and regulations could result in Vulcan Group incurring costs in order to take additional steps to ensure future compliance.

As a group operating in more than one jurisdiction, Vulcan Group is subject to Australian, European Union, German and other national and local laws, regulations and ordinances. Vulcan Group must observe a large number of different regulatory requirements. For its operations Vulcan Group is required to obtain and hold various permits. The laws and regulations that Vulcan Group is subject to change frequently, evolve constantly and may become more stringent. Vulcan Group may be required to incur significant costs and devote significant management time to adapting its exploration or production processes and operating policies to changes in applicable laws, and regulations and there can be no assurance that its efforts will ensure it is in compliance with such laws and regulations. If Vulcan Group does not comply with existing, changed or new laws and regulations, it may be required to take remedial actions that could be costly and time consuming, and it may also be subject to fines, administrative penalties, claims for damages and, potentially, criminal charges.

As with most mineral exploration projects, renewable energy projects and brine extraction operations, Vulcan Group's activities are expected to have some impact on the environment, particularly if advanced exploration or lithium processing proceeds. Many of the activities and operations of Vulcan Group are environmentally sensitive and cannot be carried out without prior approval from all relevant authorities and compliance with all relevant laws and regulations. Violations of environmental laws and regulations may lead to significant sanctions including the shutdown of affected facilities and administrative fines and could also result in payment of damages to affected parties. Environmental legislation is evolving in a manner that may require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects, and a heightened degree of responsibility for renewable energy, brine and mineral extraction companies and their directors and employees. As Vulcan Group is attempting a new process of extracting lithium from geothermal brine, of which there are no comparable operating commercial precedents in Germany, there are significant unknowns with regard to the permitting process and duration with authorities.

In particular, the disposal of mineral production and process waste and brine re-injection are under constant legislative scrutiny and regulation. There is a risk that environmental laws and regulations become more onerous making Vulcan Group's operations more expensive. Approvals are required for land clearing and for ground disturbing activities. Delays in obtaining such approvals can result in the delay to anticipated exploration programmes or brine production activities.

Also, extractive businesses, such as the business carried out by Vulcan Group, often face concerns or opposition from local residents and other stakeholders regarding actual or potential breaches of conditions, risks to human health or the environment or other issues which are voiced in public participation processes or otherwise (see section "1.2.4 *Vulcan Group's projects may face opposition from local residents and other stakeholders, which may result in delays, additional costs, discontinuation of construction or operations and uncertainty.*") and may consume substantial time and cost and cause reputational risk and uncertainty.

In addition, as the Company is an Australian company and its operating subsidiaries and significant assets are based in Germany, Vulcan Group's assets are subject to risks with regard to their extraterritoriality such as changes in laws, practices and policies in the relevant jurisdictions, including laws that deal with overseas investors. In particular, changes to investment policies and legislation or a shift in political attitude may adversely affect Vulcan Group's operations and profitability. In particular, while there are currently no restrictions on the foreign ownership of mineral extraction companies in Germany, there can be no assurance that the requirements of the various governments in respect of foreign ownership and control of mining companies will not change. It is not possible for Vulcan Group to accurately predict such developments or changes in laws or policy or to what extent any such developments or changes may have a material adverse effect on Vulcan Group's operations.

The occurrence of any of these risks could adversely affect Vulcan Group's business, net assets, financial condition, cash flow, and results of operations.

1.5 Legal and Tax Risks

1.5.1 Vulcan Group is exposed to risks from potential future litigation and other legal and regulatory actions and risks, and could incur significant liabilities and substantial legal fees.

Whilst Vulcan Group is not aware of any current or anticipated litigation, Vulcan Group may become a party to legal disputes, administrative proceedings and government investigations. Such legal disputes, proceedings and investigations may, in particular, arise from its relationships with its contractual counterparties, end-customers and public authorities and could allege, among other things, breaches of contract, tort or the failure to comply with applicable laws and regulations. There may also be investigations by governmental authorities into circumstances of which Vulcan Group is not currently aware or which may arise in the future, including possible regulatory and environmental complaints, licencing challenges or criminal proceedings.

If Vulcan Group were to be found liable under any such claims, lawsuits or investigations it might be required to pay damages or fines and to take, or refrain from taking, certain actions and it could incur substantial costs and divert substantial amounts of management's time in dealing with them, even if they are unsuccessful, any of which could adversely affect its business, net assets, financial condition, cash flow, and results of operations.

1.5.2 Vulcan Group might be unable to adequately protect its intellectual property rights.

Vulcan Group believes its know-how and proprietary technology is critical to its success. It has sought protection of its proprietary technology through obtaining a German utility patent, and filing an application for a Patent Cooperation Treaty (PCT) (international) patent. Vulcan Group also relies on trade secret protection through non-disclosure agreements and other methods to protect its proprietary rights. Vulcan Group has also filed extensive trade mark applications for its brands in Europe, the US, Canada, China and Japan. Vulcan Group is subject to a number of risks in adequately protecting its intellectual property, including that:

- Vulcan Group might not be able to obtain effective intellectual property protection;
- Vulcan Group may be required to expend significant resources (including financial, managerial and operational resources) to monitor and protect its intellectual property rights;
- any of Vulcan Group's intellectual property rights could be challenged or invalidated through administrative processes or litigation;
- Vulcan Group may not discover any infringement or violation of its intellectual property rights by a third party, or the extent of any such infringement or other violation, or, to the extent discovered, may not be successful in any claims or litigation against that third party; and
- Vulcan Group's competitors may independently develop or otherwise acquire equivalent or superior technology or intellectual property rights.

In addition, Vulcan Group may inadvertently infringe the intellectual property rights of third parties. The realisation of any such risks, alone or in combination, could have a material adverse effect on Vulcan Group's operations or financial performance.

1.5.3 Vulcan Group is currently subject to the tax laws and regulations of Australia and Germany. Its tax burden may increase as a consequence of current or future tax assessments or court proceedings in connection with changes in domestic or foreign tax laws and double taxation treaties or changes in the application or interpretation thereof. Vulcan Group's tax burden may also increase should it be considered tax resident of Germany, the UK or any other jurisdiction.

Vulcan Group is currently subject to the tax laws and regulations of Australia and Germany. Vulcan Group's tax liability depends on various aspects of tax laws and regulations including Australian and German domestic tax laws and regulations and double taxation treaties concluded, in particular,

between Australia and Germany. Due to Vulcan Group's international business activities, Vulcan Group is constantly exposed to risks arising from the application of international tax concepts used for the purpose of allocating taxing rights between countries, for example the concepts of tax residency or permanent establishment as used, inter alia, in double taxation treaties. Amendments to tax laws and double taxation treaties may have a retroactive effect, and their application or interpretation by tax authorities or courts is subject to change and may not be anticipated by Vulcan Group. Furthermore, tax authorities occasionally limit court decisions to their specific facts by way of non-application decrees which results in additional uncertainties regarding the interpretation of tax law and regulations.

Vulcan Group is subject to regular tax audits in the jurisdictions in which it conducts its operations. As the result of an audit, Vulcan Group may incur additional tax payments as well as penalties and late payment charges resulting from the corresponding tax assessments.

The Company has received initial tax advice from its tax advisor that it is currently considered a tax resident of Australia for domestic tax law purposes. If the Company's central administration or place of effective management were considered not to be located where its registered office is situated, the Company could be regarded as being a tax resident of another jurisdiction. The tax authorities may challenge the Company's central administration or place of effective management both for previous years or in the future. In addition, business needs and the structure of Vulcan Group may in the near term evolve such that the Company becomes tax resident of another jurisdiction. If the tax authorities decide to challenge the Company's central administration or place of effective management or determine that the Company is or has become tax resident of another jurisdiction, there could be unanticipated adverse tax consequences for the Company, but also for the Company's shareholders, possibly on a retroactive basis.

The materialisation of any of these risks could have a material adverse effect on its business, net assets, financial condition, cash flow, and results of operations.

1.5.4 The Company is incorporated in Australia and therefore the shareholders in the Company may be affected by the Australian tax regime which may also change from time to time.

The taxation of income from any future dividend payments, if any, as well as other income, for instance, from the sale of the Shares, may vary depending on the tax residence of the shareholder, as well as the existence and provisions of double tax treaties between a shareholder's country of residence and Australia. Tax provisions applying to particular shareholders may be unfavourable and/or may change in the future, in a way which has an adverse effect on the tax treatment of a shareholder's holding of the Shares.

1.6 Risks related to the Shares

1.6.1 Future capital increases could lead to a substantial dilution of shareholders' interests in the Company and their voting rights and may adversely affect the market price of the Shares.

The Company may in the future seek to raise additional capital through the issuance of additional Shares or other securities with conversion rights (for example, options, performance rights, convertible bonds and other convertible securities) or to implement future stock option or employee incentive plans. The Company may also issue Shares or other securities as consideration for certain acquisitions or investments from time to time. An issuance of additional Shares or securities with a right to convert into equity, or the exercise of a stock option or employee incentive right could potentially affect the market price of Shares.

If such offerings of Shares or other securities with conversion rights are made (other than in respect of any pro rata offer to the Company's existing shareholders), these offerings would dilute the economic and voting rights of the Company's existing shareholders.

Because the timing and nature of any future offering would depend on market conditions at the time of the future offering, the Company cannot predict or estimate the amount, timing or nature of any future offering. Investors in the Company bear the risk that such future offerings could reduce the market price of Shares, in which case investors could lose some or all of their investment, and/or dilute their shareholdings.

While the Company will be subject to the constraints of the ASX Listing Rules regarding the percentage of its capital that it is able to issue in any 12-month period (other than where exceptions apply), existing shareholders may still be diluted as a result of such issues of Shares and fundraisings depending on how they are structured.

1.6.2 Holders of the Shares, in particular holders located in certain jurisdictions including the United States, may not be able to exercise their subscription rights or participate in future equity offerings.

Shareholders may not be able to participate in potential future equity offerings if they do not have the funds necessary to subscribe for new securities or if the subscription rights are excluded. In addition, securities laws of certain jurisdictions may restrict the Company's ability to allow participation by shareholders in future offerings. In particular, shareholders in the United States may not be entitled to participate in future offerings, unless either the Shares and any other securities that are offered and sold are registered under the United States Securities Act of 1933, as amended ("**US Securities Act**"), or the Shares and such other securities are offered pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act. The Company cannot assure prospective investors that it will file any such registration statements, or that any exemption from such overseas securities law requirements would be available to enable US or other shareholders to participate in future offerings or, if available, that the Company will utilise any such exemption, each of which would result in shareholders in restricted jurisdictions being unable to participate in any such future issue. To the extent that US or other holders of the Shares are not able to participate in future equity offerings, their proportional interests in the Company would be diluted. Open market purchases to counteract such dilution could be possible only on terms which are less favourable than those offered to other shareholders in connection with such an equity offering.

1.6.3 The Company is incorporated in Australia and, as a result, it may not be possible for shareholders to enforce civil liability provisions of the securities laws of other countries, including for example the United States, against the Company, its Directors or officers.

The Company is incorporated under the laws of Australia and all of its assets are located outside the United States. In addition, the members of the Board of Directors are non-residents of the United States. As a result, it may not be possible for the holders of the Company's Shares to effect service of process upon its Directors or officers within the United States or to enforce against the Company or its Directors or officers in the United States court judgements based on the civil liability provisions of the securities laws of the United States. Similarly, shareholders located in other jurisdictions in which neither Company's assets are located nor Directors or officers are resident may not be able to effect service of process upon, or to enforce against, the Company or its Directors or officers in the relevant jurisdiction court judgements based on the civil liability provisions of the securities laws of such jurisdiction.

1.7 Risks related to the Listing

1.7.1 The market price and trading volume of the Shares could fluctuate considerably, also as between the ASX and the FSE, which may result in substantial losses for investors. Differences in market price, trading volume, settlement and clearing systems, trading currencies and transaction costs between the ASX and the FSE may hinder the transferability of the Shares between the ASX and the FSE.

Following the FSE Listing, the trading volume and price of the Shares may fluctuate significantly, also as between the ASX and the FSE. Securities markets in general, particularly shares of issuers with a high risk profile (as is the case in respect of Vulcan Group), have been volatile in the past. The price of the Shares quoted on the ASX on the date of the Prospectus may not be indicative of the prevailing market price of the Company's Shares from time to time.

Among other factors, negative reports regarding the Company or the Shares issued by short sellers (so-called "short seller attacks") or other market participants could negatively and significantly impact the price of the Shares or result in large fluctuations in the price or trading volume of the Shares. The Company has been the target of a negative report by a short seller dated 26 October 2021, which led to a substantial decrease in the market price of the Company's Shares, and the Company may also in the future become the target of such reports which may increase the risk of

litigation proceedings being instituted (see section "1.5.1 Vulcan Group is exposed to risks from potential future litigation and other legal and regulatory actions and risks, and could incur significant liabilities and substantial legal fees.").

Further factors that could negatively affect the price of the Shares or result in fluctuations in the price or trading volume of the Shares include (but are not limited to):

- changes in Vulcan Group's implementation of strategy and failure to implement its exploration and production goals within the envisaged timeframe;
- changes in the Company's actual or projected results of operations or those of its competitors;
- changes in earnings projections or failure to meet investors' and analysts' earnings expectations;
- investors' evaluations of the success and effects of the strategy described in this Prospectus;
- any of the risk factors referred to in this Prospectus occurring; and
- large purchases or sales of Shares.

Many of these factors are outside of the Company's control. Additionally, general fluctuations in share prices, particularly prices of shares of companies in the lithium and renewable energy sector, could affect the price of the Company's shares, even where there may not necessarily be a reason for this in the Company's business or performance.

In addition, as a result of the dual-listing of the Company's Shares on the ASX and the FSE following the FSE Listing, the trading volume and price of the Shares may at any time be different on either of the two exchanges. The Shares are quoted and traded in Australian Dollars on the ASX and are quoted and traded in euro on the FSE. Therefore, the price of the Shares on those exchanges may also differ due to exchange rate fluctuations. The Shares traded on the ASX are settled and cleared in A\$ through to the settlement facility known as the 'Clearing House Electronic Sub-register System' ("**CHESS**") operated by ASX Settlement Pty ("**ASX Settlement**") in accordance with the settlement operating rules of ASX Settlement. The shares traded on the FSE are settled and cleared in euro within the Clearstream system. Differences that occur in settlement and clearing systems, trading currencies, transaction costs and other factors may hinder the transferability of the Shares between the ASX and the FSE.

Any or all of these factors could result in material fluctuations in the price of Shares, which could lead to investors getting back less than they invested or a total loss of their investment. The Company does not have a fixed winding-up date and therefore, unless Shareholders vote to wind up the Company, Shareholders will only be able to realise their investment through the sale or transfer of their Shares.

1.7.2 The Company will face additional administrative requirements from its listing on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) which need to be aligned to the Company's listing requirements from its existing listing on the ASX.

After the admission of the Shares to trading on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard) (the "**Listing**"), the Company will in addition to the legal requirements from its existing listing on the securities exchange operated by ASX Limited ("**ASX**") be simultaneously subject to the German legal requirements for public companies listed on the Prime Standard sub-segment of the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) which deviate from the legal requirements as set forth for companies listed on the ASX. These new requirements include periodic financial reporting, regular calls with securities and industry analysts, compliance with the EU market abuse regulation and other public disclosures of information required by statutory laws or the regulations by the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). The Company is expected to be the first Australian company with a listing on the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and there may be challenges for the Company in

combining the listing requirements of both markets in a coherent manner. There can be no assurance that the Company's accounting, legal or other administrative functions will be capable of responding to these additional requirements without difficulties and inefficiencies or significant additional costs. Failure to comply with these requirements could expose the Company to delisting of its Shares on the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), significant fines, sanctions and other regulatory action and potentially civil litigation. This could also cause the price of the Shares to fall, in which case investors could lose some or all of their investment.

The members of the management team will need to devote time to these additional requirements that they could have otherwise devoted to other aspects of managing the Company's operations, and these additional requirements could also entail substantially increased time commitments and costs for the accounting and legal departments and other administrative functions.

1.7.3 If securities analysts do not publish research or reports about the Company, or if they downgrade the Shares or the Company's sector, the share price and trading volume could decline.

The trading market for Shares will be influenced by, among other things, the research and reports that industry or securities analysts publish about the Company, its business, its markets, and its competitors. If any of the analysts who cover the Company issues an adverse opinion regarding the Company, the price of the Shares could decline. The Share price could also be adversely affected by reports about the Company's markets or its competitors, even if the reports do not directly address the Company. If one or more of these analysts cease coverage of the Company or fail to publish reports on it regularly, the Company could lose visibility in the financial markets, which in turn could cause the share price and/or trading volume of Shares to decline, in which case investors could lose some or all of their investment.

1.7.4 Future sales by shareholders of the Company, in particular large shareholders, could depress the price of the Shares.

Except for the restrictions set forth in the lock-up agreements applying to those members of the Company's board of directors (the "**Directors**") who themselves, or the associates of whom, have a relevant interest of over 5% of the Shares on issue (who are precluded for a period of six months from the date of the initial listing of the Company's Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) to sell any Shares without the prior written consent of the Company) and in the lock-up agreements applying to certain existing shareholders, there are no lock-up agreements that preclude shareholders from selling, distributing, transferring or otherwise disposing of any Shares.

Following the expiration of those lock-up agreements, there will be no contractual restriction on the sale of Shares owned by those shareholders. If larger shareholders were to sell substantial amounts of their shareholdings on the public exchange, or if market participants were to become convinced that such sales might occur, this could have adverse effects on the market price of the Shares, in which case investors could lose some or all of their investment.

1.7.5 Prior to the planned FSE Listing, the Shares have outside of Australia only been introduced to trading on the unregulated market (*Freiverkehr*) of the Frankfurt Stock Exchange and other German stock exchanges with limited market liquidity and there is no certainty for the development of an active trading market on the regulated market of the Frankfurt Stock Exchange following the planned FSE Listing.

Prior to the planned admission of the Company's shares to trading on the regulated market (Prime Standard) of the Frankfurt Stock Exchange, the Company's Shares have outside of Australia only been introduced to trading on the unregulated market (*Freiverkehr*) of the Frankfurt Stock Exchange and other German stock exchanges with a limited market liquidity, and there is no certainty that an active trading market in the Company's Shares will develop following the planned FSE Listing. As there has not been significant liquidity in the Company's Shares on these unregulated markets in the past and as the planned FSE Listing is not connected with a public offering of Shares, the market in the Company's Shares on the regulated market of the Frankfurt Stock Exchange may remain illiquid and thus subject to fluctuation. Despite of its concurrent ASX listing, the Company cannot predict the extent to which investor interest will lead to an active trading market on the regulated market of the Frankfurt Stock Exchange or how liquid that market might become. The lack of an active trading market in the Shares on the regulated market of the Frankfurt Stock Exchange could

affect an investor's ability to purchase and sell the Company's Shares at a desired price, at a desired time and/or in a desired quantity.

2. GENERAL INFORMATION

2.1 Responsibility for the content of this Prospectus

Vulcan Energy Resources Limited, whose registered office is at Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Australia, LEI 8945006OYFHQ9HE4XE54, ACN 624 223 132 (hereinafter the "**Company**") and together with its consolidated subsidiaries, "**Vulcan Group**") and Joh. Berenberg, Gossler & Co. KG, Neuer Jungfernstieg 20, 20354 Hamburg, Germany, LEI 529900UC20D7II24Z667 ("**Berenberg**" or the "**Listing Agent**") each assume responsibility for the contents of this prospectus (the "**Prospectus**") pursuant to section 8 of the German Securities Prospectus Act (*Wertpapierprospektgesetz*) in conjunction with Article 11 of Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC, as amended (the "**Prospectus Regulation**") and hereby confirm that, to the best of their knowledge, the information contained in this Prospectus is in accordance with the facts and that the Prospectus makes no omission likely to affect its import.

GLJ Ltd. (Mr Greg Owen P.Eng.), 1920, 401 – 9th Avenue S.W. Calgary, Alberta, Canada T2P 3C5 and APEX Geoscience Ltd. (Mr Roy Eccles P. Geol. and Mr Steven Nicholls MAIG), #100, 11450-160 St. NW Edmonton, Canada ABT5M 3Y7, have given and have not withdrawn their written consent to the inclusion in this Prospectus of the Competent Persons' Report set out in an annex to this Prospectus and have authorised the contents of the Competent Persons' Report as part of this Prospectus for the purposes of item 1.3 of Annex 1 of Commission Delegated Regulation (EU) 2019/980 of 14 March 2019 and have given and have not withdrawn their written consent to the publication of this document with the inclusion herein of the references to their names.

2.2 General disclaimers

If any claims are asserted before a court of law based on the information contained in this Prospectus, the investor appearing as plaintiff may have to bear the costs of translating this Prospectus prior to the commencement of the court proceedings pursuant to the national legislation of the member states of the European Economic Area (the "**EEA**").

The information contained in this Prospectus will not be supplemented subsequent to the date hereof, except for any significant new factor, material mistake or material inaccuracy relating to the information included in this Prospectus that may affect the assessment of the shares and that arises or is noted between the time when this Prospectus is approved and the time when trading of the Company's fully paid ordinary shares (the "**Shares**") on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, on the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) commences, which will be disclosed in a supplement to this Prospectus pursuant to article 23 of the Prospectus Regulation without undue delay. The obligation to supplement the Prospectus pursuant to article 23 of the Prospectus Regulation will no longer apply following the expiration of the validity of this Prospectus at the end of the first day of trading in the Company's Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), currently expected to occur on 15 February 2022.

2.3 Approval of the Prospectus

This Prospectus has been approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht* – "**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Germany, tel.: +49 228 4108 0, www.bafin.de, as the competent authority under the Prospectus Regulation, on 11 February 2022. BaFin only approves this Prospectus as meeting the standards for completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval should not be considered as an endorsement of the Company or of the quality of the Shares that are the subject of this Prospectus. Investors should make their own assessment as to the suitability of investing in the Shares.

2.4 Purpose of this Prospectus

This Prospectus relates to the admission to trading on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment of the regulated market with additional post-admission obligations (Prime

Standard) (the "**FSE Listing**") of 131,645,090 Shares with no par value, being all of the issued Shares in the Company.

2.5 Information on the FSE Listing

2.5.1 Admission to Trading and Reasons for the FSE Listing

The Company is admitted to the official list of ASX and its Shares are quoted on the securities exchange operated by ASX under the ticker code "VUL". In addition to the existing listing on ASX, the Company has applied for admission of its Shares to trading on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard) on 8 February 2022 which will result, upon granting of the admission, in a dual listing of the Shares on the ASX and the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). The Shares are expected to be admitted to trading on or about 14 February 2022. Trading of the Shares is expected to commence on the regulated market segment (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on or about 15 February 2022.

The reason for the additional listing of the Shares on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) is to achieve better access to the capital markets and align its listing to the geographic region in which the Company's main commercial activities are located.

2.5.2 Costs of the FSE Listing

The costs of the Company related to the FSE Listing are expected to amount to approximately EUR 1,750 thousand. Investors will not be charged expenses by the Company or Berenberg. Investors will have to bear customary transaction and handling fees charged by their brokers or other financial institutions through which they hold their securities.

2.5.3 Interest of parties participating in the FSE Listing

In its capacity as Listing Agent, Berenberg coordinates the FSE Listing for the Company and will, upon successful implementation of the FSE Listing, receive a listing fee. As a result of this contractual relationship, Berenberg has a financial interest in the success of the FSE Listing.

In addition, Berenberg or its affiliates may enter into financing arrangements (including swaps, warrants or contracts for differences) with investors in connection with which Berenberg (or its affiliates) may from time to time acquire, hold or dispose of Shares.

Berenberg or its affiliates have, and may from time to time in the future continue to have, business relations with Vulcan Group or may perform services for Vulcan Group in the ordinary course of business for which they have received or may receive customary fees and commissions.

The Company's Directors hold Shares and therefore have a personal interest in the performance of the Company's share price.

None of the aforementioned interests in the FSE Listing constitute a conflict of interests or a potential conflict of interests. Consequently, there are no conflicts of interest with respect to the FSE Listing.

2.6 Forward-looking statements

This Prospectus contains certain forward-looking statements. A forward-looking statement is any statement that does not relate to historical facts or events or to facts or events as of the date of this Prospectus. Forward-looking statements can be identified by the use of forward-looking terminology or subjective assessments including "may", "will", "expect", "plan", "intend", "predict", "estimate", "target", "propose" or "forecasts". This applies, in particular, to statements in this Prospectus containing information on future earnings capacity, plans and expectations regarding Vulcan Group's business, growth and profitability, and the general economic and legal conditions and other factors to which Vulcan Group is exposed.

The forward-looking statements contained in this Prospectus are based on the Company's current estimates and assessments. These forward-looking statements are based on assumptions and are subject to uncertainties and other factors, the occurrence or non-occurrence of which could cause

actual circumstances – including with regard to the assets, business, financial condition and results of operations as well as profitability of the Company – to differ materially from or fail to meet the expectations expressed or implied in the forward-looking statements. Even if future results of the Company meet the expectations expressed herein, they may not be indicative of the results of any succeeding periods. Investors are cautioned not to place undue reliance on these forward-looking statements (particularly in light of the current economic climate and significant volatility, uncertainty and disruption caused by the COVID-19 pandemic).

The forward-looking statements contained in this Prospectus speak only as of the date on which they were made. Investors are advised that neither the Company nor the Listing Agent assume any obligation or intend to, except as required by law, publicly release any updates or revisions to these forward-looking statements to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based or to adjust them in line with future events or developments.

2.7 References regarding mineral resources, ore reserves and production targets

Refer to the Competent Persons' Report (which is included in this Prospectus and has been released to the market together with this Prospectus) for further details about the mineral resources, ore reserves and production targets (including forecast financial information derived from such production targets) included in this Prospectus.

The Company confirms that, in respect of estimates of mineral resources and ore reserves included in this Prospectus:

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

2.8 Notes concerning currency and financial information

This Prospectus contains data denominated in the Australian dollars, euros and US dollars currency. Figures denominated in Australian dollars, euros and US dollars are designated with "A\$", "EUR" and "US\$", respectively, preceding the amount. If figures are denominated in a currency other than the Australian dollars, euros or US dollars, express reference is made in the corresponding figure or figures utilising the respective applicable currency abbreviation.

Some figures and percentages in this Prospectus have been rounded according to established commercial standards, whereby aggregate amounts (totals, sub-totals, differences or amounts in relation thereto) are calculated based on the underlying unrounded amounts. As a result, the aggregate amounts may not correspond in all cases to the corresponding rounded amounts contained in the text and tables. Moreover, in the tables, such rounded figures may under certain circumstances not add up precisely to the total figures which may also be included in the tables. The percentage changes that are stated in the text and the tables have been commercially rounded to a whole number unless stated otherwise. With respect to financial data set out in the Prospectus, a dash ("—") signifies that the relevant figure is not applicable, while a zero ("0") signifies that the relevant figure is applicable but is or has been rounded to zero.

Where financial information contained in tables in this Prospectus is described as "audited", this means that it has been taken from the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2021 (the "**Consolidated Annual Financial Statements 2021**"), the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2020 (the "**Consolidated Annual Financial Statements 2020**") or the audited consolidated annual financial statements of the Company prepared in accordance with AASI and the Australian Corporations Act as of and for the financial year ended 30 June 2019 (the "**Consolidated Annual Financial**

Statements 2019" and together with the Consolidated Annual Financial Statements 2021 and the Consolidated Annual Financial Statements 2020, the "**Consolidated Annual Financial Statements**" and the Consolidated Annual Financial Statements together with the Consolidated Interim Financial Statements September 2021 the "**Consolidated Financial Statements**"). The Consolidated Financial Statements comply with International Financial Reporting Standards ("**IASB IFRS**") as developed and published by the International Accounting Standards Board ("**IASB**"). According to Art. 1 a) of the Commission Decision of 12 December 2008 (2008/961/EC), IASB IFRS are to be regarded as equivalent to the IFRS adopted under Regulation (EC) No 1606/2002 ("**EU IFRS**"), provided that the notes to the audited financial statements contain an explicit and unreserved statement that these financial statements comply with "International Financial Reporting Standards in accordance with IAS 1 Presentation of Financial Statements". Where the financial information in this Prospectus is described as "unaudited", this means that it was not taken from the Consolidated Annual Financial Statements but was either taken or derived from the Consolidated Interim Financial Statements September 2021, the Company's accounting records or internal management reporting systems or is based on calculations of these figures, or recomputed or derived from the abovementioned sources. All information on value increases and decreases (absolute and in percentage terms) and ratios has been calculated by the Company and is unaudited.

2.9 Notes concerning sources of market data and information provided by third parties

This Prospectus contains information sourced from third parties, particularly in the form of sector and market data, calculations and statistics, which are derived from sector reports and studies, commercial publications, and publicly available information. The Company has accurately reproduced information sourced from third parties and, as far as it is aware and able to ascertain from information published by such third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. Investors should nevertheless treat this information with care. Market studies are frequently based on information and assumptions which are potentially neither exact nor appropriate, and their methodology is forward-looking and speculative by its nature. In addition, some of the sources of market data included in this Prospectus were prepared before or at the early stage of the pandemic spread of the COVID-19, and have not been updated for the potential effects of this pandemic. The Company is not able to determine whether the third parties who have prepared such sources will revise their estimates and projections due to the potential impact of the COVID-19 pandemic on future market developments. The Prospectus also contains Company estimates related to third-party market data which are based on published market data or figures derived from publicly accessible sources. Investors should take into account that the Company's estimates are based on such third-party market studies. Without affecting the assumption of responsibility for the content of this Prospectus by the Company and the Listing Agent (see section "2.1 Responsibility for the content of this Prospectus"), the Company and the Listing Agent have not verified the figures, market data and other information on which third parties have based their studies.

The following sources were used for the preparation of this Prospectus:

- Bloomberg, BNEF Summit, Europe's formula for winning the lithium battery value-chain, 17 May 2021, ("**Bloomberg**")
- Canaccord Genuity (Australia) Ltd., Lithium | 2020 recharge - time to call the bottom?, 16 September 2020, <https://canaccordgenuity.bluematrix.com/sellside/EmailDocViewer?encrypt=34d75f67-a205-45db-bd65-e2c1573f9e21&mime=PDF&co=Canaccordgenuity&id=reg.spencer@canaccord.com.au&source=libraryview&htmlToPdf=true> ("**Canaccord 1**")
- Canaccord Genuity (Australia) Ltd., Lithium | 2H'21 recharge – Plaid acceleration., 12 August 2021 ("**Canaccord 2**")
- Clean Energy Wire, Geothermal energy – Germany's largely untapped renewable heat source, 15 June 2020, <https://www.cleanenergywire.org/factsheets/geothermal-energy-germanys-largely-untapped-renewable-heat-source#:~:text=There%20are%20currently%2037%20deep,Rift%2C%20and%20the%20Molasse%20Basin> ("**Clean Energy Wire**")

- The Economist, Lithium battery costs have fallen by 98% in three decades, 31 March 2021, <https://www.economist.com/graphic-detail/2021/03/31/lithium-battery-costs-have-fallen-by-98-in-three-decades> ("**Economist**")
- Fitch Solutions, Inc., EV Battery Chemistry Outlook, 20 May 2021, <https://www.fitchsolutions.com/autos/ev-battery-chemistry-outlook-high-nickel-nmc-lfp-cathode-types-gain-market-share-nm-assbs-eventual-market-disruptors-20-05-2021> ("**Fitch Solutions**")
- Macquarie Group, Lithium Market Outlook Electrifying demand, 12 April 2021 ("**Macquarie**")
- Minviro Ltd., Lithium Hydroxide Monohydrate Life Cycle Assessment Study, 6 January 2020 ("**Minviro**")
- Reuters, EU to target 30 million electric cars by 2030 – draft, 4 December 2020, <https://www.reuters.com/article/us-climate-change-eu-transport-idUSKBN28E2KM>, ("**Reuters**")
- S&P Global Market Intelligence, Top electric vehicle markets dominate lithium-ion battery capacity growth, 16 February 2021, <https://www.spglobal.com/marketintelligence/en/news-insights/blog/top-electric-vehicle-markets-dominate-lithium-ion-battery-capacity-growth> ("**S&P Global Market**")
- S&P Global Platts, Europe overtakes China in EV sales growth in 2020, 20 January 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/coal/012021-europe-overtakes-china-in-ev-sales-growth-in-2020> ("**S&P Global Platts 1**")
- S&P Global Platts, Producers look to 'green' lithium as automakers, investors apply ESG pressure, 3 December 2020, <https://www.spglobal.com/platts/en/market-insights/blogs/metals/120220-green-lithium-carbon-batteries-mining-brine-autos-esg> ("**S&P Global Platts 2**")
- S&P Global Platts, Europe could dominate lithium ion battery supply chain rankings by 2030, 17 May 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/metals/051721-europe-could-dominate-lithium-ion-battery-supply-chain-rankings-by-2030-bnef> ("**S&P Global Platts 3**")
- Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study, 15 January 2021, based on lithium mineral resource estimate technical reports for two licence areas contained in the Zero Carbon Lithium™ Project, prepared by Roy Eccles P. Geol. of APEX Geoscience Ltd, effectively dated 24 November 2019 and 17 January 2020. <https://vul.live.irmau.com/site/PDF/232dbb56-08a7-4f19-aac4-70fd4d11ec97/PFSPresentation> ("**PFS**")
- GLJ Ltd. and APEX Geoscience Ltd., Independent Expert Report for Vulcan Energy Resources Zero Carbon Lithium™ Project, 10 January 2022, set out in an annex to this Prospectus ("**Competent Persons' Report**")

2.10 Documents available for inspection

The documents listed below can be inspected for the duration of the validity of this Prospectus on the Company's website at www.v-er.eu/investor-centre/:

- the Consolidated Annual Financial Statements 2021 as defined under section "2.8 Notes concerning currency and financial information" (under the caption "Annual Report Site");
- the Consolidated Annual Financial Statements 2020 as defined under section "2.8 Notes concerning currency and financial information" (on the "Announcements" sub-site under the caption "Annual Reports"); and

- the Consolidated Annual Financial Statements 2019 as defined under section "2.8 *Notes concerning currency and financial information*" (on the "Announcements" sub-site under the caption "Annual Reports").

The Competent Persons' Report as defined under section "2.9 *Notes concerning sources of market data and information provided by third parties*" is included in this Prospectus.

The Company's future financial reports and interim reports will be available at the Company's offices and will be published on the Company's website at www.v-er.eu/investor-centre/.

A copy of the Company's constitution is available on the Company's website at <https://v-er.eu/corporate-directory-and-governance/> (under the caption "Constitution").

3. INFORMATION ABOUT THE SHARES

3.1 Voting rights, dividend rights, rights in the event of liquidation

As of the date of this Prospectus, the Company has 131,645,090 Shares with no par value outstanding. The 131,645,090 Shares comprise the entire issued share capital of the Company, excluding the Performance Shares detailed in section 12.3.2. The Performance Shares are a class of convertible security that is not quoted on ASX, provides no voting rights or dividend rights (unless they are converted into a Share, as described in section 12.3.2), and is not the subject of this Prospectus or the FSE Listing.

The Shares which are the subject of this Prospectus all carry the same rights, including full dividend rights from 1 July 2021. All Shares are governed by the Company's constitution (the "**Constitution**"), the Australian Corporations Act, the ASX Listing Rules and Australian general law.

Subject to any rights or restrictions for the time being attached to any class or classes of shares, at a general meeting of the Company's shareholders (each a "**Shareholder**"):

- each Shareholder entitled to vote may vote in person or by proxy, attorney or corporate representative;
- on a show of hands, every person present who is a Shareholder or a proxy, attorney or corporate representative of a Shareholder has one vote;
- on a poll, each Shareholder who is present in person or by proxy, attorney or corporate representative has one vote in respect of each Share held by that person, or in respect of which that person is appointed a proxy, attorney or corporate representative (but, in respect of partly paid shares, will have such number of votes as bears the same proportion to the total of such shares registered in the Shareholders' name as the amount paid (not credited) bears to the total amounts paid and payable (excluding amounts credited).

As the Shares are all fully paid, they will not be subject to any calls for money by Directors and will therefore not become liable for forfeiture.

For further information about the rights attaching to Shares, see:

- section "*3.4 Transferability of the Shares*" with respect to the transferability of Shares;
- section "*4.1 Dividend rights*" with respect to dividends;
- section "*12.4 General provisions on changes in the share capital*" with respect to Shareholders' rights to participate in future capital issues;
- section "*12.5 General provisions on changes in share rights*" with respect to the alteration of the rights attaching to Shares; and
- section "*13.3 General meetings of shareholders*" with respect to general meetings of Shareholders.

Full details of the rights attaching to Shares are set out in the Company's Constitution, a copy of which is available on the Company's website at <https://v-er.eu/corporate-directory-and-governance/>.

3.2 Form and representation of the Shares

All of the Shares have been issued as fully paid ordinary shares. The Shares are not represented by a physical share certificate. The Shares are in registered form.

The Shares are currently quoted on the securities exchange operated by ASX. Legal title to the Shares is registered electronically, and transfers of Shares occur electronically pursuant to the settlement facility known as the 'Clearing House Electronic Sub-register System' (CHES) operated by ASX Settlement Pty Limited (ABN 49 008 504 532), of 16-20 Bridge Street, Sydney, New South Wales 2000, Australia ("**ASX Settlement**") in accordance with the settlement operating rules of ASX Settlement.

BNP Paribas Securities Services (Sydney Branch) acts as a local custodian for Clearstream Banking S.A., 42 Avenue JF Kennedy, L-1855 Luxembourg, Luxembourg ("**Clearstream**") in the Australian market, account holding institutions connected to the Clearstream system and, ultimately, investors wishing to trade their Shares on the FSE. Following the completion of the FSE Listing, BNP Paribas Nominees Pty Ltd., Level 6, 60 Castlereagh Street, Sydney NSW 2000, Australia (the "**Custodian**"), acting for BNP Paribas Securities Services (Sydney Branch), will be recorded in the Company's share register as holder of the legal title to Shares transferred to investors on the FSE. As a result, such investors will be beneficial owners of Shares so transferred, holding such Shares through their respective account holding institutions, Clearstream and, ultimately, the Custodian.

Following the completion of the FSE Listing, as a result of the dual-listing of the Company's Shares on the ASX and the FSE, investors will be able to trade the Shares on the ASX and the FSE. Shares traded on the ASX are settled and cleared in A\$ through CHESS operated by ASX Settlement in accordance with the settlement operating rules of ASX Settlement. Shares traded on the FSE are settled and cleared in euro within the Clearstream system.

3.3 ISIN/WKN/Trading symbol

The securities codes for the Shares are as follows:

International Securities Identification Number (ISIN)	AU0000066086
German Securities Code (WKN)	A2PV3A
Trading symbol	VUL
ASX Code	VUL

3.4 Transferability of the Shares

Except for the restrictions set forth below, the Shares are freely transferable, subject to formal requirements, compliance with applicable securities laws, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of either the Australian Corporations Act or the ASX Listing Rules.

3.4.1 Lock-up agreements of the Company

In the listing agreement relating to the FSE Listing, dated 11 February 2022, among the Company and the Listing Agent, the Company agreed with Berenberg that, during the period commencing on 11 February 2022 and ending 90 days after the first day of trading of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) (currently expected to take place on 15 February 2022), to the extent legally permissible the Company will not, and will not agree to, without the prior written consent of the Listing Agent (not to be unreasonably withheld or delayed):

- announce or execute any capital increase;
- propose a capital increase to its general meeting;
- announce, execute or propose to its shareholders any issuance of financial instruments that carry conversion or option rights to Shares; or
- enter into other transactions or perform any actions with a similar economic effect to those described above.

The Company may, however, (i) issue or sell any Shares or other securities, including actual or virtual options, under current and future management participation plans to former and future employees and former, current and future members of executive bodies of the Company or its subsidiaries or their respective investment vehicles, (ii) execute a capital increase in connection with business acquisitions associated with growing its Zero Carbon Lithium business for the purposes of issuing shares to the counterparty of such business acquisition or for the purposes of financing such business acquisition and (iii) execute a capital increase for the purposes of funding certain growth projects of the Company, provided that, in the case of (i) and (ii), the Company will (in the case of (i) only with respect to future management participation plans only) use its best efforts that the relevant beneficiary of such future management participation plan and the recipients of Shares to

which such Shares will be issued, respectively, agree towards Berenberg to be bound by the same lock-up undertaking as the Company or, in the case of (iii), the aggregate amount of such issuance shall not exceed 15% of the total number of Shares outstanding immediately after the completion of the FSE Listing.

3.4.2 Lock-up agreements applying to certain Directors

For the period commencing on 11 February 2022 and ending six months after the first day of trading of the Company's shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) (currently expected to take place on 15 February 2022), Dr Francis Wedin and Gavin Rezos (being those Directors who themselves, or the associates of whom, have a relevant interest of over 5% of the Shares on issue) have agreed that they will not, and will procure that their respective associates will not (in respect of the Shares held by them or their respective associates as of 11 February 2022 only), without the prior written consent of the Company (which shall not unreasonably be withheld) directly or indirectly:

- sell, distribute, transfer or otherwise dispose of any of their Shares or other securities in the Company; or
- grant, issue or sell any option or conversion rights on or over Shares of the Company; or
- enter into other transactions or perform any actions with a similar economic effect to those described above.

The foregoing does not apply to (i) transfers to affiliates (including related bodies corporate or associates) of such Directors, (ii) transfers to other shareholders of the Company, (iii) transfers to strategic investors, (iv) voting in favour of a proposed increase of the share capital of the Company in connection with any transaction announced prior to the FSE Listing and (v) voting in favour of an employee share option plan or issuance of performance shares (and any subsequent Share issues), provided in the case of (i) through (iii) that the transferee(s) agree(s) towards the Company to be bound by the same lock-up undertaking.

3.4.3 Lock-up agreements applying to certain existing shareholders

In connection with the acquisition of Gec-co by Vulcan Group (see section "9.1.2 Recent Acquisitions"), the Company issued 325,000 Shares to Mr Thorsten Weimann, the previous sole shareholder of Gec-Co (see section "12.2 Development of the share capital over the past three years"). Mr Weimann and the Company have agreed to the lock-up of 216,667 of these Shares, the terms of which require that Mr Weimann not dispose of such Shares before 6 July 2022 (subject to certain customary exceptions).

In connection with the entry by the Company into a partnership agreement ("**Partnership Agreement**") with Legacy & Partners S.a.R.L., a company affiliated with Mr Nico Rosberg and Rosberg X Racing ("**RXR**"), the Company issued an aggregate of 69,743 Shares to Mr Rosberg and RXR (see section "12.2.2 Selected current issuances of Shares"). Mr Rosberg, RXR and the Company have agreed to the lock-up of 9,675 and 13,122, respectively, of these Shares, the terms of which require that neither RXR nor Mr Rosberg dispose of such Shares before 19 May 2022 and 8 November 2022, respectively, in each case subject to certain customary exceptions. In addition, the Company expects to issue additional Shares to RXR under the Partnership Agreement to the value of EUR 225,000 based on a 15 day volume weighted average price, such Shares to be issued on or around 30 June 2022, of which 35% will be subject to a lock-up for a period of 9 months from the date of their issue (subject to certain customary exceptions).

3.5 Paying agent

The paying agent is Automic Pty Ltd, Level 5, 191 St Georges Terrace, Perth, WA 6000, Australia.

3.6 Designated Sponsor

Berenberg, Neuer Jungfernstieg 20, 20354 Hamburg, Germany, has agreed to assume the function of the designated sponsor (the "**Designated Sponsor**") for the Shares trading on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) for a period of at least two years from the day of admission to trading and is entitled to designate an appropriately admitted third party to perform its functions. Pursuant to the designated sponsor agreement expected to be entered into between

Berenberg and the Company, the Designated Sponsor will, among other things, place limited buy and sell orders for Shares in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) during regular trading hours against customary remuneration. This is intended to achieve greater liquidity in the market for Shares. Among other things, the Designated Sponsor shall be available at all times during trading hours and, upon receipt of a request for a quote, shall promptly supply quotes and enter into transactions on such basis. In addition, the Designated Sponsor shall provide quotes throughout the auction. The Designated Sponsor shall receive a customary fee from the Company for its services.

3.7 Taxation

3.7.1 Tax warning

The tax legislation of an investor's country of residence and of Australia as the Company's country of incorporation may have an impact on any income received from the Shares.

The following information is a general summary of the Australian income tax, good and service tax ("**GST**") and stamp duty implications for investors that hold Shares on capital account for Australian income tax purposes. This information has been prepared on the basis that the Company is a resident of Australia under Australian tax law and is not a tax resident of any other jurisdiction under a foreign law or a double taxation treaty. Please refer to section "1.5.3 *Vulcan Group is currently subject to the tax laws and regulations of Australia and Germany. Its tax burden may increase as a consequence of current or future tax assessments or court proceedings in connection with changes in domestic or foreign tax laws and double taxation treaties or changes in the application or interpretation thereof. Vulcan Group's tax burden may also increase should it be considered tax resident of Germany, the UK or any other jurisdiction.*" for further information concerning the Company's tax residency status. This information does not apply to investors that are exempt from Australian income tax or are subject to special tax regimes (such as life insurance companies), investors that hold Shares otherwise than on capital account (for example, as revenue assets or as trading stock), investors that acquired their Shares under an employee share scheme or investors who have opted into any of the elective tax timing methods under the Taxation of Financial Arrangements regime in Division 230 of the Income Tax Assessment Act 1997 (Cth).

The information in this section are based on the tax laws in Australia in force as at the date of this Prospectus. Australian tax laws are complex. This summary is general in nature, is not advice and is not intended to be an authoritative or complete statement of the applicable law. Taxation laws and/or their interpretation may change during an investor's period of ownership of the Shares.

Investors should therefore consult their own tax advisors regarding the tax implications of acquiring, holding or transferring the Shares. Only qualified tax advisors are in a position to adequately consider the particular tax situation of individual investors. Taxation is only one of a number of matters investors may need to consider when making a decision about their investments.

3.7.2 Australian Taxation Considerations

3.7.2.1 Nature of Shares held through the Custodian

Under current law and practice, Shares held by an investor through the Custodian should be treated as owned by the investor for Australian capital gains tax ("**CGT**") purposes. Similarly, dividends paid on the underlying Shares should also be treated as dividends paid to the investor, as the person presently beneficially entitled to those dividends.

Therefore, the following discussion analyses the Australian CGT and dividend taxation consequences to investors holding legal title to their Shares which, for Australian taxation purposes, should generally be the same as for investors holding beneficial title to their Shares through the Custodian.

3.7.2.2 Australian resident investors

The following discussion applies to investors that are residents of Australia for Australian income tax purposes, other than temporary residents and Australian residents that hold their Shares in carrying on business through a permanent establishment outside of Australia.

3.7.2.2.1 Dividends on Shares

Dividends paid by the Company on a Share should generally constitute assessable income of that investor.

Dividends may be franked (broadly, where a franking credit is attached to the dividend), unfranked (no franking credit is attached) or partially franked. To the extent that a dividend is unfranked, the relevant investor will generally be assessed at their prevailing marginal rate on the dividend received (with no tax offset).

Investors who are individuals or complying superannuation entities should include the dividend in their assessable income. If the investor satisfies the "qualified person" rules (refer to further comments below), the investor should also include any franking credit attached to the dividend in their assessable income and such investors should also be entitled to a tax offset equal to the franking credit attached to the dividend. The tax offset can be applied to reduce the tax payable on the investor's taxable income. Where the tax offset exceeds the tax payable on the investor's taxable income, the investor should be entitled to a tax refund equal to the excess.

Corporate investors should include the dividend in their assessable income. Subject to satisfying the "qualified person" rules, they should also include the associated franking credit in their assessable income, and are entitled to a tax offset up to the amount of the franking credit attached to the dividend. A corporate investor should be entitled to a credit in its own franking account to the extent of the franking credits attached to the distribution received. Excess franking credits received by corporate investors will not give rise to a refund entitlement, but may be able to be converted into carry forward tax losses.

Investors who are trustees (other than trustees of complying superannuation entities, trusts that are taxed in the same way as corporate investors and certain other trusts) or partnerships (other than corporate limited partnerships that are taxed in the same way as corporate investors) should include the dividend in determining the net income of the trust or partnership. Subject to satisfaction of the qualified person rules, such investors should also include any franking credit attached to the dividend in their net income. The relevant beneficiary or partner may be entitled to a tax offset in respect of the franking credit in proportion to the beneficiary's or partner's share of the net income of the trust or partnership (as applicable). The rules relating to the treatment of franked dividends and associated franking credits are complex in the context of distributions received indirectly via a trust or partnership, and it is recommended that investors seek independent advice on the tax consequences arising in these circumstances.

The benefit of franking credits can be denied where an investor is not a "qualified person", in which case the investor will not need to include the amount of the franking credits in their assessable income and will not be entitled to a tax offset.

Broadly, to be a "qualified person", two tests must be satisfied: the holding period rule and, if necessary, the related payment rule. The holding period rule requires an investor to hold the Shares "at risk" for a continuous period of at least 45 days, commencing the day after the investor acquires the Shares and ending on the 45th day after the day Shares become ex-dividend excluding (if the Shares have been disposed of) the day of disposal. The holding period rule is subject to certain exceptions, including where the total franking offsets of an individual in a year of income do not exceed A\$5,000.

Under the related payment rule, a different testing period applies where the investor has made (or is under an obligation to make) a "related payment" in relation to the dividend. In that case, the investor must have held the Shares "at risk" for a period of at least 45 days during the period commencing on the 45th day before, and ending on the 45th day after, the day the Shares become ex-dividend excluding (if the Shares have been disposed of) the day of disposal.

There are also specific integrity rules that prevent taxpayers from obtaining a tax benefit from additional franking credits where dividends are received as a result of "dividend washing" or certain other arrangements.

Investors should seek professional advice to determine how the tax rules relating to dividends and dividend imputation apply to their own circumstances.

3.7.2.2.2 Disposal of Shares

An investor will derive a capital gain on the disposal of Shares where the capital proceeds received on the disposal exceed the CGT cost base of the Shares. Broadly, the CGT cost base of the Shares is the amount paid to acquire the Shares plus any non-deductible incidental costs.

A CGT discount may be available on the capital gain for individual investors, certain trustee investors and investors that are complying superannuation entities, provided the particular Shares are held for at least 12 months prior to entering into any agreement effecting the disposal and certain other requirements are met. The CGT discount (if available) for individuals and certain trusts is 50% and for complying superannuation entities is 33⅓%. The CGT discount and related rules applying to trusts and their beneficiaries are particularly complex.

Any current year or carry forward capital losses for that investor should (subject to any applicable integrity rules) offset the capital gain first before the CGT discount can be applied and the resulting amount included in the investor's net capital gain for the income year. Investors should seek professional advice on how the CGT rules apply to their circumstances.

An investor will incur a capital loss on the disposal of their particular Shares to the extent that the capital proceeds on disposal are less than the CGT reduced cost base of the Shares. The CGT reduced cost base is calculated in a similar way to the CGT cost base, with certain modifications. Capital losses may only be offset against capital gains and cannot be used to offset other types of income.

If an investor derives a net capital gain in an income year, this amount is generally included in the investor's assessable income for the income year. If an investor incurs a net capital loss in an income year, this amount is carried forward and is available to offset against capital gains derived in subsequent income years, subject to corporate investors satisfying certain rules relating to the recoupment of carried forward losses.

3.7.2.3 Foreign resident investors

The following discussion applies to investors that are not residents of Australia for Australian income tax purposes and do not hold their Shares in carrying on business through a permanent establishment in Australia.

3.7.2.3.1 Dividends on Shares

Fully franked dividends paid to foreign resident investors are generally not subject to Australian withholding tax. Dividends that are not fully franked dividends will be subject to withholding tax on the unfranked portion, except to the extent that (for example) the dividend is declared to be "conduit foreign income" (in essence dividends paid out of income and gains that have a foreign source from an Australian perspective which would include dividends received from non-Australian subsidiaries).

To the extent unfranked dividends are not paid out of conduit foreign income, dividend withholding tax will apply at the rate of 30% (unless a lower withholding tax rate applies under a double tax treaty). For example, in the case of residents of Germany, the rate is generally reduced to 15% under the Australia – Germany double tax treaty (this rate may differ in certain circumstances).

Generally, a foreign resident holder of Shares (who is not also a tax resident of Australia and who does not hold Shares as a business asset through a permanent establishment in Australia) with no other Australian source income or gains is not required to file an Australian tax return.

3.7.2.3.2 Disposal of Shares

Foreign resident investors that hold their Shares on capital account for Australian tax purposes should consider the impact of the Australian CGT rules on the disposal of their Shares. Generally, a capital gain or loss made by a foreign resident investor from disposing of their Shares should be disregarded for Australian CGT purposes, subject to the following two exceptions:

- (a) where the Shares are held as part of a trade or business conducted through a permanent establishment in Australia; or
- (b) in circumstances where:
 - (i) the investor and its associates hold (or have held for a 12 month period during the last 24 months) an interest of 10% or more in the issued capital of (or certain voting rights or rights to distributions from) the Company; and

- (ii) at the time of the disposal, more than 50% of the value of the Company's assets are attributable to taxable Australian real property (see definition below).

The definitions of the terms 'associates' and 'taxable Australian real property' for Australian tax purposes are complex. It is recommended that foreign resident investors seek their own advice as to how these expressions may apply to their circumstances. Broadly, taxable Australian real property includes real property situated in Australia (including a lease of land, if the land is situated in Australia) or a mining, quarrying or prospecting right (to the extent that the right is not real property), if the minerals, petroleum or quarry materials are situated in Australia.

3.7.2.4 Tax file numbers

Investors are not required to quote their tax file number ('TFN') and it is not an offence should they not provide it. Investors holding Shares as part of an enterprise may quote their Australian Business Number ('ABN') instead of their TFN.

If an investor does not validly quote its TFN, ABN or details of a relevant exemption, Australian tax (known as TFN withholding) may be required to be deducted from distributions and/or dividends at the top individual marginal rate plus applicable levies (currently, 47%). Australian tax resident investors may be able to claim a tax credit in respect of any such tax withheld in their income tax returns.

Investors who are not tax resident in Australia should generally be entitled to an exemption from the TFN withholding rules. This means that mandatory TFN withholding may not be required with respect to unfranked dividends or distributions paid to such investors, irrespective of whether those investors have quoted their TFN or (where applicable) ABN. Non-resident investors should obtain specialist tax advice with respect to the application of the TFN withholding rules to them.

3.7.2.5 Goods and Services Tax ('GST')

No GST should be payable by investors in respect of their acquisition of the Shares. The extent to which an investor is entitled to recover any GST incurred on costs relating to their acquisition of Shares will depend on the particular circumstances of that investor.

No GST should be payable by investors on receiving dividends distributed by the Company.

3.7.2.6 Stamp duty

No Australian stamp duty should be payable by investors in respect of their acquisition of Shares.

4. DIVIDEND RIGHTS AND DIVIDEND POLICY

4.1 Dividend rights

Subject to and in accordance with the Australian Corporations Act, the ASX Listing Rules, the rights of any holders of preference shares and the rights of the holders of any shares created or raised under any special arrangement as to dividends, the Directors may from time to time decide to pay a dividend to the shareholders entitled to the dividend which shall be payable on all Shares according to the proportion that the amount paid (not credited) is of the total amounts paid and payable (excluding amounts credited) in respect of such Shares.

The Directors may from time to time pay to shareholders any interim dividends they determine. No dividend will carry interest as against the Company. The Directors may set aside out of the profits of the Company any amounts that may determine as reserves, to be applied at the discretion of the Directors, for any purpose for which the profits of the Company may be properly applied.

Subject to the ASX Listing Rules and the Australian Corporations Act, the Company may, by resolution of the Directors, implement a dividend reinvestment plan on such terms and conditions as the Directors think fit and which provides for any dividend which the Directors may declare from time to time payable on Shares which are participating Shares in the dividend reinvestment plan, less any amount which the Company may either pursuant to the Company's Constitution or any law be entitled or obliged to retain, be applied by the Company to the payment of the subscription price of Shares.

4.2 Dividend policy and dividends per Share

No dividend or distribution of profits were paid to the Company's shareholders in the financial years ended 30 June 2019, 2020 or 2021 or between 30 June 2021 and the date of this Prospectus.

The Company anticipates that significant expenditure will be incurred in the evaluation and development of the Company's projects. These activities, together with the possible acquisition of interests in other projects, are expected to dominate at least the first two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits, i.e. credits investors may receive for underlying taxes paid by the Company via the dividend imputation system, attaching to dividends can be given by the Company.

5. CAPITALISATION AND INDEBTEDNESS

The tables below set forth Vulcan Group's capitalisation and net financial indebtedness as of 30 November 2021 derived from the Company's internal accounting records or reporting systems. The following information should be read in conjunction with chapter "6 *Management's discussion and analysis of net assets, financial position and results of operations*" and the Consolidated Financial Statements, including the notes thereto, contained in the "Financial Information" section of this Prospectus and additional financial information contained elsewhere in this Prospectus.

5.1 Statement of capitalisation

	As of 30 November 2021 (unaudited) ⁽¹⁾ in EUR thousand
Total current debt (including current portion of non-current debt) ⁽²⁾	4,057
thereof guaranteed	-
thereof secured	-
thereof unguaranteed/unsecured	4,057
Total non-current debt (excluding current portion of non-current debt) ⁽³⁾ ..	1,322
thereof guaranteed	-
thereof secured	-
thereof unguaranteed/unsecured	1,322
Shareholders' equity ⁽⁴⁾	204,648
Share capital ⁽⁵⁾	208,512
Legal reserve ⁽⁶⁾	7,237
Other reserves ⁽⁷⁾	(11,101)
Total ⁽⁸⁾	210,027

- (1) The amounts are derived from the Company's internal accounting records or reporting systems.
- (2) This item corresponds to total current liabilities which consist of trade and other payables, deferred consideration payments, lease liabilities, loans and borrowings, provisions, and income tax liabilities.
- (3) This item corresponds to total non-current liabilities which consist of lease liabilities, loans and borrowings, and provisions and deferred tax liabilities.
- (4) Shareholders' equity corresponds to the total of contributed equity, reserves and accumulated losses.
- (5) This item corresponds to contributed equity.
- (6) This item corresponds to reserves.
- (7) This item corresponds to accumulated losses as presented in the Company's interim consolidated statement of financial position as of 30 September 2021 disregarding any profit or loss or other comprehensive income for the period since 30 September 2021.
- (8) Comprises the total of the total current debt, total non-current debt and shareholders' equity.

5.2 Statement of indebtedness

As of 30 November 2021

	(unaudited) ⁽¹⁾ in EUR thousand
A. Cash ⁽²⁾	179,836
B. Cash equivalents ⁽³⁾	-
C. Other current financial assets ⁽⁴⁾	3,146
D. Liquidity (A + B + C)	182,982
E. Current financial debt (including debt instruments, but excluding current portion of non-current financial debt) ⁽⁵⁾	3,867
F. Current portion of non-current financial debt ⁽⁶⁾	190
G. Current financial indebtedness (E + F)	4,057
H. Net current financial indebtedness (G – D)	(178,925)
I. Non-current financial debt (excluding current portion and debt instruments) ⁽⁷⁾	1,322
J. Debt instruments ⁽⁸⁾	-
K. Non-current trade and other payables ⁽⁹⁾	-
L. Non-current financial indebtedness (I + J + K)	1,322
M. Total financial indebtedness (H + L)	(177,603)

- (1) The amounts are derived from the Company's internal accounting records or reporting systems.
- (2) This item corresponds to total cash.
- (3) This item corresponds to cash equivalents.
- (4) This item corresponds to current trade and other receivables.
- (5) This item corresponds to current liabilities including trade and other payables, deferred consideration payments, provisions, and income tax liabilities.
- (6) This item corresponds to current loans and borrowings, and lease liabilities.
- (7) This item corresponds to non-current loans liabilities including loans and borrowings, lease liabilities, provisions, and deferred tax liabilities.
- (8) This item corresponds to bonds.
- (9) This item corresponds to non-current trade and other payables.

As of 30 November 2021, the financial debt as presented in the statement of indebtedness includes lease liabilities of EUR 676 thousand, of which EUR 129 thousand are current and EUR 547 thousand are non-current.

5.3 Indirect and contingent indebtedness

The Company's indirect and contingent indebtedness as of 30 November 2021 amounted to nil.

5.4 Statement concerning working capital

In the Company's opinion, the working capital of Vulcan Group is sufficient to meet Vulcan Group's present requirements over at least the next twelve months following the date of this Prospectus.

6. MANAGEMENT'S DISCUSSION AND ANALYSIS OF NET ASSETS, FINANCIAL POSITION AND RESULTS OF OPERATIONS

The financial information contained in the following section is taken or derived from the Consolidated Financial Statements or is derived from the Company's accounting records. The Consolidated Financial Statements have been prepared in accordance with Australian Accounting Standards and Interpretations ("AASI") issued by the Australian Accounting Standards Board ("AASB") and the Australian Corporations Act. The Consolidated Financial Statements comply with International Financial Reporting Standards ("IASB IFRS") as developed and published by the International Accounting Standards Board ("IASB") and, in the case of the Consolidated Interim Financial Statements September 2021, IASB IFRS on interim financial reporting (IAS 34). The Consolidated Annual Financial Statements were audited by RSM, who issued unqualified independent auditor's reports thereon. According to Art. 1 a) of the Commission Decision of 12 December 2008 (2008/961/EC), IASB IFRS are to be regarded as equivalent to the IFRS adopted under Regulation (EC) No 1606/2002 ("EU IFRS"), provided that the notes to the audited financial statements contain an explicit and unreserved statement that these financial statements comply with "International Financial Reporting Standards in accordance with IAS 1 Presentation of Financial Statements". The Consolidated Financial Statements are reproduced in this Prospectus beginning on page F-1. For purposes of this section 6, the "periods under review" includes the financial years ended 30 June 2019, 30 June 2020 and 30 June 2021 and the three-month period ended 30 September 2021.

Investors should read the following discussion and analysis of financial condition and results of operations in conjunction with the Consolidated Financial Statements as well as the notes to those Consolidated Financial Statements. Some of the statements contained below include forward-looking statements. Because such statements involve inherent uncertainties, actual results may differ materially from the results expressed in or implied by such forward-looking statements. Investors can find a discussion of such uncertainties elsewhere in this Prospectus including, in section "2 – General information – 2.6 Forward-looking statements" and section "1 Risk factors".

6.1 Overview

Vulcan Group is an Australian headquartered lithium battery chemicals and renewable energy group with a clear goal to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint. With its Zero Carbon Lithium™ Project Vulcan Group intends to combine the operations of extracting lithium-rich geothermal brines in the Upper Rhine Valley of Germany, of upgrading lithium through electrolysis to a high purity lithium hydroxide monohydrate and/or lithium carbonate (Vulcan Group's lithium business), and the production of hydrogeothermal energy (Vulcan Group's renewable energy business) (the **"Zero Carbon Lithium™ Project"**). Vulcan Group's Zero Carbon Lithium™ Project intends to produce a battery-quality lithium chemical product from its combined geothermal renewable energy and lithium resource located in the Upper Rhine Valley, which is estimated to be Europe's largest lithium resource, as estimated and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**"JORC Code"**) (source: Vulcan Energy Resources Ltd, ASX Release 15 December 2020; Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study 15 January 2021; based on lithium focused peers in Europe with comparable project size and stage and published resource information; see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus). Vulcan Group aims to supply the battery electric vehicle (**"BEV"**) market in Europe, which is among the fastest growing in the world (source: S&P Global Platts 1), and is currently reliant on imports of lithium chemicals given the lack of domestic supply. The Zero Carbon Lithium™ Project has been designed from its inception to help decarbonise the German electrical and local heating grids and lithium supply chain simultaneously and has the lowest planned carbon footprint in the lithium industry compared to any previously published life cycle assessment results (source: Vulcan Energy Resources Ltd, ASX Release 4 August 2021; Minviro). An essential part of the Zero Carbon Lithium™ Project involves the use of thermal water as the principal heat source to drive the lithium extraction, which means that lithium is expected to be extracted from the brine with a net zero carbon footprint without polluting the environment with waste material or toxic substances prior to the brines being re-injected in a closed loop, circular system. In order to advance its lithium and geothermal exploration activities as well as its renewable energy business, Vulcan Group has recently undertaken several strategic acquisitions in Germany. In particular, Vulcan Group acquired two geothermal engineering companies in July 2021, which has brought significant surface and sub-surface geothermal operating expertise into Vulcan Group, and in December 2021, Vulcan Group acquired Pfalzwerke geofuture

GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**")), a company that owns and operates a geothermal renewable energy plant and has an exploitation licence for the property of the plant site in Insheim, Germany (the "**Insheim Plant**"). Moreover, in November 2021, the Company acquired two electric drill rigs as part of Vulcan Group's Zero Carbon Lithium™ Project which can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley of Germany.

Vulcan Group holds eight exploration licences in the Upper Rhine Valley of Germany encompassing an area of 983.77 km² (98,377 hectares) within the German states of Baden-Württemberg, Rhineland-Pfalz and Hessen, as well as an exploitation licence at the Insheim geothermal plant bringing the total licence area to over 1,000 km². In addition, Vulcan Group holds an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20 km from the city of Rome. An exploration licence is needed for exploring freely mineable resources, and an exploitation licence (also referred to as a production license) gives the right to extract freely mineable resources. Vulcan Group is currently at the exploration and development stage and is targeting commencement of commercial production by 2024 at one of its exploration licence areas, capitalising on its proprietary method for the manufacture of battery-grade lithium hydroxide with a net zero carbon footprint, and zero use of fossil fuels to power the extraction process.

The Company has been listed on the Australian Securities Exchange (the "**ASX**") since May 2018, initially with a company name of Koppar Resources Limited (ASX Code: KRX) and since September 2019 as Vulcan Energy Resources Limited (ASX Code: VUL). Following the envisaged dual listing, the Company will be the first Australian company with a listing on the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). The Company has its headquarters in Perth, Australia, and its principal subsidiaries focused on the development of geothermal and lithium projects are based in Karlsruhe and Augsburg, Germany. In addition to its consolidated subsidiaries, Vulcan Group also holds a 24.34% interest in Kuniko Limited ("**Kuniko**"), an ASX-listed company focused on developing hard-rock battery metals projects in Scandinavia with a planned net zero carbon footprint throughout development. Kuniko was originally a wholly owned subsidiary of the Company. In April 2021, the Company announced the planned spin-off of Kuniko (containing Vulcan Group's non-core Norwegian battery metals assets) in order to focus on its Zero Carbon Lithium™ Project. The spin-off was executed by means of an initial public offering of Kuniko on the ASX, which was completed in August 2021.

6.2 Key factors affecting Vulcan Group's results of operations

Vulcan Group's results of operations have been, and will continue to be, affected by many factors, some of which are beyond Vulcan Group's control.

Historically, Vulcan Group's negative operating result has been driven by Vulcan Group's expenses (in particular, share-based payments, consulting and legal fees and administrative expenses) in the absence of any material revenue, as Vulcan Group has not yet commenced production. Vulcan Group has also incurred significant capitalised expenses connected with developing the technology and extraction processes that underpin Vulcan Group's Zero Carbon Lithium™ Project, identifying suitable locations for lithium extraction activity and obtaining the necessary exploration licences, conducting exploration activities, undertaking feasibility studies, undertaking pilot testing works, engaging in acquisitions of companies related to Vulcan Group's strategy and other preliminary work. These expenses, combined with construction costs as Vulcan Group constructs the facilities and infrastructure necessary for the implementation of Vulcan Group's Zero Carbon Lithium™ Project, will continue to be a significant component of Vulcan Group's business through the commencement of commercial production of geothermal renewable energy and lithium hydroxide in Phase One, targeted to occur in 2024, and through the commencement of Phase Two, targeted to occur in 2025. In addition to this, the expected debt component of Vulcan Group's project financing will require periodic interest payments to be made for the term of the debt. These interest payments may have a material negative impact on the Company's operating result and generate additional losses before taxation prior to the entry into commercial production.

Vulcan Group acquired the Insheim Plant in December 2021 and, beginning in the financial year ending 30 June 2022, has commenced earning revenues and incurring expenses in connection with the operation of the Insheim Plant's existing renewable power business. During construction of the remaining facilities and infrastructure required for Vulcan Group's Zero Carbon Lithium™ Project, and after the commencement of commercial production, there are several key items that the

Company expects will impact its results from operations on a consolidated basis. These items are described below.

6.2.1 The demand for and price at which Vulcan Group will be able to sell its lithium hydroxide product

The Company estimates that, once commercial production of lithium hydroxide has commenced, sales of its lithium hydroxide product will account for approximately 75% to 85% of its revenues. Therefore, once commercial production has commenced, the sales price Vulcan Group is able to receive from customers for its lithium hydroxide product is expected to be the most significant factor affecting Vulcan Group's results of operations.

Vulcan Group has, to date, entered into five binding offtake agreements in respect of its future lithium hydroxide production:

- (i) an agreement with Umicore for the sale of between 28,000 and 42,000 metric tonnes of battery-grade lithium hydroxide for an initial five-year term with start of commercial delivery scheduled for 2025;
- (ii) an agreement with Renault for the sale of between 29,000 and 49,000 metric tonnes of battery-grade lithium hydroxide over a six-year supply term, with the start of commercial delivery scheduled for 2026;
- (iii) an agreement with Stellantis for the sale of between 81,000 metric tonnes and 99,000 metric tonnes of battery-grade lithium hydroxide over a five-year supply term, with the start of commercial delivery scheduled for 2026;
- (iv) an agreement with Volkswagen for the sale of between 34,000 metric tonnes and 42,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term, with the start of commercial delivery scheduled to commence in 2026;
- (v) an agreement with LG Energy for the sale of between 41,000 metric tonnes and 50,000 metric tonnes of battery grade lithium hydroxide over an initial five-year term with the start of commercial delivery scheduled for 2025.

Each of the agreements may be extended by agreement between the parties after their respective initial terms. Together, the volumes of lithium hydroxide to be delivered under these five offtake agreements exceed the estimated 40,000 metric tonnes referenced as annual production target in Vulcan Group's PFS upon the completion of Phase One and Phase Two of the Zero Carbon Lithium™ Project.

Vulcan Group is currently in discussions with other potential offtake partners with respect to further lithium hydroxide production from the Zero Carbon Lithium™ Project. Overall, it is the Company's goal to have all volumes of battery-grade lithium hydroxide produced in Vulcan Group's Zero Carbon Lithium™ Project committed under offtake agreements with reputable counterparties.

The pricing under each of Vulcan Group's existing offtake agreements will be set monthly, quarterly, or on a six-month basis, and will be based on market prices for lithium, as calculated by reference to market recognised price reporting agencies' contract-based indices. Therefore, movements in the market price of lithium hydroxide are expected to have a substantial effect on Vulcan Group's results from period to period. Vulcan Group expects that, once fully operational, its business will have a relatively high proportion of fixed costs within its cost base (with the main components of costs being maintenance, power and consumables, all of which Vulcan Group expects will be relatively stable from year to year), meaning that any sustained increase or decrease in the market price of lithium would likely have a direct impact on Vulcan Group's profits (positively or negatively, respectively). However, as Vulcan Group intends to sell substantially all of its lithium hydroxide pursuant to offtake agreements and the pricing under such offtake agreements will be based on a mix of fixed price and indexation based on market prices calculated by reference to certain market indices, Vulcan Group does not expect to be exposed to the day-to-day spot market and believes that its pricing will be less volatile than the spot market. Additionally, Vulcan Group will consider including price floors and ceilings in relation to part or all of the secured volume with offtakers, bringing even more stability to revenues.

The following table sets forth the average quarterly market price for lithium hydroxide from 2016 to the third quarter of 2021, based on the Asia spot price CIF (cost, insurance and freight) ("**CIF**"),

based on daily spot price data from Fastmarkets, S&P and Benchmark Minerals (with the spot market representing a relatively small but active market for lithium chemicals).

Lithium hydroxide (LiOH) Asia spot price CIF (Fastmarkets, S&P, Benchmark Minerals)¹

\$ per tonne	2016	2017	2018	2019	2020	2021
Q1	10,800	17,417	20,533	15,845	10,600	10,230
Q2	13,667	18,333	20,167	14,679	10,033	14,462
Q3	16,417	20,500	19,355	13,353	9,843	17,310
Q4	17,333	20,003	17,113	12,032	9,554	30,240

1. Based on average of price reporting agency indices aggregated by Vulcan Group.

The demand for, and prices of, lithium hydroxide are influenced by various factors, including the state of the global economy, the stability of international trade, global and regional capacity and supply, government policies, regulatory developments to promote electric vehicles, currency exchange fluctuations, other commodity prices and developments in the industrial and commercial uses of lithium hydroxide and other alternative commodities. In particular, Vulcan Group anticipates that the lithium hydroxide it produces will be used as a component of lithium-ion batteries, especially for use in electric vehicles. As Vulcan Group's current operations are based in the Upper Rhine Valley in Germany, Vulcan Group believes its sales will be primarily to European offtake customers (although Vulcan Group may also sell to customers outside of Europe) and, therefore, Vulcan Group's results are expected to be affected particularly by European demand for lithium products. Vulcan Group expects that demand will be supported by increasing regulation of vehicle carbon emissions and Government support and incentives for electric vehicles. Vulcan Group believes that Europe will represent a significant source of demand for electric vehicles in the coming years, and expects that demand for lithium products, particularly lithium hydroxide, will increase in Europe in line with growth in electric vehicle production and sales and changes in manufacturing plans. Global sales volume of EVs is forecast to increase at 33% per year from 2021 to 2025, with equivalent lithium-ion battery production increasing from 244GWh in 2021 to 968GWh by 2025 (source: Macquarie). Correspondingly, the lithium-ion battery is expected to be the fastest growing rechargeable battery technology due to increasingly strong penetration rates in the BEV market and a fall in manufacturing costs (source: Economist). The global annual consumption of lithium is expected to increase from 278,000 tonnes in 2020 to 2.4 million tonnes in 2030, which would represent a tenfold increase in ten years (source: Canaccord 1). Europe is the fastest growing lithium market in the world based on electric vehicle sales and lithium-ion battery production growth (source: S&P Global Market, S&P Global Platts 1). This would imply that by 2030, the European lithium chemical market will represent approximately 900,000 tonnes per year of lithium chemicals, more than three times the size of the global market today, while on the supply side there is no existing European domestic lithium production.

Vulcan Group believes that its lithium resource in the Upper Rhine Valley and its extraction and processing expertise potentially position the Company to be able to manufacture a product with low impurities to meet stringent demands of major battery materials manufacturers. Automotive OEMs have announced plans to introduce longer-range EV models using higher energy density batteries and are increasingly doing so by moving to high nickel content cathode materials (source: Fitch Solutions). The energy density (or specific energy, energy per mass) of lithium hydroxide exceeds that of lithium carbonate. This shift will therefore increasingly require battery-grade lithium hydroxide in the production of cathode materials. As a result, battery-grade lithium hydroxide is expected to be the fastest growing product type in terms of annual consumption, respectively, overtaking lithium carbonate demand as early as 2022 (source: Canaccord 1).

Additionally, Vulcan Group expects that in the future its sales prices may benefit from Vulcan Group's Zero Carbon Lithium™ business objective of producing lithium with a net zero carbon footprint, with a focus on the use of naturally occurring, renewable geothermal energy in its lithium extraction process, no use of fossil fuels, relatively low water requirements and a small land footprint. This is a significant differentiator from other current methods of lithium extraction and processing, such as hard-rock mining and evaporation ponds. Additionally, European companies currently import all of their required lithium and, if local supply is not developed in Europe, European buyers are expected to continue to have to import their lithium requirements, primarily from Asia (with the associated carbon impact and cost). The availability of lithium chemicals with a climate neutral footprint

produced in Europe may therefore represent a significant opportunity for European companies to de-risk their supply chain and lower their carbon footprint, which is increasingly important to companies both from a social and environmental responsibility perspective and from a regulatory perspective. For example, the EU is currently considering a new battery regulation (Proposal for a Regulation of the European Parliament and the Council concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020) which, if adopted in its current form, would require batteries to meet certain mandatory green and social requirements before entering the EU market and require companies to disclose the carbon footprint of each battery from 2024. Additionally, the EU is currently preparing to implement a new carbon border adjustment mechanism ("**CBAM**") that is expected to require EU companies importing certain goods to buy carbon certificates equivalent to the carbon price that would have been paid if the goods had been produced under the EU's carbon pricing rules. Imports covered by the CBAM regime would include power and industrial sector goods such as those involved in the manufacturing of cement, steel, chemicals and fertilisers, and it is possible that chemicals such as lithium hydroxide may be included in the future. This regime is expected to be introduced through a transitional period commencing in 2023 with full implementation by 2026. The Company believes that this regime may provide a significant incentive for European companies to source sustainably produced lithium chemicals from within Europe and may have a positive effect on the price Vulcan Group is able to achieve for its lithium product in future sales contracts. Additionally, Zero Carbon Lithium™ is a brand that Vulcan Group has asserted as its trade mark. Vulcan Group will be able to licence the trade mark it owns to customers, allowing them to show electric vehicle consumers that they are working on improving their carbon footprint by working with suppliers offering greener and more sustainable products.

6.2.2 The market prices for, and volumes of, electricity and heat produced by Vulcan Group's renewable energy business

In addition to its lithium business, Vulcan Group intends to earn revenues from the sale of electricity and heat from its binary cycle geothermal plants in Germany. In particular, Vulcan Group intends to:

- sell all of the electricity produced by the geothermal plants to the grid; and
- utilise a portion of the heat produced by the geothermal plants for its lithium extraction operations, with the remainder sold directly to third-party customers, which Vulcan Group expects will primarily consist of local municipalities and businesses.

Vulcan Group's results of operations will therefore be affected by the feed-in tariff for electricity sold to the grid, as well as the negotiated price for heat.

Electricity sold to the grid is expected to have a fixed feed-in tariff of EUR cent 25.2 / KWh, which is guaranteed for 20 years commencing from the commissioning date of a geothermal plant, based on the subsidised remuneration regime under the German Renewable Energy Act (*Erneuerbare-Energien-Gesetz*) as described in more detail in section 11.2.3 of this Prospectus. After this 20-years remuneration period (or the remaining part of this remuneration period if a geothermal plant was already commissioned), its future revenues for the applicable geothermal plant will depend upon the respective market price for renewable energy. While the applicable feed-in tariff may not offer a risk-adequate return to investors in a stand-alone geothermal power plant, Vulcan Group's business model, with its lithium and renewable energy businesses foresees dual revenue sources of which the lithium business is expected to generate the larger revenue share.

Heat sold to third-party customers will be the subject of contractual negotiation with such customers, which Vulcan Group expects will primarily comprise local municipalities and businesses in the Upper Rhine Valley.

Following the acquisition of the Insheim Plant (which is already operational) in December 2021, Vulcan Group has begun earning revenues from the sale of electricity from this plant in the financial year ending 30 June 2022. The revenues earned from this business in the financial year ended 31 December 2020 (the last full financial year prior to acquisition by Vulcan Group) were EUR 5,756,012.58. Vulcan Group expects to earn revenues from electricity and heat produced by five additional geothermal plants envisioned in Vulcan Group's Zero Carbon Lithium™ Project following their construction and the commencement of commercial production (targeted for 2024 for Phase One and 2025 for Phase Two), and Vulcan Group's revenues from its renewable energy business are, therefore, expected to grow in line with the increase in capacity, as discussed further in section "6.2.3 Results of exploration activity, ramp-up of Vulcan Group's development activities and

expansion of installed capacity" below. The volume of electricity and heat produced by Vulcan Group may also be affected by factors including brine flow rates, the efficiency and reliability of Vulcan Group's facilities and infrastructure and any required plant shutdowns for maintenance or other reasons.

6.2.3 Results of exploration activity, ramp-up of Vulcan Group's development activities and expansion of installed capacity

As Vulcan Group is currently in the exploration and development phase, Vulcan Group's results in future financial years are expected to be influenced by the results of Vulcan Group's exploration activities and the ramp-up of its development activities and operations.

Vulcan Group is currently progressing a systematic exploration programme over its project area in the Upper Rhine Valley and expects that a DFS in respect of Phase One will be completed by the second half of 2022. The success of Vulcan Group's strategy relies upon being able to drill geothermal wells which produce the requisite heat, lithium grades and brine flow rate to economically deliver lithium chloride concentrate, and subsequently battery-quality lithium hydroxide, in progressively larger quantities.

Vulcan Group is currently developing its Zero Carbon Lithium™ Project in two phases. Phase One, from which Vulcan Group is targeting to commence commercial production in 2024, is planned to comprise two geothermal plants (with a targeted capacity, subject to heat and flow rate determination following drilling, of 8 megawatt ("MW") and 14MW, respectively), two direct lithium extraction ("DLE") plants and one central lithium plant for lithium hydroxide production, with a targeted production capacity of 15 kilo tonnes ("Kt") of lithium hydroxide. Phase Two, from which Vulcan Group is targeting to commence commercial production in 2025, is planned to comprise three geothermal plants (each with a targeted capacity, subject to heat and flow rate determination following drilling, of 17MW), three DLE plants and one additional central lithium plant, with a targeted production capacity of 25Kt of lithium hydroxide. Phase Two is expected to bring Vulcan Group's total production to 74MW renewable energy and 40Kt lithium hydroxide annually following commencement of Phase Two (see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus). These plans and figures are, however, subject to change as part of Vulcan Group's DFS as, for example, additional project areas may be added to Vulcan Group's development plans including, for example, the granted licence areas Mannheim and Lampertheim.

In addition to the lithium business, the geothermal plants comprised in the project will also produce electricity and/or heat depending on location, with all electricity to be sold to the grid and all heat not used for Vulcan Group's own operations to be sold to third parties, as discussed in section "6.2.2 The market prices for, and volumes of, electricity and heat produced by Vulcan Group's renewable energy business" above.

Vulcan Group's revenues may increase substantially in future years as the new plants envisioned in the Zero Carbon Lithium™ Project in the Upper Rhine Valley commence commercial production. Vulcan Group is also continually exploring other acquisition and development opportunities in various locations related to Vulcan Group's core expertise of converting geothermal brine to renewable energy and lithium, and the consummation of any further acquisitions or other expansion opportunities could also increase Vulcan Group's installed capacity and revenue, as discussed in section "6.2.5 The impact of acquisitions") below.

6.2.4 Construction costs and increasing operating costs

Historically, the Company's costs have been primarily administrative and other expenses not directly related to development activity (including non-capitalised staff costs, consulting and legal fees in connection with M&A and other activity, share-based payment expenses, office costs, foreign currency losses and gains and other expenses) as well as capitalised costs relating to obtaining approvals and technical studies in connection with the Zero Carbon Lithium™ Project (including 2D and 3D seismic surveys data acquisition), consultant costs and costs related to piloting Vulcan Group's extraction technology. Going forward, as development of the Zero Carbon Lithium™ Project ramps up, construction expenses and, in turn, operating costs will have a substantial impact on the Company's results. Administrative expenses have been historically and will continue to be classified as operating costs rather than as project-related capital expenditure, whereas construction related

costs incurred in the construction phase of the project will be capitalised as capital expenditures. With the commencement of production, the Company will begin to depreciate the asset value of its plants and the annual depreciation charge is expected to be material given the capital base of the project.

The total capital expenditure required for the Zero Carbon Lithium™ Project is expected to be approximately EUR 700 million (including contingencies) for Phase One and EUR 1,138 million (including contingencies) for Phase Two, based on Vulcan Group's Pre-Feasibility Study ("PFS"). However, the exact level of capital expenditure required for the Zero Carbon Lithium™ Project will be further refined as the Company advances the project, with the level of capital expenditure for Phase One to be further refined in the DFS (expected to be completed by the second half of 2022).

See section "6.8.2 Capital expenditure" below for a further discussion of Vulcan Group's estimated capital expenditure in connection with the Zero Carbon Lithium™ Project.

The financial model reflected in Vulcan Group's PFS includes certain contingencies and assumptions and the Company believes that if the project were to encounter unforeseen variances during the drilling and construction phase, a certain level of associated cost increases could be absorbed into the Company's financial model without a significant financial impact on the viability of the Zero Carbon Lithium™ Project. However, investors are cautioned that the Zero Carbon Lithium™ Project is an early stage and highly complex project which incorporates many different engineering disciplines, and that certain aspects (including, among other things, lithium hydroxide production via electrolysis) of the project are novel, and therefore there is the potential for unforeseen delays and cost overruns.

Operating costs, though expected to be less significant during the construction phase of the project, are likely to increase over time under this accounting treatment as additional administrative expenditure (principally employee costs) will be necessary to support the increased levels of activity within the Company. In particular, in order to achieve its development strategy within the targeted timeframe the Company is seeking to further significantly grow its multi-disciplinary team during the coming months and years by adding industry experts in key discipline areas that will be vital to delivering the proposed development plan, and in particular is targeting an increase in staff to roughly four times the current size of the workforce over the next three to five years. Upon commencement of first commercial production, operating costs are not expected to be capitalised and will be reflected on the Company's Consolidated Statement of Profit or Loss and Other Comprehensive Income.

According to estimates in Vulcan Group's PFS, if and when Phase One and Phase Two are fully operational, Vulcan Group's lithium extraction process will entail costs of approximately US\$3,142 per tonne of lithium hydroxide (including US\$1,949 for the DLE process and US\$1,200 for processing at the central lithium plant (electrolysis)). This compares favourably to a modelled average selling price of US\$14,925 per tonne of lithium hydroxide.

The Company believes that the potential key strategic advantages of the Zero Carbon Lithium™ Project underpinning its relatively low estimated operating costs compared to other methods of processing lithium hydroxide include:

- a low cost feedstock of brine from Vulcan Group's geothermal plants, which serve the dual purpose of lithium extraction and energy production in the form of renewable electricity and heat;
- the use of low-cost energy (in the form of heat) coming from Vulcan Group's own geothermal plants;
- the use of the adsorbent DLE method to isolate lithium as opposed to using large volumes of chemicals such as sulphuric acid to dissolve a rock feedstock or soda ash for brine; and
- the use of electrolysis to upgrade chloride into a high purity hydroxide using renewable energy, with no heavy reagent usage (such as sodium hydroxide or lime).

The principal components of Vulcan Group's operating costs, based on the PFS, will include:

- power, which is estimated to constitute approximately 71% of the geothermal plants' operating costs, 22% of the DLE plants' operating costs and 28% of the central lithium plants' operating costs; Vulcan Group expects to purchase its power requirements from the grid, preferably from green energy providers;
- maintenance costs, which are estimated to constitute approximately 11% of the geothermal plants' operating costs, 18% of the DLE plants' operating costs and 22% of the central lithium plants' operating costs;
- consumables (mainly resin, which is used in adsorbing lithium from the geothermal brine), which are estimated to constitute approximately 28% of the DLE plants' operating costs; Vulcan Group currently expects to source resin through long term fixed contracts (of between 3-5 years) negotiated directly with providers; and
- labour costs, which are estimated to comprise approximately 18% of the central lithium plants' operating costs.

Increases in Vulcan Group's variable operating costs will have a negative effect on Vulcan Group's results, while decreases will have a positive effect on Vulcan Group and enhance Vulcan Group's margins (see sections "1.1.4 Mineral exploration and development companies face risks along the entire value chain to extract and produce minerals which may result in substantial delays or operational shut-downs, may require significant capital outlays or may result in an inadequate return or loss on invested capital." and "1.2.2 The resource estimates relating to Vulcan Group's current and future projects are subject to certain assumptions and interpretations which may prove to be inaccurate. Any material deviations may result in alterations to development plans which may, in turn, adversely affect Vulcan Group's operations.").

6.2.5 The impact of acquisitions

During and following the periods under review, Vulcan Group has grown through acquisitions, and Vulcan Group may make further acquisitions and investments in the future in line with its growth strategy that may have a significant effect on Vulcan Group's revenue and profitability. Vulcan Group acquired Vulcan Energy Resources Europe Pty Ltd in September 2019, which represented the acquisition of the Zero Carbon Lithium™ Project that is now the focus of Vulcan Group's strategy and was transformational for Vulcan Group. The total consideration for this acquisition, including up front and deferred consideration, was A\$6,794,800. In the financial years ended 30 June 2020 and 30 June 2021, share-based payment expenses in connection with shares issued to the vendors and introducers (including Dr Francis Wedin and Dr Horst Kreuter) as consideration, as well as advisory, legal and other expenses connected to the acquisition, represented a significant proportion of Vulcan Group's expenses.

In July 2021, Vulcan Group acquired (i) Global Geothermal Holding UG ("**GGH**"), which holds an exploration licence for geothermal and exploration licence applications for geothermal and lithium, near the southwest German cities of Mannheim, Karlsruhe, Speyer and Neustadt, for an acquisition price of EUR 57,411 plus deferred consideration in the form of Performance Shares with a fair value of EUR 363,307 to be issued upon the achievement of certain milestones; and (ii) two geothermal engineering companies, GeoThermal Engineering GmbH ("**GeoT**") and gec-co Global Engineering & Consulting-Company GmbH ("**Gec-co**"), which are focused on the sub-surface development of deep geothermal projects and the above-surface development of geothermal power and heating plants, in Europe and worldwide, respectively, for a combined purchase price of EUR 1,637,296 plus up to EUR 862,750 in deferred earn-out consideration to be paid upon the achievement of certain milestones.

In December 2021, Vulcan Group acquired Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**")), which owns and operates the Insheim geothermal renewable energy Plant and holds an exploitation licence granting it the exclusive right to geothermal renewable energy from brine extracted from the site of the Insheim Plant, for a preliminary purchase price of EUR 32.7 million, subject to certain price adjustments (expected final purchase price approximately EUR 31.3 million). Accordingly, Vulcan Group will earn revenue and incur costs in connection with the sale of electricity at the Insheim Plant in the financial year ending 30 June 2022 and in future financial years. Sales of Natürlich Insheim for the period ending 31 December 2020 amounted to EUR 5,756,012.58 (according to German generally accepted accounting principles). As indicated in the Pro Forma Financial Information included in Section "7 Pro Forma Financial Information" of this Prospectus, in the period from 1 July 2020 to 30 June 2021 Natürlich Insheim had revenue from

continuing operations in an amount of EUR 5,943 thousand and a profit before income tax of EUR 599 thousand, while in the three-month period from 1 July 2021 to 30 September 2021 it had revenue from continuing operations of EUR 961 thousand and a loss before income tax of EUR 444 thousand, with the loss in the latter period attributable primarily to routine planned maintenance.

Although Vulcan Group's current operations are focused on its Zero Carbon Lithium™ Project in the Upper Rhine Valley of Germany, Vulcan Group is continually exploring other acquisition and development opportunities in various locations, particularly those with significant, established geothermal brine reservoirs and high lithium grades. Vulcan Group's acquisition strategy is focused on opportunities related to Vulcan Group's core expertise of converting geothermal brine to renewable energy and lithium. Although Vulcan Group has not entered into any binding commitments with respect to any such further acquisitions, Vulcan Group's business may expand geographically through acquisition activity in the future.

Vulcan Group uses the purchase method in the initial consolidation of subsidiaries in the course of business combinations. The acquired entity's identifiable assets, liabilities and contingent liabilities are recognised at their acquisition date fair values. Any excess of cost over the acquirer's interest in the fair value of the subsidiary's net identifiable assets is recognised as goodwill. Goodwill is reported in subsequent periods at cost less accumulated impairment losses.

The overall impact of acquisitions on Vulcan Group's financial results is a function of a variety of factors, including acquisition costs, subsequent capital expenditure involved in integration and development and the achievement of any operational efficiencies and synergies across the combined business. Vulcan Group's results of operations may be adversely affected by any delays or difficulties that it encounters in integrating acquisitions into its business, particularly if this results in the diversion of management and key employees from other parts of Vulcan Group's operations. The risk of such adverse effects may be heightened if Vulcan Group completes acquisitions in jurisdictions with which it has less experience. Vulcan Group may also fail to generate expected margins or cash flows, or to realise the anticipated benefits of any acquisitions, including expected operational, revenue, technical, cost and/or other synergies or benefits within anticipated timeframes or at all. In addition, Vulcan Group's assessments of, and assumptions regarding, acquisition targets may prove to be incorrect, and actual results may differ significantly from expectations. Vulcan Group may incur higher than expected capital expenditures and cost in seeking to achieve its growth strategy and it may be unable to realise the anticipated benefits of the capital expenditures and other investments, and may experience longer than anticipated investment payback periods. Vulcan Group may also have reduced amounts of cash available for use towards other initiatives.

6.2.6 Foreign currency exchange rates

Vulcan Group's Consolidated Annual Financial Statements included in this Prospectus are presented in Australian dollars, which was Vulcan Energy Resources Limited's presentational currency during the periods under review. However, Vulcan Group changed its presentational currency to euro with effect from the commencement of the current financial year ending 30 June 2022. The change to euro as the presentational currency is reflected in the Consolidated Interim Financial Statements September 2021 included in this Prospectus.

During the periods under review up to and including the financial year ended 30 June 2021, Vulcan Group had significant translational exchange rate risk as a result of its presentational currency being Australian dollars, while its principal business activities are outside of Australia and its operations outside of Australia use currencies other than the Australian dollar, principally euro and the Norwegian krone (relating mainly to the Kuniko business). As a result, fluctuations in foreign currency exchange rates, in particular, the relative strength or weakness of the Australian dollar and euro have, during the periods under review up to and including the financial year ended 30 June 2021, had an impact on Vulcan Group's performance and results of operations. However, this risk will be mitigated to a significant extent with effect from the current financial year as Vulcan Group's presentational currency has been changed to the euro. Following the change of Vulcan Group's presentational currency to euro, the translational exchange rate risk mainly relates to cash held by Vulcan Group in Australian dollars. Vulcan Group has hedged a significant portion of this residual exchange rate risk in relation to Australian dollar cash reserves through the conversion of Australian dollar reserves into euro, although it retained approximately A\$87 million in Australian dollar cash reserves as of the date of this Prospectus.

As Vulcan Group is, apart from the operational Insheim Plant, primarily in the exploration and development stage it has not earned material revenues to date, but if the Zero Carbon Lithium™

Project achieves commercial production, Vulcan Group will earn revenues from the sale of lithium hydroxide, as well as of electricity and heat from its renewable energy business. Vulcan Group expects that these sales will be principally to European customers and denominated in euro (which is Vulcan Group's presentational currency from the financial year ending 30 June 2022), although it is possible that Vulcan Group may export a portion of its lithium hydroxide outside of Europe, in which case the associated revenues may be denominated in other currencies, principally the US dollar. Vulcan Group's costs have to date been incurred in a combination of Australian dollars, euro and Norwegian krone (relating mainly to the Kuniko business); however, as Vulcan Group's Zero Carbon Lithium™ Project in Germany ramps up towards construction and production, Vulcan Group's costs may increasingly be incurred in euro. Until the change of Vulcan Group's presentational currency to euro, Vulcan Group's financial performance was, therefore, subject to fluctuations as a result of foreign currency exchange rate movements whenever financial information was translated from non-Australian dollar currencies and, subsequent to the change of Vulcan Group's presentational currency to euro, Vulcan Group's financial performance is subject to the translation of financial information from non-euro currencies.

In addition to the translational impact of exchange rate fluctuations, Vulcan Group is exposed to transactional exchange rate risk, which arises as a result of payments Vulcan Group makes or receives in local currencies. Revenues received by Vulcan Group's subsidiaries are usually but not always received in the same currency as the expenses incurred by such subsidiaries. For the financial year ended 30 June 2020 and the financial year ended 30 June 2021 (during which years Vulcan Group did not earn material revenue), approximately nil and 52%, respectively, of Vulcan Group's revenue was earned in currencies other than Australian dollars and approximately 10% and 13%, respectively, of Vulcan Group's expenses were incurred in currencies other than Australian dollars. Vulcan Group expects that, going forward, a degree of transactional exchange rate risk will remain as certain materials will need to be imported from outside the euro area, with costs in currencies other than euro. Moreover, pricing under the offtake agreements concluded by Vulcan Group is based on market prices, calculated by reference to certain indices. The indices commonly used are Price Reporting Agency ("**PRA**") contract indices as provided by, for example, Fastmarkets. Both indices are currently quoted in US dollars, exposing Vulcan Group to a transactional exchange rate risk. While Vulcan Group expects that by the time it commences commercial production indices quotes in euro may become available for the European market, there can be no assurance that this will be the case. Foreign currency transactions are translated into the functional currency 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 period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

6.2.7 Vulcan Group's financing arrangements

Historically, Vulcan Group's finance costs have been minimal. However, Vulcan Group expects to incur increasing levels of finance costs as a result of the construction and development of its Zero Carbon Lithium™ Project. Based on estimates of Vulcan Group's PFS for the Zero Carbon Lithium™ Project, initial funding of approximately EUR 700 million (including contingencies) will be required for the development of Phase One (targeted to commence commercial production in 2024) and a further EUR 1,138 million (including contingencies) will be required for the development of Phase Two, subject to change as part of further updates of Vulcan Group's PFS and of Vulcan Group's DFS. The ability to develop the Zero Carbon Lithium™ Project will depend on the future availability of further funding. Vulcan Group expects to finance the Zero Carbon Lithium™ Project through a combination of green financing and equity, syndicated senior debt, hybrid debt and equity at the project level. Vulcan Group is already in discussions with potential finance parties (some of whom have provided written support for the provision of senior debt for the Zero Carbon Lithium™ Project) and expects to finalise its funding plan following the completion of its DFS in respect of Phase One (which is expected to be completed by the second half of 2022). Vulcan Group may also consider the bond market once in production, in view of the increasing market demand for bonds that meet Environmental, Social, and Governance ("**ESG**") criteria and the availability of longer term yields in the bond market as compared to project finance (high yield) bonds. Vulcan Group has appointed BNP Paribas to assist it with a bankability study and advise Vulcan Group on its project financing process thereafter.

Vulcan Group anticipates that the mix of debt and equity financing may vary by reference to the part of the business to which the funding relates. Vulcan Group expects that the funding for the development of the renewable energy business (which represents a more mature industry), estimated to amount to approximately EUR 226 million of the Phase One funding requirement, may be comprised of a relatively larger proportion of debt financing than the funding for the development

of the lithium business, estimated to amount to approximately EUR 474 million of the Phase One funding requirement. The Company anticipates that it may be able to achieve a higher debt to equity funding ratio for the development of Phase Two of the lithium business once the process is commercially viable; however, this will be evaluated at the time based on a range of factors.

The Zero Carbon Lithium™ Project benefits from being a lithium chemicals project supported by EU-backed group EIT InnoEnergy, the founder and steward of the European Battery Alliance.

Although Vulcan Group has not yet entered into or agreed the terms of any debt facility, the Company expects that, once entered into, Vulcan Group will have a material interest expense, which may be at a variable rate. As such, the amount of interest payable by the Company would ultimately be a function of the prevailing interest rates. A material increase in interest rates during the development phase or once commercial production commences would lead to a higher interest expense for Vulcan Group. In the absence of any material revenue before the commencement of material commercial production, these finance costs may generate additional losses before taxation. These losses may be compounded if the Company is required to incur more debt than currently expected (for example, if the Company is required to finance cost overruns in connection with the Zero Carbon Lithium™ Project).

6.3 Recent Accounting Pronouncements

Vulcan Group has adopted AASB 16 from 1 July 2019. AASB 16 replaces AASB 117 'Leases' and for lessees eliminates the classifications of operating leases and finance leases. Except for short-term leases and leases of low-value assets, right-of-use assets and corresponding lease liabilities are recognised in the statement of financial position. Straight-line operating lease expense recognition is replaced with a depreciation charge for the right-of-use assets (included in operating costs) and an interest expense on the recognised lease liabilities (included in finance costs). In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results improve as the operating expense is now replaced by interest expense and depreciation in profit or loss. For classification within the statement of cash flows, the interest portion is disclosed in operating activities and the principal portion of the lease payments are separately disclosed in financing activities. For lessor accounting, AASB 16 does not substantially change how a lessor accounts for leases. The adoption of AASB 16 has not have a material impact on Vulcan Group given the low level of leases within Vulcan Group.

6.4 Segment information

Following the acquisition of a 100% interest in Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd) which held the Zero Carbon Lithium™ Project in the Upper Rhine Valley of Germany on 4 September 2019, it was determined that Vulcan Group operated in three operating segments: lithium chemicals and geothermal renewable energy exploration in Germany; base metals exploration in Norway; and administration. In the Consolidated Interim Financial Statements for the three-month period ended 30 September 2021, a fourth operating segment, investment, was added; this relates principally to the Vulcan Group's investment in Kuniko, in respect of which a spin-off was completed in August 2021 but in which the Vulcan Group retains a 24.34% residual interest. Vulcan Group is currently assessing the composition of its operating segments in light of its current strategic direction, which will inform the Vulcan Group's segmental disclosure in the financial year ending 30 June 2022 and the basis on which internal reports are provided to the Directors for assessing performance and determining the allocation of resources within Vulcan Group going forward. See note 3 to the Consolidated Annual Financial Statements for the financial year ended 30 June 2020 and the financial year ended 30 June 2021 and note 2 to the Consolidated Interim Financial Statements for the three-month period ended 30 September 2021 for further detail with respect to segment performance during the periods under review.

6.5 Description of key line items

6.5.1 Revenue from continuing operations

Vulcan Group is currently in the exploration and development phase and, therefore, did not earn material revenue during the periods under review. Prior to 30 June 2021, all revenue earned by Vulcan Group during the periods under review has been classified as "other income". Following the acquisition of GeoT and Gec-co in July 2021, Vulcan Group has been earning a small amount of revenue (EUR 109,202 in the three-month period ended 30 September 2021) from the external businesses of GeoT and Gec-co, classified as "revenue from continuing operations". Additionally, in

the three-month period ended 30 September 2021, Vulcan Group recorded a EUR 1,975,185 gain on deconsolidation, attributable to the fair value of Vulcan Group's residual interest in Kuniko following its spin-off.

Following the acquisition of the Insheim Plant in December 2021, Vulcan Group has commenced earning revenues from the sale of electricity, which from the financial year ending 30 June 2022 will be classified as "revenue from continuing operations". If and when Vulcan Group's Zero Carbon Lithium™ Project reaches commercial production (with Phase One commercial production currently targeted for 2024 and Phase Two commercial production currently targeted for 2025), Vulcan Group intends to earn revenues both from the sale of lithium hydroxide from its lithium business and the sale of electricity and heat from its renewable energy business.

Other income

Other income comprises principally interest earned on term deposit, Research and Development tax incentives and funds received from EIT InnoEnergy towards development of Vulcan Group's Zero Carbon Lithium™ Project. Vulcan Group also received a temporary government grant during the economic downturn associated with the COVID-19 pandemic.

Interest revenue is recognised as interest accrued using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

Dividends from equity investments are recognised in the profit or loss as other income when Vulcan Group's right to receive payments is established.

6.5.2 Raw materials and purchased services

During the periods under review, Vulcan Group began incurring expenses for raw materials and purchased services in the three-month period ended 30 September 2021, during which period these comprised materials and purchased services relating to the businesses of GeoT and Gec-co acquired by Vulcan Group in July 2021. In future periods, it is expected that these will also include raw materials and purchased services in connection with the operation of the Insheim Plant as well as Vulcan Group's Zero Carbon Lithium™ Project.

6.5.3 Administrative expenses

Administrative expenses comprise accounting, audit and company secretarial fees, travel expenses and general and administrative expenses.

6.5.4 Compliance and regulatory expenses

Compliance and regulatory expenses comprise ASX, ASIC and audit and taxation advice costs.

6.5.5 Depreciation

During the periods under review, depreciation related to depreciation of plant & equipment and software. Once Vulcan Group has commenced commercial production, it is expected that depreciation will also include depreciation of Vulcan Group's production assets and capitalised expenses.

Once assets are available for use, depreciation is calculated using the straight-line method to allocate asset costs over their estimated useful lives, as follows:

Software: 3 -5 years

Plant & Equipment: 2-15 years

6.5.6 Consulting and legal fees

Consulting and legal fees comprise corporate advisory fees, consulting fees and legal fees.

6.5.7 Employee benefit expenses

Employee benefit expenses comprise salary and wages and associated costs.

6.5.8 Investor relations

Investor relations expenses comprise fees paid to media companies as well as share-based payments to investor publications.

6.5.9 Introducer fee

Introducer fees represent a share-based payment expense recognised in the Statement of Profit or Loss and Other Comprehensive Income in respect of certain shares issued to the introducers of the Vulcan Energy Resources Europe Pty Ltd acquisition as part of the consideration of the acquisition. During the periods under review, introducer fees were only recognised in the financial year ended 30 June 2020.

6.5.10 Occupancy costs

Occupancy costs comprise rent of office premises.

6.5.11 Impairment expense

Impairment expense comprises impairments to the Company's exploration and evaluation assets, principally for relinquished exploration licences in Norway.

6.5.12 Share-based payment expense

Share-based payment expense comprises share-based payment expenses recognised in the Statement of Profit or Loss and Other Comprehensive Income in respect of certain shares issued to outside parties (including the vendors (Dr Francis Wedin and Dr Horst Kreuter) in respect of the acquisition of Vulcan Energy Resources Europe Pty Ltd) and share-based remuneration provided to employees, consultants and directors.

6.5.13 Other expenses

Other expenses comprise office expenses and IT costs.

6.5.14 Foreign currency (losses) / gain

Foreign currency (losses) / gain represent losses and gains resulting from the settlement of foreign currency transactions and from the translation at period end exchange rates of monetary assets and liabilities denominated in foreign currencies.

6.5.15 Income tax expense

Income tax expense comprises current income tax expense and deferred tax expense.

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at the end of the reporting period. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Current and deferred income tax expense (income) is charged or credited directly to equity instead of the profit or loss when the tax relates to items that are credited or charged directly to equity.

6.6 Results of operations

6.6.1 Overview

The table below presents Vulcan Group's results of operations for the periods indicated, which information has been extracted without material adjustment from the historical financial information set out in the Consolidated Financial Statements and the Consolidated Interim Financial Statements which are reproduced in this Prospectus beginning on page F-1.

Through the end of the financial year ended 30 June 2021, Vulcan Group's presentational currency was the Australian dollar. With effect from the financial year ending 30 June 2022, Vulcan Group's presentation currency is euro. Therefore, the financial information for the three-month period ended 30 September 2021 (and the comparative information for the three-month period ended 30 September 2020) extracted without material adjustment from the Consolidated Interim Financial Statements is presented in euro, and is therefore not directly comparable with the financial information for the financial years ended 30 June 2019, 2020 and 2021, which is presented in Australian dollars.

	Three-month period ended 30 September		Financial year ended 30 June		
	2021 EUR	2020 EUR	2021 A\$	2020 A\$	2019 A\$
	(unaudited)			(audited)	
Revenue					
Revenue from continuing operations	109,202	-	-	-	-
Other income	141,955	166,726	631,542	95,342	56,055
Gain on deconsolidation	1,975,185	-	-	-	-
Other own work capitalised	976,275	-	-	-	-
Expenses					
Raw materials and purchased services	(343,963)	-	-	-	-
Administrative expenses	(688,317)	(46,799)	(888,145)	(320,920)	(172,580)
Compliance and regulatory expenses	(214,142)	(25,883)	(551,639)	(98,906)	(62,970)
Consulting and legal fees	(825,785)	(53,248)	(1,922,771)	(424,603)	(109,642)
Depreciation	(100,242)	-	(131,522)	-	-
Employee benefit expenses	(1,235,905)	(71,989)	(624,829)	(234,551)	(156,165)
Investor relations	(141,407)	(7,819)	(410,338)	(314,510)	-
Introducer fee	-	-	-	(150,000)	-
Occupancy costs	(27,120)	(3,808)	(55,930)	(18,148)	(11,000)
Impairment expenses	(8,489)	(139,930)	(228,663)	(286,017)	(287,667)
Share-based payments expense	(833,342)	(467,592)	(6,517,484)	(1,690,473)	(62,138)
Other expenses	(310,779)	(10,135)	(120,877)	(103,406)	(27,533)
Foreign currency (losses)/gain	7,552	138	76,042	(7,167)	(3,024)
Loss before income tax expense	(1,519,322)	(660,339)	(10,744,614)	(3,553,359)	(836,664)
Income tax expense	(10,717)	-	-	-	-
Loss after income tax for the period	(1,530,039)	(660,339)	(10,744,614)	(3,553,359)	(836,664)
Other comprehensive income	-	-	(99,993)	(22,016)	-
Exchange differences on translation of foreign operations	(605,389)	(58,250)	-	-	-
Total comprehensive loss attributable to the owners of Vulcan Energy Resources Limited	(2,135,428)	(718,589)	(10,844,607)	(3,575,375)	(836,664)

6.6.2 Comparison of the results of operations for the three-month periods ended 30 September 2021 and 2020 and the financial years ended 30 June 2021, 2020, and 2019

6.6.2.1 Revenue from continuing operations

Q1 FY2022 vs. Q1 FY2021

Vulcan Group's only revenue in the three-month period ended 30 September 2020 was from other income. Other income decreased by EUR 24,771, or 14.9%, to EUR 141,955 in the three-month period ended 30 September 2021 from EUR 166,726 in the three-month period ended 30 September 2020. In the three months ended 30 September 2020 Vulcan Group received EUR 150,000 funding from InnoEnergy related to developing Vulcan Group's Zero Carbon project.

In the three-month period ended 30 September 2021, Vulcan Group also had a EUR 1,975,185 gain related to the deconsolidation of Kuniko following the spin-off of Kuniko from Vulcan Group completed in August 2021, following which Vulcan Group's remaining 25.85% interest in Kuniko was measured at fair value; EUR 109,202 in revenue from continuing operations attributable to revenues earned by GeoT and Gec-co following their acquisition by Vulcan Group; and EUR 976,275 in other own work capitalised, which consists of GeoT and Gec-co providing services relating to non-current assets for own use (exploration and evaluation expenditure) to Vulcan GmbH.

FY2021 vs. FY2020

As Vulcan Group has not yet commenced commercial production, its only revenue in the financial years ended 30 June 2021 and 30 June 2020 was from other income. Other income increased by A\$536,200, or 562.4%, to A\$631,542 in the financial year ended 30 June 2021 from A\$95,342 in the financial year ended 30 June 2020. This increase was primarily driven by A\$327,380 in funding from EU-backed EIT InnoEnergy pursuant to an investment agreement signed in July 2020, a A\$133,484 R&D tax incentive and an increase in interest income to A\$120,678 (compared to A\$45,342 in the financial year ended 30 June 2020).

FY2020 vs. FY2019

As Vulcan Group has not yet commenced commercial production, its only revenue in the financial years ended 30 June 2020 and 30 June 2019 was from other income. Other income increased by A\$39,287, or 70.1%, to A\$95,342 in the financial year ended 30 June 2020 from A\$56,055 in the financial year ended 30 June 2019. This increase was primarily driven by a A\$50,000 government grant related to the economic downturn associated with the COVID-19 pandemic in the financial year ended 30 June 2020, partially offset by a slight decrease in interest income from A\$56,055 in the financial year ended 30 June 2019 to A\$45,342 in the financial year ended 30 June 2020.

6.6.2.2 Raw materials and purchased services

Q1 FY2022

In the three-month period ended 30 September 2021, Vulcan Group had expenses for raw materials and purchased services of EUR 343,963, relating primarily to operations at GeoT and Gec-co following their acquisition by Vulcan Group, including external contractors.

Vulcan did not incur any expenses for raw materials and purchased services in the three-month period ended 30 September 2020, or in the financial years ended 30 June 2021, 30 June 2020 or 30 June 2019.

6.6.2.3 Administrative expenses

Q1 FY2022 vs. Q1 FY2021

Administrative expenses increased by EUR 641,518 or 1,370.8%, to EUR 688,317 in the three-month period ended 30 September 2021 from EUR 46,799 in the three-month period ended 30 September 2020. This increase was primarily driven by an increase in general expenses connected with the ramp-up of Vulcan Group's operations in Germany, with costs including, but not limited to, rent, public and stakeholder relations, information technology and recruitment. These increases were partially offset by lower accounting, audit and company secretarial fees and lower travel expenses as a result of travel restrictions put in place due to the COVID-19 pandemic.

FY2021 vs. FY2020

Administrative expenses increased by A\$567,225, or 176.7%, to A\$888,145 in the financial year ended 30 June 2021 from A\$320,920 in the financial year ended 30 June 2020. This increase was primarily driven by an A\$670,259 increase in general expenses connected with the ramp-up of Vulcan Group's operations in Germany, with costs including rent, public and stakeholder relations, information technology and recruitment. These costs were partially offset by lower accounting, audit

and company secretarial fees and lower travel expenses as a result of travel restrictions put in place due to the COVID-19 pandemic.

FY2020 vs. FY2019

Administrative expenses increased by A\$148,340, or 86.0%, to A\$320,920 in the financial year ended 30 June 2020 from A\$172,580 in the financial year ended 30 June 2019. This increase was primarily driven by an A\$81,417 increase in travel expenses, principally travel by management from Australia to Germany and travel by personnel within Germany in connection with the increasing operations in the Upper Rhine Valley in relation to the Zero Carbon Lithium™ Project, and an A\$59,912 increase in general and administrative expenses connected with the ramp-up of Vulcan Group's operations.

6.6.2.4 Compliance and regulatory expenses

Q1 FY2022 vs. Q1 FY2021

Compliance and regulatory expenses increased by EUR 188,259, or 727.3%, to EUR 214,142 in the three-month period ended 30 September 2021 from EUR 25,883 in the three-month period ended 30 September 2020. This increase was primarily driven by additional ASX costs relating to the A\$200 million institutional share placement in September 2021.

FY2021 vs. FY2020

Compliance and regulatory expenses increased by A\$452,733, or 457.7%, to A\$551,639 in the financial year ended 30 June 2021 from A\$98,906 in the financial year ended 30 June 2020. This increase was primarily driven by additional ASX costs relating to shares issued during the financial year ended 30 June 2021 (including a (combined) A\$120 million equity fundraising in February and June 2021).

FY2020 vs. FY2019

Compliance and regulatory expenses increased by A\$35,936, or 57.1%, to A\$98,906 in the financial year ended 30 June 2020 from A\$62,970 in the financial year ended 30 June 2019. This increase was primarily driven by additional ASX related costs resulting from the Company's June 2020 equity fundraising, an increase in annual listing fees and fees related to shares issued as part of the acquisition of Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd) which held the Zero Carbon Lithium™ Project.

6.6.2.5 Consulting and legal fees

Q1 FY2022 vs. Q1 FY2021

Consulting and legal fees increased by EUR 772,537, or 1,450.8%, to EUR 825,785 in the three-month period ended 30 September 2021 from EUR 53,248 in the three-month period ended 30 September 2020. This increase was driven by increases in consultancy fees and legal fees in relation to preparations for the listing of the Company on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), the spin-off of Kuniko, work done in relation to the acquisitions of the Insheim Plant, GGH and GeoT and the general ramp-up of Vulcan Group's business.

FY2021 vs. FY2020

Consulting and legal fees increased by A\$1,498,168, or 352.8%, to A\$1,922,771 in the financial year ended 30 June 2021 from A\$424,603 in the financial year ended 30 June 2020. This increase was driven by an A\$739,965 increase in consultancy fees and a A\$775,748 increase in legal fees, in each case principally in relation to a (combined) A\$120 million equity fundraising in February and June 2021, the spin-off of Kuniko, work done in relation to the acquisitions of the GGH, GeoT and Gec-co and the general ramp-up of Vulcan Group's business. These increases were partially offset by a A\$17,544 reduction in corporate advisory fees.

FY2020 vs. FY2019

Consulting and legal fees increased by A\$314,961, or 287.3%, to A\$424,603 in the financial year ended 30 June 2020 from A\$109,642 in the financial year ended 30 June 2019. This increase was driven by a A\$208,920 increase in legal fees, a A\$53,048 increase in corporate advisory fees and

A\$52,993 of consulting fees in the financial year ended 30 June 2020, all of which were principally in relation to the acquisition of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd., the ramp-up of Vulcan Group's business and the assessment of other acquisition opportunities.

6.6.2.6 Employee benefit expenses

Q1 FY2022 vs. Q1 FY2021

Employee benefit expenses increased by EUR 1,163,916, or 1,616.8%, to EUR 1,235,905 in the three-month period ended 30 September 2021 from EUR 71,989 in the three-month period ended 30 September 2020. This increase was principally driven by an increase in Vulcan Group's employee headcount as it further expanded its operations in connection with the Zero Carbon Lithium™ Project.

FY2021 vs. FY2020

Employee benefit expenses increased by A\$390,278, or 166.4%, to A\$624,829 in the financial year ended 30 June 2021 from A\$234,551 in the financial year ended 30 June 2020. This increase was principally driven by an increase in Vulcan Group's employee headcount as it further expanded its operations in connection with the Zero Carbon Lithium™ Project.

FY2020 vs. FY2019

Employee benefit expenses increased by A\$78,386, or 50.2%, to A\$234,551 in the financial year ended 30 June 2020 from A\$156,165 in the financial year ended 30 June 2019. This increase was principally driven by an increase in Vulcan Group's employee headcount.

6.6.2.7 Investor relations

Q1 FY2022 vs. Q1 FY2021

Investor relations expenses increased by EUR 133,588, or 1,708.5%, to EUR 141,407 in the three-month period ended 30 September 2021 from EUR 7,819 in the three-month period ended 30 September 2020. This increase was principally driven by the share-based payment expense relating to Vulcan Group's RXR sponsorship.

FY2021 vs. FY2020

Investor relations expenses increased by A\$95,828, or 30.5%, to A\$410,338 in the financial year ended 30 June 2021 from A\$314,510 in the financial year ended 30 June 2020. This increase was principally driven by the expansion of the Zero Carbon Lithium™ Project and Vulcan Group's investor base.

FY2020 vs. FY2019

Vulcan Group did not incur any expenses related to investor relations in the financial year ended 30 June 2019. In the financial year ended 30 June 2020, Vulcan Group incurred A\$314,510 of expenses related to investor relations, which was principally attributable to a share-based payment to the investor publication *Next Investors* for coverage of Vulcan Group.

6.6.2.8 Introducer fee

Q1 FY2022 vs. Q1 FY2021

Vulcan Group did not incur an introducer fee in the three-month period ended 30 September 2020 or the three-month period ended 30 September 2021.

FY2021 vs. FY2020

Vulcan Group did not incur an introducer fee in the financial year ended 30 June 2021. In the financial year ended 30 June 2020, Vulcan Group incurred an introducer fee of A\$150,000, related to a share-based payment to the introducers of the acquisition of 100% of the shares in Vulcan Energy Resources Pty Ltd to Koppa Resources Limited.

FY2020 vs. FY2019

Vulcan Group did not incur an introducer fee in the financial year ended 30 June 2019. As described above, in the financial year ended 30 June 2020, Vulcan Group incurred an introducer fee of A\$150,000, related to a share-based payment to the introducers of the acquisition of 100% of the shares in Vulcan Energy Resources Pty Ltd to Kopper Resources Limited.

6.6.2.9 Occupancy costs

Q1 FY2022 vs. Q1 FY2021

Occupancy costs increased by EUR 23,312 or 612.2%, to EUR 27,120 in the three-month period ended 30 September 2021 from EUR 3,808 in the three-month period ended 30 September 2020. This increase was principally due to the occupancy of an additional property in Germany.

FY2021 vs. FY2020

Occupancy costs increased by A\$37,782 or 208.2%, to A\$55,930 in the financial year ended 30 June 2021 from A\$18,148 in the financial year ended 30 June 2020. This increase was principally due to the occupancy of additional floor space for Vulcan Group's Australian operations.

FY2020 vs. FY2019

Occupancy costs increased by A\$7,148, or 65.0%, to A\$18,148 in the financial year ended 30 June 2020 from A\$11,000 in the financial year ended 30 June 2019. This increase was principally due to a change of office in Perth, Australia.

6.6.2.10 Impairment expenses

Q1 FY2022 vs. Q1 FY2021

Impairment expenses decreased by EUR 131,441, or 93.9%, to EUR 8,489 in the three-month period ended 30 September 2021 compared to EUR 139,930 in the three-month period ended 30 September 2020. This decrease was primarily due to the relinquishment of licenses in Norway in the three-month period ended 30 September 2020.

FY2021 vs. FY2020

Impairment expenses decreased by A\$57,354, or 20.1%, to A\$228,663 in the financial year ended 30 June 2021 compared to A\$286,017 in the financial year ended 30 June 2020. This decrease was primarily due to lower write offs of Norwegian license expenditure in the financial year ended 30 June 2021.

FY2020 vs. FY2019

Impairment expenses were relatively stable at A\$286,017 in the financial year ended 30 June 2020 compared to A\$287,667 in the financial year ended 30 June 2019. The impairment expenses in each year related primarily to relinquished exploration licences in Norway.

6.6.2.11 Share-based payment expense

Q1 FY2022 vs. Q1 FY2021

Share-based payment expense increased by EUR 365,750, or 78.2%, to EUR 833,342 in the three-month period ended 30 September 2021 from EUR 467,592 in the three-month period ended 30 September 2020. This increase was principally driven by the grant of additional performance rights since 30 September 2020 to Directors, staff and consultants to align their interests to that of the Company's shareholders and assist as an effective means of retaining staff, as well as the issue of warrants to EIT InnoEnergy and the issue of shares for services rendered.

FY2021 vs. FY2020

Share-based payment expense increased by A\$4,827,011, or 285.5%, to A\$6,517,484 in the financial year ended 30 June 2021 from A\$1,690,473 in the financial year ended 30 June 2020. This increase was principally driven by the grant in the financial year ended 30 June 2021 of A\$4,419,668 in performance rights to the Directors, staff and consultants to align their interests to that of the Company's shareholders and assist as an effective means of retaining staff, as well as additional

Performance Shares issued to the vendors (Dr Francis Wedin and Dr Horst Kreuter) in connection with the acquisition by Vulcan Group of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd., the issue of warrants to EIT InnoEnergy and the issue of other shares and options.

FY2020 vs. FY2019

Share-based payment expense increased by A\$1,628,335, or 2,620.5%, to A\$1,690,473 in the financial year ended 30 June 2020 from A\$62,138 in the financial year ended 30 June 2019. This increase was principally driven by the grant in the financial year ended 30 June 2020 of various incentive-related performance rights issued to directors and staff and the issue of Performance Shares to the vendors in connection with the acquisition by Vulcan Group of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd.

6.6.2.12 Loss from continuing operations before income tax

Q1 FY2022 vs. Q1 FY2021

For the reasons set out above, loss from continuing operations before income tax increased by EUR 858,983, or 130.1%, from EUR 660,339 in the three-month period ended 30 September 2020 to EUR 1,519,322 in the three-month period ended 30 September 2021.

FY2021 vs. FY 2020

For the reasons set out above, loss from continuing operations before income tax increased by A\$7,191,255, or 202.4%, from A\$3,553,359 in the financial year ended 30 June 2020 to A\$10,744,614 in the financial year ended 30 June 2021.

FY2020 vs. FY2019

For the reasons set out above, loss from continuing operations before income tax increased by A\$2,716,695, or 324.7%, from A\$836,664 in the financial year ended 30 June 2019 to A\$3,553,359 in the financial year ended 30 June 2020.

6.6.2.13 Income tax expense

Q1 FY2022 vs. Q1 FY2021

Vulcan Group incurred an income tax expense of EUR 10,717 in the three-month period ended 30 September 2021, attributable to income tax expense of the Gec-co business following its acquisition by Vulcan Group.

Vulcan Group did not incur any income tax expense in the three-month period ended 30 September 2020.

FY2021 vs. FY2020

Due to Vulcan Group's loss from continuing operations in each of the financial years, Vulcan Group did not incur any income tax expense in the financial year ended 30 June 2020 or the financial year ended 30 June 2021.

FY2020 vs. FY2019

Due to Vulcan Group's loss from continuing operations in each of the financial years, Vulcan Group did not incur any income tax expense in the financial year ended 30 June 2019 or the financial year ended 30 June 2020.

6.6.2.14 Loss from continuing operations after income tax

Q1 FY2022 vs. Q1 FY2021

As Vulcan Group did not pay income tax in the three-month period ended 30 September 2020, its loss from continuing operations after income tax was the same as its loss from continuing operations before income tax in that period.

For the three-month period ended 30 September 2021, Vulcan Group's loss from continuing operations after income tax was EUR 1,530,039, for the reasons set out above.

FY2021 vs. FY2020

As Vulcan Group did not pay income tax in either financial year, its loss from continuing operations after income tax was the same as its loss from continuing operations before income tax in each of the financial year ended 30 June 2020 and the financial year ended 30 June 2021.

FY2020 vs. FY2019

As Vulcan Group did not pay income tax in either financial year, its loss from continuing operations after income tax was the same as its loss from continuing operations before income tax in each of the financial year ended 30 June 2019 and the financial year ended 30 June 2020.

6.6.2.15 Other comprehensive income

Q1 FY2022 vs. Q1 FY2021

In the three-month period ended 30 September 2021, Vulcan Group had other comprehensive loss of EUR 605,389, compared to other comprehensive loss of EUR 58,250 in the three-month period ended 30 September 2020, which related in each case to exchange differences on translation of foreign operations.

FY2021 vs. FY2020

In the financial year ended 30 June 2021, Vulcan Group had other comprehensive loss of A\$ 99,993, compared to other comprehensive loss of A\$ 22,016 in the financial year ended 30 June 2020, which related in each case to exchange differences on translation of foreign operations.

FY2020 vs. FY2019

Vulcan Group did not record other comprehensive income in the financial year ended 30 June 2019. In the financial year ended 30 June 2020, Vulcan Group had other comprehensive loss of A\$22,016, which related to exchange differences on translation of foreign operations.

6.6.2.16 Total comprehensive loss

Q1 FY2022 vs. Q1 FY2021

For the reasons set out above, total comprehensive loss increased by EUR 1,416,839, or 197.2%, from EUR 718,589 in the three-month period ended 30 September 2020 to EUR 2,135,428 in the three-month period ended 30 September 2021.

FY2021 vs. FY2020

For the reasons set out above, total comprehensive loss increased by A\$7,269,232, or 203.3%, from A\$3,575,375 in the financial year ended 30 June 2020 to A\$10,844,607 in the financial year ended 30 June 2021.

FY2020 vs. FY2019

For the reasons set out above, total comprehensive loss increased by A\$2,738,711, or 327.3%, from A\$836,664 in the financial year ended 30 June 2019 to A\$3,575,375 in the financial year ended 30 June 2020.

6.7 Assets, equity and liabilities

6.7.1 Overview

The following table shows selected information from the consolidated statements of financial position of the Company as at 30 September 2021 and as at 30 June 2021, 2020 and 2019. In respect of the financial position of the Company as at 30 June 2021, in order to aid comparison across periods, the information has been presented in both Australian dollars (being Vulcan Group's presentational currency through the financial year ended 30 June 2021) and euro (being Vulcan Group's presentational currency with effect from the current financial year ending 30 June 2022). The information presented in Australian dollars has been extracted from the Consolidated Financial

Statements and the information presented in euro has been extracted from the Consolidated Interim Financial Statements.

	As at 30 September 2021 EUR	30 June 2021 EUR	30 June 2021 A\$	As at 30 June 2020 A\$	30 June 2019 A\$
	(unaudited)		(audited)		
ASSETS					
Current assets					
Cash and cash equivalents	187,220,521	72,494,107	114,705,865	6,421,557	3,348,996
Trade and other receivables	1,970,017	756,818	1,197,500	116,071	35,063
Contract assets	194,233	-	-	-	-
Total current assets	189,384,771	73,250,925	115,903,365	6,537,628	3,384,059
Non-current assets					
Exploration and evaluation expenditure	9,968,705	8,722,293	13,793,798	2,556,980	526,001
Intangible assets	2,578,488	-	-	-	-
Plant and equipment	2,320,228	935,433	1,480,672	13,353	-
Right-of-use asset	700,588	357,867	566,246	-	-
Investments accounted for using equity method	1,708,987	-	-	-	-
Deferred tax assets	76,637	-	-	-	-
Total non-current assets	17,353,633	10,015,593	15,840,716	2,570,333	526,001
Total assets	206,738,404	83,266,518	131,744,081	9,107,961	3,910,060
LIABILITIES					
Current liabilities					
Trade and other payables	3,185,674	1,335,425	2,113,014	208,222	116,944
Lease liabilities	128,828	39,430	62,389	-	-
Provisions	61,339	55,353	87,584	13,700	-
Loans and borrowings	62,087	-	-	-	-
Income tax liabilities	50,900	-	-	-	-
Total current liabilities	3,488,828	1,430,208	2,262,987	221,922	116,944
Non-current liabilities					
Lease liabilities	570,230	313,818	496,547	-	-
Loans and borrowings	139,182	-	-	-	-
Provisions	254,500	-	-	-	-
Deferred tax liabilities	425,758	-	-	-	-
Total non-current liabilities	1,389,670	313,818	496,547	-	-
Total liabilities	4,878,498	1,744,026	2,759,534	221,922	116,944
Net assets	201,859,906	81,522,492	128,984,547	8,886,039	3,793,116
EQUITY					
Contributed equity	206,547,871	85,271,678	136,500,372	11,836,741	4,746,416
Reserves	6,413,356	5,822,096	7,899,461	1,719,970	164,013
Accumulated losses	(11,101,321)	(9,571,282)	(15,415,286)	(4,670,672)	(1,117,313)
Total equity	201,859,906	81,522,492	128,984,547	8,886,039	3,793,116

6.7.2 Comparison of the figures reported in the consolidated statements of financial position as of 30 September 2021 and 30 June 2021, 2020 and 2019

6.7.2.1 Current assets

30 September 2021 vs. 30 June 2021

Current assets increased by EUR 116,133,846, or 158.5%, from EUR 73,250,925 as of 30 June 2021 to EUR 189,384,771 as of 30 September 2021, primarily due to an increase in cash and cash equivalents attributable primarily to the proceeds of an institutional placement of shares completed in September 2021.

30 June 2021 vs. 30 June 2020

Current assets increased by A\$109,365,737, or 1,672.9%, from A\$6,537,628 as of 30 June 2020 to A\$115,903,365 as of 30 June 2021, primarily due to an increase in cash and cash equivalents attributable primarily to proceeds from the issue of shares.

30 June 2020 vs. 30 June 2019

Current assets increased by A\$3,153,569, or 93.2%, from A\$3,384,059 as of 30 June 2019 to A\$6,537,628 as of 30 June 2020, primarily due to an increase in cash and cash equivalents attributable primarily to the proceeds of new share issues, partially offset by cash used in Vulcan Group's operating activities and investing activities.

6.7.2.2 Non-current assets

30 September 2021 vs. 30 June 2021

Non-current assets increased by EUR 7,338,040, or 73.3%, from EUR 10,015,593 as of 30 June 2021 to EUR 17,353,633 as of 30 September 2021, primarily due to the addition of goodwill and intangible assets related to the acquisition of Gec-co in July 2021, the addition of investments of EUR 1,708,987 representing Vulcan Group's residual interest in Kuniko following its spin-off by Vulcan Group, increases in the carrying value of plant and equipment and an increase in capitalised exploration and evaluation expenditure attributable to the acquisition of the Zero Carbon Lithium™ Project and other exploration activity during the three-month period ended 30 September 2021 and the addition of EUR 1,086,516 in goodwill related to the acquisition of Gec-co in July 2021.

30 June 2021 vs. 30 June 2020

Non-current assets increased by A\$13,270,383, or 516.3%, from A\$2,570,333 as of 30 June 2020 to A\$15,840,716 as of 30 June 2021, primarily due to an increase in capitalised exploration and evaluation expenditure attributable to the acquisition of the Zero Carbon Lithium™ Project and other exploration activity during the year ended 30 June 2021 and increases in the carrying value of software and plant and equipment.

30 June 2020 vs. 30 June 2019

Non-current assets increased by A\$2,044,332, or 388.7%, from A\$526,001 as of 30 June 2019 to A\$2,570,333 as of 30 June 2020, primarily due to an increase in capitalised exploration and evaluation expenditure attributable to the acquisition of the Zero Carbon Lithium™ Project and other exploration activity during the year ended 30 June 2020.

6.7.2.3 Current liabilities

30 September 2021 vs. 30 June 2021

Current liabilities increased by EUR 2,058,620, or 143.9%, from EUR 1,430,208 as of 30 June 2021 to EUR 3,488,828 as of 30 September 2021, primarily due to a EUR 1,850,249 increase in trade and other payables attributable to an increase in development activity for the Zero Carbon Lithium™ Project and contingent consideration relating to the acquisition of GGH, as well as a EUR 89,398 increase in current lease liabilities and the addition of loans and borrowings and income tax liabilities.

30 June 2021 vs. 30 June 2020

Current liabilities increased by A\$2,041,065, or 919.7%, from A\$221,922 as of 30 June 2020 to A\$2,262,987 as of 30 June 2021, primarily due to an A\$1,904,792 increase in trade and other payables attributable to an increase in development activity for the Zero Carbon Lithium™ Project, as well as an increase in lease liabilities and provisions.

30 June 2020 vs. 30 June 2019

Current liabilities increased by A\$104,978, or 89.8%, from A\$116,944 as of 30 June 2019 to A\$221,922 as of 30 June 2020, primarily due to increased payables on corporate and exploration costs.

6.7.2.4 Non-Current liabilities

30 September 2021 vs. 30 June 2021

Non-current liabilities increased by EUR 1,075,852, or 342.8%, from EUR 313,818 as of 30 June 2021 to EUR 1,389,670 as of 30 September 2021, primarily due to a EUR 256,412 increase in non-

current lease liabilities and the addition as at 30 September 2021 of loans and borrowings of EUR 139,182, deferred tax liabilities of EUR 425,758 and other provisions of EUR 254,500.

30 June 2021 vs. 30 June 2020

Vulcan Group did not have non-current liabilities in the financial year ended 30 June 2020. Non-current liabilities of A\$496,547 in the financial year ended 30 June 2021 related to lease liabilities for office space and vehicles.

30 June 2020 vs. 30 June 2019

Vulcan Group did not have non-current liabilities in the financial years ended 30 June 2019 or 30 June 2020.

6.7.2.5 Equity

30 September 2021 vs. 30 June 2021

Equity increased by EUR 120,337,414, or 147.6%, from EUR 81,522,492 as of 30 June 2021 to EUR 201,859,906 as of 30 September 2021, primarily due to capital increases in the three-month period ended 30 September 2021 (including EUR 123,680,002 from a share placement (less transaction fees) completed in September 2021, as well as shares issued as consideration for the acquisitions of Gec-co and GGH and shares issued for services rendered). This increase was partially offset by higher accumulated losses.

30 June 2021 vs. 30 June 2020

Equity increased by A\$120,098,508, or 1,351.5%, from A\$8,886,039 as of 30 June 2020 to A\$128,984,547 as of 30 June 2021, primarily due to (combined) A\$120 million equity fundraising in February and June 2021 together with increased share-based payment reserves, partially offset by higher accumulated losses.

30 June 2020 vs. 30 June 2019

Equity increased by A\$5,092,923, or 134.3%, from A\$3,793,116 as of 30 June 2019 to A\$8,886,039 as of 30 June 2020, primarily due to capital increases in the year ended 30 June 2020, together with increased share-based payment reserves.

6.8 Liquidity and financial resources

6.8.1 Overview

The Company's principal source of funds has historically been cash generated from financing activities, primarily the issuance of share capital as well as loans from third parties. The Company expects that capital expenditures to fund the Zero Carbon Lithium™ Project will represent its most significant use of funds to 2025. It will also need to pay interest on the debt components of any project debt financing. After the commencement of commercial production at the Zero Carbon Lithium™ Project, certain working capital requirements, operating costs, payments of interest and principal are expected to be higher during the development period, and incremental capital expenditures after the development period are anticipated to be the primary use of funds and will be sourced primarily out of cash flow from operations. The Company had cash and cash equivalents of EUR 187.2 million as at 30 September 2021 and cash and cash equivalents of EUR 134.5 million as of 31 December 2021.

6.8.2 Capital expenditure

To date, Vulcan Group's capital expenditure has been comprised primarily of expenditure relating to obtaining approvals and completing technical studies in connection with the Zero Carbon Lithium™ Project, consultant costs and costs related to piloting Vulcan Group's lithium extraction technology. In the financial years ended 30 June 2019, 30 June 2020 and 30 June 2021, Vulcan Group's capital expenditure amounted to A\$438,000, A\$2,316,000 and A\$13,034,000 respectively, relating principally to the following:

- The A\$438,000 in capital expenditure in the financial year ended 30 June 2019 related principally to exploration on Norwegian licenses. These capital expenditures were funded principally from the initial public offering funds.
- The A\$2,316,000 in capital expenditure (before impairments) in the financial year ended 30 June 2020 related to the acquisition and exploration expenditure on Vulcan Group's Zero Carbon Lithium™ Project and Norwegian licenses. These capital expenditures were funded principally from capital raised in September 2019 and existing funds.
- The A\$13,034,000 in capital expenditure (before impairments and depreciation) in the financial year ended 30 June 2021 related to the acquisition, exploration and property plant and equipment expenditure on Vulcan Group's Zero Carbon Lithium™ Project. These capital expenditures were funded principally from capital raised in June 2020 and February 2021 as well as the proceeds of the exercise of listed options.

Between 30 June 2021 and the date of this Prospectus, Vulcan Group incurred capital expenditures in the amount of EUR 47 million, primarily comprising of exploration and property plant and equipment expenditure on Vulcan Group's Zero Carbon Lithium™ Project as well as the acquisition of two drilling rigs and Natürlich Insheim. Vulcan Group financed these capital expenditures from the (combined) February and June 2021 placement and the September 2021 placement.

Vulcan Group's capital expenditure is expected to increase substantially in future years as it progresses the development of the Zero Carbon Lithium™ Project towards commercial production. Vulcan Energy is currently intending to develop the project in two phases, subject to change during its DFS and further pre-feasibility studies (see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus):

- Phase One (targeted to commence commercial production in 2024) is expected to require capital expenditure of approximately EUR 700 million (including contingencies), according to Vulcan Group's PFS. This estimate includes EUR 226 million for the development of two geothermal plants (with capacities of 8MW and 14MW, respectively), EUR 291 million for the development of two DLE plants (with the capacity to process 8Kt lithium hydroxide (LiOH) and 7Kt lithium hydroxide (LiOH), respectively) and EUR 182 million for the development of one central lithium plant (with the capacity to process 15Kt lithium hydroxide (LiOH)).
- Phase Two (targeted to commence commercial production in 2025) is expected to require capital expenditure of approximately EUR 1,138 million (including contingencies), according to Vulcan Group's PFS. This estimate includes EUR 438 million for the development of three additional geothermal plants (each with a capacity of 17MW), EUR 460 million for the development of two additional DLE plants (each with the capacity to process 8Kt lithium hydroxide (LiOH)) and EUR 240 million for the development of one additional central lithium plant (with the capacity to process 25Kt lithium hydroxide (LiOH)).

Substantially all of the capital expenditure related to the Zero Carbon Lithium™ Project will be incurred in Europe, principally Germany. These plans and figures are, however, subject to change as part of Vulcan Group's DFS as, for example, additional project areas may be added to Vulcan Group's development plans including, for example, the granted licence areas Mannheim and Lampertheim.

The Company expects to finance the Zero Carbon Lithium™ Project through a combination of green financing and equity, syndicated senior debt, hybrid debt and equity at the project level. The Company may also consider the bond market once in production, in view of the increasing market demand for bonds that meet ESG criteria and the availability of longer term yields in the bond market as compared to other forms of debt. The exact amount of capital expenditure anticipated to be required in connection with the Zero Carbon Lithium™ Project, and Vulcan Group's funding plan with respect thereto, will be further refined in the DFS (expected to be completed by the second half of 2022). See section "6.2.7 Vulcan Group's financing arrangements" above (Vulcan Group's financing arrangements) for a further discussion of Vulcan Group's anticipated financing arrangements.

As of the date of this Prospectus, Vulcan Group had entered into commitments for ongoing capital expenditures in an aggregate amount of approximately EUR 2 million, which will be primarily invested in Germany. The Company plans to finance these ongoing capital expenditures from existing cash balances.

6.8.3 Borrowings

Vulcan Group has not incurred any material indebtedness to date. Going forward, the Company expects to incur substantial indebtedness in connection with the financing of the Zero Carbon Lithium™ Project, including to fund a significant portion of the capital expenditure requirements described in section "6.8.2 Capital expenditure" above. However, the actual amount of debt incurred will depend upon the capital expenditure requirements outlined in the DFS, the availability of suitable debt financing and the market terms available in the debt capital markets at the time Vulcan Group seeks this financing, as compared with other sources of financing. For more information, see section "6.2.7 Vulcan Group's financing arrangements" above.

6.8.4 Cash flows

The following table shows selected information from the Company's consolidated statements of cash flow for the three-month periods ended 30 September 2021 and 2020 and the financial years ended 30 June 2021, 2020 and 2019.

	Three-month period ended 30 September		Financial year ended 30 June		
	2021 EUR	2020 EUR	2021 A\$	2020 A\$	2019 A\$
	(unaudited)			(audited)	
Cash flows from operating activities					
Receipts from customers	109,202	-	-	-	-
Payments to suppliers and employees	(2,168,384)	(214,471)	(3,446,209)	(1,427,391)	(417,562)
Interest received	46,910	1,174	100,937	45,342	56,055
Other income	46,321	165,552	510,879	50,000	-
Interest paid	(70,738)	-	(6,752)	-	-
Cash paid for income taxes	(10,717)	-	-	-	-
Net cash used in operating activities	(2,047,406)	(47,745)	(2,841,145)	(1,332,049)	(361,507)
Cash flows from investing activities					
Payments for exploration and evaluation costs	(874,988)	1,321,950	(5,832,409)	(1,205,783)	(438,127)
Cash acquired upon acquisition of subsidiary	126,409	-	-	404	-
Loans to other entities	-	-	-	-	(1,154)
Payments for software	-	-	-	(13,353)	-
Payment for plant and equipment	(1,293,817)	(66,780)	(1,312,818)	-	-
Cash outflow from deconsolidation of subsidiary	(52,851)	-	-	-	-
Net cash used in investing activities	(2,095,247)	(1,388,730)	(7,145,227)	(1,218,732)	(439,281)
Cash flows from financing activities					
Proceeds from exercise of listed and unlisted options	-	-	4,430,809	-	-
Proceeds from issue of listed options	-	-	-	-	126,875
Option issue costs	-	-	-	-	(25,000)
Proceeds from issued shares	123,680,002	672,234	120,000,000	5,976,310	-
Share issue costs	(4,351,377)	-	(6,139,997)	(330,545)	-
Lease repayments	(32,828)	-	(22,888)	-	-
Repayment of shareholder loan	(70,000)	-	-	-	-
Net cash from financing activities	119,225,797	672,234	118,267,924	5,645,765	101,875

	Three-month period ended 30 September		Financial year ended 30 June		
	2021 EUR (unaudited)	2020 EUR (unaudited)	2021 A\$ (audited)	2020 A\$ (audited)	2019 A\$ (audited)
Net increase / (decrease) in cash and cash equivalents	115,083,144	(764,241)	108,281,552	3,094,984	(698,913)
Cash and cash equivalents at the beginning of the period	72,494,107	3,924,214	6,421,557	3,348,996	4,047,909
Effect of exchange rate fluctuations on cash held	(356,730)	(64,464)	2,756	(22,423)	-
Cash and cash equivalents at the end of the period	187,220,521	3,095,509	114,705,865	6,421,557	3,348,996

6.8.5 Comparison of the figures reported in the consolidated statements of cash flows for the three-month periods ended 30 September 2021 and 2020 and the financial years ended 30 June 2021, 2020 and 2019

6.8.5.1 Net cash used in operating activities

Q1 FY2022 vs. Q1 FY2021

Net cash used in operating activities increased from EUR 47,745 in the three-month period ended 30 September 2020 to EUR 2,047,406 in the three-month period ended 30 September 2021, primarily due to increased payments to suppliers and employees in connection with the ramp-up of development activities (including a ramp-up in Vulcan Group's employee headcount) and a decrease in other income. This increase was partially offset by revenue of EUR 109,202 in the three-month period ended 30 September 2021 (primarily attributable to the GeoT and Gec-co businesses following their acquisition by Vulcan Group), as well as an increase in interest received by Vulcan Group.

FY2021 vs. FY2020

Net cash used in operating activities increased from A\$1,332,049 in the financial year ended 30 June 2020 to A\$2,841,145 in the financial year ended 30 June 2021, primarily due to increased payments to suppliers and employees following the acquisition of the Zero Carbon Lithium™ Project and the ramp-up of development activities (including a ramp-up in Vulcan Group's employee headcount). This increase was partially offset by A\$510,879 of other income.

FY2020 vs. FY2019

Net cash used in operating activities increased from A\$361,507 in the financial year ended 30 June 2019 to A\$1,332,049 in the financial year ended 30 June 2020, primarily due to increased payments to suppliers and employees following the acquisition of the Zero Carbon Lithium™ Project and the ramp-up of development activities (including a ramp-up in Vulcan Group's employee headcount). This increase was partially offset by A\$50,000 of other income from a temporary government grant during the economic downturn associated with the COVID-19 pandemic in the financial year ended 30 June 2020.

6.8.5.2 Net cash used in investing activities

Q1 FY2022 vs. Q1 FY2021

Net cash used in investing activities increased from EUR 1,388,730 in the three-month period ended 30 September 2020 to EUR 2,095,247 in the three-month period ended 30 September 2021, primarily due to a significant increase in payments for plant and equipment (attributable to the ramp-up in Vulcan Group's development activities), partially offset by a reduction in payments for exploration and evaluation costs and EUR 126,409 in cash acquired upon the acquisition of subsidiaries in the three-month period ended 30 September 2021.

FY2021 vs. FY2020

Net cash used in investing activities increased from A\$1,218,732 in the financial year ended 30 June 2020 to A\$7,145,227 in the financial year ended 30 June 2021, primarily due to increases in exploration and evaluation costs in connection with the ramp-up of the Zero Carbon Lithium™ Project, as well as payments for plant and equipment.

FY2020 vs. FY2019

Net cash used in investing activities increased from A\$439,281 in the financial year ended 30 June 2019 to A\$1,218,732 in the financial year ended 30 June 2020, primarily due to increases in exploration and evaluation costs following the acquisition of the Zero Carbon Lithium™ Project, as well as payments for software.

6.8.5.3 Net cash from financing activities

Q1 FY2022 vs. Q1 FY2021

Net cash from financing activities increased from EUR 672,234 in the three-month period ended 30 September 2020 to EUR 119,225,797 in the three-month period ended 30 September 2021, primarily due to EUR 123,680,002 in proceeds from the issue of shares (including primarily the institutional share placement completed in September 2021), partially offset by share issue costs, lease repayments and the repayment of a shareholder loan.

FY2021 vs. FY2020

Net cash from financing activities increased from A\$5,645,765 in the financial year ended 30 June 2020 to A\$118,267,924 in the financial year ended 30 June 2021, primarily arising from the proceeds of fresh issues of shares and the exercise of listed and unlisted options, partially offset by share issue costs.

FY2020 vs. FY2019

Net cash from financing activities increased from A\$101,875 in the financial year ended 30 June 2019 to A\$5,645,765 in the financial year ended 30 June 2020, primarily arising from the proceeds of fresh issues of shares.

6.8.6 Cash flows in the three-month period ended 31 December 2021

As required by ASX rules, the Company published a quarterly cash flow report for the three-month period ended 31 December 2021 (being the second quarter of its financial year) on 31 January 2022. During this three-month period, the Company's cash and cash equivalents decreased from EUR 187.2 million as at 1 October 2021 to EUR 134.5 million as of 31 December 2021. This was principally attributable to net cash used in investing activities of EUR 57.6 million, including EUR 32.6 million for the acquisition of entities (principally Natürlich Insheim), EUR 11.5 million for property, plant and equipment (included the acquisition of two electric drill rigs, technical equipment for the lithium extraction demonstration plant as well as engineering costs towards the construction of the demonstration plant) and EUR 4.3 million for exploration and evaluation expenditure (including engineering studies towards the DFS for the Zero Carbon Lithium™ Project, the purchase of 3D seismic and drilling data from Rhein Petroleum GmbH and the interpretation of existing 3D seismic and planning for 3D seismic surveys in Vulcan Group's license areas). During this period, the Group also had a net cash outflow of EUR 2.9 million for operating activities (primarily attributable to administration and corporate costs and staff costs), and a net cash inflow from financing activities of EUR 2.3 million (attributable to proceeds from the issuance of equity securities).

6.8.7 Financial liabilities

Financial liabilities mainly include trade payables and payables to taxation authorities for VAT.

As of 30 September 2021, financial liabilities had the following maturities based on the contractually agreed amounts.

	Up to 1 year	1 to 5 years	More than 5 years	Total
As of 30 September 2021				
		(unaudited)		

(in EUR thousand)

Trade payables	3,186	-	-	3,186
Other financial liabilities	191	709	-	900
Financial liabilities	<u>3,377</u>	<u>709</u>	<u>-</u>	<u>4,086</u>

6.8.8 Contingent liabilities and other financial obligations

Vulcan Group's contingent liabilities as at 30 September 2021 included deferred consideration in the form of 4,400,000 Performance Shares issued to the vendors (Dr Francis Wedin and Dr Horst Kreuter) 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 offtake agreements representing a minimum of 30% of the production volume of the Vulcan Group's Zero Carbon Lithium™ Project over a three year term, or a downstream joint venture partner making a minimum A\$10,000,000 investment in Vulcan Group's Zero Carbon Lithium™ 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 binding offtake agreements Vulcan Group signed with Stellantis, Volkswagen, Renault Group and Umicore and were converted into fully paid ordinary Shares of the Company (see section "9.15.5 Lithium Supply Agreements").

6.8.9 Off-balance sheet arrangements

Vulcan Group has no off-balance sheet arrangements.

6.9 Qualitative and quantitative disclosure on market risks

For a description of Vulcan Group's management of foreign exchange risk, interest rate risk, credit risk and liquidity risk, see Note 15 of the Consolidated Annual Financial Statement 2019 and the Consolidated Annual Financial Statement 2020 (respectively), and Note 18 of the Consolidated Annual Financial Statement 2021.

6.10 Key accounting and valuation principles involving estimates or judgements

For a description of Vulcan Group's critical accounting judgements and key sources of estimation uncertainty, see Note 2 of the Consolidated Annual Financial Statements.

7. PRO FORMA FINANCIAL INFORMATION

7.1 Introduction

The Company is a company domiciled in Perth, Western Australia. As of 30 June 2021, the Company had three subsidiaries with 100% ownership interest, Kuniko Limited ("**Kuniko**"), Perth, Western Australia, Vulcan Energy Resources Europe Pty Ltd, Perth, Western Australia and Vulcan Energie Ressourcen GmbH, Karlsruhe/Germany.

Vulcan Energie Ressourcen GmbH ("**Vulcan Energie**") and the shareholders of gec-co Global Engineering & Consulting GmbH ("**Gec-co**") and Geothermal Engineering GmbH ("**GeoT**") entered into an agreement concerning the acquisition of all shares in Gec-co and GeoT by Vulcan Energie. The acquisition of all shares of Gec-co and GeoT was completed on 2 July 2021.

Additionally, Vulcan Energie and the shareholders of Global Geothermal Holding UG ("**GGH**") entered into an agreement concerning the acquisition of all shares of GGH. The acquisition of all shares of GGH was also completed on 2 July 2021. Furthermore, in the three months ended 30 September 2021, Vulcan Energie founded the entities Vulcan Geothermal GmbH ("**Vulcan Geo**") and VER GEO LIO GmbH ("**VER GEO**").

VER GEO entered into an agreement with the shareholders of Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**")) concerning the acquisition of all shares in Natürlich Insheim. The acquisition was completed on 31 December 2021 (24:00 pm). The acquisitions of Gec-co, GeoT and Natürlich Insheim are hereinafter referred to as "**Acquisitions**".

By way of a spin-off, the Company lost control ("**Loss of Control**") of its subsidiary Kuniko on 17 August 2021. The Company initially retained an interest of 25.85% which has since been diluted to 24.34%.

In exchange for the acquisition of all shares of Gec-co, the Company issued 325,000 Shares via a capital increase to Mr Thorsten Weimann, the previous sole shareholder of Gec-Co. In exchange for the acquisition of all shares in GeoT, the Company paid a cash consideration of EUR 1.

The preliminary purchase price for the acquisition of all shares of Natürlich Insheim amounted to EUR 32.7 million. The preliminary purchase price is expected to be adjusted by approximately EUR 1.4 million based on the purchase price adjustments stated in the acquisition agreement. Therefore, the expected final purchase price will amount to approximately EUR 31.3 million. The Company expects the Acquisitions and the Loss of Control to have a material impact on the net assets, financial position, and results of the operations of the Company. Therefore, the Company has prepared the following pro forma financial information ("**Pro Forma Financial Information**"), comprising a pro forma statement of financial position as of 30 June 2021 and as of 30 September 2021 ("**Pro Forma Statement of Financial Position**") as well as a pro forma statement of profit or loss for the period from 1 July 2020 to 30 June 2021 and for the three-month period from 1 July 2021 to 30 September 2021 ("**Pro Forma Statement of Profit or Loss**") as well as accompanying pro forma notes ("**Pro Forma Notes**").

The purpose of the Pro Forma Financial Information is to show the material effects that the Acquisitions and the Loss of Control would have had on the consolidated statement of profit or loss of Vulcan Group as if the Acquisitions and the Loss of Control had taken place on 1 July 2020 and the statement of financial position of Vulcan Group as if the Acquisitions and the Loss of Control were in effect as of 30 June 2021.

The Pro Forma Financial Information is for illustrative purposes only and is based on assumptions and bears uncertainties and therefore does not represent the actual performance of the financial development of the Company. Thus, the Pro Forma Financial Information describes only a hypothetical situation and therefore the presentation does not reflect what the actual net assets, financial position and results of operations of the Company would have been had the Acquisitions and the Loss of Control occurred on the dates assumed, nor is it necessarily indicative of the Company's future net assets, financial positions and results of operations after the Acquisitions and Loss of Control have been completed. In addition, the Pro Forma Financial Information should not be considered as an indicator of the future performance of the financial position of the Company and the results of its operations and its cash flows after completion the Acquisitions and the Loss of Control.

The Pro Forma Financial Information should only be read in conjunction with the Consolidated Annual Financial Statements 2021 and the Consolidated Interim Financial Statements September 2021.

The Pro Forma Financial Information was prepared by the Company on 8 February 2022.

7.2 Historical financial information

The Pro Forma Financial Information as of 30 June 2021 was prepared based on the following historical information:

- The Consolidated Annual Financial Statements 2021, prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("**AASB**") and the Australian Corporations Act. The Consolidated Annual Financial Statements 2021 comply with IASB IFRS.
- Audited and published financial statements as of 30 June 2021 of Kuniko, prepared in accordance with the AASB and the Australian Corporations Act. The financial statements of Kuniko comply with IASB IFRS.
- The unaudited and unpublished statements of financial position of Gec-co and GeoT as of 30 June 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Annual Financial Statements 2021.
- The unaudited and unpublished statements of profit or loss of Gec-co and GeoT for the period from 1 July 2020 to 30 June 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Annual Financial Statements 2021.
- The unaudited and unpublished statement of financial position of Natürlich Insheim as of 30 September 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Annual Financial Statements 2021.
- The unaudited and unpublished statement of profit or loss of Natürlich Insheim for the period from 1 July 2020 to 30 June 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Annual Financial Statements 2021.

Gec-co and GeoT have not prepared financial statements in accordance with EU IFRS before. The statement of financial position as of 30 June 2021 and the statement of profit or loss for the period from 1 July 2020 to 30 June 2021 were prepared on the basis of EU IFRS and the accounting policies consistently applied by the Company and solely for the purpose of inclusion in the accompanying Pro Forma Financial Information. Therefore, no accounting policy alignment adjustments were required for the preparation of the Pro Forma Financial Information.

Natürlich Insheim has not prepared financial statements in accordance with EU IFRS before. The statement of financial position as of 30 September 2021 and the statement of profit or loss for the period from 1 July 2020 to 30 June 2021 were prepared on the basis of EU IFRS and the accounting policies consistently applied by the Company and solely for the purpose of inclusion in the accompanying Pro Forma Financial Information. Therefore, no accounting policy alignment adjustments were required for the preparation of the Pro Forma Financial Information.

The Pro Forma Financial Information as of 30 September 2021 was prepared based on the following historical information:

- The Company's consolidated statement of financial position included in the Consolidated Interim Financial Statements September 2021, prepared in accordance with IASB IFRS on interim financial reporting (IAS 34).

- The Company's consolidated statement of profit or loss included in the Consolidated Interim Financial Statements September 2021, prepared in accordance with IASB IFRS on interim financial reporting (IAS 34).
- The unaudited and unpublished statement of profit or loss for the period from 1 July 2021 to 18 August 2021 of Kuniko, prepared in accordance with the AASB and the Australian Corporations Act. The statement of profit or loss complies with IASB IFRS.
- The unaudited and unpublished statement of financial position of Natürlich Insheim as of 30 September 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Interim Financial Statements September 2021.
- The unaudited and unpublished statement of profit or loss of Natürlich Insheim for the three-month period from 1 July 2021 to 30 September 2021, prepared on a combined basis solely for the purpose of inclusion in the Pro Forma Financial Information using the same recognition and measurement principles as applied in the Consolidated Interim Financial Statements September 2021.

Natürlich Insheim has not prepared financial statements in accordance with EU IFRS before. The statement of financial position as of 30 September 2021 and the statement of profit or loss for the three-month period from 1 July 2021 to 30 September 2021 were prepared on the basis of EU IFRS and the accounting policies consistently applied by the Company and solely for the purpose of inclusion in the accompanying Pro Forma Financial Information. Therefore, no accounting policy alignment adjustments were required for the preparation of the Pro Forma Financial Information.

7.3 Basis of preparation

7.3.1 Preparation principles

The Pro Forma Financial Information was prepared on the basis of the IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (*IDW Rechnungslegungshinweis: Erstellung von Pro-Forma-Finanzinformationen (IDW RH HFA 1.004)*), as promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer in Deutschland e.V. – IDW*) and in accordance with the ESMA Guidance on disclosure requirements under the Prospectus Regulations issued on 4 March 2021.

The Pro Forma Financial Information has been prepared consistently in all material aspects on the basis of EU IFRS and the accounting policies of the Company, as described in the notes to the Consolidated Annual Financial Statements 2021 and the Consolidated Interim Financial Statements September 2021, unless otherwise stated.

The pro forma assumptions and pro forma adjustments, based on such assumptions, have been prepared as described below.

The pro forma adjustments made for purposes of the Pro Forma Financial Information are based on information available at the time of the preparation. No adjustments have been made for measures that may be taken after the completion of the acquisition of Gec-co, GeoT and Natürlich Insheim; the Pro Forma Financial Information does not include any costs that Vulcan Group expects to incur in connection with the Acquisitions, nor any cost savings or synergies that may result from the combination of the businesses of Vulcan Group and Gec-co, GeoT and Natürlich Insheim, respectively, nor the costs necessary to achieve these cost savings and other synergies, except for expected intercompany cost savings relating to the elimination of interest expenses paid to previous shareholders of Natürlich Insheim for an intercompany loan which VER GEO took over in the course of the acquisition of Natürlich Insheim. As a result, the actual amounts which will be reported in the consolidated annual financial statements of the Company as of and for the fiscal year ended 30 June 2022 will differ from the amounts in the Pro Forma Financial Information, and these differences may be material.

In the context of the acquisition of Gec-co, GeoT as well as Natürlich Insheim a preliminary purchase price allocation was prepared. This purchase price allocation is preliminary and therefore still subject to uncertainty. It reflects the current state of knowledge and is the Company's best estimate as of the reporting date. Furthermore, the Company and the acquired entities are in the process of

establishing a reporting framework to allow the exchange of full financial information. The presented financial information as well as the presented preliminary purchase price allocation may be adjusted following the establishment of the reporting framework. These adjustments may be substantial. Furthermore, the acquisition of Natürlich Insheim was completed as of 31 December 2021. For the preliminary purchase price allocation of Natürlich Insheim an IFRS opening balance sheet as of 30 September 2021 was applied. The adjustments of the preliminary purchase price allocation including an IFRS opening balance sheet as of 31 December 2021 may be material.

The Pro Forma Financial Information is presented in euro. The currency translation had to be carried out for the Consolidated Annual Financial Statements 2021 of the Company as well as for the financial statements of Kuniko as of 30 June 2021, as those have the Australian dollar as the functional currency. For the statement of profit or loss an average exchange rate with EUR 1.00 to A\$0.6260, for assets and liabilities a closing exchange rate with EUR 1.00 to A\$0.6320 and for the historical equity a historical exchange rate with EUR 1.00 to A\$0.6430 was applied (IAS 21). The Company's consolidated quarterly financial statements as of 30 September 2021 were prepared in EUR. The acquired entities Gec-co, GeoT and Natürlich Insheim have the euro as their functional currency, as they are based in Germany. Amounts in the Pro Forma Financial Information are stated in EUR thousands and Australian dollar thousands. The figures presented in the tables of the Pro Forma Financial Information were rounded according to established commercial principles and may not add up to sums presented. Parentheses around any figures in the tables indicate negative values. A dash ("—") signifies that there is no relevant figure, while a zero ("0") signifies that the relevant figure is available but has been rounded to or equals zero.

7.3.2 Pro forma assumptions

The following pro forma assumptions were used for the preparation of the Pro Forma Financial Information as of 30 June 2021:

- The Pro Forma Statement of Profit or Loss for the 12-month period from 1 July 2020 to 30 June 2021 shows the effects of the acquired entities Gec-co, GeoT and Natürlich Insheim as if the acquisitions had been completed on 1 July 2020.
- The Pro Forma Statement of Financial Position as of 30 June 2021 shows effects of the acquired entities Gec-co, GeoT and Natürlich Insheim as if the acquisitions had been completed on 30 June 2021.
- The Pro Forma Statement of Profit or Loss for the 12-month period from 1 July 2020 to 30 June 2021 shows the effects of the Loss of Control of Kuniko as if the Loss of Control had been completed on 1 July 2020.
- The Pro Forma Statement of Financial Position as of 30 June 2021 shows effects of the Loss of Control of Kuniko as if the Loss of Control had been completed on 30 June 2021.
- Since the Pro Forma Statement of Profit or Loss for the 12-month period from 1 July 2020 to 30 June 2021 shows the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 1 July 2020, the profit transfer agreement with the previous shareholder was eliminated. Correspondent income tax effects are considered as well.
- An intercompany loan which the acquirer of Natürlich Insheim, VER GEO, took over in the course of the acquisition as well as the correspondent interest expenses which were paid to previous shareholders are not recognized in the Pro Forma Statement of Financial Position and the Pro Forma Statement of Profit or Loss since the intercompany loan and the interest expenses will be eliminated in the forthcoming consolidated financial statements of the Company.

The following pro forma assumptions were used for the preparation of the Pro Forma Financial Information as of 30 September 2021:

- The Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021 shows the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 1 July 2020.

- The Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021 shows the effects of the Loss of Control of Kuniko as if the Loss of Control had been completed on 1 July 2020.
- The Pro Forma Statement of Financial Position as of 30 September 2021 shows the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 30 September 2021.
- Since the Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021 shows the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 1 July 2020, the profit transfer agreement with the previous shareholder was eliminated. Correspondent income tax effects are considered as well.
- An intercompany loan which the acquirer of Natürlich Insheim, VER GEO, took over in the course of the acquisition as well as the correspondent interest expenses which were paid to previous shareholders are not recognized in the Pro Forma Statement of Financial Position and the Pro Forma Statement of Profit or Loss since the intercompany loan and the interest expenses will be eliminated in the forthcoming consolidated financial statements of the company.

7.3.3 Purchase Price Allocation

IFRS 3 generally requires all assets, liabilities and contingent liabilities to be measured at fair value at the time of acquisition.

For the purpose of the Pro Forma Financial Information as of 30 June 2021, the purchase price allocation of the acquisition of Gec-co and GeoT was performed on the basis of a preliminary valuation of the acquired net assets at fair value as of 30 June 2021. For the purpose of the Pro Forma Financial Information as of 30 June 2021 as well as 30 September 2021, the purchase price allocation of the acquisition of Natürlich Insheim was performed on the basis of a preliminary valuation of the acquired net assets at fair value as of 31 December 2021. An IFRS opening balance sheet as of 30 September 2021 as latest applicable information was applied. The purchase price allocation of the acquisition of Natürlich Insheim which will be applied for the consolidated annual financial statements of Vulcan Energie as of 30 June 2022 will include an IFRS opening balance sheet as of 31 December 2021.

The income statement effects from the development of the preliminary purchase price allocations were taken into account in the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021 as if the Acquisitions of all three entities had been completed on 1 July 2020. For the three-month period from 1 July 2021 to 30 September 2021, the income statement effects from the development of the preliminary purchase price allocations were taken into account in the Pro Forma Statement of Profit or Loss as if the acquisition of Natürlich Insheim had been completed on 1 July 2020.

These purchase price allocations are based on the most current available information using certain estimates and assumptions in order to assess the fair value of the assets acquired and liabilities assumed. For Gec-co and GeoT, fair value adjustments on customer relationships were indicated in the preliminary purchase price allocation. These fair value step ups are to be amortized over a weighted average period of nine years each for customer relationships. For Gec-co, additional fair value adjustments on order backlog were indicated in the preliminary purchase price allocation. This fair value step up is to be amortized over a weighted average period of one year. The additional amortization will be expensed in the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021 as well as for the interim period from 1 July 2021 to 30 September 2021.

For Natürlich Insheim, fair value adjustments on tangible and intangible assets were indicated in the preliminary purchase price allocation. These fair value step ups are to be amortized over a weighted average period of 18 years for tangible and 16 years for intangible assets. The additional amortization will be expensed in the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021 as well as for the three-month period from 1 July 2021 to 30 September 2021.

Considering the pro forma assumptions described in this section of the Prospectus, the preliminary total consideration for Gec-co amounted to EUR 2,490 thousand. Compared with the pro forma net fair value amount of identifiable assets acquired, including cash and cash equivalents acquired, and

liabilities assumed amounting to EUR 1,450 thousand, the acquisition results in a pro forma goodwill of EUR 1,040 thousand.

Considering the pro forma assumptions described in this section of the Prospectus, the preliminary total consideration for GeoT amounted to EUR 1. Compared with the pro forma net fair value amount of identifiable assets acquired, including cash and cash equivalents acquired, and liabilities assumed amounting to EUR -1 thousand, the acquisition results in a pro forma goodwill of EUR 1 thousand.

Considering the pro forma assumptions described in this section of the Prospectus, the preliminary expected total consideration for Natürlich Insheim amounted to EUR 31,274 thousand. Thereof, EUR 11,467 thousand are considered as other investments and EUR 19,806 thousand are considered as trade and other receivables. Compared with the pro forma net fair value amount of identifiable assets acquired, including cash and cash equivalents acquired, and liabilities assumed amounting to EUR 11,401 thousand, the acquisition results in a pro forma goodwill of EUR 66 thousand.

Considering the measurement period, which shall not exceed one year from the acquisition date, the final purchase price allocation and the goodwill resulting from the acquisitions may differ significantly from the preliminary purchase price allocation performed for the purposes of the Pro Forma Financial Information.

7.4 Pro Forma Financial Information as of 30 June 2021

7.4.1 Pro Forma Statement of Financial Position as of 30 June 2021

	Historical financial information					
	Currency Translation	Derecognition	Acquisition	Acquisition	Acquisition	
	Vulcan	Vulcan	Kuniko Limited	gec-co	Geothermal	Natürlich
	Energy	Energy		Global	Engineering	Insheim
	Resources	Resources		Engineering	GmbH	GmbH ¹
	Limited	Limited		& Consulting		
	GmbH	GmbH		GmbH		
30 June 2021	(audited)	(audited)	(audited)	(unaudited)	(unaudited)	(unaudited)
	A\$	EUR	EUR	EUR	EUR	EUR
	thousand	thousand	thousand	thousand	thousand	thousand
Current assets						
Cash and cash equivalents	114,706	72,494	17	246	62	1,416
Trade and other receivables	1,198	757	36	557	152	89
Contract assets	-	-	-	192	-	-
Inventories	-	-	-	-	-	121
Total current assets	115,903	73,251	54	995	214	1,626
Non-current assets						
Intangible assets	-	-	-	17	3	15
Exploration and evaluation expenditure	13,794	8,722	245	-	-	-
Plant and equipment	1,481	935	-	15	10	26,061
Right-of-use-asset	566	358	-	69	53	-
Investments accounted for using equity method	-	-	-	-	-	-
Deferred tax assets	-	-	-	21	68	1,771
Total non-current assets	15,841	10,016	245	122	134	27,846
Total Assets	131,744	83,267	299	1,117	348	29,472
Current liabilities						

¹ The acquisition of Natürlich Insheim took place as of 31 December 2021. The unaudited and unpublished statement of financial position of Natürlich Insheim presented in this column is as of 30 September 2021.

30 June 2021	Historical financial information					
	Currency Vulcan Energy Resources Limited	Translation Vulcan Energy Resources Limited	Derecognition Kuniko Limited	Acquisition gec-co Global Engineering & Consulting GmbH	Acquisition Geothermal Engineering GmbH	Acquisition Natürlich Insheim GmbH ¹
	(audited) A\$ thousand	(audited) EUR thousand	(audited) EUR thousand	(unaudited) EUR thousand	(unaudited) EUR thousand	(unaudited) EUR thousand
Lease liabilities	62	39	-	20	44	-
Trade and other payables	2,113	1,335	243	320	156	602
Loans and borrowings	-	-	-	235	132	-
Income tax liabilities	-	-	-	51	-	-
Provisions	88	55	-	-	-	-
Total current liabilities	2,263	1,430	243	626	332	602
Non-current liabilities						
Lease liabilities	497	314	-	50	10	-
Loans and borrowings	-	-	186	39	100	20,131
Provisions	-	-	-	5	-	50
Trade and other payables	-	-	-	-	-	-
Deferred tax liabilities	-	-	-	-	-	-
Total non-current liabilities	497	314	186	93	110	20,181
Total liabilities	2,760	1,744	429	719	442	20,783
Equity						
Share capital	136,500	85,272	482	25	25	6,920
Reserves	7,899	5,822	(194)	376	(158)	1,770
Accumulated gains/(losses)	(15,415)	(9,571)	(419)	(3)	39	-
Total Equity	128,985	81,522	(131)	398	(94)	8,690
Total Equity and Liabilities	131,744	83,267	299	1,117	348	29,472

	Subtotal	Pro Forma Adjustments	Pro-Forma Note (column C)	Pro Forma Financial Information EUR thousand
30 June 2021	EUR thousand	EUR thousand		
Current assets				
Cash and cash equivalents	74,201	0	A1	74,201
Trade and other receivables	1,519	(289)	A2	1,229
Contract assets	192	-		192
Inventories	121	-		121
Total current assets	76,033	(289)		75,743
Non-current assets				
Intangible assets	35	4,181	A3	4,216
Exploration and evaluation expenditure	8,477	(263)	A4	8,214
Plant and equipment	27,021	2,373	A5	29,394
Right-of-use-asset	480	-		480
Investments accounted for using equity method	-	1,705	A6	1,705
Deferred tax assets	1,860	-		1,860
Total non-current assets	37,873	7,995		45,868
Total Assets	113,906	7,706		121,612
Current liabilities				
Lease liabilities	103	-		103
Trade and other payables	2,170	10,993	A7	13,163
Loans and borrowings	367	-		367
Income tax liabilities	51	-		51
Provisions	55	-		55
Total current liabilities	2,747	10,993		13,739
Non-current liabilities				
Lease liabilities	373	-		373
Loans and borrowings	20,085	186	A2	20,271
Provisions	55	-		55
Trade and other payables	-	863	A8	863
Deferred tax liabilities	-	1,589	A3, A5	1,589
Total non-current liabilities	20,512	2,638		23,150
Total liabilities	23,259	13,631		36,889
Equity				
Share capital	91,759	(4,860)	A9	86,899
Reserves	8,004	(1,988)	A10	6,016
Accumulated gains/(losses)	(9,117)	924	A11	(8,193)
Total Equity	90,646	(5,924)		84,722
Total Equity and Liabilities	113,906	7,706		121,612

7.4.2 Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021

	Currency Translation Vulcan Energy Resources Limited	Vulcan Energy Resources Limited	Derecognition Kuniko Limited	Acquisition gec-co Global Engineering & Consulting GmbH	Acquisition Geothermal Engineering GmbH	Acquisition Natürlich Insheim GmbH
	(audited) A\$ thousand	(audited) EUR thousand	(audited) EUR thousand	(unaudited) EUR thousand	(unaudited) EUR thousand	(unaudited) EUR thousand
1 July 2020 to 30 June 2021						
Revenue from continuing operations	-	-	-	2,588	1,172	5,943
Other income	632	395	-	252	217	229
Other own work capitalised	-	-	-	(172)	(32)	17
Raw materials and purchased services	-	-	-	(310)	(73)	(1,513)
Administrative expenses	(888)	(556)	(23)	(243)	(58)	(631)
Compliance and regulatory expenses	(552)	(345)	(56)	-	-	-
Consulting and legal fees	(1,923)	(1,204)	(150)	(13)	(2)	(33)
Depreciation	(132)	(82)	-	(94)	(93)	(1,697)
Employee benefits expenses	(625)	(391)	(10)	(1,514)	(773)	(707)
Investor relations expenses	(410)	(257)	-	-	-	-
Occupancy costs	(56)	(35)	-	-	(22)	(23)
Impairment expense	(229)	(143)	(143)	(18)	(3)	(22)
Share-based payment expenses	(6,518)	(4,080)	-	-	-	-
Other expenses	(121)	(76)	(16)	(14)	(78)	(962)
Foreign currency gain/(loss)	76	48	(2)	-	-	(1)
Profit/(loss) before income tax	(10,745)	(6,726)	(400)	462	255	599
Income tax (expenses)/income	-	-	-	(184)	(41)	(102)
Income or (expenses) from profit transfer agreements	-	-	-	-	-	(622) ²
Profit/(loss) after income tax	(10,745)	(6,726)	(400)	278	214	(125)
Other comprehensive income/(loss)	(100)	(63)	-	-	-	-
Other comprehensive income/(loss) for the year, net of tax	(100)	(63)	-	-	-	-
Total comprehensive income/(loss) attributable	(10,845)	(6,789)	(400)	278	214	(125)

² Profit transfer agreement in accordance with German Commercial Law figures.

	Subtotal	Pro Forma Adjustments	Pro Forma Notes (column C)	Pro Forma Financial Information
	EUR thousand	EUR thousand		EUR thousand
1 July 2020 to 30 June 2021				
Revenue from continuing operations	9,703	(1,758)	B1	7,946
Other income	1,093	-		1,093
Other own work capitalised	(186)	1,491	B2	1,305
Raw materials and purchased services	(1,897)	4	B3	(1,893)
Administrative expenses	(1,465)	-		(1,465)
Compliance and regulatory expenses	(290)	-		(290)
Consulting and legal fees	(1,102)	-		(1,102)
Depreciation	(1,966)	(441)	B4	(2,407)
Employee benefit expenses	(3,375)	-		(3,375)
Investor relations expenses	(257)	-		(257)
Occupancy costs	(80)	-		(80)
Impairment expense	(43)	-		(43)
Share-based payment expenses	(4,080)	-		(4,080)
Other expenses	(1,114)	738	B5	(376)
Foreign currency (losses)/gain	49	-		49
Profit/(loss) before income tax	(5,010)	34		(4,976)
Income tax (expenses)/income	(327)	(273)	B6	(600)
Income or (expenses) from profit transfer agreements	(622)	622	B7	-
Profit/(loss) after income tax	(5,959)	382		(5,577)
Other comprehensive income/(loss)	(63)	-		(63)
Other comprehensive income/(loss) for the year, net of tax	(63)	-		(63)
Total comprehensive income/(loss) attributable	(6,022)	382		(5,639)

7.4.3 Explanation of the Pro Forma adjustments to the Pro Forma Statement of Financial Position as of 30 June 2021 and the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021

In the following Pro Forma Notes, the pro forma adjustments in column C are explained in detail in order to illustrate the effects on the Pro Forma Statement of Financial Position as of 30 June 2021 and the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021.

(A) Pro Forma Adjustments A: Statement of Financial Position

For the purposes of the Pro Forma Statement of Financial Position it has been assumed that the acquisition of Gec-co, GeoT and Natürlich Insheim has been completed as of 30 June 2021. The financial statements of Kuniko as of 30 June 2021 were subtracted from the Consolidated Annual Financial Statements 2021 of the Company.

Adjustments contained in column C of the Pro Forma Statement of Financial Position as of 30 June 2021 are as follows:

- **A1:** Cash and cash equivalents were adjusted by EUR 0 thousand for the consideration transferred for GeoT amounting to EUR 1.
- **A2:** Trade and other receivables were adjusted in total by EUR (289) thousand due to the following:
 - The elimination of an intercompany loan which the acquirer of Natürlich Insheim, VER GEO, took over in the course of the acquisition and which will be eliminated in the forthcoming consolidated financial statements of the company. The first step was to recognize a trade and other receivable to Natürlich Insheim in the amount of EUR 19,806 thousand. The second step was to eliminate this intercompany receivable in the same amount EUR (19,806) thousand.
 - The internal transfer of shares of the Company used as consideration paid by the legal acquirer – Vulcan Energie- resulted in intercompany transactions, which need to be eliminated in preparation of the Pro Forma Financial Information of the Company. Therefore, the first step was to adjust trade and other receivables by EUR 1,628 thousand to recognize an intercompany receivable of the Company to Vulcan Energie. The second step was to eliminate this intercompany receivable in the same amount (EUR (1,628) thousand).
 - EUR 186 thousand due to the elimination of an intercompany trade payable from Kuniko to Vulcan Limited was eliminated in the course of the derecognition of Kuniko. Loans and borrowings were adjusted by the same amount.
 - The elimination of intercompany transactions between Gec-co, GeoT and Vulcan Energie resulted in an elimination of intercompany receivables of EUR (475) thousand. Trade and other payables (current) were adjusted by the same amount.
- **A3:** Intangible assets were adjusted by EUR 4,181 thousand due to the identification of intangible assets in the course of the preliminary purchase price allocation in the amount of EUR 3,072 thousand as well as a corresponding impact on deferred tax liabilities of EUR 877 thousand based on Gec-co's, GeoT's and Natürlich Insheim's applicable tax rates (refer to A5). Furthermore, goodwill which is included in intangible assets was adjusted by EUR 1,109 thousand for the preliminary allocation of the consideration transferred and the net assets of Gec-co and GeoT acquired through Vulcan Energie as well as the acquisition of Natürlich Insheim through VER GEO.
- **A4:** Exploration and evaluation expenditure was adjusted by EUR (263) thousand due to the elimination of the margin of provided services from Gec-co and GeoT to Vulcan Energie. The provided margin of the service was capitalized within Vulcan Energie and correspondingly eliminated as classified intercompany transactions. Accumulated gains/ (losses) were adjusted by the same amount (see section A11).
- **A5:** Plant- and Equipment was adjusted by EUR 2,373 thousand due to the identification of tangible assets in the course of the preliminary purchase price allocation as well as a

corresponding impact on deferred tax liabilities of EUR 712 thousand based on Natürlich Insheim's applicable tax rates.

- **A6:** Investments accounted for using equity method were adjusted in total by EUR 1,705 thousand due to the following:
 - EUR 2,490 thousand in the course of the recognition of the acquired entities Gec-co and GeoT. For Gec-co, EUR 1,628 thousand was paid via shares of the Company (see section A9). The remaining EUR 863 thousand was classified as contingent considerations within the preliminary purchase allocation (see section A8). For GeoT, a consideration transferred of EUR 1 was paid via cash (see section A1).
 - EUR 11,467 thousand in the course of the recognition of the acquired entity Natürlich Insheim which was paid via cash.
 - EUR (13,957) thousand due to the capital consolidation resulting in the derecognition of the investments in Gec-co, GeoT and Natürlich Insheim.
 - The remaining EUR 1,705 thousand relate to the recognized remaining shares in the deconsolidated entity Kuniko.
- **A7:** Trade and other payables (current) were adjusted by EUR 10,993 thousand mainly due to the cash consideration transferred for the acquisition of Natürlich Insheim in the amount of EUR 11,467 thousand. The remaining amount is due to the elimination of intercompany transactions.
- **A8:** Trade and other payables (non-current) were adjusted by EUR 863 thousand due to the **preliminary** purchase allocation of Gec-co where a portion of the acquisition costs were classified as contingent consideration.
- **A9:** Share capital was adjusted in total by EUR (4,860) thousand due to the following:
 - EUR (6,970) thousand due to the capital consolidation of Gec-co, GeoT and Natürlich Insheim.
 - EUR 1,628 thousand due to the consideration transferred of Gec-co which was partly paid via shares of the Company and resulted from a group perspective in an adjustment in share capital.
 - EUR 482 thousand due to the elimination of the contributed equity of Kuniko was eliminated in the course of the derecognition of Kuniko. This amount was re-entered because the initial figures of the Company represent consolidated figures.
- **A10:** Reserves were adjusted in total by EUR (1,988) thousand due to the following:
 - For the purpose of the preliminary purchase price allocation fair value step-ups were recognized and eliminated for the Acquisitions. The first step was to recognize fair value step-ups in the amount of EUR 3,856 thousand. The second step was to eliminate the recognized fair value step-ups in the amount of EUR (3,856) thousand.
 - EUR (1,988) thousand due to the capital consolidation of reserves of the Acquisitions.
- **A11:** Accumulated gains/(losses) were adjusted in total by EUR 924 thousand due to the following:
 - EUR (35) thousand due to the capital consolidation of Gec-co and GeoT.
 - EUR (263) thousand due to the elimination of the margin of provided services from Gec-co and GeoT to Vulcan Energie.
 - EUR 1,222 thousand due to the recognition of the gain on deconsolidation of Kuniko.

(B) Pro Forma Adjustments B: Statement of Profit or Loss

For the purposes of the Pro Forma Statement of Profit or Loss it has been assumed that the acquisition of Gec-co, GeoT and Natürlich Insheim has been completed as of 1 July 2020.

Adjustments contained in the column C of the Pro Forma Statement of Profit or Loss for the period from 1 July 2020 to 30 June 2021 are as follows:

- **B1:** Revenue from continuing operations were adjusted by EUR (1,758) thousand due to the elimination of provided services from Gec-co and GeoT to Vulcan Energie. Gec-co provided services in the amount of EUR 896 thousand and GeoT in the amount of EUR 858 thousand to Vulcan Energie. The remaining provided serviced in the amount of EUR 4 thousand were between Gec-co and GeoT.
- **B2:** Other own work capitalized were adjusted by EUR 1,491 thousand in the course of the intercompany revenue elimination for provided services from Gec-co and GeoT to Vulcan Energie (refer to B1).
- **B3:** Raw materials and purchased services were adjusted by EUR 4 thousand in the course of the intercompany revenue elimination for provided services between Gec-co and GeoT (refer to B1).
- **B4:** Depreciation was adjusted by EUR (441) thousand related to the subsequent measurement of the preliminary identified tangible and intangible assets from the purchase price allocation and corresponding impact on recognized deferred tax liabilities in the amount of EUR 128 thousand (refer to B6).
- **B5:** Other expenses were adjusted by EUR 738 thousand due to the derecognition of interest expenses paid to previous shareholders which will be eliminated in the forthcoming consolidated financial statements of the Company.
- **B6:** Income tax (expenses)/income were adjusted in total by EUR (273) due to income tax effects in the amount of EUR (401) thousand which resulted in the course of the elimination of the profit transfer agreement (refer to B7) as well as due to the derecognition of intercompany interest expenses (refer to B5). Furthermore, from the subsequent measurement of the preliminary identified tangible and intangible assets additional EUR 128 thousand income tax effects were recognized (refer to B4).
- **B7:** Income or (expenses) from profit transfer agreements with former shareholders were adjusted by EUR 622 to reflect the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 1 July 2020.

7.5 Pro Forma Financial Information as of 30 September 2021

7.5.1 Pro Forma Statement of Financial Position as of 30 September 2021

	Historical financial information			Pro Forma Adjustments	Pro Forma Notes (column E)
	Vulcan Energy Resources Limited (unaudited) EUR thousand	Acquisition Natürlich Insheim GmbH ³ (unaudited) EUR thousand	Subtotal EUR thousand		
30 September 2021					
Current assets					
Cash and cash equivalents	187,221	1,416	188,637	-	
Trade and other receivables	1,970	89	2,059	-	
Contract assets	194	-	194	-	
Inventories	-	121	121	-	
Total current assets	189,385	1,626	191,011	-	
Non-current assets					
Intangible assets	2,578	15	2,593	1,567	A1
Exploration and evaluation expenditure	9,969	-	9,969	-	
Plant and equipment	2,320	26,061	28,381	2,373	A2
Right-of-use-asset	701	-	701	-	
Investments accounted for using equity method	1,709	-	1,709	-	
Deferred tax assets	77	1,771	1,847	-	
Total non-current assets	17,354	27,846	45,200	3,940	
Total Assets	206,738	29,472	236,211	3,940	
Current liabilities					
Lease liabilities	129	-	129	-	
Trade and other payables	3,186	602	3,787	11,467	A3
Loans and borrowings	62	-	62	-	
Income tax liabilities	51	-	51	-	
Provisions	61	-	61	-	
Total current liabilities	3,489	602	4,090	11,467	
Non-current liabilities					
Lease liabilities	570	-	570	-	
Loans and borrowings	139	20,131	20,271	-	
Provisions	255	50	305	-	
Deferred tax liabilities	426	-	426	1,162	A1, A2
Total non-current liabilities	1,390	20,181	21,571	1,162	
Total liabilities	4,879	20,783	25,661	12,630	
Equity					
Share capital	206,548	6,920	213,468	(6,920)	A4
Reserves	6,413	1,770	8,183	(1,770)	A5
Accumulated gains/(losses)	(11,101)	-	(11,101)	-	
Total Equity	201,860	8,690	210,549	(8,690)	
Total Equity and Liabilities	206,738	29,472	236,211	3,940	

³ The acquisition of Natürlich Insheim took place as of 31 December 2021. The unaudited and unpublished statement of financial position of Natürlich Insheim presented in this column is as of 30 September 2021.

30 September 2021	Pro Forma Financial Information EUR thousand
Current assets	
Cash and cash equivalents	188,637
Trade and other receivables	2,059
Contract assets	194
Inventories	121
Total current assets	191,011
Non-current assets	
Intangible assets	4,160
Exploration and evaluation expenditure	9,969
Plant and equipment	30,754
Right-of-use-asset	701
Investments accounted for using equity method	1,709
Deferred tax assets	1,847
Total non-current assets	49,140
Total Assets	240,151
Current liabilities	
Lease liabilities	129
Trade and other payables	15,255
Loans and borrowings	62
Income tax liabilities	51
Provisions	61
Total current liabilities	15,558
Non-current liabilities	
Lease liabilities	570
Loans and borrowings	20,271
Provisions	305
Deferred tax liabilities	1,588
Total non-current liabilities	22,733
Total liabilities	38,291
Equity	
Share capital	206,547
Reserves	6,413
Accumulated gains/(losses)	(11,101)
Total Equity	201,860
Total Equity and Liabilities	240,151

7.5.2 Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021

	Vulcan Energy Resources Limited (unaudited) EUR thousand	Derecognition Kuniko Limited (unaudited) EUR thousand	Acquisition Natürlich Insheim GmbH (unaudited) EUR thousand	Subtotal EUR thousand
1 July 2021 to 30 September 2021				
Revenue from continuing operations	109	-	961	1,070
Other income	142	0	8	150
Gain on deconsolidation	1,975	-	-	1,975
Other own work capitalized	976	-	-	976
Raw materials and purchased services	(344)	-	(348)	(692)
Administrative expenses	(688)	(138)	(166)	(716)
Compliance and regulatory expenses	(214)	-	-	(214)
Consulting and legal fees	(826)	-	(0)	(826)
Depreciation	(100)	-	(427)	(527)
Employee benefits expenses	(1,236)	-	(222)	(1,458)
Investor relations expenses	(141)	-	-	(141)
Occupancy costs	(27)	-	(6)	(33)
Impairment expense	(9)	-	(1)	(10)
Share-based payment expenses	(833)	-	-	(833)
Other expenses	(311)	-	(244)	(554)
Foreign currency gain/(loss)	8	-	-	8
Profit/(loss) before income tax	(1,519)	(138)	(444)	(1,825)
Income tax (expenses)/income	(11)	-	(25)	(36)
Income or (expenses) from profit transfer agreement	-	-	444 ⁴	444
Profit/(loss) after income tax	(1,530)	(138)	(25)	(1,417)
Other comprehensive income/(loss)	(605)	-	-	(605)
Other comprehensive income/(loss) for the period, net of tax	(605)	-	-	(605)
Total comprehensive income/(loss) attributable	(2,135)	(138)	(25)	(2,022)

⁴ Profit transfer agreement in accordance with German Commercial Law figures.

	Pro Forma Adjustments		Pro Forma Notes (column B)	Pro Forma Financial Information EUR thousand
	EUR thousand	EUR thousand		
1 July 2021 to 30 September 2021				
Revenue from continuing operations		-		1,070
Other income		-		150
Gain on deconsolidation		-		1,975
Other own work capitalised		-		976
Raw materials and purchased services		-		(692)
Administrative expenses		-		(716)
Compliance and regulatory expenses		-		(214)
Consulting and legal fees		-		(826)
Depreciation		(56)	B1	(584)
Employee benefits expenses		-		(1,458)
Investor relations expenses		-		(141)
Occupancy costs		-		(33)
Impairment expense		-		(10)
Share-based payment expenses		-		(833)
Other expenses		178	B2	(376)
Foreign currency (losses)/gain				8
Profit/(loss) before income tax		122		(1,703)
Income tax (expenses)/income		97	B3	61
Income or (expenses) from profit transfer agreement		(444)	B4	-
Profit/(loss) after income tax		(225)		(1,642)
Other comprehensive income/(loss)		-		(605)
Other comprehensive income/(loss) for the period, net of tax		-		(605)
Total comprehensive income/(loss) attributable		(225)		(2,248)

7.5.3 Explanation of the Pro Forma adjustments of the Pro Forma Statement of Financial Position as of 30 September 2021 and the Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021

In the following Pro Forma Notes, the pro forma adjustments in column E and B are explained in detail in order to illustrate the effects on the Pro Forma Statement of Financial Position as of 30 September 2021 and Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021.

(A) Pro Forma Adjustments A: Statement of Financial Position

For the purposes of the Pro Forma Statement of Financial Position it has been assumed that the acquisition of Natürlich Insheim has been completed as of 30 September 2021.

Adjustments contained in column E of the Pro Forma Statement of Financial Position as of 30 September 2021 are as follows:

- **A1:** Intangible assets were adjusted in total by EUR 1,567 thousand due to the identification of intangible assets in the amount of EUR 1,500 thousand in the course of the preliminary purchase price allocation as well as a corresponding impact on deferred tax liabilities of EUR 450 thousand based on Natürlich Insheim's applicable tax rates (refer to A2). Furthermore, goodwill which is included in intangible assets was adjusted by EUR 67 thousand for the preliminary allocation of the consideration transferred and the net assets of Natürlich Insheim through VER GEO.
- **A2:** Plant- and Equipment was adjusted by EUR 2,373 thousand due to the identification of tangible assets in course of the preliminary purchase price allocation as well as a corresponding impact on deferred tax liabilities of EUR 712 thousand based on Natürlich Insheim's applicable tax rates.
- **A3:** Trade and other payables were adjusted in total by EUR 11,467 thousand due to the consideration transferred for the acquisition of Natürlich Insheim.
- **A4:** Share capital was adjusted by EUR (6,920) thousand due to the capital consolidation of Natürlich Insheim.
- **A5:** Reserves were adjusted by EUR (1,770) thousand due to the capital consolidation of Natürlich Insheim.

(B) Pro Forma Adjustments B: Statement of Profit or Loss

For the purposes of the Pro Forma Statement of Profit or Loss it has been assumed that the acquisition of Natürlich Insheim has been completed as of 1 July 2020.

Adjustments contained in the column B of the Pro Forma Statement of Profit or Loss for the three-month period from 1 July 2021 to 30 September 2021 are as follows:

- **B1:** Depreciation was adjusted by EUR (56) thousand related to the subsequent measurement of the preliminary identified tangible and intangible assets from the purchase price allocation and the corresponding impact on recognized deferred tax liabilities in the amount of EUR 17 thousand (refer to B3).
- **B2:** Other expenses were adjusted by EUR 178 thousand due to the derecognition of interest expenses paid to previous shareholders which will be eliminated in the forthcoming consolidated financial statements of the Company.
- **B3:** Income tax (expenses)/income were adjusted in total by EUR 97 thousand to represent income tax effects in the amount of EUR 133 thousand which occurred due to the elimination of the profit transfer agreement (refer to B4). On this behalf, since the result of the period from 1 July 2021 to 30 September 2021 is negative correspondent deferred tax assets for unused tax losses carried forward were recognized. Furthermore, income tax effects from the subsequent measurement of the preliminary identified tangible and intangible assets in the amount of EUR 17 thousand are included as well (refer to B1). Additionally, due to the

derecognition of intercompany interest expenses, income tax effects in the amount of EUR (53) thousand were recognized (refer to B2).

- **B4:** Income or (expenses) from profit transfer agreements with former shareholders were adjusted by EUR (444) to reflect the effects of the acquired entity Natürlich Insheim as if the acquisition had been completed on 1 July 2020.

7.6 Auditor's report to the Pro Forma Financial Information

To Vulcan Energy Resources Limited, Perth/Australia

We have audited whether the pro forma financial information for the periods from 1 July 2020 to 30 June 2021 and from 1 July 2021 to 30 September 2021 of Vulcan Energy Resources Limited (the "**Company**") has been properly compiled on the basis stated in the pro forma notes and whether this basis is consistent with the accounting policies of the Company. The pro forma financial information comprises a pro forma statement of income for the period from 1 July 2020 to 30 June 2021, a pro forma statement of income for the period from 1 July 2021 to 30 September 2021, a pro forma balance sheet as of 30 June 2021 and a pro forma balance sheet as of 30 September 2021 as well as pro forma notes.

The purpose of the pro forma financial information is to present the material effects the transactions described in the pro forma notes would have had on the historical financial statements if the group had existed in the structure created by the transactions throughout the entire reporting period of the pro forma statement of income or as at the pro forma balance sheet date would have existed in the structure created by the transactions. As pro forma financial information reflects a hypothetical situation, it is not entirely consistent with the presentation that would have resulted had the relevant events actually occurred at the beginning of the reporting period of the pro forma statement of income or at the pro forma balance sheet date. Therefore, we do not issue an opinion on the actual effects of the transaction described in the pro forma notes.

The compilation of pro forma financial information in accordance with the principles of the IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) promulgated by the *Institut der Wirtschaftsprüfer in Deutschland e.V.* (IDW) is the responsibility of the management of the Company.

Our responsibility is to express an opinion, based on our audit, whether the pro forma financial information has been properly compiled on the basis stated in the pro forma notes and whether this basis is consistent with the accounting policies of the Company. This includes the evaluation of the overall presentation of the pro forma financial information. The subject matter of this engagement does neither include an audit or review of the basic figures including their adjustment to the accounting policies of the Company, nor of the pro forma assumptions stated in the pro forma notes.

We have planned and performed our audit in accordance with the IDW Auditing Practice Statement: Audit of Pro Forma Financial Information (IDW AuPS 9.960.1) promulgated by the *Institut der Wirtschaftsprüfer in Deutschland e.V.* (IDW) in such a way that material errors in the compilation of the pro forma financial information on the basis stated in the pro forma notes and in the compilation of this basis consistent with the accounting policies of the Company are detected with reasonable assurance.

In our opinion, the pro forma financial information has been properly compiled on the basis stated in the pro forma notes. This basis is consistent with the accounting policies of the Company.

Frankfurt am Main, Germany, 9 February 2022

RSM GmbH

Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

/s/ Arno Kramer_____

Wirtschaftsprüfer

(German Public Auditor)

/s/Santosh Varughese

Wirtschaftsprüfer

(German Public Auditor)

8. INDUSTRY OVERVIEW

8.1 Overview of Lithium Industry

8.1.1 Introduction

Lithium is the lightest and least dense solid element in the periodic table. In its metallic form, lithium is a soft silvery-gray metal with good heat and electric conductivity. As a result of its reactive properties, lithium does not occur naturally in its pure elemental metallic form, instead occurring within minerals and salts. After being extracted from minerals or brines, lithium can be converted into various compounds and derivatives which are ready for commercial applications, such as lithium carbonate, lithium hydroxide and lithium metal. In recent years, lithium consumption has surged following the growth in the rechargeable battery market owed to lithium-ion battery ("**LIB**") applications, first mostly in portable consumer electronics (laptops, mobile phones, power tools, etc.) and now taken over by an application requiring much larger battery packs and therefore more lithium: rechargeable batteries for electric mobility. The strong growth is mainly due to lithium being the lightest material with the highest electrochemical potential enabling a very high energy and power density. Therefore, lithium has become one of the most important materials in high performance battery production.

The two main known sources of lithium are currently hard-rock lithium deposits (also known as pegmatites) and lithium enriched continental saline, geothermal and oilfield brines. Continental brines are typically found in South America, North America and China.

Hard-rock lithium deposits are intrusive igneous rocks formed as part of the cooling and crystallisation process of magma. Hard-rock occurrences produce lithium ores including spodumene, petalite, lepidolite and ablygonite. Spodumene is the most commonly mined mineral of lithium, with historical and active deposits exploited in Australia, Canada and China among other areas. Through beneficiation, spodumene is processed into concentrated products for direct consumption or used as raw materials for on-ward conversion and manufacturing of lithium compounds and derivatives.

Lithium-bearing brines occur in salt flats or salars, or dried salt lakes. Lithium brines are pumped to the surface and typically undergo solar evaporation, ion-exchange or other upgrading techniques to produce a concentrated lithium brine concentrate of 3.0-6.0% Li content, which can be processed further into lithium compounds. Geothermal brines generally have lower lithium grades than salar-type brines, but benefit from heat within the brine that could be used to drive lithium extraction and lower the use, cost and footprint of reagents and energy during extraction.

8.1.2 Lithium products supply

Lithium is rarely consumed in its pure form. Instead, lithium is consumed as a compound created through a chemical process. Lithium compounds include:

- Lithium carbonate
- Lithium chloride
- Lithium hydroxide (battery-grade and non-battery)
- Butyllithium
- High purity lithium metal

Lithium carbonate and lithium chloride are produced through the extraction and processing of lithium bearing resources, which are either brine or hard rock. After extraction, the source materials are further processed into higher concentration compounds which are typically used to produce lithium carbonate, lithium chloride and lithium hydroxide. Lithium carbonate and lithium chloride are typically produced to standard specifications, such as minimum lithium content or maximum impurity levels, depending on the end use application. Lithium carbonate and lithium chloride are primarily used in energy storage, glass, ceramics and general industrial applications. Lithium carbonate and lithium chloride are also used as the input in the production of performance lithium compounds.

Lithium compounds are produced through chemical processes that primarily utilise lithium carbonate and lithium chloride as inputs. The production of lithium compounds requires extensive manufacturing process technology and application know-how as products are required to meet

specific performance requirements in each customer's manufacturing application. As a result, lithium compounds are often developed in collaboration with customers and undergo rigorous qualification processes to ensure they can meet these requirements. Customer qualification processes take approximately twelve months and may be longer depending on the product, customer and application.

8.1.2.1 Lithium carbonate

Lithium carbonate is primarily used in energy storage, glass and ceramics applications, and is also used as an input in the production of lithium hydroxide and speciality lithium compounds. In energy storage applications, lithium carbonate's use is limited to portable electronic devices and in electric vehicle applications that require lower energy density, such as lithium iron phosphate, lithium cobalt oxide and lower nickel content lithium nickel manganese cobalt oxide cathode materials. Lithium carbonate is an odourless, white powder of a specific particle size.

8.1.2.2 Lithium chloride

Lithium chloride is primarily used in the production of lithium compounds such as butyllithium and high purity lithium metal. Lithium chloride is also used in limited industrial applications such as air treatment. Lithium chloride is composed of free-flowing white crystals. Standard quality specifications for lithium chloride include a minimum lithium chloride concentration (as a percentage of weight) of 98.5% and maximum concentrations of water, potassium chloride, sodium chloride and calcium chloride of 0.6%, 0.5%, 0.6% and 0.02%, respectively.

8.1.2.3 Battery-grade lithium hydroxide

Battery-grade lithium hydroxide is primarily used to produce high nickel content cathode materials for use in electric vehicle battery applications. High nickel content cathodes enable the production of higher energy density batteries, allowing vehicles to achieve greater driving range between charges for the same battery weight. High nickel content cathodes are expected to be increasingly adopted in evolving battery technologies over the coming years, and since production of these cathodes requires the use of battery-grade lithium hydroxide, demand for this compound is expected to grow significantly (source: Macquarie).

Vulcan Group intends to primarily sell battery-grade lithium hydroxide to the high growth battery electric vehicle ("**BEV**") market (see section "9.4.1 *Lithium business*"). At the same time, it aims to retain the flexibility to sell lithium carbonate in the future, should customer preferences in battery chemistry change.

8.1.2.4 Non-battery lithium hydroxide

Non-battery lithium hydroxide is primarily sold into grease applications for use in automobiles, aircraft, railcars and agriculture and other types of equipment. Lithium greases are non-corrosive, extremely versatile and work well in a wide range of temperatures and weather conditions.

8.1.2.5 Butyllithium

Butyllithium is an organolithium compound used to initiate polymerisation in the manufacturing of synthetic rubber and other polymers. One of the primary applications for synthetic rubber is in the production of fuel-efficient "green" tires. Compared to traditional tires, "green" tires are more fuel efficient as they offer lower rolling resistance, better wet grip and reduced noise and wear resistance. As a chemical reagent, butyllithium is used in the synthesis of certain organic compounds, including active pharmaceutical ingredients, agrochemicals and electronic materials.

8.1.2.6 High purity lithium metal

High purity lithium metal is mainly used in aluminium alloys and non-rechargeable lithium batteries. In aluminium alloys, high purity lithium metal is used to impart specific strength and weight characteristics in aerospace applications.

8.2 Global trends and developments affecting lithium demand

The strong growth prospects in lithium end markets are driven by the combination of a number of market tailwinds, including increase in demand, policy support and end-user's manufacturing plans.

The Company believes that the following market developments and trends may also have a strong effect on the growth in demand for lithium products and on the further development of Vulcan Group.

8.2.1 Increase in electric vehicle production

Global sales volumes of electric vehicles ("**EV**") are forecast to increase at 33% per year from 2021 to 2025 and LIB production in Europe is forecast to increase to 1000Wh to support 30 million electric vehicles by 2030 (source: Macquarie; Reuters). Led by LIB growth, the global annual demand of lithium is expected to increase from 278,000 tons in 2020 to 2.4 million tons in 2030, multiplied by 9 in 10 years (source: Canaccord 1). LIB production was previously dominated by Asia where more than 98% of all production was based. The landscape is changing, and Europe is competing as a leading centre for electric mobility ("**E-Mobility**"). The production for EV and energy storage batteries is expected to rise 13-fold by 2025 in Europe and is expected to represent more than a quarter of the global battery production capacity by 2030 (source: S&P Global Market).

8.2.2 Introduction of higher energy density batteries

While lithium carbonate used to represent a majority of the demand for lithium chemicals, this is rapidly changing following an evolution of the cathode technology. Automotive original equipment manufacturers ("**OEMs**") have announced plans to introduce longer-range EV models using higher energy density batteries and are increasingly doing so by moving to high nickel content cathode materials (source: Fitch Solutions). The energy density (or specific energy, energy per mass) of lithium hydroxide exceeds that of lithium carbonate. This shift will therefore increasingly require battery-grade lithium hydroxide in the production of cathode materials. As a result, battery-grade lithium hydroxide is expected to be the fastest growing product type in terms of annual consumption, respectively, overtaking lithium carbonate demand as early as 2022 (source: Canaccord 1). Vulcan Group intends to primarily sell battery-grade lithium hydroxide to the high growth BEV market (see section "*9.4.1 Lithium business*").

8.2.3 Automotive manufacturers committing to carbon neutrality

Many major automotive OEMs have announced that they are committing to carbon neutrality, such as Volkswagen, Daimler and BMW. This neutrality is to be achieved via a carbon neutral supply chain, i.e. a CO₂-neutral production allowing for a reduction of carbon across the entire lifecycle of the products.

8.2.4 Government initiatives and policy support for E-Mobility production

Policymakers have played an influential role in the evolution and development of the global EV industry through measures including subsidies, tax exemptions, and government funding as well as direct regulations to promote EV adoption by the public. European nations have been in the forefront of such policies. In 2017, the European Battery Alliance ("**EBA**") was created and includes the European Commission, the European Investment Bank and key industry stakeholders such as automotive OEMs, battery, cathode producers and miners. The EBA's goal is to create a competitive and fully integrated battery manufacturing chain in Europe, from raw material extraction down to EV production. In addition, European regulations for the reduction of emissions set mandatory emission targets for manufacturers, incentivise production of electric and hybrid vehicles, and introduced CO₂ emissions performance standards. In 2020, the European Raw Materials Alliance was created and the EU added lithium to its Critical Raw Materials List. Many countries also implemented incentives for EV manufacturers and purchasers to boost the penetration rate of EVs. In some countries, such as Sweden, governmental subsidies and other incentives contribute to increased sales of electric and hybrid vehicles which are viewed as a mode of transport which reduces CO₂ emissions and pollution in cities. The Norwegian government exempts purchasers of EV from the standard 25% value added tax applied to vehicle sales. Governments in countries including the United Kingdom and France have either pledged to or are assessing the potential of banning the sales of traditional internal combustion vehicles largely from 2030 to 2040. Following the German federal elections, the coalition parties signed their coalition agreement on 7 December 2021 (the "**Coalition Agreement**"), 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. In the United Kingdom, the government has also allocated funding towards the improvement of charging infrastructure throughout the country. In addition, since 2017, over a dozen countries worldwide have announced targets varying from the ban of new sales on diesel vehicles to requirements for full electrification.

8.2.5 Environmental awareness and contribution to sustainability

Global efforts to fight climate change are driving demand for green mobility and fostering the development of electric and hybrid vehicles. Alternatives to combustion engine vehicles, such as EVs, are becoming increasingly popular due to consumers' desire to take steps to fight climate change and reduce their carbon footprints. Rising consumer awareness of climate change is also creating an increase in demand for electric and hybrid vehicles. Demand for combustion vehicles is expected to decline particularly in developed countries as there is a substitution effect with electric and hybrid vehicles that are strongly associated with sustainability and this effect is likely to increase as electric and hybrid vehicle technology develops in order to enhance range and performance. In addition, continued development and expansion of electric charging infrastructure should make driving electric or hybrid vehicles more attractive and have a positive effect on demand. As demand for electric and hybrid vehicles increases, so too does demand for battery-grade lithium hydroxide for the production of LIBs.

8.2.6 Solid state battery production

Solid state battery is considered a next generation battery technology for EV application due to its ability to achieve higher energy density which enables longer driving range and faster charging, as well as improved safety features. Leading global companies across industries including Toyota Motor Corporation, Panasonic Corporation and Sakti Inc. (acquired by Dyson Corporation) have all invested in this field. Vulcan Group notes that the precursor product it intends to produce, lithium chloride concentrate, can be used as a precursor for lithium metal used in next generation solid state batteries, which are expected to be commercialised in the next decade.

8.3 Competitive Landscape

The lithium products production sector is highly concentrated with only a limited number of sizeable operators. This group includes Albemarle which is headquartered in the US, operates globally and with its main assets being located in Chile; and FMC which is also headquartered in the US and operates globally but with its main assets being located in Argentina, SQM (Chile), Tianqi and Ganfeng (both China). Smaller operators include, for example, Orocobre which is based in Argentina but, following its merger with Galaxy Resources, also operates in Australia. As a result, lithium products generally have to be imported from South America and China by European and North American OEMs. Vulcan Group's business aims to fill the void in Europe where OEMs are currently still reliant entirely on imports from South America and in particular from China. As a result of this void there are a large number of lithium development projects around the world that are being progressed towards production, and that may compete with Vulcan Group's projects to supply lithium chemical products into the market.

9. BUSINESS

9.1 Introduction

9.1.1 Business Overview

Vulcan Group is an Australian headquartered lithium battery chemicals and renewable energy group with a clear goal to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint. With its Zero Carbon Lithium™ Project Vulcan Group intends to combine the operations of extracting lithium-rich geothermal brines in the Upper Rhine Valley of Germany, of upgrading lithium through electrolysis to a high purity lithium hydroxide monohydrate and/or lithium carbonate (Vulcan Group's lithium business), and the production of hydrogeothermal energy (Vulcan Group's renewable energy business) (the "**Zero Carbon Lithium™ Project**"). Vulcan Group's Zero Carbon Lithium™ Project intends to produce a battery-quality lithium chemical product from its combined geothermal renewable energy and lithium resource located in the Upper Rhine Valley, which is estimated to be Europe's largest lithium resource, as estimated and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("**JORC Code**") (source: Vulcan Energy Resources Ltd, ASX Release 15 December 2020; Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study 15 January 2021⁵; based on lithium focused peers in Europe with comparable project size and stage and published resource information; see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus). Vulcan Group aims to supply the battery electric vehicle ("**BEV**") market in Europe, which is among the fastest growing in the world (source: S&P Global Platts 1), and is currently reliant on imports of lithium chemicals given the lack of domestic supply. The Zero Carbon Lithium™ Project has been designed from its inception to help decarbonise the German electrical and local heating grids and lithium supply chain simultaneously and has the lowest planned carbon footprint in the lithium industry compared to any previously published life cycle assessment results (source: Vulcan Energy Resources Ltd, ASX Release 4 August 2021; Minviro). An essential part of the Zero Carbon Lithium™ Project involves the use of thermal water as the principal heat source to drive the lithium extraction, which means that lithium is expected to be extracted from the brine with a net zero carbon footprint without polluting the environment with waste material or toxic substances prior to the brines being re-injected in a closed loop, circular system. In order to advance its lithium and geothermal exploration activities as well as its renewable energy business, Vulcan Group has recently undertaken several strategic acquisitions in Germany. In particular, Vulcan Group acquired two geothermal engineering companies in July 2021, which has brought significant surface and sub-surface geothermal operating expertise into Vulcan Group and in December 2021, Vulcan Group acquired Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH), a company that owns and operates a geothermal renewable energy plant and has an exploitation licence for the property of the plant site in Insheim, Germany (see "9.1.2 Recent Acquisitions"). Moreover, in November 2021, the Company acquired two electric drill rigs as part of Vulcan Group's Zero Carbon Lithium™ Project which can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley of Germany.

Vulcan Group holds eight exploration licences in the Upper Rhine Valley of Germany encompassing an area of 983.77 km² (98,377 hectares) within the German states of Baden-Württemberg, Rhineland-Pfalz and Hessen, as well as an exploitation licence at the Insheim geothermal plant bringing the total licence area to over 1,000 km². In addition, Vulcan Group holds an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20 km from the city of Rome. An exploration licence is needed for exploring freely mineable resources, and an exploitation licence (also referred to as a production licence) gives the right to extract freely mineable resources. Vulcan Group is currently at the exploration and development stage and is targeting commencement of commercial production by 2024 at one of its exploration licence areas, capitalising on its proprietary method for the manufacture of battery-grade lithium hydroxide with a net zero carbon footprint, and zero use of fossil fuels to power the extraction process.

As of the date of this Prospectus, Vulcan Group has entered into agreements for the sale of battery grade lithium hydroxide with five customers. In October 2021, Vulcan Group entered into a binding offtake agreement with Umicore N.V. ("**Umicore**") to sell between 28,000 metric tonnes and 42,000

⁵ This information relates to the Taro Licence and the Ortenau Licence (and does not include the Insheim Licence, which was not included in the PFS).

metric tonnes of battery-grade lithium hydroxide to Umicore for an initial five-year term with start of commercial delivery scheduled to commence in 2025 (see section "9.15.5.1 *Lithium Supply Agreements with Umicore*"). In November 2021, Vulcan Group entered into binding offtake agreements with Renault Group ("**Renault**") and Stellantis N.V. ("**Stellantis**"), respectively, to sell to Renault between 29,000 to 49,000 metric tonnes of battery-grade lithium hydroxide over an initial six-year term (see section "9.15.5.2 *Lithium Supply Agreement with Renault*") and to Stellantis between 81,000 metric tonnes and 99,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term (see section "9.15.5.3 *Lithium Supply Agreement with Stellantis*"), in each case with commercial delivery scheduled to commence in 2026. In December 2021, Vulcan Group entered into a binding offtake agreement with Volkswagen AG ("**Volkswagen**"), to sell to Volkswagen between 34,000 to 42,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term, with commercial delivery scheduled to commence in 2026 (see section "9.15.5.4 *Lithium Supply Agreement with Volkswagen*"). In January 2022, Vulcan Group entered into a binding offtake agreement with LG Energy Solution ("**LG Energy**") to sell to LG Energy between 41,000 metric tonnes and 50,000 metric tonnes of battery-grade lithium with commercial delivery scheduled to commence in 2025 with an initial term of five years, which can be extended by five years (see section "9.15.5.5 *Lithium Supply Agreement with LG Energy*"). In addition, in November 2021, Vulcan Group entered into a binding offtake agreement with geox GmbH ("**geox**"), an operator of a geothermal power plant in Landau in der Pfalz (the "**Landau Plant**"), regarding the provision to Vulcan Group of brine from the Landau Plant for the purpose of extracting the lithium contained in the brine for an initial term of 20 years with an offtake start date of 30 December 2024 (the "**geox Agreement**").

In September 2021, Vulcan Group signed a letter of intent agreement with chemical park management company Infracore GmbH & Co. Höchst KG ("**Infracore**"), to secure a site for its planned CLP, at the Höchst Chemical Park (*Industriepark Höchst*), located in Frankfurt am Main (see section "9.15.9 *Site Letter of Intent Agreement with Infracore*"). In January 2022, Vulcan Group and Nobian, a European essential chemicals production company, have entered into agreements to 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. Nobian maintains operations located at the Höchst Chemical Park and the envisaged cooperation foresees, among other things and subject to certain conditions, the operation by Vulcan Group of a demonstration plant at Nobian's existing site at Höchst Chemical Park, prior to the establishment and joint operation of the envisaged CLP at commercial scale. Vulcan Group currently intends to use the CLP to be constructed at the Höchst Chemical Park as a processing hub, processing lithium chloride from multiple combined geothermal and lithium sorption plants into lithium hydroxide monohydrate.

The Company has been listed on the ASX since May 2018, initially with a company name of Koppar Resources Limited (ASX Code: KRX) and since September 2019 as Vulcan Energy Resources Limited (ASX Code: VUL). Following the envisaged dual listing, the Company will be the first Australian company with a listing on the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). The Company has its headquarters in Perth, Australia, and its principal subsidiaries focused on the development of geothermal and lithium projects are based in Karlsruhe and Augsburg, Germany. In addition to its consolidated subsidiaries, Vulcan Group also holds a 24.34% interest in Kuniko Limited ("**Kuniko**"), an ASX-listed company focused on developing hard-rock battery metals projects in Scandinavia with a planned net zero carbon footprint throughout development. Kuniko was originally a wholly owned subsidiary of the Company. In April 2021, the Company announced the planned spin-off of Kuniko (containing Vulcan Group's non-core Norwegian battery metals assets) in order to focus on its Zero Carbon Lithium™ Project. The spin-off was executed by means of an initial public offering of Kuniko on the ASX, which was completed in August 2021.

As Vulcan Group is currently still in the exploration and development phase in its lithium business, it did not generate any meaningful revenues in the last three financial years, with A\$ 56,055, A\$ 95,342 and A\$ 631,542 generated in the financial years ended 30 June 2019, 2020 and 2021, respectively. As of the date of this Prospectus, Vulcan Group has a total of 121 employees (full-time equivalents) based in Australia and Germany.

9.1.2 Recent Acquisitions

In order to advance its lithium and geothermal energy exploration activities, Vulcan Group has recently undertaken the following strategic acquisitions.

9.1.2.1 Global Geothermal Holding UG

In July 2021, the Company's wholly owned subsidiary Vulcan Energie Ressourcen GmbH ("**Vulcan Energie**") acquired Global Geothermal Holding UG ("**GGH**") from Dr Horst Kreuter and Thorsten Weimann, with the consideration for the purchase comprising shares in the Company (see section "12.2 Development of the share capital over the past three years"). GGH holds an exploration licence for geothermal energy (the "**Taro Licence**") and exploration licence applications for geothermal energy and lithium, near the southwest German cities of Mannheim, Karlsruhe, Speyer and Neustadt (see section "9.5.4 Overview of Project Licences").

9.1.2.2 gec-co Global Engineering & Consulting-Company GmbH and GeoThermal Engineering GmbH

In July 2021, the Company's wholly owned subsidiary Vulcan Energie acquired geothermal engineering companies, GeoThermal Engineering GmbH ("**GeoT**") from Dr Horst Kreuter, and gec-co Global Engineering & Consulting-Company GmbH ("**Gec-co**") from Thorsten Weimann, with the consideration for the purchase of Gec-co comprising shares in the Company (see section "12.2 Development of the share capital over the past three years"). GeoT is an engineering company focused on the sub-surface development of deep geothermal renewable energy projects and Gec-co is an engineering company focused on the above-surface development of geothermal power and heating plants, in Europe and worldwide. GeoT and Gec-co were also among the expert companies which contributed to the PFS (see section "9.1.3.1 Pre-Feasibility Study"). These acquisitions enabled the Company to bring in an experienced surface and sub-surface geothermal development team to execute on its Zero Carbon Lithium™ Project.

9.1.2.3 Natürlich Insheim GmbH

In December 2021, the Company's wholly owned indirect subsidiary VER GEO LIO GmbH ("**VER GEO**") acquired from Pfalzwerke Aktiengesellschaft ("**Pfalzwerke**") 100% of the shares in Pfalzwerke geofuture GmbH (renamed Natürlich Insheim GmbH ("**Natürlich Insheim**") (the "**Insheim Acquisition**"). Natürlich Insheim owns and operates a deep geothermal power plant in Insheim, Germany, which operates with a thermal water temperature of 165°C, with the technical ability to produce a maximum of 4.8MW power or 28.5MW thermal energy (currently producing approximately 2.9MW of electricity on average) (the "**Insheim Plant**"). The Insheim Plant has the capacity to supply approximately 8,000 households with electricity and approximately 600-800 households with heat. The Company expects the Insheim Plant to be a source of revenue for Vulcan Group, having reported sales of EUR 5.8 million and an EBITDA of EUR 2.9 million for the financial year ending 31 December 2020. In addition, Natürlich Insheim holds an exploitation licence (the "**Insheim Licence**"). The Insheim Licence grants Natürlich Insheim the exclusive right to geothermal energy from brine extracted from the site of the Insheim Plant. The Insheim Plant currently pumps lithium-rich brine to the surface for geothermal energy generation, but not for processing and extracting the lithium before the brine is reinjected into the reservoir.

9.1.3 Vulcan Group's Mission to implement the Zero Carbon Lithium™ Project

Vulcan Group has a clear goal to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint. In order to accomplish its mission Vulcan Group has, since 2021, commenced engagement with local stakeholders to enable public acceptance and backing for Vulcan Group's planned lithium hydroxide and renewable energy projects, as well as timely grant of requisite permits. Also, since 2021, Vulcan Group has systematically explored and sought to develop the project areas.

For the next five years, Vulcan Group has the following key measures planned, which the Company expects to commence at the indicative times as set forth below.

- 2022: Completion of a definitive feasibility study for Phase One, comprising Vulcan Group's project areas relating to the Taro Licence and the Insheim Licence, as well as an updated pre-feasibility study for its additional project areas, including further exploration works in each area as required, engineering works for its planned lithium and geothermal plants, and permitting as required to develop the project.
- 2022: Operation of a pilot plant and demonstration plant to demonstrate the successful production of lithium chloride concentrate, and subsequently battery-quality lithium hydroxide, in progressively larger quantities.

- 2022: Further growth of Vulcan Group's development team to ensure that Vulcan Group can meet its strategic goals in a timely manner.
- 2022: Develop and implement ESG framework including applying for carbon credit certification for the Zero Carbon Lithium™ Project.
- 2022: Working with financial advisors to progress project financing for the construction of Vulcan Group's projects.
- 2022-2023: Drilling and testing geothermal wells towards the end of 2022 for the Taro Licence and Ortenau Licence areas and in 2023 for other licence areas which, if successful at producing the requisite heat, lithium grades and brine flow rate, will be converted to production wells.
- 2023-2024: Construction and commissioning of the geothermal energy and direct lithium extraction ("**DLE**") plants, and central lithium plant ("**CLP**") at the Höchst Chemical Park (*Industriepark Höchst*), Frankfurt am Main, Germany, for lithium hydroxide production.
- 2024: Commencing commercial production of renewable heat/power, and commercial production of battery quality lithium products (Phase One).
- 2024-2025: Expansion of commercial production in line with the expected growth in the European BEV market.
- 2025 onwards: Evaluation and pursuit of global business development opportunities to establish other geothermal-lithium production areas with a net zero carbon footprint.

The following timeline illustrates the various expected stages for the implementation of the Zero Carbon Lithium™ Project.



Vulcan Group has progressed and expects to continue to progress its Zero Carbon Lithium™ Project by conducting industry-standard feasibility studies. A pre-feasibility study ("**PFS**") has already been completed, and the Company has commenced commissioning of a definitive feasibility study ("**DFS**") with the assistance of industry consultancy firms.

9.1.3.1 Pre-Feasibility Study (January 2021)

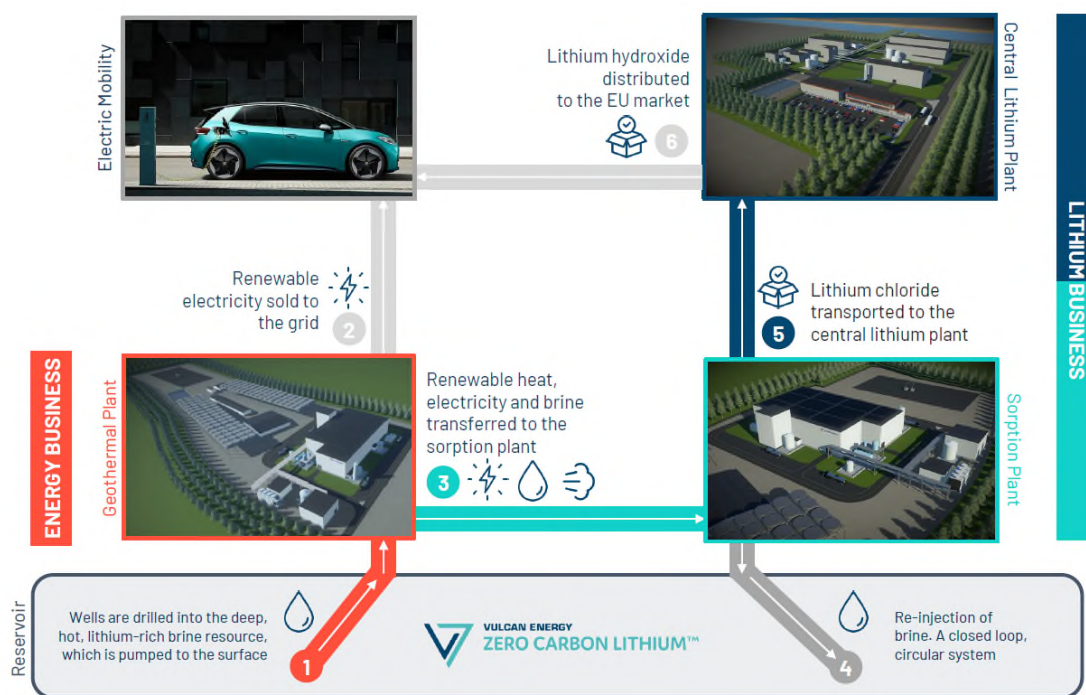
The PFS has been prepared and reviewed by a number of expert companies in the field of lithium extraction, chemistry, chemical engineering, geothermal plant engineering and geology including Hatch Ltd. (lithium processing plant design, engineering and cost estimates), GLJ Ltd. (review and sign-off on the Maiden Probable JORC Ore Reserves), APEX Geoscience Ltd. (resource modelling and estimation for the Upper Rhine Valley Project (URVP) Li-brine Indicated Resources), IBZ salt Chemie GmbH & Co. KG (laboratory test work) and Optiro Ltd. (financial modelling) as well as GeoT and Gec-co which were both subsequently acquired by Vulcan Group and lead the engineering studies and cost estimates for the geothermal plant and the subsurface well design and production study, respectively. The PFS intended to determine whether to proceed with a DFS and to determine areas within the project that might require more attention. The PFS also factored in known costs and estimated gross dimensions and quantities following the completion of preliminary conceptual engineering and project design. The PFS presents probable ore reserves and indicated and inferred mineral resources for two of its granted licences, with a planned Phase One development in the Taro Licence, and a planned Phase Two development at a location near the city of Offenburg (the "**Ortenau Licence**"). In 2020, Vulcan Group acquired and reinterpreted existing 2-D and 3-D seismic data relating to the Taro Licence area, and detailed geological and downhole geophysical information from a well located approximately 18km northeast of the Taro Licence area. In addition, Vulcan Group conducted its first mineral processing trials using a sorption-type DLE method to test the recovery of lithium from the brine. Based on the PFS findings, Vulcan Group has identified a lithium resource estimate of 15.85 million metric tonnes ("**Mt**") of lithium carbonate equivalent ("**LCE**")⁶ at a grade of 181 mg/l Li (comprising 3.61 Mt LCE of indicated mineral resources and 12.24 Mt LCE of inferred mineral resources, and including probable ore reserves of 1.12 Mt LCE) (see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves, production targets and estimated project economics included in this Prospectus). The PFS also presented Vulcan Group's patented production process flowsheet (see section "9.11 Intellectual Property") comprising three steps each occurring at a different plant:

1. *Binary Cycle Geothermal Plant:* Hot brine is extracted from the ground and generates steam that powers turbines and produces renewable electricity using standard geothermal production.
2. *DLE Plant:* Brine flow is diverted, and lithium is extracted from the solution using the sorption-type DLE process which has been used commercially for decades on continental-style brines in South America, and more recently in China.
3. *Central lithium plant:* Lithium chloride is then sent to the lithium refining plant to be converted into battery-quality lithium hydroxide, using lithium electrolysis.

Vulcan Group's process flowsheet

The following simplified image illustrates the Zero Carbon Lithium™ Project:

⁶ In order to describe the resource in terms of industry standard, a conversion factor of 5.323 is used to convert elemental Li to LCE. Please refer to the Company's PFS for further information about the reserves and resources statements, and the assumptions underlying them.



In addition to preliminary conceptual engineering and project design with regards to the flowsheet the PFS also considered for the first time the potential viability of establishing the Zero Carbon Lithium™ Project as a dual purpose renewable project, by complementing the lithium business with a renewable energy business and presented the project economics (including an estimated post-tax net present value of the Zero Carbon Lithium™ Project in an amount of EUR 2.1 billion) for the implementation of the dual purpose Zero Carbon Lithium™ Project (see section "9.1.3.3 Implementation of the Zero Carbon Lithium™ Project"). In addition to electricity as shown in the simplified image, Vulcan Group intends to sell heat to the grid and local third-party customers.

9.1.3.2 Definitive Feasibility Study

Following successful completion of Vulcan Group's PFS, the Company commenced its DFS, including the commissioning and construction of a pilot plant operating at the geox geothermal energy facility in Landau, which has begun successfully extracting lithium with over 90% recoveries from live geothermal brine and producing lithium chloride eluate, which was converted offsite to first battery quality lithium hydroxide monohydrate. Vulcan Group intends to use data collected from the pilot plant towards completion of a DFS. Vulcan Group also intends to construct a demonstration plant in late 2022 in order to train staff on the operation in a pre-commercial setting. Hatch Ltd. and GLJ Ltd. which have both also been involved in the preparation of the PFS have been engaged to assist the Company with the DFS. In August 2021, Vulcan Group appointed BNP Paribas to work with Vulcan Group on a bankability review of the DFS. Following the Insheim Acquisition (see section "9.15.1 Natürlich Insheim Purchase Agreement") and the conclusion of the geox Agreement (see section "9.15.6 Brine Offtake Agreement with geox"), Vulcan Group anticipates completing the DFS in respect of Phase One (as defined below) by the second half of 2022.

9.1.3.3 Implementation of the Zero Carbon Lithium™ Project

Vulcan Group currently aims to implement the Zero Carbon Lithium™ Project for a production start separated into two phases, with start dates in 2024 and 2025. Based on Vulcan Group's PFS, a first phase would target a production start in 2024 for the Taro Licence area ("**Phase One**") and a second phase would target a production start in 2025 for the Ortenau Licence area ("**Phase Two**") (see section "9.5.4 Overview of Project Licences"). Vulcan Group intends, subject to a positive DFS, to incorporate the geox Agreement and the Insheim Plant into its Phase One development plans.

The following chart provides a budget overview of initial funding requirements for the implementation of the Zero Carbon Lithium™ Project based on the PFS:

	ENERGY BUSINESS		LITHIUM BUSINESS	
	1 Geothermal Plant	➡	2 DLE Plant	➡
PHASE 1 2024 Start	2 geothermal plants: • GB1 – 8MW • GB2 – 14MW Capex: €226M		2 DLE plants: • DB1 – 8kt LiOH • DB2 – 7kt LiOH Capex: €291M	3 CLP
PHASE 2 2025 Start	3 geothermal plants: • GC1 – 17MW • GC2 – 17MW • GC3 – 17MW Capex: €438M		3 DLE plants: • DC1 – 8kt LiOH • DC2 – 8kt LiOH • DC3 – 8kt LiOH Capex: €460M	1 Central Lithium Plant • CLP1 – 15kt LiOH Capex: €182M
FULL PROJECT NO PHASING 2024 Start	5 geothermal plants 74MW Capex: €665M		5 DLE Plants Capex: €751M	1 Central Lithium Plant • CLP – 40kt LiOH Capex: €322M
				€473M €700M €1.1bn

Based on Vulcan Group's PFS, Vulcan Group aims to produce 74MW of renewable energy from its renewable energy business and 40,000 metric tonnes of lithium hydroxide from its lithium business annually following commencement of Phase Two (see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves, production targets and estimated project economics included in this Prospectus).

9.2 Competitive Strengths

Vulcan Group believes that the following competitive strengths will allow it to execute its business strategy and will set it apart from its competitors in the future:

9.2.1 Clear goal and strategy built around implementing the world's first net zero carbon footprint lithium production project.

Vulcan Group believes that its proprietary processing technology, combined with its dual purpose geothermal-lithium resource in the Upper Rhine Valley (see section "9.5.3 Upper Rhine Valley"), will allow it to produce lithium chemicals with a net zero carbon footprint and zero fossil fuel usage to power the extraction process. Vulcan Group's proprietary process aims to allow for quick processing time by using direct precipitation, for which the evaporation process is driven by steam in contrast to sunlight for solar evaporation, enabling Vulcan Group to be responsive to market needs, unlike current South American salt flat production ("**Salar**") which takes longer (up to 18 months), is more carbon-intensive and is vulnerable to weather events. Salar lithium operations in South America are typically carried out at over 3,000m above sea level and use large quantities of soda ash mined in the USA (which need to be transported to remote locations), resulting in a substantial carbon footprint. Salar operations also use large amounts of water (up to 470m³) in some of the driest places on earth (source: Minviro). In contrast to current hard-rock lithium operations, which generally have a high carbon footprint due to their processing methods and long transport distance to customer markets, the location of Vulcan Group's dual purpose geothermal-lithium project in the Upper Rhine Valley gives Vulcan Group's Zero Carbon Lithium™ Project the potential advantage of a very short product transport distance for servicing the German and European automotive industry. Vulcan Group's Zero Carbon Lithium™ Project is also located in the heart of the EU's emerging battery and cathode "mega" and "giga" factories, and within easy range of electric transport to battery and cathode factories, such as Saft Group S.A.'s lithium-ion battery factory in Nersac, France, and Northvolt's factory to be constructed in Salzgitter, Germany, as a part of its partnership with Volkswagen AG. As the majority of the global lithium supply is controlled by just five companies, all operating from outside of Europe (see section "8.3 Competitive Landscape"), Vulcan Group's business aims to fill the market gap in Europe, where original equipment manufacturers ("**OEMs**") are currently still reliant entirely on imported lithium products, in particular from China, accounting for 80% to 90%, as well as South America (source: Bloomberg).

The Company expects that the implementation of a dual lithium chemicals production and renewable energy business will make Vulcan Group's Zero Carbon Lithium™ Project the world's first net zero carbon footprint lithium chemicals production project. At a time of increasing global focus on decarbonisation across all supply chains, Vulcan Group intends to capitalise on its first mover position, in particular as a favoured supplier to European buyers of lithium chemicals, who have publicly stated their intention to prioritise sustainable sources of lithium (source: S&P Global Platts

2). It also means Vulcan Group could be potentially positively exposed to a rising carbon price, if carbon pricing is factored into the lithium supply chain. Vulcan Group aims to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint for the burgeoning European BEV market, which the Company believes is a clear selling point for EV-producing manufacturers which Vulcan Group intends on assisting in reaching their sustainability targets by offsetting CO₂ against the rest of their supply chain.

9.2.2 A well-balanced business model with potential for dual revenue sources planned through lithium and renewable energy business.

Vulcan Group plans to produce and sell both lithium chemicals for the battery market and renewable energy (heat and power). Through such diversification of revenue, Vulcan Group expects, unlike other traditional suppliers, to be able to mitigate its dependency on the lithium price environment to a greater degree than traditional lithium suppliers, who are focused solely on lithium production. Prices for lithium have been, and may continue to be, volatile. Vulcan Group expects that prices for lithium compounds will continue to be influenced by various factors, including worldwide supply and demand as well as the business strategies of major producers. With access to a large scale and stable supply of lithium raw materials from a source that may also be exploited for the production of renewable energy, the Company believes that Vulcan Group is well positioned to diversify its business while avoiding a dependency on a single source of revenue.

9.2.3 Access to a strategically located and scalable lithium raw materials resource, estimated by the Company to be the largest lithium resource in Europe.

Access to an adequate supply of lithium raw materials is crucial to achieving business size and growth and vital for Vulcan Group's stable business operations in the lithium products industry. Vulcan Group has a total lithium resource estimate of 15.85 Mt LCE at a grade of 181 mg/l Li (comprising 3.61 Mt LCE of indicated mineral resources and 12.24 Mt LCE of inferred mineral resources, and including probable ore reserves of 1.12 Mt LCE), which is currently estimated by the Company based on publicly listed companies developing lithium projects in Europe and having defined a lithium resource, to be the largest lithium resource in Europe reported in accordance with JORC (based on lithium focused peers with comparable project size and stage and published resource information; see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus). The high concentrations of lithium in Vulcan Group's project areas have certain similar characteristics to the Salton Sea brines in California which are being developed by a number of companies to produce power and lithium compounds. This large size means that, subject to the right geological conditions and availability of suitable land, Vulcan Group potentially has the ability to scale up its operations with the addition of more geothermal-lithium operations in the future while maintaining a stable supply of lithium raw materials. This is in contrast to smaller, hard-rock lithium projects in Europe (for example pegmatite-hosted spodumene deposits) which, due to their size, have limited ability to scale up operations in the future, and require chemical conversion capacity which does not currently exist. Additionally, hard-rock lithium projects have a significant surface impact from mining operations, which makes new projects unpopular in Europe. With access to a European source for lithium brine extraction, Vulcan Group has secured a strategically located lithium raw materials source which positions it well to develop a potentially scalable business.

9.2.4 Potential to be a very low operating cost lithium business, according to Vulcan Group's PFS.

The PFS demonstrated that, due to the availability of pre-heated brine and steam, and therefore reduced energy costs – as well as the availability of brine from the geothermal operation for use in the lithium operation without incremental cost – the planned Zero Carbon Lithium™ Project is expected to have very low operating costs once in production. Brine lithium production is typically cheaper than lithium production in hard-rock operations. This is primarily due to lower energy requirement during extraction, and in this case this is expected to be lower still due to the availability of heat in the brine. This is due to the location of brine deposits in areas that are typically flat and arid, making extraction easier. In addition, lithium brine is not located as deep as hard-rock deposits, allowing for surveys and initial extraction at a shallower depth. This presents an opportunity for an attractive proposition in a European market, which currently has only small or complex hard-rock projects. In addition, Vulcan Group has developed a proprietary processing technology for brine operations that significantly reduces the time from pumping brine to processing, whilst using zero fossil fuels to power the process. This reduction in production time compares favourably to a

conventional Salar evaporation process. Each of these factors give Vulcan Group a potential competitive advantage over other, high-cost sources of lithium supply in the future.

9.2.5 Experienced and committed international management and execution team.

Vulcan Group has a strong and experienced management team. Vulcan Group was founded by sector experts Dr Francis Wedin, the Managing Director/CEO of the Company and a geologist with a background in lithium exploration, and Dr Horst Kreuter, the managing director of Vulcan Energie, the Company's direct subsidiary in Germany, and a geologist with an extensive background in geothermal project development, including having founded the first geothermal development company in Germany.

Vulcan Group also has a strong management team overseeing its different business sectors, including its chief financial officers in Germany and in Australia with longstanding industry experience, its Chief Operating Officer Mr Thorsten Weimann who is an experienced geothermal project developer, and its Chief Technical Officer Dr Stephen Harrison who is a direct lithium extraction expert. Vulcan Group has a diverse skill set and experienced Board of Directors, including senior employees of Tesla and Evonik and former Ernst & Young ("**EY**") senior partner who led and delivered the EY Global Renewables and Sustainable Business Plan. In addition, Vulcan Group has a capable and experienced technical team across the fields of geothermal energy development, including geology and engineering, and lithium extraction (chemistry and chemical engineering). Both the fields of deep geothermal energy development and DLE are specialised industries, with a relatively small pool of expertise. Having this expertise in-house places Vulcan Group at a potential competitive advantage.

9.2.6 Well-positioned to capitalise on the expected dynamic transition to electric mobility and renewable energy in Europe, through the ability to offer a sustainable lithium product from its Zero Carbon Lithium™ Project.

Vulcan Group believes that the anticipated significant growth in demand for electric vehicle batteries and energy storage batteries (source: S&P Global Platts 3) will be a key driver for the expected growth for the demand for battery-quality lithium chemicals in Europe. Subject to successful development of its Zero Carbon Lithium™ Project, with a secure, domestic lithium supply in the Upper Rhine Valley of Germany for the burgeoning European BEV market (see section "9.2.3 Access to a strategically located and scalable lithium raw materials resource, estimated by the Company to be the largest lithium resource in Europe."), Vulcan Group believes it is well-positioned to capitalise on the strong growth anticipated in lithium consumption by end markets, primarily including the BEV market.

The strong growth prospects in lithium end markets are driven by the combination of a number of market tailwinds, including increase in demand, policy support and end-users' manufacturing plans (see section "8 Industry Overview"). Global sales volume of EVs is forecast to increase at 33% per year from 2021 to 2025, with equivalent lithium-ion battery production increasing from 244GWh in 2021 to 968GWh by 2025 (source: Macquarie). Correspondingly, the lithium-ion battery is expected to be the fastest growing rechargeable battery technology due to increasingly strong penetration rates in the BEV market and a fall in manufacturing costs (source: Economist). The global annual consumption of lithium is expected to increase from 278,000 tonnes in 2020 to 2.4 million tonnes in 2030, which would represent a tenfold increase in ten years (source: Canaccord 1).

Vulcan Group's lithium resource in the Upper Rhine Valley and its extraction and processing expertise, combined with the availability of renewable heat to drive the process, potentially position Vulcan Group to be able to manufacture a product with low impurities to meet stringent demands of major battery materials manufacturers. Automotive OEMs have announced plans to introduce longer-range EV models using higher energy density batteries and are increasingly doing so by moving to high nickel content cathode materials (source: Fitch Solutions). The energy density (or specific energy, energy per mass) of lithium hydroxide exceeds that of lithium carbonate. This shift will therefore increasingly require battery-grade lithium hydroxide in the production of cathode materials. As a result, battery-grade lithium hydroxide is expected to be the fastest growing product type in terms of annual consumption, respectively, overtaking lithium carbonate demand as early as 2022 (source: Canaccord 1).

9.2.7 Access to capital markets, proven ability to obtain funding to execute its business strategy and to implement the Zero Carbon Lithium™ Project and distinct international profile.

The Company believes that its existing access to Australian capital markets together with the access to European capital markets to be achieved with the FSE Listing will position it well to obtain the funding required to execute its business strategy and to implement the Zero Carbon Lithium™ Project.

The Company has been listed on the ASX since May 2018, initially with a company name of Koppar Resources Limited (ASX Code: KRX) and since September 2019 as Vulcan Energy Resources Limited (ASX Code: VUL). The Company's listing on the ASX has allowed the Company and Vulcan Group's Zero Carbon Lithium™ Project to gain additional visibility among the Australian investment community and beyond and to gain access to capital markets in Australia. In 2021, the Company was included in the S&P Dow Jones Indices ASX300 Index which includes 300 of Australia's largest companies by (float-adjusted) market capitalisation and the PWC Australia ASX "Mid-Tier 50" (MT50) list which includes the largest ASX-listed mining companies outside the S&P/ASX 50 Index.

Moreover, since its listing on the ASX, the Company has successfully executed a number of equity placements with existing and new investors including, most recently, a placement to sophisticated and institutional investors of A\$200 million on 22 September 2021, a placement to sophisticated and institutional investors and Vivien Enterprises Pte Ltd (a company whose sole shareholder is the spouse of Mr Gavin Rezos) of (combined) A\$120 million in February and June 2021, respectively, and a A\$3 million issuance to existing shareholders in Australia and New Zealand under a share purchase plan on 18 October 2021 (see section "12.2.2 Selected current issuances of Shares"), evidencing Vulcan Group's ability to obtain funding to execute its business strategy and to implement the Zero Carbon Lithium™ Project. The Company believes that the funding obtained through the placements to sophisticated investors and the share purchase plan will accelerate and expand the implementation of Vulcan Group's integrated renewable energy and lithium development strategy.

Finally, following the completion of the FSE Listing, the Company believes it will be the first Australian company to have a listing on the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). In the Company's view, the FSE Listing, once completed, will increase the international profile of Vulcan Group and enable access for investment into the Company for the full range of the European and broader investment community.

9.3 Strategy

Vulcan Group is aiming to become the world's first lithium chemicals and renewable energy producer with a net zero carbon footprint targeting commencement of commercial production in 2024. With its Zero Carbon Lithium™ Project, Vulcan Group intends to produce a battery-quality lithium hydroxide chemical product from its combined geothermal energy and lithium resource, which is estimated to be Europe's largest lithium resource reported in accordance with JORC (source: Vulcan Energy Resources Ltd, ASX Release 15 December 2020; Vulcan Energy Resources Ltd, Zero Carbon Lithium Pre-Feasibility Study 15 January 2021; based on lithium focused peers with comparable project size and stage and published resource information; see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus). Vulcan Group's unique Zero Carbon Lithium™ Project aims to produce both renewable geothermal energy, and lithium hydroxide, from the same deep brine source. In doing so, Vulcan Group intends to address the European market's lithium requirements while reducing the high carbon and water footprint of production (as compared with other methods of lithium production) and addressing the European market's current total reliance on imports. In particular, Vulcan Group aims to supply the BEV market in Europe. The Zero Carbon Lithium™ Project has an estimated resource which could potentially meet a significant part of Europe's needs for the electric vehicle transition, from a source with a net zero carbon footprint. In order to achieve this, Vulcan Group has adopted a strategy designed to capitalise on its competitive strengths. The key elements of Vulcan Group's strategy are as follows:

9.3.1 Ensure local support from stakeholders for the Zero Carbon Lithium™ Project

For every decarbonisation or renewable energy project, it is vital that there is a tangible benefit to the local area and communities. Vulcan Group is aiming to build multiple renewable energy and sustainable lithium extraction operations across numerous regions and communities in the Upper Rhine Valley. Vulcan Group intends to supply these communities with renewable heat and power, and will supply European battery makers and auto-makers with sustainable lithium, thus assisting with decarbonisation efforts, in an area already significantly affected by climate change. In addition,

by setting up local, project-based companies for each renewable energy plant location, Vulcan Group aims to ensure that the taxes for its project companies are levied at a local level and more generally that there is a direct local benefit of its projects.

In addition, Vulcan Group is continuously expanding its community outreach by engaging with the community members, local and municipal councils, state and federal governments as well as regional media. Vulcan Group appointed regional managers were in Ortenau, Südpfalz and Kurpfalz, overseeing teams of public affairs, communications, and project management professionals. These teams, with local knowledge and expertise, work with the community to ensure Vulcan's mission and the Zero Carbon Lithium™ Project is understood and accepted.

9.3.2 Grow the business by investing in the expansion of Vulcan Group's team

Vulcan Group is aiming to enter into production in a short period of time relative to the market standard for typical geothermal projects. By accelerating the necessary growth, Vulcan Group intends to capitalise on the rapidly increasing demand for lithium chemicals in Europe, and capture a market share. To achieve this in the targeted time frame, Vulcan Group is seeking to further significantly grow its multi-disciplinary team during the coming months and years by adding industry experts in key discipline areas that will be vital to delivering the proposed development plan.

9.3.3 Build-out in a modular fashion to accelerate growth and minimise disruption by capitalising on the teams' experience during project execution

Vulcan Group has recently acquired two engineering companies with deep expertise in the geothermal business and intends to use the significant experience of its geothermal and lithium teams to proactively minimise disruption during the construction and build out of its lithium and renewable energy businesses. The Company intends to build out multiple geothermal-lithium operations in a relatively modular fashion across the Upper Rhine Valley. In doing so, Vulcan Group expects to be able to accelerate the development of multiple locations over a short period of time by carrying out the construction required for its patented production process developed for the Zero Carbon Lithium™ Project. An advantage of this modular build-out is also that lessons learned from one location can also be applied to other locations.

9.3.4 Further improve Vulcan Group's research and development and innovation capabilities

Vulcan Group is committed to investing significant resources in its research and development efforts. Vulcan Group plans to fully tap into the strength of its geothermal and lithium technical teams to achieve this. To further improve its advanced brine extraction methods and lithium processing techniques and improve its technological edge in the global lithium industry, Vulcan Group also plans to strengthen existing and initiate further cooperation with external companies, such as Minviro Ltd., a company which quantifies the environmental impacts of raw material extraction, and Circulor Ltd ("Circulor"), utilising their supply chain full traceability and dynamic CO2 solution, as well as with external research institutes, such as the Karlsruhe Institute of Technology (the "**Karlsruhe Institute**"), the University of Stuttgart and the Technical University of Darmstadt. In particular, Vulcan Group intends to advance its research and development in-house in order to continuously improve its geothermal extraction and mineral processing techniques. Vulcan Group presently has filed a Patent Cooperation Treaty ("**PCT**") (international) patent application and has been granted a German utility model patent for "a system and process for the production of both battery-quality lithium hydroxide monohydrate, and lithium carbonate, from a geothermal brine".

9.3.5 Develop solid and long-standing customer relationships and strong ties with the latest developments in lithium end-use markets

Vulcan Group's goal is to become a critical link in its customers' supply chains and an integral component in lithium end markets. Vulcan Group plans to continuously expand its customer base and deepen customer relationships, in particular in Europe, by further enhancing its sales efforts and customer-oriented research and development capabilities. Vulcan Group intends to strengthen its ties with top-tier end customers, in particular cathode, battery and electric vehicle manufacturers and has for this purpose recently entered into binding offtake agreements with Umicore, Renault, Stellantis, Volkswagen and LG Energy. Together, the volumes of lithium hydroxide to be delivered under these five offtake agreements exceed the estimated 40,000 metric tonnes as annual production target referenced in Vulcan Group's PFS upon the completion of Phase One and Phase Two of the Zero Carbon Lithium™ Project.

Vulcan Group is currently in discussions with other potential offtake partners with respect to further lithium hydroxide production from the project. Overall, it is the Company's goal to have all volumes of battery-grade lithium hydroxide produced in Vulcan Group's Zero Carbon Lithium™ Project committed under offtake agreements with reputable counterparties. In line with the ESG requirements of end customers, Vulcan Group is undertaking assessments and implementing policies and procedures with the goal of improving transparency across up and downstream supply chains.

Vulcan Group strives to keep in step with the latest industry trends and technological developments in the downstream sectors, enabling it to grasp new market movements in order to continuously optimise its product portfolio and innovate new products to suit its customers' needs.

9.3.6 Develop next generation lithium compounds and advance circular economy approaches to lithium, in line with Vulcan Group's core sustainability values

Vulcan Group believes that the evolution of battery technologies will lead to the adoption of lithium-based applications in the anode and electrolyte within the battery. This evolution will require new forms of lithium to be produced, such as new lithium metal powders or printable lithium products. Vulcan Group intends to continue to invest in its research and development efforts to help create new products, and will also invest with and partner alongside its customers to further their own research and development efforts. In particular, Vulcan Group notes that the precursor product it intends to produce from its DLE plant, lithium chloride concentrate, can be used as a precursor for lithium metal used in next generation "solid state" batteries (batteries with solid composite cathodes as opposed to liquid gel powered lithium-ion batteries), which are expected to be commercialised by 2030. Utilisation of the Circular value chain CO₂ tracking is also intended to allow Vulcan Group to continuously monitor the end-product with the ability to work with downstream customers for repurposing, reusing and recycling.

9.3.7 Become a long-term renewable energy partner to the German economy

While some of the heat generated from Vulcan Group's Zero Carbon Lithium™ Project will be used to power the DLE plant, Vulcan Group intends on selling all its generated electricity to the German electricity grid at a favourable feed-in tariff. In addition, surplus renewable heat production is intended to be sold to third-party customers, which Vulcan Group expects will primarily consist of local municipalities and businesses. As such, Vulcan Group's renewable energy business aims at being a net contributor to the transition of Germany's power consumption away from fossil fuels and towards more sustainable sources of renewable energy.

9.4 Principal business areas

Vulcan Group intends to produce both battery-grade lithium hydroxide to supply the growing BEV market and geothermal heat and power to offset the energy consumed in lithium production and processing, while also selling the renewable power to the grid and renewable heat to third-party customers, which Vulcan Group expects will primarily consist of local municipalities and businesses.

9.4.1 Lithium business

Vulcan Group intends to produce a battery-quality lithium hydroxide chemical product from its combined geothermal energy and lithium resource located in the Upper Rhine Valley of Germany.

Lithium hydroxide is a fine white powder that can be produced from spodumene or other ores using a high temperature chemical process, or converted from lithium carbonate (Li₂CO₃), or produced from lithium chloride (LiCl) concentrate. Although historically lithium hydroxide has mainly been used in grease applications, it is fast becoming a crucial raw material for lithium-ion batteries. While lithium carbonate used to represent the majority of the lithium chemicals market demand, the evolution of the cathode technology has prompted a rapid shift towards lithium hydroxide. In order to improve the energy density of the battery and move away from toxic and cost-intensive cobalt, nickel-cobalt-manganese cathodes producers are reducing their cobalt content and increasing nickel usage. Cathode synthesis using lithium carbonate requires high temperatures, which in turn are incompatible with a nickel content of 60% and above (as opposed to 40% cobalt and manganese). The new generation of nickel-cobalt-manganese cathodes used in lithium-ion batteries, therefore require the use of lithium hydroxide instead of lithium carbonate in order to allow for a higher nickel content. Accordingly, Vulcan Group's focus will be on supplying high performance battery-grade lithium hydroxide to the fast-growing BEV market. Vulcan Group aims, subject to completion of its DFS, to also potentially produce lithium carbonate from its lithium hydroxide products, and also has

the ability to potentially produce a lithium chloride precursor product for lithium metal used in "solid state" battery applications, should there be a market for these in the future.

9.4.2 Renewable energy business

Hundreds of geothermal plants are in operation globally and 37 deep geothermal energy plants are in operation in Germany (source: Clean Energy Wire). Vulcan Group intends to produce geothermal energy from brine at various locations throughout the Upper Rhine Valley. In addition to high lithium grades, the Upper Rhine Valley is a deep geothermal brine reservoir with a high brine flow rate and a capability of generating renewable heat. Geothermal brine is a hot, concentrated saline solution that has circulated through very hot rocks and become enriched with elements such as lithium, boron and potassium. The process of pumping brine to the surface at a geothermal plant generates renewable heat which is used to produce electricity. This also allows for an extraction of lithium powered by naturally occurring geothermal energy. Because of its natural conditions, the Upper Rhine Valley is a particularly well-suited location for the operation of geothermal plants.

9.5 Lithium business

9.5.1 Overview

Vulcan Group is exploring opportunities to extract lithium chemicals and produce geothermal energy from brine at various locations throughout the Upper Rhine Valley (see section "9.5.3 Upper Rhine Valley").

Vulcan Group holds eight exploration licences in the Upper Rhine Valley of Germany encompassing an area of 983.77 km² (98,377 hectares) within the German states of Baden-Württemberg, Rhineland-Pfalz and Hessen, as well as an exploitation licence at the Insheim Plant bringing the total licence area to over 1,000 km² (together, the "**Project Licences**"). An exploration licence grants the right to explore for, extract to the extent necessary for the planned exploration of, and erect and operate facilities that are required for exploring the resources and for carrying out related activities. The exploitation licence grants the exclusive right to geothermal energy from brine extracted from the site of the Insheim Plant. Vulcan Group intends to continue to expand its Project Licence areas in the Upper Rhine Valley. In addition, Vulcan Group holds an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20 km from the city of Rome. Vulcan Group is currently at the exploration and development stage and is targeting commencement of commercial production by 2024 at one of its exploration licence areas (see section "9.1.3.3 Implementation of the Zero Carbon Lithium™ Project"). The Company has developed a proprietary method for the manufacture of battery-grade lithium hydroxide with net zero carbon footprint, and zero use of fossil fuels to power the extraction process.

9.5.2 Vulcan Group's Zero Carbon Lithium™ Project

Vulcan Group's Zero Carbon Lithium™ Project will consist of a process to produce both renewable geothermal energy and lithium hydroxide from the same deep brine source. Vulcan Group's Zero Carbon Lithium™ Project is in the Upper Rhine Valley geothermal field in Germany, an area endowed with high grade, low impurity, sub-surface geothermal brines. The concentrations of lithium in the Upper Rhine Valley are similar to the Salton Sea brines in California, which are being developed by a number of companies to produce power and lithium. The Upper Rhine Valley brine field has been extensively studied due to its geological and geothermal characteristics, including historical exploration for oil and gas. As a consequence, the Zero Carbon Lithium™ Project is situated in a brine field with considerable amounts of existing seismic and drilling data potentially available for exploration and resource evaluation.

Vulcan Group's Zero Carbon Lithium™ Project represents an early-stage exploration and development project. The aim is to explore and develop Vulcan Group's Zero Carbon Lithium™ Project to produce battery-grade lithium hydroxide from geothermal brines. Vulcan Group intends to utilise a direct lithium extraction process for lithium processing, which is less water and carbon-intensive relative to the evaporative method used in Salars and to hard-rock lithium operations which generally have a high carbon footprint due to their processing methods and distance to markets. The temperature of the brines is expected to be an advantage in the development of the processing method providing a source of renewable heat. As a by-product of the production process, renewable geothermal energy is expected to be generated from dual-purpose wells in order to offset the energy consumed in lithium production and processing and also to be sold as part of the renewable energy business (see section "9.6 Renewable energy business").

Vulcan Group's Zero Carbon Lithium™ Project, if and when fully operational beyond renewable energy production at the Insheim Plant, aims to combine the operations of extracting lithium-rich geothermal brine in the Upper Rhine Valley, of upgrading lithium through electrolysis to a high purity lithium hydroxide (LiOH) and the production of hydrogeothermal energy (renewable electricity and heat). Thermal water will be used as the energy source, which means that lithium is expected to be extracted from the brine without polluting the environment with emissions, waste material or toxic substances. Vulcan Group's Zero Carbon Lithium™ Project, if and when operational, would benefit from being a lithium project supported by EU-backed group EIT InnoEnergy, the founder and steward of the European Battery Alliance aimed at building an independent, sustainable, and resilient battery industry in Europe. EIT InnoEnergy is supporting Vulcan Group in bringing Vulcan Group's Zero Carbon Lithium™ Project to fruition.

9.5.3 Upper Rhine Valley

The Project Licences cover locations within the Upper Rhine Valley of south-western Germany (see section "9.5.4 Overview of Project Licences"), a valley composed of sedimentary rocks with evaporite deposits formed within an isolated basin depression. The brine occurs in subsurface, confined aquifers within the Upper Rhine Valley at depths of greater than approximately 2,000 m below the surface. More specifically, the deep brine aquifers occur in porous sandstone and fluid flow is channelled in fault zones that penetrate down into the altered base. Globally, geothermal brines are relatively common, but the fluids are rarely as lithium-rich as they are in the Upper Rhine Valley.

At present, there are no oil and gas or geothermal wells that penetrate the deep-seated aquifer within the boundaries of the Project Licences, apart from the recently acquired Insheim Plant where there are existing operating wells. Consequently, Vulcan Group was initially reliant on pre-existing wells that neighbour the property including those wells that are managed and operated by current geothermal companies. In 2019, Vulcan Group conducted a data compilation and brine sampling program in the Upper Rhine Valley that consisted of a geological compilation and subsurface review of the sedimentary rock; an assessment of the hydrogeological conditions underlying the rock; and collecting and analysing brine samples from the Insheim Plant or neighbouring geothermal wells to verify the historical lithium-brine geochemical results. The average lithium content from brine collected by Vulcan Group from six geothermal wells located throughout the Upper Rhine Valley and proximal to the Project Licences was 181 mg/L Li. Vulcan Group has identified a lithium mineral resource estimate of 15.85 Mt LCE at a grade of 181 mg/l Li (comprising 3.61 Mt LCE of indicated mineral resources and 12.24 Mt LCE of inferred mineral resources, and including probable ore reserves of 1.12 Mt LCE) within its project areas across the Upper Rhine Valley (see section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus).

9.5.4 Overview of Project Licences

9.5.4.1 Main Project Licences

The following table provides an overview of Vulcan Group's probable ore reserves at the areas of the Taro Licence, the Ortenau Licence and the Insheim Licence.

Licence	Ownership	Expiry / renewal date	Location	Type	Estimated Resources / Estimated Reserves (Li) (based on PFS) ⁷
Ortenau	Vulcan Energy	June 2023	Baden-Württemberg, Germany	Exploration licence (geothermal, brine, lithium)	Probable ore reserve: 0.7 Mt Indicated mineral resource: 2.06 Mt Inferred mineral resource: 10.8 Mt
Taro	GGH	August 2022	Rheinland-Pfalz, Germany	Exploration licence (geothermal; lithium) licence	Probable ore reserve: 0.42 Mt

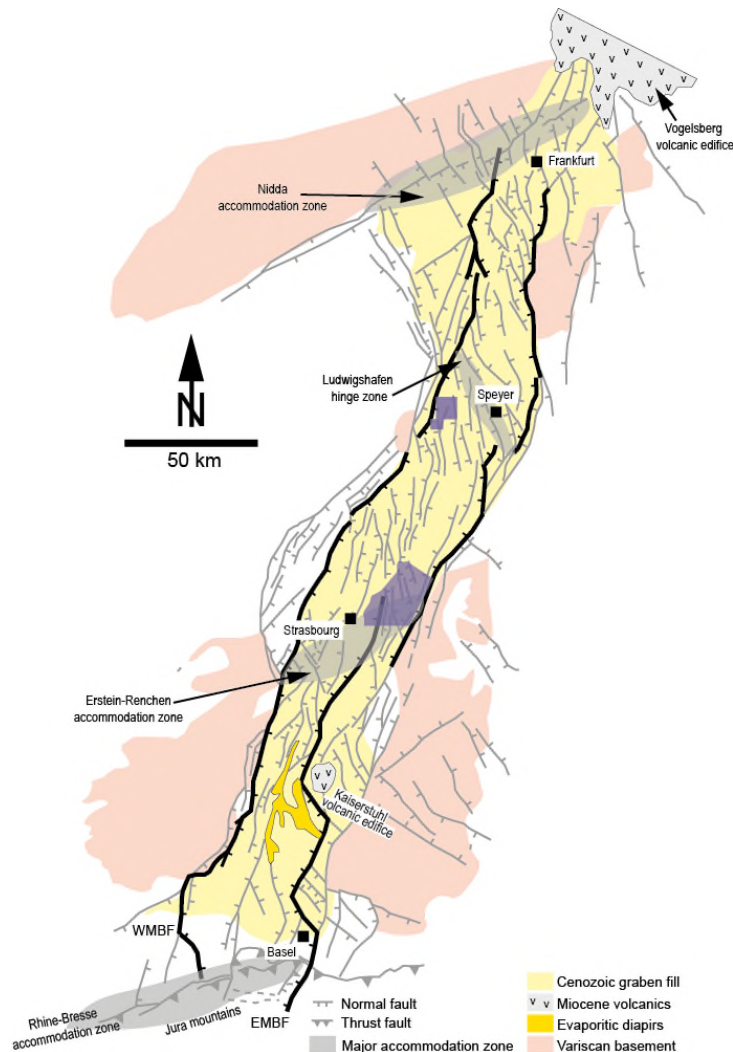
⁷ See section "2.7 References regarding mineral resources, ore reserves and production targets" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus.

				application in progress over same area).	Indicated mineral resource: 0.83 Mt Inferred mineral resource: 1.44 Mt Probable ore reserve: N/A ¹ Indicated mineral resource: 0.72 Mt Inferred mineral resource: N/A
Insheim ¹	Natürlich Insheim	November 2037	Rheinland-Pfalz, Germany	Exploitation licence (geothermal, brine)	

¹ The Insheim licence was not included in the PFS.

9.5.4.2 Additional Project Licences

In addition to the Taro Licence, the Ortenau Licence and the Insheim Licence, Vulcan Group holds a total of six additional exploration licences for geothermal, brine and lithium in the Upper Rhine Valley, one in Baden-Württemberg, with expiry date June 2024 (the "**Mannheim Licence**"), one in Hessen, with expiry date July 2024 (the "**Lampertheim Licence**") and four in Rheinland-Pfalz relating to the sites 'Therese', 'Ludwig', 'Kerner' and 'Löwenherz', each with expiry date in December 2024 (the "**Rheinland-Pfalz Licences**"). The Mannheim Licence, the Lampertheim Licence and the Rheinland-Pfalz Licences relate to earlier stage exploration projects at the respective licence areas in which surveying is currently being conducted. Vulcan Group intends to continue to expand its Project Licence areas in the Upper Rhine Valley. In addition, Vulcan Group holds an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20 km from the city of Rome.



Location of the Taro and Ortenau License areas in purple (Taro is the northern area) within the regional geology of the Upper Rhine Valley.

9.5.5 Offtake Agreements

As of the date of this Prospectus, Vulcan Group has entered into agreements for the sale of battery grade lithium hydroxide with five customers.

In October 2021, Vulcan Group entered into a binding offtake agreement with Umicore to sell between 28,000 metric tonnes and 42,000 metric tonnes of battery-grade lithium hydroxide to Umicore for an initial five-year term with start of commercial delivery planned for 2025 (see section "9.15.5.1 Lithium Supply Agreements with Umicore").

In November 2021, Vulcan Group entered into binding offtake agreements with Renault and Stellantis, respectively, to sell to Renault between 29,000 to 49,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term (see section "9.15.5.2 Lithium Supply Agreement with Renault") and to Stellantis between 81,000 metric tonnes and 99,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term (see section "9.15.5.3 Lithium Supply Agreement with Stellantis"), in each case with commercial delivery scheduled to commence in 2026.

In December 2021, Vulcan Group entered into a binding offtake agreement with Volkswagen, to sell to Volkswagen between 34,000 to 42,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term, with commercial delivery scheduled to commence in 2026 (see section "9.15.5.4 Lithium Supply Agreement with Volkswagen").

In January 2022, Vulcan Group entered into a binding offtake agreement with LG Energy to sell to LG Energy between 41,000 metric tonnes and 50,000 metric tonnes of battery-grade lithium with an initial term of five years and commercial delivery scheduled to commence in 2025. Pricing will be based on market prices for lithium hydroxide (see section "9.15.5.5 Lithium Supply Agreement with LG Energy").

Together, the volumes of lithium hydroxide to be delivered under these five offtake agreements exceed the estimated 40,000 metric tonnes referenced as annual production target in Vulcan Group's PFS upon the completion of Phase One and Phase Two of the Zero Carbon Lithium™ Project. Vulcan Group is also in discussions with other potential offtake partners that have demonstrated interest in securing lithium hydroxide feed from potential additional phases of Vulcan Group's Zero Carbon Lithium™ Project. Overall, it is the Company's goal to have all volumes of battery-grade lithium hydroxide produced in Vulcan Group's Zero Carbon Lithium™ Project committed under offtake agreements with reputable counterparties.

In addition, in November 2021, Vulcan Group entered into the geox Agreement, regarding the provision to Vulcan Group of brine from the Landau Plant for the purpose of extracting the lithium contained in the brine with an offtake start date of 30 December 2024 (see section "9.15.6 Brine Offtake Agreement with geox").

The following table provides an overview of the binding offtake agreements entered into by Vulcan Group as of the date of this Prospectus:

Partner	Category	Start & duration	Volume over the duration of the contract (t)
Umicore	Tier one cathode maker	2025 5 years	28,000 to 42,000
Renault Group	OEM*	2026 6 years	29,000 to 49,000
Stellantis	OEM	2026 5 years	81,000 to 99,000
Volkswagen Group	OEM	2026 5 years	34,000 to 42,000
LG Energy Solutions	Tier one battery maker	2025 5 years	41,000 to 50,000

9.6 Renewable energy business

Vulcan Group is exploring opportunities to produce geothermal energy from brine at various locations throughout the Upper Rhine Valley.

9.6.1 Overview and key operational metrics

Vulcan Group commenced operations of its renewable energy business following the acquisition of Natürlich Insheim in December 2021, which operates the Insheim Plant (see section "9.1.2 Recent Acquisitions"). The installed production capacity of the Insheim Plant amounts to approximately 4.8MW of renewable power or 28.5MW thermal energy (currently producing approximately 2.9MW of electricity on average). In addition, Vulcan Group's Zero Carbon Lithium™ Project involves the construction and commissioning of five geothermal plants, which are expected to produce an aggregate of 74MW of renewable energy following commencement of Phase Two.

Vulcan Group intends to:

- sell all of the electricity produced by the geothermal plants to the grid; and
- utilise a portion of the heat produced by the geothermal plants for its lithium extraction operations, with the remainder sold to third-party customers, which Vulcan Group expects will primarily consist of local municipalities and businesses.

Electricity sold to the grid is expected to have a fixed feed-in tariff price of EUR cent 25.20 / KWh for 20 years commencing from the commissioning date of each new geothermal plant, based on the subsidised remuneration regime under the German Renewable Energy Act (*Erneuerbare-Energien-Gesetz*). After this 20-year period, future revenues for the applicable geothermal plant will depend upon the respective market price for renewable energy. Vulcan Group also intends to sell geothermal energy in the form of heat to third-party customers, which Vulcan Group expects will primarily consist of local municipalities and businesses via pipes, provided they have the necessary proximity.

Vulcan Group is developing its Zero Carbon Lithium™ Project in two phases. Phase One targets a production start of two geothermal plants in 2024 for the Taro Licence area and Phase Two targets a production start of three geothermal plants in 2025 for the Ortenau Licence area.

9.6.2 Direct Marketing and Grid Connection

Natürlich Insheim has entered into a framework agreement with Pfalzwerke, the former owner of Natürlich Insheim, for a direct marketing agreement ("**DMA**") for the electricity produced in the Insheim Plant. The remuneration under the DMA is based on the respective hourly spot market prices at the EPEX Spot SE in Leipzig ("**EPEX**"). Pfalzwerke receives a direct marketing fee, which is deducted from the revenues obtained from marketing at EPEX. This direct marketing fee amounts to 0.10 EUR/MWh.

Natürlich Insheim has entered into a grid connection agreement with Pfalzwerke Netz AG as the responsible local grid operator. The grid connection agreement has an indefinite term, but can be terminated by Pfalzwerke Netz AG and Natürlich Insheim at any time with one month's notice. Pfalzwerke Netz AG's grid connection was established at a medium voltage level with a voltage of 20 kV.

9.7 Property

The Company has its registered office at Level 11 Brookfield Place, 125 St Georges Terrace, Perth, WA 6000, Australia, and its key operational subsidiaries are based in Germany.

9.7.1 Overview

The following table provides an overview of the real property owned or leased by Vulcan Group as of 30 June 2021:

Location	Leased / owned	Use	Used by
Level 11, Brookfield Place, 125 St Georges Terrace, Perth, Western Australia (Australia)	Leased	office space	Company, Vulcan Energy
Level 1, 2 Kings Park Road, Perth Western Australia (Australia)	Leased	office space	Company, Vulcan Energy

Baischstrasse 8, Karlsruhe (Germany)	Leased	office space	Vulcan Energie, GeoT
Pforzheimer Str. 29, Karlsruhe (Germany)	Leased	laboratory	Vulcan Energie
Bgm.-Wegele-Straße 6, Augsburg (Germany)	Leased	office space	Gec-co

9.7.2 Environment/ESG

Vulcan Group 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.

Vulcan Group believes that it maintains adequate procedures to monitor and assess its environmental impact and obligations and aims to comply with the latest most relevant local and international environmental and social standards, including changing environmental and social standards from time to time. To assist with this, Vulcan Group has formed an independent Audit, Risk and ESG Committee and appointed an internal ESG lead to continue to strengthen Vulcan Group's ESG framework and strategy. The Audit, Risk and ESG Committee meets regularly to discuss risks and opportunities associated with climate-related matters and subsequently presents these findings at monthly Board meetings, while the ESG lead is responsible for the development, implementation and reporting of Vulcan Group's ESG framework (see section "13.2.4.2 Audit, Risk and ESG Committee").

Vulcan Group's strategy and major plans of action have been guided by climate protection-related considerations, including the decision in 2019 to acquire and develop the Zero Carbon Lithium™ Project. Performance objectives linked to climate protection-related considerations have been set for the management team. To monitor the implementation and performance, as well as relying on feedback from the management team, the Audit, Risk and ESG Committee and Board also rely on third party independent consultancies to provide guidance as to the climate impact of Vulcan Group's current and planned operations, with recommendations to eliminate these impacts provided where they arise.

In 2019, Vulcan Group commissioned the first life cycle assessment ("**LCA**") on the environmental footprint of lithium hydroxide, which it recently updated with data from its PFS. Results of an updated LCA estimate were published in August 2021, estimating negative 2.9 tonnes of CO₂ emitted per tonne of lithium hydroxide to be produced from the Zero Carbon Lithium™ Project. Vulcan Group's Zero Carbon Lithium™ Project has the lowest planned carbon footprint in the lithium industry compared to any previously published LCA results (source: Vulcan Energy Resources Ltd, ASX Release 4 August 2021; Minviro). The LCA was conducted according to ISO-14040:2006 and ISO-14044:2006 standards and included a third-party expert review. In addition, Vulcan Group aligned its approach to sustainability with the United Nations' Sustainable Development Goals adopted in 2015, with a particular focus on the following seven Sustainable Development Goals: Gender equality, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, sustainable cities and communities, responsible consumption and production, and climate action.

In March 2021, Vulcan Group announced that it intends to use the full traceability and dynamic CO₂ measurement solution developed by Circular ("**Circular's CO₂ Solution**") for its Zero Carbon Lithium™ Project across the European lithium-ion battery and EV supply chain. Circular's customers include major European automotive OEMs such as Volvo Cars, Daimler, Polestar and Jaguar Land Rover. Circular's CO₂ Solution offers a solution that enables customers to track raw materials throughout supply chains to demonstrate responsible sourcing and sustainability. The system implementation enables reputational protection, proof of compliance with regulations and dynamic carbon tracking. Circular's CO₂ Solution provides a month-to-month visibility of CO₂ intensity across the supply chain and its participants (see section "9.12 Information Technology"). Vulcan Group intends to implement Circular's CO₂ Solution to its future lithium supply contracts with European OEMs to help them meet their sustainability objectives for material traceability and CO₂ transparency. Circular and Vulcan Group intend on collaborating to prepare Vulcan Group and its supply chain for full traceability of Vulcan Group's Zero Carbon Lithium™ product for its targeted production start in 2024.

Vulcan Group is also a member of the Global Battery Alliance ("**GBA**"), an umbrella partnership consisting of 70 members working towards a sustainable battery value chain globally. The GBA follows ten guiding principles covering issues from the circular recovery of battery materials,

ensuring transparency of greenhouse gas emissions and their progressive reduction, to eliminating child and forced labour. The GBA is also developing the battery passport, a global solution for securely sharing information and data to prove responsibility and sustainability to consumers with a "quality seal", while enabling resource efficiency across the battery life cycle.

Vulcan Group has been certified as carbon neutral by Climate Active, a partnership between the Australian Government and Australian businesses, to encourage voluntary climate action. Vulcan Group is seeking similar certification for its European operations with base year 2021 aligning with the group consolidation of entities (Natürlich Insheim, Vulcan Energie, Gec-co and GeoT) in order to accurately measure future greenhouse gas emission reduction targets from the point of consolidation.

Vulcan Group's lithium team has joined the German National Committee of ISO/TC333 that coordinates the standardisation process in the field of lithium chemicals at national level and is responsible for organising German participation in standards work at European and international level. Together with experts from the other 15 countries that currently embody the global ISO/TC 333 Committee, the team will help to improve the quality and value proposition of sustainable lithium products made in Europe.

In its Consolidated Annual Financial Statements 2021, Vulcan Group highlighted its commitment to the guidelines as set out by the Task Force on Climate-Related Financial Disclosures (TCFD), disclosing climate related risks and opportunities as identified by the Company over the short, medium and long term; defined respectively as four years, first half, and second half of the project to 2054. Vulcan Group is also currently in the process of applying for acceptance into the Taskforce on Nature-related Financial Disclosures (TNFD) Forum, a global and multi-disciplinary consultative grouping of institutional supporters who share the vision and mission of the TNFD and make themselves available to contribute to the work and mission of the Taskforce.

9.8 Research and Development

As of 30 September 2021, Vulcan Group had a team of seven employees in its research and development department dedicated to project development and technology advancement. Vulcan Group's core team comprises a select and well-balanced group of experts with advanced degrees and extensive experience in chemistry and chemical engineering and other relevant scientific fields for the research and development of lithium products. Vulcan Group has developed, is testing and optimising extraction techniques of lithium from geothermal brine. Vulcan Group is working to adapt the technologies to the parameters and dissolved minerals and gases in the brine of the Upper Rhine Valley. The goal is to reduce the impact on the brine by the extraction technologies as well as the protection of the subsurface reservoir. Vulcan Group's research and development efforts have generated intellectual property and industry know-how (see section "9.11 Intellectual Property").

Vulcan Group is committed to building research and development collaborations with universities and research institutions. Vulcan Group intends on initiating joint research efforts with the Karlsruhe Institute. In addition, Vulcan is currently conducting a research project aiming to explore and provide information on lithium and other element contents in the geothermal brines and mine waters of Eastern Europe. For this Vulcan Group has partnered with universities and research centres throughout Europe. Vulcan Group subsidiaries GeoT, Gec-co and Natürlich Insheim are also involved in numerous other research projects with further research applications in planning stages.

9.9 Marketing

In order to accomplish its mission to become the world's first lithium chemicals and renewable energy producer with net zero carbon footprint, Vulcan Group has, since 2021, engaged with local stakeholders to ensure public acceptance and backing for Vulcan Group's planned lithium hydroxide and renewable energy projects, as well as timely grant of requisite permits. Vulcan Group has engaged the services of German renewables-focused public relations company DWR eco GmbH to assist with this. Vulcan Group has built a team of local communication experts to tailor messaging to best inform local stakeholders about planned activities and attract interest in its Zero Carbon Lithium™ Project at a federal and international level.

In August 2021, Vulcan Group entered into a partnership and, for this purpose, concluded a partnership agreement ("**Partnership Agreement**") with Rosberg X Racing ("**RXR**"), a company affiliated with sustainability entrepreneur and former Formula One World Champion Nico Rosberg which manages and operates the RXR electric Extreme E racing team. Extreme E was created to highlight the impact of climate change and human activity on the world's most remote locations

while promoting sustainability and the adoption of electric vehicles. Based on the Partnership Agreement, Vulcan Group has become an official partner of RXR and RXR and Mr Rosberg have become shareholders in the Company (see section "12.3 *Details of unquoted securities*"), in return for advertising and promotional rights for the 2021 and 2022 Extreme E racing seasons.

In addition, Vulcan Group has set up local project websites for each area within the Upper Rhine Valley, such as the local website for the licence area of Ortenau ([https:// natuerlich-ortenau.de/](https://natuerlich-ortenau.de/)) which was deployed in preparation for the exploration activities starting in September 2021, and initiated editorial contributions. Vulcan Group has also cooperated with the State Ministry of Baden-Württemberg and the University of Stuttgart to implement a participation concept, following the guidelines of the State of Baden-Württemberg, to involve stakeholders.

9.10 Employees

As of the date of this Prospectus, Vulcan Group employed approximately 121 employees (full-time equivalents) of which 6 were employed in Australia and 115 were employed in Germany. Of these employees, 75 were employed as engineers or consultants and 46 were employed as administration employees and managers.

The following table provides an overview of the number of Vulcan Group's employees (headcount) by Group company as of 30 September 2021 and as of 30 June 2021, 2020 and 2019, respectively.

Vulcan Group company	As of 30 September 2021	2021	As of 30 June 2020	2019
Vulcan Energy Resources Limited (the Company)	6	4	2	1
Vulcan Energy Resources Europe Pty Ltd.	0	0	0	0
Vulcan Energy Italy Pty Ltd. (founded in July 2021)....	0	n/a	n/a	n/a
Vulcan Energie Ressourcen GmbH	19	8	1	0
Global Geothermal Holding UG (acquired in July 2021)	0	n/a	n/a	n/a
GeoThermal Engineering GmbH (acquired in July 2021)	16	n/a	n/a	n/a
.....				
gec-co Global Engineering & Consulting-Company GmbH (acquired in July 2021)	39	n/a	n/a	n/a
VER GEO LIO GmbH (founded in July 2021).....	0	n/a	n/a	n/a
Vulcan Geothermal GmbH (founded in July 2021).....	0	n/a	n/a	n/a
VERCANA GmbH (founded in December 2021)	n/a	n/a	n/a	n/a
Natürlich Insheim GmbH (acquired in December 2021)	n/a	n/a	n/a	n/a
Total	80	12	3	1

9.11 Intellectual Property

As of 6 August 2021, the Company has filed a Patent Cooperation Treaty (PCT) (international) patent application and has been granted a German utility model patent, which is material to its business. The registered German utility model patent has a priority date of 8 April 2020 and is for "a system and process for the production of both battery-quality lithium hydroxide monohydrate, and lithium carbonate, from a geothermal brine". The Company aims to make further international patent applications in relation to this system and improvements thereto and has initiated further projects in that regard.

The Company currently owns registered figurative trade marks in Europe, the UK, New Zealand and in Australia. These trade marks relate, in particular, to the Company's logo and Vulcan Group's Zero Carbon Lithium™ Project logo. Vulcan Group has also filed extensive trade mark applications for its brands in Europe, the US, Canada, China and Japan.

9.12 Information Technology

Vulcan Group uses a number of standard software for its business operations, in particular monitoring and accounting software provided by DATEV and ODOO (Enterprise Resource Planning) and data management system ALFRESCO. In addition, Vulcan Group uses seismic, geographic and geochemical interpretation and simulation software such as OpendTect, QGIS and PHREEQC. Vulcan Group announced in March 2021 that it intends to use Circular's CO₂ Solution for its Zero Carbon Lithium™ Project across the European lithium-ion battery and EV supply chain. Circular offers a software solution that enables customers to track raw materials throughout supply chains to demonstrate responsible sourcing and sustainability.

9.13 Insurance

The Company has taken out insurance policies that are customary in its industry, such as fire, natural disasters, operational interruptions, enterprise accident and third-party liability insurance. The Company believes that its insurance policies contain market-standard exclusions and deductibles. The Company regularly reviews the adequacy of its insurance coverage and considers the scope of its insurance coverage to be customary in its industry. The Company has also taken out a directors and officers insurance policy that covers members of the Company's management.

9.14 Litigation

Vulcan Group may be party to legal proceedings from time to time which may arise in the ordinary course of business. During the twelve months prior to the date of this Prospectus, there were no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Company is aware) which may have, or which have in the recent past had, a significant effect on the Company's or Vulcan Group's financial position or profitability.

The Company was the target of a negative report by a short seller dated 26 October 2021, which led to a substantial decrease in the market price of the Company's Shares and caused the Company to institute legal proceedings. On 15 December 2021, the Company entered into a settlement with the short seller which includes, among other things, permanent restraints preventing the short seller from publishing any matter of and concerning the Company and an apology to the Company.

9.15 Material Agreements

9.15.1 Natürlich Insheim Purchase Agreement

In December 2021, the Company's wholly owned indirect subsidiary, VER GEO, acquired Pfalzwerke geofuture GmbH for a preliminary purchase price of EUR 32.7 million, subject to certain price adjustments (expected final purchase price approximately EUR 31.3 million). The share purchase agreement contains customary seller and buyer representations and warranties. Prior to completion of the Insheim Acquisition, the company name was changed from Pfalzwerke geofuture GmbH to Natürlich Insheim GmbH. Natürlich Insheim owns and operates a deep geothermal power plant in Insheim, Germany, which operates with a thermal water temperature of 165°C, with the technical ability to produce a maximum of 4.8MW power or 28.5MW thermal energy (currently producing approximately 2.9MW of electricity on average). The Insheim Plant has the capacity to supply approximately 8,000 households with electricity and approximately 600-800 households with heat. Vulcan Group intends to operate the Insheim Plant with the existing employees. In addition, Natürlich Insheim holds the Insheim Licence. The Insheim Licence grants Natürlich Insheim the exclusive right to geothermal energy from brine extracted from the site of the Insheim Plant. Following a memorandum of understanding signed in November 2019, Vulcan Group completed lithium-brine mineral resource estimation at the Insheim License area in January 2020.

9.15.2 GGH Purchase Agreement

In July 2021, the Company's wholly owned subsidiary Vulcan Energie entered into a share purchase agreement with Dr Horst Kreuter and Thorsten Weimann to acquire GGH from Dr Horst Kreuter and Thorsten Weimann, with the consideration for the purchase comprising shares in the Company (see section "12.2 Development of the share capital over the past three years"). GGH holds the Taro Licence and exploration licence applications for geothermal energy and lithium, near the southwest German cities of Mannheim, Karlsruhe, Speyer and Neustadt.

9.15.3 GeoT Purchase Agreement

In July 2021, the Company's wholly owned subsidiary Vulcan Energie entered into a share purchase agreement with Dr Horst Kreuter to acquire all the shares in geothermal engineering company, GeoThermal Engineering GmbH ("**GeoT**"). GeoT is an engineering company focused on the sub-surface development of deep geothermal renewable energy projects, such as geothermal power plants, heat stations and drill pads, as well as geothermal projects in high- and low-enthalpy brines around the world. This acquisition enabled the Company to bring in an experienced geothermal development team and to double the size of its technical team for the execution of its Zero Carbon Lithium™ Project.

9.15.4 Gec-co Purchase Agreement

In July 2021, the Company's wholly owned subsidiary Vulcan Energie entered into a share purchase agreement with Thorsten Weimann to acquire all of the shares in geothermal engineering company, gec-co Global Engineering & Consulting-Company GmbH ("**Gec-co**") with the consideration for the purchase comprising shares in the Company (see section "*12.2 Development of the share capital over the past three years*"). Gec-co is an engineering company focused on the above-surface development of geothermal power and heating plants, in Europe and worldwide. This acquisition enabled the Company to bring in an experienced surface geothermal development team to execute on its Zero Carbon Lithium™ Project.

9.15.5 Lithium Supply Agreements

9.15.5.1 Lithium Supply Agreements with Umicore

In October 2021, the Company entered into a binding offtake agreement with Umicore N.V. ("**Umicore**") to sell to Umicore between 28,000 metric tonnes and 42,000 metric tonnes of battery-grade lithium hydroxide for an initial five-year term with start of commercial delivery planned for 2025. Pricing will be based on market prices for lithium hydroxide on a take-or-pay basis. Conditions precedent to the start of commercial delivery include successful start of commercial operation and full production.

9.15.5.2 Lithium Supply Agreement with Renault

In November 2021, the Company entered into a binding offtake agreement with Renault to sell to Renault between 29,000 metric tonnes and 49,000 metric tonnes of battery-grade lithium hydroxide over an initial six-year term, representing approximately 12% of Vulcan Group's current planned output over the period with commercial delivery scheduled to commence in 2026. Pricing will be based on market prices for lithium hydroxide on a take-or-pay basis. Prior to the start of commercial delivery, Renault expects to launch 'Renault ElectriCity' as production unit for electric vehicles in Europe. Conditions precedent to the start of commercial delivery include commencement of commercial production and the lithium product being qualified for use in accordance with customary industry standards.

9.15.5.3 Lithium Supply Agreement with Stellantis

In November 2021, the Company entered into a binding offtake agreement with Stellantis to sell to Stellantis between 81,000 metric tonnes and 99,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term with commercial delivery scheduled to commence in 2026. The battery grade lithium hydroxide will be used by the three Stellantis battery production facilities in Europe – in Termoli, Italy, and the Automotive Cells Company (ACC) joint venture plants in Kaiserslautern, Germany, and Douvrin, France. Pricing will be based on market prices for lithium hydroxide on a take-or-pay basis. Conditions precedent to the start of commercial delivery include commencement of commercial operation and the lithium product achieving full product qualification.

9.15.5.4 Lithium Supply Agreement with Volkswagen

In December 2021, the Company entered into a binding offtake agreement with Volkswagen, to sell to Volkswagen between 34,000 to 42,000 metric tonnes of battery-grade lithium hydroxide over an initial five-year term, with commercial delivery scheduled to commence in 2026. Pricing will be based on market prices for lithium hydroxide on a take-or-pay basis. Volkswagen announced that it intends on establishing six battery gigafactories with a total production capacity of 240 GWh in Europe by the end of the decade. Volkswagen and the Company have also agreed to a first right of refusal to invest in additional capacity in the Zero Carbon Lithium™ Project. Conditions precedent to the start of commercial delivery include commencement of commercial operation and the lithium product achieving full product qualification.

9.15.5.5 Lithium Supply Agreement with LG Energy

In January 2022, the Company entered into a binding offtake agreement with LG Energy to sell to LG Energy between 41,000 metric tonnes and 50,000 metric tonnes of battery-grade lithium with commercial delivery scheduled to commence in 2025 with an initial term of five years, which can be extended by five years. Pricing will be based on market prices for lithium hydroxide, calculated by reference to the Datamyne Index published by Descartes Systems Group Inc. Conditions precedent to start of commercial delivery include securing of project finance, construction and commissioning of the plants, and the lithium product meeting agreed specifications by the agreed timeline.

9.15.6 Brine Offtake Agreement with geox

In November 2021, Vulcan Group entered into a binding offtake agreement with geox, the operator of the Landau Plant, regarding the provision to Vulcan Group of brine from the Landau Plant for the purpose of extracting the lithium contained in the brine (the "**geox Agreement**"). Under the terms of the geox Agreement, Vulcan Group has the right to purchase and extract the lithium from the brine produced from the Landau Plant, and return it to the plant for re-injection, with expected brine volume from the production well of at least 100 litres per second, subject to the financing and drilling of a reinjection well which can accommodate the current production well flow, and with an offtake start date of 30 December 2024. Vulcan Group intends, subject to a positive DFS, to incorporate the geox Agreement into its Phase One development plans. In addition, subject to obtaining the relevant permissions from the authorities, the Landau Plant will provide access to accommodate Vulcan Group's demonstration lithium extraction plant, with a target start-up date for the second half of 2022.

9.15.7 Drill Rig Purchase Agreements with Wintershall Dea Deutschland GmbH and Aftermarket Drilling Service IT-AG GmbH

In October 2021, Vulcan Group entered into agreements with Wintershall Dea Deutschland GmbH and Aftermarket Drilling Service IT-AG GmbH, respectively, to acquire two electric drill rigs as part of Vulcan Group's Zero Carbon Lithium™ Project ("**Drill Rig Purchase Agreements**"). The specialised rigs to which the Drill Rig Purchase Agreements relate can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley, Germany. The deep geothermal rigs represent a strategic asset for Vulcan Group's implementation of its Zero Carbon Lithium™ Project. The deep geothermal rigs also give Vulcan Group the potential to generate renewable energy for local communities in Germany (heat and/or power, depending on location). Following refurbishment, the rigs are expected to be operation-ready by late 2022.

9.15.8 Data Acquisition Agreement with Rhein Petroleum GmbH

In November 2021, Vulcan Energie entered into an agreement with Rhein Petroleum GmbH ("**Rhein Petroleum**") to acquire seismic and drilling data on the Upper Rhine Valley for use in its geothermal renewable energy and lithium exploration and extraction activities as part of Vulcan Group's Zero Carbon Lithium™ Project (the "**Data Acquisition Agreement**"). Pursuant to the Data Acquisition Agreement, Rhein Petroleum may continue using the data for its own non-lithium exploration. The Data Acquisition Agreement contains restrictions on the transfer of the data to competitors of Rhein Petroleum and certain restrictions on the disclosure of the data by Rhein Petroleum to third parties. In addition to the aforementioned restrictions of use of the data, the Data Acquisition Agreement contains provisions on the intellectual property rights related to the data (for example, trade secret status, copyright).

9.15.9 Site Letter of Intent Agreement with Infraser

In September 2021, the Company signed a letter of intent agreement with chemical park management company Infraser, to secure a site for its planned CLP, at the Höchst Chemical Park (*Industriepark Höchst*), located in Frankfurt am Main. Vulcan Group currently intends to use the CLP to be constructed at the Höchst Chemical Park as a processing hub, processing lithium chloride from multiple combined geothermal and lithium sorption plants into lithium hydroxide monohydrate. Pursuant to the agreement, Infraser reserves the site exclusively for the Company through 30 June 2023, whereas the Company is not entitled to use the site during the reservation period. The site in Höchst to which the agreement relates has a close proximity to Vulcan Group's Project Licence areas.

10. GENERAL INFORMATION ABOUT THE COMPANY

10.1 Company name, incorporation, registered office and financial year

The Company's legal name is Vulcan Energy Resources Limited.

The Company was incorporated on 5 February 2018 under the name Koppar Resources Limited by Pheakes Pty Ltd (a public company limited by shares incorporated in Australia with registered address at 81 Philip Road, Dalkeith WA 6009, Australia) and was admitted to the official list of ASX on 30 May 2018. The Company is incorporated and registered in Australia under Australian Company Number 624 223 132. The Company's legal entity identifier (LEI) is 8945006OYFHQ9HE4XE54.

The Company's registered office and business address is Level 11, Brookfield Place, 125 St Georges Terrace, Perth WA 6000, Australia. The Company's telephone number is +61 8 6189 8767, the Company's website is www.v-er.eu. The information on the Company's website is neither part of, nor incorporated by reference into, this Prospectus.

The Company's financial year begins on 1 July and ends on 30 June.

The Company is incorporated for an indefinite period, and will remain a company until deregistered or wound up. Subject to the satisfaction of certain requirements, the Company can be deregistered or wound up voluntarily (i.e. following approval at a general meeting of Shareholders) or by court order in case the Company is insolvent.

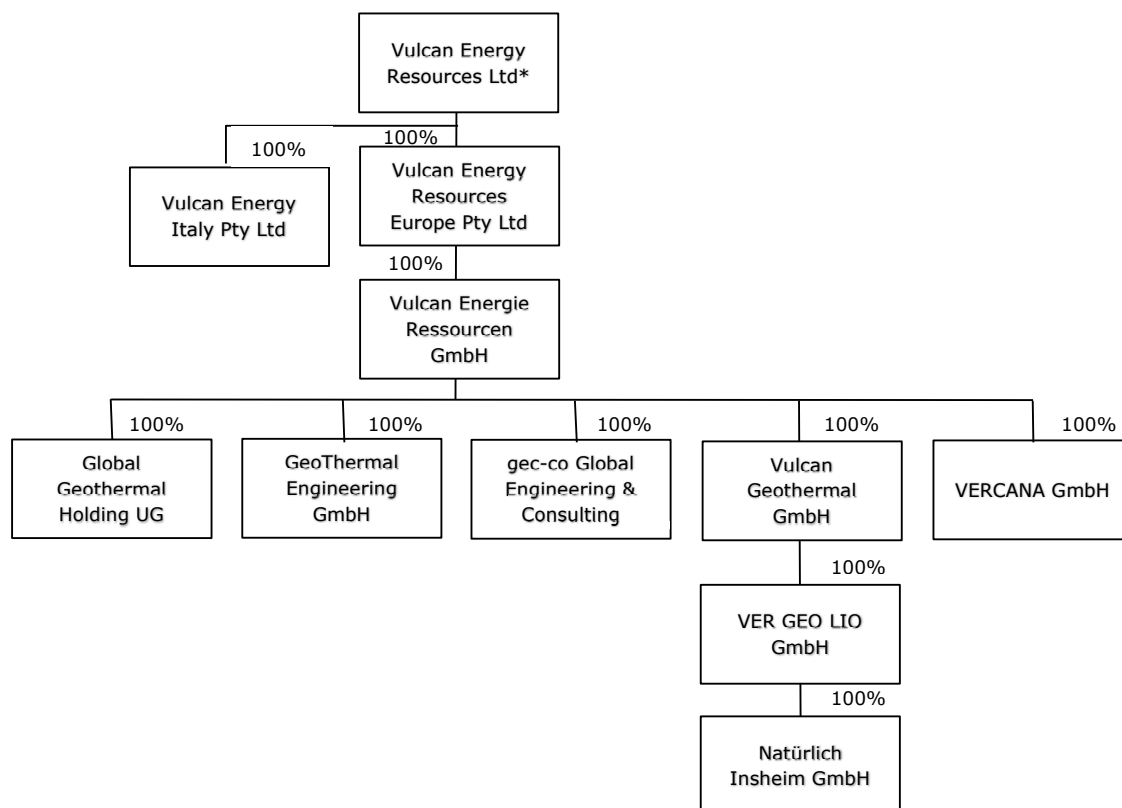
10.2 History of the Company

The Company was incorporated on 5 February 2018 under the name Koppar Resources Limited by Pheakes Pty Ltd (a public company limited by shares incorporated in Australia with registered address at 81 Philip Road, Dalkeith WA 6009, Australia). The Company was admitted to the official list of ASX on 30 May 2018 as Koppar Resources Limited (ASX Code: KRX) and, since September 2019, as Vulcan Energy Resources Limited (ASX Code: VUL). Still in 2018, the Company completed the acquisition of Koppar Resources Europe Pty Ltd (later renamed Kuniko Limited) and, in 2019, of Vulcan Energy Resources Pty Ltd (later renamed Vulcan Energy Resources Europe Pty Ltd).

In 2021, the Company's wholly owned subsidiary Vulcan Energie acquired GGH, Gec-co and GeoT. In 2021, VER GEO LIO GmbH completed the acquisition of Natürlich Insheim (see section "9.1.2 Recent Acquisitions").

10.3 Group structure

The Company is the parent company of Vulcan Group. As the parent company of Vulcan Group, the Company performs certain group management functions including strategic planning and public relations. The following chart shows the structure of Vulcan Group as of the date of this Prospectus:



* Vulcan Energy Resources Ltd also holds a 24.34% interest in Kuniko Limited.

10.4 Subsidiaries

The following table provides an overview of the Company's subsidiaries. All of the shares in these subsidiaries are fully paid ordinary shares.

As of the date of this Prospectus

Name, registered office, country of incorporation	Field of activity	Proportion of share capital held directly or indirectly by the Company	Issued capital
Vulcan Energy Resources Europe Pty Ltd., Perth (Australia)	Holding Company	100% (directly)	100 fully paid ordinary shares
Vulcan Energy Italy Pty Ltd., Perth (Australia)	Holding Company	100% (directly)	10 fully paid ordinary shares
Vulcan Energie Ressourcen GmbH, Karlsruhe (Germany)	Holding Company / Geothermal Energy	100% (indirectly)	EUR 25,000.00
gec-co Global Engineering & Consulting-Company GmbH, Neusäß (Augsburg) (Germany)	Engineering / Consultancy	100% (indirectly)	EUR 25,000.00
Global Geothermal Holding UG, Karlsruhe (Germany)	Geothermal Energy	100% (indirectly)	EUR 2,500.00
GeoThermal Engineering GmbH, Karlsruhe (Germany)	Engineering / Consultancy	100% (indirectly)	EUR 25,000.00
Vulcan Geothermal GmbH, Karlsruhe (Germany)	Geothermal Energy	100% (indirectly)	EUR 25,000.00
VER GEO LIO GmbH, Karlsruhe (Germany)	Geothermal Energy	100% (indirectly)	EUR 25,000.00
VERCANA GmbH, Karlsruhe (Germany)	Drilling Services	100% (indirectly)	EUR 25,000.00
Natürlich Insheim GmbH, Ludwigshafen (Germany)	Geothermal Energy	100% (indirectly)	EUR 6,920,000.00

10.5 Statutory auditors

The Company's statutory auditor is RSM Australia Partners, Level 32, 2 The Esplanade, Perth WA 6000, Australia ("**RSM**"). RSM is a practice entity member of Chartered Accountants Australia and New Zealand, 33 Erskine Street, Sydney NSW 2001, Australia. RSM is subject to oversight and review by the Australian Securities and Investments Commission ("**ASIC**"). Under s1280 of the Australian Corporations Act, ASIC has the power to register individuals as Registered Company Auditors. The audit engagement leader, Tutu Phong, is a Registered Company Auditor with ASIC (Registration number: 322652) and is registered pursuant to section 134 the German Public Accountant Act (*Wirtschaftsprüferordnung – WPO*).

RSM audited the Consolidated Annual Financial Statements in accordance with IASB IFRS and issued unqualified independent auditor's reports which are contained in this Prospectus. The respective auditor's reports of RSM refer to the Consolidated Annual Financial Statements and the respective group management reports of Vulcan Group as a whole. The group management reports of Vulcan Group are neither included nor incorporated by reference in this Prospectus.

The EU Commission established the equivalence of auditing standards for Australia in Decision 2011/30/EU of 19 January 2011.

10.6 Announcements

As the Company is admitted to the Official List of ASX, the Company is considered a "disclosing entity" for the purposes of the Australian Corporations Act. As a disclosing entity, the Company is subject to regular reporting and disclosure requirements. Specifically, like all companies admitted to the official list of ASX, the Company is required to continually disclose to the market any information it has that a reasonable person would expect would have a material effect on the price or value of the Company's securities.

The Company's announcements are published on the website of ASX at www.asx.com.au. The Company may also provide certain information to Shareholders by post or by electronic

communication (for example, by email or publication on the Company's website at www.v-er.eu/investor-centre/).

Notices required under applicable laws governing stock exchange transactions will be published in the Federal Gazette (*Bundesanzeiger*) and, if required by mandatory legal provisions, by media distributed across the entire EEA.

Notices relating to the approval of this Prospectus or any supplements thereto will be published in the manner stipulated for the Prospectus in compliance with the provisions of the Prospectus Regulation, i.e. by way of publication on the Company's website: www.v-er.eu/investor-centre/.

11. REGULATORY FRAMEWORK

Vulcan Group's business operations are subject to various laws, rules and regulations. The failure to comply with any of these laws may subject Vulcan Group to civil liability, administrative orders, fines or, potentially, criminal sanctions.

The following provides a brief overview of certain selected regulatory provisions with a focus on the EU and Germany (being the jurisdictions in which Vulcan Group's primary operations are located) applicable to Vulcan Group's business operations. While the relevant laws and regulations are typically of a national scope, within the EU, a considerable degree of regulatory harmonisation exists in a number of areas relevant to Vulcan Group's business. The EU has created a common regulatory framework that applies not only in Vulcan Group's most important market Germany, but in all member states of the EU and comprises directives and regulations. Regulations do not require implementation into national law and apply directly and uniformly in all member states of the European Union. Directives, however, only become effective once they are transposed into national law in the respective member state of the European Union and the implementation of directives may vary between member states. In addition, Vulcan Group has to comply with certain non-EU regulations due to, for example, its incorporation in Australia.

11.1 EU

11.1.1 New Battery Regulation Proposal

Vulcan Group's lithium business involves the production of lithium hydroxide from lithium chloride to create the performance compound battery-grade lithium hydroxide. The lithium will be generated from geothermal waters in an existing renewable energy plant. Vulcan Group is therefore part of the battery value chain, but is not itself a battery producer.

Batteries that are more sustainable throughout their life cycle are key for the goals of the European Green Deal and contribute to the zero-pollution ambition set in it. The new so-called Circular Economy Action Plan, which is one of the building blocks of the European Green Deal and Europe's new agenda for sustainable growth, also contains measures strengthening the entire life cycle of products which includes, inter alia, the aim of a new regulatory framework for batteries for enhancing the sustainability and boosting the circular potential of batteries. For that purpose, on 10 December 2020, the EU Commission published a proposal for a new regulation concerning batteries and waste batteries (2020/0353(COD)), repealing Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators, as amended ("**Battery Directive**") and amending Regulation (EU) 2019/1020 of the European Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products ("**New Battery Regulation Proposal**").

The New Battery Regulation Proposal contains progressive requirements to minimise the carbon footprint over the life cycle of batteries. In this context, efforts to decrease the carbon footprint in the manufacturing process will indirectly lead to the promotion of renewable energy generation. In the recital 19 of the New Battery Regulation Proposal, the EU Commission states explicitly that certain substances contained in batteries, such as, inter alia, lithium, are acquired from scarce resources that are not easily available in the EU and that this is an area where Europe needs to enhance its strategic autonomy and increase its resilience in preparation for potential disruptions in supply. Vulcan Group's lithium business producing lithium chemical from a renewable energy plant is thus part of the value chain addressed in the New Battery Regulation Proposal.

Based on the New Battery Regulation Proposal, batteries placed on the EU market should be sustainable, high-performing and safe all along their entire life cycle. This means batteries that are produced with the lowest possible environmental impact, using materials obtained in full respect of human rights as well as social and ecological standards. Batteries have to be long-lasting and safe, and at the end of their life, they should be repurposed, remanufactured or recycled, feeding valuable materials back into the economy. Moreover, the EU Commission intends to introduce certain mandatory requirements for placing batteries on the market, such as use of responsibly sourced raw materials with restricted use of hazardous substances, minimum content of recycled materials, carbon footprint, performance and durability and labelling, as well as meeting collection and recycling targets. Vulcan Group intends to use a software solution developed by Circular that enables customers to track raw materials throughout supply chains to demonstrate responsible sourcing. In addition, the EU Commission proposes to introduce targets for the minimum share of, inter alia, lithium in active materials in batteries.

11.1.2 REACH Regulation

The use, manufacture and importing of chemicals is regulated in the European Union through Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended ("**REACH**"). Its main objectives include improving the protection of human health and the environment from the risks that can be posed by chemicals and ensuring the free circulation of substances in the internal market of the EU. REACH establishes three procedures consisting of the registration, evaluation and authorisation of chemical substances and mixtures. Vulcan Group will use, if and when it commences commercial production, chemical substances and chemical mixtures as part of its production processes. As a consequence, Vulcan Group is subject to REACH as a downstream user.

As a rule, REACH applies to all chemical substances. In principle, all manufacturers and importers of chemicals in the EU must identify and manage risks linked to the substance they manufacture and market. For substances produced or imported in quantities of one ton or more per year per company, manufacturers and importers need to demonstrate that they have appropriately done so by means of a registration dossier, which shall be submitted to the European Chemicals Agency ("**ECHA**"). The ECHA reviews the dossier for compliance with REACH and evaluates testing proposals to ensure that the assessment of the chemical substances will not result in unnecessary testing, especially on animals. Where appropriate, authorities may also select substances for a broader substance evaluation to further investigate substances of concern.

Manufacturers and importers must provide their downstream users with the risk information they need to be able to use the substances safely. This is done via a classification and labelling system and safety data sheets as needed. Depending on the circumstances (i.e. the individual substances used, inclusion of substance in end product), a downstream user can have the following obligations: make uses known to the registrants (i.e. suppliers); identify and apply the appropriate measures described in the safety data sheets; contact suppliers with new information on the hazard of the substance or mixture or if the risk management measures are not appropriate.

REACH also provides for an authorisation system aiming to ensure that substances of very high concern are adequately controlled and progressively substituted by safer substances or technologies or only used where there is an overall benefit to society from using the substance. These substances are prioritised and gradually included in Annex XIV to REACH. Once they are included, companies have to submit applications to the ECHA on authorisation for continued use of these substances which are otherwise prohibited. In addition, EU authorities can impose restrictions on manufacturing, use or sale of substances which cause an unacceptable risk to human health or the environment. Given that Vulcan Group intends on producing lithium in an ecologically-friendly manner from naturally occurring brines, production will likely not require 'substances of very high concern'.

11.1.3 Water Framework Directive

Vulcan Group is subject to EU regulations on water use and protection (implemented by the applicable national laws) as during the course of the production processes water is used and disposed of. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, as amended ("**Water Framework Directive**") includes a comprehensive approach to water protection. The Water Framework Directive has been implemented in Germany in the German Federal Water Act (cf. for further details below).

Groundwater is protected by both the Water Framework Directive and Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration, as amended ("**Groundwater Subsidiary Directive**"), implemented in Germany in the German Groundwater Ordinance entered into force on 11 August 2010, which lays down detailed quality criteria for the assessment of the groundwater's chemical status, including standards set at the EU level and requirements for threshold values to be set at the member state level. The Groundwater Subsidiary Directive requires member states to establish measures to prevent the input of hazardous substances into the groundwater and limit the introduction of other pollutants.

Discharge of waste water and its treatment is regulated by Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment, as amended. This directive addresses the collection, treatment and discharge of urban waste water and the treatment and the discharge of waste water

from certain industrial sectors. Its aim is to protect the environment from any adverse effects caused by the discharge of such waters.

11.1.4 Renewable Energy Directive II

On 11 December 2018, the European Parliament and the Council of the European Union adopted Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources ("**RED II Directive**"), which was announced in the Official Journal of the European Union on 21 December 2018. The main objective of the Directive is to increase the share of renewable energy in the European electricity mix to at least 32% by 2030. It is intended to contribute to achieving the climate protection goals of the Paris Agreement.

The RED II Directive contains, among others, also new regulations on administrative procedures for the permitting of renewable energy plants. Lengthy administrative procedures are considered as a major administrative barrier and costly. Due to the RED II Directive administrative permit granting processes shall be simplified and clear time-limits for decisions to be taken by the authorities competent for issuing the authorisation for the electricity generation installation on the basis of a completed application shall be introduced. These regulations should stimulate a more efficient handling of procedures, thereby reducing administrative costs. The provisions of the RED II Directive must have been transposed into national law by the member states by 30 June 2021. In relation of permitting procedures in connection with geothermal uses, the requirements of the RED II Directive have been implemented in the German mining law (see below).

On 14 July 2021, the European Commission proposed a revised RED (so-called RED III Directive), which, in particular, provides for a binding EU minimum share of renewable energy sources in final energy consumption of 40 % by 2030.

11.2 Germany

11.2.1 Federal Mining Act (*Bundesberggesetz*)

11.2.1.1 Permits under mining law

Vulcan Group is subject to the German mining law as the exploration and exploitation of geothermal and lithium fall within the scope of the German Federal Mining Act (*Bundesberggesetz* – "**BBergG**"). As a result, the exploration activities and feasibility testing for Vulcan Group's lithium and renewable energy businesses require the necessary permits pursuant to the BBergG. The underground land and mineral resources are subject to a specific system of property and use rights which are further defined under the BBergG. These provisions differentiate between so-called "freely mineable resources" (*bergfreie Bodenschätze*) and "freehold resources" (*grundeigene Bodenschätze*). Whereas freehold resources are part of the property of each landowner, the freely mineable resources are not part of the property of the landowner so that ownership in land shall not extend to these freely mineable resources. The provisions of the BBergG provide an exhaustive list of freely mineable resources which also includes lithium as well as geothermal heat.

In contrast to the use of freehold resources, the use of freely mineable resources requires several mining authorisations. In this regard, the BBergG contains a detailed and stepwise permitting system. Under this system,

- in a first step, so-called mining authorisations have to be obtained which give an exclusive right to explore and exploit the relevant resource;
- in a second step, the specific mining activities to actually exploit the resource (as an exercise of the previously granted mining authorisation), are subject to a specific approval system, in particular the mining operations plan procedure (*Betriebsplanverfahren*).

11.2.1.1.1 Mining authorisations (first step)

Under the BBergG the use of freely mineable resources is only permissible with a mining authorisation. An exploration licence (*Aufsuchungserlaubnis*) is needed for exploring freely mineable resources, and an exploitation licence (*Gewinnungserlaubnis*) gives the right to extract freely mineable resources. The authorisation requirements are aimed at an economic ordering function: through granting new mining authorisations and the administering of existing mining authorisations the state can regulate and control which entities in which area are allowed to explore and extract freely mineable resources.

In particular, an exploitation licence gives the licence holder the exclusive right to explore the resources specified in the exploitation licence, to extract them and to acquire ownership in the resources. These rights are limited to a specific extraction field (*Bewilligungsfeld*) and exclude third parties from extracting the same resource (for example, geothermal energy) in the same extraction field. Furthermore, an exploitation licence is granted for a limited period of time which is adjusted to the specific mining activity. This period is usually rather long and as a general rule should not exceed a period of 50 years (unless the size of the investment in the mining activity in the single case requires a longer extraction period).

An exploitation licence is granted upon application. Importantly, the decision is a conditional decision (*gebundene Entscheidung*) with no discretion of the authority so that the applicant has a right to receive the licence if all legal conditions are met. The requirements for a mining authorisation vary according to whether an exploration licence or an exploitation licence is requested. The requirements for an exploitation licence include, inter alia, the precise identification of the relevant natural resources, a work program showing that the work is adequate in terms of nature, scope and purpose, that the required reliability of the operator is given and that major public interests do not oppose the project. Furthermore, it must be demonstrated that the natural resources are actually profitable and that economic extraction can be expected in the whole extraction field in the future. Beyond the provisions of the BBergG to the mining authorisation and mining operational plan, an entrepreneur may have to fulfil certain specific additional requirements, for example, those of the Mining Ordinance for Drilling (*Tiefbohrverordnung*) or Ordinance on Hazardous Substances (*Gefahrstoffverordnung*).

11.2.1.1.2 Operational plan procedure (second step)

The granting of a mining authorisation does not yet permit the actual exploitation activity. For this, approval of so-called operational plans (*Betriebspläne*) is required. Whereas the mining authorisation decides who is allowed to explore and exploit minerals, the operational plans permit the actual activities and determine the conditions and requirements for the exploration and exploitation activities in line with environmental and mining law requirements, as well as any other public concerns.

The operational plan procedure is a specific permitting procedure set forth in secs. 51 to 57 BBergG for a comprehensive preventative operational control. Specific features of the mining operational plan procedure are the different levels of the approval system, as well as the recurring character of the approval which distinguishes it from other systems which usually have a one-off approval before commissioning of a specific plant.

With regard to the different operational plans, the main planning instrument is the main operational plan (*Hauptbetriebsplan*) which permits the specific mining activities. The main operational plan describes in a precise way the mining project with its type and extent as well, inter alia, the technology used, the delineation to other facilities and water law permits.

In addition, the mining authority can also approve by way of special operational plans (*Sonderbetriebspläne*) single parts of mining operations or specific projects outside of the contents of the main operational plan. The purpose of this approval instrument is primarily to simplify the procedure. In the context of geothermal facilities, for example, special works such as pipe works or the construction and operation of hot water pipelines may be permitted by way of special operational plans.

In addition to the main operational plan, a mandatory general operational plan (*obligatorischer Rahmenbetriebsplan*) is required and a formal planning approval procedure (*Planfeststellungsverfahren*) must be executed for the approval of such plan if a project requires an environmental impact assessment (*Umweltverträglichkeitsprüfung*, in the following "**EIA**"). In case an EIA obligation does not apply and a mandatory general operational plan is therefore not required, the facultative general operational plan (*fakultativer Rahmenbetriebsplan*) can be applied for.

A terminating operational plan (*Abschlussbetriebsplan*) is required for the termination of the extraction activities and the shut-down of the operations.

With regard to the time period during which a main operational plan is valid, main operational plans must be limited in time and as a general rule shall be limited to a period of two years. The background of the comparatively short term of the main operational plans is the dynamic operational mode of mining activities, which are often further developed locally due to the location of the mineral resources and are therefore subjected to a corresponding continuous control by the authorities. A

time limit of more than two years may be allowed as an exception, especially if the course of the operation (*Betriebsverlauf*) is foreseeable.

11.2.1.2 Further permits

The approval for the mining activities granted under the main operational plan or special operational plans does not automatically include all other permits, so that the mining company regularly needs further administrative approvals and permits such as a building permit (*Baugenehmigung*).

11.2.1.3 Current developments in the legal framework of the German mining law

11.2.1.3.1 Lithium extraction

The German legislator has recently adopted changes of the German mining law which, inter alia, aim at further enabling the extraction of lithium that is dissolved in thermal water (cf. BT Drs. 19/28402). These changes entered into force on 18 June 2021. Accordingly, lithium in all forms (i.e. including in dissolved form in thermal water) has been defined to be a freely mineable resource. The background of these changes is that it was previously slightly unclear under the German mining law whether such lithium is actually to be considered as a "freely mineable resource" or as a "freehold resource" under the BBergG. The federal government considered that in the latter case discussions could potentially arise as to which property owner has the right to extract the lithium, whereas in the case of the lithium being clearly defined as a freely mineable resource the respective company can protect its investments by way of obtaining exclusive mining authorisations. With lithium defined as a freely mineable resource, Vulcan Group is not required to obtain title to the properties for its lithium exploration and extraction activities relating to its lithium business.

11.2.1.3.2 Changes in the permitting procedure

The recent changes of the German mining law contain, in addition to the before mentioned amendment on lithium extraction, further provisions on changes to the permitting procedure, which also affect the permitting procedure for plants for the generation of electricity from geothermal energy. The background to these amendments were European requirements (Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of renewable energy sources – RED II), which provide for certain requirements for the administrative procedure for the permitting of installations for the production of energy from renewable sources. The aim is to avoid long administrative procedures for electricity generation plants using renewable energy and to simplify the procedures for the use of renewable energy overall. For this purpose, the following changes in German mining law were adopted, in particular:

- Duration of main operational plans: Previously, the provisions of the BBergG stipulated as a general rule that main operational plans should basically not exceed a period of 2 years. Under the revised BBergG, it has been expressly clarified that the competent authority may determine that main operating plans may also be established for a longer period than for two years if it is possible to control the operation even if the main operating plan has a longer duration, in particular if the course of operations is already foreseeable.
- Simplification of procedures: As part of the recent amendment of the BBergG, new provisions were introduced with the aim to simplify the permitting procedures under the German mining law, i.e. also for the extraction of geothermal energy. The new regulation is intended to ensure that the approval of main and special operational plans and all other approval procedures required under federal or state law are handled by a "single body", i.e. by one centralised authority. This procedure is carried out "at the request of the developer", i.e. the involvement of the single body is voluntary for the applicant. In addition, a procedure manual is to be created. The procedure manual should serve to make it easier for project developers who want to invest in renewable energy to understand the permitting procedures under German mining law. The procedure manual should essentially describe the necessary permitting procedures, provide assistance to applicants on the necessary documents and on how to conduct the procedure and be a source of information on specific procedural questions.

In addition, following the German federal elections, the coalition parties signed their coalition agreement on 7 December 2021 (the "**Coalition Agreement**"), in which the intention was outlined to significantly expedite the permitting process with the goal of accelerating the expansion of renewables.

11.2.2 Federal Water Act (Wasserhaushaltsgesetz)

Next to mining laws, German water law, in particular the German Federal Water Act – Wasserhaushaltsgesetz – "**WHG**" is applicable for the extraction of geothermal waters. Under the WHG, the use of a water body, including the ground water, requires a permit. The "use" of the ground water in a geothermal project includes the drilling into a ground water body (*wasserrechtliche Erlaubnis*). Vulcan Group's plans for drill pad construction require a water law permit for surface water wells. The extraction of ground water, as well as the re-injection of the ground water into the ground water body does not require a water law permit at Vulcan Group's Project Licence areas in the Upper Rhine Valley.

A water law permit can be withdrawn by the competent authority and is granted based on the discretion of the authority. A withdrawal of the permit is however subject to certain restrictions and cannot be withdrawn arbitrarily. Rather, a withdrawal is only possible for a factual reason (in particular one relating to detrimental impacts on the water body resulting from the respective use) and must in any case be in line with the principle of proportionality (i.e. in particular no less restrictive remedies are available to remediate the factual issue).

Whereas water law permits in general remain separate permits, uses of water bodies which are related to mining activities are permitted by the mining authority, which has to coordinate such permits with the competent water authority. Thus, water law permits are often included in the operational plans issued by the competent mining authorities.

Further requirements for groundwater are laid down in the German Groundwater Ordinance (*Grundwasserverordnung*), which in particular contains provisions on uniform threshold values in relation to the chemical status of groundwater.

11.2.3 Renewable Energies Act (Gesetz für den Ausbau erneuerbarer Energien)

Vulcan Group is also subject to the German Renewable Energies Act ("**EEG**") insofar as the lithium will be generated from geothermal waters in renewable energy plants which also uses geothermal waters for the production of electricity subsidised under the EEG. The EEG applies to all plants for the generation of electricity from renewable energies and therefore also to the geothermal plants which Vulcan Group operates and intends to operate as a part of its renewable energy business. Renewable energies within the meaning of the EEG also include geothermal energy, i.e. also geothermal power plants are subject to regulations under the EEG. Depending on the commissioning date of a geothermal power plant, different versions of the EEG (EEG 2004, EEG 2009, EEG 2012, EEG 2014, EEG 2017 or EEG 2021) can be applicable.

The EEG provides for, inter alia, provisions for the remuneration of electricity produced in renewable energy plants. Under the previous versions of the EEG (EEG 2004, EEG 2009 and EEG 2012) a remuneration by way of statutory fixed feed-in tariffs was the general rule. The EEG 2012 introduced then a new system of direct marketing in form of the market premium model (*Marktprämienmodell*) in which the electricity is marketed directly by the plant operator (or a direct marketing company) at the EPEX energy exchange and – on top – a market premium is paid by the grid operator. This form of direct marketing was under the EEG 2012 still optional and became mandatory under the EEG 2014 (and all later versions).

As Vulcan Group intends to operate geothermal power plants as a part of its renewable energy business and for the extraction of lithium from the geothermal waters, Vulcan Group receives the statutory tariffs or market premium paid under the EEG for the electricity produced in such geothermal power plants and fed into the public grid. The market premium is calculated based on statutory tariffs, known as 'reference price' (*anzulegender Wert*), which depends on the relevant energy source. The current applicable statutory tariff for geothermal power plants amounts to EUR cent 25.20 / kWh. From this reference price, the reference market value is subtracted. This value basically means that the average monthly value for the respective energy source received at the EPEX Spot SE in Leipzig is subtracted to take account of the receipts already achieved by the direct marketing. As a general rule, the remuneration mechanism of the market-premium model still applies under the EEG 2017 and EEG 2021, with the exception that the reference prices for new plant are no longer determined by way of statutory provisions, but by way of the tender procedures. However, geothermal power plants are still exempted from the requirement to participate in tender procedure, so that the statutory tariff of EUR cent 25.20 / kWh remains applicable. For geothermal plants commissioned after 31 December 2023, a decreased statutory tariff applies. As a rule, the statutory tariff decreases by 0.5% on annual basis compared to the preceding year, noting that the

statutory tariff in place at the date of commissioning of an individual plant applies to this plant throughout its remuneration period and does not further decrease.

The remuneration under the EEG is typically paid for a period of 20 years beginning from the commissioning date plus the remaining period of the calendar year in which the respective plant was commissioned.

Electricity generated by Vulcan Group in the geothermal power plant as part of its renewable energy business and fed into the public grid is also subject to legal privileges under the EEG. In addition to the provisions on the remuneration of electricity, the EEG also contains obligations of the grid operators to immediately and as a priority connect plants generating electricity from renewable energy sources to the grid connection point. Grid operators are also obliged to physically take off, transmit and distribute immediately as a priority the electricity from renewable energy sources. The obligation to take off the electricity (*Abnahmeverpflichtung*) comprises the complete amount of electricity produced in the respective renewable energy facility.

12. INFORMATION ON THE COMPANY'S CAPITAL

12.1 Issued capital and Shares

As of the date of this Prospectus, the issued capital of the Company comprises:

- 131,645,090 Shares;
- 8,656,324 unquoted performance rights ("**Performance Rights**") (of various classes);
- 91,174 unquoted performance shares ("**Performance Shares**").

References to 'share capital' in this section 12 and elsewhere in this Prospectus are to the Shares (i.e. the fully paid ordinary shares in the capital of the Company with no par value) and do not include the Performance Rights or the Performance Shares, which do not provide any voting rights or dividend rights prior to any conversion into Shares following the satisfaction of applicable performance criteria. For additional detail on the Performance Rights and the Performance Shares, see section "12.3 Details of unquoted securities".

Except for the restrictions described in section "3.4 Transferability of the Shares", there are no restrictions on the transferability of the Shares. Each Share on issue is fully paid. For more information about the rights applying to the Shares, see section "3 Information about the Shares".

The Shares are not represented by a physical share certificate. For additional information on the legal title to, and transfers of, the Shares, see section "3.2 Form and representation of the Shares".

The Shares have no nominal or par value. All of the Shares are fully paid up. The Shares are governed by the Company's constitution, the Australian Corporations Act, the ASX Listing Rules and Australian general law.

As of the date of this Prospectus, the Company does not hold any treasury shares.

12.2 Development of the share capital over the past three years

As at 1 July 2018, the Company's share capital comprised 31,750,001 Shares. As of the date of this Prospectus, the Company has a total of 131,645,090 ordinary Shares on issue, all of which are quoted (and tradeable) on ASX.

12.2.1 Overview

Between 1 July 2018 and the date of this Prospectus, the following changes in the Company's share capital occurred:

Date	Details	Number of Shares
1 July 2018	Opening balance	31,750,001
N/A	N/A	-
30 June 2019	Balance as at 30 June 2019	31,750,001
10 July 2019	Placement to sophisticated investors	+ 2,820,000
19 July 2019	Placement to sophisticated investors	+ 3,513,334
5 August 2019	Shares issued to S3 Consortium Pty Ltd. for services rendered	+ 1,000,000
4 September 2019	Shares issued to vendors and introducers of the Zero Carbon Lithium™ Project as part of consideration for the acquisition of 100% of the shares in Vulcan Energy Resources Pty Ltd	+ 7,666,667
4 September 2019	Shares issued to Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse	+ 750,000

Date	Details	Number of Shares
	of Gavin Rezos, to incentive performance and retain services	
4 September 2019	Shares issue to Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse of Gavin Rezos, for participation in placement	+ 1,000,000
28 February 2020	Conversion of Class A Performance Shares and Class D Performance Rights	+ 5,170,000
30 June 2020	Conversion of Class A Performance Rights	+ 800,000
30 June 2020	Conversion of Class A Performance Shares	+ 480,000
30 June 2020	Conversion of listed options	+ 267,753
30 June 2020	Placement to sophisticated investors	+ 12,000,000
30 June 2020	Balance as at 30 June 2020	67,217,755
6 October 2020	Shares issued to S3 Consortium Pty Ltd in lieu of cash fees for marketing and public relations services rendered	+ 400,000
2 July 2020 – 17 December 2020	Conversion of listed options	+ 8,930,765
15 October 2020 – 26 November 2020	Conversion of unlisted options	+ 1,125,250
16 September 2020	Conversion of Class B Performance Rights	+ 500,000
16 September 2020	Issue of introducer shares	+ 660,000
27 November 2020	Shares issued to Ranya Alkadamani	+ 100,000
15 January 2021	Conversion of Class B Performance Shares	+ 4,400,000
15 January 2021	Conversion of Class E & K Performance Rights	+ 2,250,000
20 December 2020 – 20 January 2021	Conversion of listed options	+ 3,457,409
6 February 2021	Placement to sophisticated investors	+ 18,423,077
11 May 2021	Conversion of Class H Performance Shares	+ 260,000
30 June 2021	Placement to Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse of Gavin Rezos	+ 38,461
30 June 2021	Issue to the introducers of the Zero Carbon Lithium™ Project	+ 660,000
30 June 2021	Balance as at 30 June 2021	108,422,717
6 July 2021	Shares issued to vendors as partial consideration for the acquisition of GGH	+ 11,396
6 July 2021	Shares issued (216,667 of which are locked up, subject to certain customary exceptions,	+ 325,000

Date	Details	Number of Shares
	until 6 July 2022) to vendors as consideration for the acquisition of Gec-Co	
19 August 2021	Shares issued to nominee of Nico Rosberg and RXR (9,675 of which are locked up, subject to certain customary exceptions, until 19 May 2022) pursuant to the Partnership Agreement	+ 32,251
22 September 2021	Placement to sophisticated investors	+ 14,814,815
18 October 2021	Shares issued to existing Shareholders in Australia and New Zealand in connection with share purchase plan	+ 228,434
1 December 2021	Shares issued upon conversion of warrants	+ 521,304
17 December 2021	Placement to (1) Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse of Gavin Rezos, (2) Annie Liu, (3) Josephine Bush and (4) Heidi Grön	+ 65,317
17 December 2021	Conversion of Class C Performance Shares and Class F, Class L, Class H, Class N and Class Q Performance Rights	+ 7,186,364
8 February 2022	Shares issued to nominee of Nico Rosberg (13,122 of which are locked up, subject to certain customary exceptions, until 8 November 2022) pursuant to the Partnership Agreement	+ 37,492
11 February 2022	Balance as at 11 February 2022	131,645,090

12.2.2 Selected current issuances of Shares

In connection with the placement to sophisticated investors on 22 September 2021 referred to in section "12.2.1 Overview", the Company issued 14,814,815 new Shares to sophisticated investors at an offer price of A\$13.50 per new Share, resulting in gross proceeds to the Company in an amount of A\$200 million. The placees included new and existing shareholders (including Hancock Prospecting Pty Ltd) as well as a number of global ESG-focused institutions. Canaccord Genuity and Goldman Sachs Australia Pty Ltd acted as joint lead managers, underwriters and bookrunners and Berenberg acted as Co-Manager to the placement.

In addition to, and in connection with, the placement to sophisticated investors, on 18 October 2021, the Company issued 228,434 new Shares to existing Shareholders in Australia and New Zealand under a share purchase plan referred to in section "12.2.1 Overview" at an offer price of A\$13.50 per new Share, resulting in gross proceeds to the Company in an amount of A\$3.085 million.

Moreover, the Company issued 65,317 new Shares to (1) Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse of Gavin Rezos, (2) Annie Liu, (3) Josephine Bush and (4) Heidi Grön in their capacity as Directors of the Company on 17 December 2021 as referred to in section "12.2.1 Overview" at an offer price of A\$13.50 per new Share, resulting in gross proceeds to the Company in an amount of A\$881,780.

Going forward, the Company expects to issue additional Shares to RXR under the Partnership Agreement to the value of EUR 225,000 based on a 15 day volume weighted average price, such Shares to be issued on or around 30 June 2022, of which 35% will be subject to a lock-up for a period of 9 months from the date of their issue (subject to certain customary exceptions).

12.3 Details of unquoted securities

12.3.1 Performance Rights

As of the date of this Prospectus, the Company has 8,656,324 Performance Rights on issue, as set out in the table below. Each Performance Right, subject to the satisfaction of the applicable vesting criteria before the expiry date, entitles the holder to elect to receive one Share for nil consideration by notifying the Company of such election. For further details about the incentive plan under which the Performance Rights were granted (see section "13.2.5.2.3 Variable Remuneration – Long-Term Incentives (LTI)").

Class	Expiry Date	Vesting criteria	Number of Performance Rights on issue
Class G	1 December 2023	Will vest upon the holder completing six months continuous employment with the Company.	250,000
Class H	1 December 2023	The Company announcing, on or before 18 May 2022, a positive pre-feasibility study in relation to the Company's Zero Carbon Lithium™ Project, confirming it is commercially viable.	553,636
Class I	1 December 2023	The Company announcing, on or before 18 May 2023, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three-year term, or a downstream lithium chemicals joint venture partner with a minimum of A\$10,000,000 investment in relation to the Zero Carbon Lithium™ Project.	1,000,000
Class J	16 September 2023	Both of the following occurring: - The Company announcing, within 36 months from the date of issue, a positive (JORC-Compliant) definitive feasibility study in relation to the Zero Carbon Lithium™ Project, confirming it is commercially viable. - The VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 225% of the VWAP for Shares for the last 5 trading days up to but not including the date of the shareholders' meeting ("Reference Price").	2,500,000
Class M	1 December 2023	The Company announcing, on or before 21 May 2021, a positive pre-feasibility study in relation to the Company's Zero Carbon Lithium™ Project, confirming it is commercially viable.	1,500,000

Class	Expiry Date	Vesting criteria	Number of Performance Rights on issue
Class N	1 December 2023	The Company announcing, on or before 21 May 2022, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three-year term, or a downstream lithium chemicals joint venture partner with a minimum of A\$10,000,000 investment in relation to the Zero Carbon Lithium™ Project.	1,500,000
Class P	1 December 2023	The Company announcing before 31 December 2022 a positive definitive feasibility study in relation to the Zero Carbon Lithium™ Project, confirming it is commercially viable.	368,000
Class R	27 November 2022	Vesting on issue, and converting to shares on a one for one basis on the date that is 24 months from the date of issue.	100,000
Class S	30 June 2025	One third vesting 12 months from the date of the 24 June 2021 General Meeting (" EGM "), one third vesting 24 months from EGM, one third vesting 36 months from EGM.	38,688
Class T	1 December 2024	The Company being issued a building permit for the first geothermal power plant or, in the case of a pure heating project with no electricity production, the transfer station, on or before the expiry date of 1 December 2024.	268,000
Class U	1 December 2024	The Company being issued a building permit for the first Direct Lithium Extraction system, on or before the expiry date of 1 December 2024.	250,000
Class V	1 December 2024	The Company being granted a permit according to German Immission Control Act (<i>BImSchG</i>) for the first lithium refinery, on or before the expiry date of 1 December 2024.	118,000
Class W	1 December 2024	The Company announcing commissioning of the first commercial lithium extraction plant, on or before the expiry date of 1 December 2024.	100,000
Class Y	1 December 2024	The Company successfully listing on the regulated market of the Frankfurt Stock Exchange on or before the expiry date of 1 December 2024.	60,000
Class Z	1 December 2024	The Company obtaining project financing for the first commercial plant on or before the expiry date of 1 December 2024.	50,000

Class	Expiry Date	Vesting criteria	Number of Performance Rights on issue
		Balance as at 11 February 2022	8,656,324

12.3.2 Performance Shares

As of the date of this Prospectus, the Company has 91,174 Performance Shares on issue. Each Performance Share, subject to the satisfaction of the applicable vesting criteria before the expiry date, entitles the holder to elect to receive one Share for nil consideration by notifying the Company of such election. Prior to conversion into a Share, the Performance Shares provide no voting rights and no dividend rights, and are not transferable.

Class	Expiry Date	Vesting exercise	Number of Performance Shares on issue
Class D	24 June 2024	The Performance Shares will vest on any one of the following milestones on any of the GGH licence areas within 30 months of completion of the acquisition of GGH (which completed on 2 July 2021): - 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; - 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; - the Company (or any of its subsidiaries) obtaining the first approval for a special operating plan in accordance with BBergG; - the Company (or any of its subsidiaries) the first approval or preapproval from the relevant governmental authority for the construction of a geothermal organic rankine cycle plant; or - 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.	91,174

Class	Expiry Date	Vesting exercise	Number of Performance Shares on issue
		Balance as at 11 February 2022	91,174

12.4 General provisions on changes in the share capital

Under the Australian Corporations Act, the Company does not have an authorised share capital and there is generally no limit under the Australian Corporations Act or the Constitution on the power of the Directors to issue Shares or other securities.

Subject to specified exceptions, the ASX Listing Rules restrict a company admitted to the official list of ASX from issuing, or agreeing to issue, more than 15% of the company's total number of securities (calculated according to a prescribed equation) in any rolling 12-month period without obtaining shareholder approval.

Specified exceptions to the requirement to seek shareholder approval under the ASX Listing Rules include (among other things):

- pro rata issues made to existing shareholders;
- issues made to an underwriter of the shortfall under a pro rata issue, subject to certain requirements; and
- issues made under an employee incentive plan approved by shareholders in the preceding three years.

12.5 General provisions on changes in share rights

Under section 246B of the Australian Corporations Act, the Company may vary or cancel the rights attached to shares in a class of shares only if:

- where the Company's Constitution sets out a procedure for varying or cancelling such rights, that procedure is followed; or
- where the Company's Constitution does not set out a procedure for varying or cancelling such rights, the Company follows the procedure prescribed by the Australian Corporations Act.

Under the Company's Constitution, if at any time the share capital of the Company is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issues of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three quarters of the issued capital of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

12.6 General provisions on dividend payments and distributions out of capital

Under the Australian Corporations Act, a company must not pay a dividend unless:

- its assets exceed its liabilities immediately before the dividend is declared and the excess is sufficient for the payment of the dividend;
- the dividend is to be fair and reasonable to the company's shareholders as a whole; and
- the payment of the dividend does not materially prejudice the company's ability to pay its creditors.

Additionally, where a distribution is paid out of capital, the provisions of the Australian Corporations Act relating to reductions of capital must also be complied with.

12.7 General provisions on the liquidation of the Company

If the Company is wound up, the liquidator may, with the authority of a special resolution, divide among the shareholders in kind the whole or any part of the property of the Company, and may for that purpose set such value as the liquidator considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders.

12.8 Regulation of Australian takeovers

Subject to certain exceptions, the Australian Corporations Act prohibits the acquisition of a relevant interest in the voting shares of a company registered under the Australian Corporations Act that either is listed on a prescribed stock exchange (including ASX) or has more than 50 shareholders if, as a result of the acquisition, the voting power of the acquirer (or any other person) in the company would increase:

- from 20% or below to more than 20%; or
- from a starting point that is more than 20% but less than 90%,

(known as the "**20% rule**").

A person's voting power for these purposes is equal to the aggregate relevant interest of the person and their associates in the voting shares of the company. The Shares are currently the only class of voting shares in the Company on issue.

Broadly, a person has a "relevant interest" in a security if they:

- are the holder of that security;
- have the power to dispose of, or control the exercise of a power to dispose of, that security;
- have the power to exercise, or control the exercise of, the right to vote in respect of that security;
- control or have voting power above 20% of a body corporate or management investment scheme that has a relevant interest in that security;
- grant an option, or have granted an option to, or by, a person with a relevant interest in the security, the exercise of which would give the first person a relevant interest in the security; or
- are given, or have been given, or give, or have given, an enforceable right in relation to the security, the enforcement of which would give the first person a relevant interest in the security (whether the right is enforceable presently or in the future and whether or not on the fulfilment of a condition).

These concepts are broad and, for example, the concepts of "power" and "control" include:

- power or control that is indirect;
- power or control that is, or can be, exercised as a result of, by means of or by the revocation or breach of a trust, agreement, practice or combination (whether or not enforceable); and
- power or control that is, or can be made, subject to restraint or restriction,

regardless of whether the power or control is express or implied, formal or informal, or exercisable alone or jointly with another person.

There are several exceptions which allow acquisitions that would otherwise be prohibited from taking place under the 20% rule. These exceptions include (among other things):

- (a) takeover bid: an acquisition under a formal takeover bid that complies with the requirements of the Australian Corporations Act;
- (b) scheme of arrangement: an acquisition that results from a compromise or arrangement approved by a court under Part 5.1 of the Australian Corporations Act;

- (c) shareholder approval: an acquisition that has been previously approved by shareholders at a general meeting of Shareholders (provided, among other things, that shareholders are provided with certain information prescribed under the Australian Corporations Act and the potential acquirer and its associates did not vote on the approval);
- (d) 3% creep: an acquisition by a person where the person (or any other person) had voting power in the company of at least 19% throughout the six-months prior to the acquisition, and the acquisition does not result in any of those persons' voting power to increase by more than 3% over the voting power they had six months prior to the acquisition; and
- (e) pro rata offers: an acquisition under a pro rata offer of new securities in which all securityholders in that class are offered the opportunity to participate on the same terms, where the securityholders have been provided with a reasonable opportunity to accept such offers (including an acquisition by an underwriter or sub-underwriter to that offer).

In addition, the Foreign Acquisitions and Takeovers Act 1975 (Cth) of Australia (the "**Australian Foreign Acquisitions and Takeovers Act**") regulates the acquisition directly or indirectly by a "foreign person" of (among other things) securities in Australian companies. The definition of "foreign person", broadly, encapsulates any person or entity that is not an Australian resident, including any Australian company in which a "foreign person" has an interest of at least 20% or in which two or more "foreign persons" have an aggregate interest of at least 40%.

Generally, an acquisition by a foreign person that results in foreign ownership in an Australian company exceeding the applicable threshold will require notification to (and, usually, a confirmation of no objection from) the Australian treasurer.

In most cases, the applicable threshold will be met where a foreign person, together with its associates, directly or indirectly acquires an interest in (or increases its interest above) 20% of more of the voting power in an Australian business valued at more than A\$1,250 million (in the case of investors from certain countries that have an applicable free trade agreement with Australia) or A\$289 million (for investors from other countries). However, lower thresholds (both monetary threshold and interest threshold) may apply depending on the nature of the acquirer (for example, where the acquirer is a "foreign government investor") and the nature of the target (for example, where the target holds significant land interests or is a "national security business").

12.9 Takeover bids

One of the main methods for acquiring control of an Australian company that is listed on a prescribed stock exchange (including ASX) or has more than 50 shareholders is by way of a takeover bid under Chapter 6 of the Australian Corporations Act. A takeover bid involves a potential acquirer making an offer to all securityholders of a target company (or unitholders of a trust) to acquire their securities (or units) on the same terms.

There are two types of takeover bid:

- an off-market bid (which may offer cash or other consideration, may be subject to conditions, and may be for 100% of the target securities or a specified proportion of each target securityholder's securities); and
- a market bid (which must be an unconditional cash offer).

In an off-market bid, the bidder must make its offers to target securityholders in writing in a document called a bidder's statement, which must be prepared in accordance with the requirements of the Australian Corporations Act. The target company must respond to that bidder's statement by preparing and dispatching to its securityholders (in the class of securities subject to the takeover bid) a document called a target's statement, which contains all the information that holders of bid class securities and their professional advisers would reasonably require to make an informed assessment whether to accept the offer under the bid (subject to limited exceptions), as well as the target directors' recommendation as to whether securityholders should accept or not accept the takeover bid. In contrast, a market bid (often called an on-market bid) involves the bidder appointing a broker to stand in the ASX market and make offers to acquire target securities at the specified bid price, with acceptances being effected by the execution of on-market trades rather than off-market acceptances. Despite the offers being made on-market, a bidder's statement and target's statement still need to be prepared in a market bid.

12.10 Scheme of Arrangement

In addition to takeover bids, the other main method of acquiring control of an Australian company that is listed on a prescribed stock exchange (including ASX) or has more than 50 shareholders is by way of a scheme of arrangement between the company and its members under Part 5.1 of the Australian Corporations Act. A scheme of arrangement is a statutory procedure that allows a company to reorganise its capital structure to give effect to a proposal, such as transferring all of the voting shares in a company to a proposed acquirer, or cancelling all of the voting shares in a company not already held by the proposed acquirer.

Unlike a takeover bid, a scheme of arrangement is a legal process involving the target company and its shareholders consenting to a proposal that will bind all shareholders. For a scheme of arrangement to bind all shareholders, the following majority approvals must be obtained from shareholders:

- (a) headcount test – a simple majority in number (greater than 50%) of the shareholders who vote; and
- (b) voted shares test – at least 75% of the total number of votes cast.

The scheme of arrangement must also be approved by an Australian court. In determining whether to approve a scheme of arrangement, the Australian court will need to be satisfied that:

- (a) the requirements of the Australian Corporations Act have been met (including that the majority approvals for shareholders have been achieved);
- (b) the majority of shareholders voting in favour of the schemes were acting in good faith and not for an illegal or illegitimate purpose; and
- (c) the proposal was sufficiently fair and reasonable such that an intelligent and honest shareholder might approve it.

The advantage of a scheme of arrangement compared to a takeover bid is that a change of control of the target company can be effected by achieving the above shareholder majority approvals, and does not require the unanimous agreement of all shareholders (or approval of such number of shareholders so as to enable the bidder to proceed with follow-on compulsory acquisition – see section "12.11 Squeeze-out of minority shareholders" below).

Compared to a takeover bid, a bidder has a more limited role in a scheme of arrangement, as the process is controlled by the target company whose co-operation is required to put forward the bidder's proposal before a meeting of the target company's shareholders. For these reasons, the bidder's role in a scheme of arrangement is generally confined to:

- (a) making the proposal to acquire all the shares in the target company by scheme of arrangement;
- (b) negotiating and entering into a scheme implementation agreement (being the document that sets out the obligations of the target and bidder to co-operate to give effect to implementation of the scheme of arrangement); and
- (c) providing input into the target company's explanatory statement to shareholders (described below).

Once the terms of the scheme implementation agreement are agreed, the target company will then draft a notice of meeting and explanatory statement to shareholders, commonly referred to as a "**Scheme Booklet**", explaining the effect of the proposed scheme of arrangement and containing all information known to the target company's directors that is material to the making of a decision by a shareholder as to whether or not to agree to the scheme of arrangement. The Scheme Booklet is then lodged with the Australian Securities and Investments Commission ("**ASIC**"), being the Australian national regulator of corporations, for review. Where the consideration offered to the target company's shareholders comprises (in whole or in part) securities in the bidder or another entity, the Scheme Booklet must also contain all the information that investors and their professional advisers would reasonably require to make an informed assessment of the rights and liabilities attaching to those securities, and the assets and liabilities, financial position and performance, profits and losses and prospects of the body that is to issue the securities (but only to the extent to which

(i) the target company's directors known or ought reasonably know that information, and (ii) it is reasonable for investors and their professional advisers to expect to find the information in the Scheme Booklet).

Following ASIC's review of the scheme booklet, the target company will apply to an Australian court for an order to convene a meeting of its shareholders to consider and vote on the proposed scheme of arrangement. If approval of the relevant Australian court is received, the Scheme Booklet is despatched to the target company's shareholders and a shareholders' meeting is convened to consider the proposed scheme of arrangement.

If the target company's shareholders approve the scheme of arrangement at the meeting of shareholders, the target company will then notify ASIC and apply for orders at a second hearing (again, before an Australian court) seeking approval of the scheme of arrangement. The Australian Court then has the discretion to either approve or decline the scheme of arrangement, but will generally not substitute its assessment of the merits of the scheme of arrangement for that of the majority shareholders who voted in favour of it. Shareholders of the target company may appear at the second hearing and petition the Australian court not to approve the proposed scheme of arrangement if they believe the scheme prejudices their interests or has not met the legal requirements. ASIC may also appear at either the first or second court hearing if it objects to a proposed scheme.

Following approval by the Australian court at the second court hearing, the target company will lodge the Court orders with ASIC, at which time the scheme of arrangement will become legally binding on all shareholders of the target company, including those who voted against the scheme or omitted to vote. The scheme of arrangement will be implemented shortly thereafter.

12.11 Squeeze-out of minority shareholders

The Australian Corporations Act provides that a person who has made a takeover bid which results in, at the end of the offer period, that person (and its associates) having a relevant interest in at least 90% of the issued shares and having acquired 75% (by number) of the shares that the person offered to acquire under the bid, may compulsorily acquire any remaining shares it does not hold at the same price offered under the bid, within one month after the end of the offer period.

The Australian Corporations Act also permits a minority shareholder to require an offeror to acquire the minority shareholders' shares if the offeror has a relevant interest in at least 90% (by number) of the issued shares at the end of the takeover bid.

In addition, whether or not a takeover bid has been made, a person who lawfully acquires a relevant interest in at least 90% of the issued shares of a company is able to acquire the remaining shares in that company for fair value (as determined by an independent expert), provided that the acquirer lodges a compulsory acquisition notice within six months after obtaining a relevant interest in at least 90% of the issue shares.

12.12 Notification and reporting requirements for shareholdings

12.12.1 Australia

As the Company is admitted to the official list of ASX, under the Australian Corporations Act, a shareholder who begins or ceases to have a substantial holding in the Company, or who has a substantial holding in the Company and there is a movement by at least 1% in their holding, must give a notice to the Company and ASX within the prescribed period (generally, within two business days).

A person has a substantial holding in the Company if:

- that person and that person's associates have a relevant interest in 5% or more of the voting shares in the Company; or
- that person has made a takeover bid for voting shares in the Company.

A failure to give such a notice is an offence (which can attract financial penalties and, in the case of individuals, imprisonment), but does not preclude the shareholder from exercising the rights attaching to the relevant shares.

12.12.2 Germany

After the Shares become admitted to trading on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment of the regulated market (Prime Standard), Germany will become the home member state of the Company pursuant to Section 2, para. 13, no. 3 of the German Securities Trading Act (*Wertpapierhandelsgesetz*). Holders of the Shares and derivatives or other financial instruments linked to the Shares may be subject to notification obligations pursuant to the German Securities Trading Act (*Wertpapierhandelsgesetz*) and the German Securities Trading Reporting Ordinance (*Wertpapierhandelsanzeigerordnung*). The following description summarises these obligations. The Company's shareholders are advised to consult with their own legal advisers to determine whether the notification obligations apply to them.

Section 33 of the German Securities Trading Act (*Wertpapierhandelsgesetz*) provides that, at the time the shares of a company whose country of origin is Germany are listed for the first time, any shareholder who holds 3% or more of the voting rights must notify the respective issuer and BaFin without undue delay (*unverzüglich*), but no later than within four trading days after the date of the listing and must also disclose the amount of its current share of the voting rights. Moreover, any shareholder who, through acquisition, sale or otherwise, reaches, exceeds or falls below 3%, 5%, 10%, 15%, 20%, 25%, 30%, 50% or 75% of the voting rights in a listed company whose country of origin is Germany must notify the respective issuer and BaFin without undue delay (*unverzüglich*), but no later than within four trading days after the event, of having reached, exceeded or fallen below the respective threshold and must also disclose the amount of its current share of the voting rights. The prescribed time limit commences at the time when the shareholder required to give the notification has actual knowledge or should have had knowledge under the circumstances that its share of voting rights reached, exceeded or fell below the stated thresholds. It is assumed that the shareholder required to give the notification has gained knowledge about the shareholding two trading days after reaching, exceeding or falling below the aforementioned thresholds. If the shareholder's percentage of voting rights has reached, exceeded or fallen below the thresholds due to a change of the total number of voting rights in the company, the notification period begins at the point when the shareholder required to give the notification learns that the threshold is triggered, but no later than the publication of the change of the total number of voting rights by the issuer. The German Securities Trading Act (*Wertpapierhandelsgesetz*) defines "holding" as the existence of an unconditional claim related to a transfer of shares without an undue delay or a respective obligation. Section 34 of the German Securities Trading Act (*Wertpapierhandelsgesetz*) contains various rules which are supposed to ensure that the shareholding is attributed to the person who actually controls the voting rights relating to the shares. For example, shares held by a third person will be attributed to another person if that other person exercises control over the person holding the shares. This also applies to shares which are held by a third person on behalf of another person or a person controlled by such other person as well as voting rights which the person can exercise free of instructions as a proxy.

Corresponding disclosure obligations towards the issuer and BaFin apply to reaching, exceeding, or falling below the thresholds mentioned above, except for the threshold of 3%, when the relevant shareholder directly or indirectly holds instruments (i) which either, on maturity, give their holder an unconditional right to acquire already issued shares carrying voting rights in the issuer or the discretion as to the right to acquire such shares in the issuer or (ii) which are referenced to already issued shares of the issuer carrying voting rights and have similar economic effect to the instruments mentioned under (i), irrespective of whether or not they confer a right to a physical settlement (section 38 of the German Securities Trading Act (*Wertpapierhandelsgesetz*)). In particular such instruments comprise transferable securities, options, futures, swaps, forward rate agreements and contracts for differences. The number of voting rights relevant for the notification requirement is generally calculated by reference to the full nominal amount of shares underlying the instrument, except where the instrument provides exclusively for a cash settlement.

Moreover, pursuant to section 39 of the German Securities Trading Act (*Wertpapierhandelsgesetz*), the notification obligation applies if the sum of the voting rights in one issuer, which are to be taken into account pursuant to section 33, para. 1, sentence 1 or para. 2 of the German Securities Trading Act (*Wertpapierhandelsgesetz*) with respect to holdings of shares and section 38, para. 1, sentence 1 of the German Securities Trading Act (*Wertpapierhandelsgesetz*) with respect to holdings of instruments, reaches, exceeds or falls below the thresholds mentioned above, except for the threshold of 3%.

The notification may be made either in German or English and shall be submitted through BaFin's Reporting and Publishing Platform (*MVP-Portal*). As a domestic issuer within the meaning of the German Securities Trading Act (*Wertpapierhandelsgesetz*), the Company must publish this notification without undue delay, but no later than three trading days after receipt of the notification in various media distributed across the entire EEA in accordance with section 16 in conjunction with section 3a of the German Securities Trading Reporting Ordinance (*Wertpapierhandelsanzeigeverordnung*) and submit the publication to BaFin. The issuer must also transmit the notification to the company register (*Unternehmensregister*) maintained electronically by the German Federal Ministry of Justice within the meaning of section 8b of the German Commercial Code (*Handelsgesetzbuch*) for storage without undue delay, but not prior to the publication.

In case of non-compliance with the disclosure obligation for example failing to file a notice or providing false information, the shareholder is precluded from exercising the rights relating to those shares (including voting rights and the right to receive dividends) for the duration of the failure in accordance with the provisions of section 44 of the German Securities Trading Act (*Wertpapierhandelsgesetz*). If the disclosure requirements are violated in a wilful or grossly negligent manner, any rights relating to the shares will be suspended for a six-month period. Furthermore, a fine can be imposed in the case of non-compliance with the disclosure requirements, and BaFin will publish its measures and sanctions taken on its website.

Moreover, pursuant to section 43 of the German Securities Trading Act (*Wertpapierhandelsgesetz*), a shareholder reaching or exceeding 10% or more of the voting rights relating to shares of an issuer must inform the issuer of the objective being pursued through the acquisition of voting rights and the sources of the funds used for the purchase, in each case within 20 trading days from such shareholder acquiring the relevant percentage of the shares. In particular, the shareholder must disclose whether it intends to (i) pursue any strategic objectives with respect to the company (as opposed to profits from trading in the shares), (ii) acquire further voting rights within the following twelve months, (iii) exert any influence or control over the company's management or supervisory board and (iv) make any significant changes to the company's capital structure, especially with respect to debt-to-equity ratio and dividend policy. The Company's articles of association have not made use of the option to release shareholders from this disclosure obligation. If the above objectives change, such change needs to be disclosed to the issuer within 20 trading days of such change.

12.13 Managers' / Directors' transactions

12.13.1 Australia

As an ASX-listed company, the Company must announce to ASX:

- the notifiable interests of a director newly appointed to the Company, within five business days of the appointment of that director;
- any change in the notifiable interests of a director of the Company, within five business days of the date of that change; and
- the notifiable interests of a director who ceases to be a director of the Company, within five business days of that person ceasing to be a director of the Company.

Notifiable interests of a director include the director's relevant interest in the Company's Shares and any interests in contracts to which the director is a party or under which the director is entitled to a benefit, and that confer a right to (among other things) call for or deliver Shares in the Company or a related body corporate.

The Company has a securities trading policy ("**Securities Trading Policy**") which sets out the Company's policy on the sale and purchase of the Company's securities by staff and key management personnel. The Company's key management personnel comprise its directors, executives and those employees directly reporting to the Managing Director.

Under the Securities Trading Policy:

- staff and key management personnel must obtain the prior written approval of the Chairman of the Board of Directors before dealing in the Company's securities (other than any dealing by the Chairman, which requires the prior written approval of the Board of Directors); and
- other than in exceptional circumstances, key management personnel must not deal in securities of the Company during the following periods:
 - o 30 days prior to, and 48 hours after, the release of the Company's annual financial report;
 - o 30 days prior to, and 48 hours after, the release of the Company's consolidated interim report; and
 - o 30 days prior to, and 48 hours after, the release of the Company's quarterly reports (if applicable).

In addition, under the Australian Corporations Act, any person who possesses price sensitive information relating to a company or its securities is prohibited (subject to limited exceptions) from acquiring, disposing of or applying for those securities or procuring others do so, and from communicating the information to third parties where the person knows or ought reasonably know that the person to whom the information is communicated would or would be likely to acquire, dispose of or apply for those securities, or procure others do so.

12.13.2 Germany

Since the Company has filed its application for an admission of its Shares to trading on the regulated market (Regulierter Markt) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) (Prime Standard), it has become subject to the provisions of the Market Abuse Regulation on disclosure of transactions by persons discharging managerial responsibilities within the Company (the "**Managers**") and persons closely associated with them. According to the rules set out in the Market Abuse Regulation, the Managers are obliged to notify the Company and BaFin within three working days regarding any of their transactions in Shares or financial instruments linked to them, particularly derivatives. This obligation also applies to persons closely associated with a Manager. The Company is obliged to promptly, and in no event later than two business days after the transaction, publish the information received in accordance with the foregoing and to simultaneously notify BaFin of the publication. Notification is not required if the sum of all transactions involving a Manager or persons closely associated with him or her is less than EUR 20,000 in a given calendar year.

A Manager is any member of the Company's administrative, management or supervisory body or another senior executive who has regular access to inside information relating directly or indirectly to the Company and power to take managerial decisions affecting the future developments and business prospects of the Company. Persons closely associated with the Manager are (i) spouses and partners considered to be equivalent to a spouse in accordance with national law, (ii) dependent children, in accordance with national law, (iii) other relatives who have shared the same household as the Manager for at least one year on the date of the transaction concerned and (iv) legal persons, trusts or partnerships, the managerial responsibilities of which are discharged by the Manager or any of the aforementioned parties, which are directly or indirectly controlled by a Manager or such a party, which are set up for the benefit of a Manager or such a party or whose economic interests are substantially equivalent to those of a Manager or such a party. Non-compliance with the notification requirements may result in a fine.

Furthermore, the Market Abuse Regulation imposes a closed period of 30 calendar days prior to the announcement of interim financial statements or annual financial statements which the Company is obliged to publish, during which a Manager shall not conduct any transactions in Shares or financial instruments linked to them, particularly derivatives, or act on behalf of a third party in relation to such transactions.

12.14 Short selling regulation (ban on naked short selling)

12.14.1 Australia

Under section 1020B of the Australian Corporations Act, the short selling of securities is only permitted under certain conditions. In particular, "naked" short selling of securities (where a person sells a security - including shares, among other financial products - in circumstances where, at the

time of sale, the seller does not have a presently exercisable and unconditional right to vest the share in the buyer) is prohibited in Australia.

Further information in relation to short selling in Australia is set out in ASIC RG 196 *Short selling*, which is available on ASIC's website at <https://asic.gov.au>.

12.14.2 Germany

Pursuant to Regulation (EU) no. 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps (the "**Short Selling Regulation**"), the European Commission's delegated regulation for the purposes of detailing the Short Selling Regulation, and the German EU Short Selling Implementation Act (*EU-Leerverkaufs-Ausführungsgesetz*) of 15 November 2012, the short-selling of the shares is only permitted under certain conditions. In addition, under the provisions of the Short Selling Regulation, significant net-short selling positions in the shares must be reported to BaFin and published if they exceed a specific percentage. The reporting and publication process is detailed in the German Regulation on Net-Short Positions (*Netto-Leerverkaufspositionsverordnung*) of 17 December 2012. The net short-selling positions are calculated by offsetting the short positions of a natural person or legal entity in the shares with its long positions in such shares. The details are regulated in the Short Selling Regulation and the other regulations the European Commission has enacted on short-selling. In certain situations described in the Short Selling Regulation, BaFin may restrict short-selling and comparable transactions.

13. INFORMATION ON THE GOVERNING BODIES OF THE COMPANY

13.1 Overview

As an Australian public company limited by shares, the Company's governing bodies are the Board of Directors and the general meeting of Shareholders. The responsibilities and powers of these government bodies are determined predominantly by the Australian Corporations Act and the Company's Constitution.

13.2 Board of Directors

13.2.1 General information

The role of the Company's Board of Directors is to provide overall strategic guidance and effective oversight of management.

Subject to any specific requirements under the Australian Corporations Act, the ASX Listing Rules or the Company's Constitution, the day to day business of the Company is also managed by the Board of Directors, who may exercise all of the powers of the Company except for those which require approval of the general meeting of shareholders (see "*13.3.1.5 Passing resolutions at a general meeting of Shareholders*"). Specific responsibilities ascribed to the Company's Board of Directors are set out in the board charter (see "*13.2.2 Board Charter*"). The Company's Board of Directors is permitted under the Company's Constitution to delegate any of their powers to one or more persons or committees.

Under Australian law, the Directors of the Company are subject to certain duties, including to act in good faith in the interests of the company, to act for a proper purpose, not to fetter their discretion, to exercise care, skill and diligence, to avoid conflicts of interest, not to use their position to their advantage, and not to misappropriate company property. Pursuant to section 14.1 of the Company's Constitution, the Company's Board of Directors is to comprise of not less than three and not more than nine Directors (excluding any alternate Directors). The quorum for a meeting of the Board of Directors is two Directors.

Subject to the Company's Constitution, the Company may elect a person as a Director by resolution passed at a general meeting of Shareholders. A Director elected at a general meeting of Shareholders is taken to have been elected with effect immediately after the end of that meeting, unless the resolution by which the Director was appointed or elected specifies a different time.

At the Company's annual general meeting of Shareholders each year, one third of the Directors (other than the Managing Director) or, if their number is not a multiple of three, then the number nearest one-third, must retire from office (and each such Director who retires is eligible to seek re-election at that annual general Shareholders' meeting).

In addition, no Director (except the Managing Director) may hold office without re-election past the longer of (i) the third annual general meeting of Shareholders following their appointment or election, and (ii) three years.

The Directors to retire at each annual general meeting of Shareholders are those who have been in office the longest since their last election. Where persons have become Directors on the same day, unless otherwise agreed amongst themselves, the Directors to retire by rotation will be determined by drawing lots.

The Directors may also at any time appoint a person to be a Director, either to fill a casual vacancy or as an addition to the existing Directors. Any Director so appointed holds office only until the next following annual general meeting of Shareholders and is then eligible for re-election (but will not be taken into account in determining the Directors who are to retire by rotation (if any) at that meeting).

13.2.2 Board Charter

The Company has established a board charter ("**Board Charter**") which sets out:

- (a) the respective roles and responsibilities of the Board of Directors and management; and
- (b) those matters that are expressly reserved to the Board of Directors and those delegated to management.

Under the Board Charter:

- (a) responsibility for the day-to-day operations and administration of the Company is delegated to the Company's Managing Director;
- (b) specific limits on the authority delegated to the Chief Executive Officer/Managing Director and the team of executives as appointed by the Company must be set out in the delegated authorities approved by the Board of Directors; and
- (c) the role of management is to support the Managing Director and implement the running of the general operations and financial business of the Company, including instilling and reinforcing the Company's values, in accordance with the delegated authority of the Board of Directors.

Specific responsibilities reserved for the Board of Directors under the Board Charter include:

- (a) driving the strategic direction of the Company and defining the Company's purpose, ensuring appropriate resources are available to meet objectives and monitoring management's performance;
- (b) approving the Company's statement of values and Code of Conduct to ensure the desired culture within the Company is maintained and monitoring the implementation of such values and culture at all times;
- (c) ensuring that an appropriate framework exists for relevant information to be reported by management to the Board of Directors;
- (d) when required, challenging management and holding it to account;
- (e) appointment and replacement of the Managing Director, other senior executives and the Company Secretary, and the determination of the terms and conditions of their employment (including remuneration and termination);
- (f) approving the Company's remuneration framework and ensuring it is aligned with the Company's purpose, values, strategic objectives and risk appetite;
- (g) monitoring the timeliness and effectiveness of reporting to Shareholders;
- (h) reviewing and ratifying systems of audit, risk management (for both financial and non-financial risk) and internal compliance and control, codes of conduct and legal compliance to minimise the possibility of the Company operating beyond acceptable risk parameters;
- (i) approving and monitoring the progress of major capital expenditure, capital management and significant acquisitions and divestitures;
- (j) approving and monitoring the budget and the adequacy and integrity of financial and other reporting such that the financial performance of the Company has sufficient clarity to be actively monitored;
- (k) approving the annual, half yearly and quarterly accounts;
- (l) approving significant changes to the organisational structure;
- (m) approving decisions affecting the Company's capital, including determining the Company's dividend policy and declaring dividends;
- (n) recommending to Shareholders the appointment of the external auditor as and when their appointment or re-appointment is required to be approved by them (in accordance with the ASX Listing Rules if applicable);
- (o) ensuring a high standard of corporate governance practice and regulatory compliance and promoting ethical and responsible decision making; and

- (p) procuring appropriate professional development opportunities for Directors to develop and maintain the skills and knowledge needed to perform their role as Directors effectively and to deal with new and emerging business and governance issues.

13.2.3 Members of the Board of Directors

As of the date of this Prospectus, the Company's Board of Directors consists of the following members:

Name	Born	Director since/from	Last elected / appointed	Role
Gavin Rezos	13 April 1961	4 September 2019	25 November 2020	Non-Executive Chairman
Dr Francis Wedin	12 March 1986	4 September 2019	4 September 2019 ⁽¹⁾	Managing Director/CEO
Annie Liu	21 August 1979	18 March 2021	29 November 2021	Non-Executive Director
Dr Heidi Grön	16 May 1973	25 March 2021	29 November 2021	Non-Executive Director
Josephine Bush	28 August 1969	16 April 2021	29 November 2021	Non-Executive Director
Ranya Alkadamani	22 February 1982	29 April 2020	29 November 2021	Non-Executive Director

(1) As Managing Director/CEO, Dr Francis Wedin is not required to seek re-election.

Gavin Rezos: Mr Rezos has many years of Australian and international corporate, project finance and investment banking experience and is both a former Head of Legal and Compliance across multiple countries for the HSBC Group and an investment banking Director of HSBC Group with regional roles during his career based in London, Sydney and Dubai. Mr Rezos has held chairman, board and CEO positions of companies in the materials, technology and resources sector in Australia, the United Kingdom, the United States and Singapore and was formerly a non-executive director of Iluka Resources and of Rowing Australia, the peak Olympics sports body for rowing in Australia. He is a principal of Viaticus Capital.

During the past five years, Mr Rezos has been a member of the administrative, management or supervisory bodies or partner of the following companies and partnerships:

Existing mandates:

- Non-Executive Chairman of Resource & Energy Group Limited
- Non-Executive Chairman of Kuniko Limited

Discontinued mandates:

- Executive and non-executive Chairman of Alexium International Group Limited (2010-2018)
- Non-Executive Director of Delaware Thirteen Limited (2015-2017)

Mr Rezos may be contacted at the Company's business address.

Dr Francis Wedin: Dr Wedin is a battery raw materials industry executive, with a diverse career spanning four continents and multiple commodities. Dr Wedin co-founded Vulcan Group's Zero

Carbon Lithium™ Project in Germany. Dr Wedin was previously Executive Director of successful ASX-listed Exore Resources Ltd (ASX:ERX). During this time, he discovered and defined two new JORC lithium resources, on two continents, in under a year. This included Lynas Find, which was bought by Pilbara Minerals to become part of its large Pilgangoora Lithium Project, now in production (ASX:PLS). Dr Wedin has a PhD and BSc (Hons) in geology and mineral exploration, and an MBA in renewable energy. He is a Fellow of the Geological Society, London, and a member of the Australasian Institute of Mining and Metallurgy.

During the past five years, Dr Wedin has been a member of the administrative, management or supervisory bodies or partner of the following companies and partnerships:

Existing mandates:

- Director of Magni Associates Pty Ltd.
- Director of Wedin Pty Ltd.
- Director of VTI Resources Pty Ltd.

Discontinued mandates:

- Executive Technical Director of Exore Resources Limited (2014-2018)

Dr Wedin may be contacted at the Company's business address.

Annie Liu: Ms Liu was the former Head of Battery and Energy Supply Chain at Tesla. She led and managed Tesla's multi-billion-dollar strategic partnerships and sourcing portfolios that support Tesla's Energy and Battery business units including Battery, Battery Raw Material, Energy Storage, Solar and Solar Glass, including raw materials sourcing efforts such as lithium for battery cells. Earlier in her career, Ms Liu held various leading manufacturing and procurement roles at Microsoft launching advanced technology products.

During the past five years, Ms Liu has been a member of the administrative, management or supervisory bodies or partner of the following companies and partnerships:

Existing mandates:

- Principal of Alto Group, Inc.

Discontinued mandates:

None

Ms Liu may be contacted at the Company's business address.

Dr Heidi Grön: Dr Grön is a chemical engineer with more than 20 years' experience in the chemicals industry. Since 2007, Dr Grön has been a senior executive with Evonik, a specialty chemicals company. At Evonik, Dr Grön is currently responsible for Global product safety including impact assessment and development of solutions for the EU Chemicals Strategy for Sustainability as well as the management of Evonik's major investment volumes and production network.

During the past five years, Ms Grön has not been a member of the administrative, management or supervisory bodies or partner of any companies or partnerships.

Dr Grön may be contacted at the Company's business address.

Josephine Bush: Ms Bush is a qualified solicitor, and chartered tax adviser, as well as earning the CFA ESG investing qualification and a sustainable finance certification. She has an MA in Law from Cambridge University. Ms Bush was a senior partner at EY for 14 years specialising in the renewable energy sector. She built and led the UK and Ireland Renewables Tax Practice, led on market leading transactions such as structuring for the initial public offerings of several environmental yieldcos, and developed latterly the EY global renewables business plan. She was a member of the Ernst & Young Power and Utilities Board and UK&I Governance Board.

During the past five years, Ms Bush has been a member of the administrative, management or supervisory bodies or partner of the following companies and partnerships:

Existing mandates:

- Non-executive director of Net Zero Now Ltd
- Non-executive director of Foresight Sustainable Forestry Company Plc
- Non-executive director of Blackfinch Renewable Energy Investment Trust PLC
- Non-executive director of Foresight Forestry Company PLC
- Non-executive director of Next Energy Solar Fund PLC

Discontinued mandates:

- Partner of Ernst & Young Global Limited (2005-2020)

Ms Bush may be contacted at the Company's business address.

Ranya Alkadamani: Ms Alkadamani holds a Master in International Relations and International Communications and a Bachelor in Media from Macquarie University. Ms Alkadamani is currently Founder and CEO of Impact Group International, a strategic communications consultancy focused on advice to impact investors, philanthropists and innovative social impact programs. Ms Alkadamani works extensively in the impact investment space in Australia and internationally and has a strong network of clients and investors in the clean energy and renewables sector. She is also a Director of the Impact Investment Summit, Asia Pacific and an advisory board member at Murdoch University. Ms Alkadamani was formerly Strategic Communications and External Affairs Director of Andrew Forrest's Minderoo Foundation and Minderoo Group, Press Secretary to former Australian Prime Minister, Kevin Rudd during his time as Australian Foreign Minister and a spokesperson for the Australian Department of Foreign Affairs and Trade.

During the past five years, Ms Alkadamani has been a member of the administrative, management or supervisory bodies or partner of the following companies and partnerships:

Existing mandates:

- Chief Executive Officer of Impact Group International

Discontinued mandates:

None

Ms Alkadamani may be contacted at the Company's business address.

13.2.4 Committees of the Board of Directors

Under the Company's Constitution, the Board of Directors can create committees in accordance with applicable laws.

As at the date of this Prospectus, the Company has a People and Performance Committee and an Audit, Risk and ESG Committee. Due to the current size and stage of development of the Company, the Company does not currently have a nomination committee. The Company has, however, established a charter to define the nomination committee's function, composition, mode of operation, authority and responsibilities, which (subject to replacement or repeal) will apply to any nomination committee established by the Company in the future.

13.2.4.1 People and Performance Committee

The role of the Company's people and performance committee ("**People and Performance Committee**") is to provide assistance and recommendations to the Board of Directors in fulfilling its responsibilities in overseeing the:

- (a) overall remuneration strategy of the Company and its specific application to the Managing Director and direct reports, and the remuneration of non-executive Directors;
- (b) ensuring that the executive remuneration strategy demonstrates a clear relationship between key executive performance and remuneration;
- (c) recommending to the Board of Directors the remuneration of executive Directors;
- (d) ensuring incentives for non-executive directors do not conflict with their obligation to bring an independent judgement to matters before the Board of Directors;
- (e) reviewing the Company's recruitment, retention and termination policies and procedures for senior management; and
- (f) diversity strategy, policy, and practices of the Company.

The People and Performance Committee will also make decisions on behalf of the Board of Directors where such authority has been expressly delegated.

The People and Performance Committee comprises:

- (a) Gavin Rezos;
- (b) Ranya Alkadamani (Chair); and
- (c) Annie Liu.

The Company has established a charter ("**People and Performance Committee Charter**") to set out:

- (a) the specific responsibilities delegated by the Board of Directors to the People and Performance Committee; and
- (b) the People and Performance Committee's objectives, authority, responsibilities, composition and operation.

Under the People and Performance Committee Charter, the People and Performance Committee is intended to meet at least three times in each financial year.

13.2.4.2 Audit, Risk and ESG Committee

The role of the Company's audit, risk and ESG committee ("**Audit, Risk and ESG Committee**") is to assist the Board of Directors in monitoring and reviewing any matters of significance affecting the Company's financial reporting, compliance and its impacts on environment, social and governance matters.

The Audit, Risk and ESG Committee comprises:

- (a) Gavin Rezos;
- (b) Dr Heidi Grön; and
- (c) Josephine Bush (Chair).

The Company has established a charter ("**Audit, Risk and ESG Committee Charter**") to set the risk parameters and define the Audit, Risk and ESG Committee's function, composition, mode of operation, authority and responsibilities.

The Audit, Risk and ESG Committee Charter sets out (among other things) the specific responsibilities of the Audit, Risk and ESG Committee, including with respect to the internal audit function, relationship with external auditors and risk management.

Under the Audit, Risk and ESG Committee Charter, the Audit, Risk and ESG Committee is to meet at least twice in each financial year and additionally as circumstances may require for it to undertake its role effectively.

13.2.5 Remuneration of the members of the Board of Directors

The Directors are paid out of the funds of the Company, by way of remuneration for their services as Directors.

13.2.5.1 Resolution on the remuneration of the members of the Board of Directors

The total maximum remuneration of non-executive Directors is initially set by the Constitution and subsequent variation is by ordinary resolution of Shareholders in general meeting in accordance with the Constitution, the Australian Corporations Act and the ASX Listing Rules, as applicable. The total aggregate fixed sum will be divided between the Directors as the Directors determine from time to time or, failing agreement between them, in equal shares. The current total maximum remuneration for non-executive Directors has been set at A\$650,000 per annum, as approved by Shareholders at the Company's general meeting of Shareholders held on 24 June 2021.

The remuneration of an executive Director will be decided by the Board of Directors, without the affected executive Director participating in that decision-making process. Non-executive Directors may not be paid (as part or whole of their remuneration) a commission on, or a percentage of, profits, or a commission on, or a percentage of, operating revenue, and no executive Director may be paid (as whole or part of their remuneration) a commission on, or percentage of, operating revenue.

In addition, a Director may be paid fees or other amounts (subject to any necessary Shareholder approval) as the Directors determine where a Director (being called upon) performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director.

Directors are also entitled to be paid reasonable travelling, accommodation and other expenses incurred by them respectively in or about the performance of their duties as Directors.

13.2.5.2 Remuneration Policy

Vulcan Group's board remuneration policy is to ensure the remuneration package properly reflects the person's duties and responsibilities and that remuneration is competitive in attracting, retaining and motivating people of the highest quality. The Company has recently established a People and Performance Committee (see section "13.2.4.1 People and Performance Committee"), the purpose of which is (among other things) to provide assistance and recommendations to the Board of Directors in fulfilling its responsibilities in overseeing the overall remuneration strategy of the Company and its specific application to the Managing Director and direct reports, and the remuneration of non-executive Directors.

The pay and reward framework for key management personnel may consist of the following areas:

- (a) Fixed Remuneration – Base Salary
- (b) Variable Short-Term Incentives
- (c) Variable Long-Term Incentives

The combination of these would comprise the key management personnel's total remuneration.

13.2.5.2.1 Fixed Remuneration – Base Salary

The fixed remuneration for each key management personnel ("**KMP**"), including the members of the Board of Directors, is influenced by the nature and responsibilities of each role and knowledge, skills and experience required for each position. Fixed remuneration provides a base level of remuneration which is market competitive and comprises a base salary inclusive of statutory superannuation or equivalent in the place of employment. It is structured as a total employment cost package. Key management personnel are offered a competitive base salary that comprises the fixed component of pay and rewards. External remuneration consultants may provide analysis and advice to ensure base pay is set to reflect the market for a comparable role.

No paid external advice was taken during the financial year 2021. Determination of remuneration was based upon publicly available data, surveys and trends for comparable roles in Australia and Europe, published by remuneration consultants. Base salary for key management personnel is reviewed annually to ensure the KMP's pay is competitive with the market. The pay of key

management personnel is also reviewed on promotion. There is no guaranteed pay increase included in any key management personnel's contract. For the financial year 2022, Vulcan Group has retained the services of a dedicated remuneration advisor.

13.2.5.2.2 Variable Remuneration – Short-Term Incentives (STI)

Discretionary cash bonuses may be paid to KMP annually, subject to the requisite Board of Directors and shareholder approvals (where applicable). Bonus payments were made during the financial year. For the financial year 2021, KMP's have been set milestone-based key performance indicators which, if achieved, will lead to cash bonus payments.

13.2.5.2.3 Variable Remuneration – Long-Term Incentives (LTI)

Vulcan Group grants long term incentives to its officers, employees and contractors through the issue of Shares, Performance Rights and/or options under the Company's incentive plans.

The purpose of Vulcan Group's incentive plans is to:

- reward officers, employees and contractors of Vulcan Group;
- assist in the retention and motivation of employees of Vulcan Group;
- incentivise Vulcan Group employees to grow shareholder value (by providing them with an opportunity to receive an ownership interest in the Company); and
- provide Directors with the opportunity to sacrifice a percentage of their Director's fees for a given financial year in exchange for the provision of Shares.

As at 11 February 2022, 8,656,324 Performance Rights and no options are on issue, which have been granted in accordance with the Company's incentive plans as described further below.

2018 Incentive Plan

On 30 November 2018, shareholders of the Company approved a performance rights plan under which the Board of Directors was provided with the discretion (subject to any requisite shareholder approval) to grant Performance Rights to eligible participants (including KMP) ("**2018 Incentive Plan**"). The 2018 Incentive Plan applies to Performance Rights granted prior to 8 October 2021.

Performance Rights granted under the 2018 Incentive Plan only vest if the applicable performance hurdles determined by the Board of Directors from time to time are achieved.

A summary of the key terms of the 2018 Incentive Plan is contained in the Company's notice of 2018 annual general meeting dated 31 October 2018, a copy of such notice of meeting is available on the Company's website at <https://v-er.eu/investor-centre/> or on ASX's website at www.asx.com.au.

2021 Incentive Plan

On 8 October 2021, the Company adopted a new incentive awards plan, under which the Board of Directors may (in their discretion) invite full or part time employees and directors of, and contractors to, the Company or associated bodies corporate to apply for the issue of Shares, Performance Rights or options ("**2021 Incentive Plan**"). The 2021 Incentive Plan was approved by shareholders on 29 November 2021.

As with the 2018 Incentive Plan, each Performance Right and option granted under the 2021 Incentive Plan will entitle the holder to subscribe for and be issued one Share upon the vesting and exercise of the security (unless the 2021 Incentive Plan or the specific invitation provides otherwise). Unless otherwise waived by the Board of Directors, Performance Rights and options will only vest and become exercisable if the applicable vesting conditions (if any) have been satisfied and the Board of Directors has notified the holder of that fact. options awarded under the Incentive Plan may be subject to payment of an "option exercise price".

Subject to applicable laws, the quantum of Performance Rights and options to be granted to eligible participants, as well as the vesting conditions (if any) applying to Performance Rights and options, will be determined by the Board of Directors from time to time (including having regard to the participant's role and responsibilities in Vulcan Group).

Performance Rights and options granted under the 2021 Incentive Plan will lapse (and therefore will not be able to vest and become exercisable) in certain circumstances specified in the 2021 Incentive Plan, including (among other things) where:

- the vesting conditions are not met or become incapable of being met (and are not waived by the Board of Directors);
- the holder ceases to be an eligible participant (for example, by ceasing to be an employee of Vulcan Group) prior to the vesting of the Performance Right/option, unless the Board of Directors exercises its discretion to vest the Performance Right/option or allow the Performance Right/option to remain unvested; or
- the Board of Directors deems that the Performance Rights/options should lapse due to the fraud, dishonesty or other improper behaviour of the holder under the rules of the Incentive Plan.

A summary of the key terms of the 2021 Incentive Plan is contained in the Company's notice of 2021 annual general meeting dated 22 October 2021, a copy of such notice of meeting is available on the Company's website at <https://v-er.eu/investor-centre/> or on ASX's website at www.asx.com.au.

13.2.5.3 Remuneration of the members of the Board of Directors in financial year ended 30 June 2021

The aggregate compensation made to Directors of the Company in the financial year ended 30 June 2021 is set out below.

	Short-term Employee Benefit			Post-Employment	Share Based Payments	Total
	Salary & Fees	Non-monetary benefits	Others	Super-annuation	Shares & Rights	
	A\$	A\$	A\$	A\$	A\$	A\$
Non-Executive Directors						
Mr Gavin Rezos	113,150 ⁽¹⁾	-	-	-	1,170,356 ⁽²⁾	1,283,506
Ms Ranya Alkadamani	31,963	-	-	3,036	449,279	484,278
Dr Heidi Grön	13,542	-	-	-	1,010	14,552
Ms Annie Liu	14,249	-	-	-	1,010	15,259
Ms Josephine Bush	10,725	-	-	-	1,010	11,735
Former Executive Directors						
Dr Horst Kreuter ⁽³⁾	230,302	-	19,239	-	2,000,344	2,249,885
Former Non-Executive Directors						
Dr Katharina Gerber ⁽⁴⁾	5,000	-	-	-	-	5,000
Managing Director/CEO						
Dr Francis Wedin	300,417	-	30,000	31,389	-	361,806
Total	719,348	-	49,239	34,425	3,623,009	4,426,021

⁽¹⁾ Fees paid to Viaticus Capital Pty Ltd, a company of which Mr Rezos is a director and whose sole shareholder is a discretionary family trust of which Mr Rezos is one of the beneficiaries.

⁽²⁾ Shares and Performance Rights issued to Vivien Enterprises Pte Ltd, a company whose sole shareholder is the spouse of Mr Rezos.

⁽³⁾ Resigned as a Director on 25 March 2021 (but continues to hold offices, including as advisor of the Board of Directors, within Vulcan Group).

⁽⁴⁾ Resigned as a Director on 1 September 2020.

Under the Australian Corporations Act, shareholders of a listed company have the right to participate in a non-binding vote to approve the adoption of the remuneration report of the company, at each

annual general meeting. The remuneration report is included in the directors' report and is required to contain a discussion of the Board of Directors' policy in relation to remuneration of key management personnel of the Company.

13.2.6 D&O Insurance

The Company has indemnified the Directors and certain officers for costs incurred, in their capacity as director or officer, for which they may be held personally liable, except where there is a lack of good faith. During the financial year ended 30 June 2021, the Company paid a premium in respect of a contract to insure the Directors and Executives of the Company against a liability to the extent permitted by the Australian Corporations Act. The contract of insurance prohibits disclosure of the nature of the liability and the amount of the premium.

13.2.7 Pension payments

The total amounts set aside or accrued by Vulcan Group to provide pension and other retirement benefits amount to A\$54,498 (superannuation Australia) in the financial year ended 30 June 2021.

13.2.8 Shares, options, Performance Rights and Performance Shares held by members of the Board of Directors

The following table sets out each current Director's relevant interest in Shares and other securities of the Company as at the date of this Prospectus.

Director	Ordinary Shares	Options	Performance Rights	Performance Shares
Dr Francis Wedin	16,458,561 ⁽¹⁾	-	-	-
Annie Liu	73,080 ⁽²⁾	-	12,896 ⁽³⁾	-
Heidi Grön	1,800	-	12,896	-
Josephine Bush	9,399	-	12,896	-
Ranya Alkadamani	176,000 ⁽⁴⁾	-	100,000 ⁽⁴⁾	-
Total	16,718,840	-	138,688	-

⁽¹⁾ Includes 812,500 Shares held by Magni Associates Pty Ltd. Katy and Francis Wedin are the directors of Magni Associates Pty Ltd and it is 100% owned by Wedin Pty Ltd as trustee for the Wedin Family Trust.

⁽²⁾ Includes 22,080 Shares held by Alto Group Inc and 51,000 Shares held by Alto Group Hong Kong Limited, both companies being related parties to Ms Liu.

⁽³⁾ Held by Alto Group Inc.

⁽⁴⁾ Held by Impact Group International Investments Pty Ltd ATF the Alkadamani Investment Trust, a related party of Ms Alkadamani.

7,598,727 Shares and 1,000,000 Performance Rights are held by Vivien Enterprises Pte Ltd. The sole shareholder of Vivien Enterprises Pte Ltd is Joanne Ellen Rezos, the spouse of Gavin Rezos, and Vivien Enterprises Pte Ltd is an associate of Mr Gavin Rezos.

13.2.9 Potential conflicts of interest of the members of the Board of Directors

Under the Australian Corporations Act, a director of a company who has a material personal interest in a matter that relates to the affairs of the company generally is required to give the other directors notice of that interest. If the company is a public company (as the Company is), that director must not be present at a meeting where the matter is being considered or vote on the matter, unless the other directors or ASIC approve, or the matter is not one which requires disclosure under the Australian Corporations Act.

Under the Australian Corporations Act, failure of a director to disclose a material personal interest, or voting despite a material personal interest, does not affect the validity of a contract in which the director has an interest. A company's directors, when entering into transactions with the company, are subject to the common law and statutory duties to avoid conflicts of interest.

Other than set out in section 15 of this Prospectus, there are no conflicts of interest or potential conflicts of interest of the members of the Board of Directors as regards the Company on the one side and their private interests, membership in governing bodies of companies, or other obligations on the other side.

13.2.10 Certain information on the members of the Board of Directors

None of the members of the Board of Directors has been convicted in relation to fraudulent offences over the last five years.

Except as disclosed above, no member of the Board of Directors has been associated in his or her capacity as a member of an administrative, management or supervisory board, as a partner with unlimited liability, founder or senior manager with any bankruptcies, receiverships or liquidations or companies put into administration over the last five years. No public incriminations and/or sanctions have been brought against any of the members of the Board of Directors by statutory or regulatory authorities (including designated professional bodies) in the last five years nor have these individuals ever been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conduct of the affairs of any company.

There are no family relationships between the members of the Board of Directors.

13.3 General meetings of shareholders

13.3.1 General rules on meetings of shareholders

13.3.1.1 Calling a general meeting

A general meeting of Shareholders may be called from time to time by the Board of Directors or by individual directors.

In addition, Shareholders with at least 5% of the votes that may be cast at a general meeting of Shareholders may request a general meeting. If, following such a request by Shareholders, the Directors do not call a general meeting within 21 days, Shareholders holding 50% of the votes of all of the Shareholders who requested the general meeting may convene and hold a general meeting.

13.3.1.2 The annual general meeting

The Company must hold its annual general meeting of Shareholders at least once in each calendar year and within five months after the end of its financial year.

13.3.1.3 Notice of general meetings

As a company admitted to the official list of ASX, notice of a general meeting of Shareholders must be given to Shareholders at least 28 days before the date of the meeting. Under the Company's Constitution, a notice of meeting is taken as given on the day after the day on which it was posted. When calculating the notice period, the day on which the notice is sent and the day of the meeting are disregarded.

The notice of meeting must include the date and time of the meeting and the general nature of the business of the meeting. Notice of the meeting must be provided to all Shareholders, Directors, alternative Directors and any auditors of the Company.

13.3.1.4 Quorum at a general meeting

A quorum for a general meeting of Shareholders is two Shareholders attending in person, or by proxy, attorney or corporate representative.

13.3.1.5 Passing resolutions at a general meeting of Shareholders

Subject to any rights or restrictions for the time being attached to any class or classes of Shares, at a general meeting of Shareholders:

- on a show of hands, each Shareholder who is present in person or by proxy, attorney or corporate representative has one vote; and

- on a poll, each Shareholder who is present in person or by proxy, attorney or corporate representative has one vote in respect of each Share held by that person, or in respect of which that person is appointed a proxy, attorney or corporate representative (but, in respect of partly paid shares, will have such number of votes as bears the same proportion to the total of such shares registered in the shareholders' name as the amount paid (not credited) bears to the total amounts paid and payable (excluding amounts credited)).

Resolutions at a general meeting of Shareholders are passed with a simple majority of the votes cast unless a higher majority (such as in respect of a "special resolution") or further requirements are provided for by the Australian Corporations Act, the ASX Listing Rules or the Company's Constitution.

A special resolution must be passed by at least 75% of the votes cast by Shareholders entitled to vote on the resolution.

Matters that require shareholder approval (by a resolution passed by a simple majority) under the Australian Corporations Act include:

- electing Directors to, and removing Directors from, the Company's Board of Directors,
- appointing the Company's auditor,
- entering into transactions that give related parties (including Directors) a financial benefit, and
- certain types of equal reductions in capital or equal share buy-backs.

The ASX Listing Rules also require shareholder approval for (among other things):

- the Company to issue, or agree to issue, any Shares to a related party (including a Director),
- subject to specified exceptions, the Company to issue, or agree to issue, more than 15% of the Company's total number of securities (calculated according to a prescribed equation) in any rolling 12-month period (see section 12.5),
- increase the total aggregate amount of directors' fees payable to all of the Company's Non-Executive Directors.

In addition, the Australian Corporations Act requires certain matters to be resolved by a company by special resolution, including:

- the change of name of the Company,
- modification or repeal of the Company's Constitution,
- the conversion of the Company from one type or form to another,
- a selective reduction of capital or selective share buy-back, and
- a decision to wind up the Company voluntarily.

13.3.1.6 Persons entitled to attend general meetings

A general meeting of Shareholders can be attended by:

- Shareholders, in person or by proxy, attorney or corporate representative;
- Directors and public officers of the Company;
- the Company's auditor; and
- any other person or persons approved by the chairman of the meeting.

13.3.1.7 Chairman

At each general meeting of Shareholders, the chairman of the Board of Directors will, if willing, preside as chairman of the meeting. The chairman of the meeting is responsible for the general conduct and procedures to be adopted at the meeting.

If the Directors have not elected a chairman of the Board of Directors or the chairman (or, in his absence, the vice chairman) is not present within 15 minutes after the time appointed for holding the general meeting of Shareholders or is unwilling to act:

- (a) the Directors present at the meeting may elect a chairman of the meeting; or
- (b) if no chairman is so elected by the Directors present, the Shareholders present may elect one of the Shareholders to be the acting chairman of the meeting.

13.3.1.8 Adjournment

The chairman may adjourn a meeting of Shareholders from time to time and from place to place, but no business may be transacted on the resumption of any adjourned Shareholders' meeting other than the business left unfinished at the meeting from which the adjournment took place.

A poll cannot be demanded on any resolution concerning the adjournment of a general meeting except by the chairman of the meeting.

13.3.1.9 Method of voting and demand for poll

Unless a poll is demanded, a resolution put to vote at a meeting of Shareholders must be decided on a show of hands.

A poll may be demanded on any resolution at a meeting of Shareholders (except a resolution concerning the election of the chairman of a meeting), before or immediately after the results of the vote on the resolution on a show of hands, by:

- (a) the chairman of the meeting;
- (b) at least five Shareholders present in person or by proxy, attorney or corporate representative having the right to vote on the resolution; or
- (c) any one or more Shareholders holding not less than 5% of the total voting rights of all Shareholders having the right to vote on the resolution;

In addition, under the Company's Constitution, the chairman of the meeting must demand a poll if, having regard to the number of votes cast by proxy and direct voting, the outcome of the poll would or may be different from the outcome of a show of hands.

Unless a poll is demanded, the Chairman's declaration of a decision on a show of hands is conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favour of or against the resolution.

13.3.1.10 Cancellation and postponement of general meetings

The Directors may at any time postpone a meeting of Shareholders by giving written notice to ASX. If a meeting of Shareholders is postponed for one month or more, the Company must give new notice of the postponed meeting. The only business that may be transacted at a general meeting the holding of which is postponed is the business specified at the original meeting.

In addition, the Directors may, by a resolution passed by a majority of Directors, cancel a meeting of Shareholders that has been called by the Directors by providing Shareholders with not less than two days' notice of such cancellation.

A meeting of Shareholders called following Shareholder requisition in accordance with the Australian Corporations Act may only be cancelled by the Directors if the application was requisition has been withdrawn by Shareholders.

13.3.1.11 Proxies

A Shareholder who is entitled to cast two or more votes at a meeting may appoint up to two proxies to attend and vote at the meeting on the Shareholder's behalf. The Company's Constitution contains provisions specifying the manner of lodgement of proxy appointment instruments.

A proxy need not be a Shareholder, and may be an individual or a corporation.

Where a Shareholder appoints two proxies or attorneys to vote at the same general Shareholders' meeting:

- (a) on a show of hands, if more than one proxy or attorney attends, neither may vote; and
- (b) on a poll, each proxy or attorney may only exercise votes in respect of those Shares or voting rights the proxy or attorney represents (and if the Shareholder has appointed two proxies and the appointment does not specify the proportion of votes that each proxy may exercise, each proxy may exercise half the votes).

13.3.1.12 Appointment of proxy

The appointment of a proxy is effective only if the instrument effecting the appointment is received by the Company at its registered office or such other place specified in the notice not less than:

- (a) 48 hours before the time at which the meeting is scheduled to commence; or
- (b) for an adjourned meeting, 48 hours before the resumption of the meeting.

13.3.1.13 Notice of revocation of proxy

Unless the Company has received a notice of revocation of a proxy before commencement of a meeting, a vote cast at the meeting by the appointed proxy is valid, even if, before the proxy votes, the Shareholder has:

- (a) sold their shares;
- (b) revoked the appointment of that proxy; or
- (c) died or become of unsound mind.

The appointment of a proxy is not revoked by the appointing Shareholder attending and taking part in the meeting, unless the appointing Shareholder actually votes at the meeting on the resolution for which the proxy is proposed to be used, in which case the proxy's appointment is deemed to be revoked with respect to voting on that resolution.

Generally, neither Australian law nor the Company's Constitution restrict the right of non-resident or foreign shareholders to hold Shares or to exercise any voting rights attached to these Shares.

13.3.1.14 Direct Voting

Under the Company's Constitution, the Board of Directors may determine that Shareholders may cast votes to which they are entitled on any or all of the resolutions (including any special resolution) proposed to be considered at, and specified in the notice convening, a general meeting of Shareholders by delivering a notice of the Shareholder's voting intention to the Company by post, fax, electronic or other means approved by the Board of Directors and otherwise in accordance with the Company's Constitution and regulations, rules and procedures made by the Board of Directors ("**Direct Voting**").

If the Board of Directors determines that votes may be cast by direct vote, the Board of Directors may make such regulations as it considers appropriate for the casting of direct votes, including regulations for:

- (a) the form, method and manner of voting by direct vote; and
- (b) the time by which the votes of Shareholders to be cast by direct vote must be received by the Company in order to be effective.

If the Board of Directors determines to allow voting by direct vote on a resolution at a general meeting of Shareholders, the notice of meeting must inform Shareholders of their right to vote by direct vote in respect of that resolution.

Direct votes are not counted if a resolution is decided on a show of hands.

The Company's Constitution sets out further information about voting by direct vote.

13.3.2 Virtual Shareholders' Meetings

Under the Company's Constitution, a general meeting of Shareholders can be held at two or more venues simultaneously using any technology that gives Shareholders as a whole a reasonable opportunity to participate.

Under the Australian Corporations Act, the Company is permitted to hold a "hybrid" general meeting of Shareholders (where the meeting is held both at a physical location and also through an online facility), provided that Shareholders as a whole are given a reasonably opportunity to participate.

In addition, the Australian legislature has recently approved temporary legislation (which is due to expire on 1 April 2022) which permits companies to hold purely virtual general meetings (that is, where the meeting does not have any physical location, and can be attended only through one or more online facilities), provided certain criteria are met (relevantly, that shareholders are given a reasonable opportunity to ask questions and participate in the meeting). It is intended that this legislation will be replaced with permanent provisions governing the law relating to virtual meetings. Until that legislation is finalised, it is not possible to say whether purely virtual Shareholder meetings will be permitted in Australia. The current draft legislation, which has not yet been approved, provides that virtual Shareholder meetings are only permitted if expressly permitted by the company's constitution.

13.4 Corporate Governance

13.4.1 Australia

13.4.1.1 Recommendations published by the ASX Corporate Governance Council

As a company admitted to the official list of ASX, the Company is subject to the Corporate Governance Principles and Recommendations ("**Recommendations**") published by the ASX Corporate Governance Council ("**Council**"). The Recommendations set out recommended corporate governance practices for entities listed on the ASX that, in the Council's view, are likely to achieve good corporate governance outcomes and meet the reasonable expectations of most investors in most situations. The Council recognises, however, that different entities may legitimately adopt different governance practices, based on a range of factors, including their size, complexity, history and corporate culture. For that reason, the Recommendations are not mandatory and do not seek to prescribe the corporate governance practices that a listed entity must adopt.

Under the Recommendations, if the Board of Directors considers that a Recommendation is not appropriate to its particular circumstances, it is entitled not to adopt it. If it does so, however, it must explain why it has not adopted the recommendation – referred to as the "if not, why not" approach.

Each year the Company is required to give to ASX a corporate governance statement, which sets out the extent to which the Company has followed the Recommendations. If the Company has not followed a Recommendation for any part of the reporting period, its corporate governance statement must separately identify that Recommendation and the period during which it was not followed and state its reasons for not following the Recommendation and what (if any) alternative governance practices it adopted in lieu of the Recommendation during that period.

A copy of the Company's corporate governance policies and charters, and its most recent Corporate Governance Statement, are available on the Company's website at <https://v-er.eu/corporate-directory-and-governance/>.

The Board of Directors consider that the Company has established corporate governance policies and procedures that are appropriate in light of the Company's size, nature and activities. The Company's Directors are committed to conducting the Company's business in an ethical manner and in accordance with the highest standards of corporate governance.

13.4.1.2 Code of Conduct

The Company has established a code of conduct ("**Code of Conduct**") to provide a framework for decisions and actions in relation to ethical conduct in employment. The Code of Conduct underpins the Company's commitment to integrity and fair dealing in its business affairs and to a duty of care to all employees, clients and stakeholders.

Pursuant to the Code of Conduct, the Company's primary objective is to build a successful exploration and production company that delivers material benefits to Shareholders and contributes to the development of the regions in which it works, whilst acting lawfully, ethically and responsibly.

13.4.1.3 Securities Trading Policy

A summary of Vulcan Group's Securities Trading Policy is set out in section "*12.13.1 Australia*".

13.4.2 Germany

As a public company limited by shares incorporated in Australia under the Australian Corporations Act and governed by the laws of Australia, the Company is not required to adhere to the German corporate governance regime applicable to stock corporations organised in Germany in addition to the Australian corporate governance regime.

14. MAJOR SHAREHOLDERS

The following table presents an overview of the Shareholders that have a relevant interest* in 5% or more of the Company's total issued Shares as at the date of this Prospectus, based on substantial holder notices issued to the Company in accordance with section 671B of the Australian Corporations Act:

Name of the shareholder	Shares	%
Dr Francis Wedin**	16,458,561	12.51
Vivien Enterprises Pte Ltd***	7,598,727	5.77
HPPL and subsidiaries of HPPL****	7,424,534	5.64
Free float/others	100,163,268	76.08
Total	131,645,090	100

* Under Australian law, a person has a relevant interest in a security if, among other things, the person is the holder of that security, has the power to dispose of, or control the exercise of a power to dispose of, that security, has the power to exercise, or control the exercise of, the right to vote in respect of that security, or controls or has voting power above 20% of a body corporate that has a relevant interest that security. For further information, see section "12.8 Regulation of Australian takeovers".

** The Shares in which Dr Francis Wedin holds a relevant interest comprise (i) 15,646,061 Shares held by Dr Wedin directly, and (ii) 812,500 Shares held by Magni Associates Pty Ltd. Katy and Francis Wedin are the directors of Magni Associates Pty Ltd and it is 100% owned by Wedin Pty Ltd as trustee for the Wedin Family Trust.

*** The sole shareholder of Vivien Enterprises Pte Ltd is Joanne Ellen Rezos, the spouse of Gavin Rezos, and Vivien Enterprises Pte Ltd is an associate of Mr Gavin Rezos.

**** Under Australian law, each of Georgina Hope Rinehart and Bianca Hope Rinehart (in her capacity as trustee of the Hope Margaret Hancock Trust) are also considered to have a relevant interest in those Shares because each of them has greater than 20% of the voting power in HPPL.

15. TRANSACTIONS AND LEGAL RELATIONSHIPS WITH RELATED PARTIES

The following describes the material transactions and legal relationships that existed between the Company on the one hand and related parties (as defined in IAS 24) on the other hand in the financial years ended 30 June 2021, 2020, and 2019, and in the current financial year up to the date of the Prospectus.

According to IAS 24, related parties of the Company are entities or persons related to the Company, including:

- companies that are controlled by the Company, in which the Company has an interest that gives it a significant influence, or over which it has joint control;
- companies that are associated with the Company within the meaning of IAS 28, and that are not consolidated by Company, as well as joint ventures in which the Company participates;
- principal shareholders whose shares give them control, joint control or a significant influence over the Company, as well as all companies and businesses over which these shareholders can exert a controlling influence and/or in which they hold more than 50% of the voting rights; and
- members of the Board of Directors (or their close family members), as well as entities controlled or significantly influenced by members of the Board of Directors (or their close family members), or in which those persons directly or indirectly hold significant voting power.

None of the related party transactions described below form part of the revenue of the Company.

15.1 Transactions and relationships with members of the Board of Directors

During the financial years ended 30 June 2021, 2020, and 2019, and in the current financial year up to the date of the Prospectus, Shares of the Company were placed with members of the Board of Directors as described in section "12.2 Development of the share capital over the past three years".

In the current financial year up to the date of the Prospectus, the members of the Board of Directors received an aggregate remuneration of EUR 934,000. For details regarding the purchase by the Vulcan Group of GGH, Gec-co and GeoT from Dr Horst Kreuter, member of the Board of Directors of the Company between December 2019 and March 2021, and Thorsten Weimann (not a member of the Board of Directors), see "9.1.2.1 Global Geothermal Holding UG" and "9.1.2.2 gec-co Global Engineering & Consulting-Company GmbH and GeoThermal Engineering GmbH".

During the financial year ended 30 June 2021, the members of the Board of Directors (including former Directors that have resigned) received an aggregate remuneration of A\$4,426,021.

During the financial year ended 30 June 2020, the members of the Board of Directors received an aggregate remuneration of A\$743,738. In addition, Dr Horst Kreuter was paid A\$43,474 in consulting fees, prior to becoming a member of the Board of Directors of the Company. On 4 September 2019, 13,200,000 Performance Shares were issued to Dr Francis Wedin and Dr Horst Kreuter in their capacity as vendors in connection with the acquisition by Vulcan Group of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd., which were converted into Shares on a one for one basis on 17 December 2021, as a result of the relevant milestone being reached upon Vulcan Group recently entering into the offtake agreements with Stellantis, Volkswagen, Renault Group and Umicore (see section "9.15.5 Lithium Supply Agreements").

During the financial year ended 30 June 2019, the members of the Board of Directors received an aggregate remuneration of A\$322,136.

For a description of the current remuneration of the members of the Board of Directors, please refer to section "13.2.5.3 Remuneration of the members of the Board of Directors in financial year ended 30 June 2021".

15.2 Transactions and relationships with related parties of members of the Board of Directors

During the financial years ended 30 June 2021, 2020, and 2019, and in the current financial year up to the date of the Prospectus, Shares of the Company were placed with related parties of members of the Board of Directors as described in section "12.2 *Development of the share capital over the past three years*".

In the current financial year up to the date of the Prospectus, payments for consulting fees of EUR 60,000 were made to Alto Group Inc., a related party of Ms Annie Liu. A capital raising fee relating to the placement of shares to sophisticated investors on 6 February 2021 in an amount of EUR 32,000 was paid to Viaticus Capital Pty Ltd, a company related to Mr Rezos.

During the financial year ended 30 June 2021, payments for corporate advisory services outside of Australia of A\$45,000 (2020: A\$73,185) were made to Viaticus Capital, a related party of Mr Rezos. Viaticus Capital also received fees of A\$49,256 (2020: A\$18,000) for capital raising fees associated with a placement undertaken in the financial year ended 30 June 2021. The corporate advisory services agreement with Viaticus Capital entered into in 2018 was amended by mutual agreement during the reporting period to exclude any capital raising, M&A or related services. Payments for consulting fees of A\$43,044 (2020: A\$0) were made to Alto Group Inc., a related party of Ms Annie Liu. The outstanding balance to Alto Group Inc. at 30 June 2021 was A\$17,493 (2020: A\$0). In addition, payments for engineering services of EUR 736,609 were made to GeoT, a related party of Dr Horst Kreuter, member of the Board of Directors of the Company between December 2019 and March 2021.

During the financial year ended 30 June 2020, payments for corporate advisory services outside of Australia of A\$73,185 were made to Viaticus Capital, a related party of Mr Rezos. Viaticus Capital also received fees of A\$18,000 for capital raising fees associated with a placement undertaken in June 2020. There was A\$33,000 trade payable/accrual balance at 30 June 2020. In addition, payments for engineering services of EUR 77,035 were made to GeoT, a related party of Dr Horst Kreuter.

16. RECENT DEVELOPMENTS AND OUTLOOK

16.1 Recent developments

In the period after 30 September 2021, the Company focused on the preparations for this FSE Listing, as well as on its further business operations including, in particular, the implementation of Vulcan Group's Zero Carbon Lithium™ Project.

Noteworthy developments in connection with Vulcan Group's business operations since 30 September 2021 include the conclusion of agreements for the sale of battery grade lithium hydroxide with five customers. Between October 2021 and the date of this Prospectus, Vulcan Group has entered into lithium hydroxide offtake agreements with Umicore, Renault, Stellantis, Volkswagen and LG Energy. Together, the volumes of lithium hydroxide to be delivered under these five offtake agreements exceed the estimated 40,000 metric tonnes referenced as annual production target in Vulcan Group's PFS upon the completion of Phase One and Phase Two of the Zero Carbon Lithium™ Project. In addition, in November 2021, Vulcan Group concluded a binding offtake agreement with geox regarding the provision to Vulcan Group of brine from the geothermal plant operated by geox (see section "9.5.5 Offtake Agreements").

Moreover, in November 2021, the Company acquired two deep drill rigs as part of Vulcan Group's Zero Carbon Lithium™ Project which can drill to the target depth required for deep geothermal energy wells in the Upper Rhine Valley, Germany.

In particular, in December 2021, Vulcan Group completed the acquisition of Natürlich Insheim which owns and operates the Insheim Plant and holds an exploitation licence granting it the exclusive right to geothermal energy from brine extracted from the site of the Insheim Plant, for a preliminary purchase price of EUR 32.7 million, subject to certain price adjustments (expected final purchase price approximately EUR 31.3 million).

On 4 January 2022, Vulcan Group announced it had been granted four new exploration licenses for geothermal energy and lithium in the Upper Rhine Valley, Germany. The licences cover 325km² of area which is considered by Vulcan Group to be prospective for deep geothermal and lithium brine, and increases Vulcan Group's granted license area by nearly 50% to over 1,000km². In January 2022, Vulcan Group also acquired an exploration licence encompassing an area of 11.46 km² (1,146 hectares) in the Cesano geothermal field located within the Monti Sabatini volcanic region in Italy approximately 20km from the city of Rome. On 11 January 2022, Vulcan Group signed a term sheet agreement with Nobian, a European producer of essential chemicals which maintains operations at the Höchst Chemical Park, to 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.

Other noteworthy developments in the period after 30 September 2021 in connection with Vulcan Group include certain issuances of Shares as described in section "12.2.2 Selected current issuances of Shares".

Apart from this, there have been neither significant changes to Vulcan Group's financial performance nor to Vulcan Group's financial position between 30 September 2021 and the date of this Prospectus.

16.2 Outlook

Vulcan Group believes it is well positioned to continue its path to implement the Zero Carbon Lithium™ Project. In the next 12 months, Vulcan Group intends to progress its DFS and to further advance exploration at its Project Licence areas and to obtain further licences within the Upper Rhine Valley of Germany. Vulcan Group intends on completing its DFS in respect of Phase One by the second half of 2022 and is currently targeting commencement of commercial production by 2024 at one of its exploration licence areas. Vulcan Group intends on opening a new laboratory in the town of Karlsruhe in early 2022 to accommodate Vulcan Group's expanded lithium processing division.

In the next 12 months, Vulcan Group intends to continue to advance the envisaged implementation of the Zero Carbon Lithium™ Project by concluding agreements with third parties for the practical implementation of the project and for the sale of battery grade lithium hydroxide. In working towards a commencement of commercial production in 2024, Vulcan intends to construct and commission a DLE plant and a CLP plant. In order to achieve this growth, Vulcan Group intends on expanding its workforce, and its Board should the appropriate candidate be available. Vulcan Group currently aims to implement the Zero Carbon Lithium™ Project for a production start separated into two phases,

with start dates in 2024 and 2025. Phase One would target a production start in 2024 for the Taro Licence area and Phase Two would target a production start in 2025 for the Ortenau Licence area. Based on Vulcan Group's PFS, Vulcan Group aims to produce 74MW of renewable energy from its renewable energy business and 40,000 metric tonnes of lithium hydroxide from its lithium business annually following commencement of Phase Two (see section "2.7 *References regarding mineral resources, ore reserves and production targets*" and the Competent Persons' Report for information about the Company's mineral resources, ore reserves and production targets (including forecast financial information based on production targets) included in this Prospectus).

Vulcan Group is currently aiming at commencing commercial delivery under its lithium hydroxide offtake agreements in 2025 for LG Energy and Umicore and in 2026 for Renault, Stellantis and Volkswagen. Following commencement, Vulcan Group intends on expanding its commercial production in line with the expected growth in the European BEV market. Vulcan Group believes it is well positioned to continue its growth path following commencement of commercial production due to market trends in sectors such as E-Mobility and renewable energy.

17. DEFINITIONS

2

20% rule	129
2018 Incentive Plan	144
2021 Incentive Plan	144

A

AASB.....	4, 11, 36, 65
AASI	4, 11, 36
ACN	1
Acquisitions.....	5, 64
Akquisitionen.....	12
Aktien	8
ASIC	113, 131
ASX.....	1, 8, 18, 37
ASX Settlement	18, 26
Audit, Risk and ESG Committee	142
Audit, Risk and ESG Committee Charter..	142
Australian Corporations Act	1
Australian Foreign Acquisitions and Takeovers Act.....	130
Australisches Unternehmensgesetz	8

B

BaFin.....	1, 8, 20
Battery Directive.....	115
BBergG.....	117
Berenberg.....	1, 8, 20
Bestehende Aktien	13
BEV.....	2, 9, 36, 85, 88
Bloomberg	23
Board Charter.....	137
Board of Directors.....	3
Börsenzulassungsbeauftragte	8

C

Canaccord 1	23
Canaccord 2	23
CBAM	40
CGT	29
CHESS.....	18
Circular.....	98
Circular's CO ₂ Solution.....	105
Clean Energy Wire	23
Clearstream	26
CLP	9, 91
Coalition Agreement.....	86, 119
Code of Conduct	152
Company	1, 20, 83
Competent Persons' Report	6, 24
Consolidated Annual Financial Statements..	4, 23
Consolidated Annual Financial Statements 2019	4, 23
Consolidated Annual Financial Statements 2020	4, 22
Consolidated Annual Financial Statements 2021	4, 22
Consolidated Financial Statements	4, 23
Consolidated Interim Financial Statements September 2021	4
Constitution	26
Council	151
Custodian	27

D

Data Acquisition Agreement	110
Designated Sponsor	28
DFS	2, 9, 91
Direct Voting	150
Directors.....	3, 19
DLE.....	2, 9, 11, 41, 91
DMA.....	104
Drill Rig Purchase Agreements.....	110

E

EBA.....	86
ECHA	116
Economist.....	24
EEA.....	20
EEG	120
EGM.....	126
EIA	118
E-Mobility	86
EPEX	104
ESG	45
EU IFRS.....	4, 23, 36
EU-IFRS	11
EV	86
EY.....	96

F

Fitch Solutions.....	24
FSE Listing.....	6, 21
FWB-Notierung	14

G

GBA	105
Gec-co	5, 12, 8, 43, 64, 90, 108
GeoT.....	5, 12, 8, 43, 64, 90, 108
geox	2, 9, 89
geox Agreement	89, 109
Gesellschaft	8
GGH.....	5, 12, 8, 43, 64, 90
Groundwater Subsidiary Directive	116
GST	29

H

HPPL	3

I

IASB	4, 11, 23, 36
IASB IFRS.....	4, 11, 23, 36
Infraserv	89
Insheim Acquisition.....	90
Insheim Licence.....	90
Insheim Plant.....	4, 37, 90
ISIN.....	1, 8

J

JORC Code.....	1, 9, 36, 88

K

Karlsruhe Institute	98
KMP	143
konsolidierte Zwischenabschluss September 2021	11
konsolidierten Finanzberichte	11
Kontrollverlust.....	12
Konzernabschluss 2019	11
Konzernabschluss 2020	11
Konzernabschluss 2021	11

Konzernabschlüsse.....	11	Prospectus.....	1, 20
Kt41.....		Prospectus Regulation	1, 20
Kuniko.....	5, 12, 37, 64, 89	Prospekt	8
L		Prospektverordnung.....	8
Lampertheim Licence.....	102	R	
Landau Plant	89	REACH	116
LCA.....	105	Recommendations	151
LCE	92	RED II Directive.....	117
LEI.....	1, 8	Renault	89
LG Energy	89	Reuters	24
LIB.....	84	Rhein Petroleum	110
Listing	18	Rheinland-Pfalz Licences	102
Listing Agent	1, 20	RSM.....	4, 11, 113
Loss of Control	5, 64	RXR	28, 106
M		S	
Macquarie	24	S&P Global Market	24
Managers.....	135	S&P Global Platts 1	24
Mannheim Licence.....	102	S&P Global Platts 2	24
Minviro	24	S&P Global Platts 3	24
Mt.....	92	Salar	94
MW	41	Securities Trading Policy	134
N		Share	1
Natürlich Insheim.....	5, 12, 4, 37, 43, 64, 90	Shareholder	26
New Battery Regulation Proposal	115	Shares	1, 20
O		Short Selling Regulation	136
OEMs.....	86, 94	Stellantis	89
Ortenau Licence.....	7, 92	Summary.....	1
P		T	
Partnership Agreement	28, 106	Taro Licence.....	8, 90
PCT	98	U	
People and Performance Committee	141	Umicore.....	88, 109
People and Performance Committee Charter	142	V	
Performance Rights	122	VER GEO	5, 12, 64, 90
Performance Shares	122	Verwaltungsrat.....	11
Pfalzwerke	90	Verwaltungsratsmitglieder	11
PFS	2, 9, 4, 24, 42, 91	Volkswagen.....	89
Phase Eins	9	Vulcan Energie	5, 12, 10, 64, 90
Phase One.....	2, 11, 93	Vulcan Geo	64
Phase Two	2, 11, 93	Vulcan Group	1, 20
Phase Zwei.....	9	Vulcan-Konzern	8
PRA.....	45	W	
Pro Forma Financial Information	5, 64	Water Framework Directive.....	116
Pro Forma Notes	64	WHG	120
Pro Forma Statement of Financial Position.	64	Z	
Pro Forma Statement of Profit or Loss	64	Zero Carbon Lithium™ Project.....	1, 36, 88
Pro-Forma-Finanzinformationen	12	Zero Carbon Lithium™ Projekt.....	8
Project Licences.....	100	Zusammenfassung.....	8

18. FINANCIAL INFORMATION

TABLE OF CONTENTS

	PAGE
18.1 Financial Statements for the 3-month period ended 30 September 2021. F-2	
18.1.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income	F-2
18.1.2 Consolidated Statement of Financial Position	F-3
18.1.3 Consolidated Statement of Changes in Equity	F-4
18.1.4 Consolidated Statement of Cash Flows.....	F-5
18.1.5 Notes to the Condensed Consolidated Interim Financial Statements	F-6
18.2 Financial Statements 2021..... F-16	
18.2.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income	F-16
18.2.2 Consolidated Statement of Financial Position	F-17
18.2.3 Consolidated Statement of Changes in Equity	F-18
18.2.4 Consolidated Statement of Cash Flows.....	F-19
18.2.5 Notes to the Consolidated Financial Statements	F-20
18.2.6 Independent Auditor's Report	F-55
18.3 Financial Statements 2020..... F-59	
18.3.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income	F-59
18.3.2 Consolidated Statement of Financial Position	F-60
18.3.3 Consolidated Statement of Changes in Equity	F-61
18.3.4 Consolidated Statement of Cash Flows.....	F-62
18.3.5 Notes to the Consolidated Financial Statements	F-63
18.3.6 Independent Auditor's Report	F-87
18.4 Financial Statements 2019..... F-90	
18.4.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income	F-90
18.4.2 Consolidated Statement of Financial Position	F-91
18.4.3 Consolidated Statement of Changes in Equity	F-92
18.4.4 Consolidated Statement of Cash Flows.....	F-93
18.4.5 Notes to the Consolidated Financial Statements	F-94
18.4.6 Independent Auditor's Report	F-118

18.1 Financial Statements for the 3-month period ended 30 September 2021

18.1.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the three months ended 30 September 2021

	Note	30-Sep-21 €	30-Sep-20 €
Revenue from continuing operations		109,202	-
Other income		141,955	166,726
Gain on deconsolidation	4	1,975,185	-
Other own work capitalised		976,275	-
Raw materials and purchased services		(343,963)	-
Administrative expenses		(688,317)	(46,799)
Compliance and regulatory expenses		(214,142)	(25,883)
Consulting and legal fees		(825,785)	(53,248)
Depreciation		(100,242)	-
Employee benefit expenses		(1,235,905)	(71,989)
Investor relations expenses		(141,407)	(7,819)
Impairment expenses		(8,489)	(139,930)
Occupancy costs		(27,120)	(3,808)
Share-based payments expense		(833,342)	(467,592)
Other expenses		(310,779)	(10,135)
Foreign currency gain/(loss)		7,552	138
Loss before income tax expense		(1,519,322)	(660,339)
Income tax expense		(10,717)	-
Loss after income tax for the period		(1,530,039)	(660,339)
Other comprehensive income		-	-
<i>Items that may be reclassified subsequently to profit or loss</i>			
Exchange differences on translation of foreign operations		(605,389)	(58,250)
Total comprehensive loss for the period (net of tax)		(2,135,428)	(718,589)
Total comprehensive loss for the period attributable to the owners of Vulcan Energy Resources Limited		(2,135,428)	(718,589)
Loss per share for the period attributable to the owners of Vulcan Energy Resources Limited			
Basic and diluted loss per share (cents)		(1,39)	(0,96)

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

18.1.2 Consolidated Statement of Financial Position

As at 30 September 2021

	Note	30-Sep-21 €	30-June-21 €
Assets			
Current assets			
Cash and cash equivalents		187,220,521	72,494,107
Trade and other receivables		1,970,017	756,818
Contract assets		194,233	-
Total current assets		189,384,771	73,250,925
Non-current assets			
Intangible assets		2,578,488	-
Exploration and evaluation expenditure		9,968,705	8,722,293
Plant and equipment		2,320,228	935,433
Right-of-use		700,588	357,867
Investments accounted for using equity method	4	1,708,987	-
Deferred tax assets		76,637	-
Total non-current assets		17,353,633	10,015,593
Total Assets		206,738,404	83,266,518
Liabilities			
Current liabilities			
Lease liabilities		128,828	39,430
Trade and other payables		3,185,674	1,335,425
Loans and borrowings		62,087	-
Income tax liabilities		50,900	-
Provisions		61,339	55,353
Total Current liabilities		3,488,828	1,430,208
Non-current liabilities			
Lease liabilities		570,230	313,818
Loans and borrowings		139,182	-
Provisions		254,500	-
Deferred tax liabilities		425,758	-
Total non-current liabilities		1,389,670	313,818
Total Liabilities		4,878,498	1,744,026
Net Assets		201,859,906	81,522,492
Equity			
Share capital	3	206,547,871	85,271,678
Reserves		6,413,356	5,822,096
Accumulated losses		(11,101,321)	(9,571,282)
Total Equity		201,859,906	81,522,492

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

18.1.3 Consolidated Statement of Changes in Equity

For the three months ended 30 September 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	-	-	-	(1,530,039)	(1,530,039)
Other comprehensive income	-	-	(605,389)	-	(605,389)
Total comprehensive loss for the period after tax	-	-	(605,389)	(1,530,039)	(2,135,428)
Transactions with owners in their capacity as owners:					
Issue of share capital	125,627,570	-	-	-	125,627,570
Share issue costs	(4,351,377)	-	-	-	(4,351,377)
Share-based payments	-	1,196,649	-	-	1,196,649
Balance at 30 September 2021	206,547,871	6,192,074	221,282	(11,101,321)	201,859,906

Consolidated	Issued 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 year	-	-	-	(660,339)	(660,339)
Other comprehensive income	-	-	(58,250)	-	(58,250)
Total comprehensive loss for the period after tax	-	-	(58,250)	(660,339)	(718,589)
Transactions with owners in their capacity as owners:					
Issue of share capital	838,641	-	-	-	838,641
Share issue costs	-	-	-	-	-
Share-based payments	-	467,592	-	-	467,592
Balance at 30 September 2020	8,072,073	1,532,257	(80,682)	(3,505,596)	6,018,052

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

18.1.4 Consolidated Statement of Cash Flows

For the three months ended 30 September 2021

	30-Sep-21 €	30-Sep-20 €
Cash flows from operating activities		
Receipts from customers	109,202	-
Payments to suppliers and employees	(2,168,384)	(214,471)
Interest received	46,910	1,174
Other income	46,321	165,552
Interest paid	(70,738)	-
Cash paid for income taxes	(10,717)	-
Net cash used in operating activities	(2,047,406)	(47,745)
Cash flows from investing activities		
Payments for exploration and evaluation expenditure	(874,988)	(1,321,950)
Payment for plant and equipment	(1,293,817)	(66,780)
Cash acquired upon acquisition of subsidiary	126,409	-
Cash outflow from deconsolidation of subsidiary	(52,851)	-
Net cash used in investing activities	(2,095,247)	(1,388,730)
Cash flows from financing activities		
Proceeds from issue of shares	123,680,002	672,234
Share issue costs	(4,351,377)	-
Lease repayments	(32,828)	-
Repayment of shareholder loan	(70,000)	-
Net cash from financing activities	119,225,797	672,234
Net increase/(decrease) in cash and cash equivalents	115,083,144	(764,241)
Cash and cash equivalents at beginning of the period	72,494,107	3,924,214
Effect of exchange rate fluctuations	(356,730)	(64,464)
Cash and cash equivalents at end of the period	187,220,521	3,095,509

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

18.1.5 Notes to the Condensed Consolidated Interim Financial Statements

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation

These general purpose interim financial statements for the three months ended 30 September 2021 have been prepared in accordance 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 corresponding interim reporting period. New accounting policies adopted in the current period are as follows;

Change in Presentation Currency & 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.

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.

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 associate's 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 Energy Resources Limited which have been capitalised to exploration and evaluation expenditure. 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 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.

Operating Segment	Exploration & Development (Germany)	Consultancy Services (Germany)	Investment (Norway)	Administration (Australia)	Total
	€	€	€	€	€
30-Sep-21 Revenue					
Revenue from continuing operations	-	109,202	-	-	109,202
Other own work capitalised	-	976,275	-	-	976,275
Interest income	-	-	-	45,484	45,484
Other income	50,177	-	-	46,294	96,471
Gain on deconsolidation	-	-	1,975,185	-	1,975,185
Total segment revenue	50,177	1,085,477	1,975,185	91,778	3,202,617
Net profit/(loss) before tax from continuing operations	(1,836,175)	741,514	1,975,185	(2,399,846)	(1,519,322)

Geographical information

Segment assets	Germany	Norway	Australia	Total
30-Sep-21	€	€	€	€
Total segment assets	20,186,190	1,708,987	184,843,227	206,738,404
Segment liabilities	Germany	Norway	Australia	Total
30-Sep-21	€	€	€	€
Total segment liabilities	3,412,111	-	1,466,387	4,878,498

Operating Segment	Exploration & Development (Germany)	Consultancy Services (Germany)	Investment (Norway)	Administration (Australia)	Total
30-Sep-20	€	€	€	€	€
Revenue					
Interest income	-	-	-	1,174	1,174
Other income	165,552	-	-	-	165,552
Total segment revenue	165,552	-	-	1,174	166,726
Net profit/(loss) before tax from continuing operations	136,481	-	(140,281)	(656,539)	(660,339)

Geographical Information

Segment assets	Germany	Norway	Australia	Total
30-Sep-20	€	€	€	€
Total segment assets	3,728,097	79,676	2,919,503	6,727,276
Segment liabilities	Germany	Norway	Australia	Total
30-Sep-20	€	€	€	€
Total segment liabilities	430,707	331	278,186	709,224

NOTE 3 CONTRIBUTED EQUITY

	30-Sep-21		30-Jun-21	
	No.	€	No.	€
Fully paid ordinary shares	123,606,179	206,547,871	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.

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.	6/7/2021	325,000	5,04	1,637,295
Shares issued as consideration for acquisition of GGH	6/7/2021	11,396	5,04	57,411
Shares issued for services rendered	19/8/2021	32,251	7,84	252,862
Placement	22/9/2021	14,814,815	8,35	123,680,002
Less capital raising costs	22/9/2021			(4,351,377)
At 30 September 2021		123,606,179		206,547,871

NOTE 4 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 17 August 2021, the initial public offering shares were issued, with the Company retaining a 25.85% shareholding. The loss of control resulted in €1,975,185 gain on deconsolidation.

The following table summarises the deconsolidation of Kuniko Limited:

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

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 as at 30 September 2021:

	€
Investment in associate	1,708,987

NOTE 5 ACQUISITION 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 July 2, 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.

	€
Purchase Consideration	57,411
Shares issued (refer to note 3)	363,307
Performance shares issued	420,718
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 IFRS 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 6 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 (%)
Vulcan Geothermal GmbH	Karlsruhe	Group holding	July 09, 2021	100 (indirect)
VER GEO LIO GmbH	Karlsruhe	Group holding	July 12, 2021	100 (indirect)
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)

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

NOTE 7 BUSINESS COMBINATIONS

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 July 2, 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, 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 (BImSchG) for the construction of a DLE (lithium extraction) plant is granted.

Details of the acquisition are as follows:

	€
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

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 July 2, 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:

	€
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

NOTE 8 LOSS PER SHARE

	30-Sep-21	30-Sep-20
	€	€
Net Loss for the year	(1,530,039)	(660,339)
Weighted average number of ordinary shares for basic and diluted loss per share	110,057,916	68,450,360
Basic and diluted loss per share (cents)	(1,39)	(0,96)

NOTE 10 DIVIDENDS

No dividend has been declared or paid during the interim period ended 30 September 2021 (30 June 2021: Nil), and the Directors do not recommend the payment of a dividend in respect of the three months ended 30 September 2021.

NOTE 11 CONTINGENCIES

Vulcan Group's contingent liability as at 30 September 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 A\$10,000,000 investment in relation to the Vulcan Zero Carbon Lithium™ 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.

NOTE 12 COMMITMENTS

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

NOTE 13 EVENTS SUBSEQUENT TO THE REPORTING PERIOD

The Share Purchase Plan announced by the Company on 14 September 2021 closed on 13 October 2021. The Company raised an amount of €1.96m (A\$3.085m) through the issue of 228,434 new fully paid ordinary shares in the Company.

Following the binding term sheet signed on 2 August 2021, conditional on the execution of a Definitive Agreement by 20 November 2021, Vulcan has signed a binding lithium hydroxide offtake agreement ("Agreement") with Renault Group, a major automotive manufacturer and pioneer in the European electric vehicle market. The Agreement is in line with Renault Group's ambition to offer 'made in Europe' cars. Following the launch of Renault ElectriCity – a new production unit for electric vehicles in Europe – the Group will purchase between 26,000 to 32,000 metric tonnes of battery grade lithium chemicals over the duration of the agreement.

Vulcan and Stellantis N.V. (NYSE / MTA / Euronext Paris: STLA) have signed a binding lithium hydroxide offtake agreement ("Agreement") to supply, starting 2026, a minimum of 81,000 tonnes and a maximum of 99,000 tonnes of battery grade lithium hydroxide over the duration of the initial five-year agreement.

Vulcan has signed a binding lithium hydroxide offtake agreement ("Agreement") with Volkswagen Group, the world's largest automaker by revenue and the largest company in Germany. Volkswagen Group is to purchase a minimum of 34,000 tonnes and a maximum of 42,000 tonnes of battery grade lithium hydroxide over the duration of the Agreement. The Agreement is for an initial five-year term and the start of commercial delivery is set for 2026. Pricing will be based on market prices on a take-or-pay basis.

At the end December 2021 Vulcan Energy Resources Ltd completed the acquisition of an operational geothermal renewable energy power plant in the Upper Rhine Valley at Insheim, Germany (the "Insheim Plant"), through the acquisition of 100% of the shares in the entity which owns and operates the plant. A new Germany subsidiary of Vulcan (VER GEO LIO GmbH) , based in Karlsruhe, will be the owner and operator of the Insheim Plant.

On 17 December the following Performance Shares and Performance Rights have vested as a result of a milestone satisfied by the recent binding offtake agreements the Company has signed with Stellantis N.V., Volkswagen Group, Renault Group and Umicore:

- Performance Share Class C, which was the final part of the original consideration payable to the vendors for the acquisition of the Zero Carbon Lithium™ Project in 2019 (refer announcement 19 July 2019) - 4,400,000
- Performance Rights Class F - 1,250,000
- Performance Rights Class L - 1,000,000
- Performance Rights Class I - 1,000,000

- Performance Rights Class N - 1,500,000 In addition, the 100,000 Performance Rights in Class Q have also vested.

The Company wishes to advise that: - it has issued 7,186,364 shares relating to the conversion of Class C Performance Shares and Classes F, L and (a portion of) I Performance Rights. The Class N and remaining Class I performance rights will remain as vested performance rights.

Vulcan Energy Resources Ltd has 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.

Vulcan Energy Resources Ltd has signed a memorandum of understanding 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 Energy Resources Ltd has signed a binding lithium hydroxide offtake 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).

Directors' Declaration

In the Directors' opinion:

- the attached financial statements and notes comply with International Accounting Standard 34 'Interim Financial Reporting';
- the attached financial statements and notes give a true and fair view of the consolidated entity's financial position as at 30 September 2021 and of its performance for the three months 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.

On behalf of the directors

Gavin Rezos

Non-Executive Chairman

10 February 2022

18.2 Financial Statements 2021

18.2.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 30 June 2021

	Note	2021 \$	2020 \$
Revenue from continuing operations			
Other income	4	631,542	95,342
Expenses			
Administrative expenses	5(a)	(888,145)	(320,920)
Compliance and regulatory expenses		(551,639)	(98,906)
Consulting and legal fees	5(b)	(1,922,771)	(424,603)
Depreciation		(131,522)	-
Employee benefit expenses		(624,829)	(234,551)
Investor relations		(410,338)	(314,510)
Introducer fee		-	(150,000)
Occupancy costs		(55,930)	(18,148)
Impairment expense	10	(228,663)	(286,017)
Share-based payments expense	19	(6,517,484)	(1,690,473)
Other expenses		(120,877)	(103,406)
Foreign currency gain/(losses)		76,042	(7,167)
Loss from continuing operations before income tax		(10,744,614)	(3,553,359)
Income tax expense	6	-	-
Loss from continuing operations after income tax		(10,744,614)	(3,553,359)
Other comprehensive income		(99,993)	(22,016)
Other comprehensive income for the year, net of tax		(99,993)	(22,016)
Total comprehensive loss attributable to the members of Vulcan Energy Resources Limited		(10,844,607)	(3,575,375)
Loss per share for the year attributable to the members Vulcan Energy Resources Limited:			
Basic loss per share (cents)	7	(12.32)	(7.37)
Diluted loss per share (cents)	7	(12.32)	(7.37)

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

18.2.2 Consolidated Statement of Financial Position

As at 30 June 2021

	Note	2021 \$	2020 \$
ASSETS			
Current assets			
Cash and cash equivalents	8	114,705,865	6,421,557
Trade and other receivables	9	1,197,500	116,071
Total current assets		115,903,365	6,537,628
Non-current assets			
Exploration and evaluation expenditure	10	13,793,798	2,556,980
Plant and equipment	11	1,480,672	13,353
Right-of-use asset	12	566,246	-
Total non-current assets		15,840,716	2,570,333
Total assets		131,744,081	9,107,961
LIABILITIES			
Current liabilities			
Trade and other payables	13	2,113,014	208,222
Lease liabilities	12	62,389	-
Provisions	14	87,584	13,700
Total current liabilities		2,262,987	221,922
Non Current liabilities			
Lease liabilities	12	496,547	-
Total Non current liabilities		496,547	-
Total liabilities		2,759,534	221,922
Net assets		128,984,547	8,886,039
EQUITY			
Contributed equity	15	136,500,372	11,836,741
Reserves	16	7,899,461	1,719,970
Accumulated losses	24	(15,415,286)	(4,670,672)
Total equity		128,984,547	8,886,039

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

18.2.3 Consolidated Statement of Changes in Equity

For the Financial Year Ended 30 June 2021

	Issued Capital	Reserves	Accumulated Losses	Total
	\$	\$	\$	\$
At 1 July 2020	11,836,741	1,719,970	(4,670,672)	8,886,039
Loss for the year	-	-	(10,744,614)	(10,744,614)
Other comprehensive loss for the year	-	(99,993)	-	(99,993)
Total comprehensive loss for the year after tax	-	(99,993)	(10,744,614)	(10,844,607)
<i>Transactions with owners in their capacity as owners:</i>				
Issue of share capital	130,803,628	-	-	130,803,628
Share issue costs	(6,139,977)	-	-	(6,139,977)
Share-based payments	-	6,279,484	-	6,279,484
Balance at 30 June 2021	136,500,372	7,899,461	(15,415,286)	128,984,547

	Issued Capital	Reserves	Accumulated Losses	Total
	\$	\$	\$	\$
At 1 July 2019	4,746,416	164,013	(1,117,313)	3,793,116
Loss for the year	-	-	(3,553,359)	(3,553,359)
Other comprehensive loss for the year	-	(22,016)	-	(22,016)
Total comprehensive loss for the year after tax	-	(22,016)	(3,553,359)	(3,575,375)
<i>Transactions with owners in their capacity as owners:</i>				
Issue of share capital	7,438,810	-	-	7,438,810
Share issue costs	(348,485)	-	-	(348,485)
Share-based payments	-	1,577,973	-	1,577,973
Balance at 30 June 2020	11,836,741	1,719,970	(4,670,672)	8,886,039

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

18.2.4 Consolidated Statement of Cash Flows

For the Financial Year Ended 30 June 2021

	Note	2021 \$	2020 \$
Cash flows from operating activities			
Payments to suppliers and employees		(3,446,209)	(1,427,391)
Interest received		100,937	45,342
Other income		510,879	50,000
Interest paid		(6,752)	-
Net cash used in operating activities	8(a)	<u>(2,841,145)</u>	<u>(1,332,049)</u>
Cash flows from investing activities			
Payments for exploration and evaluation costs		(5,832,409)	(1,205,783)
Net cash acquired from acquisition of subsidiary	17	-	404
Payments for software		-	(13,353)
Payment for plant and equipment		<u>(1,312,818)</u>	<u>-</u>
Net cash used in investing activities		<u>(7,145,222)</u>	<u>(1,218,732)</u>
Cash flows from financing activities			
Proceeds from exercise of listed and unlisted options		4,430,809	-
Proceeds from issued shares		120,000,000	5,976,310
Share issue costs		(6,139,997)	(330,545)
Lease repayments		<u>(22,888)</u>	<u>-</u>
Net cash from financing activities		<u>118,267,924</u>	<u>5,645,765</u>
Net increase in cash and cash equivalents		108,281,552	3,094,984
Cash and cash equivalents at the beginning of the year		6,421,557	3,348,996
Effect of exchange rate fluctuations on cash held		2,756	(22,423)
Cash and cash equivalents at the end of the year	8	<u>114,705,865</u>	<u>6,421,557</u>

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

18.2.5 Notes to the Consolidated Financial Statements

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Reporting Entity

Vulcan Energy Resources Limited (referred to as "Vulcan" or the "Company") is a company domiciled in Australia. The address of the Company's registered office and principal place of business is disclosed in the Corporate Directory of the Annual Report. The consolidated financial statements of the Company as at and for the year ended 30 June 2021 comprise the Company and its subsidiaries (together referred to as the "consolidated entity" or the "Group").

(b) Basis of Preparation

Statement of compliance

The consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") and the Corporations Act 2001. The consolidated financial statements comply with International Financial Reporting Standards ("IFRS") adopted by the International Accounting Standards Board ("IASB"). Vulcan Energy Resources Limited is a for-profit entity for the purpose of preparing the financial statements.

The annual report was authorised for issue by the Board of Directors on 2 September 2021.

Basis of measurement

The consolidated financial statements have been prepared on a going concern basis in accordance with the historical cost convention, unless otherwise stated.

Parent entity information

In accordance with the Corporations Act 2001, these financial statements present the results of the consolidated entity only. Supplementary information about the parent entity is disclosed in Note 26.

New, revised or amended standards and interpretations adopted by the Group

The Group has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") that are mandatory for the current reporting period.

The following Accounting Standards and Interpretations are most relevant to the consolidated entity:

Conceptual Framework for Financial Reporting (Conceptual Framework)

The consolidated entity has adopted the revised Conceptual Framework from 1 July 2020. The Conceptual Framework contains new definition and recognition criteria as well as new guidance on measurement that affects several Accounting Standards, but it has not had a material impact on the consolidated entity's financial statements.

Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is

cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Equity Instruments

Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in the profit or loss as other income when the Group's right to receive payments is established.

Financial Assets - Impairment

From 1 July 2019, the Group assesses on a forward-looking basis the expected credit losses (ECLs) associated with its debt instruments carried at amortised cost and FVOCI. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive. The shortfall is then discounted at an approximation to the asset's original effective interest rate.

The Group assesses at each balance date whether there is objective evidence that a financial asset or group of financial assets is impaired. For trade and other receivables, the Group applies the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience.

Employee benefits

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled wholly within 12 months of the reporting date are measured at the amounts expected to be paid when the liabilities are settled.

Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date are measured at the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on corporate bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Share-based payments

Equity-settled and cash-settled share-based compensation benefits are provided to employees.

Equity-settled transactions are awards of shares, or options over shares, that are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using either the Binomial or Black-Scholes option pricing model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with non-vesting conditions that do not determine whether the consolidated entity receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

The cost of cash-settled transactions is initially, and at each reporting date until vested, determined by applying either the Binomial or Black-Scholes option pricing model, taking into consideration the terms and conditions on which the award was granted. The cumulative charge to profit or loss until settlement of the liability is calculated as follows:

- during the vesting period, the liability at each reporting date is the fair value of the award at that date multiplied by the expired portion of the vesting period.
- from the end of the vesting period until settlement of the award, the liability is the full fair value of the liability at the reporting date.

All changes in the liability are recognised in profit or loss. The ultimate cost of cash-settled transactions is the cash paid to settle the liability.

Market conditions are taken into consideration in determining fair value. Therefore any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the consolidated entity or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the consolidated entity or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

New standards and interpretations not yet mandatory or early adopted

Australian Accounting Standards and Interpretations relevant to the Group that have recently been issued or amended but are not yet effective, have not been adopted by the Group for the period ended 30 June 2021 and are outlined in the table below:

Reference	Summary	Application date of the standard	Applies to financial year ended
AASB 2020-8	Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform – Phase 2 Requires that for-profit private sector entities: This Standard amends the Standards to help entities to provide financial statement users with useful information about the effects of the interest rate benchmark reform on those entities' financial statements. As a result of these amendments, an entity: a) will not have to derecognise or adjust the carrying amount of financial instruments for changes required by the reform, but will instead update the effective interest rate to reflect the change to the alternative benchmark rate; b) will not have to discontinue its hedge accounting solely because it makes changes required by the reform, if the hedge meets other hedge accounting criteria; and c) will be required to disclose information about new risks arising from the reform and how it manages the transition to alternative benchmark rates.	1 January 2021	30 June 2022
AASB 2020-3	Annual Improvements to IFRS Standards 2018–2020 and Other Amendments This Standard amends: a) the application of AASB 1 by a subsidiary that becomes a first-time adopter after its parent in relation to the measurement of cumulative translation differences; b) AASB 3 to update references to the Conceptual Framework for Financial Reporting; c) AASB 9 to clarify when the terms of a new or modified financial liability are substantially different from the terms of the original financial liability; d) AASB 116 to require an entity to recognise the sales proceeds from selling items produced while preparing property, plant and equipment for its intended use and the related cost in profit or loss, instead of deducting the amounts received from the cost of the asset; e) AASB 137 to specify the costs that an entity includes when assessing whether a contract will be loss-making; and f) AASB 141 to align the fair value measurement requirements in AASB 141 with those in other Australian Accounting Standards.	1 January 2022	30 June 2023
AASB 2020-1	Amendments to Australian Accounting Standards – Classification of Liabilities as Current or Non-Current Amends AASB 101 to clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date (for example, the receipt of a waiver, a breach of covenant, or settlement of the liability). The mandatory application date of the amendment has been deferred by 12 months to 1 January 2023 by AASB 2020-6.	1 January 2023	30 June 2024
AASB 2021-2	Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates This Standard amends: - AASB 7, to clarify that information about measurement bases for financial instruments is expected to be material to an entity's financial statements; - AASB 101, to require entities to disclose their material accounting policy information rather than their significant accounting policies; - AASB 108, to clarify how entities should distinguish changes in accounting policies and changes in accounting estimates; - AASB 134, to identify material accounting policy information as a component of a complete set of financial statements; and - AASB Practice Statement 2, to provide guidance on how to apply the concept of materiality to accounting policy disclosures.	1 January 2023	30 June 2024

The Group has not yet assessed the impact of these new or amended Accounting Standards and Interpretations but does not expect it to have a significant impact on the Group's results.

Significant Judgements and Estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the consolidated entity's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.

(c) Comparatives

The comparative period is 1 July 2019 to 30 June 2020.

(d) Principles of Consolidation

Subsidiaries

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Vulcan Energy Resources Limited ('Company' or 'parent entity') as at 30 June 2021 and the results of all subsidiaries for the year then ended.

Subsidiaries are all entities (including special purpose entities) over which the consolidated entity has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one-half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the consolidated entity controls another entity.

Subsidiaries are fully consolidated from the date on which control is transferred to the consolidated entity. They are de-consolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between consolidated entity companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the consolidated entity.

The acquisition method of accounting is used to account for business combinations by the consolidated entity. A change in ownership interest, without the loss of control, is accounted for as an equity transaction, where the difference between the consideration transferred and the book value of the share of the non-controlling interest acquired is recognised directly in equity attributable to the parent.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and statement of financial position respectively.

(e) Foreign Currency Translation

Functional and presentation currency

Items included in the financial statements of each of the consolidated entity's entities are measured using the currency of the primary economic environment in which the entity operates ("functional currency"). The consolidated financial statements are presented in Australian dollars, which is Vulcan Energy Resources Limited's functional and presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency 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 period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

(f) Asset Acquisition not constituting a Business

When an asset acquisition does not constitute a business combination, the assets and liabilities are assigned a carrying amount based on their relative fair values in an asset purchase transaction and no deferred tax will arise in relation to the acquired assets and assumed liabilities as the initial recognition exemption for deferred tax under AASB 112 applies. No goodwill will arise on the acquisition and transaction costs of the acquisition will be included in the capitalised cost of the asset.

(g) Dividends

Dividends are recognised when declared during the financial period and no longer at the discretion of the Company.

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses.

Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions in these financial statements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period are disclosed below.

Coronavirus (COVID-19) pandemic

Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the consolidated entity based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the consolidated entity operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the consolidated entity unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic.

Exploration and evaluation expenditure

Exploration and evaluation costs have been capitalised on the basis that activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves. Key judgements are applied in considering costs to be capitalised which includes determining expenditures directly related to these activities and allocating overheads between those that are expensed and capitalised.

Share-based payments

The Group measures the cost of equity settled transactions with Directors, employees and consultants, where applicable, by reference to the fair value of equity instruments at the date at which they are granted. The fair value is determined using an appropriate valuation model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact

on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity.

Estimation of useful lives of assets

The consolidated entity determines the estimated useful lives and related depreciation and amortisation charges for its plant and equipment. The useful lives could change significantly as a result of technical innovations or some other event. The depreciation and amortisation charge will increase where the useful lives are less than previously estimated lives, or technically obsolete or non-strategic assets that have been abandoned or sold will be written off or written down.

NOTE 3 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.

For the financial years ended 30 June 2020 and 30 June 2021 and following the acquisition of a 100% interest in the Vulcan Lithium Project in the Upper Rhine Valley of Germany on 4 September 2019, it was determined that the Group operates in three operating segments being, energy metals exploration in Germany, copper and zinc mineral exploration in Norway and resources allocated to 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 Group.

For the year ended 30 June 2021

Segment performance	Exploration Germany	Exploration Norway	Administration	Total
30 June 2021	\$	\$	\$	\$
Revenue				
Interest income	-	-	120,663	120,663
Other income	327,380	-	183,499	510,879
Total segment revenue	327,380	-	304,162	631,542

Reconciliation of segment results to net loss before tax
Amounts not included in segment results but reviewed by the Board

- Administration, consulting and other expenses	(11,376,156)
Net loss before tax from continuing operations	(10,744,614)

Segment assets	Exploration Germany	Exploration Norway	Administration	Total
30 June 2021	\$	\$	\$	\$
Total segment asset	16,504,072	388,045	114,851,961	131,744,078

For the year ended 30 June 2020

Segment performance	Exploration Germany	Exploration Norway	Administration	Total
30 June 2020	\$	\$	\$	\$
Revenue				
Interest income	-	-	45,342	45,342
Other income	-	-	50,000	50,000
Total segment revenue	-	-	95,342	95,342

Reconciliation of segment results to net loss before tax
Amounts not included in segment results but reviewed by the Board

- Administration, consulting and other expenses	(3,648,701)
Net loss before tax from continuing operations	(3,553,359)

Segment assets	Exploration Germany	Exploration Norway	Administration	Total
30 June 2020	\$	\$	\$	\$
Total segment asset	2,279,731	290,602	6,537,628	9,107,961

Segment liabilities	Exploration Germany	Exploration Norway	Administration	Total
30 June 2020	\$	\$	\$	\$
Total segment liabilities	30,984	668	190,270	221,922

Accounting Policy

Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board. Management has determined that based on the report reviewed by the Board and used to make strategic decisions, that the consolidated entity has one reportable segment.

NOTE 4 REVENUE

	2021	2020
	\$	\$
Other income		
Interest income	120,678	45,342
Cash Boost	50,000	50,000
R&D tax incentive	133,484	-
InnoEnergy Funding	327,380	-
	631,542	95,342

NOTE 5 EXPENSES

	2021	2020
	\$	\$
(a) Administration expenses		
Accounting, audit and company secretarial fees	103,559	151,336
Travel expenses	51,926	107,183
General expenses	732,660	62,401
	<u>888,145</u>	<u>320,920</u>
(b) Consultancy and legal expenses		
Corporate advisory fees	87,456	105,000
Consulting fees	1,054,926	314,961
Legal fees	780,390	4,642
	<u>1,922,772</u>	<u>424,603</u>

NOTE 6 INCOME TAX

	2021	2020
	\$	\$
(a) The components of tax expense comprise:		
Current tax	-	-
Deferred tax	-	-
Income tax expense reported in the of profit or loss and other comprehensive income	<u>-</u>	<u>-</u>
(b) The prima facie tax on loss from ordinary activities before income tax is reconciled to the income tax as follows:		
Loss before income tax expense	(10,744,614)	(3,553,359)
Prima facie tax benefit on loss before income tax at 30% (2020: 30%)	(3,223,384)	(1,066,008)
Tax effect of amounts that are not deductible/taxable in calculating taxable income		
Non-deductible expense	2,271,803	603,944
Tax losses and temporary differences not brought to account	797,865	451,694
Foreign corporate rate differential	153,716	10,370
Income tax expense	<u>-</u>	<u>-</u>
(c) Deferred tax assets/(liabilities) not brought to accounts are:		
Accruals	93,062	26,411
Prepayments	(21,970)	(5,743)
Other	65,140	20,042
Tax losses	1,050,391	606,194
Total deferred tax balances not brought to account	<u>1,186,623</u>	<u>646,904</u>

Potential deferred tax assets attributable to tax losses and other temporary differences have not been brought to account at 30 June 2021 because the directors do not believe it is appropriate to regard realisation of the deferred tax assets as probable at this point in time. These benefits will only be obtained if:

- the Company derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the expenditure to be realised; and
- no changes in tax legislation adversely affect the Company in realising the benefit from the deductions for the expenditure.

Accounting Policy

The income tax expense (revenue) for the year comprises current income tax expense (income) and deferred tax expense (income).

Current Tax

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at the end of the reporting period. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred Tax

Deferred tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Current and deferred income tax expense (income) is charged or credited directly to equity instead of the profit or loss when the tax relates to items that are credited or charged directly to equity.

Deferred tax assets and liabilities are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at the end of the reporting period. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investments in subsidiaries, branches, associates, and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of set-off exists, the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

NOTE 7 LOSS PER SHARE

	2021	2020
	\$	\$
Net loss for the year	(10,744,614)	(3,553,359)
Weighted average number of ordinary shares for basic and diluted loss per share.	87,204,203	48,226,596
Basic and diluted loss per share (cents)	(12.32)	(7.37)

Accounting Policy**Basic Loss Per Share**

Basic loss per share is determined by dividing net profit or loss after income tax attributable to members of the Company, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

Diluted Loss Per Share

Diluted loss per share adjusts the figures used in the determination of basic earnings per share to take into account the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

NOTE 8 CASH AND CASH EQUIVALENTS

	2021	2020
	\$	\$
Cash at bank and in hand	6,156,871	4,621,557
Short-term deposits	108,548,994	1,800,000
	114,705,865	6,421,557

(a) Reconciliation of net loss after tax to net cash flows from operations

Loss for the financial year	(10,744,614)	(3,553,359)
<i>Adjustments for:</i>		
Share-based payments expense	6,857,484	2,040,473
Impairment expense	228,663	286,017
Depreciation	131,522	-
<i>Changes in assets and liabilities</i>		
Trade and other receivables	(113,154)	(81,008)
Trade and other payables	725,069	(24,172)
Provisions	73,884	-
Net cash used in operating activities	(2,841,146)	(1,332,049)

Accounting Policy

Cash at bank earns interest at floating rates based on daily deposit rates. Short-term deposits are made in varying periods between one day and three months, depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates.

NOTE 9 TRADE AND RECEIVABLES

	2021	2020
	\$	\$
GST receivable	23,479	47,049
Other receivables	182,124	17,592
VAT receivable	573,384	51,430
Other deposits	418,513	-
	1,197,500	116,071

Allowance for impairment loss

Other receivables are non-interesting bearing and are generally on terms of 30 days.

Trade Receivables

Trade and other receivables include amounts due from customers for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets. Refer to Note 1 for expected credit loss allowance assessment.

Goods and Services Tax ('GST')

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included as a current asset or liability in the Consolidated statement of financial position.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST on investing and financial activities, which are disclosed as operating cash flows.

Other Receivables

Other receivables are recognised at amortised cost, less any provision for expected credit loss. Other receivables do not contain impaired assets and are not past due. Based on the credit history, it is expected that these other balances will be received when due.

Value Added Tax ("VAT")

Revenues expenses and assets are recognised net of VAT, except where the amount of VAT incurred is not recoverable from the German tax authority. In these circumstances the VAT is recognised as part of the cost of acquisition or parts of the expense. Receivables and payables are stated inclusive of the amount of VAT receivable or payable. The net amount of VAT recoverable from, or payable to, the taxation authority is included as a current asset or liability in the Consolidated statement of financial position. Cash flows are presented in the statement of cash flows on a gross basis, except for the VAT on investing and financial activities, which are disclosed as operating cash flows.

Other Deposits

Other deposits represent an unconditional performance bond.

NOTE 10 EXPLORATION AND EVALUATION EXPENDITURE

	2021	2020
	\$	\$
Carrying amount of exploration and evaluation expenditure	13,793,798	2,556,980
At the beginning of the year	2,556,980	526,001
Exploration expenditure incurred	5,670,681	1,195,871
Vulcan Energy Europe acquisition (1)	5,794,800	1,121,125
Impairment expense	(228,663)	(286,017)
At the end of the year	13,793,798	2,556,980

(1) - - During the 2020/2021 period, the Company issued 1,320,000 shares to various parties involved in introducing the Zero Carbon Lithium Project™ ('Project') in Germany, through the acquisition of Vulcan Energy Resources Europe Pty Ltd, as initially announced on 10 July 2019. The issue of these shares remained subject to shareholder approval and meeting certain milestones. On 21 February 2020, the Company reached Milestone 1 by announcing a positive scoping study in relation to the Project. On 15 January 2021, the Company also reached Milestone 2 by announcing a positive pre-feasibility study in relation to the Project. The Company obtained shareholder approval for the issue of the Milestone 1 shares (being 660,000 shares) and Milestone 2 shares (being 660,000 shares) on 10 September 2020 and 24 June 2021 respectively. The issue of these shares were valued at \$587,400 and \$5,207,400 respectively (refer to Note 15).

Accounting Policy

Acquisition, exploration and evaluation costs associated with mining tenements are accumulated in respect of each identifiable area of interest. These costs are only carried forward to the extent that the rights of tenure to that area of interest are current and that the costs are expected to be recouped through the successful commercial development or sale of the area or where activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves.

Costs in relation to an abandoned area are written off in full against profit in the period in which the decision to abandon the area is made.

Each area of interest is also reviewed annually, and acquisition costs written off to the extent that they will not be recoverable in the future.

11 PLANT AND EQUIPMENT

	2021	2020
	\$	\$
Software	173,188	13,353
Plant & Equipment	564,447	-
Assets under Construction	743,037	-
	1,480,672	13,353

Movement in carrying amounts of plant and equipment for year ended 30 June 2021

	Software	Plant & Equipment	Assets under construction	Total
	\$	\$	\$	\$
Balance at 1 July 2020	13,353	-	-	13,353
Additions	164,136	662,135	743,037	1,569,308
Depreciation	(4,301)	(97,688)	-	(101,989)
Balance at 30 June 2021	173,188	564,447	743,037	1,480,672

Movement in carrying amounts of plant and equipment for year ended 30 June 2020

	Software	Plant & Equipment	Assets under construction	Total
	\$	\$	\$	\$
Balance at 1 July 2019	-	-	-	-
Additions	13,353	-	-	13,353
Depreciation	-	-	-	-
Balance at 30 June 2021	13,353	-	-	13,353

Accounting Policy

Plant and equipment is stated at historical cost less accumulated depreciation and impairment. Historical cost includes expenditure that is directly attributable to the acquisition of the items

Once assets are available for use, depreciation is calculated using the straight-line method to allocate asset costs over their estimated useful lives, as follows:

Software	3 -5 years
Plant & Equipment	2-15 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

NOTE 12 LEASES

Right-of-use asset	Office space	Vehicles	Total
Cost			
At 1 July 2020	-	-	-
Additions	528,584	60,011	588,595
At 30 June 2021	528,584	60,011	588,595
Accumulated Depreciation			
At 1 July 2020	-	-	-
Depreciation for the year	16,348	6,001	22,349
	16,348	6,001	22,349
Carrying amount			
At 1 July 2020	-	-	-
At 30 June 2021	512,236	54,010	566,246
Lease Liabilities			
At 1 July 2020	-	-	-
New lease liabilities entered during the period	528,584	60,011	588,595
Add: Interest	5,242	1,510	6,752
Less: Payment	(18,513)	(17,898)	(36,411)
Closing Balance	515,313	43,623	558,936
Represented by:			
Current lease liabilities	54,429	7,960	62,389
Non-current lease liabilities	460,884	35,663	496,547
	515,313	43,623	558,936

Accounting Policy

Right-of-use assets:

A right-of-use asset is recognised at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is the shorter. Where the consolidated entity expects to obtain ownership of the leased asset at the end of the lease term, the depreciation is over its estimated useful life. Right-of use assets are subject to impairment or adjusted for any remeasurement of lease liabilities.

The consolidated entity has elected not to recognise a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are expensed to profit or loss as incurred.

Lease liabilities

A lease liability is recognised at the commencement date of a lease. The lease liability is initially recognised at the present value of the lease payments to be made over the term of the lease, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the consolidated entity's incremental borrowing rate. Lease payments comprise of fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, amounts expected to be paid under residual value guarantees, exercise price of a purchase option when the exercise of the option is reasonably certain to occur, and any anticipated termination

penalties. The variable lease payments that do not depend on an index or a rate are expensed in the period in which they are incurred.

Lease liabilities are measured at amortised cost using the effective interest method. The carrying amounts are remeasured if there is a change in the following: future lease payments arising from a change in an index or a rate used; residual guarantee; lease term; certainty of a purchase option and termination penalties. When a lease liability is remeasured, an adjustment is made to the corresponding right-of use asset, or to profit or loss if the carrying amount of the right-of-use asset is fully written down.

The Group leases office space and vehicles through its German subsidiary Vulcan Energie Ressourcen GmbH .

NOTE 13 TRADE AND OTHER PAYABLES

(i) Trade payables are non-interest bearing and are normally settled on 30-day terms.

Due to the short-term nature of these payables, their carrying value is assumed to be the same as their fair value.

Accounting Policy

Trade payables and other payables represent liabilities for goods and services provided to the Group prior to the end of the financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

NOTE 14 PROVISION

	2021	2020
	\$	\$
Annual leave provision	87,584	13,700
	87,584	13,700

Accounting Policy

Provisions

Provisions are recognised when the consolidated entity has a present (legal or constructive) obligation as a result of a past event, it is probable the consolidated entity will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. If the time value of money is material, provisions are discounted using a current pre-tax rate specific to the liability. The increase in the provision resulting from the passage of time is recognised as a finance cost.

NOTE 15 CONTRIBUTED EQUITY

(a) Issued and fully paid	2021		2020	
	No.	\$	No.	\$
Ordinary shares	108,422,717	136,500,373	67,217,555	11,836,741

Ordinary shares entitle the holder to participate in the dividends and the proceeds on winding up in proportion to the number of and amounts paid on the shares held.

At shareholders meetings, each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.

(b) Movement reconciliation

	Date	Number	Issue Price	\$
At 1 July 2019		31,750,001		4,746,416
Placement to sophisticated investors	10/07/2019	2,820,000	0.15	423,000
Placement to sophisticated investors	19/07/2019	3,513,334	0.15	527,000
Shares issued for services rendered	5/08/2019	1,000,000	0.20	200,000
Shares to Vendors and Introducers as part of consideration for the Acquisition	4/09/2019	7,666,667	0.15	1,150,000
Shares issued to Director to incentive performance and retain services	4/09/2019	750,000	0.15	112,500
Share issue to Director for participation in Placement	4/09/2019	1,000,000	0.15	150,000
Less Capital raising costs		-	-	(58,425)
Conversion of Class A performance shares and Class D performance rights	28/02/2020	5,170,000	-	-
Conversion of Class A performance rights	30/06/2020	800,000	-	-
Conversion of Class A performance shares	30/06/2020	480,000	-	-
Conversion of listed options	30/06/2020	267,753	0.29	76,310
Placement to sophisticated investors	30/06/2020	12,000,000	0.40	4,800,000
Less Capital raising costs	30/06/2020	-	-	(290,060)
At 30 June 2020		67,217,755		11,836,741
At 1 July 2020		67,217,755		11,836,741
Shares issued in lieu of cash fees for services rendered	6/10/2020	400,000	0.85	340,000
Conversion of Listed Options	2/7/2020 - 17/12/2020	8,930,765	0.29	2,545,268
Conversion of Unlisted Options	15/10/2020- 26/11/2020	1,125,250	0.80	900,200
Conversion of Class B Performance Rights	16/09/2020	500,000	-	-
Introducer shares	16/09/2020	660,000	0.89	587,400
Shares issued to Director	27/11/2020	100,000	2.38	238,000
Conversion of Class B Performance Shares	15/01/2021	4,400,000	-	-
Conversion of Class E & K Performance Rights	15/01/2021	2,250,000	-	-
Conversion of Listed Options	20/12/2020- 20/01/2021	3,457,409	0.29	985,362
Placement	6/02/2021	18,423,077	6.50	119,750,001
Conversion of Class H Performance shares	11/05/2021	260,000	-	-
Less capital raising costs		-	-	(6,139,997)
Placement to Director	30/06/2021	38,461	6.50	249,997
Introducer shares	30/06/2021	660,000	7.89	5,207,400
At 30 June 2021		108,422,717		136,500,372

Accounting Policy

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options for the acquisition of a business are not included in the cost of the acquisition as part of the purchase consideration.

If the entity reacquires its own equity instruments, for example, as a result of a share buy-back, those instruments are deducted from equity and the associated shares are cancelled. No gain or loss is recognised in the profit or loss and the consideration paid including any directly attributable incremental costs (net of income taxes) is recognised directly in equity.

NOTE 16 RESERVES

	2021 \$	2020 \$
Share-based payment reserve	8,021,470	1,741,986
Foreign currency translation reserve	(122,009)	(22,016)
Total	7,899,461	1,719,970

	Number of Warrants	Number of Listed options	Number of Unlisted Options	Number of Performance Shares	Number of Performance Rights	\$
<u>Movement</u>						
<u>reconciliation</u>						
On issue at 1 July 2019	-	12,687,512	-	-	3,900,000	164,013
Issue of performance rights during the year	-	-	-	-	5,000,000	-
Recognition of share-based payment expense for performance rights issued to Directors and staff (Note 19)	-	-	-	-	-	689,625
Performance share issued during the year	-	-	-	13,200,000	-	-
Recognition of share-based payment expense for performance shares issued to Vendors on Acquisition (Note 19)	-	-	-	-	-	888,348
Performance rights cancelled during the year	-	-	-	-	(2,600,000)	-
Exercise of performance rights during the year	-	-	-	-	(2,050,000)	-
Exercise of performance shares during the year	-	-	-	(4,400,000)	-	-
Exercise of listed options during the year	-	(267,753)	-	-	-	-
On issue at 30 June 2020	-	12,419,759	-	8,800,000	4,250,000	1,741,986

	Number of Warrants	Number of Listed options	Number of Unlisted Options	Number of Performance Shares	Number of Performance Rights	\$
Movement reconciliation						
On issue at 1 July 2020	-	12,419,759	-	8,800,000	4,250,000	1,741,986
Issue of performance rights during the year	-	-	-	-	10,248,688	-
Recognition of share - based payment expense for performance rights issued to Directors, staff & consultants (Note 19)	-	-	-	-	-	4,419,668
Performance rights cancelled during the year	-	-	-	-	(250,000)	-
Recognition of share - based payment expense for performance rights issued to Vendors on Acquisition (Note 19)	-	-	-	-	-	752,017
Issue of unlisted options during the year	-	-	1,112,250	-	-	-
Exercise of unlisted options during the year	-	-	(1,112,250)	-	-	-
Recognition of share based payment expense for unlisted options issued (Note 19)	-	-	-	-	-	369,757
Exercise of listed options during the year	-	(12,388,174)	-	-	-	-
Listed options expired during the year	-	(31,585)	-	-	-	-
Exercise of Performance rights during the year	-	-	-	-	(3,010,000)	-
Warrants issued during the year	512,447	-	-	-	-	-
Recognition of shared based payment expense for warrants issued during the year	-	-	-	-	-	373,836
Exercise of Performance Shares during the year	-	-	-	(4,400,000)	-	-
Recognition of shared based payment expense for performance rights issued to Directors & staff in prior periods (Note 19)	-	-	-	-	-	364,206
On issue at 30 June 2021	512,447	-	-	4,400,000	11,238,688	8,021,470

The option reserve is used to record the value of share-based payments provided to outside parties, and share-based remuneration provided to employees and directors.

	2021	2020
	\$	\$
Foreign Currency Translation Reserve		
Balance at the beginning of the year	(22,016)	-
Movement during the year	(99,993)	(22,016)
Balance at the end of the year	(122,009)	(22,016)

NOTE 17 ACQUISITION OF SUBSIDIARY

On 4 September 2019, the Company successfully completed its acquisition of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd ("the Vulcan Lithium Project"). The acquisition was assessed as an asset acquisition rather than a business combination. The Company issued 6,666,667 fully paid ordinary shares in the Company to the Vendors, Dr Wedin and Dr Horst Kreuter to acquire the asset.

	4 September 2019
	\$
Fair value of shares issued	1,000,000
Purchase consideration	1,000,000
Fair value of net assets acquired are as follows:	
Cash and cash equivalents	404
Exploration and evaluation expenditure	1,121,125
Trade and other payables	(121,529)
	1,000,000

NOTE 18 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of the financial markets and seeks to minimise potential adverse effects on the financial performance of the Group. The Group uses different methods to measure and manage different types of risks to which it is exposed.

These include monitoring levels of exposure to interest rate and foreign exchange risk and assessments of market forecasts for interest rate and foreign exchange prices. Ageing analysis and monitoring of specific credit allowances are undertaken to manage credit risk. Liquidity risk is monitored through the development of future cash flow forecasts.

Risk management is carried out by Management and overseen by the Board of Directors with assistance from suitably qualified external advisors.

The main risks arising for the Group are foreign exchange risk, interest rate risk, credit risk and liquidity risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below.

The carrying values of the Group's financial instruments are as follows:

	2021	2020
	\$	\$
Financial Assets		
Cash and cash equivalents	114,705,865	6,421,557
Trade and other receivables	1,197,500	116,071

	115,903,365	6,537,628
Financial Liabilities		
Trade and other payables	2,113,016	221,922
Lease liabilities	558,936	-
	2,671,952	221,922

(a) Market risk

(i) Foreign exchange risk

The Group's exposure to foreign currency risk at the end of the reporting period, expressed in Australian dollar, was as follows:

	30 June 2021		30 June 2020	
	AUD	EUR	AUD	EUR
Other Receivables	146,099	1,051,401	66,118	49,953
Trade Payables	(615,398)	(827,581)	(85,903)	(1,510)
Other Payables	(348,052)	(968,503)	(105,035)	(30,984)
	(817,351)	(744,683)	(124,820)	17,459

The aggregate net foreign exchange gains/losses recognised in the P&L were:

	2021	2020
Net foreign exchange gains/losses recognised in the P&L were:	76,042	(7,167)

Sensitivity

As shown in the table above, the group is primarily exposed to changes in EUR/AUD exchange rates. The sensitivity of profit or loss to changes in the exchange rates is:

	Impact on post-tax profit	
	2021	2020
	\$	\$
EUR/AUD exchange rate - increase 10% (2020 -10%)*	65,637	6,651
EUR/AUD exchange rate - decrease 10% (2020 -10%)*	(80,222)	(8,128)
*Holding all other variables constant	-	

(ii) Interest rate risk

The Group is exposed to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in the market interest rates on interest bearing financial instruments. The Group's exposure to this risk relates primarily to the Group's cash and any cash on deposit. The Group does not use derivatives to mitigate these exposures. The Group manages its exposure to interest rate risk by holding certain amounts of cash in fixed and floating interest rate facilities. At the reporting date, the interest rate profile of the Group's interest-bearing financial instruments was:

	2021		2020	
	Weighted average interest rate	Balance \$	Weighted average interest rate	Balance \$
Cash and cash equivalents	0.23%	114,705,865	0.08%	6,421,557

Sensitivity

Within the analysis, consideration is given to potential renewals of existing positions and the mix of fixed and variable interest rates. The following sensitivity analysis is based on the interest rate risk exposures in existence at the reporting date. The 1% increase and 1% decrease in rates is based on reasonably expected possible changes over a financial year.

At 30 June 2021, if interest rates had moved, as illustrated in the table below, with all other variables held constant, losses and equity would have been affected as follows:

<i>Judgements of reasonably possible movements:</i>	Profit higher/(lower) 2021	Profit higher/(lower) 2020
	\$	\$
+ 1.0% (100 basis points)	1,147,059	64,216
- 1.0% (100 basis points)	(1,147,059)	(64,216)

(b) Credit risk

Credit risk arises from the financial assets of the Group, which comprise cash and cash equivalents, trade and other receivables and other financial assets. The Group's exposure to credit risk arises from potential default of the counterparty, with maximum exposure equal to the carrying amount of the financial assets.

The Group's policy is to trade only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms will be subject to credit verification procedures.

In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. There are no significant concentrations of credit risk within the Group except for cash and cash equivalents.

(c) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows. The Group does not have any external borrowings.

The following are the contractual maturities of financial liabilities:

	1 year or less	1-5 years	> 5 years	Total
	\$	\$	\$	\$
2021				
Trade and other payables	2,113,014	-	-	2,113,014
Lease Liabilities	62,389	283,267	213,280	558,936
2020				
Trade and other payables	221,922	-	-	221,922

(d) Capital risk management.

The Group's objectives when managing capital are to:

Safeguard their ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders; and

Maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the number of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Given the stage of the Company's development there are no formal targets set for return on capital. The Company is not subject to externally imposed capital requirements. The net equity of the Company is equivalent to capital. Net capital is obtained through capital raisings on the Australian Securities Exchange ("ASX").

NOTE 19 SHARE-BASED PAYMENTS

	2021	2020
	\$	\$
Recognised share-based payment transactions		
Performance rights issued to Directors, staff and consultants (i)	4,419,668	-
Performance rights issued to Directors & staff in prior periods (ii)	364,206	689,626
Performance shares issued to Vendors of Acquisition (iii)	752,017	888,348
Shares issued for consideration of services	340,000	462,500
Shares issued to Director	238,000	-
Warrants (iv)	373,836	-
Unlisted Options (v)	369,757	-
Shares issued to Introducers of Acquisition (Note 10)	5,794,800	-
	12,652,284	2,040,473

Represented by

Shared-based payment expense	6,517,484	1,690,473
Investor relations expense	340,000	200,000
Introducer fee	-	150,000
Capitalised exploration assets (Note 10)	5,794,800	-
	12,652,284	2,040,473

- (i) The Company issued the total of 10,248,688 performance rights during the year to the Directors, staff and consultants to align their interests to that of the Company's shareholders and assist as an effective means of retaining staff.

Based on management assessment, a percentage of a share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.

Details of Performance Rights granted during the year are:

	Fair value of each right	Expected volatility	Grant date	Price at grant date (\$)	Expiry date	Vesting hurdle (5-day VWAP)	Interest rate	Number of Rights	Total value of Rights (\$)	Share based payment expense (\$)
Class H	\$1.05 & \$0.90	N/A	11/9/2020 & 15/9/2020	1.05 & 0.90	1/12/2023	N/A	N/A	250,000 & 250,000	487,500	487,500
Class H	\$2.38	N/A	25/11/2020	2.38	1/12/2023	N/A	N/A	250,000	595,000	595,000

	Fair value of each right	Expected volatility	Grant date	Price at grant date (\$)	Expiry date	Vesting hurdle (5-day VWAP)	Interest rate	Number of Rights	Total value of Rights (\$)	Share based payment expense (\$)
Class I	\$1.05 & \$0.90	N/A	11/9/2020 & 15/9/2020	1.05 & 0.90	1/12/2023	N/A	N/A	250,000 & 250,000	487,500	115,805
Class I	\$2.38	N/A	25/11/2020	2.38	1/12/2023	N/A	N/A	250,000	595,000	- (i)
Class J	\$0.57	70%	10/09/2020	0.89	16/09/2023	1.84	0.26%	2,500,000	1,422,500	264,991
Class K	\$0.72	70%	10/09/2020	0.89	16/09/2023	1.23	0.26%	1,000,000	720,000	720,000
Class L	\$0.61	70%	10/09/2020	0.89	16/09/2023	1.64	0.26%	1,000,000	614,000	130,719
Class M	\$0.89	N/A	10/09/2020	0.89	1/12/2023	N/A	N/A	1,500,000	1,335,000	1,335,000
Class N	0.89	N/A	10/09/2020	0.89	1/12/2023	N/A	N/A	1,500,000	1,335,000	506,350
Class P	\$0.9 & \$7.6	N/A	15/09/2020 & 29/06/2021	\$0.9 & \$7.6	1/12/2023	N/A	N/A	250,000 & 60,000	681,000	47,032
Class Q	\$2.38	N/A	25/11/2020	2.38	27/11/2021	N/A	N/A	100,000	238,000	140,725
Class R	\$2.38	N/A	25/11/2020	2.38	27/11/2022	N/A	N/A	100,000	238,000	70,555
Class S	\$7.80	N/A	24/06/2021	\$7.80	30/06/2025	N/A	N/A	38,688	301,766	3,031
Class T	\$7.60	N/A	29/06/2021	\$7.60	1/12/2024	N/A	N/A	250,000	1,900,000	1,139
Class U	\$7.60	N/A	29/06/2021	\$7.60	1/12/2024	N/A	N/A	250,000	1,900,000	1,063
Class V	\$7.60	N/A	29/06/2021	\$7.60	1/12/2024	N/A	N/A	100,000	760,000	456
Class W	\$7.60	N/A	29/06/2021	\$7.60	1/12/2024	N/A	N/A	100,000	760,000	302

(1) Class I has no share-based payment expense for the year due to performance rights lapsed in June 2021 following Dr Katherina Gerber resignation from the Company.

Details of Performance Rights vesting conditions:

Class H

- the Company announcing, on or before 18 May 2022, a positive Pre-Feasibility Study in relation to the Company's Zero Carbon Lithium Project™ confirming it is commercially viable.

Class I

- the Company announcing, on or before 18 May 2023, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three-year term, or a downstream lithium chemicals joint venture partner with a minimum of \$10,000,000 investment in relation to the Project.

Class J

- the Company announcing, within 36 months from the date of issue, a positive (JORC-Compliant) Definitive Feasibility Study in relation to the Project confirming it is commercially viable; and

- the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 225% of the VWAP for Shares for the last 5 trading days up to but not including the date of the Meeting (the Reference Price).

Class K

- the Company announcing, within 36 months from the date of issue, a positive Pre-Feasibility Study in relation to the Company's Zero Carbon Lithium Project™ confirming it is commercially viable; and

- the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 150% of the Reference Price.

Class L

- the Company announcing, within 36 months from the date of issue, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three-year term,

or a downstream lithium chemicals joint venture partner with a minimum of \$10,000,000 investment in relation to the Project; and

- the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 200% of the Reference Price.

Class M

- the Company announcing, on or before 21 May 2021, a positive Pre-Feasibility Study in relation to the Company's Zero Carbon Lithium Project™ confirming it is commercially viable.

Class N

- the Company announcing, on or before 21 May 2022, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three-year term, or a downstream lithium chemicals joint venture partner with a minimum of \$10,000,000 investment in relation to the Project.

Class P

- the Company announcing before 31 December 2022 a positive Definitive Feasibility Study in relation to the Project confirming it is commercially viable.

Class Q

- Vesting on issue, and converting to shares on a one for one basis on the date that is 12 months from the date of issue.

Class R

- Vesting on issue, and converting to shares on a one for one basis on the date that is 24 months from the date of issue.

Class S

- one third vesting 12 months from the date of the 24 June 2021 General Meeting (EGM), one third vesting 24 months from EGM, one third vesting 36 months from EGM.

Class T

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

Class U

- the Company being issued a building permit for the first Direct Lithium Extraction system, on or before the Expiry Date of 1st December 2024.

Class V

- the Company being granted a permit according to BImSchG for the first lithium refinery, on or before the Expiry Date of 1st December 2024;

Class W

- the Company announcing commissioning of the first commercial lithium extraction plant, on or before the Expiry Date of 1st December 2024;

(ii) In the prior year, 5,000,000 performance rights were granted and issued as follows:

On 4 September 2019, the Company issued 3,750,000 performance rights to Mr Gavin Rezos as an incentive in connection with his appointment as Chairman.

On 18 May 2020, the Company issued 1,250,000 performance rights to staff as incentive in connection with their appointment.

3,900,000 performance rights were granted and issued to directors in prior periods. These were issued on 20 December 2018.

Based on management assessment, percentage of a share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.

Details of Performance Rights granted in prior years are:

Details of Performance Rights vesting conditions:

	Fair value of each right	Expected volatility	Grant date	Price at grant date (\$)	Expiry date	Vesting hurdle (5-day VWAP)	Interest rate	Number of Rights	Total value of Rights (\$)	Share based payment expense (\$)
Class A	\$0.1463	90%	30/11/2018	0.18	30/11/2021	0.4	0.0206	1,200,000	175,560	- (i)
Class B	\$0.1124	90%	30/11/2018	0.18	30/11/2021	0.75	0.0206	1,200,000	134,880	10,683
Class C	\$0.0906	90%	30/11/2018	0.18	30/11/2021	1.1	0.0206	1,500,000	135,900	- (ii)
Class D	\$0.15	N/A	4/09/2019	0.15	4/09/2020	N/A	N/A	1,250,000	187,500	- (i)
Class E	\$0.15	N/A	4/09/2019	0.15	4/09/2021	N/A	N/A	1,250,000	187,500	141,190
Class F	\$0.15	N/A	4/09/2019	0.15	4/09/2022	N/A	N/A	1,250,000	187,500	72,451
Class G	\$0.225	N/A	11/05/2020	0.225	1/12/2023	N/A	N/A	250,000	56,250	- (i)
Class H	\$0.225	N/A	11/05/2020 & 14/5/2020	0.225	1/12/2023	N/A	N/A	500,000	112,500	108,049
Class I	\$0.225	N/A	14/05/2020	0.225	1/12/2023	N/A	N/A	500,000	112,500	31,833

(1) Class A, D and G have no share-based payment expense for the year due to performance rights vested in the prior year.

(2) Class C has no share-based payment expense for the year due to performance rights cancelled in the prior year.

Class A

- Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.40.

Class B

- Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.75.

Class C

- Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$1.10.

Class D

- Vest immediately and convert into Shares on the Company announcing a positive scoping study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 12 months of completion of the Acquisition.

Class E

- Vest immediately and will convert into shares on the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 24 months of completion of the Acquisition.

Details of Performance Rights vesting conditions:

Class F

- Vest immediately and will convert into shares on the Company announcing that it has secured either an offtake agreement representing a minimum of 30% of production volume over a three year term, or a downstream joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within 36 months of completion of the Acquisition.

Class G

- Will vest upon the holder completing six months continuous employment with the Company, with an expiry date of 1 December 2023.

Class H

- Will vest upon the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Lithium Project is commercially viable within two years of issue of the Performance Rights, with an expiry date of 1 December 2023.

Class I

- Will vest upon the Company announcing that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream lithium chemicals joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within three years of issue of the Performance Rights, with an expiry date of 1 December 2023.

(iii) On 4 September 2019, the Company issued 13,200,000 Performance Shares (PS) issued to Vendors of the Vulcan Lithium Project Acquisition which will each convert into a Share on a one for one basis on the satisfaction of milestones. Based on management assessment, percentage of a share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income

	Fair value of each PS (\$)	Expected volatility	Grant date	Price at grant date	Expiry date	Vesting hurdle (5-day VWAP)	Interest rate	Number of PS	Total value of PS(\$)	Share based payment expense (\$)
Class A	\$0.15	N/A	4/09/2019	\$0.15	4/09/2020	N/A	N/A	4,400,000	660,000	-(i)
Class B	\$0.15	N/A	4/09/2019	\$0.15	4/09/2021	N/A	N/A	4,400,000	660,000	496,989
Class C	\$0.15	N/A	4/09/2019	\$0.15	4/09/2022	N/A	N/A	4,400,000	660,000	255,028

(iv) Class A has no share-based payment expense for the year due to performance shares vested in the prior year.

- (v) On 10 September 2020, 25 November 2020, and 24 June 2021, shareholder approval was obtained to issue total of 521,304 warrants to EIT InnoEnergy. On 16 September 2020, and on 8 January 2021, the Company issued 479,519 and 32,928 warrants respectively, with 8,857 warrants issued on 9 August 2021, subsequent to 30 June 2021. The warrants can only be exercised after 1 September 2021 and at any time on or prior to expiry. These warrants were valued using a Black-Scholes valuation, with the valuation model inputs used to determine the fair value at grant date as follows:

Grant Date	10/09/2020	25/11/2020	24/06/2021
Expiry Date	16/09/2023	8/01/2023	9/08/2024
Share price at grant date	\$0.89	\$2.38	\$7.89
Exercise Price	\$0.00	\$0.00	\$0.00
Number of warrants	479,519	32,928	8,857
Fair value at grant date	\$0.88	\$2.38	\$7.89
Expected volatility	70%	70%	70%
Risk free rate	0.26%	0.11%	0.20%
Total value	\$426,772	\$78,369	\$69,873
Balance at the end of the year (No.)	479,519	32,928	8,857
Share based payment expense (\$)	349,658	18,103	6,075

- (vi) On 16 September 2020, the Company issued 1,125,250 unlisted options exercisable at \$0.80 on or before 18 months expiry following shareholder approval at a GM held on 10 September 2020. The grant of options was agreed and finalised in June 2020 when the Company completed a capital raise for \$4.8 million however were subject to shareholder approval prior to issue. These options were valued using a Black-Scholes valuation, with the valuation model inputs used to determine the fair value at grant date as follows:

Grant Date	10/09/2020
Expiry Date	16/03/2022
Share price at grant date	\$0.89
Exercise Price	\$0.80
Number of options	1,125,250
Fair value at grant date	\$0.33
Expected volatility	70%
Risk free rate	0.26%
Total value	\$369,757
Share based payment expense (\$)	\$369,757
Exercised	1,125,250
Balance at the end of the year (No)	-

Accounting Policy

Equity-settled and cash-settled share-based compensation benefits are provided to Key Management Personnel and employees.

Equity-settled transactions are awards of shares, or options over shares, which are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using an appropriate valuation model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with non-vesting conditions that do not determine whether the consolidated entity receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

The cost of cash-settled transactions is initially, and at each reporting date until vested, determined by applying an appropriate valuation model, taking into consideration the terms and conditions on which the award was granted. The cumulative charge to profit or loss until settlement of the liability is calculated as follows:

- (a) During the vesting period, the liability at each reporting date is the fair value of the award at that date multiplied by the expired portion of the vesting period.
- (b) From the end of the vesting period until settlement of the award, the liability is the full fair value of the liability at the reporting date.

All changes in the liability are recognised in profit or loss. The ultimate cost of cash-settled transactions is the cash paid to settle the liability.

Market conditions are taken into consideration in determining fair value. Therefore, any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the consolidated entity or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the consolidated entity or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

NOTE 20 RELATED PARTY DISCLOSURE

(a) Key Management Personnel Compensation

The aggregate compensation made to directors and other members of key management personnel of the consolidated entity is set out below.

The aggregate compensation made to directors and other members of key management personnel of the consolidated entity is set out below.

	2021	2020
	\$	\$
Short-term benefits	1,124,701	471,534
Post-employment benefits	52,232	20,443
Share-based payments	4,017,627	384,616
	<u>5,194,560</u>	<u>876,593</u>

(b) Transactions with related parties

Terms and conditions

All transactions were made on normal commercial terms and conditions and at market rates.

During the financial year, payments for corporate advisory services outside of Australia of \$45,000 (2020: \$73,185) were made to Viaticus Capital, a related party of Mr Rezos. Viaticus Capital also received fees of \$49,256 (2020: \$18,000) for capital raising fees associated with a placement undertaken in year ending 30 June 2021. The outstanding balance to Viaticus Capital at 30 June 2021 was \$68,836 (2020: \$33,000). The corporate advisory services agreement with Viaticus Capital entered into in 2018 was amended by mutual agreement during the reporting period to exclude any capital raising, M&A or related services.

Dr Kreuter was CEO of Geothermal Group Germany GmbH and GeoThermal Engineering GmbH (GeoT). GeoThermal Engineering GmbH provides engineering services to Vulcan Energie Ressourcen GmbH, wholly sub of the Vulcan Energy Resources Ltd. During the financial year, Geothermal Engineering received €736,609 or A\$1,176,710 from Vulcan Energie Ressourcen GmbH (2020: €77,035 or A\$130,128). There were no amounts outstanding at 30 June 2021 (2020: Nil).

During the financial year payments for consulting fees of \$43,044 (2020: Nil) were made to Alto Group Inc., a related party of Ms Annie Liu. The outstanding balance to Alto Group Inc., at 30 June 2021 was \$17,493 (2020: Nil).

There were no other related party transactions during the previous financial year.

There were no loans made to any KMP during the year ended 30 June 2021 (2020: Nil).

Other than the above, there were no other transactions with KMP during the year ended 30 June 2021.

NOTE 21 COMMITMENTS

Below are the commitments in relation to its exploration and evaluation assets:

	2021	2020
	\$	\$
Within one year	1,589,594	163,639
One to five years	2,155,391	163,639
	<u>3,744,985</u>	<u>327,278</u>

NOTE 22 CONTINGENCIES

As part of the acquisition of Vulcan Lithium Project, the Company agrees to pay the following by way of deferred consideration of remaining 4,400,000 (13,200,000 less 8,800,000) Performance Shares to be issued to the Vendors, which will each convert into a Share on a one for one basis on satisfaction the following milestones:

(i.) 4,400,000 Shares on the Company announcing that it has secured an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within 36 months of completion of the Acquisition (Milestone 3), (together, the Deferred Consideration).

Other than the above, there are no other contingent assets or contingent liabilities as at 30 June 2021.

NOTE 23 AUDITOR'S REMUNERATION

	2021 \$	2020 \$
Amounts received or due and receivable by RSM Australia Partners for:		
Audit or review of the annual financial report	59,000	31,500
Other services - RSM Australia Pty Ltd for:		
– Corporate Finance	1,500	-
	60,500	31,500

NOTE 24 ACCUMULATED LOSSES

	2021 \$	2020 \$
Balance at beginning of the year	(4,670,672)	(1,117,313)
Loss after income tax for the year	(10,744,614)	(3,553,359)
Balance at end of the year	(15,415,286)	(4,670,672)

NOTE 25 INVESTMENT IN CONTROLLED ENTITIES

	Principal Activities	Country of Incorporation	Ownership Interest	Ownership Interest
			2021 %	2020 %
Kuniko Limited	Exploration	Australia	100	100
Vulcan Energy Resources Europe Pty Ltd	Exploration	Australia	100	100
Vulcan Energie Ressourcen GmbH	Exploration	Germany	100	100

NOTE 26 PARENT ENTITY

	2021 \$	2020 \$
Statement of Financial Position		
ASSETS		
Current Assets	114,598,014	6,330,432
Non-Current Assets	14,989,640	2,745,876
TOTAL ASSETS	129,587,654	9,076,308
LIABILITIES		
Current Liabilities	603,110	190,270

TOTAL LIABILITIES	<u>603,110</u>	<u>190,270</u>
EQUITY		
Issued Capital	136,500,372	11,836,741
Reserves	8,021,740	1,741,986
Accumulated losses	(15,537,568)	(4,692,689)
TOTAL EQUITY	<u>128,984,544</u>	<u>8,886,038</u>
Statement of Profit or Loss and other comprehensive income		
Loss for the year	<u>10,844,879</u>	<u>(3,575,376)</u>
Total Comprehensive Income	<u>10,844,879</u>	<u>(3,575,376)</u>

Contingent liabilities

Other than disclosed at Note 22, the parent entity has no other contingent assets or contingent liabilities as at 30 June 2021 and 30 June 2020.

Capital commitments - Property, plant and equipment

The parent entity had no capital commitments for property, plant and equipment as at 30 June 2021 and 30 June 2020.

Exploration commitments

The parent entity has no exploration commitments.

Significant accounting policies

The accounting policies of the parent entity are consistent with those of the consolidated entity, as disclosed in the financial statements, except for the following:

Investments in subsidiaries are accounted for at cost, less any impairment, in the parent entity.

NOTE 27 EVENTS AFTER THE REPORTING DATE

- (i) On 6 July 2021, the Company issued 336,396 shares and 91,174 performance shares in the Company, comprising:
- 11,396 shares and 91,174 performance shares, being the security consideration for the acquisition of Global Geothermal Holding UG (a company incorporated under the laws of Germany); and
 - 325,000 shares (216,667 of which are escrowed until 6 July 2022) being the share consideration for the acquisition of Global Engineering & Consulting Company GmbH (a company incorporated under the laws of Germany),

in both cases, as approved by shareholders at a General Meeting held on 24 June 2021.

The company also completed on the same day the acquisition of Geothermal Engineering GmbH.

On 12 July 2021, the Company announced that new exploration license for geothermal energy, geothermal heat, brine and lithium has been granted in the Upper Rhine Valley for a three year period. The license covers 108km² of area considered by the Company to be prospective for geothermal and lithium brine.

On 13 July 2021, Markus Ritzauer was appointed as CFO of Vulcan's German operations, effective from 1 September 2021. Mr. Ritzauer has over 20 years' experience in finance roles within the

chemicals industry. He is currently Head of Finance at Currenta, a chemical park service provider in Germany formerly part of Bayer.

On 19 July 2021, the Company signed a binding lithium hydroxide offtake term sheet ("Agreement") with LG Energy Solution ("LGES"). LGES is the largest producer of lithium-ion batteries for electric vehicles in the world and supplies its products to top global OEMs. The Agreement is for an initial five-year term which can be extended by a further five years, with start of commercial delivery set for 2025. LGES to purchase 5,000 metric tonnes of battery grade lithium hydroxide for the first year of the supply term, ramping up to 10,000 metric tonnes per year during the second and subsequent years of the supply term. Pricing will be based on market prices for lithium hydroxide. Conditions precedent to start of commercial delivery include the execution of a definitive formal offtake agreement on materially the same terms by end November 2021, successful start of commercial operation and full product qualification.

On 27 July 2021, the Company announced, further to its announcement of 21 April 2021, the close of the \$7.88 million IPO raise for the spin out of its wholly owned subsidiary Kuniko Limited. The Company is expecting the spin off and listing of Kuniko Limited to complete on 24 August 2021. Following the spin off Vulcan will retain a 25.85% holding in Kuniko Limited.

On 2 August 2021, the Company and Renault Group, top automotive player and pioneer in the European EV market have signed a lithium offtake term sheet. The agreement is for an initial five-year term which can be extended if mutually agreed, with a start of commercial delivery set for 2026. In line with Renault Group's ambition to offer 'made in Europe' cars, and following the launch of Renault ElectricCity – the most competitive and efficient production unit for electric vehicles in Europe – the Group will purchase between 6,000 to 17,000 metric tonnes per year of battery grade lithium chemicals produced in Germany by Vulcan.

On 4 August 2021, the Company announced that, after having originally commissioned the world's first Life Cycle Assessment (LCA) and global study on the environmental footprint of lithium hydroxide (LHM) production, it again commissioned Minviro Ltd., to update its independent LCA based on more recent data from Vulcan's Pre-Feasibility Study (PFS). Results of the updated LCA estimates a negative 2.9t of CO₂ emitted per tonne of LHM to be produced from Vulcan's Zero Carbon Lithium™ Project, including Scope 1, 2 and 3 emissions. Vulcan's negative CO₂ 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, and Vulcan's industry-leading move to strictly exclude fossil fuels as an energy source from its planned operations. According to public data, this result confirms that Vulcan's Zero Carbon Lithium™ Project has the lowest planned carbon footprint in the world compared to any LCA results previously published in the lithium industry.

On 9 August 2021, the Company announced that it is to apply for dual listing on the regulated market of the Frankfurt Stock Exchange (FSE), in the Prime Standard market segment, which has the very highest transparency requirements of all segments on the FSE.

On 19 August 2021 the Company announced it had signed a partnership agreement with Mr. Nico Rosberg and the Rosberg X Racing (RXR) electric racing team. The Partnership Agreement sees Vulcan Energy becoming an Official Partner of RXR and RXR and Mr Rosberg becoming shareholders in Vulcan, in return for advertising and promotional rights for the 2021 and 2022 racing seasons.

On 23 August 2021 the Company announced it had signed BNP Paribas as financial advisor towards financing the Zero Carbon Lithium™ Project.

On 24 August 2021 Kuniko Limited successfully listed on the Australian Stock Exchange (ASX:KNI), thereby completing the spin-off of the Norwegian assets announced in June 2021, with the Company retaining a 25.85% shareholding.

Apart from the above, no other matter or circumstance has arisen since 30 June 2021 that has significantly affected, or may significantly affect the consolidated entity's operations, the results of those operations, or the consolidated entity's state of affairs in future financial years.

Directors' Declaration

In the Directors' opinion:

- (a) The financial statements and accompanying notes are in accordance with the Corporations Act 2001, including:
 - (i) complying with Australian Accounting Standards, the Corporations Regulations 2001 and other mandatory professional reporting requirements; and
 - (ii) giving a true and fair view of the consolidated entity's financial position as at 30 June 2021 and of its performance for the financial year ended on that date.
- (b) The financial statements and notes comply with International Financial Reporting Standards.
- (c) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

The Directors have been given the declarations required by section 295A of the Corporations Act 2001.

This declaration is made in accordance with a resolution of the Board of Directors made pursuant to section 295(5)(a) of the Corporations Act 2001 and is signed for and on behalf of the Directors by:

A handwritten signature in dark ink, appearing to read 'Gavin Rezos', with a stylized flourish at the end.

Gavin Rezos
Chairman
2 September 2021

18.2.6 Independent Auditor's Report

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

Opinion

We have audited the financial report of Vulcan Energy Resources Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 June 2021, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the Corporations Act 2001, including:

- (i) Giving a true and fair view of the Group's financial position as at 30 June 2021 and of its financial performance for the year then ended; and
- (ii) Complying with Australian Accounting Standards and the Corporations Regulations 2001.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Group in accordance with the auditor independence requirements of the Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the Corporations Act 2001, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter	How our audit addressed this matter
Exploration and Evaluation Expenditure Refer to Note 10 in the financial statements	
The Group has capitalised exploration and evaluation expenditure with a carrying value of \$13,793,798 as at 30 June 2021.	Our audit procedures included: Ensuring that the right to tenure of the area of interest was current;
We considered this to be a key audit matter due to the significant management judgments	Agreeing a sample of additions to supporting documentation and ensuring the amounts are capital in

involved in assessing the carrying value of the asset including: • Determination of whether the exploration and evaluation expenditure can be associated with finding specific mineral resources and the basis on which that expenditure is allocated to an area of interest; • Assessing whether exploration activities have reached a stage at which the existence of economically recoverable reserves may be determined; and • Assessing whether any indicators of impairment are present and if so, judgement applied to determine and quantify any impairment loss.	nature and relate to the area of interest; • Enquiring with management and reviewing budgets and other documentation as evidence that active and significant operations in, or relation to, the area of interest will be continued in the future; • Assessing and evaluating management's determination that exploration activities have not yet progressed to the stage where the existence or otherwise of economically recoverable reserves may be determined; • Assessing and evaluating management's assessment of whether indicators of impairment existed at the reporting date; and • Assessing that the impairment expense recognised for the year ended was appropriately calculated.
<i>Share-based payments</i> Refer to Note 19 in the financial statements	
During the year, the Group issued options, warrants and performance rights to key management personnel, employees, advisors and suppliers. Management have accounted for these instruments in accordance with AASB 2 Share-Based Payments. We have considered this to be a key audit matter because: • The complexity of the accounting required to value these instruments; • Management judgement is required to determine the probability of vesting conditions of these instruments and the inputs used in the valuation model to value these instruments; and • The recognition of the share-based payment expense is complex due to the variety of vesting conditions attached to these instruments.	Our audit procedures included: • Obtaining an understanding of the terms and conditions of the instruments issued; • Reviewing the completeness of the instruments issued at reporting date; • Reviewing management's valuation methodology; • Reviewing the key inputs used for each instrument in the valuation model; • Critically assessing management's determination of the vesting probability of each instrument; • Recalculating the value of the share-based payment expense to be recognised in consolidated statement of profit or loss and other comprehensive income; and • Reviewing the appropriateness of disclosures in the financial statements.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2021 but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the 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 financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: https://www.auasb.gov.au/auditors_responsibilities/ar2.pdf. This description forms part of our auditor's report.

Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in the directors' report for the year ended 30 June 2021.

In our opinion, the Remuneration Report of Vulcan Energy Resources Limited, for the year ended 30 June 2021, complies with section 300A of the Corporations Act 2001.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

RSM AUSTRALIA PARTNERS

Perth, WA

Dated: 2 September 2021

TUTU PHONG

Partner

18.3 Financial Statements 2020

18.3.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 30 June 2020

	Note	2020 \$	2019 \$
Revenue from continuing operations			
Other income	4	95,342	56,055
Expenses			
Administrative expenses	5(a)	(320,920)	(172,580)
Compliance and regulatory expenses		(98,906)	(62,970)
Consulting and legal fees	5(b)	(424,603)	(109,642)
Employee benefit expenses		(234,551)	(156,165)
Investor relations		(314,510)	-
Introducer fee		(150,000)	-
Occupancy costs		(18,148)	(11,000)
Impairment expense	10	(286,017)	(287,667)
Share-based payments expense	16	(1,690,473)	(62,138)
Other expenses		(103,406)	(27,533)
Foreign currency (losses)/gain		(7,167)	(3,024)
Loss from continuing operations before income tax		(3,553,359)	(836,664)
Income tax expense	6	-	-
Loss from continuing operations after income tax		(3,553,359)	(836,664)
Other comprehensive income		(22,016)	-
Other comprehensive income for the year, net of tax		(22,016)	-
Total comprehensive loss attributable to the members of Vulcan Energy Resources Limited		(3,575,375)	(836,664)
Loss per share for the year attributable to the members Vulcan Energy Resources Limited:			
Basic loss per share (cents)	7	(7.37)	(2.64)
Diluted loss per share (cents)	7	(7.37)	(2.64)

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

18.3.2 Consolidated Statement of Financial Position

As at 30 June 2020

	Note	2020 \$	2019 \$
ASSETS			
Current assets			
Cash and cash equivalents	8	6,421,557	3,348,996
Trade and other receivables	9	116,071	35,063
Total current assets		6,537,628	3,384,059
Non-current assets			
Exploration and evaluation expenditure	10	2,556,980	526,001
Intangible assets		13,353	-
Total non-current assets		2,570,333	526,001
Total assets		9,107,961	3,910,060
LIABILITIES			
Current liabilities			
Trade and other payables	11	221,922	116,944
Total current liabilities		221,922	116,944
Total liabilities		221,922	116,944
Net assets		8,886,039	3,793,116
EQUITY			
Contributed equity	12	11,836,741	4,746,416
Reserves	13	1,719,970	164,013
Accumulated losses	21	(4,670,672)	(1,117,313)
Total equity		8,886,039	3,793,116

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

18.3.3 Consolidated Statement of Changes in Equity

For the Financial Year Ended 30 June 2020

	Issued Capital \$	Reserves \$	Accumulated Losses \$	Total \$
At 1 July 2019	4,746,416	164,013	(1,117,313)	3,793,116
Loss for the year	-	-	(3,553,359)	(3,553,359)
Other comprehensive loss for the year	-	(22,016)	-	(22,016)
Total comprehensive loss for the year after tax	-	(22,016)	(3,553,359)	(3,575,375)
<i>Transactions with owners in their capacity as owners:</i>				
Issue of share capital	7,438,810	-	-	7,438,810
Share issue costs	(348,485)	-	-	(348,485)
Share-based payments	-	1,577,973	-	1,577,973
Balance at 30 June 2020	11,836,741	1,719,970	(4,670,672)	8,886,039

	Issued Capital \$	Reserves \$	Accumulated Losses \$	Total \$
At 1 July 2018	4,746,416	-	(280,649)	4,465,767
Loss for the year	-	-	(836,664)	(836,664)
Total comprehensive loss for the year after tax	-	-	(836,664)	(836,664)
<i>Transactions with owners in their capacity as owners:</i>				
Issue of listed options	-	126,875	-	126,875
Option issue costs	-	(25,000)	-	(25,000)
Share-based payments	-	62,138	-	62,138
Balance at 30 June 2019	4,746,416	164,013	(1,117,313)	3,793,116

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

18.3.4 Consolidated Statement of Cash Flows

For the Financial Year Ended 30 June 2020

	Note	2020 \$	2019 \$
Cash flows from operating activities			
Payments to suppliers and employees		(1,427,391)	(417,562)
Interest received		45,342	56,055
Other income		50,000	-
Net cash used in operating activities	8(a)	(1,332,049)	(361,507)
Cash flows from investing activities			
Payments for exploration and evaluation costs		(1,205,783)	(438,127)
Net cash acquired from acquisition of subsidiary	14	404	-
Loans to other entities		-	(1,154)
Payments for software		(13,353)	-
Net cash used in investing activities		(1,218,732)	(439,281)
Cash flows from financing activities			
Proceeds from issue of listed options		-	126,875
Option issue costs		-	(25,000)
Proceeds from issued shares		5,976,310	-
Share issue costs		(330,545)	-
Net cash from financing activities		5,645,765	101,875
Net increase/(decrease) in cash and cash equivalents		3,094,984	(698,913)
Cash and cash equivalents at the beginning of the year		3,348,996	4,047,909
Effect of exchange rate fluctuations on cash held		(22,423)	-
Cash and cash equivalents at the end of the year	8	6,421,557	3,348,996

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

18.3.5 Notes to the Consolidated Financial Statements

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Reporting Entity

Vulcan Energy Resources Limited (referred to as "Vulcan" or the "Company") is a company domiciled in Australia. The address of the Company's registered office and principal place of business is disclosed in the Corporate Directory of the Annual Report. The consolidated financial statements of the Company as at and for the year ended 30 June 2020 comprise the Company and its subsidiaries (together referred to as the "Consolidated Entity" or the "Group").

(b) Basis of Preparation

Statement of compliance

The consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") and the Corporations Act 2001. The consolidated financial statements comply with International Financial Reporting Standards ("IFRS") adopted by the International Accounting Standards Board ("IASB"). Vulcan Energy Resources Limited is a for-profit entity for the purpose of preparing the financial statements.

The annual report was authorised for issue by the Board of Directors on 30 September 2020.

Basis of measurement

The consolidated financial statements have been prepared on a going concern basis in accordance with the historical cost convention, unless otherwise stated.

Parent entity information

In accordance with the Corporations Act 2001, these financial statements present the results of the consolidated entity only. Supplementary information about the parent entity is disclosed in Note 23.

New, revised or amended standards and interpretations adopted by the Group

The Group has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") that are mandatory for the current reporting period.

The following Accounting Standards and Interpretations are most relevant to the consolidated entity:

AASB 16 Leases

The consolidated entity has adopted AASB 16 from 1 July 2019. The standard replaces AASB 117 'Leases' and for lessees eliminates the classifications of operating leases and finance leases. Except for short-term leases and leases of low-value assets, right-of-use assets and corresponding lease liabilities are recognised in the statement of financial position. Straight-line operating lease expense recognition is replaced with a depreciation charge for the right-of-use assets (included in operating costs) and an interest expense on the recognised lease liabilities (included in finance costs). In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results improve as the operating expense is now replaced by interest expense and depreciation in profit or loss. For classification within the statement of cash flows, the interest portion is disclosed in operating activities and the principal portion of the lease payments are separately disclosed in financing activities. For lessor accounting, the standard does not substantially change how a lessor accounts for leases.

Impact of adoption

There is no impact on the Group for the year ended 30 June 2020 and the prior year financial statements did not have to be restated as a result.

Revenue recognition

The consolidated entity recognises revenue as follows:

Revenue from contracts with customers

Revenue is recognised at an amount that reflects the consideration to which the consolidated entity is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the consolidated entity: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Interest

Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

Other revenue

Other revenue is recognised when it is received or when the right to receive payment is established.

Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Equity Instruments

Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in the profit or loss as other income when the Group's right to receive payments is established.

Impairment

From 1 July 2019, the Group assesses on a forward-looking basis the expected credit losses (ECLs) associated with its debt instruments carried at amortised cost and FVOCI. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive. The shortfall is then discounted at an approximation to the asset's original effective interest rate.

The Group assesses at each balance date whether there is objective evidence that a financial asset or group of financial assets is impaired. For trade and other receivables, the Group applies the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience.

New standards and interpretations not yet mandatory or early adopted

The Australian Accounting Standards and Interpretations that have recently been issued or amended but are not yet mandatory, have not been early adopted by the Group for the annual reporting period ended 30 June 2020. The Group intends to adopt these standards and interpretations, if applicable, when they become effective.

Conceptual Framework for Financial Reporting (Conceptual Framework)

The revised Conceptual Framework is applicable to annual reporting periods beginning on or after 1 January 2020 and early adoption is permitted. The Conceptual Framework contains new definition and recognition criteria as well as new guidance on measurement that affects several Accounting Standards. Where the consolidated entity has relied on the existing framework in determining its accounting policies for transactions, events or conditions that are not otherwise dealt with under the Australian Accounting Standards, the consolidated entity may need to review such policies under the revised framework. At this time, the application of the Conceptual Framework is not expected to have a material impact on the consolidated entity's financial statements.

Significant Judgements and Estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the consolidated entity's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.

(c) Comparatives

The comparative period is 1 July 2018 to 30 June 2019.

(d) Principles of Consolidation

Subsidiaries

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Vulcan Energy Resources Limited ('Company' or 'parent entity') as at 30 June 2020 and the results of all subsidiaries for the year then ended.

Subsidiaries are all entities (including special purpose entities) over which the consolidated entity has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one-half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the consolidated entity controls another entity.

Subsidiaries are fully consolidated from the date on which control is transferred to the consolidated entity. They are de-consolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between consolidated entity companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the consolidated entity.

The acquisition method of accounting is used to account for business combinations by the consolidated entity. A change in ownership interest, without the loss of control, is accounted for as an equity transaction, where the difference between the consideration transferred and the book value of the share of the non-controlling interest acquired is recognised directly in equity attributable to the parent.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and statement of financial position respectively.

(e) Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board. Management has determined that based on the report reviewed by the Board and used to make strategic decisions, that the consolidated entity has one reportable segment.

(f) Foreign Currency Translation

Functional and presentation currency

Items included in the financial statements of each of the consolidated entity's entities are measured using the currency of the primary economic environment in which the entity operates ("functional currency"). The consolidated financial statements are presented in Australian dollars, which is Vulcan Energy Resources Limited's functional and presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency 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 period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

(g) Asset Acquisition not constituting a Business

When an asset acquisition does not constitute a business combination, the assets and liabilities are assigned a carrying amount based on their relative fair values in an asset purchase transaction and no deferred tax will arise in relation to the acquired assets and assumed liabilities as the initial recognition exemption for deferred tax under AASB 112 applies. No goodwill will arise on the acquisition and transaction costs of the acquisition will be included in the capitalised cost of the asset.

(h) Dividends

Dividends are recognised when declared during the financial period and no longer at the discretion of the Company.

NOTE 2 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS AND ASSUMPTIONS

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses.

Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions in these financial statements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period are disclosed below.

Coronavirus (COVID-19) pandemic

Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the consolidated entity based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the consolidated entity operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the consolidated entity unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic.

Exploration and evaluation expenditure

Exploration and evaluation costs have been capitalised on the basis that activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves. Key judgements are applied in considering costs to be capitalised which includes determining expenditures directly related to these activities and allocating overheads between those that are expensed and capitalised.

Share based payments

The Group measures the cost of equity settled transactions with Directors, employees and consultants, where applicable, by reference to the fair value of equity instruments at the date at which they are granted. The fair value is determined using an appropriate valuation model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled shared-based payments would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity.

NOTE 3 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.

Following the acquisition of a 100% interest in the Vulcan Lithium Project in the Upper Rhine Valley of Germany on 4 September 2019, it was determined that the Group operates in three operating segments being, energy metals exploration in Germany, copper and zinc mineral exploration in Norway and resources allocated to 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 Group.

(i) Segment performance	Exploration Germany	Exploration Norway	Administration	Total
30-June-20	\$	\$	\$	\$
Revenue				
Interest income	-	-	45,342	45,342
Other income			50,000	50,000
Total segment revenue	-	-	95,342	95,342

Reconciliation of segment results to net loss before tax

Amounts not included in segment results but reviewed by the Board

- Administration, consulting and other expenses	(3,648,701)
Net loss before tax from continuing operations	(3,553,359)

(ii) Segment assets	Exploration Germany	Exploration Norway	Administration	Total
30-June-20	\$	\$	\$	\$
Total segment asset	2,279,731	290,602	6,537,628	9,107,961

(ii) Segment liabilities	Exploration Germany	Exploration Norway	Administration	Total
30-June-20	\$	\$	\$	\$
Total segment liabilities	(30,984)	(668)	(190,270)	(221,922)

NOTE 4 REVENUE

	2020	2019
	\$	\$
Other income		
Interest income	45,342	56,055
Cash boost	50,000	-
	95,342	56,055

NOTE 5 EXPENSES

	2020	2019
	\$	\$
(a) Administrative expenses		
Accounting, audit and company secretarial fees	151,336	144,325
Travel expenses	107,183	25,766
General and administration expenses	62,401	2,489
	320,920	172,580
(b) Consultancy and legal expenses		
Corporate advisory fees	158,048	105,000
Consulting fees	52,993	-
Legal fees	213,562	4,642
	424,603	109,642

NOTE 6 INCOME TAX

(a) The components of tax expense comprise:

Current tax	-	-
Deferred tax	-	-
Income tax expense reported in the of profit or loss and other comprehensive income	-	-

(b) The prima facie tax on loss from ordinary activities before income tax is reconciled to the income tax as follows:

Loss before income tax expense	(3,553,359)	(836,664)
Prima facie tax benefit on loss before income tax at 30% (2019: 30%)	(1,066,008)	(250,999)
Tax effect of:		
Non-deductible expense	603,944	114,064
Tax losses and temporary differences not brought to account	451,694	136,935
Foreign corporate rate differential	10,370	-
Income tax expense	-	-

(c) Deferred tax assets/(liabilities) not brought to account are:

Accruals	26,411	15,300
Prepayments	(5,743)	(5,739)
Other	20,042	-
Tax losses	606,194	164,108
Total deferred tax balances not brought to account	646,904	173,669

Potential deferred tax assets attributable to tax losses and other temporary differences have not been brought to account at 30 June 2020 because the directors do not believe it is appropriate to regard realisation of the deferred tax assets as probable at this point in time. These benefits will only be obtained if:

- the Company derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the expenditure to be realised; and
- no changes in tax legislation adversely affect the Company in realising the benefit from the deductions for the expenditure.

Accounting Policy

The income tax expense (revenue) for the year comprises current income tax expense (income) and deferred tax expense (income).

Current Tax

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at the end of the reporting period. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred Tax

Deferred tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Current and deferred income tax expense (income) is charged or credited directly to equity instead of the profit or loss when the tax relates to items that are credited or charged directly to equity.

Deferred tax assets and liabilities are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at the end of the reporting period. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investments in subsidiaries, branches, associates, and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of set-off exists, the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

NOTE 7 LOSS PER SHARE

	2020	2019
	\$	\$
Net loss for the year	(3,553,359)	(836,664)
Weighted average number of ordinary shares for basic and diluted loss per share.	48,226,596	31,750,001
Basic and diluted loss per share (cents)	(7.37)	(2.64)

Accounting Policy

Basic Loss Per Share

Basic loss per share is determined by dividing net profit or loss after income tax attributable to members of the Company, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

Diluted Loss Per Share

Diluted loss per share adjusts the figures used in the determination of basic earnings per share to take into account the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

NOTE 8 CASH AND CASH EQUIVALENTS

	2020	2019
	\$	\$
Cash at bank and in hand	4,621,557	348,996
Short-term deposits	1,800,000	3,000,000
	6,421,557	3,348,996

(a) Reconciliation of net loss after tax to net cash flows from operations

Loss for the financial year/period	(3,553,359)	(836,664)
<i>Adjustments for:</i>		
Share based payments	2,040,473	62,138
Impairment expense	286,017	287,667
<i>Changes in assets and liabilities</i>		
Trade and other receivables	(81,008)	61,576
Trade and other payables	(24,172)	63,776
Net cash used in operating activities	(1,332,049)	(361,507)

Accounting Policy

Cash at bank earns interest at floating rates based on daily deposit rates. Short-term deposits are made in varying periods between one day and three months, depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates.

NOTE 9 TRADE AND OTHER RECEIVABLES

	2020	2019
	\$	\$
GST receivable (net)	47,049	14,779
VAT receivable (net)	51,430	-
Other receivable	17,592	19,130
Loan to Vulcan Energy Resources	-	1,154
	116,071	35,063

Allowance for impairment loss

Other receivables are non-interesting bearing and are generally on terms of 30 days.

Trade Receivables

Trade and other receivables include amounts due from customers for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets. Refer to Note 1(b)(ii) for expected credit loss allowance assessment.

Goods and Services Tax ('GST')

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included as a current asset or liability in the Consolidated statement of financial position.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST on investing and financial activities, which are disclosed as operating cash flows.

Other Receivables

Other receivables are recognised at amortised cost, less any provision for expected credit loss. Other receivables do not contain impaired assets and are not past due. Based on the credit history, it is expected that these other balances will be received when due.

NOTE 10 EXPLORATION AND EVALUATION EXPENDITURE

	Note	2020 \$	2019 \$
Carrying amount of exploration and evaluation expenditure		2,556,980	526,001
At the beginning of the period		526,001	375,541
Exploration expenditure incurred		1,195,871	438,127
Vulcan Lithium Project acquisition	14	1,121,125	-
Impairment expense		(286,017)	(287,667)
At the end of the period		2,556,980	526,001

Accounting Policy

Acquisition, exploration and evaluation costs associated with mining tenements are accumulated in respect of each identifiable area of interest. These costs are only carried forward to the extent that the rights of tenure to that area of interest are current and that the costs are expected to be recouped through the successful commercial development or sale of the area or where activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves.

Costs in relation to an abandoned area are written off in full against profit in the period in which the decision to abandon the area is made.

Each area of interest is also reviewed annually, and acquisition costs written off to the extent that they will not be recoverable in the future.

NOTE 11 TRADE AND OTHER PAYABLES

	2020 \$	2019 \$
Trade payables ⁽ⁱ⁾	85,903	65,944
Accrued expenses	74,335	51,000
Other payables	61,684	-
	221,922	116,944

Trade payables are non-interest bearing and are normally settled on 30-day terms.

Due to the short-term nature of these payables, their carrying value is assumed to be the same as their fair value.

Accounting Policy

Trade payables and other payables represent liabilities for goods and services provided to the Group prior to the end of the financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

NOTE 12 CONTRIBUTED EQUITY

(a) Issued and fully paid	2020		2019	
	No.	\$	No.	\$
Ordinary shares	67,217,755	11,836,741	31,750,001	4,746,416

Ordinary shares entitle the holder to participate in the dividends and the proceeds on winding up in proportion to the number of and amounts paid on the shares held.

At shareholders meetings, each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.

(b) Movement reconciliation	Date	Issue	
		Number	Price
At 1 July 2019		31,750,001	4,746,416
At 30 June 2020		67,217,755	11,836,741
At 1 July 2019	1/07/2019	31,750,001	4,746,416
Placement to sophisticated investors	10/07/2019	2,820,000	\$0.15 423,000
Placement to sophisticated investors	19/07/2019	3,513,334	\$0.15 527,000
Shares issued for services rendered	5/08/2019	1,000,000	\$0.20 200,000
Shares to Vendors and Introducers as part of consideration for the Acquisition	4/09/2019	7,666,667	\$0.15 1,150,000
Shares issued to Director to incentive performance and retain services	4/09/2019	750,000	\$0.15 112,500
Share issue to Director for participation in Placement	4/09/2019	1,000,000	\$0.15 150,000
Less Capital raising costs	-	-	- (58,425)
Conversion of Class A performance shares and Class D performance rights	28/02/2020	5,170,000	- -
Conversion of Class A performance rights	30/06/2020	800,000	- -
Conversion of Class A performance shares	30/06/2020	480,000	- -
Conversion of listed options	30/06/2020	267,753	\$0.285 76,310
Placement to sophisticated investors	30/06/2020	12,000,000	\$0.40 4,800,000
Less Capital raising costs	30/06/2020	-	- (290,060)
At 30 June 2020		67,217,755	11,836,741

Accounting Policy

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options for the acquisition of a business are not included in the cost of the acquisition as part of the purchase consideration.

If the entity reacquires its own equity instruments, for example, as a result of a share buy-back, those instruments are deducted from equity and the associated shares are cancelled. No gain or loss is recognised in the profit or loss and the consideration paid including any directly attributable incremental costs (net of income taxes) is recognised directly in equity.

NOTE 13 RESERVES

	2020	2019
	\$	\$
Share-based payment reserve	1,741,986	164,013
Foreign currency translation reserve	(22,016)	-
Total	1,719,970	164,013

Movement reconciliation

Share-based payment reserve

Balance at the beginning of the year	164,013	-
Issue of listed options	-	126,875
Option issue costs	-	(25,000)
Equity settled share-based payment transactions (Note 16)	1,577,973	62,138
Balance at the end of the year	1,741,986	164,013

Share-based payment reserve

The option reserve is used to record the value of share-based payments provided to outside parties, and share-based remuneration provided to employees and directors.

	2020	2019
	\$	\$
Foreign Currency Translation Reserve		
Balance at the beginning of the year	-	-
Movement during the year	(22,016)	-
Balance at the end of the year	(22,016)	-

NOTE 14 ACQUISITION OF SUBSIDIARY

On 4 September 2019, the Company successfully completed its acquisition of 100% of the issued capital of Vulcan Energy Resources Europe Pty Ltd ("the Vulcan Lithium Project"). The acquisition was assessed as an asset acquisition rather than a business combination. The Company issued 6,666,667 fully paid ordinary shares in the Company to the Vendors, Dr Wedin and Dr Horst Kreuter to acquire the asset.

	4 September 2019
	\$
Purchase consideration	
Fair value of shares issued	1,000,000
	1,000,000

Fair value of net assets acquired are as follows:

Cash and cash equivalents	404
Exploration and evaluation expenditure	1,121,125
Trade and other payables	(121,529)
	1,000,000

NOTE 15 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of the financial markets and seeks to minimise potential

adverse effects on the financial performance of the Group. The Group uses different methods to measure and manage different types of risks to which it is exposed.

These include monitoring levels of exposure to interest rate and foreign exchange risk and assessments of market forecasts for interest rate and foreign exchange prices. Ageing analysis and monitoring of specific credit allowances are undertaken to manage credit risk. Liquidity risk is monitored through the development of future cash flow forecasts.

Risk management is carried out by Management and overseen by the Board of Directors with assistance from suitably qualified external advisors.

The main risks arising for the Group are foreign exchange risk, interest rate risk, credit risk and liquidity risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below.

The carrying values of the Group's financial instruments are as follows:

	2020	2021
	\$	\$
Financial Assets		
Cash and cash equivalents	6,421,557	3,348,996
Trade and other receivables	116,071	35,063
	6,537,628	3,384,059
Financial Liabilities		
Trade and other payables	221,922	116,944
	221,922	116,944

(a) Market risk

(i) Foreign exchange risk

The Group was not significantly exposed to foreign currency risk fluctuations.

(ii) Interest rate risk

The Group is exposed to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in the market interest rates on interest bearing financial instruments. The Group's exposure to this risk relates primarily to the Group's cash and any cash on deposit. The Group does not use derivatives to mitigate these exposures. The Group manages its exposure to interest rate risk by holding certain amounts of cash in fixed and floating interest rate facilities. At the reporting date, the interest rate profile of the Group's interest-bearing financial instruments was:

	2020		2019
	Weighted average interest rate	Balance \$	Weighted average interest rate
			Balance \$
Cash and cash equivalents	0.08%	6,421,557	1.68%
			3,348,996

Sensitivity

Within the analysis, consideration is given to potential renewals of existing positions and the mix of fixed and variable interest rates. The following sensitivity analysis is based on the interest rate risk exposures in existence at the reporting date. The 1% increase and 1% decrease in rates is based on reasonably expected possible changes over a financial year.

At 30 June 2020, if interest rates had moved, as illustrated in the table below, with all other variables held constant, losses and equity would have been affected as follows:

	Profit higher/(lower) 2020	Profit higher/(lower) 2019
<i>Judgements of reasonably possible movements:</i>	\$	\$
+ 1.0% (100 basis points)	64,216	33,490
- 1.0% (100 basis points)	(64,216)	(33,490)

(b) Credit risk

Credit risk arises from the financial assets of the Group, which comprise cash and cash equivalents, trade and other receivables and other financial assets. The Group's exposure to credit risk arises from potential default of the counterparty, with maximum exposure equal to the carrying amount of the financial assets.

The Group's policy is to trade only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms will be subject to credit verification procedures.

In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. There are no significant concentrations of credit risk within the Group except for cash and cash equivalents.

(c) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows. The Group does not have any external borrowings.

The following are the contractual maturities of financial liabilities:

	1 year or less \$	1-5 years \$	> 5 years \$	Total \$
2020				
Trade and other payables	221,922	-	-	221,922
2019				
Trade and other payables	116,944	-	-	116,944

(d) Capital risk management

The Group's objectives when managing capital are to:

- Safeguard their ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders; and
- Maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the number of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Given the stage of the Company's development there are no formal targets set for return on capital. The Company is not subject to externally imposed capital requirements. The net equity of the Company is equivalent to capital. Net capital is obtained through capital raisings on the Australian Securities Exchange ("ASX").

NOTE 16 SHARE BASED PAYMENTS

	2020 \$	2019 \$
Share based payment- investor relationship	200,000	-
Share based payment- introducer fee	150,000	-
	350,000	-
Performance rights issued to Directors ⁽ⁱ⁾	626,942	62,138
Performance shares issued to Vendors of Acquisition ⁽ⁱⁱ⁾	888,348	-
Shares issued for consideration of services ⁽ⁱⁱⁱ⁾	112,500	-
Performance rights issued to staff ^(iv)	62,684	-
	1,690,473	62,138

- (i) In the prior year, 3,900,000 performance rights were granted and issued to directors. The value of each rights as set out below in the summary of performance rights granted. These were issued on 20 December 2018.

On 4 September 2019, the Company issued 3,750,000 performance rights to Mr Gavin Rezos as an incentive in connection with his appointment as Chairman. A share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.

	Class A	Class B	Class C	Class D	Class E	Class F
Fair value of each right	\$0.1463	\$0.1124	\$0.0906	\$0.1500	\$0.1500	\$0.1500
Expected volatility	90%	90%	90%	N/A	N/A	N/A
Grant date	30/11/2018	30/11/2018	30/11/2018	4/09/2019	4/09/2019	4/09/2019
Price at grant date	\$0.18	\$0.18	\$0.18	\$0.15	\$0.15	\$0.15
Expiry date	30/11/2021	30/11/2021	30/11/2021	4/09/2020	4/09/2021	4/09/2022
Vesting hurdle (5-day VWAP)	\$0.40	\$0.75	\$1.10	N/A	N/A	N/A
Interest rate	2.06%	2.06%	2.06%	N/A	N/A	N/A
Number of Rights	1,200,00	1,200,000	1,500,000	1,250,000	1,250,000	1,250,000
Total value of rights	\$175,560	\$134,880	\$135,900	\$187,500	\$187,500	\$187,500

- (ii) On 4 September 2019, the Company issued 13,200,000 Performance Shares (PS) issued to Vendors of the Vulcan Lithium Project Acquisition which will each convert into a Share on a one for one basis on the satisfaction of milestones. Based on management assessment, percentage of a share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.

	Class A	Class B	Class C
Fair value of each PS	\$0.15	\$0.15	\$0.15
Expected volatility	N/A	N/A	N/A
Grant date	4/09/2019	4/09/2019	4/09/2019
Price at grant date	\$0.15	\$0.15	\$0.15
Expiry date	4/09/2020	4/09/2021	4/09/2022
Vesting hurdle (5-day VWAP)	N/A	N/A	N/A
Interest rate	N/A	N/A	N/A
Number of PS	4,400,000	4,400,000	4,400,000
Total value of PS	\$660,000	\$660,000	\$660,000

- (iii) 750,000 ordinary shares issued to Gavin Rezos to incentivise the continued performance and to assist the Company in retaining his services and expertise. A share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.
- (iv) On 18 May 2020, the Company issued 1,250,000 performance rights to staff as incentive in connection with their appointment. A share-based payment expense has been recognised in the Statement of Profit or Loss and Other Comprehensive Income.

	Class G	Class H	Class I
Fair value of each right	\$0.225	\$0.225	\$0.225
Expected volatility	N/A	N/A	N/A
Grant date	11/05/2020	11/05/2020 & 14/5/2020	14/05/2020
Price at grant date	\$0.225	\$0.225	\$0.225
Expiry date	1/12/2023	1/12/2023	1/12/2023
Vesting hurdle (5-day VWAP)	N/A	N/A	N/A
Interest rate	N/A	N/A	N/A
Number of Rights	250,000	500,000	500,000
Total value of rights	\$56,250	\$112,500	\$112,500

Terms and conditions of Performance rights:

Tranche	Terms
Class A	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.40.
Class B	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.75.
Class C	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$1.10.
Class D	Vest immediately and convert into Shares on the Company announcing a positive scoping study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 12 months of completion of the Acquisition.
Class E	Vest immediately and will convert into shares on the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 24 months of completion of the Acquisition.
Class F	Vest immediately and will convert into shares on the Company announcing that it has secured either an offtake agreement representing a minimum of 30% of production volume over a three year term, or a downstream joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within 36 months of completion of the Acquisition.
Class G	Will vest upon the holder completing six months continuous employment with the Company, with an expiry date of 1 December 2023.
Class H	Will vest upon the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Lithium Project is commercially viable within two years of issue of the Performance Rights, with an expiry date of 1 December 2023.
Class I	Will vest upon the Company announcing that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream lithium chemicals joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within three years of issue of the Performance Rights, with an expiry date of 1 December 2023.

Set out below are summaries of performance rights granted under the plan:

30 June 2020

Grant date	Expiry date	Balance at the start of the year	Granted	Exercised	Expired/ forfeited/ other	Balance at the end of the year
30/11/2018	30/11/2021	3,900,000	-	(800,000)	(2,600,000)	500,000
18/5/2020	1/12/2023		1,250,000			1,250,000
		3,900,000	1,250,000	(800,000)	(2,600,000)	1,750,000

Accounting Policy

Equity-settled and cash-settled share-based compensation benefits are provided to Key Management Personnel and employees.

Equity-settled transactions are awards of shares, or options over shares, that are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using an appropriate valuation model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with non-vesting conditions that do not determine whether the consolidated entity receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

The cost of cash-settled transactions is initially, and at each reporting date until vested, determined by applying an appropriate valuation model, taking into consideration the terms and conditions on which the award was granted. The cumulative charge to profit or loss until settlement of the liability is calculated as follows:

- During the vesting period, the liability at each reporting date is the fair value of the award at that date multiplied by the expired portion of the vesting period.
- From the end of the vesting period until settlement of the award, the liability is the full fair value of the liability at the reporting date.

All changes in the liability are recognised in profit or loss. The ultimate cost of cash-settled transactions is the cash paid to settle the liability.

Market conditions are taken into consideration in determining fair value. Therefore, any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the consolidated entity or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the consolidated entity or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

NOTE 17 RELATED PARTY DISCLOSURE

(a) Key Management Personnel Compensation

The aggregate compensation made to directors and other members of key management personnel of the consolidated entity is set out below

	2020	2019
	\$	\$
Short-term benefits	471,534	259,998
Post-employment benefits	20,443	-
Share-based payments	384,616	62,138
	876,593	322,136

(b) Transactions with related parties

Terms and conditions

All transactions were made on normal commercial terms and conditions and at market rates.

During the financial year 6,666,667 fully paid ordinary shares in the Company were issued to the shareholders of Vulcan, Dr Francis Wedin and Dr Horst Kreuter (Vendors) (Consideration Shares) and;

13,200,000 Performance Shares to be issued to the Vendors, which will each convert into a Share on a one for one basis on satisfaction the following milestones:

- 4,400,000 Shares on satisfaction of Milestone 1;
- 4,400,000 Shares on satisfaction of Milestone 2; and
- 4,400,000 Shares on satisfaction of Milestone 3.

During the financial year, payments for engineering services of €77,035, (A\$130,128) were made to GeoThermal Engineering GmbH, a related party of Horst Kreuter. Dr Kreuter was paid \$43,474 consulting fees prior to becoming a Director of the Company. There was no trade payable balance at 30 June 2020.

During the financial year, payments for corporate advisory services outside of Australia of \$73,185 were made to Viaticus Capital, a related party of Mr Rezos. Viaticus Capital also received fees of \$18,000 for capital raising fees associated with a placement undertaken in June 2020. There was \$33,000 trade payable/accrual balance at 30 June 2020.

There were no related party transactions during the previous financial year.

There were no loans made to any KMP during the year ended 30 June 2020 (2019: Nil).

Other than the above, there were no other transactions with KMP during the year ended 30 June 2020.

NOTE 18 COMMITMENTS

Below are the commitments in relation to its exploration and evaluation assets:

	2020 \$	2019 \$
Within one year	163,639	-
One to five years	163,639	-
	327,278	-

NOTE 19 CONTINGENCIES

As part of the acquisition of Koppar Resources Europe Pty Ltd in the prior year, the Company agrees that:

- (a) Upon completion of a scoping study by Koppar for the development of any of the Projects where a JORC compliant measured, indicated or inferred resource is identified at any of the Projects, the Company will issue 4,000,000 fully paid ordinary shares in the capital of Koppar at a deemed issue price of \$0.20 per Share to the Shareholders; and
- (b) Upon completion of a definitive feasibility study for the development of any of the Projects based on a JORC compliant measured or indicated resource being identified at any of the Projects, it will issue 4,000,000 fully paid ordinary shares in the capital of Koppar at a deemed issue price of \$0.20 per Share to the Shareholders.

As part of the acquisition of Vulcan Lithium Project, the Company agrees to pay the following by way of an introduction and facilitation fees:

1,980,000 ordinary shares to be issued as follows:

- (a) 660,000 ordinary shares to be issued on satisfaction of Milestone 1;
- (b) 660,000 ordinary shares to be issued on satisfaction of Milestone 2; and
- (c) 660,000 ordinary shares to be issued on satisfaction of Milestone 3.

As part of the acquisition of Vulcan Lithium Project, the Company agrees to pay the following by way of deferred consideration of remaining 8,800,000 (13,200,000 less 4,400,000) Performance Shares to be issued to the Vendors, which will each convert into a Share on a one for one basis on satisfaction the following milestones:

- 4,400,000 Shares on the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 24 months of completion of the Acquisition (Milestone 2); and
- 4,400,000 Shares on the Company announcing that it has secured an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within 36 months of completion of the Acquisition (Milestone 3), (together, the Deferred Consideration).

Other than the above, there are no other contingent assets or contingent liabilities as at 30 June 2020.

NOTE 20 AUDITOR'S REMUNERATION

	2020 \$	2019 \$
Amounts received or due and receivable by RSM Australia Partners for:		
Audit and review of the annual and half-year financial report	31,500	25,000
Other services - RSM Australia Pty Ltd for:		
Other	-	1,500
	31,500	26,500

NOTE 21 ACCUMULATED LOSSES

	2020 \$	2019 \$
Balance at beginning of the year	(1,117,313)	(280,649)
Loss after income tax for the year	(3,553,359)	(836,664)
Balance at end of the year	(4,670,672)	(1,117,313)

NOTE 22 INVESTMENT IN CONTROLLED ENTITIES

	Principal Activities	Country of Incorporation	Ownership Interest	Ownership Interest
			2020 %	2019 %
Koppar Resources Europe Pty Ltd	Exploration	Australia	100	100
Vulcan Energy Resources Europe Pty Ltd	Exploration	Australia	100	-
Vulcan Energie Ressourcen GmbH	Exploration	Germany	100	-

NOTE 23 PARENT ENTITY

	2020 \$	2019 \$
Assets		
Current assets	6,330,432	3,379,725
Non-current assets	2,745,876	530,607
Total assets	9,076,308	3,910,332
Liabilities		
Current liabilities	190,270	117,216
Total liabilities	190,270	117,216
Equity		
Contributed equity	11,836,741	4,746,416
Reserves	1,741,986	164,013
Accumulated losses	(4,692,689)	(1,117,313)
Total equity	8,886,038	3,793,116
Loss for the year	(3,575,376)	(836,213)
Total comprehensive loss	(3,575,376)	(836,213)

Contingent liabilities

Other than disclosed at Note 19, the parent entity has no other contingent assets or contingent liabilities as at 30 June 2020 and 30 June 2019.

Capital commitments - Property, plant and equipment

The parent entity had no capital commitments for property, plant and equipment as at 30 June 2020 and 30 June 2019.

Exploration commitments

The parent entity has no exploration commitments.

Significant accounting policies

The accounting policies of the parent entity are consistent with those of the consolidated entity, as disclosed in the financial statements, except for the following:

- Investments in subsidiaries are accounted for at cost, less any impairment, in the parent entity.

NOTE 24 EVENTS AFTER THE REPORTING DATE

On 8 July 2020, the Company announced it had signed an Investment agreement with EU-backed EIT InnoEnergy for staged cash investments into Vulcan, with initial tranche valued at A\$0.51/share, equivalent to the 15-day VWAP and at an 8.5% premium to 30-day VWAP, subject to shareholder approval.

EIT InnoEnergy will provide the following staged payments to Vulcan Energie Ressourcen GmbH, the Company's 100%-owned German subsidiary (Subsidiary):

- (a) an initial payment of €150,000 (Tranche 1, equivalent to \$245,534 at current exchange rates).
- (b) further payment of €50,000 after approval by EIT InnoEnergy of the financial and performance reporting related to expenditure of Tranche 1 funding on approved work packages Tranche 2).
- (c) a final settlement of €50,000 of approved funding after approval by EIT InnoEnergy of the final financial and performance reporting for the expenditure of Tranche 1 and Tranche 2 funding

The Company has agreed to grant Warrants to EIT InnoEnergy on payment of each Tranche of funding, in the following amounts:

- (a) Tranche 1: 479,519 Warrants subject to shareholder approval (being the Australian dollar amount of the Tranche 1 funding, divided by \$0.512, which was the volume weighted average price (VWAP) for Shares over the last 15 days on which Shares were traded immediately prior to execution of the funding agreements; and
- (b) Tranches 2 and 3: the number equal to the Australian dollar amount of the relevant Tranche of funding, divided by the VWAP for Shares over the last 15 days on which Shares were traded immediately prior to EIT InnoEnergy paying the relevant Tranche of the funding.

Shareholder approval for Tranche 1 warrants was received on 10 September 2020. and 479,519 warrants were issued on 16 September 2020. The Warrants will convert into Shares on a one for one basis on exercise.

On 31 July 2020 the Company appointed London-based Natural Resources Global Capital Partners Limited ("NRG") to provide strategic and financial advice in connection with the Vulcan's Zero Carbon Lithium™ Project. NRG will assist Vulcan with financial advice related to potential future transactions surrounding funding for its Definitive Feasibility Study ("DFS") and first commercial lithium hydroxide production plant.

On 3 August 2020 the Company announced that Lithium concentrate has been successfully produced from Upper Rhine Valley geothermal brine during a series of successful benchscale Direct Lithium Extraction (DLE) tests commissioned by Vulcan. Two different, pre-selected DLE adsorbents were tested and in both cases the lithium recovery rate exceeded 90% on first pass. The tested DLE adsorbents are of a type already used commercially on lithium brines worldwide, which reduces development risk, in line with Vulcan's strategy of utilising established technologies.

On 1 September 2020 the Company announced that Dr. Katharina Gerber has accepted an executive role as Project Manager with the Company, and relocated with her family from California back to Germany to focus on developing the Zero Carbon Lithium™ Project full time.

On 31 August Vulcan announced the grant of its Taro License in the Vulcan Zero Carbon Lithium™ Project area in the Upper Rhine Valley, and maiden Taro Licence Inferred Resource estimate. In conjunction with this, Vulcan has re-totaled the collective Mineral Resource estimations for the Upper Rhine Valley Project (URVP) area within the Zero Carbon Lithium™ Project.

The Taro license area has been granted to Global Geothermal Holding UG (GGH), with which Vulcan has agreement to earn a 51% interest by spending €500,000 within two years of the license grant (Initial Expenditure). After the Initial Expenditure, a Joint Venture will be formed, with Vulcan owning 51% and GGH 49%. Vulcan will then spend a further €500,000 to earn a further 29% (Second Earn-In Expenditure) with two years, to take its JV interest to 80%. Once VER has spent the minimum amount and has taken its share to 80%, GGH can elect to co-fund the project pro rata, or be diluted by an industry-standard formula whilst Vulcan continues to develop the project. Should GGH be diluted below 5%, its share will be converted to a non-diluting 2% net royalty.

On 10 September 2020 the Company held a General Meeting and approved the following resolutions:-

Resolution 1 Ratification of Issue of Placement Shares issued under Listing Rule 7.1

Resolution 2 – Ratification of Issue of Placement Shares issued under Listing 7.1A

Resolution 3 – Issue of Broker Options to Merchant Group

Resolution 4 – Issue of Milestone 1 Deferred Introducer Shares

Resolution 5 – Issue of Tranche 1 Warrants to EIT InnoEnergy

Resolution 6 – Issue of Performance Rights to Mr Gavin Rezos

Resolution 7 – Issue of Performance Rights to Dr Horst Kreuter

The grant of Performance Rights to Mr Rezos and Mr Kreuter comprised of:-

Class M Performance Rights	1,500,000 to Dr Kreuter (or his nominee)	Vesting on issue, and converting to Shares on a one for one basis on the Company announcing, on or before 21 May 2021, a positive Pre-Feasibility Study in relation to the Company's Zero Carbon Lithium™ Project confirming it is commercially viable.
Class N Performance Rights	1,500,000 to Dr Kreuter (or his nominee)	Vesting on issue, and converting to Shares on a one for one basis on the Company announcing, on or before 21 May 2022, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream lithium chemicals joint venture partner with a minimum of \$10,000,000 investment in relation to the Project.
Class J Performance Rights	1,500,000 to Dr Kreuter (or his nominee) 1,000,000 to Mr Rezos	Vesting on issue, and converting to Shares on a one for one basis once both of the following have been satisfied: - the Company announcing, within 36 months from the date of issue, a positive Definitive Feasibility Study in relation to the Project confirming it is commercially viable; and - the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 225% of the VWAP for Shares for the last 5 trading days up to but not including the date of the Meeting (the Reference Price).
Class K Performance Rights	1,000,000 to Mr Rezos (or his nominee)	Vesting on issue, and converting to Shares on a one for one basis once both of the following have been satisfied: - the Company announcing, within 36 months from the date of issue, a positive Pre-Feasibility Study in relation to the Company's Zero Carbon Lithium™ Project confirming it is commercially viable; and - the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 150% of the Reference Price.
Class L Performance Rights	1,000,000 to Mr Rezos (or his nominee)	Once both of the following have been satisfied: - the Company announcing, within 36 months from the date of issue, that it has secured either an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream lithium chemicals joint venture partner with a minimum of \$10,000,000 investment in relation to the Project; and - the VWAP for Shares as traded on ASX over 20 consecutive trading days is equal to or greater than 200% of the Reference Price.

On 16 September 2020 the Company issued the securities approved at the 10 September General Meeting along with 1,250,000 performance rights to senior management personnel (refer ASX announcement 16 September 2020 for further details).

Directors' Declaration

In the Directors' opinion:

- (a) The financial statements and accompanying notes are in accordance with the Corporations Act 2001, including:
 - (i) complying with Australian Accounting Standards, the Corporations Regulations 2001 and other mandatory professional reporting requirements; and
 - (ii) giving a true and fair view of the consolidated entity's financial position as at 30 June 2020 and of its performance for the financial year ended on that date.
- (b) The financial statements and notes comply with International Financial Reporting Standards.
- (c) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

The Directors have been given the declarations required by section 295A of the Corporations Act 2001.

This declaration is made in accordance with a resolution of the Board of Directors made pursuant to section 295(5)(a) of the Corporations Act 2001 and is signed for and on behalf of the Directors by:



Gavin Rezos
Chairman

30 September 2020

18.3.6 Independent Auditor's Report

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

Opinion

We have audited the financial report of Vulcan Energy Resources Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 June 2020, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the Corporations Act 2001, including:

- (i) Giving a true and fair view of the Group's financial position as at 30 June 2020 and of its financial performance for the year then ended; and
- (ii) Complying with Australian Accounting Standards and the Corporations Regulations 2001.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Group in accordance with the auditor independence requirements of the Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the Corporations Act 2001, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter	How our audit addressed this matter
Exploration and Evaluation Expenditure Refer to Note 10 in the financial statements	
The Group has capitalised exploration and evaluation expenditure with a carrying value of \$2,556,980 as at 30 June 2020.	Our audit procedures included: Ensuring that the right to tenure of the area of interest was current;

We considered this to be a key audit matter due to the significant management judgments involved in assessing the carrying value of the asset including: • Determination of whether the exploration and evaluation expenditure can be associated with finding specific mineral resources and the basis on which that expenditure is allocated to an area of interest; • Assessing whether any indicators of impairment are present and if so, judgement applied to determine and quantify any impairment loss; and • Assessing whether exploration activities have reached a stage at which the existence of economically recoverable reserves may be determined.	• Agreeing a sample of additions to supporting documentation and ensuring the amounts are capital in nature and relate to the area of interest; • Assessing that the impairment expense recognised for the year ended was appropriately calculated; • Assessing and evaluating management's assessment of whether indicators of impairment existed at the reporting date; • Enquiring with management and reviewing budgets and other documentation as evidence that active and significant operations in, or relation to, the area of interest will be continued in the future; and • Through discussions with the management and review of the Board Minutes, ASX announcements and other relevant documentation, assessing management's determination that exploration activities have not yet progressed to the stage where the existence or otherwise of economically recoverable reserves may be determined.
Acquisition of Vulcan Energy Resources Europe Pty Ltd Refer to Note 14 in the financial statements	
On 4 September 2019, the Group acquired a 100% interest in Vulcan Energy Resources Europe Pty Ltd for a consideration of \$1,000,000. Accounting for this acquisition is a key audit matter as it involves management judgements in determining the acquisition date, the acquisition accounting treatment, the fair value of net assets acquired and the fair value of the purchase consideration.	Our audit procedures included: • Reviewing the acquisition agreement to understand key terms and conditions; • Evaluating the management determination that the acquisition did not meet the definition of a business within AASB 3 Business Combinations and therefore was an asset acquisition as opposed to a business combination; • Assessing management's determination of the acquisition date, fair value of consideration paid and the fair value of the net assets acquired; and • Reviewing the adequacy and accuracy of the relevant disclosures in the financial statements.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2020, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the 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 financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: https://www.auasb.gov.au/auditors_responsibilities/ar2.pdf. This description forms part of our auditor's report.

Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in the directors' report for the year ended 30 June 2020. In our opinion, the Remuneration Report of Vulcan Energy Resources Limited, for the year ended 30 June 2020, complies with section 300A of the Corporations Act 2001.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

RSM AUSTRALIA PARTNERS

Perth, WA
Dated: 30 September 2020

TUTU PHONG
Partner

18.4 Financial Statements 2019

18.4.1 Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 30 June 2019

	Note	2019 \$	5 Feb 18 to 30 June 18 \$
Revenue from continuing operations			
Other income	4	56,055	4,180
Expenses			
Administrative expenses	5(a)	(172,580)	(60,135)
Compliance and regulatory expenses		(62,970)	(62,530)
Consulting and legal fees	5(b)	(109,642)	(90,367)
Employee benefit expenses		(156,165)	(65,000)
Occupancy costs		(11,000)	(1,000)
Impairment expense	10	(287,667)	-
Share-based payments expense	16	(62,138)	-
Other expenses		(27,533)	(6,034)
Foreign currency (losses)/gain		(3,024)	237
Loss from continuing operations before income tax		(836,664)	(280,649)
Income tax expense	6	-	-
Loss from continuing operations after income tax		(836,664)	(280,649)
Other comprehensive income		-	-
Other comprehensive income for the year, net of tax		-	-
Total comprehensive loss attributable to the members of Koppar Resources Limited		(836,664)	(280,649)
Loss per share for the year attributable to the members Koppar Resources Limited:			
Basic loss per share (cents)	7	(2.64)	(2.66)
Diluted loss per share (cents)	7	(2.64)	(2.66)

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

18.4.2 Consolidated Statement of Financial Position

As at 30 June 2019

	Note	2019 \$	2018 \$
ASSETS			
Current assets			
Cash and cash equivalents	8	3,348,996	4,047,909
Trade and other receivables	9	35,063	95,486
Total current assets		3,384,059	4,143,395
Non-current assets			
Exploration and evaluation expenditure	10	526,001	375,540
Total non-current assets		526,001	375,540
Total assets		3,910,060	4,518,935
LIABILITIES			
Current liabilities			
Trade and other payables	11	116,944	53,168
Total current liabilities		116,944	53,168
Total liabilities		116,944	53,168
Net assets		3,793,116	4,465,767
EQUITY			
Contributed equity	12	4,746,416	4,746,416
Reserves	13	164,013	-
Accumulated losses		(1,117,313)	(280,649)
Total equity		3,793,116	4,465,767

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

18.4.3 Consolidated Statement of Changes in Equity

For the Financial Year Ended 30 June 2019

	Issued Capital	Reserves	Accumulated Losses	Total
	\$	\$	\$	\$
At 1 July 2018	4,746,416	-	(280,649)	4,465,767
Loss for the year	-	-	(836,664)	(836,664)
Total comprehensive loss for the year after tax	-	-	(836,664)	(836,664)
<i>Transactions with owners in their capacity as owners:</i>				
Issue of listed options	-	126,875	-	126,875
Option issue costs	-	(25,000)	-	(25,000)
Share-based payments	-	62,138	-	62,138
Balance at 30 June 2019	4,746,416	164,013	(1,117,313)	3,793,116

	Contributed equity	Accumulated Losses	Total
	\$	\$	\$
At 5 February 2018 (Incorporation)	-	-	-
Loss for the period	-	(280,649)	(280,649)
Total comprehensive loss for the period after tax		(280,649)	(280,649)
<i>Transactions with owners in their capacity as owners</i>			
Issue of share capital	5,190,001	-	5,190,001
Share issue costs	(443,585)	-	(443,585)
At 30 June 2018	4,746,416	(280,649)	4,465,767

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

18.4.4 Consolidated Statement of Cash Flows

For the Financial Year Ended 30 June 2019

	Note	2019 \$	5 Feb 18 to 30 June 18 \$
Cash flows from operating activities			
Payments to suppliers and employees		(417,562)	(347,171)
Interest received		56,055	4,180
Net cash used in operating activities	8(a)	(361,507)	(342,991)
Cash flows from investing activities			
Payments for exploration and evaluation costs		(438,127)	(105,516)
Loans to other entities		(1,154)	-
Net cash used in investing activities		(439,281)	(105,516)
Cash flows from financing activities			
Proceeds from issue of listed options		126,875	-
Option issue costs		(25,000)	-
Proceeds from issued shares		-	4,940,001
Share issue costs		-	(443,585)
Net cash from financing activities		101,875	4,496,416
Net (decrease)/increase in cash and cash equivalents		(698,913)	4,047,909
Cash and cash equivalents at the beginning of the year		4,047,909	-
Cash and cash equivalents at the end of the year	8	3,348,996	4,047,909

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

18.4.5 Notes to the Consolidated Financial Statements

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Reporting Entity

Koppar Resources Limited (referred to as "Koppar" or the "Company") is a company domiciled in Australia. The address of the Company's registered office and principal place of business is disclosed in the Corporate Directory of the Annual Report. The consolidated financial statements of the Company as at and for the year ended 30 June 2019 comprise the Company and its subsidiary (together referred to as the "Consolidated Entity" or the "Group").

(b) Basis of Preparation

Statement of compliance

The consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") and the Corporations Act 2001. The consolidated financial statements comply with International Financial Reporting Standards ("IFRS") adopted by the International Accounting Standards Board ("IASB"). Koppar Resources Limited is a for-profit entity for the purpose of preparing the financial statements.

The annual report was authorised for issue by the Board of Directors on 26 September 2019.

Basis of measurement

The consolidated financial statements have been prepared on a going concern basis in accordance with the historical cost convention, unless otherwise stated.

Parent entity information

In accordance with the Corporations Act 2001, these financial statements present the results of the consolidated entity only. Supplementary information about the parent entity is disclosed in Note 22.

New, revised or amended standards and interpretations adopted by the Group

The Group has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") that are mandatory for the current reporting period.

- AASB 15 Revenue from Contracts with Customers; and
- AASB 9 Financial Instruments.

The new accounting policies are disclosed below. There is no impact on the Group for the year ended 30 June 2019 and the prior year financial statements did not have to be restated as a result.

(i) AASB 15 Revenue from contracts with Customers

AASB 15 Revenue from contracts with Customers replaces AASB 118 Revenue. AASB 15 was adopted by the Group on 1 July 2018. AASB 15 provides a single, principles-based five-step model to be applied to all contracts with customers.

The Group's new revenue accounting policy is detailed below:

Revenue from contracts with customers

Revenue is recognised at an amount that reflects the consideration to which the Group is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the Group: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts received that are subject to the constraining principle are initially recognised as deferred revenue in the form of a separate refund liability.

Sale of goods

Revenue from the sale of goods is recognised at the point in time when the customer obtains control of the goods, which is generally at the time of delivery.

Rendering of services

Revenue from a contract to provide services is recognised over time as the services are rendered based on either a fixed price or an hourly rate.

Interest

Interest revenue is recognised as interest accrues using the effective interest method.

Other revenue

Other revenue is recognised when it is received or when the right to receive payment is established.

The Group has considered AASB 15 in detail and determined that the impact on the Group's sales revenue from contracts under AASB 15 is insignificant on transition date, 1 July 2018, and at reporting date 30 June 2019.

(ii) AASB 9 Financial Instruments

AASB 9 Financial Instruments replaces the provisions of AASB 139 Financial Instruments: Recognition and Measurement that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting.

Classification and measurement

Except for certain trade receivables the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

Under AASB 9 financial assets are subsequently measured at fair value through profit or loss (FVTPL), amortised cost, or fair value through other comprehensive income (FVOCI). The classification is based on two criteria: The Group's business model for managing the assets; and whether the

instruments' contractual cash flows represent 'solely payments of principal and interest' on the principal amount outstanding (the 'SPPI criterion').

The adoption of AASB 9 Financial Instruments from 1 July 2018 did not give rise to any material transitional adjustments on transition date, 1 July 2018, and at reporting date 30 June 2019.

Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the consolidated entity's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Equity Instruments

Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in the profit or loss as other income when the Group's right to receive payments is established.

Impairment

From 1 July 2018 the group assesses on a forward-looking basis the expected credit losses (ECLs) associated with its debt instruments carried at amortised cost and FVOCI. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive. The shortfall is then discounted at an approximation to the asset's original effective interest rate.

The Group assesses at each balance date whether there is objective evidence that a financial asset or group of financial assets is impaired. For trade and other receivables, the Group applies the simplified approach permitted by AASB 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience.

New standards and interpretations not yet mandatory or early adopted

The Australian Accounting Standards and Interpretations that have recently been issued or amended but are not yet mandatory, have not been early adopted by the Group for the annual reporting period ended 30 June 2019. The Group intends to adopt these standards and interpretations, if applicable, when they become effective.

Reference and Title	Summary	Application Date of Standard	Impact on Koppar Resources Limited Financial Statements
AASB 16 Leases	AASB 16 eliminates the operating and finance lease classifications for lessees current accounted for under AASB 117 Leases. It instead requires an entity to bring most leases onto its balance sheet in a similar way to how existing finance leases are treated under AASB 117. An entity will be required to recognise a lease liability and a right of use asset in its balance sheet for most leases. Subject to exceptions, a 'right-of-use' asset will be capitalised in the statement of financial position, measured at the present value of the unavoidable future lease payments to be made over the lease term. Subject to exceptions, a 'right-of-use' asset will be capitalised in the statement of financial position, measured at the present value of the unavoidable future lease payments to be made over the lease term. The exceptions relate to short-term leases of 12 months or less and leases of low-value assets (such as personal computers and small office furniture) where an accounting policy choice exists whereby either a 'right-of-use' asset is recognised or lease payments are expensed to profit or loss as incurred. A liability corresponding to the capitalised lease will also be recognised, adjusted for lease prepayments, lease incentives received, initial direct costs incurred and an estimate of any future restoration, removal or dismantling costs. Straight-line operating lease expense recognition will be replaced with a depreciation charge for the leased asset (included in operating costs) and an interest expense on the recognised lease liability (included in finance costs). In the earlier periods of the lease, the expenses associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) results will be improved as the operating expense is replaced by interest expense and depreciation in profit or loss under AASB 16.	Annual reporting periods commencing on or after 1 January 2019.	When this standard is first adopted from 1 July 2019, there will be minimal impact on transactions and balances recognised in the financial statements.

	For classification within the statement of cash flows, the lease payments will be separated into both a principal (financing activities) and interest (either operating or financing activities) component. For lessor accounting, the standard does not substantially change how a lessor accounts for leases.		

Significant Judgements and Estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the consolidated entity's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.

(c) Comparatives

As the Company was incorporated on 5 February 2018, comparative information is from 5 February 2018 to 30 June 2018.

(d) Principles of Consolidation

Subsidiaries

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Koppar Resources Limited ('Company' or 'parent entity') as at 30 June 2019 and the results of all subsidiaries for the year then ended.

Subsidiaries are all entities (including special purpose entities) over which the consolidated entity has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one-half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the consolidated entity controls another entity.

Subsidiaries are fully consolidated from the date on which control is transferred to the consolidated entity. They are de-consolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between consolidated entity companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the consolidated entity.

The acquisition method of accounting is used to account for business combinations by the consolidated entity. A change in ownership interest, without the loss of control, is accounted for as an equity transaction, where the difference between the consideration transferred and the book value of the share of the non-controlling interest acquired is recognised directly in equity attributable to the parent.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and statement of financial position respectively.

(e) Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating

resources and assessing performance of the operating segments, has been identified as the Board. Management has determined that based on the report reviewed by the Board and used to make strategic decisions, that the consolidated entity has one reportable segment.

(f) Foreign Currency Translation

Functional and presentation currency

Items included in the financial statements of each of the consolidated entity's entities are measured using the currency of the primary economic environment in which the entity operates ("functional currency"). The consolidated financial statements are presented in Australian dollars, which is Koppa Resources Limited's functional and presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency 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 period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

(g) Asset Acquisition not constituting a Business

When an asset acquisition does not constitute a business combination, the assets and liabilities are assigned a carrying amount based on their relative fair values in an asset purchase transaction and no deferred tax will arise in relation to the acquired assets and assumed liabilities as the initial recognition exemption for deferred tax under AASB 112 applies. No goodwill will arise on the acquisition and transaction costs of the acquisition will be included in the capitalised cost of the asset.

(h) Dividends

Dividends are recognised when declared during the financial period and no longer at the discretion of the Company.

NOTE 2 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS AND ASSUMPTIONS

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses.

Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions in these financial statements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period are disclosed below.

Exploration and evaluation expenditure

Exploration and evaluation costs have been capitalised on the basis that activities in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves. Key judgements are applied in considering costs to be capitalised which includes determining expenditures directly related to these activities and allocating overheads between those that are expensed and capitalised.

Share based payments

The Group measures the cost of equity settled transactions with Directors, employees and consultants, where applicable, by reference to the fair value of equity instruments at the date at

which they are granted. The fair value is determined using the Black-Scholes model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled shared-based payments would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity.

NOTE 3 SEGMENT INFORMATION

The Group operates only in one reportable segment being predominantly in the area of copper and zinc mineral exploration in Norway. The Board considers its business operations in copper and zinc mineral exploration to be its primary reporting function. Results are analysed as a whole by the chief operating decision maker, this being the Board of Directors. Consequently, revenue, profit or loss, net assets, total assets and total liabilities for the operating segment are reflected in this financial report.

NOTE 4 REVENUE

	2019	5 Feb 18 to 30 June 18
	\$	\$
Other income		
Interest income	56,055	4,180
	56,055	4,180

NOTE 5 EXPENSES

(a) Administrative expenses		
Accounting, audit and company secretarial fees	144,325	56,500
Travel expenses	25,766	-
General and administration expenses	2,489	3,635
	172,580	60,135
(b) Consultancy and legal expenses		
Corporate advisory fees	105,000	-
Consulting fees	-	55,250
Legal fees	4,642	35,117
	109,642	90,367

NOTE 6 INCOME TAX

(a) The components of tax expense comprise:		
Current tax	-	-
Deferred tax	-	-
Income tax expense reported in the of profit or loss and other comprehensive income	-	-
(b) The prima facie tax on loss from ordinary activities before income tax is reconciled to the income tax as follows:		
Loss before income tax expense	(836,664)	(280,649)
Prima facie tax benefit on loss before income tax at 30% (2018: 27.5%)	(250,999)	(77,178)
Tax effect of:		
Non-deductible expense	114,064	33,764
Tax losses and temporary differences not brought to account	136,935	44,792
Income tax expense	-	-
(c) Deferred tax assets/(liabilities) not brought to account are:		
Accruals	15,300	3,025
Prepayments	(5,739)	(4,338)
Unrealised foreign exchange gain	-	(65)
Tax losses	164,108	44,792
Total deferred tax balances not brought to account	173,669	43,414

Potential deferred tax assets attributable to tax losses and other temporary differences have not been brought to account at 30 June 2019 because the directors do not believe it is appropriate to regard realisation of the deferred tax assets as probable at this point in time. These benefits will only be obtained if:

- the Company derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the expenditure to be realised; and

- no changes in tax legislation adversely affect the Company in realising the benefit from the deductions for the expenditure.

Accounting Policy

The income tax expense (revenue) for the year comprises current income tax expense (income) and deferred tax expense (income).

Current Tax

Current income tax expense charged to the profit or loss is the tax payable on taxable income calculated using applicable income tax rates enacted, or substantially enacted, as at the end of the reporting period. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority.

Deferred Tax

Deferred tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Current and deferred income tax expense (income) is charged or credited directly to equity instead of the profit or loss when the tax relates to items that are credited or charged directly to equity.

Deferred tax assets and liabilities are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at the end of the reporting period. Their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investments in subsidiaries, branches, associates, and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where a legally enforceable right of set-off exists, the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

NOTE 7 LOSS PER SHARE

	2019	2018
	\$	\$
Net loss for the year	(836,664)	(280,649)
Weighted average number of ordinary shares for basic and diluted loss per share.	31,750,001	10,536,208
Basic and diluted loss per share (cents)	(2.64)	(2.66)

Accounting Policy**Basic Loss Per Share**

Basic loss per share is determined by dividing net profit or loss after income tax attributable to members of the Company, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

Diluted Loss Per Share

Diluted loss per share adjusts the figures used in the determination of basic earnings per share to take into account the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

NOTE 8 CASH AND CASH EQUIVALENTS

Cash at bank and in hand	348,996	4,047,909
Short-term deposits	3,000,000	-
	3,348,996	4,047,909

(a) Reconciliation of net loss after tax to net cash flows from operations

Loss for the financial year/period	(836,664)	(280,649)
<i>Adjustments for:</i>		
Share based payments	62,138	-
Impairment expense	287,667	-
<i>Changes in assets and liabilities</i>		
Trade and other receivables	61,576	(97,385)
Trade and other payables	63,776	35,043
Net cash used in operating activities	(361,507)	(342,991)

Accounting Policy

Cash at bank earns interest at floating rates based on daily deposit rates. Short-term deposits are made in varying periods between one day and three months, depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates.

NOTE 9 TRADE AND OTHER RECEIVABLES

GST receivable	14,779	67,610
Other deposits and receivables	-	12,101
Prepayments	19,130	15,775
Loan to Vulcan Energy Resources	1,154	-
	35,063	95,486

(a) Allowance for impairment loss

Other receivables are non-interesting bearing and are generally on terms of 30 days.

Trade Receivables

Trade and other receivables include amounts due from customers for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets. Refer to Note 1(b)(ii) for expected credit loss allowance assessment.

Goods and Services Tax ('GST')

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or the assets or part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included as a current asset or liability in the Consolidated Statement of Financial Position.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST on investing and financial activities, which are disclosed as operating cash flows.

Other Receivables

Other receivables are recognised at amortised cost, less any provision for expected credit loss. Other receivables do not contain impaired assets and are not past due. Based on the credit history, it is expected that these other balances will be received when due.

NOTE 10 EXPLORATION AND EVALUATION EXPENDITURE

	2019	2018
	\$	\$
Carrying amount of exploration and evaluation expenditure	526,001	375,540
At the beginning of the period	375,541	-
Exploration expenditure incurred	438,127	105,516
Koppar Europe acquisition (Note 13)	-	270,024
Impairment expense	(287,667)	-
At the end of the period	526,001	375,540

Accounting Policy

Acquisition, exploration and evaluation costs associated with mining tenements are accumulated in respect of each identifiable area of interest. These costs are only carried forward to the extent that the company's rights of tenure to that area of interest are current and that the costs are expected to be recouped through the successful commercial development or sale of the area or where activities

in the area have not yet reached a stage that permits reasonable assessment of the existence of economically recoverable reserves.

Costs in relation to an abandoned area are written off in full against profit in the period in which the decision to abandon the area is made.

Each area of interest is also reviewed annually, and acquisition costs written off to the extent that they will not be recoverable in the future.

NOTE 11 TRADE AND OTHER PAYABLES

	2019	2018
	\$	\$
Trade payables ⁽ⁱ⁾	65,944	31,468
Accrued expenses	51,000	11,000
Other payables	-	10,700
	116,944	53,168

(i) Trade payables are non-interest bearing and are normally settled on 30-day terms.

Due to the short-term nature of these payables, their carrying value is assumed to be the same as their fair value.

Accounting Policy

Trade payables and other payables represent liabilities for goods and services provided to the Group prior to the end of the financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

NOTE 12 CONTRIBUTED EQUITY

(a)

(a) Issued and fully paid	2019		2018	
	No.	\$	No.	\$
Ordinary shares	31,750,001	4,746,416	31,750,001	4,746,416

Ordinary shares entitle the holder to participate in the dividends and the proceeds on winding up in proportion to the number of and amounts paid on the shares held.

At shareholders meetings, each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.

(b) Movement reconciliation	Date	Number	Issue Price	\$
At 1 July 2018		31,750,001		4,746,416
At 30 June 2019		31,750,001		4,746,416
At 5 February 2018 (Incorporation)	5/02/2018	-	-	-
Company incorporation share issued	5/02/2018	1	\$1.00	1
Seed 1 Shares (\$0.01)	29/03/2018	4,000,000	\$0.01	40,000
Seed 1 Shares (\$0.10)	29/03/2018	4,000,000	\$0.10	400,000
Share issued pursuant to agreement for Acquisition	28/05/2018	1,250,000	\$0.20	250,000
Initial Public Offering ("IPO")	28/05/2018	22,500,000	\$0.20	4,500,000
Share issue costs		-	-	(443,585)
At 30 June 2018		31,750,001		4,746,416

Accounting Policy

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options for the acquisition of a business are not included in the cost of the acquisition as part of the purchase consideration.

If the entity reacquires its own equity instruments, for example, as a result of a share buy-back, those instruments are deducted from equity and the associated shares are cancelled. No gain or loss is recognised in the profit or loss and the consideration paid including any directly attributable incremental costs (net of income taxes) is recognised directly in equity.

NOTE 13 RESERVES

	2019	2018
	\$	\$
Share-based payment reserve	164,013	-
<u>Movement reconciliation</u>		
Issued options reserve		
Balance at the beginning of the year	-	-
Issue of listed options	126,875	-
Option issue costs	(25,000)	-
Equity settled share-based payment transactions (Note 16)	62,138	-
Balance at the end of the year	164,013	-

Share-based payment reserve

The option reserve is used to record the value of share-based payments provided to outside parties, and share-based remuneration provided to employees and directors.

NOTE 14 ASSET ACQUISITION

On 28 May 2018, the Company completed the acquisition of Koppar Resources Europe Pty Ltd ("Koppar Europe") to have a 100% ownership interest in Koppar Europe, the owner of granted tenements which comprise of nine copper-zinc projects located in Norway. The copper-zinc projects are still in the exploration phase and no processes or outputs were acquired. As a result of this, the acquisition was assessed as an asset acquisition rather than a business combination. The total consideration for the acquisition is as follows:

- (a) 1,250,000 fully paid ordinary shares in the capital of Koppar Resources Limited at a deemed issue price of \$0.20 per share (Consideration Shares") to the Shareholders.

Purchase consideration	250,000
Net assets acquired are as follows:	
Exploration and evaluation expenditure	270,024
Trade and other payables	(20,024)

NOTE 15 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of the financial markets and seeks to minimise potential adverse effects on the financial performance of the Group. The Group uses different methods to measure and manage different types of risks to which it is exposed. These include monitoring levels of exposure to interest rate and foreign exchange risk and assessments of market forecasts for interest rate and foreign exchange prices. Ageing analysis and monitoring of specific credit allowances are undertaken to manage credit risk. Liquidity risk is monitored through the development of future cash flow forecasts.

Risk management is carried out by Management and overseen by the Board of Directors with assistance from suitably qualified external advisors.

The main risks arising for the Group are foreign exchange risk, interest rate risk, credit risk and liquidity risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below.

The carrying values of the Group's financial instruments are as follows:

	2019 \$	2018 \$
Financial Assets		
Cash and cash equivalents	3,348,996	4,047,909
Trade and other receivables	35,063	95,486
	3,384,059	4,143,395
Financial Liabilities		
Trade and other payables	116,944	53,168
	116,944	53,168

(a) Market risk

(i) Foreign exchange risk

The Group was not significantly exposed to foreign currency risk fluctuations.

(ii) Interest rate risk

The Group is exposed to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in the market interest rates on interest bearing financial instruments.

The Group's exposure to this risk relates primarily to the Group's cash and any cash on deposit. The Group does not use derivatives to mitigate these exposures. The Group manages its exposure to interest rate risk by holding certain amounts of cash in fixed and floating interest rate facilities. At the reporting date, the interest rate profile of the Group's interest-bearing financial instruments was:

	2019		2018	
	Weighted average interest rate	Balance \$	Weighted average interest rate	Balance \$
Cash and cash equivalents	1.68%	3,348,996	0.10%	4,047,909

Sensitivity

Within the analysis, consideration is given to potential renewals of existing positions and the mix of fixed and variable interest rates. The following sensitivity analysis is based on the interest rate risk exposures in existence at the reporting date. The 1% increase and 1% decrease in rates is based on reasonably expected possible changes over a financial year.

At 30 June 2019, if interest rates had moved, as illustrated in the table below, with all other variables held constant, losses and equity would have been affected as follows:

<i>Judgements of reasonably possible movements:</i>	Profit higher/(lower) 2019 \$	Profit higher/(lower) 2018 \$
+ 1.0% (100 basis points)	33,490	40,479
- 1.0% (100 basis points)	(33,490)	(40,479)

(b) Credit risk

Credit risk arises from the financial assets of the Group, which comprise cash and cash equivalents, trade and other receivables and other financial assets. The Group's exposure to credit risk arises from potential default of the counterparty, with maximum exposure equal to the carrying amount of the financial assets.

The Group's policy is to trade only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms will be subject to credit verification procedures.

In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. There are no significant concentrations of credit risk within the Group except for cash and cash equivalents.

(c) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows. The Group does not have any external borrowings.

The following are the contractual maturities of financial liabilities:

	1 year or less \$	1-5 years \$	> 5 years \$	Total \$
2019				
Trade and other payables	116,944	-	-	116,944
2018				
Trade and other payables	53,168	-	-	53,168

(d) Capital risk management

The Group's objectives when managing capital are to:

- Safeguard their ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders; and
- Maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the number of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Given the stage of the Company's development there are no formal targets set for return on capital. The Company is not subject to externally imposed capital requirements. The net equity of the Company is equivalent to capital. Net capital is obtained through capital raisings on the Australian Securities Exchange ("ASX").

NOTE 16 SHARE BASED PAYMENTS

	2019 \$	2018 \$
Performance rights issued to Directors ⁽ⁱ⁾	62,138	-
	62,138	-

- (i) During the year, 3,900,000 performance rights were granted and issued to directors. The value of each rights as set out below in the summary of performance rights granted. These were issued on 20 December 2018.

	Tranche A	Tranche B	Tranche C
Value of each right	\$0.1463	\$0.1124	\$0.0906
Expected volatility	90%	90%	90%
Grant date	30/11/2018	30/11/2018	30/11/2018
Price at grant date	\$0.18	\$0.18	\$0.18
Expiry date	30/11/2021	30/11/2021	30/11/2021
Vesting hurdle (5-day VWAP)	\$0.40	\$0.75	\$1.10
Interest rate	2.06%	2.06%	2.06%
Number of Rights	1,200,00	1,200,000	1,500,000
Total value of rights	\$175,560	\$134,880	\$135,900

Terms and conditions of Performance rights:

Tranche	Terms
Tranche A	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.40.
Tranche B	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$0.75.
Tranche C	Will vest if, at any time within 36 months following grant date of the Rights the VWAP of the Company's shares traded on the ASX over five (5) consecutive trading days is equal to or greater than \$1.10.

Set out below are summaries of performance rights granted under the plan:

30 June 2019

Grant date	Expiry date	Balance at the start of the year	Granted	Exercised	Expired/ forfeited/ other	Balance at the end of the year
30/11/2018	30/11/2021	-	3,900,000	-	-	3,900,000
		-	3,900,000	-	-	3,900,000

Accounting Policy

Equity-settled and cash-settled share-based compensation benefits are provided to Key Management Personnel and employees.

Equity-settled transactions are awards of shares, or options over shares, that are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using an appropriate valuation model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with non-vesting conditions that do not determine whether the consolidated entity receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

The cost of cash-settled transactions is initially, and at each reporting date until vested, determined by applying an appropriate valuation model, taking into consideration the terms and conditions on which the award was granted. The cumulative charge to profit or loss until settlement of the liability is calculated as follows:

- a. During the vesting period, the liability at each reporting date is the fair value of the award at that date multiplied by the expired portion of the vesting period.
- b. From the end of the vesting period until settlement of the award, the liability is the full fair value of the liability at the reporting date.

All changes in the liability are recognised in profit or loss. The ultimate cost of cash-settled transactions is the cash paid to settle the liability.

Market conditions are taken into consideration in determining fair value. Therefore, any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the consolidated entity or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the consolidated entity or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

NOTE 17 RELATED PARTY DISCLOSURE

(a) Key Management Personnel Compensation

The aggregate compensation made to directors and other members of key management personnel of the consolidated entity is set out below.

	2019	2018
	\$	\$
Short-term benefits	259,998	87,333
Share-based payments	62,138	-
	322,136	87,333

(b) Transactions with related parties

Terms and conditions

All transactions were made on normal commercial terms and conditions and at market rates.

There were no related party transactions during the financial year. In the financial year ended 30 June 2018, as part of the Koppar Resources Europe Acquisition, Ms Morgan received 250,000 fully paid ordinary shares as consideration.

There were no loans made to any KMP during the year ended 30 June 2019 (2018: Nil).

(c) Issue of performance rights to related parties

During the financial year, the Company issued 3,900,000 performance rights to Directors. Refer to Note 16 for details. No performance rights were issued in the financial year ended 30 June 2018.

There were no other transactions with KMP during the year ended 30 June 2019.

NOTE 18 COMMITMENTS

There are no commitments as at 30 June 2019 (2018: Nil).

NOTE 19 CONTINGENCIES

As part of the acquisition of Koppar Resources Europe Pty Ltd in the prior year, the Company agrees that:

- (a) Upon completion of a scoping study by Koppar for the development of any of the Projects where a JORC compliant measured, indicated or inferred resource is identified at any of the Projects, the Company will issue 4,000,000 fully paid ordinary shares in the capital of Koppar at a deemed issue price of \$0.20 per Share to the Shareholders; and
- (b) Upon completion of a definitive feasibility study for the development of any of the Projects based on a JORC compliant measured or indicated resource being identified at any of the Projects, it will issue 4,000,000 fully paid ordinary shares in the capital of Koppar at a deemed issue price of \$0.20 per Share to the Shareholders.

There are no other contingent assets or contingent liabilities as at 30 June 2019.

NOTE 20 AUDITOR'S REMUNERATION

	2019 \$	2018 \$
Amounts received or due and receivable by RSM Australia Partners for:		
Audit and review of the annual and half-year financial report	25,000	18,000
Other services - RSM Australia Pty Ltd for:		
Investigating Accountant's Report	-	10,000
Other	1,500	-
	26,500	28,000

NOTE 21 INVESTMENT IN CONTROLLED ENTITIES

	Principal Activities	Country of Incorporation	Ownership Interest 2019 %	Ownership Interest 2018 %
Koppar Resources Europe Pty Ltd	Exploration	Australia	100	100

NOTE 22 PARENT ENTITY

	2019	2018
	\$	\$
Assets		
Current assets	3,379,725	4,138,856
Non-current assets	530,607	368,658
Total assets	3,910,332	4,507,514
Liabilities		
Current liabilities	117,216	42,198
Total liabilities	117,216	42,198
Equity		
Contributed equity	4,746,416	4,746,416
Reserves	164,013	-
Accumulated losses	(1,117,313)	(281,100)
Total equity	3,793,116	4,465,316
Loss for the year/period	(836,213)	(281,100)
Total comprehensive loss	(836,213)	(281,100)

Contingent liabilities

Other than disclosed at Note 19, the parent entity has no other contingent assets or contingent liabilities as at 30 June 2019 and 30 June 2018.

Capital commitments - Property, plant and equipment

The parent entity had no capital commitments for property, plant and equipment as at 30 June 2019 and 30 June 2018.

Exploration commitments

The parent entity has no exploration commitments.

Significant accounting policies

The accounting policies of the parent entity are consistent with those of the consolidated entity, as disclosed in the financial statements, except for the following:

- Investments in subsidiaries are accounted for at cost, less any impairment, in the parent entity.

NOTE 23 EVENTS AFTER THE REPORTING DATE

On 10 July 2019, Koppar Resources Limited announced it signed a binding heads of agreement to acquire 100% of Vulcan Energy Resources, owner of the Vulcan Lithium Project.

The consideration for the Acquisition was:

- i. 6,666,667 fully paid ordinary shares in Koppar (Shares) to be issued to the shareholders of Vulcan, Dr Francis Wedin and Dr Horst Kreuter (Vendors) (Consideration Shares); and
- ii 13,200,000 Performance Shares to be issued to the Vendors, which will each convert into a Share on a one for one basis on satisfaction the following milestones:
 - 4,400,000 Shares on the Company announcing a positive scoping study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 12 months of completion of the Acquisition (Milestone 1);
 - 4,400,000 Shares on the Company announcing a positive preliminary feasibility study in relation to the Vulcan Lithium Project, confirming the Vulcan Lithium Project is commercially viable within 24 months of completion of the Acquisition (Milestone 2); and
 - 4,400,000 Shares on the Company announcing that it has secured an off-take agreement representing a minimum of 30% of production volume over a three year term, or a downstream joint venture partner with a minimum \$10,000,000 investment in relation to the Vulcan Lithium Project within 36 months of completion of the Acquisition (Milestone 3), (together, the Deferred Consideration).

The terms of the Performance Shares and Deferred Consideration were subject to ASX approval, which was subsequently given.

As part of the Acquisition, the Company has paid the following by way of an introduction and facilitation fee to parties involved in introducing the Acquisition to the Company:

- (i) 1,000,000 Shares to be issued on completion of the Acquisition; and
- (ii) 1,980,000 Shares to be issued as follows:
 - (A) 660,000 Shares to be issued on satisfaction of Milestone 1;
 - (B) 660,000 Shares to be issued on satisfaction of Milestone 2; and
 - (C) 660,000 Shares to be issued on satisfaction of Milestone 3.

Following completion of the transaction, Mr Gavin Rezos joined the Board as Chairman. Dr Francis Wedin, founder and major shareholder of Vulcan Energy Resources joined the Board of Koppar as Managing Director.

The Company has agreed to issue Shares and Performance Rights to Mr Rezos as an incentive in connection with his appointment as Chairman:

- (a) 750,000 Shares; and
- (b) a total of 3,000,000 Performance Rights to be issued to Mr Rezos (or his nominee), which will each convert into a Share on a one for one basis on satisfaction the following milestones:
 - (i) 1,000,000 Shares on satisfaction of Milestone 1;
 - (ii) 1,000,000 Shares on satisfaction of Milestone 2; and

(iii) 1,000,000 Shares on satisfaction of Milestone 3.

The Company has appointed Viaticus Capital Pty Ltd, a related body corporate of Gavin Rezos, to provide investor relations advice in Europe and the US. The appointment is for an initial term of 12 months, or such longer period as the parties may agree. The terms of the appointment are set out below.

Commencement Date	Completion of the Acquisition
Term	12 months from the Commencement Date, unless extended by agreement and subject to termination by either party (see termination and notice below)
Retainer	\$5,000 per month
Performance based bonuses	A total of 750,000 Performance Rights ¹ to be issued to Viaticus (or its nominee), which will each convert into a Share on a one for one basis on satisfaction the following milestones: (i) 250,000 Shares on satisfaction of Milestone 1; (ii) 250,000 Shares on satisfaction of Milestone 2; (iii) 250,000 Shares on satisfaction of Milestone 3; and
Fees on Capital Raisings	A 6% fee on any amount invested by an investor introduced by Viaticus and based outside Australia into any Koppar capital raising and a 1% fee on any amount raised for Koppar by any licensed broker or fund investor introduced by Viaticus.
Termination and Notice	The Company or Viaticus Capital may terminate the agreement with three months' notice.

In parallel with the Acquisition, the Company raised A\$1.1 million at \$0.15 per share ("Placement"). The proceeds of the Placement will be used to fund due diligence and initial work at the Vulcan Lithium Project. The Company issued 2,820,000 fully paid ordinary shares on 10 July 2019 and 3,513,334 on 19 July 2019 as part of the Placement.

On 5 August 2019, the Company issued 1,000,000 fully paid ordinary shares at an issue price of \$0.20 per share to a Consultant of the Company. The shares issued were in lieu of cash fees for services rendered.

On 5 August 2019, the Company cancelled the following performance rights previously issued to a Director, Rebecca Morgan.

- 400,000 Performance Rights Class A
- 400,000 Performance Rights Class B
- 500,000 Performance Rights Class C

The Performance Rights were cancelled in accordance with the terms of issue.

On 4 September 2019, shareholders approved the following resolutions at the Koppar General Meeting:

- Issue of 6,666,667 fully paid ordinary shares to the Vendors as consideration for the Vulcan Energy Acquisition;
- Issue of 13,200,000 Performance Shares to the Vendors as consideration for the Vulcan Energy Acquisition;
- Mr Gavin Rezos was appointed as the Non-Executive Chairman of the Company;

- Issue of 1,000,000 fully paid ordinary shares to Gavin Rezos at an issue price of \$0.15 per share for a total of \$150,000;
- Issue of 1,000,000 fully paid ordinary shares to the Introducers upon completion of the Acquisition;
- Issue of 750,000 fully paid ordinary shares to Gavin Rezos;
- Issue of 3,000,000 Performance Rights to Gavin Rezos; and
- Issue of 750,000 Performance Rights to Viaticus Capital Pty Ltd.

On 5 September 2019, the Company successfully completed its Acquisition of the Vulcan Lithium Project in the Upper Rhine Valley of Germany, on the terms set out in its Announcement dated 10 July 2019. On the same day, Dr Francis Wedin was appointed Managing Director and Mr Gavin Rezos was appointed Chairman, greatly strengthening the experience and expertise of the Board, as the Company drives forward with this new and exciting project. Rebecca Morgan has resigned from the Board to pursue other interests.

Other than the above, there has been no other matter or circumstance that has arisen since the end of the financial year that has significantly affected, or may significantly affect, the operations of the Group, the results of those operations, or the state of affairs of the Group.

Directors' Declaration

In the Directors' opinion:

- (a) The financial statements and accompanying notes are in accordance with the Corporations Act 2001, including:
 - (i) complying with Australian Accounting Standards, the Corporations Regulations 2001 and other mandatory professional reporting requirements; and
 - (ii) giving a true and fair view of the consolidated entity's financial position as at 30 June 2019 and of its performance for the financial year ended on that date.
- (b) The financial statements and notes comply with International Financial Reporting Standards.
- (c) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

The Directors have been given the declarations required by section 295A of the Corporations Act 2001.

This declaration is made in accordance with a resolution of the Board of Directors made pursuant to section 295(5)(a) of the Corporations Act 2001 and is signed for and on behalf of the Directors by:

Francis Wedin
Managing Director
26 September 2019

18.4.6 Independent Auditor's Report

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF KOPPAR RESOURCES LIMITED

Opinion

We have audited the financial report of Koppar Resources Limited (the Company) and its subsidiary (the Group), which comprises the consolidated statement of financial position as at 30 June 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the Corporations Act 2001, including:

- (i) Giving a true and fair view of the Group's financial position as at 30 June 2019 and of its financial performance for the year then ended; and
- (ii) Complying with Australian Accounting Standards and the Corporations Regulations 2001.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Group in accordance with the auditor independence requirements of the Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the Corporations Act 2001, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter	How our audit addressed this matter
Exploration and Evaluation Expenditure Refer to Note 10 in the financial statements	
The Group has capitalised exploration and evaluation expenditure with a carrying value of \$526,001 as at 30 June 2019. We considered this to be a key audit matter due to the significant management judgments	Our audit procedures included: • Ensuring that the right to tenure of the area of interest was current; • Agreeing a sample of additions to supporting documentation and ensuring the amounts are capital in

involved in assessing the carrying value of the asset including:	• Determination of whether the exploration and evaluation expenditure can be associated with finding specific mineral resources and the basis on which that expenditure is allocated to an area of interest; • Assessing whether any indicators of impairment are present and if so, judgement applied to determine and quantify any impairment loss; and • Assessing whether exploration activities have reached a stage at which the existence of economically recoverable reserves may be determined.
	• nature and relate to the area of interest; • Enquiring with management and reviewing budgets and other documentation as evidence that active and significant operations in, or relation to, the area of interest will be continued in the future; • Assessing and evaluating management's assessment of whether indicators of impairment existed at the reporting date; • Assessing that the impairment expensed recognised for the year ended was appropriately calculated; and • Through discussions with the management and review of the Board Minutes, ASX announcements and other relevant documentation, assessing management's determination that exploration activities have not yet progressed to the stage where the existence or otherwise of economically recoverable reserves may be determined.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2019, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the 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 financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: http://www.auasb.gov.au/auditors_responsibilities/ar2.pdf. This description forms part of our auditor's report.

Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in the directors' report for the year ended 30 June 2019.

In our opinion, the Remuneration Report of Koppar Resources Limited, for the year ended 30 June 2019, complies with section 300A of the Corporations Act 2001.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

RSM AUSTRALIA PARTNERS

Perth, WA

TUTU PHONG

Dated: 26 September 2019

Partner

19. Annex: Competent Persons' Report

Independent Expert Report for Vulcan Energy Resources Zero Carbon Lithium™ Project

Effective January 10, 2022

Prepared by GLJ Ltd.:
J. Greg Owen, P.Eng.
Mark P. Pascal, P.Eng.
Kim Mohler, P.Eng.
Taylor Hampton, G.I.T.
G.Gabriella Carrelli, P. Geol., M.Sc.

Prepared by APEX Geoscience Ltd.
Roy Eccles, M.Sc., P.Geol., P.Geo.

Table of Contents

1)	SUMMARY	7
1.1)	Introduction	7
1.2)	Property Location & Ownership	7
1.3)	Geology.....	7
1.4)	Exploration	8
1.5)	Mineral Resource Estimate.....	8
1.6)	Mineral Processing.....	8
1.7)	Mineral Reserves Estimate	9
1.8)	Economics.....	9
1.9)	Project Risks & Opportunities.....	10
1.10)	Competent Persons Conclusions and Recommendations.....	11
2)	INTRODUCTION	11
3)	PROPERTY LOCATION AND DESCRIPTION	13
3.1)	Location.....	13
3.2)	Ownership.....	14
4)	ACCESSIBILITY, CLIMATE AND PHYSIOGRAPHY	15
4.1)	Accessibility.....	15
4.2)	Climate	15
4.3)	Physiography.....	16
5)	LOCAL RESOURCES AND INFRASTRUCTURE	16
6)	GEOLOGY AND GEOLOGICAL INTERPRETATION	17
7)	DEPOSIT TYPES	18
8)	EXPLORATION SUMMARY	19
9)	MINERAL RESOURCE ESTIMATE.....	21
10)	LITHIUM PLANT & PROCESSING	23
10.1)	Process Description.....	23
10.2)	Project Design Basis	25
11)	MINERAL RESERVES ESTIMATE	28
12)	PLANT ENGINEERING & DESIGN, ENVIRONMENTAL, SOCIAL & PERMITTING CONSIDERATIONS.....	34
13)	MARKET STUDIES & CONTRACTS	39
13.1)	Introduction	39
13.2)	Lithium demand	39
13.3)	Supply chain	41
13.4)	Lithium supply	42
13.5)	Lithium Market Balance	44
13.6)	Production Costs	45
13.7)	Lithium prices.....	46
13.8)	Sustainability	47
14)	ECONOMIC ANALYSIS	48
14.1)	Capital and Operating Costs	48
14.2)	Economic Model.....	49

14.3) <i>Integrated Business</i>	50
14.4) <i>Separate Businesses</i>	50
14.5) <i>Sensitivity Analysis</i>	50
14.6) <i>Project funding</i>	51
15) PROJECT RISK AND OPPORTUNITIES.....	51
16) CAUTIONARY STATEMENT	53
17) COMPETENT PERSON STATEMENT:	55
GLOSSARY OF TERMS.....	56
REFERENCES	59
APPENDIX 1: JORC TABLES.....	61
<i>JORC Code 2012 Table 1. Section 1: Sampling Techniques and Data</i>	61
<i>JORC Code 2012 Table 1. Section 2: Reporting of Exploration Results</i>	70
<i>JORC Code 2012 Table 1. Section 3: Estimation and Reporting of Mineral Resources</i>	77
<i>JORC Code 2012 Table 1. Section 4: Estimation and Reporting of Ore Reserves</i>	89

List of Tables

TABLE 1: VULCAN'S COMBINED ZERO CARBON LITHIUM™ PROJECT LITHIUM (Li) BRINE INDICATED AND INFERRED MINERAL RESOURCE ESTIMATES. ONLY THE INDICATED RESOURCE ESTIMATIONS FROM THE ORTENAU AND TARO LICENCES WERE USED IN THE PFS. THE CUT-OFF GRADE USED FOR ALL RESOURCES WAS 100MG/L Li.	22
TABLE 2: BRINE FLOW PER DLE PLANT. NOTE THAT BRINE FLOW RATES ARE ASSUMED BASED ON VULCAN'S CONSULTANTS' INTERPRETATION OF THE STRUCTURAL GEOLOGY FROM SEISMIC INTERPRETATION OF THE FAULT ZONES IN THE PRODUCTION STUDY AND KNOWLEDGE OF SURROUNDING WELL PERFORMANCE AND WILL NEED TO BE CONFIRMED ONCE PRODUCTION WELLS ARE DRILLED.	25
TABLE 3: BRINE PROPERTIES AND ELEMENTAL COMPOSITION.....	25
TABLE 4: PFS DESIGN CAPACITY.....	26
TABLE 5: TARO KEY PARAMETERS, MODIFYING FACTORS AND PRODUCTION TARGET. THE BRINE FLOW RATE IS AN ASSUMPTION BASED ON SEISMIC INTERPRETATION OF GEOLOGY AND STRUCTURES AND KNOWLEDGE OF SURROUNDING WELLS AND WILL BE CONFIRMED ONCE PRODUCTION WELLS ARE DRILLED AT TARO.....	30
TABLE 6: ORTENAU KEY PARAMETERS, MODIFYING FACTORS AND PRODUCTION TARGET. THE BRINE FLOW RATE IS AN ASSUMPTION BASED ON SEISMIC INTERPRETATION OF GEOLOGY AND STRUCTURES AND KNOWLEDGE OF SURROUNDING WELLS AND WILL BE CONFIRMED ONCE PRODUCTION WELLS ARE DRILLED AT ORTENAU.	33
TABLE 7: URVP MAIDEN ORE PROBABLE RESERVE ESTIMATE	33
TABLE 8: OVERALL SUMMARY OF SCENARIOS.....	48

List of Figures

FIGURE 1: VULCAN ZERO CARBON LITHIUM™ PROJECT LICENSE SUMMARY	14
FIGURE 2: VULCAN LICENSE AREAS, UPPER RHINE VALLEY, GERMANY – PRODUCTION LICENSE AT LANDAU AND INSHEIM REFERS TO CURRENT GEOTHERMAL PRODUCTION WITH PROPOSED FUTURE LITHIUM PRODUCTION	15
FIGURE 3: AVERAGE CLIMATE IN THE CITY OF KARLSRUHE, GERMANY (CLIMATE-DATA).....	16
FIGURE 4: EXAMPLE SEISMIC PROFILE WITH INTERPRETED FORMATION TOP HORIZONS AND FAULTS.	20
FIGURE 5: 3-D RESOURCE MODEL OF ORTENAU RESOURCE, SHOWING AREAS OF INDICATED CATEGORY (PINK; BUNTSANDSTEIN GROUP FAULT ZONE DOMAIN) AND INFERRED CATEGORY (GOLD; ALL REMAINING BUNTSANDSTEIN GROUP OUTSIDE OF THE FAULT ZONES).....	20
FIGURE 6: 3-D IMAGE OF THE TARO LICENSE GEOLOGICAL MODEL WIREFRAMED FOR THE INDICATED RESOURCE ESTIMATION: THE BUNTSANDSTEIN GROUP (GOLD) AND ROTLIEGEND (REDDISH-BROWN) FAULT ZONE ENVELOPE DOMAINS. THE INFERRED RESOURCES OUTSIDE OF THE FAULT ZONES ARE NOT SHOWN.	21
FIGURE 7: HIGH-LEVEL SCHEMATIC OF VULCAN'S ZERO CARBON LITHIUM™ PROCESS, SHOWING (1) GEOTHERMAL PLANT, (2) DLE PLANT, (3) CENTRAL LITHIUM PLANT.	25
FIGURE 8: DLE PLANT 3-D RENDERING.....	27
FIGURE 9: CONVERSION PLANT 3-D RENDERING	27
FIGURE 10: LOCATION OF THE TARO AND ORTENAU LICENSE AREAS (PURPLE; TARO IS THE NORTHERN AREA) WITHIN THE REGIONAL GEOLOGY OF THE URG SHOWING MAJOR URG UNITS (MODIFIED FROM GRIMMER ET AL., 2017) (GRIMMER ET AL).	28
FIGURE 11: TARO LICENSE AREA, SHOWING STRUCTURAL MAP OF THE TOP BUNTSANDSTEIN UNIT WITH MAJOR FAULT POLYGONS AND FAULT ZONE POLYGONS BASED ON 3D-SEISMIC DATA.	29
FIGURE 12: OVERVIEW OF THE 3D MODEL OF THE TARO LICENSE AREA SHOWING THE FAULT SYSTEM AND TOP AND BASE OF THE MAPPED BUNTSANDSTEIN UNIT. IN ADDITION, ALL PLANNED (AND OPTIONAL) WELL CLUSTER ARE DISPLAYED.....	30
FIGURE 13: ORTENAU LICENCE AREA. STRUCTURAL MAP OF THE TOP BUNTSANDSTEIN UNIT WITH MAJOR FAULT POLYGONS AND FAULT ZONE POLYGONS BASED ON 2D-SEISMIC DATA.	31
FIGURE 14: OVERVIEW OF THE 3D MODEL OF THE ORTENAU LICENCE AREA SHOWING THE FAULT SYSTEM AND TOP AND BASE OF THE MAPPED BUNTSANDSTEIN UNIT. IN ADDITION, ALL PLANNED (AND OPTIONAL) WELL CLUSTERS ARE DISPLAYED.....	32
FIGURE 15: LAYOUT AND POTENTIAL CAPACITY OF PLANNED GEOTHERMAL PLANTS IN VULCAN'S TARO (B1+B2) AND ORTENAU (C1-3) LICENSE AREAS	37
FIGURE 16: 3D OVERALL VIEW OF ONE OF THE GEOTHERMAL-DLE PLANT LOCATIONS.	37
FIGURE 17: CAPEX AND OPEX ESTIMATES FOR GEOTHERMAL PLANTS, BASED ON GEC-CO STUDY	38
FIGURE 18: GIGAFACTORY CAPACITIES FOR LI-ION CELLS BY REGION (SOURCE: VDE RENEWABLES).....	39
FIGURE 19: LITHIUM GROWTH – POWERED BY ELECTRIC MOBILITY (SOURCE: CANACCORD GENUITY - LITHIUM 2020 RECHARGE (CANACCORD GENUITY, 2020)).....	40
FIGURE 20: COMPOSITION OF VARIOUS CATHODE CHEMISTRIES (SOURCE: BNEF)	40
FIGURE 21: LITHIUM HYDROXIDE AND CARBONATE DEMAND FORECASTS (SOURCE: CANACCORD GENUITY - LITHIUM 2020 RECHARGE (CANACCORD GENUITY, 2020)).....	41
FIGURE 22: CHINA'S DOMINANCE ACROSS THE SUPPLY CHAIN (SOURCE: BENCHMARK MINERAL INTELLIGENCE (BENCHMARK))	41
FIGURE 23: EXAMPLE OF AN EXISTING LITHIUM-ION BATTERY SUPPLY CHAIN (SOURCE: INFINITY LITHIUM (INFINITY LITHIUM)).....	42
FIGURE 24: ESTIMATED LITHIUM SUPPLY IN 2020, 2025 AND 2025 PER COUNTRY (SOURCE: DEUTSCHE BANK ESTIMATES (ASX, 2021)).....	42
FIGURE 25: LITHIUM PATH TO MARKET: AUSTRALIA TO ASIA	43
FIGURE 26: LITHIUM PATH TO MARKET: SOUTH AMERICA TO ASIA	43
FIGURE 27: LITHIUM CHEMICAL SUPPLY HIGHLY CONCENTRATED (SOURCE: BNEF)	44
FIGURE 28: LITHIUM MARKET DEFICIT (KTPA) FROM 2022 ONWARDS (SOURCE: MACQUARIE – RESEARCH, LITHIUM MARKET OUTLOOK, 12/04/2021 (MACQUARIE, 2021))	44
FIGURE 29: ANALYSTS AND CONSULTANTS FORECAST A LITHIUM SHORTAGE IN THE COMING YEARS.....	45
FIGURE 30: COST COMPOSITION – MINERAL CONVERSION & BRINE PROCESSING (SOURCE: ROSKILL, HATCH) ..	45

FIGURE 31: GLOBAL COST CURVE LITHIUM HYDROXIDE (SOURCE: CANACCORD GENUITY - LITHIUM 2020 RECHARGE).....	46
FIGURE 32: HISTORICAL LITHIUM HYDROXIDE PRICES (SOURCE: TRADE STATISTICS COMPILED FROM GLOBAL TRADE ATLAS®, BENCHMARK MINERALS (2016-2017), FASTMARKETS (2017-2021), S&P (2018-2021))	47
FIGURE 33: LITHIUM HYDROXIDE PRICE FORECAST – MACQUARIE (SOURCE: MACQUARIE – RESEARCH, LITHIUM MARKET OUTLOOK, 12/04/2021)	47
FIGURE 34: ENVIRONMENTAL FOOTPRINT OF LITHIUM PRODUCTION ROUTES (SOURCE: MINVIRO LIFE CYCLE ANALYSIS 2020 & VULCAN ENERGY'S PRE-FEASIBILITY STUDY)	48
FIGURE 35: ECONOMIC RESULTS FOR THE INTEGRATED BUSINESS SCENARIO FOR BOTH A PHASED AND NO PHASED DEVELOPMENT PLAN.....	50
FIGURE 36: ECONOMIC RESULTS FOR THE SEPARATE BUSINESS SCENARIO FOR BOTH A PHASED AND NO PHASED DEVELOPMENT PLAN.....	50
FIGURE 37: SENSITIVITY ANALYSIS CHART ON LITHIUM NPV & IRR. LITHIUM PRICE AND FLOW RATE ARE NOT AGGREGATED BUT HAVE THE SAME EFFECT IN THE SENSITIVITY ANALYSIS.	51

1) Summary

1.1) Introduction

This Independent Expert Report (IER) has been prepared by Competent Persons (CPs) from GLJ Ltd. (GLJ) and APEX Geoscience Ltd. (APEX) at the request of Vulcan Energy Resources Ltd. (Vulcan or the Company). Vulcan is a public company with its corporate headquarters in Perth, Western Australia. Vulcan is an exploration and development company established with the purpose of exploring for and developing lithium hydroxide production ($\text{LiOH}\cdot\text{H}_2\text{O}$) for use in battery production in Europe, and geothermal renewable energy production. Vulcan's flagship project is the Zero Carbon Lithium™ Project in the Upper Rhine Valley of Southwestern Germany. Vulcan commissioned GLJ, APEX, GeoThermal Engineering GmbH (GeoT), Hatch Ltd. (Hatch), Optiro Pty Ltd. (Optiro), IBZ Salzchemie and Gec-Co Global Engineering (Gec-Co) to review the Vulcan Zero Carbon Lithium™ Project (Vulcan Project) and prepare technical reports compliant with the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy (JORC Code 2012) (the Technical Reports). Independent consultants APEX and GLJ signed off on the Mineral Resources and Mineral Reserves estimates presented in the Technical Reports, respectively, under the JORC 2012 Code (JORC). GeoT and Gec-Co have since been acquired by Vulcan and are now members of the Vulcan Group. Information from these reports has been culminated into this IER by GLJ.

The objective of this IER is to provide investors and the general public with information regarding the current activities of Vulcan and the results of a Pre-Feasibility Study (PFS) (GeoT, 2020) which evaluated the economic potential for producing battery-grade lithium hydroxide and renewable energy, at the Vulcan Zero Carbon Lithium™ Project. Vulcan is investigating the development of a geothermal power plant coupled in series with a facility for the direct extraction via sorption of lithium chloride, and production of lithium hydroxide via electrolysis at a planned offsite chemical facility. The region hosts a medium temperature, high salinity brine resource capable of producing both geothermal energy and potential commercial quantities of lithium (symbol Li) product. The PFS is based on lithium mineral resource estimates contained in the Technical Reports for two license areas Ortenau and Taro, contained in the Vulcan Zero Carbon Lithium™ Project, prepared by Roy Eccles P. Geol. of APEX, effectively dated November 24, 2019 and January 17, 2020 (APEX, 2019), (APEX, 2020). Recovery Methods, Mineral Processing, Project Infrastructure, and Capital and Operating Costs benefit from an internal report prepared for Vulcan by Hatch. Select information from these Technical Reports and internal documents were used by Optiro to prepare the Economic Analysis presented in this IER. For future studies, Vulcan will look to integrate other license areas into its production plans.

1.2) Property Location & Ownership

The Vulcan Project is comprised of eight granted non-contiguous exploration licenses within the Upper Rhine Valley of southwest Germany at the Taro, Ortenau, Mannheim, Lampertheim, Therese, Ludwig, Kerner and Löwenherz sites, and one production license at an existing geothermal plant recently acquired by Vulcan, called Insheim. The Vulcan Zero Carbon Lithium™ Project is strategically located at the heart of the European automotive and lithium-ion battery manufacturing industry. Vulcan has acquired the geothermal brine and lithium rights through direct application to the respective mining authorities of the German states of Rheinland-Pfalz, Baden-Württemberg and Hessen. All exploration licenses were granted pursuant to the Germany Federal Mining Act (*Bundesberggesetz* 'BBergG') for the purpose of commercial exploration of mining-free mineral resources: geothermal, brine and lithium. The report includes information on the Insheim lithium resource because as of the date of this IER, Vulcan acquired the rights to the plant and production license.

1.3) Geology

The focus of Vulcan's geothermal Zero Carbon Lithium™ Project in the Upper Rhine Valley is on aquifers associated with the Permocarboniferous Rotliegend Group sandstone and the Lower Triassic Buntsandstein Group sandstone, collectively the 'Permo-Triassic strata'. The Permo-Triassic strata underly all Vulcan property licenses and are characterized as a laterally heterogeneous sandstone unit within a structurally complex rift basin. Recent German Government policy emphasizes decarbonisation and promotes the development of renewable sources. Consequently, emphasis on stratigraphically deep geothermal wells in the Upper Rhine Graben (URG) has created

access points to acquire deep, geothermally heated, lithium-enriched brine associated with the Buntsandstein Group sandstone aquifer and Permo-Triassic strata.

1.4) Exploration

Vulcan conducted a 2019 data compilation and brine sampling program that consisted of: 1) a geological compilation and subsurface review of the Permo-Triassic stratigraphy; 2) an assessment of the hydrogeological conditions underlying the Vulcan Property; and 3) collecting and analysing Permo-Triassic brine samples from the geothermal wells and plant operating at the Insheim resource area or property-neighbouring geothermal wells to verify the historical lithium brine geochemical results. The average lithium content from brine collected by Vulcan from six geothermal wells, including the recently acquired Insheim plant, that are located throughout the Upper Rhine Graben and proximal to the Ortenau and Taro licenses, was 181 mg/L lithium (n=13 total metal analyses by ICP-OES). Vulcan has recently acquired exploration data for the Mannheim and Lampertheim licenses, which will be assessed for future resource and project development potential but is not included as the basis for this IER.

1.5) Mineral Resource Estimate

The mineral resource estimates were prepared for each license area using average formation porosity to calculate the total volume of brine along with a lithium grade of 181 mg/L. The PFS was focused solely on Indicated Resources, from the Ortenau and Taro licenses. The Insheim license was not included in the PFS but may form a future upside as part of the future Definitive Feasibility Study (DFS). The Insheim Indicated Resource estimation occurs within the Buntsandstein and Rotliegend groups and is estimated at 0.72 million tonnes of lithium carbonate equivalent (LCE). The Ortenau Indicated Resource estimation occurs within the Buntsandstein Group aquifer fault zones with domain widths of between 63 m and 965 m and is estimated at 2.06 million tonnes of LCE. The Taro Indicated Resource estimations occur within fault zones with domain widths of between 111 m and 455 m and arbitrarily defined fault zone envelopes (up to 450 m on either side of the fault zone) within the Buntsandstein and Rotliegend groups. Combined the Taro license holds an estimated Indicated Resource of 0.83 million tonnes LCE. Additional resource modelling and estimation detail was included in Australian Securities Exchange (ASX) announcements dated January 20, 2020, reporting Indicated Lithium Resource at the Insheim License, November 12, 2020, reporting Taro License Indicated and Inferred Resource (ASX, 2020) and December 15, 2020, reporting Ortenau License Indicated and Inferred Resource (ASX, 2020). Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve.

In the opinion of the CP responsible for the Mineral Resource Estimate, the Vulcan Ortenau, Taro and Insheim license lithium and renewable energy projects have reasonable prospects for future economic extraction based on aquifer geometry, delineation of fault zones using re-interpreted seismic data, brine volume, brine composition, hydrogeological characterization, porosity, fluid flow, and advancement of the Company's Direct Lithium Extraction technology.

1.6) Mineral Processing

Vulcan is developing a combined geothermal renewable energy and Zero Carbon Lithium™ Project from multiple locations in the Upper Rhine Valley, Germany. The Vulcan Project includes, at each brine extraction site, a planned Geothermal energy plant for the production of renewable-sourced electricity. Co-located on the same sites are planned Direct Lithium Extraction (DLE) Plants for the extraction of lithium. The lithium chloride solution from the DLE Plants is then sent to a planned Central Lithium Plant (CLP) where the solution is purified and converted to produce battery grade lithium hydroxide monohydrate (LHM). Preliminary testwork has been performed of brine treatment and of direct extraction with a variety of sorbents. To perform more extensive and longer-term testing, Vulcan is currently pilot testing at an existing geothermal well facility, Landau, to support the subsequent engineering and design phases as part of its future DFS.

1.7) Mineral Reserves Estimate

The Production Study and Maiden Probable Ore Reserve (GeoT, 2020) estimate was conducted by GeoT and independently reviewed and signed-off by GLJ. This production study introduced additional parameters to identify and define the extractable volumes of lithium resources and to discuss the feasibility of lithium and geothermal energy production. Estimates for lithium production from geothermal wells were conducted with appropriate modifying factors. Surface and subsurface information was merged to identify ideal locations for drill sites. For the assessment of possible surface locations modifying factors, including distance to residential areas, presence of conservation areas and present land use and infrastructure were applied.

The Taro license area proposes two separate drill sites with a total of five well pairs. Each well pair includes a brine production well and a neighboring reinjection well, referred to collectively as a doublet. Each doublet is estimated to produce between 100 l/s to 120 l/s of brine. At a brine grade of 181 mg/L, a predicted lithium extraction recovery of 88.2% and a utilization rate of 90%, the average daily lithium production per doublet would be 1.52 t/day at the base case of 100-120 l/s. Based on the assumption of a 30-year project life the total forecasted base case Probable Reserves Estimate at the Taro license is 420,846 tonnes of LCE.

The Ortenau license area proposes three separate drill sites with a total of 9 doublets. Each doublet is estimated to produce 100 l/s of 181 mg/L grade brine. At predicted lithium extraction recoveries of 88.2% and a utilization rate of 90%, the average daily lithium production per doublet would be 8.01 t/day. Based on the assumption of a 30-year project life the total forecasted base case Probable Reserves Estimate at the Ortenau license is 701,409 tonnes of LCE.

Indicated Mineral Resources from the Ortenau and Taro licenses were converted to Probable Mineral Reserves, based on the results of the PFS and consideration of the modifying factors identified in the PFS. The Probable Mineral Reserve is considered to have a reasonable level of confidence based on the original quality of information collected, the local and international experience of the technical team interpreting the information, the continuity of the mineralization and the understanding of the geology, plus the demonstrable amenability to extract by pumping from deep wells in the Upper Rhine Valley. This statement relates to the global Probable Reserve, which is based on the Indicated Resources.

1.8) Economics

Optiro was retained to utilise the Gec-Co and Hatch capital and operating cost estimates for the production of geothermal energy and lithium hydroxide, respectively, to estimate Vulcan's Project economics.

Base case capital costs, operating costs and schedules were developed for each license. Taro is projected to require €474 Million (M) of initial capital expenditure (CAPEX) with annual operating expense (OPEX) of €46 M. Taro is estimated at 45 months to end of construction. Development of the Ortenau license will require an estimated €700 M of initial capital expenditure with annual operating expense of €69 M, taking approximately 48 months to complete. These estimates do not include the geothermal plants (including the wells), infrastructure located beyond the site boundary, nor owners costs.

Lithium hydroxide (LiOH) prices are based on forecasts by Canaccord Genuity (Canaccord) for battery grade lithium hydroxide (minimum 57.5% LiOH). As part of the financial analysis, Optiro has applied production rates in-line with directions from Vulcan, with potential for phasing applied. This uses brine flow rate assumptions based on seismic interpretation of structural geology and surrounding well performance, which will need to be tested in a production well setting.

The PFS demonstrates two separate scenarios; one in which the Vulcan Project is fully integrated under one business; and another where the geothermal energy operations are a separate business from the DLE and lithium refining. Each scenario was further broken into two different development options, one considering the Vulcan

Project phasing into two separate stages, and another development timeframe with no phasing. The phased approach includes Phase 1 (plants B1 and B2) and Phase 2 separately (plants C1, C2 and C2).

A discount rate of 6% has been applied to the cashflow in line for the geothermal business, comparable with discount rates used by others in the geothermal industry as advised by Vulcan's geothermal engineering business Gec-Co. A discount rate of 8% has been applied to the cashflow in line for the lithium businesses, comparable with discount rates used by others in the lithium industry and as directed by Vulcan for use by Optiro. The results of the various economic scenarios are summarized below (ASX, 2021).

These are estimated costs as of the completion date of Vulcan's PFS in January 2021, and will be refined as part of Vulcan's DFS, which is currently in progress. They are therefore subject to change. In particular, the capital expenditure is expected to increase, given global supply disruption due to COVID-19.

	Full project developed at the same time and integrated under one business.					Phase 1 developed first and is an integrated business					Phase 2 developed second and is an integrated business				
	FULL PROJECT NO PHASING 2024 Start					PHASE 1 2024 Start					PHASE 2 2025 Start				
	INTEGRATED BUSINESS					INTEGRATED BUSINESS					INTEGRATED BUSINESS				
	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3
	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3
	CLP1		CLP2			CLP1		CLP2			CLP1		CLP2		
	74MW & 40Ktpy LiOH					21MW & 15Ktpy LiOH					52MW & 25Ktpy LiOH				
Revenues €/M/y	652					232					420				
Net Op. Cash Fl. €/M/y	507					171					324				
NPV Pre-tax €/M	3,443					1,114					2,145				
NPV Post-tax €/M	2,250					703					1,403				
IRR Pre-tax	26%					23%					27%				
IRR Post-tax	21%					18%					22%				
Payback (year)	5					5					6				
CAPEX €/M	1,738					700					1,138				
CAPEX Geo	665					226					438				
CAPEX DLE	751					291					460				
CAPEX CLP	322					182					240				
OPEX €/KWh or LiOH€/t	2,640					3,139					2,792				

	Full project developed at the same time but separated in two different businesses: Energy and Lithium.					Phase 1 developed first, separated in two different businesses: Energy and Lithium.					Phase 2 developed second, separated in two different businesses: Energy and Lithium.																			
	FULL PROJECT - NO PHASING 2024 Start					PHASE 1 2024 Start					PHASE 2 2025 Start																			
	ENERGY BUSINESS					LITHIUM BUSINESS					ENERGY BUSINESS					LITHIUM BUSINESS														
	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3										
	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3										
	CLP		CLP			CLP1		CLP2			CLP1		CLP2			CLP1		CLP2												
	74MW					40Ktpy LiOH					22MW					15Ktpy LiOH					52MW					25Ktpy LiOH				
Revenues €/M/y	157					500					46					187					111					312				
Net Op. Cash Fl. €/M/y	114					394					31					140					83					242				
NPV Pre-tax €/M	685					2,802					155					971					530					1,647				
NPV Post-tax €/M	470					1,897					99					644					371					1,111				
IRR Pre-tax	16%					31%					13%					27%					18%					32%				
IRR Post-tax	13%					26%					11%					22%					15%					26%				
Payback (year)	6					4					4					4					7					5				
CAPEX €/M	665					1,073					226					474					438					700				
CAPEX Geo											226										438									
CAPEX DLE						751										291										460				
CAPEX CLP						322										182										240				
	0.066																													
OPEX €/KWh or LiOH€/t						2,681					0.078					3,201					0.061					2,855				

To achieve the outcomes of this study, initial funding in the order of €700 M (including contingency) will be required, and a further €1,138 M will be required for Phase 2. It should be noted that, as with any project at this stage, the ability to develop the Vulcan Project may depend on the future availability of funding, and while the Company believes it has reasonable basis to assume that future funding will be available and securable, this is not guaranteed.

1.9) Project Risks & Opportunities

As is normal at this stage of engineering, several risks remain. Key risks that can significantly affect the Vulcan

Project outcomes include site selection of the DLE and conversion plant, system configuration and performance. Limited testwork has been performed at this stage of engineering, with multiple areas relying on benchmarks, simulations, literature, or vendor experience for process definition and costing. Vulcan's Zero Carbon Lithium™ Project geologically represents an early-stage exploration project. While Vulcan has geological information from wells within its licenses, including the operational wells at the Insheim geothermal plant, at present, Vulcan has yet to drill a geothermal production well at the Ortenau and Taro licenses, which were the basis of the PFS. There are no operating wells that have sampled the Buntsandstein Group and/or Permo-Triassic aquifer brine in these two license areas, therefore there is a risk around lithium grade and brine flow rates. Vulcan evaluated regional and publicly available data to estimate expected brine flow rates. There is a significant amount of effective porosity measurements on Buntsandstein and Rotliegend drill cores which Vulcan has analysed, however, none of the wells were collared within the boundaries of the licenses. Consequently, the Ortenau and Taro resource estimation processes assume average matrix and fracture porosities from surrounding wells. There is risk and uncertainty associated with exploring for and exploiting fault zones as geothermal and lithium brine reservoirs as well as depleted brine composition from reinjection.

Modifying factors include, but are not limited to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and government factors. The permitting of the Vulcan Project by the government, which requires relevant environmental approvals depending on each location, is considered as a modifying factor. This a potential schedule risk, but based on information from the Company, the CPs have reason to believe that there is a reasonable probability for full approvals.

More detailed study work is under way as part of the development of Vulcan's DFS, as well as to incorporate the feasibility of extracting lithium from the newly acquired Insheim plant, which has existing, operational geothermal wells with proven lithium grades.

Opportunities also remain including optimizing process conditions to improve recovery, simplify process steps, reduce sorbent quantities, and reduce steam requirements all which could aid in reducing capital and operating costs.

1.10) Competent Persons Conclusions and Recommendations

This IER was prepared based on the information provided by Vulcan from the PFS. The CPs are reasonably confident that Vulcan, and Vulcan's independent multi-disciplinary team, have conducted sufficient due diligence to determine the Mineral Resource estimate and Mineral Reserves estimate, and that the Vulcan Zero Carbon Lithium™ Project has a reasonable prospect for eventual economic lithium extraction. The assumptions used for determination of resource estimates and flow conditions have been based on analogue data from regional existing wells and other exploration data. However, further exploration activities and technological development are required to better understand the risks associated with the license areas and to tighten the expected outcomes toward commercial development.

2) Introduction

Vulcan is aiming to become the world's first lithium and renewable energy producer with net zero greenhouse gas emissions, by producing a battery-quality lithium hydroxide chemical product with net zero carbon footprint from its combined geothermal and lithium resource, which is Europe's largest lithium resource, in the Upper Rhine Valley of Germany. Vulcan will use its unique Zero Carbon Lithium™ Project (Vulcan, 2021) to produce both renewable geothermal energy, and lithium hydroxide, from the same deep brine source. In doing so, Vulcan intends to address Europe's lithium market's requirements by reducing the high carbon and water footprint of lithium production, and total reliance on imports, mostly from China. Vulcan aims to supply the lithium-ion battery and electric vehicle market in Europe, which is the fastest growing in the world. Vulcan has a resource which can satisfy Europe's needs for the electric vehicle transition, from a zero-carbon source, for many years to come.

This Independent Expert Report (IER) has been prepared by Competent Persons (CPs) that include Greg Owen, P. Eng., of GLJ Ltd. (GLJ) and Roy Eccles, P. Geol., of APEX Geoscience Ltd. (APEX) at the request of Vulcan Energy Resources Ltd. (Vulcan or the Company). Mr. Owen takes responsibility for the preparation of sections 1, 2, 10-16. Mr. Eccles takes responsibility for the preparation of sections 3 to 9, and contributed to sections 1.1 to 1.5, 1.9, 1.10, 2, and 15.

This IER includes input from a multi-disciplinary team, who under the terms of various agreements with Vulcan, have prepared a series of JORC (2012) compliant mineral resource Technical Reports and a Pre-Feasibility Study. The multi-disciplinary team included geologists, geothermal specialists and chemical engineers with relevant experience in brine geology, brine resource modelling and estimation, and lithium brine processing.

Hatch led the lithium processing plant design, engineering, and cost estimation. Geothermal engineering companies Gec-Co and GeoT, now part of Vulcan, led the engineering studies and cost estimation for the geothermal plant and the sub-surface well design and production study, respectively. GLJ independently provided review and sign-off on the production study and Maiden Probable JORC Ore Reserves. APEX independently conducted the resource modelling and estimation for the Vulcan Zero Carbon Lithium™ Project Lithium Indicated Resources used in the PFS as announced to market on November 12, 2020 (Taro License) and December 15, 2020 (Ortenau License) in addition to the Indicated Resource not included in the PFS for the Insheim license as announced to market on January 20, 2020. Laboratory testwork was conducted at brine experts IBZ Salzchemie, among other providers. Optiro Ltd. carried out the financial modelling. The PFS was guided by Vulcan's team of in-house experts in DLE, lithium chemistry, chemical engineering, and lithium markets.

It should be noted that, since the publication of the PFS, Vulcan has commissioned its own laboratory and pilot plant, and has conducted extensive testwork in-house since then, which will be included in Vulcan's future DFS.

This IER is a compilation of publicly available information, as well as information obtained from the 2019-2020 exploration program and proprietary engineering information provided in an internal report prepared by Hatch. The 2019-2020 exploration program included brine analytical test programs conducted by Vulcan across the Upper Rhine Valley region. Company information and news releases were used to reference any historical mineral exploration work at the Vulcan licenses.

Geochemical data collected by Vulcan were analysed at independent and accredited laboratories: Bureau Veritas Laboratories and AGAT Laboratories in Edmonton, Alberta, Canada; and the University of Heidelberg and University of Karlsruhe in Germany. Historical lithium brine geochemical data were compiled from peer reviewed journals. The laboratories are independent and certified third-party consultants, academic institutions and/or include certified Professional Geologists or Engineers. The commercial geochemical laboratories cite National accreditations (e.g., ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. and/or Standards Council of Canada).

The CP, Roy Eccles, has reviewed government reports, digital information systems, journal manuscripts and Company news releases, and found no significant issues or inconsistencies that would cause one to question the validity of the data. The CP has reviewed the analytical protocols and accreditations of the laboratories used in Vulcan's 2019-2020 sampling program and are satisfied the data were created using standard methodologies in the field of lithium-brine analytical work. Accordingly, the CP has no issue with using these data to guide the regional geology, and resource evaluation presented in this IER.

The CP, Greg Owen, has reviewed modifying factors identified in the PFS that include government reports, Company new releases, permitting and economic assessment of the Vulcan Project. In the opinion of the CP there is a reasonable probability that these modifying factors are sufficient and it is appropriate to convert the Indicated Mineral Resources from the Ortenau and Taro licenses to Probable Mineral Reserves.

With respect to units of measure and currency, unless otherwise stated, this IER uses abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006) with ‘bulk’ weight presented in metric tonnes (“tonnes”; 1,000 kg or 2,204.6 lbs.). Geographic coordinates projected in Universal Transverse Mercator (UTM) system relative to Zone 32N of the North American Datum 1983 (NAD83) or World Geodetic System 1984 Datum (WGS84). The financial model has been generated in euro (€) terms with the majority of key inputs (operating and capital cost and power, acid and steam prices) also provided in € terms. The main exception to this is the LiOH price which was provided in US\$ terms. € terms were maintained through the financial model with conversion to the euro undertaken for the LiOH price.

3) Property Location and Description

3.1) Location

The Vulcan Zero Carbon Lithium™ Project is comprised of multiple license areas within the Upper Rhine Valley area of southwest Germany (the Vulcan Property). The Vulcan Property is strategically located at the heart of the European auto and lithium-ion battery manufacturing industry. Vulcan’s main project licenses are (i) an exploration licence at the Ortenau site in the German state of Baden-Württemberg that expires in June 2023 (the Ortenau Licence), (ii) an exploration licence at the Taro site in the German state of Rheinland-Pfalz that expires in April 2022 (the Taro Licence), and (iii) a production license at the Insheim site in the German state of Rhineland-Pfalz that expires in November 2037. Vulcan also holds additional exploration licences at the Mannheim site in the German state of Baden-Württemberg that expire in June 2024 (the Mannheim Licence) and at the Lampertheim site in the German state of Hessen that expire in July 2024 (the Lampertheim Licence). The Mannheim Licence and the Lampertheim Licence relate to earlier stage exploration projects at the respective licence areas in which surveying is currently being conducted (Figure 1).

Vulcan received approval for four new exploration licenses in December 2021 in the German state of Rheinland-Pfalz for a total addition of 325.15 square kilometres to Vulcan’s granted license area. The new licenses are at the Therese, Ludwig, Kerner, Löwenherz sites, with expiries in December 2024.

The exploration licences grant the right to explore for, extract to the extent necessary for the planned exploration of, and erect and operate facilities that are required for exploring the resources and for carrying out related activities. The production licence grants the exclusive right to geothermal energy from brine extracted from the site of the Insheim Plant. The Mannheim License, Taro License, Lampertheim License and Ortenau License total 658.58 square kilometres, and the Insheim License represents 19 square kilometres. With the new licenses, this brings the total Vulcan license areas to 1002.73 square kilometres.

This IER deals primarily with the Taro License and the Ortenau License, upon which Vulcan’s PFS and immediate development plans are located. While the Indicated Resource from the Insheim Resource Area was not included in the PFS, it could form a potential upside as part of the DFS. The newly acquired exploration licenses at Therese, Ludwig, Kerner, Löwenherz sites have not been reviewed for this IER and are not included in the content in subsequent sections.

The eight exploration licenses and the Insheim production license occur within the German states of Baden-Württemberg, Hessen and Rheinland-Pfalz near the cities of Mannheim and Karlsruhe, Germany, and the France-Germany border city of Strasbourg. The nine combined licenses are non-contiguous and are located within an area of approximately 2,500 square kilometres within the northeast orientated Upper Rhine Graben (Figure 2).

Zero Carbon Lithium™ Project licenses

License	State	Status	Vulcan interest	Area (km ²)
Insheim	Rheinland-Pfalz	Production license	100%	19
Taro/Lisbeth	Rheinland-Pfalz	Exploration license	100%	32.68
Ortenau	Baden-Württemberg	Exploration license	100%	373.6
Mannheim	Baden-Württemberg	Exploration license	100%	144.27
Lampertheim	Hessen	Exploration license	100%	108.03
Therese	Rheinland-Pfalz	Exploration license (newly granted)	100%	81.12
Ludwig	Rheinland-Pfalz	Exploration license (newly granted)	100%	96.34
Kerner	Rheinland-Pfalz	Exploration license (newly granted)	100%	72.26
Löwenherz	Rheinland-Pfalz	Exploration license (newly granted)	100%	75.43
Landau	Rheinland-Pfalz	Production license	Brine offtake agreement with owner/operator	

Figure 1: Vulcan Zero Carbon Lithium™ Project License Summary

3.2) Ownership

Vulcan has acquired exploration rights through direct application to the state mining authorities or via acquisition. Vulcan holds eight exploration licenses, for locations in Mannheim, Taro, Lampertheim, Ortenau, Therese, Ludwig, Kerner, and Löwenherz, and have recently acquired the Insheim production license, all with 100% ownership.

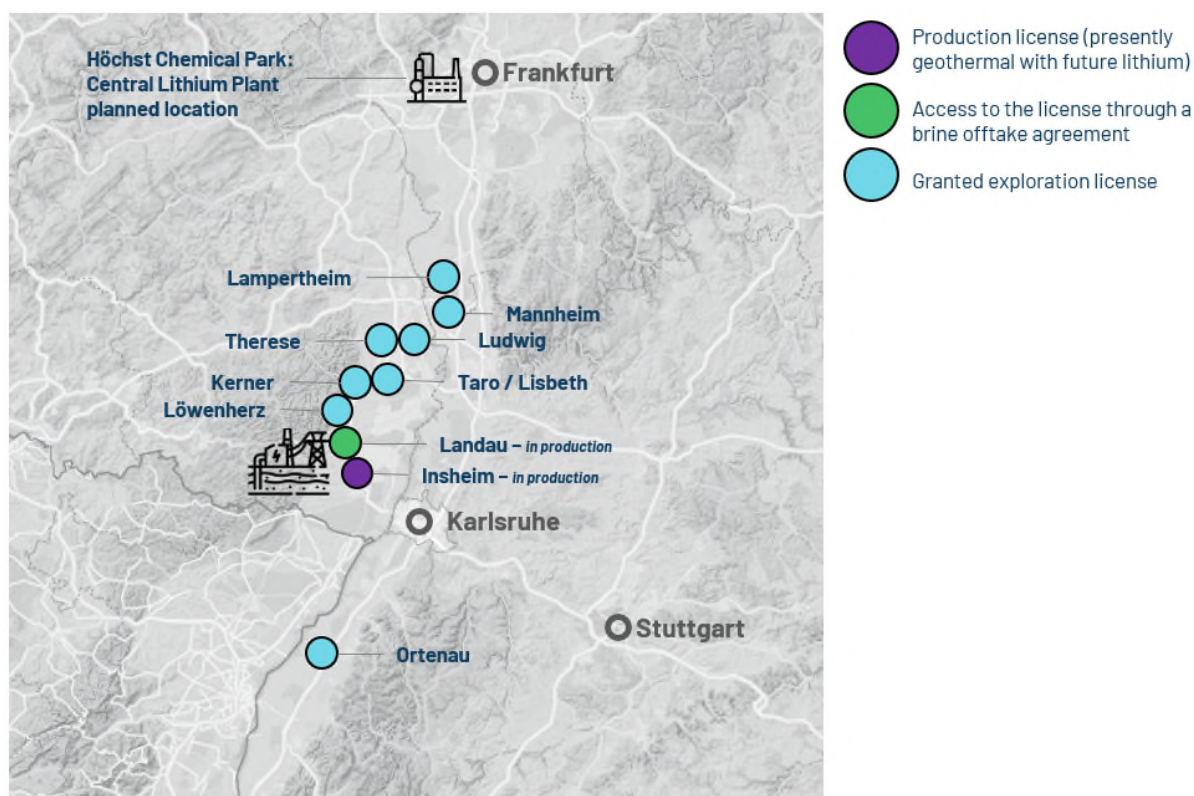


Figure 2: Vulkan License areas, Upper Rhine Valley, Germany – Production license at Landau and Insheim refers to current geothermal production with proposed future lithium production

4) Accessibility, Climate and Physiography

4.1) Accessibility

The Vulcan Zero Carbon Lithium™ Project is located in the Upper Rhine Valley region of southwest Germany. The Upper Rhine Valley is nestled in the heart of Europe and extends across three countries: Germany, France, and Switzerland. The convenient geographical location of the Upper Rhine Valley makes it easy to travel between the regions and cities, all of which are well-connected by large airports, train stations, and roadways. The nearest airport is part of the Baden Airpark (officially Flughafen Karlsruhe/Baden-Baden) about 45 kilometres southwest of Karlsruhe, with regular connections to airports in Germany and Europe in general. Frankfurt International Airport can be reached in about an hour and a half by car (one hour by train); Stuttgart Airport can be reached in about one hour (about an hour and a half by train and tram).

4.2) Climate

The climate in Karlsruhe, which represents the central city at the Vulcan Property, is warm, temperate, wet and considered to be Cfb according to the Köppen-Geiger climate classification (Figure 3). The annual temperature is approximately 11.2 °C with about 871 millimetres of annual precipitation. July is the warmest month of the year with January the coldest (near freezing). The driest month is April with the heaviest rain in December. Operations are expected to be year-round.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	2.2 °C (38) °F	2.9 °C (37.2) °F	6.5 °C (43.8) °F	10.8 °C (51.5) °F	15 °C (59) °F	18.7 °C (65.7) °F	20.6 °C (69.1) °F	20.2 °C (68.4) °F	16.2 °C (61.1) °F	11.7 °C (53) °F	6.6 °C (43.9) °F	3.3 °C (38) °F
Min. Temperature °C (°F)	-0.4 °C (31.2) °F	-0.4 °C (31.3) °F	2.2 °C (35.9) °F	5.7 °C (42.2) °F	10.1 °C (50.1) °F	13.7 °C (56.7) °F	15.8 °C (60.5) °F	15.5 °C (59.9) °F	12 °C (53.5) °F	8.1 °C (46.6) °F	3.8 °C (38.8) °F	0.9 °C (33.6) °F
Max. Temperature °C (°F)	5 °C (40.9) °F	8.4 °C (43.6) °F	10.8 °C (51.4) °F	15.8 °C (60) °F	19.3 °C (66.8) °F	23.1 °C (73.6) °F	25 °C (77) °F	24.7 °C (76.5) °F	20.6 °C (69) °F	15.8 °C (60.1) °F	9.6 °C (49.3) °F	5.9 °C (42.5) °F
Precipitation / Rainfall mm (in)	75 (3)	64 (2.5)	72 (2.8)	58 (2.3)	83 (3.3)	72 (2.8)	75 (3)	67 (2.6)	67 (2.6)	71 (2.8)	78 (3.1)	89 (3.5)
Humidity(%)	81%	78%	73%	67%	69%	66%	64%	65%	71%	78%	83%	82%
Rainy days (d)	10	9	10	9	10	9	10	9	8	8	9	11
avg. Sun hours (hours)	3.5	4.6	6.4	9.0	9.9	11.2	11.4	10.2	7.7	5.7	4.1	3.5

Figure 3: Average climate in the city of Karlsruhe, Germany (Climate-Data)

4.3) Physiography

The Upper Rhine Graben central area occurs at 85 to 115 m above sea level, is regarded as an intermontane basin and is characterized by a wide floodplain of the river Rhine. The ancient character of the landscape with abandoned paleochannels, oxbow lakes and swamps has largely disappeared during the last centuries as a result of hydrological engineering and modern agriculture. With a length of 1,300 kilometres the Rhine River is the third longest European river, behind the Danube and Volga. It serves a basin of 170,000 km² throughout seven countries: Switzerland, Austria, Germany, France, Luxembourg, Belgium and The Netherlands where more than 50 million people live.

Within the Rhine River system (Rhine-kilometres 170 to 529), the Upper Rhine Valley, or Upper Rhine Graben, measures just 350 kilometres long from north to south and 25-35 kilometres wide from west to east. The URG is situated between Basel in the south and the cities of Frankfurt/Wiesbaden in the north. The URG's southern section straddles the border between France and Germany. Since the rifting of the URG during the Eocene, two distinct shoulders on either side of the graben have been uplifted and form low mountain ranges that run the length of the URG. These low mountainous regions include the Black Forest to the east and the Vosges to the west. The Black Forest is a large, forested mountain range in the state of Baden-Württemberg in southwest Germany. Its highest peak is Feldberg with an elevation of 1,493 metres.

5) Local Resources and Infrastructure

The Upper Rhine Trinational Metropolitan Region occupies an area of 22,216 km² and is located centrally in Europe, in the northern part of Switzerland, eastern part of France and south-western part of Germany with the River Rhine as its natural border between these three countries. With 6 million inhabitants, the area is a densely populated cross border area with a strong economy defined by an economic output of more than 200 billion euros. The Rhine Valley is one of the Europe's main transportation infrastructure corridors for passenger and freight transport. The Upper Rhine Valley is a very well-connected cross-border region in the centre of Europe. Various important European destinations are readily accessible through motorways or high-speed rail. Three regional airports and the neighbourhood of important international air traffic hubs provide excellent accessibility of worldwide destinations. Numerous road crossings of the River Rhine and the national borders make commuting to the neighbouring countries relatively easy.

The Rhine River is known as one of the world's most important shipping routes and the Rhine region is a prime focus (and destination) for Dutch, Belgian, and German railway companies. The port of Strasbourg is the second largest on the Rhine after Duisburg in Germany (north of Düsseldorf).

Germany is one of the top four automobile manufacturers in the world. Five German companies and seven marques dominate the automotive industry in the country. Nearly 6 million vehicles are produced in Germany each year, and approximately 5.5 million are produced overseas by German brands.

The Rhine Valley also plays a pivotal role in the construction and operation of the European power grid acting as a backbone of electricity supply systems since the dawn of the 20th century. Initially the Rhine's flow was used to generate hydroelectricity and coal transports, but in later decades was also used to cool nuclear power plants.

Germany's largest oil refinery is in Karlsruhe. The Technologieregion Karlsruhe is a loose confederation of the region's cities designed to promote high tech industries; today, about 20% of the region's jobs are in research and development. EnBW, one of Germany's biggest electric utility companies is headquartered in Karlsruhe.

In comparison to other European regions, the economic situation of agriculture in the rural areas is strong and has relatively solid foundation of added value. This is due to the concentration on winery and arable crops, and organically produced food.

The URG area has a remarkable infrastructure system, large local workforce, moderate climate and technology enabled institutes of higher education. Lithium-brine exploration, and potential production, can be conducted year-round and could potentially add a new source of jobs that are focused on renewable energy.

6) Geology and Geological Interpretation

The Vulcan Project is located within the Upper Rhine Graben of southwestern Germany, which is characterized as a roughly azimuth 020° orientated Cenozoic graben that is composed of Permian to Tertiary sedimentary rocks with minor Tertiary volcanism and Quaternary surficial deposits.

The focus of Vulcan's geothermal Zero Carbon Lithium™ Project in the Upper Rhine Valley is on aquifers associated with the Permocarboniferous Rotliegend Group sandstone and the Lower Triassic Buntsandstein Group sandstone, collectively the 'Permo-Triassic strata'. The Permo-Triassic strata underly all Vulcan Property licenses and are characterized as a laterally heterogeneous sandstone unit within a structurally complex rift basin.

The Permocarboniferous Rotliegend Group formed during several URG rift phases with the lower Rotliegend comprised of fluvial-dominated Carboniferous and Permian sedimentary rocks. Subsequent compression of the Variscan Orogen was accompanied by volcanism and marks the end of the syn-rift phase and transition from fluvial-dominated to alluvial and eolian depositional environments.

The Lower Triassic Buntsandstein Group is subdivided into the Lower, Middle and Upper Buntsandstein subgroups as defined by distinct progradational (x2) and retrogradational fluvial sedimentary cycles. The Buntsandstein Group aquifer domain is defined as a confined sandstone aquifer that occurs between the fine grained Upper Buntsandstein Group (Rötton, Plattensandstein) and the fine-grained base of the Lower Buntsandstein.

The Buntsandstein Group aquifer (Ortenau) and Permo-Triassic strata (Taro and Insheim Resource Area) are the focus of resource models used in the PFS and this IER.

Brine aquifers within the Rotliegend Group and Buntsandstein Group may have some degree of hydrogeological communication. This is particularly evident in zones with a high degree of faulting and fracturing in which fluid brine can flow throughout the Permo-Triassic strata and can also penetrate the underlying faulted, fractured and altered granitic basement. These fault/fracture zones can contain hot brine and high fluid flow rates, and therefore, represent prime target areas for geothermal exploration.

Historical and Vulcan-conducted geochemical analysis of the aquifer brine from the Permo-Triassic strata shows the brine has elevated levels of lithium. Because recent German Government policy emphasizes decarbonisation and promotes the development of renewable sources, Vulcan is focused on extracting lithium and geothermal energy from the deep-seated aquifers as a co-product of geothermal power production within the Upper Rhine Graben. That is, the geothermal wells have created access points to acquire deep, geothermally heated, lithium-enriched brine associated with the Permo-Triassic aquifers sitting on top of the crystalline basement.

7) Deposit Types

Lithium is a silver-grey alkali metal that commonly occurs with other alkali metals (sodium, potassium, rubidium, cesium). Lithium's atomic number is three and has an atomic weight of 6.94 making it the lightest metal and the least dense of all elements that are not gases at 20° C (the density in solid form at 20° C is 534 kg/m³). Lithium has excellent electrical conductivity (i.e., a low electrical resistivity of 9.5 mΩ·cm), making it an ideal component for battery manufacturing where lithium ions move from the negative electrode to the positive electrode during discharge and back when charging. Lithium imparts high mechanical strength and thermal shock resistance in ceramics and glass.

The average crustal abundance of lithium is approximate 17-20 parts per million (ppm) with higher abundances in igneous (28-30 ppm) and sedimentary rocks (53-60 ppm). It should be noted that 1 mg/L lithium is equal to 1 ppm and 0.0001%. Lithium does not occur in elemental form in nature because of its reactivity. There are over 100 minerals that contain lithium, but only a few of these are currently economic to extract. Lithium can be described, priced, and quoted as lithium content, lithium oxide (Li₂O; 0.464 lithium content; conversion is lithium x 2.153), lithium carbonate (Li₂CO₃; 0.188 lithium content) and lithium carbonate equivalent (LCE; conversion is lithium x 5.323). Resource estimates and production quantities of lithium are often expressed as LCE.

Lithium is extracted from two main categories of deposits: mineral and brine. With respect to mineral deposits, lithium is extracted only from pegmatite deposits. Pegmatite lithium deposits are found globally and account for half of the lithium produced today. Spodumene is the most abundant lithium-bearing mineral found in economic deposits.

Continental brines include unconfined (surficial or near surface) and confined (i.e., geothermal and subsurface aquifer) brine deposits. At present, the commercial production of lithium from continental brines is limited to unconfined brine deposits although several companies, including Vulcan, are advancing technologies that may enable production of lithium from confined brine deposits.

Economic continental unconfined brine aquifers typically occur in areas where high solar evaporation results in beneficiating the brine to higher concentrations of lithium. Geothermal and/or volcanic associations are the favoured mechanisms for introducing lithium into continental basins because lithium-rich brines often exist in areas of volcanic activity (e.g., Imperial Valley, California; Reykjanes field, Iceland; Taupo Volcanic Zone, New Zealand). Typical lithium concentrations in commercially developed continental unconfined brine deposits are 200 to 1,500 mg/L, and 10-200 mg/L Li for geothermal brines.

Deep, confined aquifer lithium-brine deposits typically have lower concentrations of lithium in comparison to unconfined brine deposits (e.g., 20-400 mg/L lithium). The brine is frequently pumped as a waste product of hydrocarbon production (and in the case of the URG, from geothermal production) from confined aquifers at depths of up to 4,000 metres deep. Lithium enrichment of deep saline brines is known to occur worldwide in sedimentary basins of various age, including the Cambrian Siberian Platform, Russia, Devonian Michigan Basin, Mississippian-Pennsylvanian reservoirs of the Illinois Basin, Pennsylvanian Paradox Basin, Triassic strata of the Paris Basin, France and Jurassic Smackover strata from the Gulf Coast, Arkansas and Texas.

In the case of the Buntsandstein Group and Permo-Triassic aquifers in the URG, it is possible to access the deep-seated confined aquifer brine via in-production geothermal wells at which point the brine can be assessed for its

lithium content. Direct lithium extraction technology will be required to remove the lithium such that the brine can then be returned via the reinjection well with no interruption in the geothermal plant operational cycle.

With respect to resource modelling of confined aquifer lithium-brine occurrences, important criteria include defining the boundaries of the subsurface aquifer; brine chemistry; and understanding of the hydrology of the brine. For example, the reader is referred to the Canadian Institute of Mining and Metallurgy Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines (November 1, 2012) (CIM, 2012). While the guidelines define issues specific to unconfined continental brine deposits (i.e. salars), they do provide general direction for reporting on confined aquifer deposits.

8) Exploration Summary

Vulcan conducted a 2019 data compilation and brine sampling program that consisted of: 1) a geological compilation and subsurface review of the Permo-Triassic stratigraphy; 2) an assessment of the hydrogeological conditions underlying the Vulcan Property; and 3) collecting and analysing Permo-Triassic brine samples from the geothermal wells and plant operating at the Insheim resource area or property-neighbouring geothermal wells to verify the historical Lithium brine geochemical results.

The average lithium content from brine collected by Vulcan from 6 geothermal wells, including its 100%-owned Insheim geothermal plant, located throughout the Upper Rhine Graben and proximal to the Ortenau and Taro licenses was 181 mg/L Lithium (n=13 total metal analyses by ICP-OES). In addition, a detailed assessment of Permo-Triassic aquifer brine at the Insheim resource area production well yielded 181 mg/L Lithium (n=23 analyses), which is identical to the regional Lithium brine value (ASX, 2020). These brine geochemical results demonstrate that the Permo-Triassic brine in the Upper Rhine Graben has a homogeneous lithium chemical composition in the vicinity of the Taro and Ortenau licenses.

During 2020, Vulcan acquired the use of existing 2-D and 3-D seismic datasets at the Ortenau and Taro licenses to formulate robust 3-D geological models of the key strata, and structural fault zones underlying the licenses. Historical well data from within and surrounding Vulcan's license areas was used to assist with, and validate, the seismic data interpretation. Vulcan also acquired detailed lithological and downhole geophysical information from a nearby geothermal well, which produces brine from the same geological target unit that underlies Vulcan's licenses (Buntsandstein Group). These data were used to model fault/fracture zones and perform hydrogeological characterization measurements and calculations to gain better knowledge and validate increased porosity, permeability, and fluid flow within URG Permo-Triassic hosted fault zones (Figures 4-6).

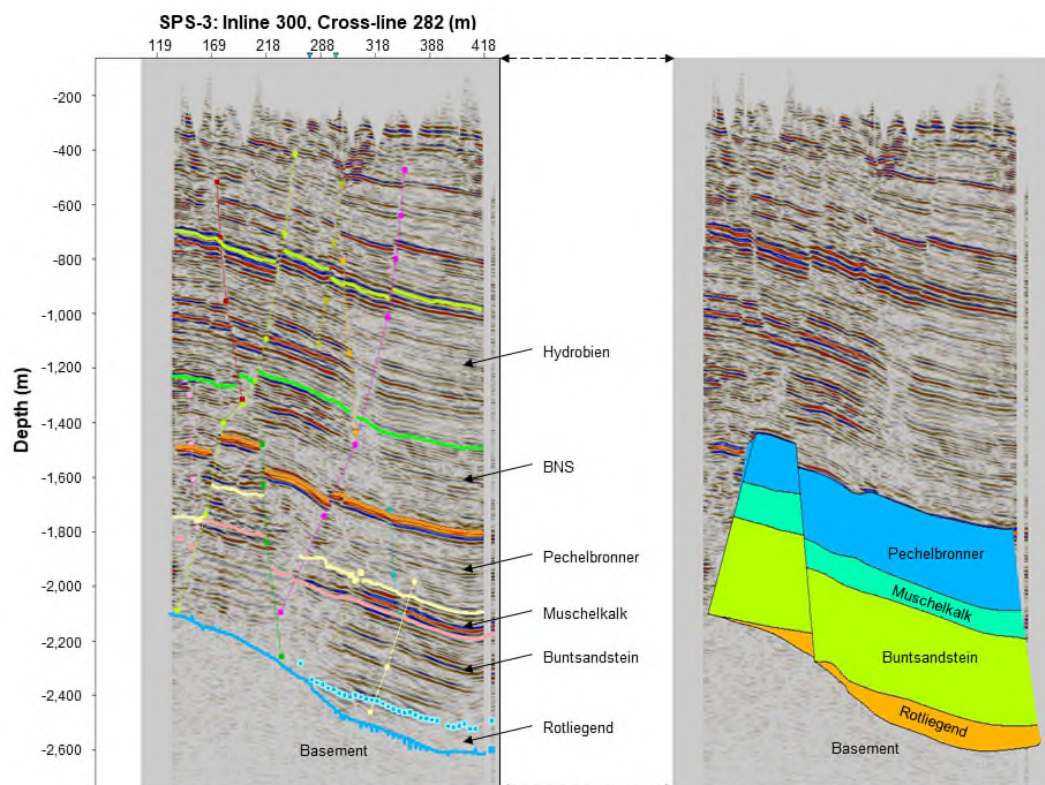


Figure 4: Example seismic profile with interpreted formation top horizons and faults.

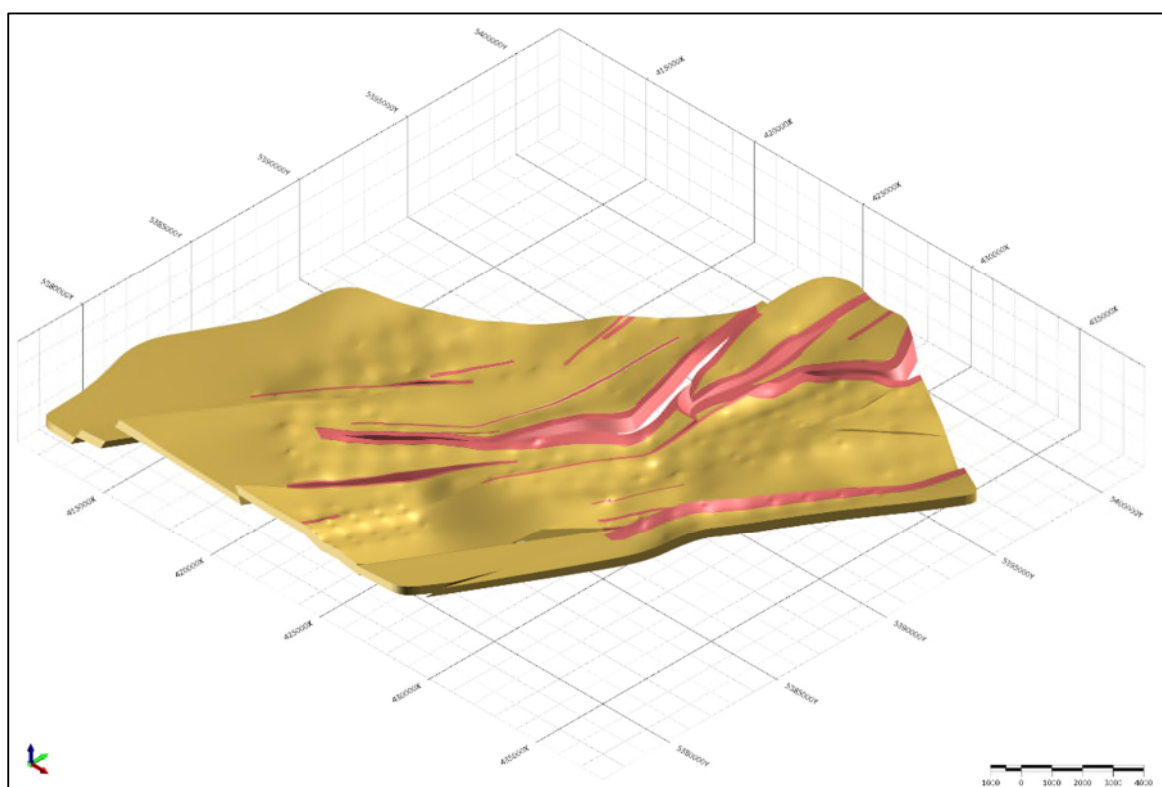


Figure 5: 3-D resource model of Ortenau resource, showing areas of Indicated category (pink; Buntsandstein Group fault zone domain) and Inferred category (gold; all remaining Buntsandstein Group outside of the fault zones).

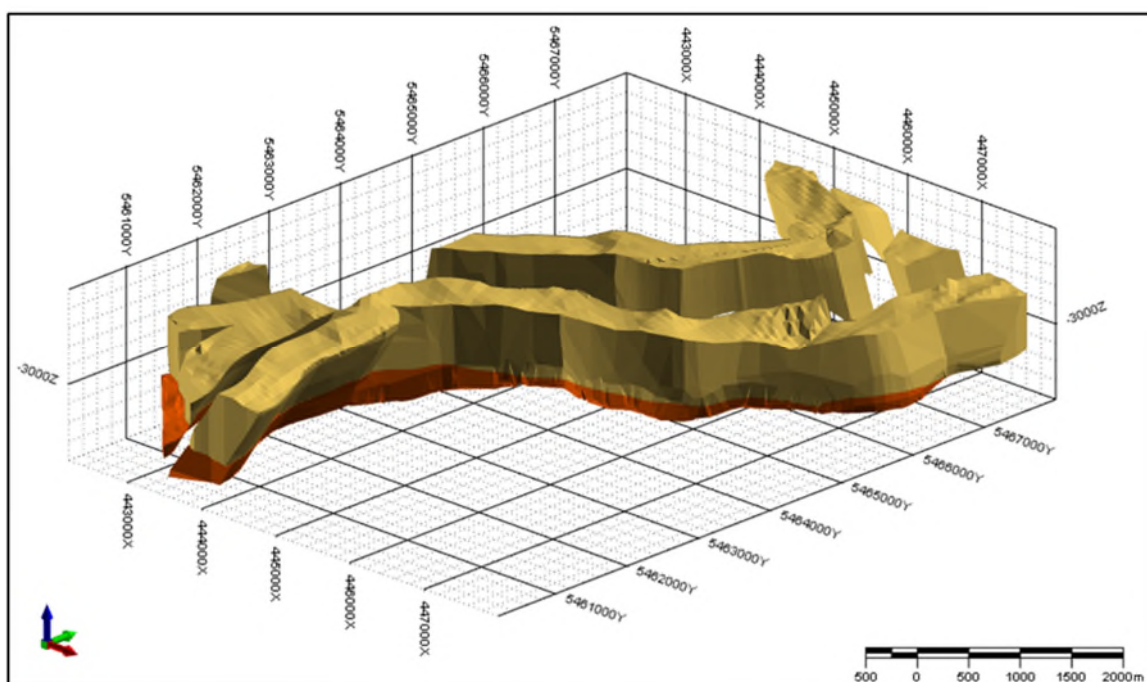


Figure 6: 3-D image of the Taro License geological model wireframed for the Indicated Resource estimation: the Buntsandstein Group (gold) and Rotliegend (reddish-brown) fault zone envelope domains. The inferred resources outside of the fault zones are not shown.

9) Mineral Resource Estimate

Vulcan has completed multiple phases of testwork that are adequate to support the disclosure of Mineral Resource estimates. In the opinion of the CPs, the Vulcan Ortenau, Taro and Insheim license lithium and renewable energy projects have reasonable prospects for future economic extraction based on aquifer geometry, delineation of fault zones using re-interpreted seismic data, brine volume, brine composition, hydrogeological characterization, porosity, fluid flow, and advancement of the Company's Direct Lithium Extraction technology. Data derived from the testwork reported by Vulcan is adequate to support the disclosure of Mineral Resource estimates.

The Ortenau Indicated Resource estimation occurs within the Buntsandstein Group aquifer fault zones with resource domain widths of between 63 m and 965 m. The Taro Indicated Resource estimations occur within fault zones with domain widths of between 111 m and 455 m and arbitrarily defined fault zone envelopes (up to 450 m on either side of the fault zone) within the Buntsandstein and Rotliegend groups. Additional resource modelling and estimation detail was included in ASX announcements dated November 12, 2020 (Taro License) (ASX, 2020) and December 15, 2020 (Ortenau License) (ASX, 2020).

Using a lower cut-off of 100 mg/L lithium, the resource estimations at the Insheim, Ortenau and Taro licences predict that the Vulcan Zero Carbon Lithium™ Project hosts a JORC 2012-compliant global resource (ASX, 2021) of 3.61 Mt LCE of Indicated Resource and 12.24 Mt LCE of Inferred Resource at a grade of 181 mg/L Lithium, for a combined total of 15.85 Mt, as shown in Table 1 below. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve.

The PFS was focused solely on Indicated Resources, from the Ortenau (2.06 Mt) and Taro (0.83 Mt) licenses. While the Indicated Resource from the Insheim Resource Area was not included in the PFS, it could form a future upside as part of the DFS, which is currently being assessed. Vulcan is also evaluating mineral resource estimations at its other licenses (e.g., Mannheim and Lampertheim).

In this section, values are provided for the estimation of Mineral Resources, not Mineral Reserves, therefore, economic viability is not considered. Where a portion of the resource estimate is based on inferred mineral resources, there is a lower level of geological confidence associated with that resource estimate and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

Table 1: Vulcan's combined Zero Carbon Lithium™ Project Lithium (Li) brine Indicated and Inferred mineral resource estimates. Only the Indicated Resource estimations from the Ortenau and Taro licences were used in the PFS. The cut-off grade used for all resources was 100mg/l Li.

Zero Carbon Lithium™ Project Resource Areas	Resource Classification	Aquifer Volume (km³)	Brine Volume (km³)	Avg. Li Conc. (mg/L Li)	Avg. Porosity (%)	Contained Elemental Li Resource Tonnes	Contained LCE Million Tonnes
<i>Ortenau</i>	Inferred Resource estimation	117.974	11.208	181	9.50	2,029,000	10.80
	Indicated Resource estimation	17.001	2.142	181	12.60	388,000	2.06
<i>Taro</i>	Inferred Resource estimation	15.924	1.497	181	9.5 (Bunt) 9.0 (Rot)	271,000	1.44
	Indicated Resource estimation	8.419	0.861	181	12.6 (BFZ) 9.5 (BHRE) 12.1(RFZ) 9.0 (RHRE)	156,000	0.83
<i>Insheim</i>	Indicated Resource estimation (not used in PFS, future upside for DFS)	8.322	0.749	181	9.00 (P-T)	136,000	0.72
TOTALS	Total Zero Carbon Lithium™ Project Inferred Resources	133.898	12.705	181	/	2,300,000	12.24
	Total Zero Carbon Lithium™ Project Indicated Resource (used in PFS – excludes Insheim)	25.42	3.003	181	/	544,000	2.89
	Total Zero Carbon Lithium™ Project Indicated and Inferred Resource (including Insheim)	167.64	16.457	181	/	2,980,000	15.85

Note 1: Mineral resources are not mineral reserves and do not have demonstrated economic viability. 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. Note 4: 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 5: The Vulcan Lithium brine Project estimation was completed and reported using a lower cutoff of 100 mg/L Li. Note 6: 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 7: The Mineral Resources that underpin the PFS results are reported inclusive of any reserves. Note 8: There has been no change to this Mineral Resource statement since the original publication dates.

10) Lithium Plant & Processing

The following is based on Hatch's lithium processing PFS study for the Vulcan Zero Carbon Lithium™ Project, from January 2021. Vulcan is developing a combined geothermal energy and Zero Carbon Lithium™ Project from multiple locations in the Upper Rhine Valley of Germany. The Vulcan Project plan includes, at each brine extraction site, a Geothermal Power Plant for the production of renewable-sourced electricity. Co-located on the same sites are Direct Lithium Extraction (DLE) Plants (DLE Plants) for the extraction of lithium. The lithium chloride solution from the DLE Plants will be sent to a Central Lithium Plant (CLP) where the solution will be purified and converted to produce battery grade lithium hydroxide monohydrate (LHM).

Multiple capacity scenarios have been investigated as part of the PFS conducted by Hatch, which defined the process and layout as well as evaluated the capital cost, operating cost, schedule, and risk and opportunities. The design was based on inputs from Vulcan and their Geothermal Plant engineering firm Gec-Co, testwork by vendors and Vulcan, as well as experience of Vulcan, vendors, and Hatch.

10.1) Process Description

The core of the process is a sorbent based, direct lithium extraction (DLE) system (Figure 7).

The principal steps in the process include:

- Drilling of geothermal production wells and extraction of deep-seated aquifer brine;
- Within the Geothermal Plant:
 - Conversion of the heat in the brine to electrical power;
- Within the DLE Plant:
 - Pre-treatment of the brine;
 - Purification of the brine;
 - Extraction of the lithium via a sorbent and de-sorption using water;
 - Concentration of the lithium chloride (LiCl) product using renewable heat from the geothermal plant and shipment to the central Conversion Plant;
 - Post-treatment of the depleted brine;
- Reinjection of the depleted brine and any evolved gases (via the Geothermal Plant);
- Within the Conversion Plant:
 - Purification of the LiCl solution (sourced from multiple DLE Plants);
 - Electrolytic conversion of the LiCl solution to lithium hydroxide (LiOH) solution, chlorine, and hydrogen gas;
 - Production of HCl solution from hydrogen and chlorine gas;
 - Crystallization and purification of lithium hydroxide monohydrate (LHM) from the LiOH solution;
 - Bleed treatment systems for elimination of impurities and recovery of lithium values;
 - Bagging and shipping.

Since the PFS was prepared, Vulcan has performed more sophisticated, larger scale, and longer duration testwork in a number of different locations in order to eliminate process technology scale-up risks from the proposed flowsheet. Notably, Vulcan has constructed and is currently operating a lithium extraction pilot plant at an operating geothermal energy facility in Landau, in the Upper Rhine Valley.

Since the PFS, the following testwork has been demonstrated for different aspects of the Vulcan lithium extraction and processing flowsheets.

Process Step	Testwork Demonstrations
Brine Pre-Treatment and Post-Treatment	Vulcan has built a laboratory capable of executing analytical and bench-scale chemistry experiments. In this laboratory, samples of real geothermal brine taken from multiple geothermal energy plants in the Upper Rhine Valley have been processed using a variety of proprietary reagents and other processes in order to remove undesirable components from the brine such as transition metals and silica. These experiments have been successful in removing the majority of these components. Simultaneously, Vulcan has constructed and is currently operating a pilot plant at a geothermal energy facility in Landau, in the Upper Rhine Valley, processing real geothermal brine which has never had access to air, thus enabling demonstration of brine processing under realistic conditions. Vulcan has demonstrated removal of transition metals from the brine with minimal air exposure using reagents, and this brine is being used to demonstrate direct lithium extraction. Vulcan's aim is to use a sorbent that requires minimal pre-or post-treatment, and believes this is achievable based on work to date.
Direct Lithium Extraction (DLE)	At the pilot at the operating geothermal energy plant, Vulcan is operating a series of DLE columns containing the most prospective commercially available sorption-based materials. In the coming months, Vulcan will make a final decision on which sorption material to be incorporated in its commercial operation. The DLE pilot plant is capable of processing brine containing 180 mg/L elemental lithium and has already produced hundreds of liters of lithium chloride concentrate. The concentrate has been shipped to partners for processing into lithium hydroxide. In the Vulcan laboratory, several flow rates, temperatures, brine chemistries, and other process conditions have been demonstrated using various DLE sorbents applied to various brines. This testwork has increased Vulcan's understanding of the impact of different operating conditions on performance of the DLE resins. Further, testwork campaigns have been executed in Germany, the United States, China, and Europe by different DLE sorbent providers to demonstrate their products on Vulcan's brine. These off-site testwork programs have demonstrated to Vulcan that multiple technology solutions exist which could perform DLE successfully for Vulcan's projects, thus the Company has moderately high technology optionality in the long term. The testwork has been focused on establishing the best lithium extraction materials by focusing on tests that determine the highest extraction capacities, and sorbent lifetimes as well as determining the purity and concentrations of the lithium solutions produced by the direct lithium extraction process.
Post-Treatment	Vulcan has successfully developed a process to treat the impurities removed by pre-treatment process, by redissolving, and remixing with the geothermal brine to be reinjected in the aquifers. Thus, largely eliminating waste materials.
Lithium Processing to Lithium Hydroxide	Vulcan is currently executing numerous testwork programs with international partners focused on lithium chloride purification and concentration prior to the production of lithium hydroxide by electrolysis. At one facility, representative concentrate solutions are being processed with reverse osmosis to demonstrate concentration to levels required for electrochemical processing. At another facility, concentrates from Germany are being purified and concentrated before they are electrolyzed to make lithium hydroxide. Vulcan will produce battery grade lithium hydroxide monohydrate samples from geothermal brine sourced lithium for the first time in the coming weeks.
Demonstration Plant	Vulcan has completed the preliminary design and is purchasing the long lead time items for its lithium hydroxide monohydrate demonstration plant.

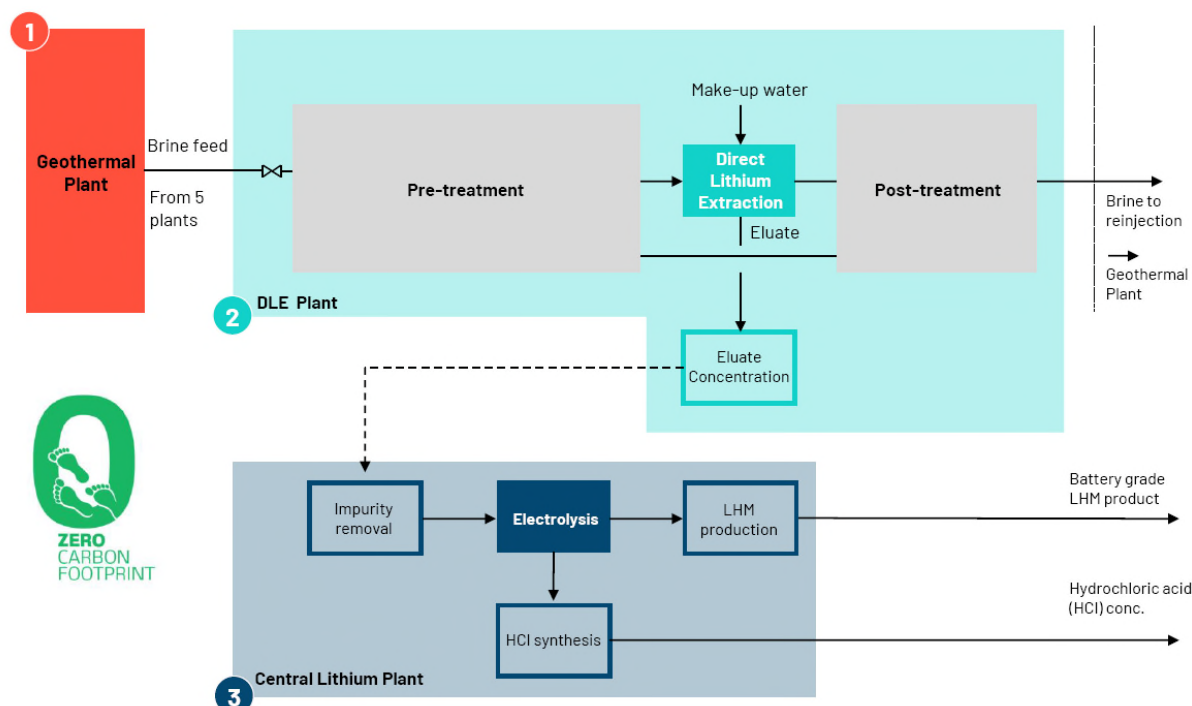


Figure 7: High-level schematic of Vulcan's Zero Carbon Lithium™ process, showing (1) Geothermal Plant, (2) DLE Plant, (3) Central Lithium Plant.

10.2) Project Design Basis

The key components of the Vulcan Project design basis as per the PFS are summarized in the following tables. The capacity of the five DLE plants are given below in Table 2. Figures 8 and 9 provide 3-D renderings of the plant design.

Table 2: Brine Flow per DLE Plant. Note that brine flow rates are assumed based on Vulcan's consultants' interpretation of the structural geology from seismic interpretation of the fault zones in the production study and knowledge of surrounding well performance and will need to be confirmed once production wells are drilled.

Site	Flow	Units	Comment
Ortenau Geothermal Plant #1 (wells P1-P3)	300	L/s	3 wells, each 100 L/s
Ortenau Geothermal Plant #2 (wells P4-P6)	300	L/s	3 wells, each 100 L/s
Ortenau Geothermal Plant #3 (wells P7-P9)	300	L/s	3 wells, each 100 L/s
Taro Geothermal Plant #1 (wells P1-P3)	300	L/s	3 wells, each 100 L/s
Taro Geothermal Plant #2 (wells P4-P6)	240	L/s	2 wells, each 120 L/s
Total brine production	1440	L/s	

The brine properties and elemental composition used in the study is found below in Table 3:

Table 3: Brine Properties and Elemental Composition

Parameter	Value	Unit
Temperature	65	°C
Pressure	22	Bar
Solids	0	%
pH	5.2	-

Parameter	Value	Unit
ORP	100	mV
Density	1.1	kg/L
Composition		
Li	181	mg/L

Table 4 below outlines the design considerations in terms of plant capacity:

Table 4: PFS Design Capacity

Parameter	Value	Units
Project life	30	years
Design factor, DLE Plant	1.10	-
Design factor, Conversion Plant	1.15	-
Plant availability - DLE Plant	90	%
Plant availability - Conversion Plant	90	%
DLE Lithium Recovery	90	%
Overall Plant Lithium Recovery	88.2	%
Estimated Plant Production	39,400	tpa LHM

The following additional points were considered as basis for plant design:

- Chemical and compositional changes of the depleted brine, including the dilution of the brine with water, were minimized;
- Minimize the ingress of oxygen in the brine to avoid impacting injection well materials of construction and/or precipitation within the geothermal brine reservoir;
- Minimize the CO₂ emissions, avoid the use of natural gas or other fossil fuels;
- Minimize the generation of residues.

The key mass balance drivers are:

- The brine feed rate and composition in terms of lithium and impurities;
- The recovery, selectivity, and operating parameters of the DLE package;
- The operating parameters and performance of the electrolysis package.

Changes to these values will impact project design and economics.

The CPs noted that Vulcan's plan to use an alumina-based sorbent is supported by other company statements, including Energy Source Minerals (Energy Source Minerals) and Standard Lithium Ltd (Standard Lithium), which both report >90% recoveries from similar DLE approaches, compared to Vulcan's overall recovery assumption of 88.2%. Vulcan has announced a technology collaboration with DuPont for sorbent selection to ensure the best fit for the Upper Rhine Graben brine is used.

Vulcan's technical team specifically selected sorption-type DLE, because of it is a commercially proven method of extracting lithium from brines. It is currently used commercially at Livent's project in Argentina, as well as multiple projects in Qinghai Province, China. Sorption-type DLE generally works best when the brine is heated, and Vulcan's brine by its very nature as a geothermal brine means it is pre-heated, which creates a potential cost advantage. The process requires very little reagents, as a water strip process is used. There are other types of DLE being pursued by other developers with no heated brine, such as ion exchange, but these require large amounts of acid and base to enable the lithium extraction, and are also not yet commercially mature, so have not been pursued by Vulcan.

For Vulcan's lithium processing from LiCl into LiOH, lithium electrolysis is being pursued as the preferred option. This is because: Vulcan has ready access to power and infrastructure needed for the electrolysis process; the electrolysis appears to have a lower carbon footprint, especially if green power is used, than the traditional reagent intensive approach of making LiOH from brines; electrolysis also seems to have a slightly lower predicted operating cost than the traditional route; lithium electrolysis is very similar to chlor-alkali, so it has a strong commercial analogue with a century of commercial production history; Germany is the largest chlor-alkali producer, so there are a number of synergies with existing companies, and; Vulcan has extensive experience of lithium electrolysis in its team.



Figure 8: DLE Plant 3-D Rendering



Figure 9: Conversion Plant 3-D Rendering

11) Mineral Reserves Estimate

The Production Study and Maiden Probable Ore Reserve Estimate over the Zero Carbon Lithium™ Project was conducted by GeoT and independently reviewed and signed-off on by GLJ. This production study introduced additional parameters to identify and define the extractable volumes of lithium resources and to discuss the feasibility of lithium and geothermal energy production. Temperature assessments indicate that the Buntsandstein (both licenses) and Rotliegend (Taro only) intervals of the Taro and Ortenau license areas are viable targets for geothermal energy production. Brine lithium concentration estimates are based on wells and geothermal energy installations in the vicinity along the Upper Rhine Valley (Figure 10). A value of 181 mg/L Lithium was used for the calculation of the potential of lithium recovery from geothermal fluids, based on the Vulcan's Mineral Resource estimates (ASX, 2021). Estimates for lithium production from geothermal wells were conducted with appropriate modifying factors.

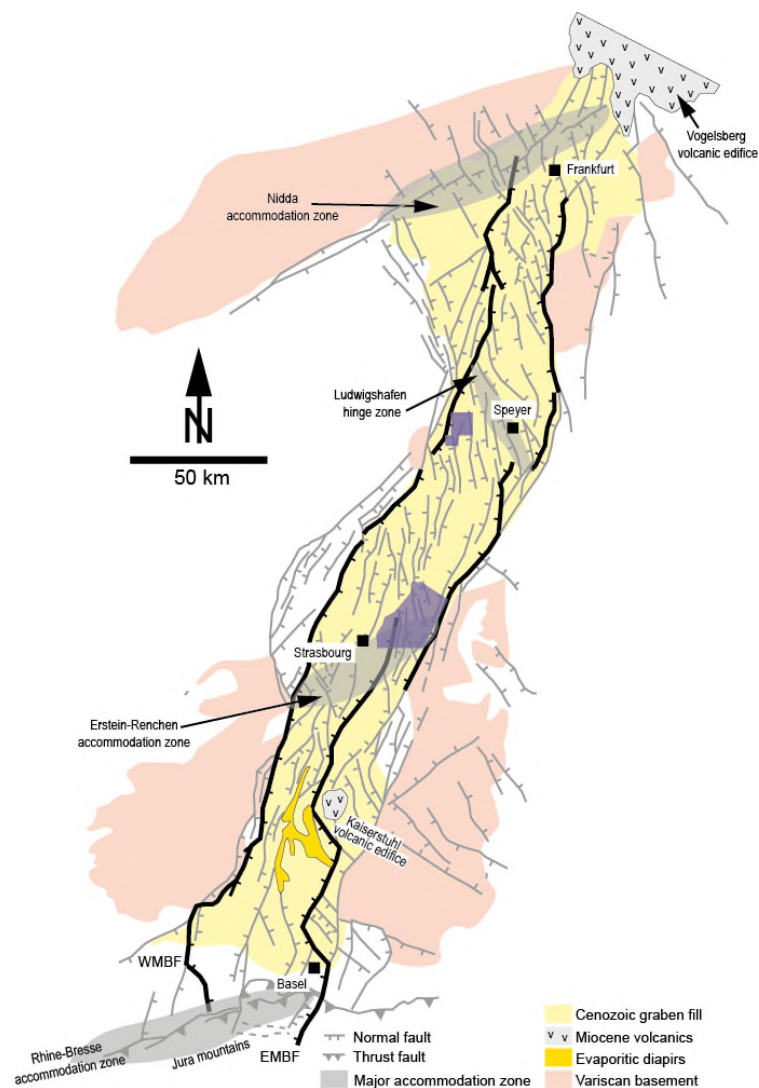


Figure 10: Location of the Taro and Ortenau license areas (purple; Taro is the northern area) within the regional geology of the URG showing major URG units (modified from Grimmer et al., 2017) (Grimmer et al).

At Taro, the average geothermal gradient is estimated at 6 K/100 metres. For a hydraulic active fault zone with upward heat convection, the gradient is assumed to decrease to values less than 3 K/100 metres. Surface and subsurface information were merged to identify ideal locations for drill sites. For the assessment of possible

surface locations modifying factors, including distance to residential areas, presence of conservation areas and present land use and infrastructure were applied. Principal subsurface information is based on the interpretation of Vulcan's purchased 2D and 3D seismic surveys, resulting in a detailed structural subsurface model. This displays the extent, orientation and volume of the fault zone within the Buntsandstein unit as the primary lithium brine reservoir (Figure 11).

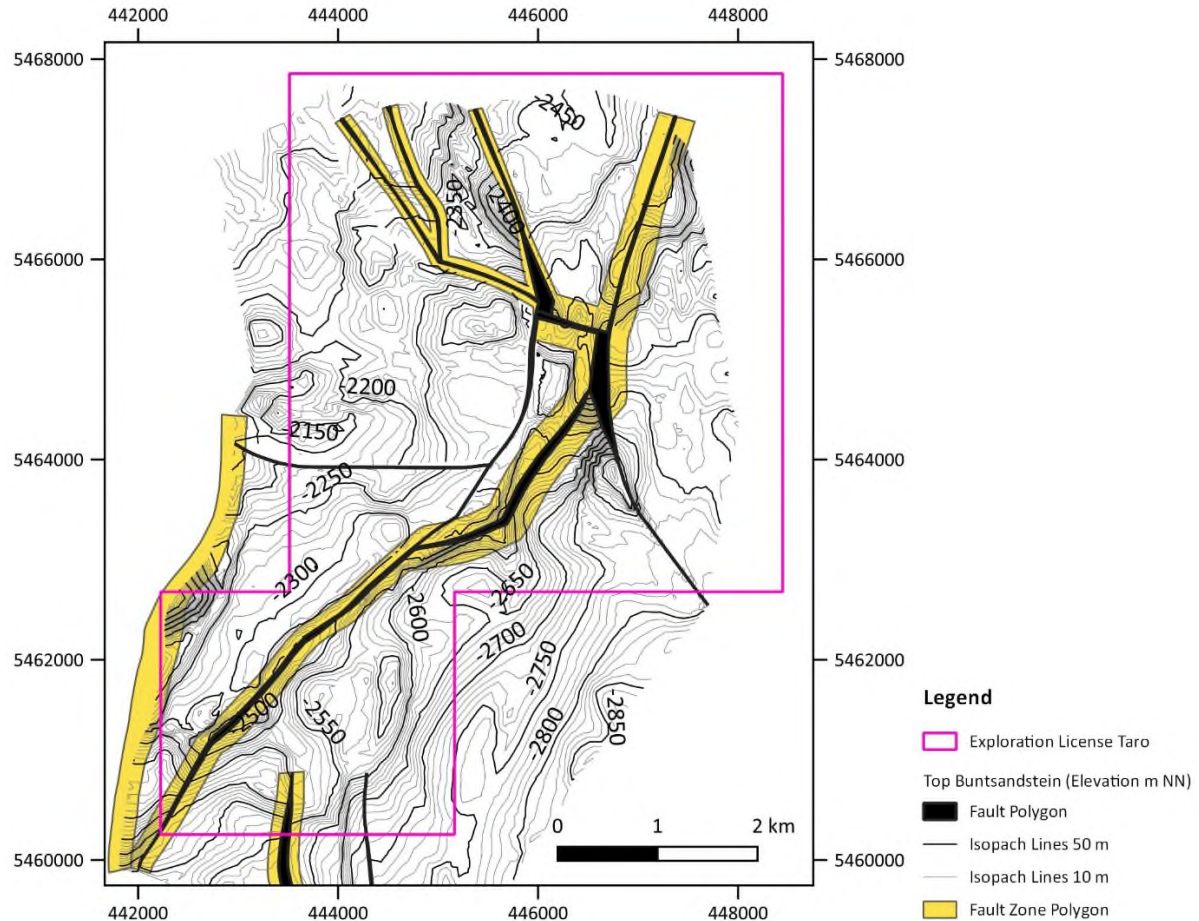


Figure 11: Taro license area, showing structural map of the top Buntsandstein unit with major fault polygons and fault zone polygons based on 3D-seismic data.

Applying different well path design criteria, target points within the fractured reservoir layer were selected. Finally, well paths for five doublets (producer-injector pairs) were designed. These should be drilled from two drill sites, Taro A in the northern part with three doublets and Taro B in the southeast with two doublets. The sizing of the sites is suitable to host the DLE plant to minimize environmental impact and optimize the use of area. The wells have been designed to target potential high flow rate fault zones, using the detailed 3D seismic data, within the Buntsandstein and Rotliegend units, with double completion of the wells within the fault zones to maximise potential flow rate, based on GeoT's interpretation of the fault zones and understanding from surrounding wells including the Insheim resource area. (Figure 12) This well design and production planning will be refined as part of more detailed study work in the DFS and is therefore subject to change.

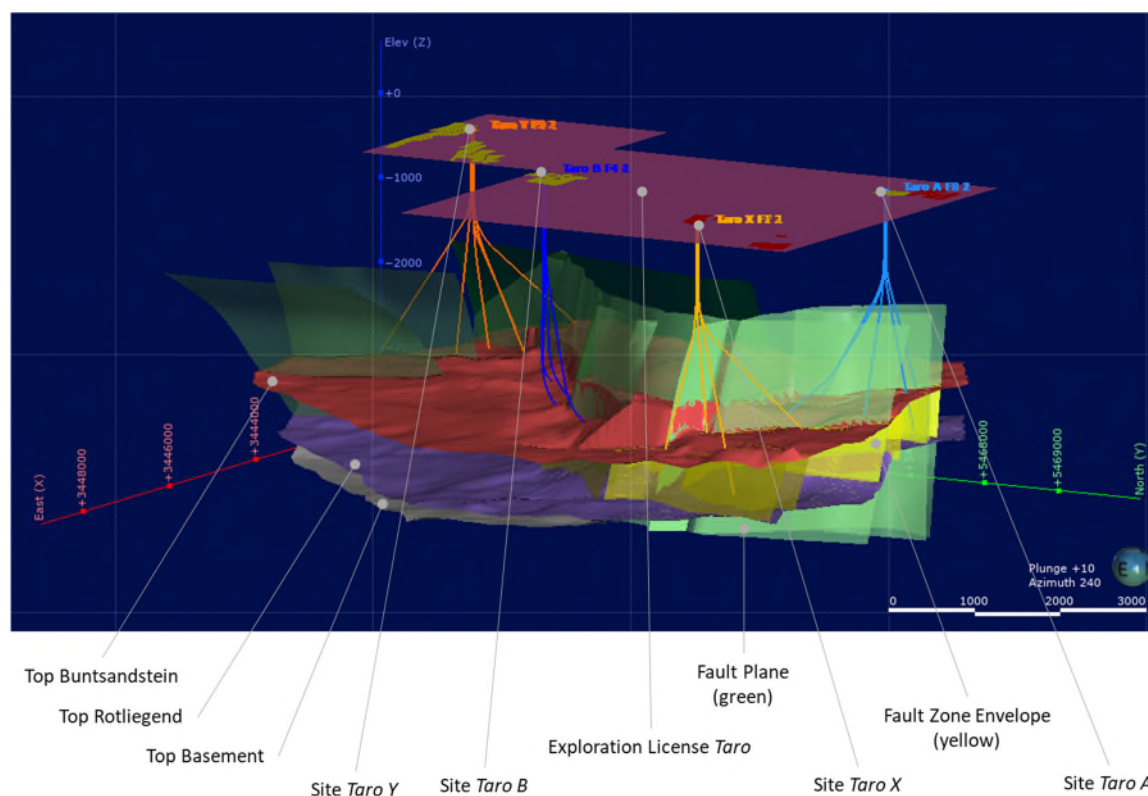


Figure 12: Overview of the 3D model of the Taro license area showing the fault system and top and base of the mapped Buntsandstein unit. In addition, all planned (and optional) well cluster are displayed.

To estimate expected flow rates, Vulcan has conducted detailed studies using modelling information derived from well log and seismic data for the license areas, as described in Section 8 of this IER. The Upper Rhine is a sedimentary graben system, geologically similar to hydrocarbon systems with permeable formations confined by impermeable rock, and seismic data is one of the best diagnostic tools to be used for exploration prior to drilling. High flow rate fault zones have been targeted for completion, using the latest multiple reservoir completion methods (ASX, 2021).

In the PFS, Vulcan used between 100 l/s and 120 l/s as assumed flow rates for the licenses, assuming the use of modern geothermal industry best practice including 3D seismic evaluation to target high flow rate fault zones prior to drilling. These values are based on evaluation of regional and publicly available data on flow rates achieved at deep geothermal wells in and near Germany. The range of expected flow rates is reasonable given the tests proximal to the license areas, such as at Landau, which have recorded flow rate potential of well over 100 l/s even without the use of 3D seismic surveys to optimally place wells.

The base case calculation for a single doublet production predicts a daily LCE production of 1.52 t/d (averaged), while the lower limit (low case) is 0.88 t/d and the upper limit (high case) is 1.97 t/d. For Taro, based on the assumption that five doublets can be configured and installed, a total production over 30 years of approximately 420 kt LCE in the base/mid case is forecasted. Based on the forecast, the calibrated reservoir model which is used to simulate a brine extraction system allow an extraction of 14,000 tons per annum LCE from Taro, after application of lithium plant recovery parameters and other modifying factors. The input parameters for the base case calculation are given in Table 5.

Table 5: Taro key parameters, modifying factors and production target. The brine flow rate is an assumption based on seismic interpretation of geology and structures and knowledge of surrounding wells and will be confirmed once production wells are drilled at Taro.

Taro Production forecast (30-year production) – Summary – Base/Mid case	
Doublets	5 (2 drill sites)
Flow rate	100 – 120 l/s

Lithium concentration	181 mg/l
	w/o recharge factor / Li decline
Lithium extraction efficiency / recovery	90%
Well / facility performance	95%
Total daily Lithium Production per doublet (averaged)	1.52 t / day
Total daily LCE Production per doublet (averaged)	7.6 t / day
Total LCE Production (30 years)	420,846 t

As mentioned above, the lower and upper ranges are limited by different flow rates, the number of doublets, and the efficiency of the well and facility performance.

Temperature assessments indicate that the Buntsandstein interval of the northern and central part of the Ortenau licence area are viable targets for geothermal energy and lithium production. The best estimate of regional average *gradT* is 4.26 K/100 metres using all available well data inside and in close vicinity of the Ortenau Licence area. For a hydraulic active fault zone with upward heat convection, the gradient is assumed to decrease to values less than 3 K/100 metres.

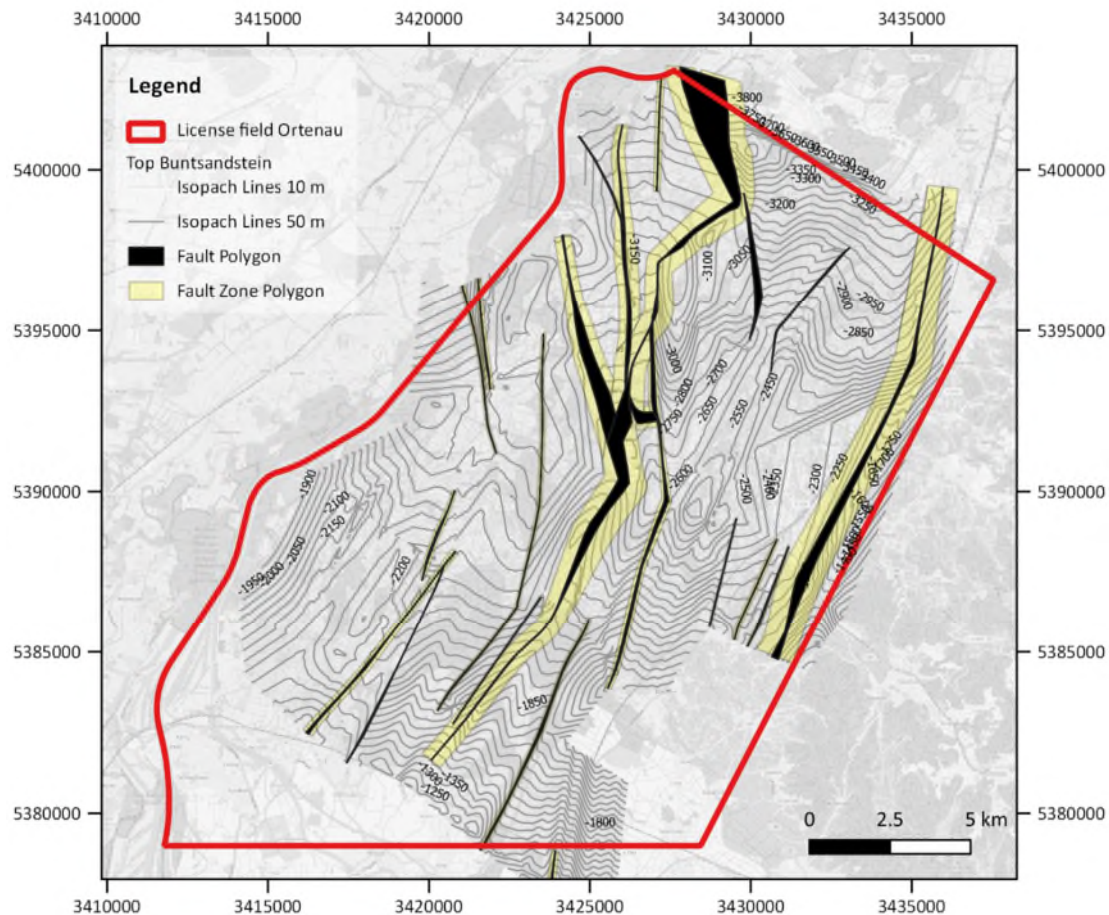


Figure 13: Ortenau licence area. Structural Map of the top Buntsandstein unit with major fault polygons and fault zone polygons based on 2D-seismic data.

At Ortenau, surface and subsurface information were merged to identify ideal locations for potential future drill sites. For the assessment of possible surface locations modifying factors as distance to residential areas, presence of conservation areas and present land use and infrastructure were applied. Principal subsurface information is based on a structural subsurface model derived from the interpretation of 2D seismic lines (Figure 13 and 14).

Finally, three sites were selected, which can host six deviated wells each. The wells are designed to intersect the fault zones of tectonic active faults within the Buntsandstein unit. Two wells are designed to intersect the same fault zone, forming a well doublet of one production well and one injection well. As with Taro, the wells have been designed to target potential high flow rate fault zones within the Buntsandstein unit, with double completion of the wells within the fault zones to maximise potential flow rate, based on Geo-T's interpretation of the fault zones and understanding from surrounding wells including the Insheim area. This well design and production planning will be refined as part of more detailed study work in the DFS and is therefore subject to change.

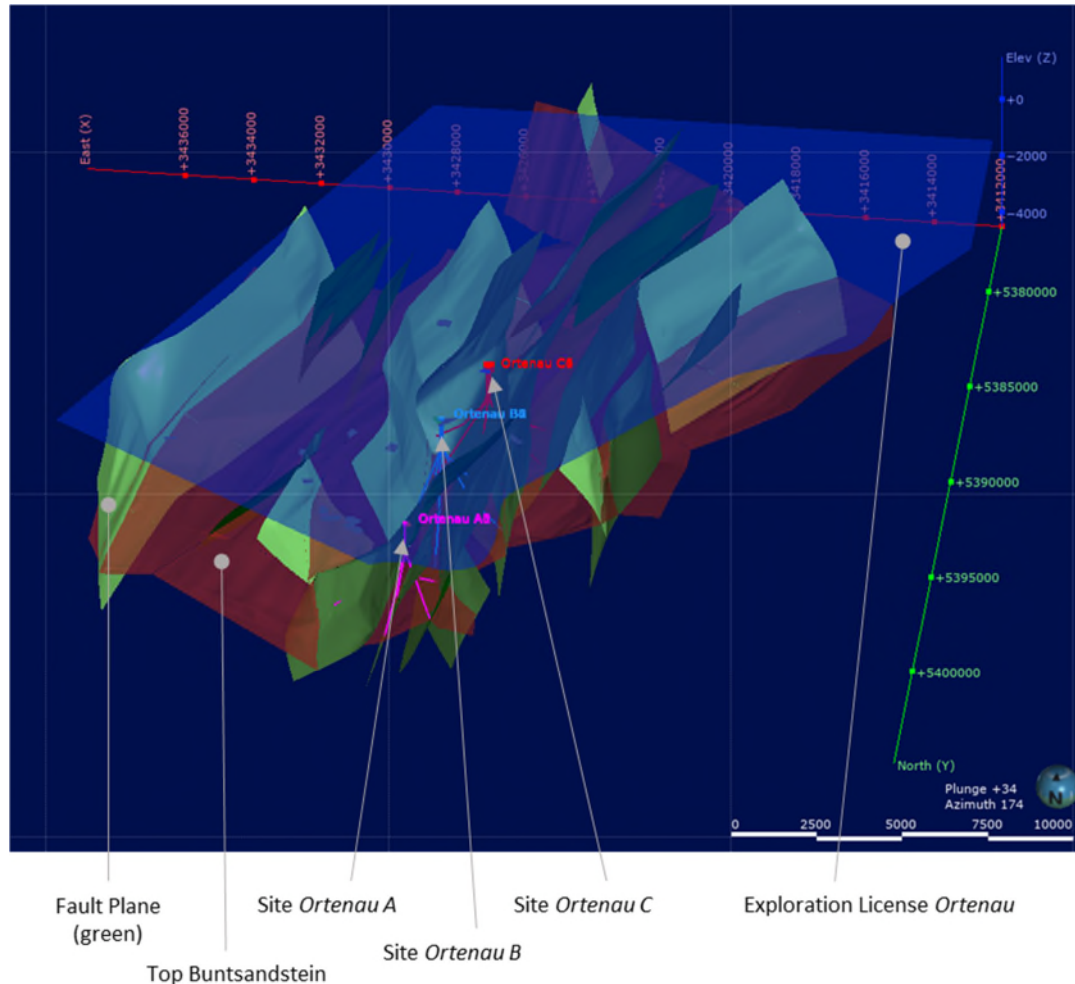


Figure 14: Overview of the 3D model of the Ortenau licence area showing the fault system and top and base of the mapped Buntsandstein unit. In addition, all planned (and optional) well clusters are displayed.

The base case calculation for a single doublet production predicts a daily LCE production of 1.41 t/d (averaged), while the lower limit (low case) is 0.88 t/d and the upper limit (high case) is 1.97 t/d. Based on the assumption that 9 doublets can be configured and installed, a total production over 30 years of approximately 701 kt LCE in the base / mid case is forecasted. Based on the forecast, the calibrated reservoir model which is used to simulate a brine extraction system allows an extraction of approximately 23,500 tonnes per annum LCE at Ortenau, after application of the modifying factors including lithium recovery from the lithium plant. The input parameters for the base case calculation are given in Table 6.

Table 6: Ortenau key parameters, modifying factors and production target. The brine flow rate is an assumption based on seismic interpretation of geology and structures and knowledge of surrounding wells and will be confirmed once production wells are drilled at Ortenau.

Ortenau Production forecast (30-year production) – Summary – Base/Mid case	
Doublets	9 (3 drill sites)
Flow rate	100 l/s
Lithium concentration	181 mg/l
	w/o recharge factor / Lithium decline
Lithium extraction efficiency / recovery	90%
Well / facility performance	95%
Total daily Lithium Production per doublet	1.41 t / day
Total daily LCE Production per doublet (averaged)	7.5 t / day
Total LCE Production (30 years)	701,409 t

Comparing production forecasts over 30 years and the estimated lithium resources of the fault damage zone and the associated host rock envelope (defined as Indicated Resources) allows the conclusion that the presented development plan with nine doublets at Ortenau is a feasible scenario. Depletion and recharge effects have been considered but not applied in this study and will be examined in more detail as part of future studies. Brine recovery rates necessary to sustain lithium grades over the life of projects with depletion/recharge are considered to be realistic, as the doublet systems will cover most of the (important) fault damage zone areas.

Table 7: URVP Maiden Ore Probable Reserve estimate

Classification	Million Tonnes LCE	Grade (Lithium ppm)
Proven	-	-
Probable - Taro	0.42	181
Probable - Ortenau	0.70	181
Total	1.12	181

The Production Targets from Ortenau and Taro led to the development of a Maiden Probable Ore Reserve Estimate, which is shown in Table 7. In the PFS project schedule, 100% of the material is included in the Probable Ore Reserves classification, with no Inferred Resources within the schedule. Both Taro and Ortenau are assumed to operate concurrently for a 30 year production life. The Probable Ore Reserves were calculated assuming the production and processing methods determined for the PFS.

The Production Targets are based on indicated mineral resource estimates at the Ortenau and Taro license areas. The stated Production Targets are based on the Company's current expectations of future results and should not solely be relied upon by investors when making investment decisions. Further evaluation work and appropriate studies within the license areas are required to establish sufficient confidence that this target will be met. It is the

opinion of the CP that the Company has conducted reasonable due diligence for determination of the production targets and mineral resource estimates in this IER, given the current state of the Vulcan Project.

12) Plant Engineering & Design, Environmental, Social & Permitting Considerations

Gec-Co GmbH was retained to conduct a study of possible production sites within the geologically conducive areas defined by Geo-T in their production study (i.e. areas within reach of potentially productive fault zones with heat and lithium potential), to design the geothermal plants and associated infrastructure for the Vulcan Project areas, and to provide CAPEX and OPEX estimates for these geothermal plants. As part of this, Gec-Co conducted a geographical and permitting study of potential exclusion areas, which included: settlement areas, conservation areas (including Natura 2000), national parks and national nature monuments, biosphere reserve and landscape protection areas, protected landscapes, biotopes, water protection areas, flooding zones and areas of exclusion based on noise protection. After applying these filters to the potential project areas, Gec-Co defined a shortlist of potential project locations for the geothermal wells and plant, and DLE plant, and used these areas as a basis for the geothermal plant design.

For the establishment and operation of a geothermal energy plant in a permitted area, a *Hauptbetriebsplan* (main operating plan) pursuant to § 52 (1) BBergG must be submitted for approval. The plan must be drawn up by the operator and must be approved by the competent mining authority.

The main operating plans must include a description of the scope, technical implementation and duration of the intended Vulcan Project, and proof that the conditions for approval of the plan are met. A written approval of an operating plan must be granted if the requirements pursuant to § 55 BBergG are met. The fulfilment of which must be demonstrated in the main operating plan. Some criteria, pursuant to § 55 BBergG, are:

- § 55 (1) 1, BBerg: The necessary authorisation for the exploration or extraction of mineral resources has been granted.
- § 55 (1) 3, BBerg: The necessary precautions are taken against risk of life, risk to health, for the protection of tangibles, employees and third parties in the company, in particular by means of measures corresponding to the generally recognised rules of safety.
- § 55 (1) 5, BBerg: The protection of the surface is ensured in the interest of personal safety and public transport.
- § 55 (1) 6, BBerg: The generated waste is properly used or disposed.
- § 55 (1) 9, BBerg: The exploration or extraction is not likely to have harmful effects on the community.

For the geothermal-lithium operation, there are certain main permits and regulations which need to be complied with in view of the *Hauptbetriebsplan* (main operating plan). For deep geothermal plants, the provisions of the *Bundesberggesetz (BBergG)* (Federal Mining Act), the *Wasserhaushaltgesetz (WHG)* (Water Resources Act), the water laws of the state, the *Baugesetzbuch (BauGB)* (Building Code), and the federal or state building regulations must be complied with. Special provisions, such as those of fisheries law or radiation protection law, may be added. The main focus will be on the German *Baugesetzbuch BauGB* (building code), which represents the most important law of building planning in Germany. The *Umweltverträglichkeitsprüfung UVP* (Environmental Assessment/EA) is based on the *Umweltrecht* (Environmental Law) as the determining law for the site selection to examine potential impacts on the environmentally protected assets. In this context, any “Natura 2000” areas would also be considered according to the *Bundesnaturschutzgesetz BNatSchG* (Federal Act for the Protection of Nature). Gec-Co has conducted potential site selection to avoid such areas.

Additional impacts on the environment are examined according to the *Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge* (Act on the Protection against Harmful Environmental Effects caused by Air Pollution, Noise, Vibrations and Similar Processes), commonly known as *Bundes-Immissionsschutzgesetz BImSchG* (Federal Emission Control Act). Vulcan and its consultants have commenced work on the processes required to obtain the permits required for its

planned renewable energy and lithium operations. The process for permitting geothermal plants in the Upper Rhine Valley in Germany is a well-trodden path. On the DLE side, since this will be the first combined DLE-geothermal project in Germany, the application process will have to be undertaken in close consultation with the authorities. For the chemical plant, a simpler process is envisaged, given Germany is a major chemicals producer. To find suitable site locations for the Geothermal and DLE plants within the license Areas, many different criteria must be considered. According to the BauGB described, there are two legal ways to define a plant site: Within an urban land-use planning zone or according to § 35 BauGB. The first option would mean that the local authority has defined a zone, where the plant site can be located. This could be either an industrial zone or a special zone with special license. Because suitable locations within the existing zones are difficult to find and the designation of new zones by the authority requires detailed information, the site selection process is carried according to § 35 BauGB for a new plant site. The second option would mean that the plant site is located outside the urban area.

The site selection is made by means of a preliminary study, where suitable site locations are evaluated. This evaluation was completed and comprises several steps: First, geological studies are conducted for the license areas by GeoT. This Geological Exploration Area defines the available drill zones and forms the basis for the further evaluation process. The next step is to determine the non-restricted area according to the UVPG. After eliminating all protected areas, the remaining region is broken down into different areas to give a more precise view on the local situation. The areas are then evaluated based on their infrastructure. In a last step, precise site locations can be defined and further evaluated. To give a more precise insight into the evaluation process and understand the restrictions behind all the criteria, a Criteria Catalogue has been developed.

To determine suitable site locations for the conversion plant, a research based on the land-use plans of the municipalities and cities next to the Rhine River was done. In this study, just locations inside existing industrial zones were considered and several suitable locations were found, including the favoured location at a chemical park outside of Frankfurt.

An Organic Rankine Cycle (ORC) style plant was used for the geothermal plant design. Vulcan is also in discussions with local stakeholders to provide heating as well as power generation, depending on the location, and this will be examined in more detail. In the PFS, only power generation was examined, due to the early stage of the Vulcan Project. In regions with geothermal reservoir temperatures above 110 °C geothermal electricity generation usually becomes feasible. In the Upper Rhine Graben region, reservoir temperatures range between 130°C and 200°C, which makes them suitable for geothermal power generation. With the DLE plant operating at 65°C, there is a minimum brine temperature difference of 70°C available to supply the energy required for the lithium extraction process, thus enabling the production of lithium with net zero greenhouse gas emissions. At these moderate water temperatures, direct drive of turbines through the brine by means of flash evaporation lacks efficiency. Instead, electricity is generated via a binary cycle technology, also referred to as ORC. When employing this technology, the thermal energy of the brine is transferred to a secondary working fluid in a heat exchanger. Due to the low boiling point of the ORC working fluid, it evaporates, and the steam phase drives a turbine. The operational temperature of the ORC is significantly lower than the temperature of the geothermal fluid. The efficiency of such binary plants is usually between 8 and 17%, depending on the brine temperature.

For designing the source plant, the volume flow and temperature of the brine are important factors. All plant parts are designed for a volume flow of 300 l/s. This defines the size of the drilling sites, pump house, operational building, filter house and DLE plant. The design of the power plant and the air-cooled condensers in particular are dependent additionally on the brine temperature. The potential brine temperature in the region of the Upper Rhine Graben is up to 200 °C. As the geological structures and brine temperatures vary, brine temperatures in the Taro license Area of 165 °C in the south, 150 °C in the middle and 130 °C in the north have been considered in consultation with GeoT. Hot temperatures are expected in the North of the Ortenau region, therefore temperatures of 165 °C have been considered. The design was aligned with existing engineered geothermal plants. The variation of the temperature is assumed to have no big impact on the size of the power plant. The used layout is based on a two-stage ORC configuration.

The number of air-cooled condensers necessary for the operation of the power plant is determined by the required cooling capacity, which arises from the spread of geothermal potential and total output power of the power plant.

The assumptions made for the required cooling capacity are based on the professional experience of Gec-Co. The chosen air-cooled collectors for the layout come as double units, called bays. The condenser surface of one bay is about 160 m². Due to the relation between the brine temperature and the electric power the surface of the condensers is strongly dependent on the brine temperature. Due to the needed steam for the DLE process the brine temperature is reduced. The air-cooled condensers are the main emitting equipment regarding noise. Therefore, the location of them must be investigated properly. To ensure the noise protection for nearby urban areas, noise protection walls can be built. The filter and pump house were designed aligned to existing plants. The filter and pump house includes filters and cooling water pumps needed for the geothermal system.

The integrated operational building includes the control room for the ORC power plant and the brine cycle. All relevant measurement parameters are detected and processed by the control system to ensure a safe, fully automated plant operation. The control room can be extended by the control system for the DLE plant. The other parts of the operational building are: the operation room, rooms for middle and low voltage switch gear, transformer rooms, workshop/store, sanitary and changing facilities, and a social room.

To achieve a brine volume flow of 300 l/s, three production and three injection wells were assumed. One production well is generally expected to have an average brine volume flow of around 100 l/s, as described in Section 11 of this IER. Therefore, generally six wells must be drilled to realize that amount of brine flow (including re-injection wells). In the project duration perspective, it is beneficial to drill two wells at the same time. Therefore, the layout will consider two separate drill sites, giving enough space to realize this setup. Another promoting factor for having two drill sites is the better reachability of different aquifers. The design of each drill site aligned to the standard of the European market. The drill site is mainly separated in two parts, the inner and outer drill site. The drill sites come with one brine basin. This basin is needed for the production tests of the wells.

The layout design of the DLE plant was provided by Hatch and included into the plot plans.

For the arrangement of the plant parts, some rules should be considered. The ORC power plant should be placed next to the air-cooled condensers to realize short, equally long piping and minimize the energy loss. To work properly, the air-cooled condensers need a sufficient clearance to higher buildings and trees. This shall guarantee a protection from pollination and a good air flow. The weather in Germany is mostly influenced by western streams, therefore a north-south alignment of the air-cooled condensers is beneficial for the air flow behaviour. To optimize the ventilation and piping, the bays were arranged in two rows on each side of the power plant. The air-cooled condensers and the ORC power plant need to be accessible by road, therefore a bypass road is attached to those plant parts. The appearance of the tall condensers can be perceived as bothersome. Therefore, other buildings can be arranged as sight protection.

The filters within the filter house secure the plant from solids out of the production well and the small underground cracks from clogging. Due to the split-up drilling sites, the Filter building should be placed between them to reduce piping. Usually, the pump building is placed next to the filter house in proximity to the power plant to reduce piping.

The operational building is placed in the middle of the locations. This gives a good overview of the operation room and shorter distances of the control room to the connected plant parts.

The drill sites should be placed in a sufficient distance from each other. Another limiting factor are the falling radii of the drilling masts. To guarantee an interference-free construction, those radii should be outside all other plant parts. The brine basin should be placed next to one drill site.

The layout of the DLE plant is used as a place holder within the assembling process. The size and shape of the DLE plant is variable and can be adjusted to the site location if necessary. The design and construction of bypassing roads needs to follow European standards.

All plant parts are designed to have enough buffer for changes for the further engineering process. Therefore, the chosen locations are large scaled as well. The assembling of the equipment within the site locations are optimised due to short piping and cable length.

A base case design size of 300 l/s cumulative brine flow, from three production well doublets, was used for the geothermal plant design, which was scaled for each site depending on predicted brine flow and temperature. Based on the anticipated heat at each site from the GeoT study, potential power production was estimated for each site. Due to higher anticipated heat in the Ortenau license (C1-3), Ortenau has higher anticipated power production potential than Taro. For geothermal projects, plant sizing is finalised once production wells are successfully drilled. The overall view of the plant design is shown in Figure 16. The DLE plant (7) is the highest building on the site, followed by the air-cooled condensers (2). The buildings 1, 3, 4 and 5 contains the technical equipment of ORC power plant, filters, pumps and operational equipment. The buildings occur as standard commercial buildings. The inner drill sites (6) are countersunk into the ground while the wellheads rise a few metres above ground. All brine pipes are marked in red, having white pipe supports every 6 to 8 metres (Figure 15-16).

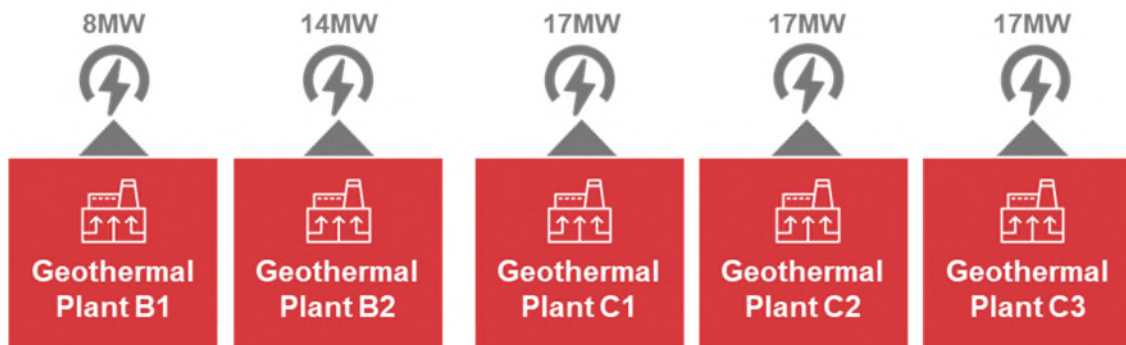


Figure 15: Layout and potential capacity of planned geothermal plants in Vulcan's Taro (B1+B2) and Ortenau (C1-3) license areas

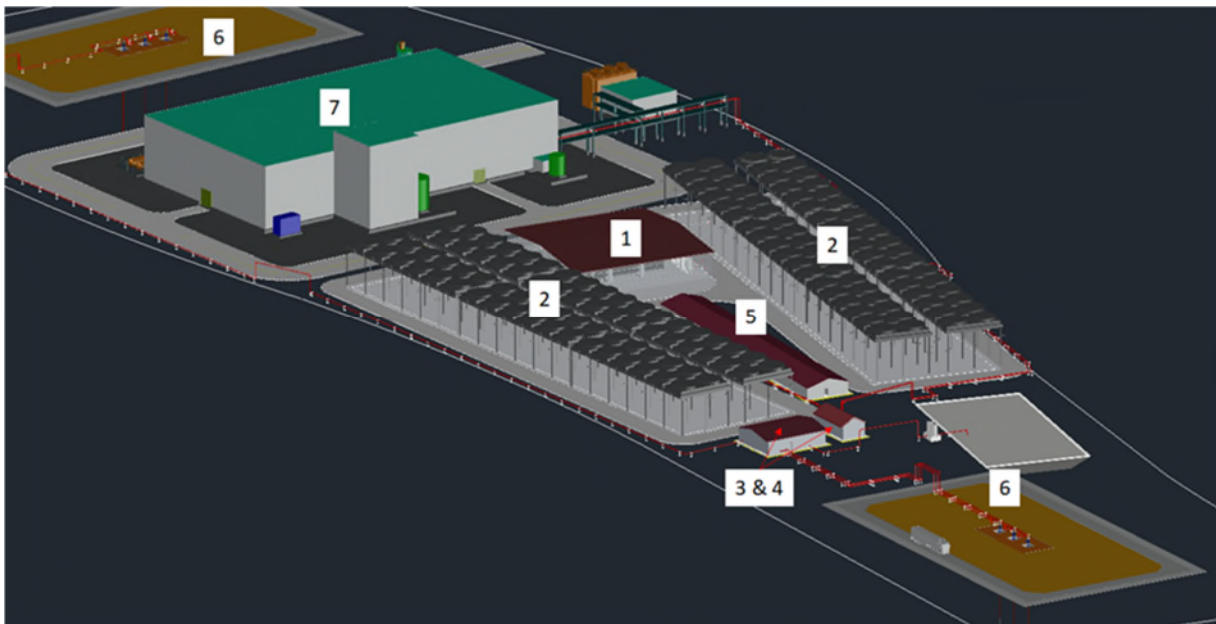


Figure 16: 3D overall view of one of the geothermal-DLE plant locations.

To buffer the expansion of the pipes for different temperatures, expansion bends are placed in specific intervals. Based on the plant designs, CAPEX and OPEX for the geothermal part of the business was estimated by Gec-Co, shown in Figure 17. Production well drilling and land acquisition costs were included in that study.

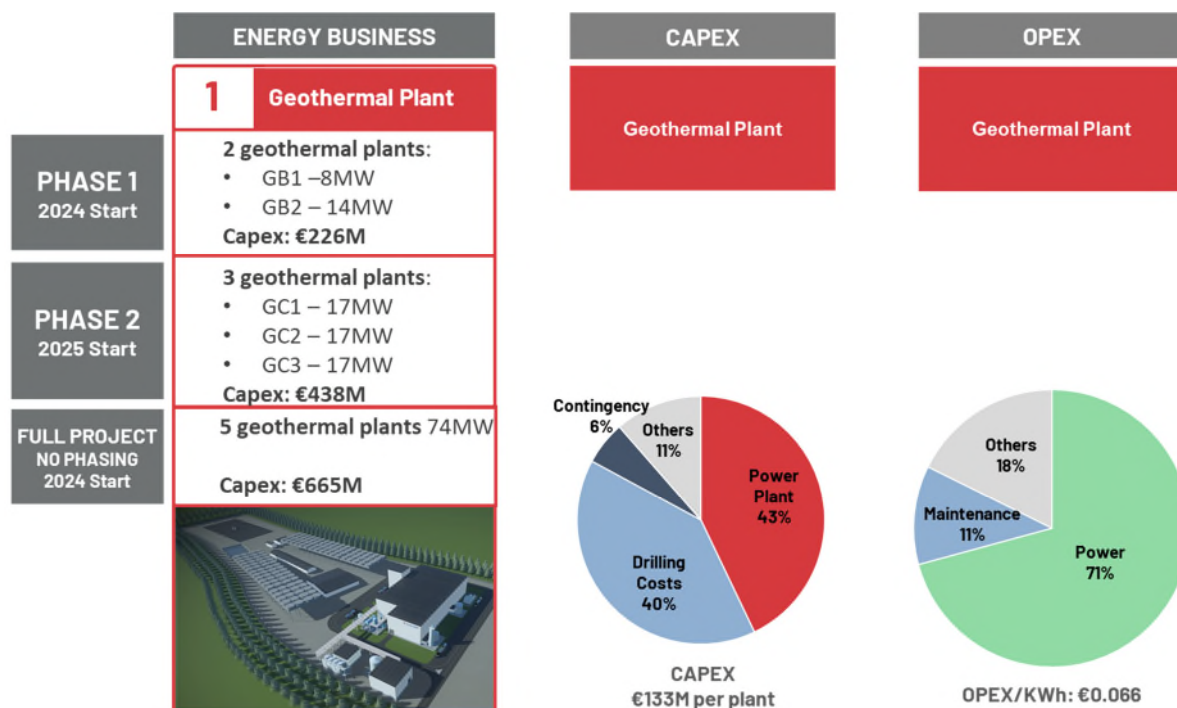


Figure 17: CAPEX and OPEX estimates for geothermal plants, based on Gec-Co study

The Renewable Energy Law (EEG) guarantees the tariff for the electricity feed-in into the grid for 20 years plus the year of commercial start. There is no obligation to deliver a certain amount of electricity into the grid. The electricity produced is fed into the grid and will be paid accordingly. Operators of EEG-supported power generation plants have a special right to have their plant connected to the power grid. They sell the electricity to the grid operators. These are obliged to give preference to electricity from renewable energy sources and must expand their power grids sufficiently to be able to transmit the subsidized electricity from the producer to the consumers. The purchase prices for electricity from the various energy sources are also set out in the EEG and differ considerably depending on the type of energy, like wind, photovoltaic, biomass, geothermal, etc. The four German transmission system operators compensate each other for the quantities of EEG electricity they accept and the feed-in tariffs they pay. This way, each transmission system operator bears a relatively equal burden. This equalization is intended to avoid the burden for a single transmission system operator with numerous EEG plants.

The grid operators sell the EEG-supported electricity on the European Energy Exchange (EEX). The difference between their income and expenditure from this electricity trade is offset by the EEG law. The purchase, remuneration and feed-in of electricity from renewable energies are therefore regulated by law. However, the utility companies that supply electricity to the end consumers are free to use any type of electricity. The tariff regarding EEG 2021 for electricity based on geothermal energy is 25,2 ct€/kWh up to a total installed geothermal electric power of 120 MWel. The current installed geothermal electric power at the time of this IER preparation is 38 MWel. Based on the projects currently under development and the experience of the last years, the threshold can be expected to be reached earliest in 2026. After reaching of the threshold of 120 MWel the tariff will be reduced by 0.5 percent per year. The first degression is thus expected to be seen in 2027. As mentioned in the previous section, Vulcan will also include heat production and sales as part of its DFS.

Revenues for the geothermal part of the business are shown in detail under the “Economic Analysis” section. For the full geothermal energy production profile (Phase 1 and 2, Ortenau and Taro), €157 M per annum revenues are calculated, with net operating cash flow of €114 M per annum and a post-tax net present value (NPV) of €470 M, with post-tax internal rate of return (IRR) of 13%. For Phase 1 (Taro), revenues from geothermal of €46 M per annum are expected, with net operating cash flow of €31 M per annum, post-tax NPV of €99 M and post-tax IRR of 11%. For Phase 2 (Ortenau), €111 M of annual revenue is expected, with €83 M per annum net operating cash flow, €371 M post-tax NPV and 15% post-tax IRR.

13) Market Studies & Contracts

13.1) Introduction

Lithium is the lightest metal and in the past was used in a variety of industrial applications from glass and ceramics to grease and pharmaceuticals. In recent years, lithium consumption has surged following the growth in lithium-ion battery (LIB) applications, first mostly in electronics (laptops, mobile phones, power tools, etc.) and now taken over by an application requiring much larger battery packs and therefore more lithium: Electric Mobility.

13.2) Lithium demand

The strong growth prospects in lithium end markets are driven by the combination of a number of market tailwinds, including increase in demand, policy support and end-user's manufacturing plans. Sales volume of electric vehicles (EV) is forecast to increase at 33% per year from 2021 to 2025, with equivalent LIB production increasing from 244 GWh in 2021 to 968 GWh by 2025 (Macquarie, 2021). LIB production used to be dominated by Asia where more than 98% of all production was based. The landscape is changing, and Europe is competing as a leading centre for E-Mobility. As featured in the map below (Figure 18), the continent is expected to represent more than a quarter of the global battery production capacity by 2030. The production for EV and energy storage batteries is expected to rise 9-fold by 2030 in Europe (Canaccord Genuity, 2020) (Figure 19).

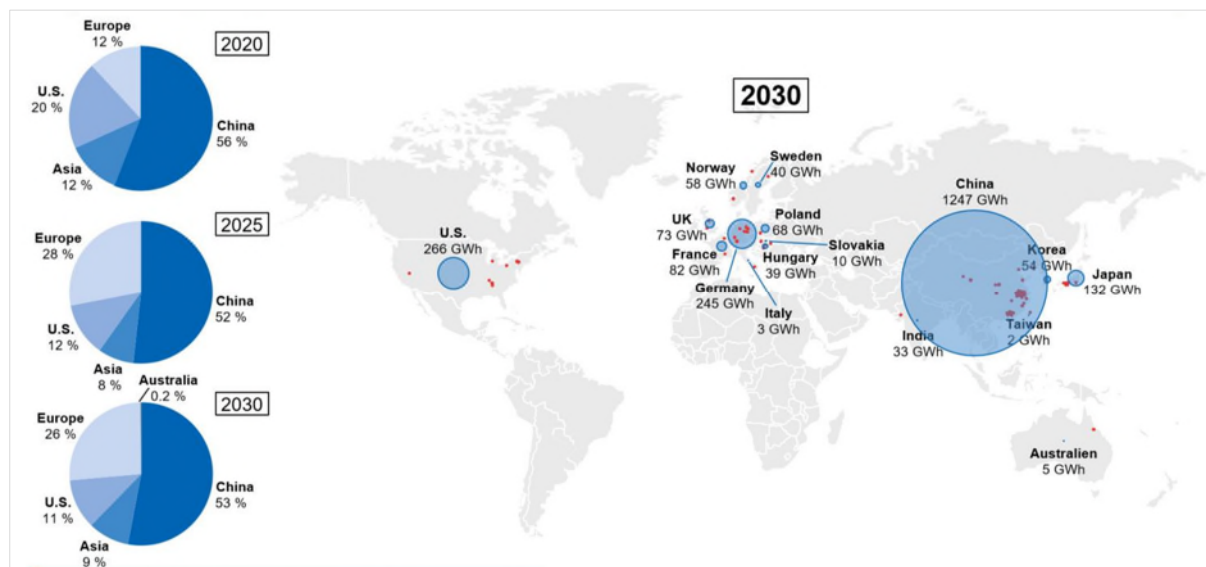


Figure 18: Gigafactory Capacities for Li-ion Cells By Region (Source: VDE Renewables)

A LIB factory is a large consumer of chemicals and metals such as lithium, nickel, cobalt and manganese, assuming that the cathode production is integrated to the site. According to IHS Markit, around 0.9 kg of Lithium Carbonate Equivalent (LCE) is used per KWh in a LIB. Led by LIB growth, the global annual demand of lithium is expected to increase from 278,000 tons in 2020 to 2.4 million tons in 2030, multiplied by 9 in 10 years (S&P, 2021).

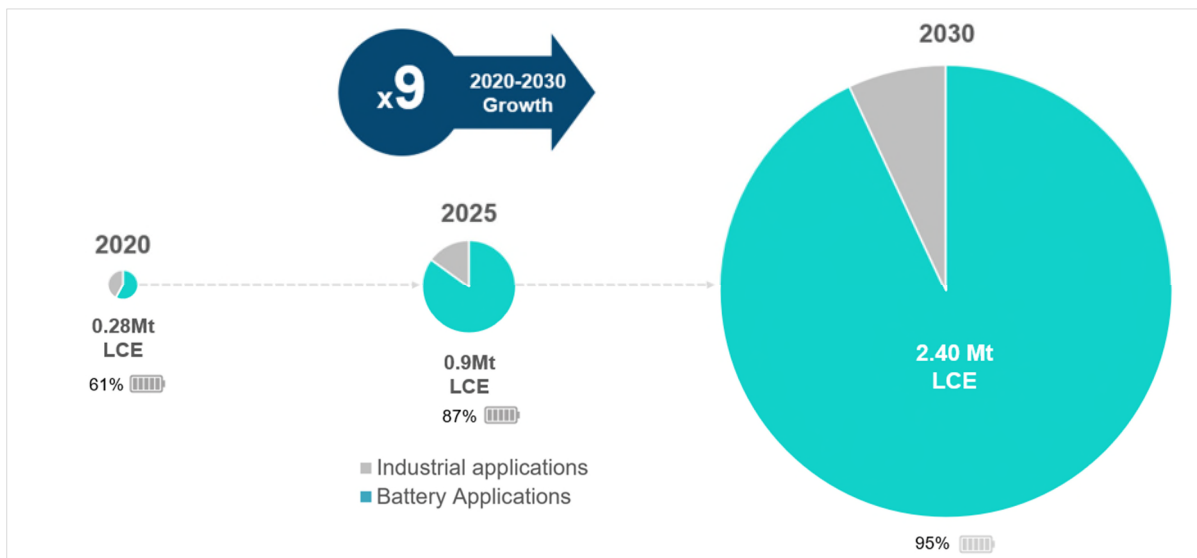


Figure 19: Lithium Growth – Powered by Electric Mobility (Source: Canaccord Genuity - Lithium | 2020 recharge (Canaccord Genuity, 2020))

In Europe, 2021 has seen a number of announcements from both battery producers and automakers allocating capital to build additional cell capacity. According to consulting firm Roland Berger, Europe is the fastest growing market in cells production and will reach more than 1,000 GWh per year production capacity by 2030 (Roland Berger, 2020). This would imply that by 2030, the European lithium chemical market will represent around 900,000 tpy of lithium chemicals, more than three times the size of the global market today, and with no existing domestic lithium production.

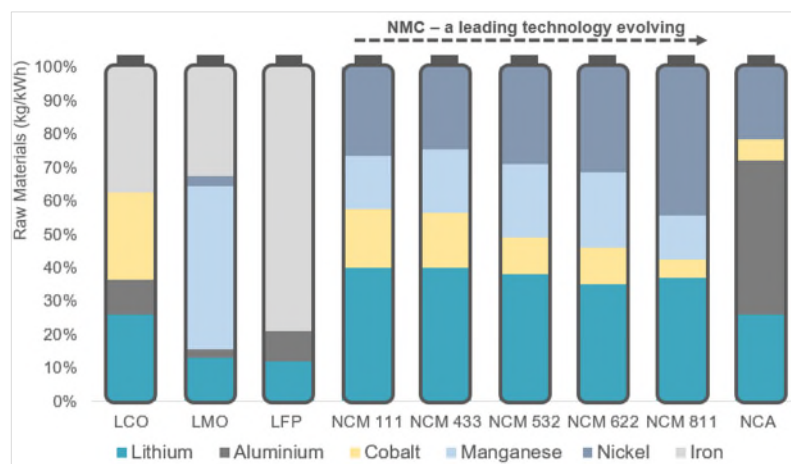


Figure 20: Composition of various cathode chemistries (Source: BNEF)

Lithium is a specialty chemical split into different products. Whilst lithium carbonate used to represent a majority of lithium chemicals demand, it is rapidly changing following an evolution of the cathode technology. (Figure 20) There are a number of different types of cathode technologies including LFP, LMO, NCA, etc. but the one set to dominate the industry is NMC (Nickel, Manganese, Cobalt). According to UBS, NMC based cathode will represent more than 73% of the E-mobility sector by 2025 (ASX, 2021). NMC cathodes are themselves evolving and producers are reducing their cobalt content and increasing nickel usage in order to improve the energy density of the battery and move away from controversial cobalt. This is in turn leading to a shift in product requirements because those nickel-rich cathodes need lithium hydroxide and not carbonate. Lithium hydroxide is forecast to take over lithium carbonate before the mid 2020's (Figure 21).

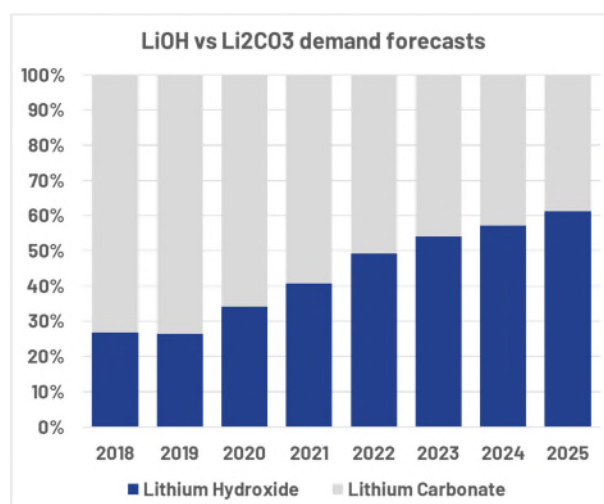


Figure 21: Lithium Hydroxide and Carbonate Demand Forecasts (Source: Canaccord Genuity - Lithium | 2020 recharge (Canaccord Genuity, 2020))

13.3) Supply chain

The LIB supply chain is dominated by Asia and particularly by China. China does not dominate the upstream part of the supply chain, i.e. mining, but has been over the years investing in foreign assets and securing offtake agreements to control the product flow. (Figure 22) According to Benchmark Mineral Intelligence (Benchmark), China represents more than 80% of battery chemicals refining, 76% of cathode and anode production, and finally 77% of LIB cell manufacturing. Europe identified this issue and in 2017 the European Battery Alliance (EBA) was created and includes the European Commission, the European Investment Bank and key industry stakeholders such as automakers, battery, cathode producers and miners. The EBA's goal is to create a competitive and fully integrated battery manufacturing chain in Europe, from raw material extraction down to EV production.

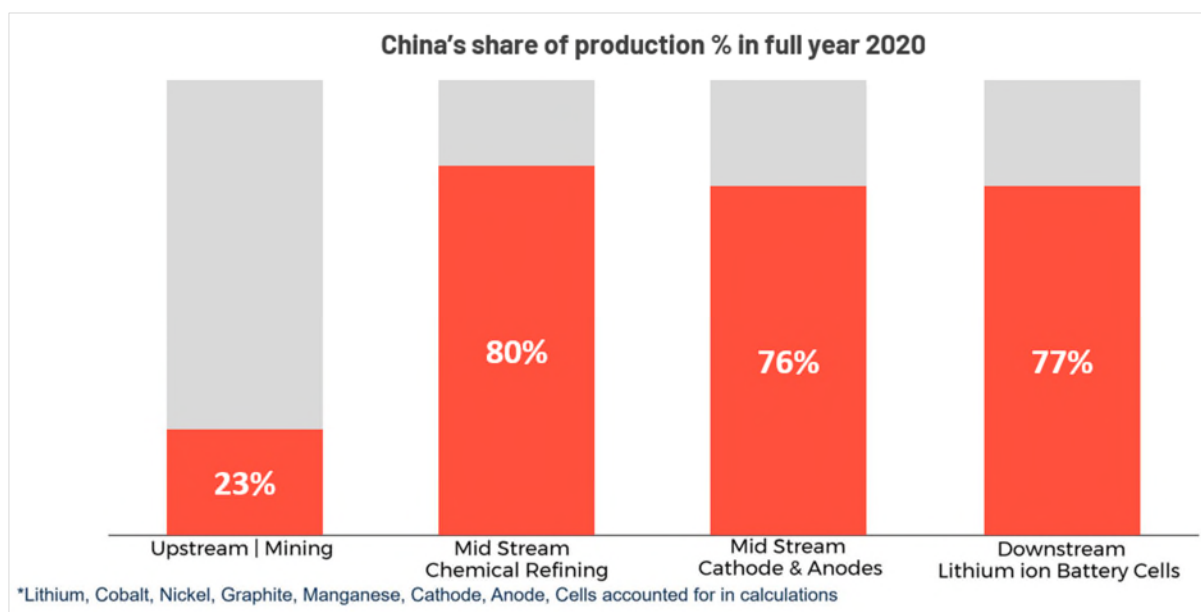


Figure 22: China's Dominance Across the Supply Chain (Source: Benchmark Mineral Intelligence (Benchmark))

As well as being dominated by China, the LIB supply chain is also very fragmented. The example displayed below (Figure 23) shows lithium travelling more 50,000 km before being used in its final application, an EV. This comes with a number of geopolitical and environmental concerns pushing regions such as the Europe to integrate and regionalise their supply chains and support investment at each step of the value chain.



Figure 23: Example of an existing lithium-ion battery supply chain (Source: Infinity Lithium (Infinity Lithium))

13.4) Lithium supply

Lithium is produced from either brine-based deposits or from hard-rock mineral deposits. Lithium from brine is often found in South America, in an area called the "Lithium Triangle" around the borders of Argentina, Bolivia and Chile. With this process, lithium is extracted from underground brines, typically from flat and salt-rich reservoirs, and then distributed to evaporation ponds. The process can take several months to a few years to complete and requires large amounts of water. The solution is then treated with a number of reagents to obtain lithium carbonate.

Lithium sourced from hard rock (spodumene) has generally been mined in Australia. Hard rock extraction is more similar to traditional mining systems (e.g. digging, explosions, crushing), with a roasting process that can be carbon-intensive (especially relative to brine extraction) and a leaching process resulting in wasted materials. In most cases, the extracted hard rock is transported as spodumene to China and converted to lithium carbonate or hydroxide.

Lithium feedstock production (brine and hard rock) is concentrated across 4 countries with Australia representing 45% of supply in 2020, followed by Chile (29%), China (10%) and Argentina (9%) (Figure 24).

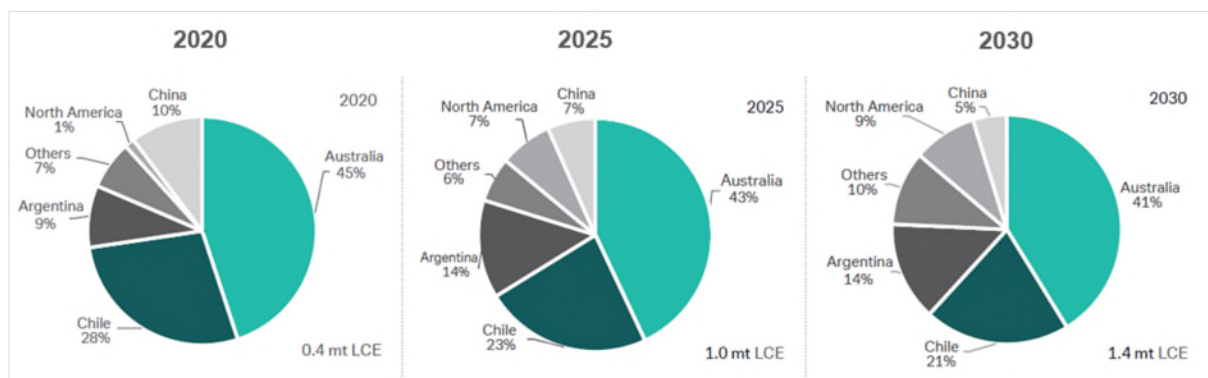


Figure 24: Estimated Lithium Supply in 2020, 2025 and 2030 per country (Source: Deutsche Bank Estimates (ASX, 2021))

Whilst Australia is the largest lithium feedstock producer in the world, the country is yet to convert its spodumene into lithium chemicals and a large majority is shipped to China, thousands of kilometres away, to be converted into lithium carbonate or hydroxide. Several lithium miners are now investing in building conversion capacity in Australia, but the final product will still have to be exported as there is no domestic market for battery grade lithium chemicals (Figure 25).

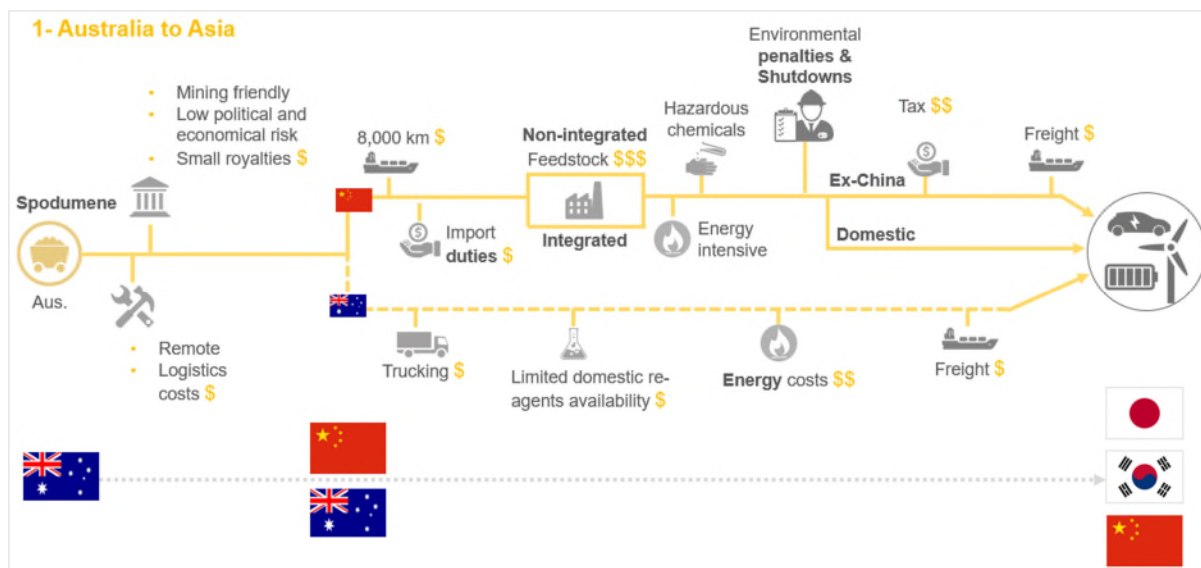


Figure 25: Lithium Path to Market: Australia to Asia

Lithium extracted in South America is mostly exported to Asia and part of it, lithium carbonate, is transported via the USA to be converted into lithium hydroxide. China is securing increasing volume of lithium carbonate from South America to cater to its domestic needs or to convert it into lithium hydroxide (Figure 26).

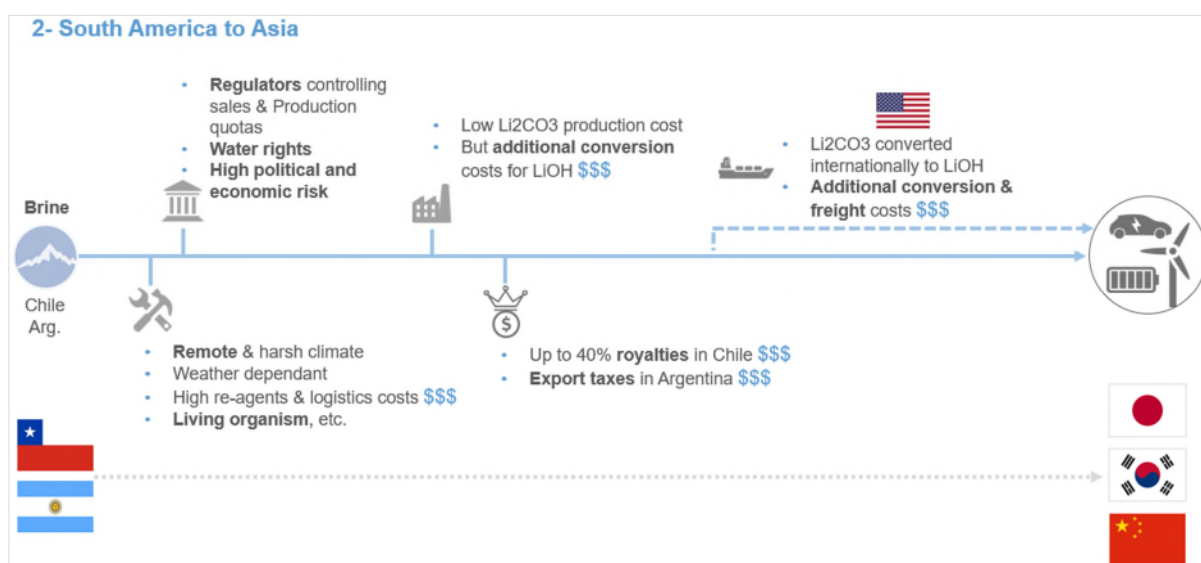


Figure 26: Lithium Path to Market: South America to Asia

Whilst China is only the fourth largest lithium miner globally, they are by far the largest producer of both lithium carbonate and hydroxide, relying mostly on imported spodumene from Australia or lithium carbonate from South America. Mostly consumed domestically, the lithium products are also exported, largely to Japan and South Korea, to be used by cathode manufacturers (Figure 27).

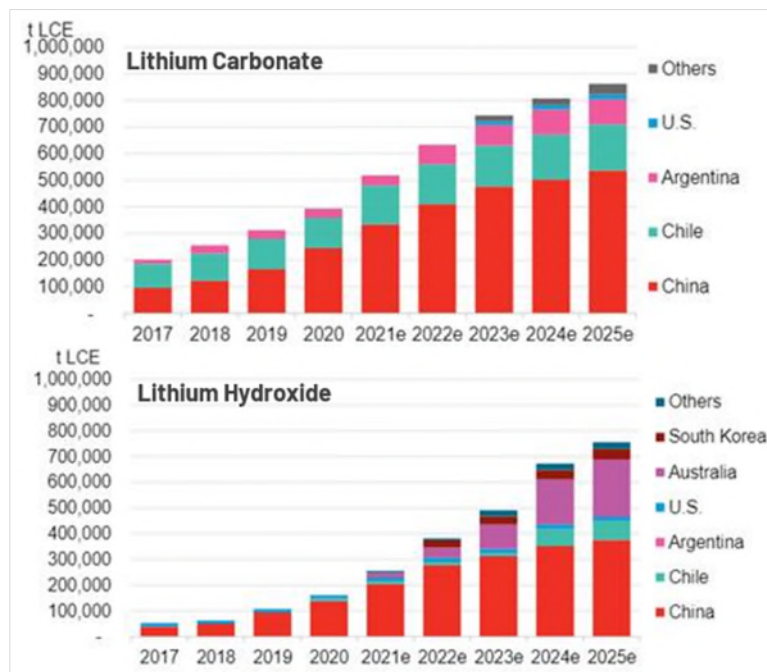


Figure 27: Lithium Chemical Supply Highly Concentrated (Source:BNEF)

13.5) Lithium Market Balance

According to Macquarie, shortage in supply is expected to increase beyond 2022 (Macquarie, 2021) (Figure 28). Macquarie stated that incorporating the stronger demand outlook combined with limitations on the supply response due to rising product quality requirements is expected to see the lithium market shift from a small surplus in 2021 to a deficit in 2022 and remain tight for 2023-2025, with deficits widening each year, reaching almost 1 million tons by 2030. (Figure 29) Canaccord Genuity indicated that due to a strong increase in demand, beyond 2025, they continue to forecast significant market deficits, noting a sevenfold increase (i.e. ~240ktpa average increase in capacity) is required to meet their 2030 demand forecast. Lastly, HSBC stated that as EVs continue to gain popularity and more OEMs announce their electrification plans, they could see a tightening in lithium supply and demand as downstream companies look to secure their supplies, potentially at higher prices.

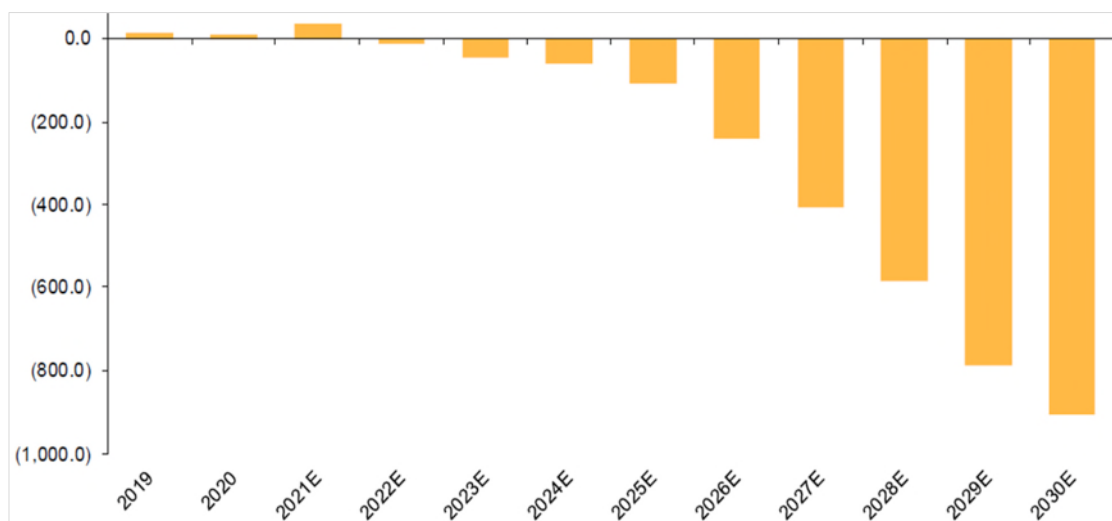


Figure 28: Lithium Market deficit (ktpa) from 2022 onwards (Source: Macquarie – Research, Lithium Market Outlook, 12/04/2021 (Macquarie, 2021))

Analyst / Consultant	Date	Units	Year of shortage	2030 balance
Woodmac	21-Apr-21	ktpa	>2030	nil
Bank of America	19-Apr-21	ktpa	2021	n.a.
BMO	16-Apr-21	ktpa	2030	(63)
Rystad	14-Apr-21	ktpa	2026	n.a.
Macquarie	12-Apr-21	ktpa	2022	(900)
Morgan Stanley	8-Apr-21	ktpa	2026	(548)
UBS	30-Mar-21	ktpa	2025	(1,700)
AME	1-Mar-21	ktpa	2024	n.a.
Deutsche Bank	15-Feb-21	ktpa	2022	(420)
Canaccord	10-Feb-21	ktpa	2024	(1,588)

Figure 29: Analysts and consultants forecast a lithium shortage in the coming years

13.6) Production Costs

Lithium production costs for brine processing are dominated by reagents, which accounts, according to Roskill, for more than 50% of the total production costs (Figure 30). One of the key chemicals used in brine processing is soda ash, which is mostly imported from the US more than 8,000 km away from China, as there is limited to no supply available domestically. Once the brine has been processed into lithium carbonate, it then needs to be converted into lithium hydroxide using lime, an additional reagent cost. Alternatively, costs for lithium production from hard rock is dominated by its feedstock cost, spodumene, which greatly influences the total production cost. Spodumene prices have fluctuated from below \$400/t to more than \$1,000/t since January 2018, and each ton of lithium hydroxide produced requires 7 to 8 tonnes of spodumene, leading to big shifts in Chinese converters cost positions, depending on if they are integrated or not.

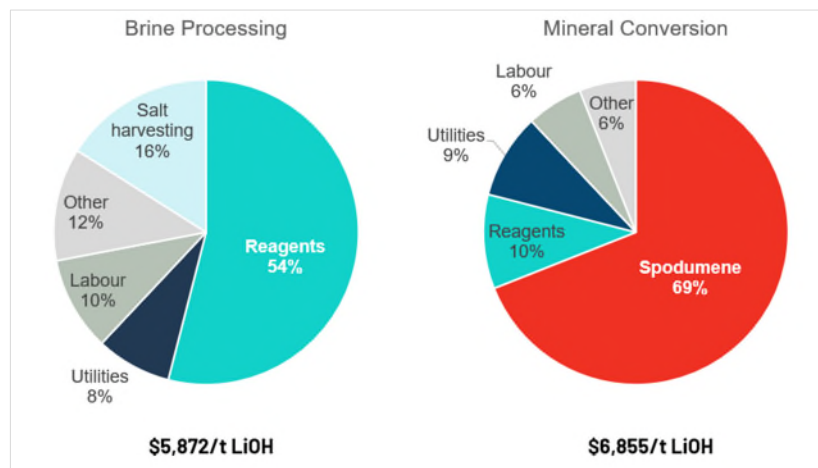


Figure 30: Cost Composition – Mineral Conversion & Brine Processing (Source: Roskill, Hatch)

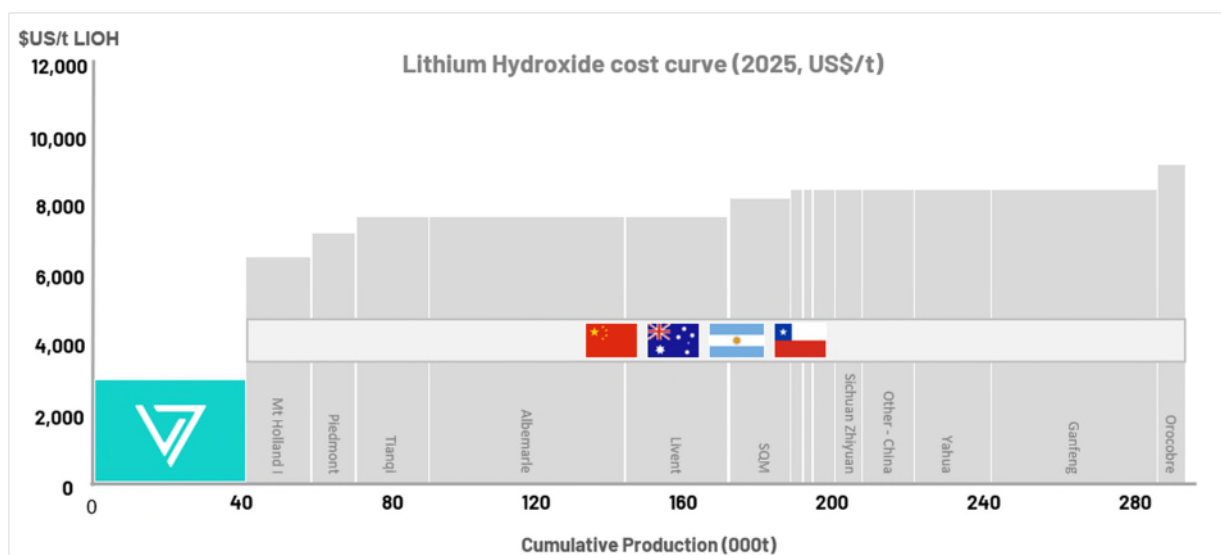


Figure 31: Global Cost Curve Lithium Hydroxide (Source: Canaccord Genuity - Lithium | 2020 recharge)

Based on Vulcan’s PFS published in January 2021, the Vulcan Project production costs are estimated to be around \$3,100 per tonne of lithium hydroxide (Figure 31). It would represent the lowest lithium production cost in the world and this is explained by three main reasons:

- Vulcan’s “feedstock”, its brine, is secured at no or low cost and has a dual purpose: lithium production and energy production in the form of renewable electricity (or heat, which will be assessed in the DFS). As a comparison, a Chinese lithium producer would have to secure a feedstock, spodumene, which according to Fastmarkets' monthly assessment for spodumene 6% Li₂O min, CIF China was \$750 per tonne on June 30, 2021, which would translate in a total feedstock cost of \$5,600 per ton of lithium hydroxide produced (Fastmarkets). Vulcan’s feedstock is “free” and is also used to generate revenues, in the form of electricity.
- Vulcan uses Direct Lithium Extraction to isolate lithium as opposed to using large volumes of chemicals to process the brine, like in South America, where the largest production costs are chemicals. Vulcan is able to do this, using a sorption method, because the brine is pre-heated, and the sorption requires the brine to be hot in order to work.
- Vulcan also uses low-cost, renewable energy directly from its geothermal operations, in the form of steam.

13.7) Lithium prices

Lithium is split into different chemical products with different grades and specifications. The number one priority for a battery/cathode producer buying a specific lithium product is consistency of the product specification. As lithium is not a commodity and its market remains small, there are no widely used hedging tools available yet. Spot prices in China, broadly reported by Price Reporting Agencies (PRA) do not represent lithium prices globally, most volume are medium-term and long-term contracts with prices agreed directly between buyers and sellers.

Lithium hydroxide prices have been volatile during the last few years and averaged around \$14,500/tonne between January 2016 and January 2021. Since the start of 2021 and following a growing market tightness, prices have increase by more than 50% according to Fastmarkets and S&P (Figure 32).

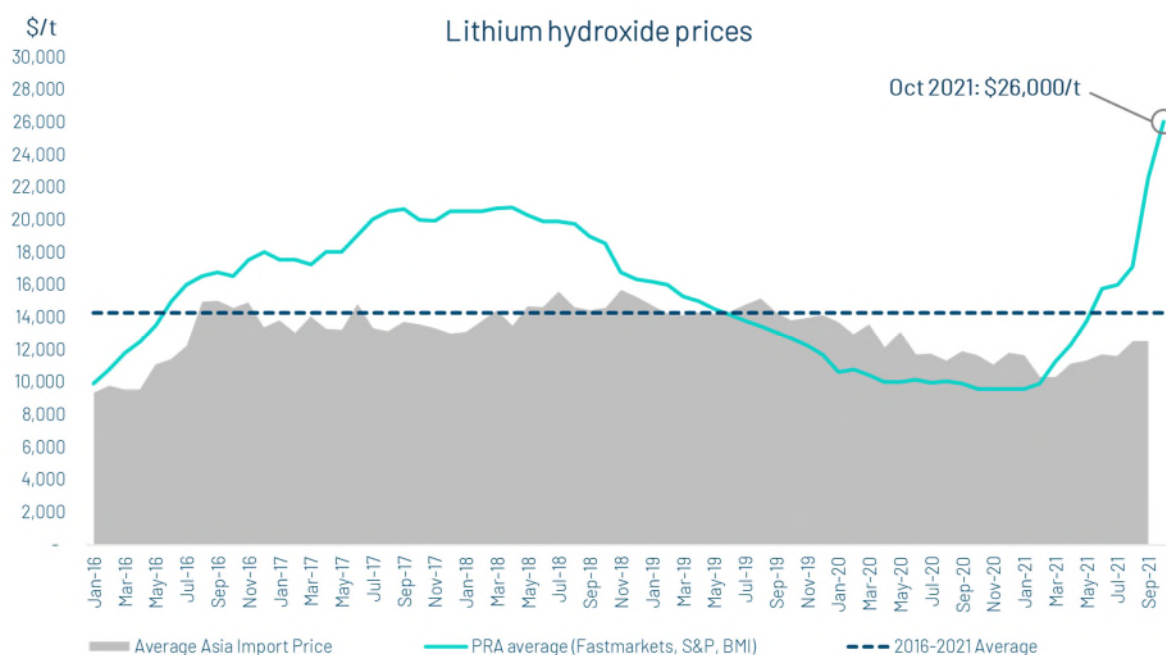


Figure 32: Historical Lithium Hydroxide Prices (Source: Trade statistics compiled from Global Trade Atlas®, Benchmark Minerals (2016-2017), Fastmarkets (2017-2021), S&P (2018-2021))

A lithium hydroxide price forecast from Macquarie is provided below (Figure 33). The estimated price indicated for 2021 is \$11,495/tonne but according to Fastmarkets Asian CIF Lithium Hydroxide index, prices are already at \$15,500/tonne as of July 22, 2021.

Macquarie lithium price forecasts now include regional carbonate and hydroxide forecasts								
Y/E December	CY20	CY21e	CY22e	CY23e	CY24e	CY25e	CY26e	Long-term*
Regional lithium hydroxide price forecasts								
Asia Lithium Hydroxide (US\$/t)	10,591	11,495	13,050	15,150	15,600	16,200	16,800	15,600

Figure 33: Lithium Hydroxide Price Forecast – Macquarie (Source: Macquarie – Research, Lithium Market Outlook, 12/04/2021)

13.8) Sustainability

Lithium production is linked to significant environmental concerns. For instance, shipping 6% Li₂O concentrate from Australia to China has obvious carbon emissions linked to transport but it is processing the hard rock into lithium chemicals which generates most of the emissions, because generally coal is used as a key source of energy. According to Minviro, a consulting firm specialising in Life Cycle Assessment for battery materials, every tonne of lithium hydroxide produced in China would emit around 15 tonnes of CO₂ emissions (Figure 34).

Lithium brine production does have a lower carbon footprint relative to hard rock extraction, but water usage from the evaporation and production process is significant. Water scarcity can have meaningful consequences for local communities, especially farmers. Vulcan's Zero Carbon Lithium™ Project aims to produce lithium hydroxide with a net zero carbon footprint, zero fossil fuels to power the process, and with significantly less land and water requirements.

Per tonne of lithium hydroxide produced

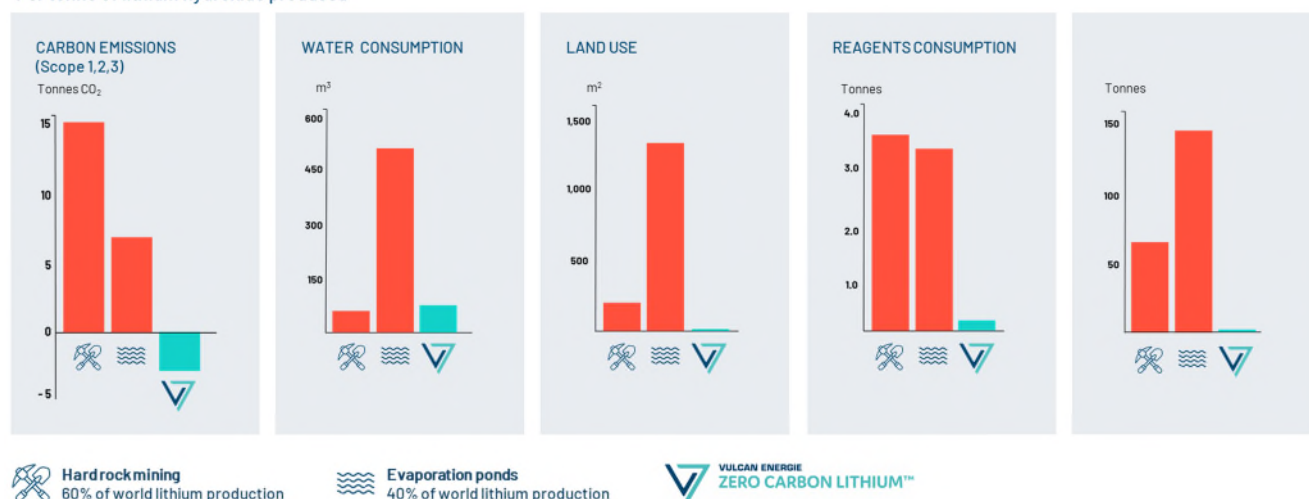


Figure 34: Environmental footprint of lithium production routes (Source: Minviro Life Cycle Analysis 2020 & Vulcan Energy's Pre-Feasibility Study)

14) Economic Analysis

14.1) Capital and Operating Costs

Capital costs, operating costs and schedules were developed for a base case. Various other plant capacities were investigated and are scaled from the base case. A summary of the results is provided below in Table 8. These estimates do not include the geothermal plants (including the wells), infrastructure located beyond the site boundary, nor owners costs.

Table 8: Overall Summary of Scenarios

Scenario	# of DLE Plants	Total Brine Feed (L/s)	Production (tpa LHM)	CAPEX (€M)	CAPEX (€/ t LHM)	OPEX (€/M/ a)	OPEX (€/ t LHM)	Schedule (months to end of construction)
Phase 1 (Taro License)	1 x 240 L/s 1 x 300 L/s	540	14,800	474	31,994	46	3,127	45
Phase 2 (Ortenau License)	3 x 300 L/s	900	24,600	700	28,447	69	2,785	48
Combined Phases Option (Taro and Ortenau Licenses)	1 x 240 L/s 4 x 300 L/s	1,440	39,400	1,073	27,238	104	2,640	50

Compared to other lithium extraction and conversion projects:

- The capital cost is somewhat higher compared to an extraction (mine and concentrator, or evaporation ponds in a salar) plus refinery project;
- The operating costs are comparable to the lowest found globally, due to the cheap raw material (brine) and limited reagent consumption; A similarly sized spodumene based project would add \$150M-250 M USD/year

of operating cost depending on the source and the grade of the spodumene, and the negotiated price. Compared to a lithium salar project, the operating cost does not include large quantities of reagents but does have substantially higher power costs. The location is generally unfavourable for salar projects (high elevation, remote) which also adds operating cost;

- The schedule aligns with the project duration for large project benchmarks, with testwork, engineering, procurement and permitting being on the critical path;
- The environmental footprint is excellent due to limited chemical consumption, no fossil fuel consumption, and almost no residues;
- The Vulcan Project can open up new, long term and sustainable, lithium resources, located in Europe.

The following items could significantly impact the operating costs if they change:

- Brine quantity, rate, or composition
- Extent of brine treatment required prior to the DLE
- DLE Lithium recovery, selectivity or operating parameters
- The price, amount and/or useful life of the sorbent
- The price of power
- The price of water

14.2) Economic Model

Optiro Pty Ltd. was retained to utilise the Gec-Co and Hatch capital and operating cost estimates for the production of geothermal energy and lithium hydroxide, respectively, to estimate the Vulcan Project economics. The key project assumptions and metrics are provided below. The financial model has been generated in euro (€) terms with the majority of key inputs (operating and capital cost and power, acid and steam prices) also provided in € terms. The main exception to this is the LiOH price which was provided in US\$ terms. € terms were maintained through the financial model with conversion to the euro undertaken for the LiOH price. The financial model incorporates the ability to apply exchange rates (EUR:US\$) on either a flat or spot basis over the life of the model or to apply a forecast exchange rate profile. Although model outputs are reported in € terms, the financial model is currently set to convert US\$ to € using exchange rate forecasts. Mining industry practitioners typically undertake financial modelling using real NPV terms, projecting constant costs and metal prices in real terms. The resultant cash flows are then discounted by a real risk-adjusted discount rate. Optiro has conformed with this practice. Weighted average cost of capital (WACC) analysis has not been completed as part of this financial modelling. A discount rate of 6% has been applied to the cashflow in line for the geothermal business, comparable with discount rates used by others in the geothermal industry as advised by Gec-Co. A discount rate of 8% has been applied to the cashflow in line for the lithium businesses, comparable with discount rates used by others in the lithium industry and as directed by Vulcan for use by Optiro. The discount rates for the lithium and geothermal parts of the business (6% and 8%, respectively) were based on feedback from Vulcan's financial advisors, the extensive resources and renewable energy project finance experience of Vulcan's Board of Directors, Vulcan's geothermal consultants in Germany and an industry review. LiOH prices are based on forecasts by Canaccord for battery grade lithium hydroxide (minimum 57.5% LiOH) provided by Vulcan.

As part of the financial analysis, Optiro has applied production rates in-line with directions from Vulcan, with potential for phasing applied. This uses brine flow rate assumptions based on seismic interpretation of structural geology and surrounding well performance, which will need to be tested in a production well setting. Phase 1 considers the production of geothermal energy and of lithium chloride through two plants (B1 and B2) whilst lithium hydroxide is produced at a Central Lithium Plant. Phase 2 considers the production of geothermal energy and of lithium chloride through three plants (C1, C2 and C3) whilst lithium hydroxide is produced at a Central Lithium Plant. A two-year construction schedule is applied with first production commencing one year after start of construction using a 25% ramp up. The Vulcan Project base case financial model comprises a model start date of 1/1/2023, with a two-year construction period for Phase 1 and 2, and 30-year model life. Phase 1 commences on 1/1/2023 and Phase 2 on 1/1/2024. 0.5% geothermal brine royalty has been assumed to be paid on CLP lithium revenue (when the lithium and geothermal businesses are separated). A project tax rate of 23.99% was applied for the geothermal and DLE businesses, and a project tax rate of 30% for the lithium refinery business, based on

feedback from local advisors. Specific selling costs have not been allowed in the financial model. Lithium hydroxide has been assumed to be sold free on board (FOB) from the mine site. Optiro completed various scenarios, including consideration of a fully integrated project; consideration of geothermal, DLE and lithium refining options only; and consideration of Phase 1 (plants B1 and B2) and Phase 2 separately (plants C1, C2 and C2). This resulted in 30 options in the financial model, with the main scenarios shown below (Figures 35-36).

14.3) Integrated Business

	Full project developed at the same time and integrated under one business.					Phase 1 developed first and is an integrated business					Phase 2 developed second and is an integrated business				
	FULL PROJECT NO PHASING 2024 Start					PHASE 1 2024 Start					PHASE 2 2025 Start				
	INTEGRATED BUSINESS					INTEGRATED BUSINESS					INTEGRATED BUSINESS				
	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3
	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3
	CLP1		CLP2			CLP1		CLP2			CLP1		CLP2		
	74MW & 40Ktpy LiOH					21MW & 15Ktpy LiOH					52MW & 25Ktpy LiOH				
Revenues €M/y	652					232					420				
Net Op. Cash Fl. €M/y	507					171					324				
NPV Pre-tax €M	3,443					1,114					2,145				
NPV Post-tax €M	2,250					703					1,403				
IRR Pre-tax	26%					23%					27%				
IRR Post-tax	21%					18%					22%				
Payback (year)	5					5					6				
CAPEX €M	1,738					700					1,138				
CAPEX Geo	665					226					438				
CAPEX DLE	751					291					460				
CAPEX CLP	322					182					240				
OPEX €/KWh or LiOH€/t	2,640					3,139					2,792				

Figure 35: Economic results for the integrated business scenario for both a phased and no phased development plan

14.4) Separate Businesses

	Full project developed at the same time but separated in two different businesses: Energy and Lithium.										Phase 1 developed first, separated in two different businesses: Energy and Lithium.										Phase 2 developed second, separated in two different businesses: Energy and Lithium.																			
	FULL PROJECT - NO PHASING 2024 Start										PHASE 1 2024 Start										PHASE 2 2025 Start																			
	ENERGY BUSINESS					LITHIUM BUSINESS					ENERGY BUSINESS					LITHIUM BUSINESS					ENERGY BUSINESS					LITHIUM BUSINESS														
	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3	GB1	GB2	GC1	GC2	GC3										
	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3	DB1	DB2	DC1	DC2	DC3										
	CLP					CLP					CLP1					CLP2					CLP1					CLP2					CLP1					CLP2				
	74MW					40Ktpy LiOH					22MW					15Ktpy LiOH					52MW					25Ktpy LiOH														
Revenues €M/y	157					500					46					187					111					312														
Net Op. Cash Fl. €M/y	114					394					31					140					83					242														
NPV Pre-tax €M	685					2,802					155					971					530					1,647														
NPV Post-tax €M	470					1,897					99					644					371					1,111														
IRR Pre-tax	16%					31%					13%					27%					18%					32%														
IRR Post-tax	13%					26%					11%					22%					15%					26%														
Payback (year)	6					4					4					4					7					5														
CAPEX €M	665					1,073					226					474					438					700														
CAPEX Geo											226										438																			
CAPEX DLE						751										291										460														
CAPEX CLP	0.066					322										182										240														
OPEX €/KWh or LiOH€/t						2,681					0.078					3,201					0.061					2,855														

Figure 36: Economic results for the separate business scenario for both a phased and no phased development plan

14.5) Sensitivity Analysis

A sensitivity analysis of the lithium component of the Vulcan Zero Carbon Lithium™ Project has been carried out considering the lithium hydroxide price, brine flow rate, foreign exchange rate (FX), OPEX and CAPEX costs at 5% increments (between +/-15%). Using these sensitivities, the analysis indicates that the Vulcan Project is most sensitive to the items directly impacting revenue (brine flow rate and lithium price). The Vulcan Project is less sensitive to operating and capital costs. The Vulcan Project retains a positive IRR and NPV with -30% sensitivity applied to Lithium price, flow rate, OPEX and CAPEX individually (Figure 37).

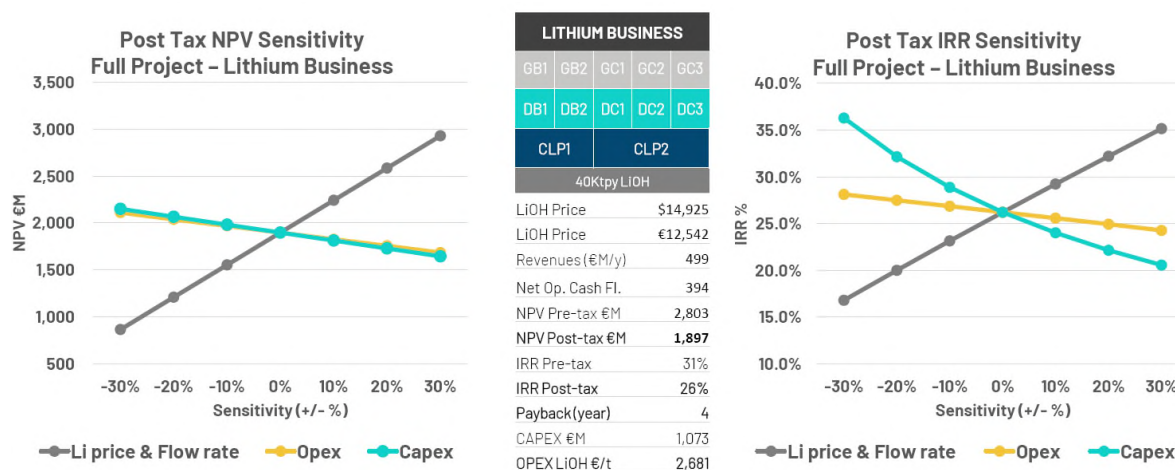


Figure 37: Sensitivity analysis chart on lithium NPV & IRR. Lithium price and flow rate are not aggregated but have the same effect in the sensitivity analysis.

14.6) Project funding

To achieve the outcomes of this study, initial funding in the order of €700 M (including contingency) will be required, and a further €1,138 M will be required for Phase 2. This may increase during the DFS, due to global supply chain disruption. It should be noted that, as with any project at this stage, the ability to develop the Vulcan Project may depend on the future availability of funding, and while the Company believes it has reasonable basis to assume that future funding will be available and securable, this is not guaranteed.

The size and location of the deposit, together with other strong project fundamentals, such as its proximity to large end users associated with European electric vehicle production that are driving lithium demand makes the Vulcan Project a strategic asset as evidenced by the large interest shown in the Vulcan Zero Carbon Lithium™ Project by public/private banks, financiers, end users and large lithium specialist companies to-date. An improvement in market conditions since work commenced and a perceived high growth outlook for the global lithium market enhance the Company's view of the fundability of the Vulcan Zero Carbon Lithium™ Project. Based on this, Vulcan's Board of Directors is confident the Company will be able to finance the Vulcan Project through a combination of syndicated senior debt, export credits, industry related hybrid debt, equity and forward sales at the Vulcan Project level. The size of the Vulcan Project will necessitate a syndicate of banks and in the current low interest rate European market the Vulcan Project represents a higher yield opportunity. Vulcan may also consider the bond market once in production, in view of the increasing market demand for bonds that meet Environmental, Social, and Governance (ESG) criteria and the availability of longer-term yields in the bond market as compared to project finance (high yield) bonds. Vulcan's Board of Directors has relevant experience in funding large scale renewable energy, chemicals and raw materials projects.

In addition, the Company has raised A\$320M in the equity capital markets during 2021, showing proven ability to raise capital. The Company has also appointed BNP Paribas as financial advisor towards undertaking a project financing process. BNP Paribas is a leader in project finance linked to sustainability and e-mobility.

For the reasons outlined above, the Vulcan's Board of Directors believes that there is a "reasonable basis" to assume that future funding will be available and securable.

15) Project Risk and Opportunities

As is normal at this stage of engineering, several risks remain. Key risks that can significantly affect the Vulcan Project outcomes are listed below:

- With the exception of the producing geothermal wells at the Insheim plant, Vulcan's Zero Carbon Lithium™ Project geologically represents an early-stage exploration project. While Vulcan has geological information from wells within its licenses, at present, Vulcan has yet to drill a geothermal production well at the Ortenau

and Taro licenses, which are the basis for the PFS, and there are no operating wells that have sampled the Buntsandstein Group and/or Permo-Triassic aquifer brine in these two license areas. There is an active geothermal production well accessing Permo-Triassic aquifer brine within Vulcan's Insheim resource area. This is in keeping with standard practice for deep geothermal projects. Accordingly, one uncertainty relates to the lack of current access to deep-seated subsurface brine within the boundaries of the Ortenau and Taro licenses. This has led to several assumptions in the resource estimation process including lithium brine concentration and average porosity of the resource domains. It has also led to the assumption that lithium extraction testwork with neighbouring brines is sufficiently representative. In deep geothermal brine projects in the URG, exploration is typically conducted with seismic data acquisition and interpretation, with the first well drilled as the first production well. Because brine cannot currently be sampled from the Buntsandstein Group and/or Permo-Triassic aquifer underlying the Taro and Ortenau licenses, the CP responsible for the Mineral Resources relied on geochemical data associated with Vulcan's 2019-2020 URG brine sampling that included, off-license, but proximal geothermal well locations. In the CPs experience, confined aquifers in sedimentary basins can have massive spatial extent and with homogeneous to semi-homogeneous lithium-in-brine concentrations. So, it is the CPs opinion that the lithium brine content of neighbouring wells is a good proxy of lithium in the Permo-Triassic aquifer domains within the URG. Permo-Triassic brine sampled from the Insheim resource area were used to verify and support the average lithium value used in the resource estimations. There are, however, always local chemical variations due to numerous geological factors, so this is a risk that will be mitigated by first production drilling of geothermal wells.

- There is a significant amount of effective porosity measurements on Buntsandstein and Rotliegend drill cores, however, none of the wells were collared within the boundaries of the licenses. Consequently, the Ortenau and Taro resource estimation processes assume average matrix and fracture porosities. It is possible that the porosity of any given resource domain is higher, or lower, than the values used because porosity and permeability can be variable in most shoreface depositional settings, particularly those that contain diagenetic and secondary cements. For the lithium brine resources, the CP responsible for the Mineral Resources has attempted to utilize reasonable and conservative porosity values to define the resource domains and in the resource calculations. Future work should be planned to include drilling the first production well, to confirm the porosity and lithium brine concentration assumptions used.
- There is risk and uncertainty associated with exploring for and exploiting fault zones as geothermal and lithium brine reservoirs. For example,
 - The architecture of a fault at depth is difficult to predict due to the heterogeneous nature of sedimentary rocks and the complexity of any fault zone. For example, the fault zone could have a single damage zone or a fault core with damage zones on either side and/or the damage zone could be anisotropic. Again, the design of the production-injection wells could resolve fluid flow issues, but this could prompt additional resources to maximize production from any given fault zone.
 - Numeric reservoir modelling studies in public literature have shown that localized high porosity/permeability can lead to channelling effects such that the geothermal reservoir potentially becomes restricted to only occurring within the fault zone. Thus, the exploitation of fault zones can constitute a trade-off between high permeability and reduced reservoir volumes.
- The assumption for this development is to target a reservoir that would not require hydraulic fracturing (fracking), which can result in induced seismicity. Some historical geothermal development in the region has resulted in induced seismicity associated with brine injection or gas build-up in a reservoir, but is typically associated with basement rocks, which are not the target of the Vulcan development. Vulcan intends to follow best practices in reservoir management including ensuring threshold limits are not crossed and target areas are where higher porosity exist.
- Site selection – Both DLE and geothermal sites remain to be finalised. Several potential sites have been identified, which were used in the PFS and this IER. The PFS assumes a flat greenfield site with services at the site boundary and no piling or blasting required. The site influences the project scope and can have a considerable impact on both the capital and operating costs due to geotechnical, utilities, environmental, logistics, and social acceptance considerations. Vulcan intends to mitigate these risks with ongoing site selection activities.

- Limited DLE testwork has been performed at this stage of engineering, with multiple areas relying on benchmarks, simulations, literature, or vendor experience for process definition and costing. Vulcan intends to mitigate this risk with additional laboratory and pilot scale testwork, which is currently under way and informing the DFS.
- Water consumption and supply – The DLE water consumption is based on vendor benchmarks but must be confirmed for the Vulcan Project specific conditions, the final sorbent selection, and the final DLE system configuration. Methods of reducing water consumption are possible and remain to be investigated. The water supply will depend on the site and local constraints. Vulcan intends to clarify this with further testwork and equipment design and mitigated in site selection.
- Depleted brine composition, reinjection and permitting – Vulcan intends to clarify this with further testwork and mitigated via consultation with authorities.
- LiCl electrolysis – lithium chloride electrolysis to produce LiOH solution is similar to the very common sodium chloride electrolysis (chloralkali process) that is widely used worldwide to produce sodium hydroxide (NaOH) and chlorine (Cl₂) gas or hydrochloric acid (HCl). Nevertheless, there are several key differences in the technology and operation, and there is presently no lithium hydroxide production via electrolysis being performed commercially. Vulcan intends to mitigate this risk with testwork and selection of vendors with appropriate experience. Vulcan also has the lower risk option to produce LHM via the “traditional route”, with a lithium carbonate step and then liming.
- Schedule delays – A high level project schedule has been prepared based on typical project durations and the input from Vulcan and Gec-Co. There are several items that can impact the schedule including: (a) extent and duration of testwork, (b) access to brine for testwork, (c) negotiations with technology providers, (d) negotiation for site purchase, (e) permitting durations and requirements given the novel nature of the application and multiple jurisdictions, and (f) financing requirements. Vulcan intends to mitigate these risks with extensive focus on risk mitigation, site selection, testwork, and permitting and financing requirements. An ongoing commitment to these activities is critical to provide data to firm up the process design, provide key sizing data to firm up equipment sizing, and to allow decisions to move the Vulcan Project forward. Sufficiently large owners, consultant, and engineering teams must be mobilized so that risks can be addressed in a timely manner.
- Well failure rate is a risk that is taken into consideration in the development plan by Vulcan, with low rates of failure expected due to the sedimentary play type, and the maturity of the exploration area. This is supported by the target sedimentary reservoir, using 3-D seismic data, and existing wells in the development region.

Various opportunities also exist including:

- Optimizing process conditions (and therefore capital cost and operating costs) to improve recovery, simplify process steps, reduce sorbent quantities, reduce steam requirements – which Vulcan intends to incorporate via testwork and engineering studies.
- Reduce capital cost by optimizing the process conditions; investigating alternative equipment or process steps; optimizing equipment number, size and materials of construction; increasing the vendor base; combining buildings; modularisation; and/or off-site construction – which Vulcan intends to incorporate via testwork, engineering studies, and procurement studies.
- Reduce operating costs by utilizing heat from geothermal plant being used to drive evaporation in a closed loop system thereby using clean built-in renewable energy for improved DLE.
- Provide geothermal heating and power to the local region, per the initiative by Vulcan with multiple local stakeholders.

16) Cautionary Statement

Some of the statements appearing in this IER 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 IER. To the maximum extent permitted by law, none of Vulcan, 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 IER. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this IER reflect views held only as at the date of this IER. This IER is not an offer, invitation or recommendation to subscribe for, or purchase securities by Vulcan. Nor does this IER constitute investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.

Information included in this IER constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance, or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events, or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements, or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements. This IER has been prepared in compliance with the JORC Code 2012 Edition and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward-looking statements in this IER, including with respect to any mining of mineralised material, modifying factors and production targets and financial forecasts. The following information is specifically provided in support of this belief:

The PFS was completed by independent specialist firms with oversight provided by the Company's in-house team.

As is normal for this type of study, the PFS has been prepared to an overall level of accuracy of approximately $\pm 25\%$ for capital and operating costs. Production targets and financial forecasts disclosed in this IER are based exclusively on Indicated Resource categories as defined under the JORC Code 2012.

All material assumptions on which the forecast financial information is based have been included in the IER.

17) Competent Person Statement and Consent:

Information in this IER that relates to Exploration Results and Mineral Resources is based on information compiled by and has been prepared and reviewed by Mr. Roy Eccles P. Geol. of APEX Geoscience Ltd. and deemed to be a 'Competent Person'. Mr. Eccles is a member as a Professional Geologist of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), a 'Recognised Professional Organisation' included in a list that is posted on the ASX website from time to time. Mr. Eccles has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr. Eccles consents to the disclosure of the technical information as they relate to the mineral resource information in this IER in the form and context in which it appears, and consent to and authorise the inclusion of all or part of this information, and all or part of this IER, in the Prospectus.

Information in this IER that relates to Production Targets and Reserves is based on information compiled by and has been prepared and reviewed by Mr. Greg Owen P.Eng., who is a full-time employee of GLJ Ltd. and deemed to be a 'Competent Person'. Mr. Owen is a member as a Professional Engineer of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), a 'Recognised Professional Organisation' included in a list that is posted on the ASX website from time to time. Mr. Owen has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr. Owen consents to the disclosure of the technical information as they relate to the Production Target and Ore Reserve information in this IER in the form and context in which it appears, and consent to and authorise the inclusion of all or part of this information, and all or part of this IER, in the Prospectus.

CONSENT of COMPETENT PERSON

I, D. Roy Eccles, P. Geol., consent to the inclusion in the Prospectus and the public filing of the report titled "Independent Expert Report for Vulcan Resources Zero Carbon Lithium™ Project" with an Effective Date of January 10, 2022 (the "Vulcan Report"), which was prepared for the Issuer, Vulcan Energy Resources Ltd.

This consent of Competent Person is provided pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition and of the Commission Delegated Regulation (EU) 2019/980 of 14 March 2019.

I confirm that I am the Competent Person for the Vulcan Report and:

- I am a fulltime Senior Consulting Geologist and Chief Operations Officer of APEX Geoscience Ltd. (100, 11450-160 Street, Edmonton, Alberta, Canada T5M 3Y7).
- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I have worked as a geologist for more than 35 years since my graduation from university.
- I am a Member and Professional Geologist with the Association of Professional Engineers and Geoscientists (APEGA, 74150) of Alberta, Canada since 2003.
- I have over 10-years experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility (explored for and prepared mineral resource estimates for lithium-brine projects in western Canada, southern United States, Europe and other international destinations).
- I am independent of the Issuer and the Vulcan Property that is the subject of the Vulcan Report.
- I have reviewed the Report to which this Consent Statement applies.

I take responsibility for the preparation of sections 3 to 9, and contributed to sections 1.1 to 1.5, 1.9, 1.10, 2 and 15. I verify that the information pertinent to these sections is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to mineral resource modelling and estimations. I consent to the release of the Vulcan Report of the matters based on this information in the form and context in which it appears.

Dated this January 10, 2022.



D. Roy Eccles M.Sc. P. Geol.
Chief Operating Officer, Senior Consultant
100, 11450 – 160th Street
Edmonton, AB Canada, T5M 3Y7
Office: (780) 467-3532
Email: reccles@apexgeoscience.com
Website: www.apexgeoscience.com

APEX Geoscience Ltd.
www.apexgeoscience.com



CONSENT of COMPETENT PERSON

I, Greg Owen, P.Eng., consent to the inclusion in the Prospectus and the public filing of the report titled "Independent Expert Report for Vulcan Resources Zero Carbon Lithium™ Project" and dated January 10, 2022 (the "Vulcan Report") for Vulcan Energy Resources Ltd.

I verify that the Vulcan Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Production Targets, and Ore Reserve estimation.

This consent of Competent Person is provided pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition and the Commission Delegated Regulation (EU) 2019/980 of 14 March 2019.

I confirm that I am the Competent Person for the Vulcan Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member as a Professional Engineer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), a 'Recognised Professional Organisation' included in a list that is posted on the ASX website from time to time.
- I have reviewed the Report to which this Consent Statement applies.
- I am a full-time employee of GLJ Ltd. at 1920, 401-9th Ave SW, Calgary, Alberta, Canada, in the role of Vice President, Business Development
- I have been engaged by Vulcan Energy Resources Ltd. to prepare this documentation.

I consent to the release of the Vulcan Report of the matters based on this information in the form and context in which it appears.

Dated this January 10, 2022.

Signature of Competent Person

Greg Owen, P.Eng.

Print name of Competent Person



GLOSSARY OF TERMS

Abbreviation/Term	Definition
%	Percent
€	Euros currency
°C	Degrees Celsius
2D seismic	Two dimensional seismic geophysical data
3D seismic	Three dimensional seismic geophysical data
ASX	Australian Securities Exchange
BauGB	German Baugesetzbuch (Building Code)
BBerg	Germany Federal Mining Act (Bundesberggesetz)
CAPEX	Capital expenditure
Cl ₂	Chlorine
CLP	Central Lithium Plant
CP	Competent Person
CO ₂	Carbon Dioxide
DFS	Definitive Feasibility Study
DLE	Direct Lithium Extraction
EBA	European Battery Alliance
EEG	German Renewable Energy Sources Act
EV	Electric vehicles
FOB	Free-on-board
FX	Foreign exchange rate
GW	Gigawatt
GWh	Gigawatt-hour
HCL	Hydrochloric Acid
ICP-OES	Inductively coupled plasma-optical emission spectroscopy
IER	Independent Expert Report
IRR	Internal Rate of Return
JORC	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy (JORC Code 2012)
K	degrees Kelvin
kg/m ³	kilogram per cubic metre
km	Kilometre
km ²	Square kilometres
L or l	Litre
l/s	litre per second
LCE	lithium carbonate equivalent
LHM	lithium hydroxide monohydrate
Li	Lithium
LIB	Lithium-ion battery
Li ² CO ₃	lithium carbonate
LiOH	lithium hydroxide
m	Metres
mΩ·cm	milliohms per centimetre
m ²	Metres squared
mg/L	milligrams per litre
M	Million
MD	measured depth
Mt	Million tonnes
mV	millivolt
MW	Megawatt
MWel	Megawatt electrical
NMC	Nickel, manganese, and cobalt
NPV	Net Present Value
OPEX	Operating expense
ORC	Organic Rankine Cycle
PFS	Pre-Feasibility Study
ppm	parts per million
QA-QC	Quality assurance and quality control
t	tonnes
t/d	tonnes per day
URG	Upper Rhine Graben area, Germany

References

- APEX. (2019). *Geological introduction and maiden Inferred Resource Estimate for Vulcan Energy Resources Ltd.'s Vulcan* .
- APEX. (2020). . *Internal Scoping Study to Evaluate Potential Dual Geothermal Energy and Lithium Hydroxide Production with* .
- ASX. (2020, November 12). *Taro Updated and Increased Resources*. Retrieved from Australian Stock Exchange: <https://www.asx.com.au/asxpdf/20201112/pdf/44ps62n1rs7j20.pdf>
- ASX. (2020, December 15). *Updated Ortenau Indicated and Inferred Resource*. Retrieved from Australian Stock Exchange: <https://www.asx.com.au/asxpdf/20201215/pdf/44qyvlqw6xngvx.pdf>
- ASX. (2021, January 15). *Maiden Indicated Resource Insheim Vulcan Zero Carbon Lithium*. Retrieved from Australian Stock Exchange: <https://www.asx.com.au/asxpdf/20200120/pdf/44dcvqjbp4k9yf.pdf>
- ASX. (2021, January 15). *Positive PFS & Maiden JORC Ore Reserve*. Retrieved from https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02330867-6A1015607?access_token=83ff96335c2d45a094df02a206a39ff4
- ASX. (2021, October 27). *Vulcan responds to disinformation in online report*. Retrieved from https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02443478-6A1059264?access_token=83ff96335c2d45a094df02a206a39ff4
- Benchmark, M. (n.d.). Retrieved from <https://www.benchmarkminerals.com/>
- Canaccord Genuity. (2020). *Lithium 2020 Recharge, Equity Research*.
- Canaccord, G. (2021, November 3). *Company Update Vulcan Energy Resources Ltd*. Retrieved from <https://www.canaccordgenuity.com/capital-markets/>
- CIM, C. I. (2012, 11 1). Retrieved from best Practice Guidelines for Reporting of Lithium Brine Resources and Reserves: <https://mrmr.cim.org/en/best-practices/estimation-of-mineral-resources-mineral-reserves/>
- Climate-Data. (n.d.). Retrieved from Climate-Data: <https://en.climate-data.org/info/sources/>
- Energy Source Minerals. (n.d.). Retrieved from <https://www.esminerals.com/>
- Fastmarkets. (n.d.). Retrieved from <https://www.fastmarkets.com/commodities/industrial-minerals/lithium-price-spotlight>
- GeoT. (2020). *PFS Ortenau and PFS Taro, Production Studies, for Vulcan Energie Ressourcen GmbH, December 2020, 109 and 103 pages*.

- Grimmer et al. (2017). The late Variscan control on the location and asymmetry of . *International Journal of Earth Sciences*, 106(3), 827-853.
- Hatch. (n.d.). *Hatch study includes DLE Plant and CLP plant. Brine extraction and reinjection wells, and geothermal plant by GeoT/GLJ and Gec-Co respectively.*
- Infinity Lithium. (n.d.). Retrieved from <https://www.infinitylithium.com/>
- JORC. (n.d.). Retrieved from Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves: https://jorc.org/docs/JORC_code_2012.pdf
- Macquarie, I.-R. (2021, 04 12). *Lithium Market Outlook*. Retrieved from <https://www.macquarieinsights.com>
- Roland Berger. (2020, 12 11). Retrieved from <https://www.rolandberger.com/en/Insights/Publications/Lithium-ion-batteries-for-the-global-automotive-industry-and-beyond.html>
- S&P , G. (2021, 2 16). *Top electric vehicle markets dominate linthium-ion battery capacity growth*. Retrieved from <https://www.spglobal.com/marketintelligence/en>
- Standard Lithium. (n.d.). Retrieved from <https://www.standardlithium.com/>
- Vulcan. (2021). *Vulcan Energy Zero Carbon Lithium™*. Retrieved from Vulcan Energy Resources Ltd.: <https://v-er.eu/>

Appendix 1: JORC Tables

JORC Code 2012 Table 1. Section 1: Sampling Techniques and Data.

Criteria	JORC Code Explanation	Commentary
Sampling techniques	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg. submarine nodules) may warrant disclosure of detailed information.	- In the Upper Rhine Graben (URG), Germany, O&G exploration is focused dominantly on Triassic-aged reservoirs. In contrast, geothermal wells access hot brine from Permocarboneous Rotliegend Group and Lower Triassic Buntsandstein Group (collectively, Permo-Triassic) sandstone aquifers/reservoirs overlying the basement. These geothermal wells, however, are limited in the URG. Consequently, Vulcan brine sampling programs were limited to collecting Permo-Triassic brine samples from: 4 different geothermal wells located throughout the URG (and in the vicinity of Vulcan’s Ortenau and Taro Licenses) to verify historically reported lithium concentrations. - the Geothermal Plant production well in the Insheim resource area. - Brine can be sampled at the well head, (the hot side of the production circuit) or after the heat exchanger (the cold side of the geothermal production circuit) prior to reinjection of the brine back down into the aquifer. Brine samples taken at the well head require a cooling mechanism (e.g., brine flows through a tube immersed in ice) and a mobile degasser unit to reduce CO₂. No special equipment is required on the cold side of the production circuit. - The brine samples were collected by GeoT. - The Mineral Resources CP collected independent brine samples at the Insheim resource area the results of which confirm the lithium-enriched brine mineralization, the Vulcan sampling program analytical results and historical lithium-in-brine analytical results. - The Mineral Resources CP has reviewed the techniques of the regional brine sampling and the Insheim resource area brine sampling programs and found the sampling was conducted using reasonable techniques in the field of brine assaying and there are no significant issues or inconsistencies that would cause one to question the validity of the sampling technique used by Vulcan. - QA-QC work as part of the sampling program included Sample Blanks (deionized water with no lithium) and Sample Standards (a laboratory prepared brine standard that assimilates hypersaline brine with a fixed value of lithium). The Blanks and Standards were randomly inserted into the sample stream. - Vulcan and GeoT maintained chain of custody of the brine samples from the geothermal well sample point to the respective laboratories in Germany (University of Karlsruhe and University of Heidelberg). In addition, 4 brine samples collected by GeoT were couriered to the Mineral Resources CP in Edmonton, Alberta Canada for analysis at a commercial Canadian

		Laboratory (AGAT Laboratories and Bureau Veritas Laboratory [formerly Maxxam Analytical]). APEX collected brine samples were also analyzed at the 2 Canadian laboratories. - The Vulcan- and Mineral Resources CP site inspection-collected samples verified the Insheim resource area and historical lithium analytical results and confirmed the Permo-Triassic brine in the URG is enriched in lithium. - The average analytical results of brine from the 4 regional wells were identical to the average results from the Insheim resource area, 181 mg/L Lithium. This result is an indication of the homogeneous lithium concentration of Permo-Triassic aquifer brine in the sampled portions of the URG (and in the vicinity of Vulcan's Taro and Ortenau licenses)
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	- Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling and is reliant on existing geothermal wells outside of the Ortenau and Taro License to access brine chemistry. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. - Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, - With respect to drilling information for the Insheim resource area, please refer to the Table 1 information provided in Vulcan's ASX announcement dated 20 January 2020.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	- Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling and is reliant on existing geothermal wells outside of the Ortenau and Taro License to access brine chemistry. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. - Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, - Regional geothermal wells and the Insheim resource area samples were recovered directly from the flowing brine stream within the geothermal facility brine circuit. - The brine sample collection method and sample collection documentation are in accordance with reasonable Lithium brine sampling expectations and Lithium brine industry standards. - There are 2 historical geothermal wells, or petroleum wells, drilled by companies other than Vulcan that extend deep enough to penetrate Permo-Triassic strata within the Ortenau License. The two historical wells were drilled in the southern and northeastern portions of the Ortenau Property, respectively. With respect to brine analytical results, these wells are discussed in more detail in PFS-Section 2, Other Substantive Exploration Data.
Logging	Whether core and chip samples have been	Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling and is reliant

	geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	on existing geothermal wells outside of the Ortenau and Taro License to access brine chemistry. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. • During 2020, GeoT reinterpreted existing 2-D seismic data in the Ortenau License area. This interpretation benefited from a review of historical well logs from two wells. These well logs were created by companies other than Vulcan but benefited the understanding of the subsurface strata underlying Ortenau. That is, the historical well logs helped to orientate the seismic line profiles and confirm and validate key stratigraphic marker horizons including the Buntsandstein surface and fault zones that are critical to the Ortenau License resource estimation process. • During 2020, Vulcan acquired detailed lithological and downhole geophysical measurements from a geothermal well which is located approximately 18 km northeast of the Taro license and 81 km north of the Ortenau License and penetrated through Permo-Triassic strata; the same strata being assessed by Vulcan. Wireline logging runs were performed in the open hole section from 3,155 m MD to approximately 3,294 MD and included: FMI-GR (resistivity image, caliper), DSI-GPIT-PPS-GR (sonic, caliper), LDS-GR (density, photo electric factor), and UBI-GR (acoustic image). The downhole information provided both qualitative (e.g., litho-logs) and quantitative information such as porosity and permeability measurements. These data were used to study and assess the hydrogeological characteristics and variations between, for example, host rock matrix porosity and fault zone fracture porosity. • In addition, the Vulcan Project benefited from oil and gas, and geothermal, log data and seismic profile data that has been compiled into 3-D national geothermal information systems. This work was conducted by state geological surveys and coalitions of German Government and academic working groups and include data and interpretations from geophysical seismic sections and more than 30,000 oil and gas wells, geothermal, thermal, mineral water and mining well boreholes in the Vulcan Project area and URG.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to	• With respect to the Vulcan 2019 brine sampling programs, 3 aliquots of brine were collected at each sample point for various analytical work that included: - o anion chemistry; - o trace metal ICP-OES; and - o dissolved metal ICP-OES. • Brine was collected from the hot and cold circuit sample points to gain an understanding of whether the geothermal plant cycle has any influence on the lithium concentration as the brine cycles through the plant. • The QA-QC protocol included the random insertion of a sample blank (composed of ionized water with no lithium) and a standard sample (a laboratory created Lithium brine standard).

	maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	- The Sample Blanks and Standard Samples were inserted into the sample stream at each sample site. - In addition, duplicate samples were collected at each sample site and the duplicate sample geochemical analyses was conducted at numerous laboratories that included independent University and commercially accredited laboratories. All labs had experience with analyzing lithium in brine. - The sample sizes were appropriate for industry standard brine assay testing. - The brine was collected from perforation points within the geothermal production well. The perforation point at each well sampled was assessed using log data and it was confirmed that the wells were producing from Permo-Triassic reservoirs. Accordingly, the Mineral Resources CP can confirm that the brine sample is representative of the brine being drawn from depths associated with the Permo-Triassic aquifer. The Permo-Triassic aquifer is the focus of Vulcan's lithium brine exploration and the resource estimation work conducted at the Ortenau and Taro licenses.
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	- The same brine sample collection, sample handling, analytical techniques, and QA-QC protocols were used for the regional well sampling and the Insheim resource area well sampling programs. - Site Inspection: Data verification procedures applied by the Mineral Resources CP were performed to confirm the lithium brine mineralization at the Insheim resource area. A Permo-Triassic brine sample collected by the Mineral Resources CP during the site inspection was split and analyzed at 2 separate commercial labs in Edmonton, Alberta Canada (AGAT Laboratory and Bureau Veritas Laboratory). The analytical result of the CP collected samples contained a mean value of 180 mg/L Li substantiating lithium-enriched brine in deep URG aquifer. - As per Vulcan's QA/QC, the Company commissioned the University of Alberta to prepare a laboratory prepared Sample Standard by adding a measured amount of elemental lithium to a hypersaline brine concoction. - A sample blank (composed of ionized water with no lithium) and a standard sample (a laboratory created Lithium brine standard) were inserted into the sample stream at each sample site. - The resulting data – as they pertain to the Sample Blank and Standard Sample samples – were excellent and show the analytical data were performed with high precision. The results helped the Mineral Resources CP deem the data acceptable for the purpose of estimating a mineral resource. - The lithium content (and trace elements) of the brine samples were analyzed by inductively coupled plasma optical emission spectrometry (ICP-OES), which is a standard analytical technique and industry standard for the measurement of lithium-in-brine. - A split of Vulcan's 2019 samples was sent by courier to APEX and analyzed at AGAT Laboratories in Edmonton, AB Canada.

		A comparison of the analytical results between the 3 laboratories yields RSD% values of between 1.3% and 9.6%. It is concluded that there is very good data quality of Vulcan 2019 lithium brine analytical results between the 3 independent labs.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core sampling, and hence, there is no twinned hole information to report. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. - Data verification procedures applied by the Mineral Resources CP were performed on key data components as they pertain to the mineral resource estimation. - Analytical brine data were prepared by independent and third-party universities and or accredited commercial laboratories. - Data verification procedures applied by the Mineral Resources CP were performed to confirm the Lithium brine mineralization within the Permo-Triassic aquifer. For example, a Permo-Triassic brine sample collected by the CP during the site inspection was split and analyzed at 2 separate commercial labs in Edmonton, Alberta Canada (AGAT Laboratory and Bureau Veritas Laboratory). The analytical result contained a mean value of 180 mg/L Li substantiating lithium-enriched brine in deep URG aquifer. The analytical result is nearly identical to the average analytical results of the regional well sampling and Insheim resource area well sampling (181 mg/L Li). - Accordingly, no adjustments to the assay data were made, or necessary. The analytical results, and the QA-QC measures adopted by Vulcan were satisfactory and the original laboratory data were used in the resource estimation process. - The Mineral Resources CP has reviewed all geotechnical and geochemical data and found no significant issues or inconsistencies that would cause one to question the validity of the historical Lithium brine geochemical data – and Vulcan’s 2019 brine geochemical results – to verify that the Permo-Triassic aquifer is consistently enriched in lithium in the deep-seated strata and aquifer underlying the URG. - Based on the Mineral Resources CP experience of measuring lithium in large subsurface, near basement, aquifers – it is commonplace for the reservoirs to have homogenous Lithium brine contents, and therefore, the Mineral Resources CP is confident to apply an average Lithium brine value of 181 mg/L Li to the Permo-Triassic strata underlying Vulcan’s Ortenau and Taro licenses.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used	Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core sampling. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license.

	in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • The regional brine samples were collected from established geothermal wells (owned by geothermal companies other than Vulcan). • Brine the Insheim resource area was collected from production well at the plant, as detailed in the ASX announcement on 20/01/20. • The grid system used is UTM WGS84 zone 32N. • The surface Digital Elevation Model used in the three-dimensional model was acquired from JPL's Shuttle Radar Topography Mission (SRTM) dataset; the 1 arc-second gridded topography product provides a nominal 30 m ground coverage.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core sampling. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. • Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • With respect to the subsurface data, a subsurface interpreted 3-D geological model was used to outline the Permo-Triassic aquifer and fault domains underlying the Ortenau License. This was done through the reinterpretation of existing 2-D seismic data that was acquired in 2020 for use by Vulcan. The seismic data included: - o The usage of twelve 2-D seismic lines were acquired and consist of 8 northwest to southeast orientated lines with 4 perpendicular southwest to northeast tie lines. The total length of the 12 survey lines is 166.0 km. This length includes the whole length of line 7719 (24.8 km), but only the 15.6 km of the line were acquired (i.e., the portion of the line that is in the Ortenau License). The surveys were conducted between 1975 and 1978. - o The usage of three 2-D seismic lines were acquired and consist of 2 northwest to southeast orientated lines with 1 perpendicular southwest to northeast tie line. The total length of the 3 survey lines is 47.7 km. The surveys were conducted in either 1979 (x2 lines) or 1983 (1 line). • With respect to the 2020 acquired 2-D seismic lines and development of an enhanced 3-D geological model, the seismic data and ensuing model covers 100% of the Ortenau License. The distance between the seismic lines ranges from 800 m to 6 km. • Taro License: During 2020, Vulcan acquired existing 2009 seismic data, which was composed of a 3-D Seismic Cube and four 2-D seismic lines. The 3-D cube seismic data covers the entire model area. The 2-D seismic profiles include, generally, 3

		east-west lines and 1 north-south line. The maximum distance between any of the lines is 2.7 km (east area). The 3-D geological model derived from the seismic information covers 82% of the Taro License. • The orientation of the Permo-Triassic strata is generally flat-lying and continuous in the License concessions. As the strata are situated within the URG, high-angle faults have created a complex horst and graben structural environment; having said this, the Permo-Triassic strata maintain their lateral continuity despite being juxtapositioned by rift events. • While locally there is minor faulting and slight offsets, the horizontal continuity of the Permo-Triassic sandstone units is tremendously uniform. This statement is supported by knowledge that the Permo-Triassic strata has been mapped for approximately 250 km along the north-northeast strike length of the entire Upper Rhine Graben. • With respect to brine sampling, and using the Insheim resource area as an example, the brine samples were collected from a well that had 2 separate perforation windows to collect the brine, which is then pumped to the surface for geothermal power processing. The perforation windows are 356 m and 147 m thick. Because the sampled product is a brine in liquid-form and pressurized with CO₂, the affect would mean the brine is sampled from a relatively large Permo-Triassic aquifer domain underlying the area. I.e., a representative sample of the overall Permo-Triassic aquifer/reservoir. • With respect to Lithium brine concentration, the brine analytical results from both the regional well sampling and detailed sampling at the Insheim resource area is identical with average values of 181 mg/L Li. In addition, these values are comparable to historical and proprietary lithium concentrations that were compiled from throughout the URG. The combination of Vulcan-sampled and historically sampled and analyzed brine shows a homogenous Lithium brine in the Permo-Triassic aquifer brine in the vicinity of Vulcan's licenses, including the Ortenau License. • With respect to spacing between sample points, there were no Lithium brine samples collected within the boundaries of the Ortenau and Taro Licenses. The closest wells include the Insheim resource area (14 km south of Taro, 44 km north of Ortenau), Landau (11 km southwest of Taro, 50 km north of Ortenau) and Brühl (18 km northeast of Taro, 81 km north of Ortenau) wells.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key	• Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core sampling. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. • Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • The geothermal wells investigated are highly deviated wells intended to angle into fault zones that enable zones of high fluid

	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	flow. At the Insheim resource area, for example, the perforation windows (356 m and 147 m thick) indiscriminately sample Permo-Triassic brine in the liquid form within a large-scale aquifer. Based on the overall dimensions of the Permo-Triassic aquifer and consistent analytical results, no sample bias is expected. • The 3-D geological models at Ortenau and Taro utilized 3-D seismic cube and/or 2-D seismic profile lines that were acquired by Vulcan specifically for the purpose of improving the 3-D geological model. In the seismic interpretation, 7 formation horizons (Taro) and 4 formation horizons (Ortenau) were selected based on the uniqueness of the marker horizons within the seismic profiles. The 3-D geological model at Ortenau utilized 17 2-D seismic profile lines. The 3-D geological model at Taro utilized an existing 3-D Seismic Cube, four 2-D seismic lines. • At Taro, the faults were interpreted by evaluating every tenth inline and crossline (line spacing of approximately 20 m). To interpret fault zones, the faults must have a minimum horizontal extension of 400 m or more. A total of 31 faults were interpreted to penetrate through the Permo-Triassic strata at the Taro License. Of the 31 faults, 12 faults were used in the Taro geological model and resource estimation process. • At Ortenau, fault zones were picked only where they could be positively identified in the seismic lines and the faults were correlated in consideration of their offset, dip angle and depth. The Ortenau subsurface is characterized by a complex fault geometry within the URG. A total of 24 faults were used in the Ortenau geological model and resource estimation process. • In the opinion of the Mineral Resources CP, the revised Taro geological model using the seismic data provided a higher level of confidence in the spatial location and orientation of the Buntsandstein, Rotliegend and basement surfaces and fault zones. • At Ortenau, the base of the Buntsandstein Group could not be clearly identified because the boundary between Buntsandstein and Permian strata overlying the crystalline basement do not exhibit a distinct lithological change in the seismic profiles. To construct the base Buntsandstein surface, GeoT used an average Buntsandstein Group thickness of 375 m based on published thickness data from throughout the Upper Rhine Graben. Because it is not possible to confidently observe laterally continuous reflector bands below the top of the Buntsandstein Group, it was not possible to map the Rotliegend Group, and therefore, the Permocarboniferous strata are not modelled in this Ortenau License resource estimation. • The 4 marker horizons were validated against litho-logs from the acquired well data drilled in the south and northeast portions of the Ortenau License area. It is concluded that there is good agreement between the reinterpreted seismic line data and the in-situ stratigraphy throughout the Ortenau License and that these data are reasonable and reliable for designing a 3-D geological resource model.

		• Fault zones were delineated in the seismic software, OpendTect, in which GeoT picked fault zones only where they could be positively identified in the seismic lines and the faults were correlated in consideration of their offset, dip angle and depth. A total of 24 faults were interpreted for the entire Ortenau License area. These faults were interpreted to penetrate downwards through the Buntsandstein Group strata at the Ortenau License and is therefore used to develop the 3-D geological model for use in the resource estimation process. • In the opinion of the Mineral Resources CP, the revised Ortenau and Taro 3-D geological model using the acquired seismic data provided a higher level of confidence in the spatial location and orientation of the Buntsandstein and Permo-Triassic surfaces and fault zones. • Detailed studies of nearby well geothermal data acquired by Vulcan in 2020 helped to understand the hydrogeological characteristics of the fault/fracture zones within the Permo-Triassic strata. The structurally complex fault damage zone typically represents conduits for localised high fluid flow of mineralised brine, due to higher fracture abundance and high fracture connectivity. The study showed that the fault zone documented within the core contains an additional fracture porosity of 3.1% (i.e., beyond the mean fracture porosity of the Middle Buntsandstein Group). This value is a conservative evaluation of the fracture porosity as distinct fracture corridors within the fault damage zone can have fracture porosities increased by a factor of >10%.
Sample security	• The measures taken to ensure sample security.	• Vulcan's 2019 brine sampling program was conducted by Dr. Kraml of GeoT. Dr. Kraml collected the samples and maintained their chain of custody from sample site to delivery of the samples to the University of Karlsruhe and University of Heidelberg for analytical work. In addition, Dr. Kraml couriered brine samples to APEX for analytical work at the Canadian Laboratories; during transport, chain of custody was maintained from Dr. Kraml to the courier to the Mineral Resources CP and to the laboratory. • The Mineral Resources CP collected 2 Insheim resource area brine samples. The only time the samples were out of the possession of the CP is during the flight from Frankfurt to Edmonton (in a locked travel bag). The samples were delivered to Canadian independent and commercial laboratories by the CP.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• An audit, or review, of the updated Taro and Ortenau resource estimations has not been completed by an external party to Vulcan. However, a CP that is independent of Vulcan and the Vulcan Property has been involved with all aspects of the Vulcan Project. • The Mineral Resources CP assisted with, and reviewed, the adequacy of Vulcan's sample collection, sample preparation, security, analytical procedures, QA-QC protocol, and conducted a site inspection of the Vulcan Property. • In addition, the Mineral Resources CP coordinated discussion and meetings involving methodologies and interpretation resulting from the exploration work to define the geometry and

		hydrogeological characterization of the Permo-Triassic aquifer that form the basis of the resource model.

JORC Code 2012 Table 1. Section 2: Reporting of Exploration Results.

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	- The Vulcan Zero Carbon Lithium™ Project is comprised of eight separate and non-contiguous granted Exploration Licenses that encompass a total land position of 1002.73 km² within the URG of southwest Germany; Taro, Ortenau, Mannheim, Lampertheim, and most recently at Therese, Ludwig, Kerner and Löwenherz sites. Vulcan recently acquired lithium rights within the production license at the Insheim resource area. - The Ortenau License, which with the Taro license, is the subject of this JORC Table, is 37,360 hectares and is centered at approximately: UTM 421900 m Easting, 5384900 m Northing, Zone 32N, WGS84. - Vulcan was granted 100% of the Ortenau and Mannheim Exploration License for geothermal, brine and lithium exploration by the Baden-Württemberg government office, which is managed by the Freiburg State Office, Council for Geology, Raw Materials and Mining. - Vulcan was granted 100% of the Lampertheim Exploration License for geothermal, brine and lithium by the Hessen government office, which is managed by the Freiburg State Office, Council for Geology, Raw Materials and Mining. - The Taro License, which with the Ortenau license, is also the subject of this JORC Table, is 3,268 hectares and is centred at approximately: UTM 445690 m Easting, 5464950 m Northing, Zone 32N, WGS84. - The Taro License has been granted to Global Geothermal Holding UG, for geothermal exploration which Vulcan has acquired 100%. A licence application by GGH over the same area for lithium is also pending and is expected to be granted shortly. - An Exploration License shall accord the holder the exclusive right to: - Explore for the geothermal resources specified in the license. - To extract and acquire ownership in the resources that must be stripped or released during planned explorations. - To erect and operate facilities that are required for exploring the resources and for carrying out related activities. - Vulcan's Ortenau Exploration license terminates in 2023, at which time renewed exploration and/or application for exploitation licenses are required. There is always some risk or an uncertainty that government regulations and policies could

		change between now and future applications. If required, Vulcan can request an production license at Ortenau, which would grant Vulcan the exclusive right to geothermal resources from brine. The application requires advanced modelling of the aquifer production and injection wells. • Vulcan's Taro exploration license terminates April 23, 2022, at which time renewed exploration and/or application for exploitation licenses are required. There is always some risk or an uncertainty that government regulations and policies could change between now and future applications. If required, Vulcan can request an production license at Taro, which would grant Vulcan the exclusive right to geothermal resources from brine. The application requires advanced modelling of the aquifer production and injection wells. • Any future geothermal brine production would require an operating plan and planning approval procedure that complies with the <i>Act on the Assessment of Environmental Impacts</i>. • In the URG, increased anthropogenic activity such as hydraulic fracking, gas extraction and enhanced geothermal systems can potentially lead to induced seismicity. Seismic risk can be mitigated by: • Performing regularly actual seismic monitoring, particularly before the implementation of stimulation work; • Ceasing to stimulate the reservoir, or • By reducing production flow rates when seismicity occurs during the operational phase.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The Upper Rhine Graben is being actively investigated for its geothermal potential by multiple companies (other than Vulcan). • A summary of historical brine geochemical analytical results (n=43 analyses) was evaluated. This includes historical analysis from the Buntsandstein Group aquifer (n=6) and Rotliegend Group-basement aquifer (n=11), which yield 158.1 mg/L and 157.7 mg/L Li. The historical data are presented in referred journal manuscripts and the Mineral Resources CP has verified that the analytical protocols were standard in the field of brine analysis and conducted at university-based and/or accredited laboratories. The historical geochemical information was used as background information and were not used as part of the resource estimation process. • GeotIS and GeORG are essentially digital geological atlases with emphasis on geothermal energy, and offer extensive compilations of well data, seismic profiles, information, and 3-D stratigraphic content with emphasis on deep stratigraphy and aquifers in Germany. The raw data – such as seismic data – are not available (as they are owned by the respective energy companies), and hence the data/profiles have been collated and interpreted into the representative geo-dataset information systems. These data were evaluated and used to construct the 3-D geological model used in the resource evaluations. • The Ortenau license 3-D Modelling was improved beyond the GeoORG subsurface information through Vulcan's 2020

		acquisition of 2-D seismic profile lines that were acquired by Vulcan specifically for the purpose of improving the 3-D geological model. The seismic information and subsequent 3-D geological models were reinterpreted by GeoT as part of Vulcan's 2020 exploration work. - Any artefacts within the model were revised by APEX Geoscience Ltd., under the supervision of the CP, in advance of resource modelling work. - The Taro license 3-D Modelling was improved beyond the GeoORG subsurface information through Vulcan's 2020 acquisition of 3-D seismic cube and 2-D seismic profile lines that were acquired by Vulcan specifically for the purpose of improving the 3-D geological model. The seismic information and subsequent 3-D geological models were reinterpreted by GeoT as part of Vulcan's 2020 exploration work. Any artefacts within the model were revised in advance of resource modelling work. - Detailed studies of nearby geothermal well data, which is located 18km northeast of Taro and 81 km north of the Ortenau license and was drilled in 2013, were interpreted by Vulcan in 2020 to understand the hydrogeological characteristics of the fault/fracture zones within the Permo-Triassic strata. The dataset included detailed litho-logs and downhole wireline log information that included FMI-GR (resistivity image, caliper), DSI-GPIT-PPS-GR (sonic, caliper), LDS-GR (density, photo electric factor), and UBI-GR (acoustic image). Vulcan commissioned GeoT, now part of Vulcan, to describe and characterize this nearby well data, and more specifically, the Buntsandstein Group's pore space and micro-fractures to develop comparative models for the Permo-Triassic strata underlying the Ortenau license.
Geology	Deposit type, geological setting and style of mineralisation.	- The potential lithium mineralization at Ortenau is situated within confined, subsurface aquifers associated with the Lower Triassic Buntsandstein Group sandstone aquifer situated within the URG at depths of between 2,165 and 4,004 m below surface. - The potential lithium mineralization at Taro is situated within confined, subsurface aquifers associated with the Permocarboneous Rotliegend Group and the Lower Triassic Buntsandstein Group (collectively, the Permo-Triassic strata) sandstone aquifers situated within the URG at depths of between 2,165 and 4,004 m below surface. - The Permo-Triassic strata are comprised predominantly of terrigenous sand facies deposited in arid to semi-arid conditions in fluvial, sandflat, lacustrine and eolian sedimentary environments. - The various facies exert controls on the porosity (1% to 27%) and permeability (<1 to >100 mD) of the sandstone sub-units. Within the Permo-Triassic strata, porosity, permeability, and fluid flow rates are dependent on the fault, fracture and micro-fracture zones that are targeted by geothermal companies in the Upper Rhine Graben.

		• Lithium mineralization occurs in the brine that is occupying the Permo-Triassic aquifer pore space. • With respect to deposit model, the lithium chemical signature of the brine is believed to be controlled by fluid-rock geochemical interactions. With increasing depth, total dissolved solids (TDS) increase in NaCl-dominated brine. Lithium enrichment associated with these deep brines is believed to be related to interaction with crystalline basement fluids and/or dissolution of micaceous materials at higher temperatures. • The Ortenau license geological model benefits from the reinterpretation of existing 2-D seismic data acquired in 2020 by Vulcan. The seismic reinterpretation mapped, in detail, 4 formation horizons based on the uniqueness of the marker horizons within the seismic profiles. Faults were interpreted by detected as the doubling of a reflector (thrust fault) or as missing reflector (normal fault). A total of 24 faults penetrating through the Buntsandstein Group strata were interpreted for the entire Vulcan Project area. The reinterpreted stratigraphic horizons and faults were used to develop the 3-D geological model for use in the Ortenau resource estimation process. • In the opinion of the Mineral Resources CP, the revised geological model using the seismic data provided a higher level of confidence in the spatial location and orientation of the Buntsandstein Group surfaces and fault zones. • The Taro license geological model benefits from 2020 2-D and 3-D seismic data acquired by Vulcan. The seismic interpretation mapped, in detail, 7 formation horizons based on the uniqueness of the marker horizons within the seismic profiles. Faults were interpreted by evaluating every tenth inline and crossline (line spacing of approximately 20 m). To interpret fault zones, the faults must have a minimum horizontal extension of 400 m or more. A total of 31 faults were interpreted for the entire Vulcan Project area. Of the 31 faults, 21 faults were found to penetrate through the Permo-Triassic strata at the Taro license, and hence used to develop the 3-D geological model for use in the resource estimation process. • In the opinion of the Mineral Resources CP, the revised geological model using the seismic data provided a higher level of confidence in the spatial location and orientation of the Buntsandstein at Ortenau, and Buntsandstein, Rotliegend and basement surfaces at Taro. The fault zones interpretations have a higher level of confidence at both Ortenau and Taro. • The structurally complex fault damage zone typically represents conduits for localised high fluid flow of mineralised brine, due to higher fracture abundance and high fracture connectivity. The study showed that the fault zone documented within the nearby well core contains an additional fracture porosity of 3.1% (i.e., beyond the mean fracture porosity of the Middle Buntsandstein Group). This value is a conservative evaluation of the fracture porosity as distinct fracture corridors within the fault damage zone can have fracture porosities increased by a factor of >10%.
Drill hole Information	• A summary of all information material to the	• Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core

	understanding of the exploration results including a tabulation of the following information for all Material drill holes: - o easting and northing of the drill hole collar - o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - o dip and azimuth of the hole - o down hole length and interception depth - o hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	sampling. The resource study was able to utilize subsurface lithological information from historical wells within the Ortenau license. • Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • There are 2 historical geothermal wells, or petroleum wells, drilled by companies other than Vulcan that extend deep enough to penetrate Permo-Triassic strata within the Ortenau license. The two wells were drilled in the southern and northeastern portions of the Ortenau Property, respectively. With respect to brine analytical results, these wells are discussed in more detail in Section 2, Other Substantive Exploration Data. Presently, there are no wells within the boundaries of the Taro license. • It is possible that Vulcan will drill a future well at the Ortenau and Taro licenses, at which time, Vulcan may consider the drill program and drillhole information as material for the Company and Vulcan Zero Carbon Lithium™ Project and disclose the results. • The location and well descriptions of wells that were used to assess the lithium concentration of the brine within Permo-Triassic aquifers within the URG is available in Vulcan’s ASX news release dated 20 January 2020.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal	• Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or core sampling. The resource study was able to utilize subsurface lithological and brine sampling information from historical wells within the Ortenau license. • Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • The brine geochemical data presented represent raw laboratory values. I.e., no weighting average or truncation techniques were applied to the data. • The brine samples represent a liquid medium (and not a solid); hence there are no formal data aggregation methods, and the analytical data is representative of the Permo-Triassic aquifer at any given space and time. • Elemental lithium within the updated Ortenau and Taro license Lithium brine resource estimations were converted to Lithium Carbonate Equivalent (“LCE” using a conversion factor of 5.323 to convert Li to Li₂CO₃); reporting lithium values in LCE units is a standard industry practice.

	equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Within the Ortenau and Taro license areas, which form the basis of the PFS, Vulcan has yet to conduct any drilling or sampling. The resource study was able to utilize subsurface lithological and brine sampling information from historical geothermal wells in the regional URG operated by companies other than Vulcan to acquire brine samples for analysis. • Vulcan has operating geothermal wells with proven drilling information and lithium grades within its newly acquired Insheim resource area, • With respect to the geothermal well data used, all engineering aspects of the wells are documented. Hence, the Mineral Resources CP has a good indication of the true vertical depths of the perforation windows used to sample and pump liquid brine from Permo-Triassic aquifers to the Earth's surface for geothermal power generation. • As mineralization being sought is related to liquid brine within a confined aquifer, intercept widths are a moot point as the well perforation points would essentially gather mineralized brine from the aquifer at large assuming the pumping rate is sufficient enough to orchestrate drawdown of the brine being sampled.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• The associated News Releases and previous News Releases capture critical figures that were used in the updated Ortenau and Taro license resource estimations. • All map images include scale and direction information such that the reader can properly orientate the information being portrayed.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Comprehensive reporting of all Exploration Results is presented in the associated News Release and in the associated Technical Reports. • There are no outlier analytical results in the geochemical dataset used to evaluate the lithium concentration of Permo-Triassic aquifer brine. The Lithium brine values are homogenous in the vicinity of Vulcan's resource licenses: Ortenau, Insheim resource area and Taro licenses. •
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical	• A substantive amount of historical data was used to investigate and define the hydrogeological characterization of the Permo-Triassic aquifers. These included over 1,800 and 1,000 Buntsandstein Group and Rotliegend Group porosity and permeability measurements. • Historical geochemical data were used to assess the lithium concentration of Permo-Triassic aquifer brine. A total of 43 historical brine analysis records were compiled. These historical data were verified by Vulcan during their 2019 brine sampling

	test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	campaigns and it is the opinion of the Mineral Resources CP that: ○ The Permo-Triassic aquifer has homogeneous concentrations of lithium in the vicinity of the Ortenau, Taro, and Insheim licenses. ○ The verification of historical geochemical results produced a geochemical dataset that is reliable and sufficient for use in the resource estimation presented in the Technical Report. • During 2020, Vulcan commissioned GeoT, now part of Vulcan, to: 1) review the acquired seismic information and nearby well data, 2) to conduct hydrogeological characterization studies specific to URG Permo-Triassic fault/fracture zones, and 3) make inferences on potential geothermal well (and Lithium brine) production scenarios and their influence on fluid flow within and adjacent to fault/fracture zones. The Mineral Resources CP has reviewed a series internal reports (n=4) and found them to factually prepared by persons holding post-secondary degrees with an abundance of experience and knowledge in the URG and geothermal exploration and exploitation within the URG. This work helped the CP to substantiate and justify the resource estimation domains and wireframes created as part of the updated Ortenau license Lithium brine resource estimation process. • Two geothermal, or oil and gas wells, were historical drilled by companies other than Vulcan within the boundaries of the Ortenau license. ○ K 1 was drilled through a Tertiary fault zone located approximately 1,000 m above the Buntsandstein Group prior to the hole's termination 14 m into the upper Buntsandstein Group. The K 1 well was not productive and is now abandoned or plugged. No Buntsandstein brine analysis, or porosity and permeability measures, were taken at K 1 (historically or by Vulcan). ○ The B 1 well penetrated through Permo-Triassic strata and 2 brine samples were historically collected through perforation points located at the end of the well within the crystalline basement as reported by Sanjuan et al., (2016). Significantly, basement-derived brine from the B 1 well has significantly lower Li (average 41.1 mg/L; n=2 analysis) in comparison to the average Permo-Triassic brine documented by Vulcan (181 mg/L Li). The CP has reviewed this discrepancy and found that the B 1 borehole was originally intended to intersect granite; however, the well was drilled into the Omerskopf para- and ortho-gneisses. The resulting brine chemistry is significantly different in comparison to Permo-Triassic brine and/or fractured granite basement domains at the Landau, Insheim, Rittershoffen Soultz, Landau, and Cronenbourg geothermal wells. It is concluded that the lithium concentration of 41 mg/L Li in the B 1 brine sample is in equilibrium with cooler brine with high TDS, Ca, Na, Cl, and Mg, and decreasing Li:Na ratios, and is representative – at least at B-1 – of a brine sample was collected from fluid along subvertical fractures in the gneiss. Any future

		exploration conducted by Vulcan would target Permo-Triassic strata overlying fractured granite basement terranes.
Further work	- The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Recommendations may apply to all Vulcan license areas, though the basis for this JORC table is related to only the Ortenau and Taro license areas. - A further exploration program at the Ortenau license is recommended, including 1) acquisition of all appropriate permits and licenses to drill a geothermal well at the Ortenau license, 2) a drill program to drill a test production geothermal well, 3) collection of brine assay samples from the well to verify lithium concentrations, 4) addressing modifying factors toward a Feasibility Study technical report, and 5) preparation of a Feasibility Study technical report. - A further exploration program at the Taro license is recommended, including 1) acquisition of all appropriate permits and licenses to drill a geothermal well at the Taro license, 2) a drill program to drill a test production geothermal well, 3) collection of brine assay samples from the well to verify lithium concentrations, 4) addressing modifying factors toward a Feasibility Study technical report, and 5) preparation of a Feasibility Study technical report.

JORC Code 2012 Table 1. Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	- Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. - Data validation procedures used.	- The review of third-party, government and/or compiled data was conducted by the Mineral Resource CP who – to the best of their knowledge – can confirm the data was generated with proper procedures, has been accurately transcribed from the original source and is suitable for use in the updated Ortenau and Taro resource estimations. - The Mineral Resources CP was able to verify the lithium content in Permo-Triassic brine from the MoU Area geothermal well during a September 2019 site inspection. - The Mineral Resources CP was involved in designing the brine sampling and analytical protocol and can verify that the brine samples were collected and analyzed using standard industry practice. QA-QC protocol included Blank samples and Standard samples and the analysis was conducted by multiple independent laboratories. The Lithium brine concentration results had a high level of precision of reproducibility (see Vulcan’s ASX News Releases dated 4 December 2019 and 20 January 2020). - Lastly, based on Mineral Resources CP previous experience and research of confined lithium-brine deposits, and sampling and analytical protocols, the Mineral Resources CP is satisfied to include these data in resource modelling, evaluation and estimations as part of Vulcan’s updated Ortenau and Taro license lithium-brine resource estimations.

		• With respect to the 3-D geological model for Ortenau, the newly acquired existing 2-D seismic data were reviewed by GeoT on behalf of Vulcan. The reinterpretation included picking distinct seismic reflectors marker horizons for stratigraphic surface picks (including the top of the Buntsandstein Group), and a review and measuring of the vertical displacement of the faulted strata. • Once the stratigraphic surfaces and fault zones were picked, dxf files of the 3-D surfaces/faults were reformatted in MicroMine by APEX Geoscience Ltd. Under the direction of the Mineral Resources CP, discrepancies, or artefacts, in the picked surfaces and/or fault zones were evaluated against the original seismic data and then corrected. • The 3-D model was then evaluated by the Mineral Resources CP for final error checking and validation. In addition to visual checks, APEX validated the model by entering log data from the historical wells into MicroMine along with 3 seismic profile lines (from the north, central and south parts of the Ortenau license). • In the opinion of the Mineral Resources CP, the Ortenau license 3-D subsurface geological model represented a significantly improved geological model in comparison to the previous geological model, which was constructed using the regional URG GeORG cross-sectional data. • Lastly, fault hydrodynamic studies on well log and downhole geophysical measurements from the logged historical well which is in the URG and 81 km north of the Ortenau license, enabled the Mineral Resources CP to validate the enhancement of porosity and permeability within URG fault zones. • It is the opinion of the Mineral Resources CP that the database integrity represented reasonable and valid contributions to conducting mineral resource estimation processes and the Mineral Resources CP is satisfied to include these data in updated resource modelling, evaluation and estimations at the Ortenau license. • With respect to the 3-D geological model for Taro, the newly acquired 2-D and 3-D were reviewed by GeoT on behalf of Vulcan. The review included checking seismic profile reflectors that were selected for the stratigraphic picks, and a review and measuring of the vertical displacement of the faulted strata, which was very evident on the seismic profiles. Any discrepancies, or artefacts, in the picked surfaces and/or fault zones were evaluated against the original seismic data and then corrected by GeoT. The 3-D model was then transferred to the Mineral Resources CP for final error checking and validation. • In the opinion of the Mineral Resources CP, the Taro license 3-D subsurface geological model represented a significantly improved geological model in comparison to the previous geological model, which was constructed using the regional URG GeORG cross-sectional data. • Lastly, the nearby well data acquired by Vulcan in 2020 enabled the Mineral Resources CP to validate the enhancement of porosity and permeability within URG fault zones. • It is the opinion of the Mineral Resources CP that the database integrity represented reasonable and valid contributions to conducting mineral resource estimation processes and the Mineral Resources CP

		is satisfied to include these data in updated resource modelling, evaluation and estimations at the Taro license. For a summary of the lithium analytical results used in the resource estimation, please see ASX announcements dating 4 December 2019 and 20 August 2020.
Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	- The Mineral Resources CP conducted a site inspection of the Vulcan Property on September 17, 2019. - The site inspection visited 3 of the Vulcan Project licenses and included a meeting and tour of the Insheim facility. - The site inspection of the Vulcan Property observed the existing infrastructure at/near the Property licenses, including primary and secondary road networks that make the licenses accessible and with ease of access to the electrical power grid. - At the Insheim resource area, the Mineral Resources CP collected two brine samples and delivered them to the independent and accredited laboratories in Edmonton, Alberta. Both labs routinely process high TDS brine and perform trace element analysis for lithium. The results (mean of 180 mg/L Li) validated lithium-enrichment of the Permo-Triassic aquifer brine.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- The addition, and reinterpretation, of existing 2-D seismic data significantly increased the Mineral Resources CP's confidence level in the subsurface 3-D geological model. Previously – the Ortenau geological model utilized regional URG subsurface sectional data acquired from GeORG (see Vulcan's ASX announcement dated 4 December 2019). - The interpreted seismic data enabled the Mineral Resources CP to create detailed Buntsandstein Group surface, which provided higher confidence in wireframing the Buntsandstein Group domain, and in the calculation of aquifer volume and brine volume for the resource estimation process. The 2-D seismic profiles covered 100% of the Ortenau license. - Using the seismic profiles, 4 subsurface stratigraphic horizons were correlated throughout the Ortenau license with confidence including the top surface of the Buntsandstein Group. The 4 marker horizons were validated against litho-logs from wells drilled in the southern and northern portions of the Ortenau license area. - The base of the Buntsandstein Group could not be clearly identified because the boundary between Buntsandstein and Permian strata overlying the crystalline basement do not exhibit a distinct lithological change in the seismic profiles. To construct the base Buntsandstein surface, the Mineral Resources CP used an average Buntsandstein Group thickness of 375 m based on published thickness data from throughout the URG and verified the base contact using GeORG cross-sectional information. - In addition, the fault/fracture zones were distinguished in the seismic profiles, and therefore, the nature and positioning of the fault zones in the 3-D geological model were created with a higher level of confidence. The vertical displacement of the fault zones on the seismic profiles enabled the Mineral Resources CP to define the activity level of the fault zone: Of the 24 faults, 20 were interpreted to be active. The fault zones were picked only where they could be

		positively identified in the seismic lines and the faults were correlated in consideration of their offset, dip angle and depth. • The vertical displacement of the fault zone on the seismic profiles was also used to make calculated inferences on the horizontal width of the fault zone in the geological model, which defines the Buntsandstein Group fault zone domain in the resource modelling. • The addition of 2-D and 3-D seismic data significantly increased the Mineral Resources CP's confidence level in the subsurface 3-D geological model. Previously – the Taro geological model utilized regional URG subsurface sectional data acquired from GeORG. The detailed seismic data enabled the Mineral Resources CP to create very detailed Buntsandstein Group, Rotliegend Group, and basement surfaces, which provided higher confidence in the calculation of aquifer volume and brine volume for the resource estimation process. The 3-D cube and 2-D seismic profiles covered 82% of the Taro license. • In addition, the fault/fracture zones were easily distinguished in the seismic profiles, and therefore, the nature and positioning of the fault zones in the 3-D geological model were created with a high level of confidence. The vertical displacement of the fault zones on the seismic profiles enabled the Mineral Resources CP to define the activity level of the fault zone and make calculated inferences at the horizontal width of the fault zone in the geological model. • Interpretation of a detailed downhole geophysical dataset from the Brühl well enabled the Mineral Resources CP to analyze and verify the hydrogeological characteristics, including average fracture porosity and permeability, within URG fault/fracture zones. • Vulcan's 2019 Lithium brine sampling and analytical program verified the historical lithium in URG Permo-Triassic brine. The resulting analytical data also provided confidence in the homogeneous lithium concentration of the Permo-Triassic brine in the vicinity of the Ortenau and Taro licenses. • The Mineral Resources CP used an abundance of regional porosity information to develop a conservative average host rock matrix porosity value that was used in the resource calculation.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The geometry of the Permo-Triassic strata at the Taro Property has a gentle south-east dip. The top and base surface elevations of the Buntsandstein Group under the Taro license is from -2,125 to -3,569 m below sea level (m asl; average of -2,580 to -3,192 m asl) with an average thickness of 611 m. The top and base surface elevations of the Rotliegend Group under the Taro license is from -2,898 to -3,796 m asl (average of -3,324 to -3,519 m asl) with an average thickness of 196 m. In the 3-D geological model, the Buntsandstein and Rotliegend groups encompass 100% and 69% of the Taro license, respectively. • Taro Exploration license is 32.68 square kilometres (3,268 hectares) in size and is centered at approximately: UTM 445690 m Easting, 5464950 m Northing (Zone 32N WGS84). • The Taro license is composed of 2 contiguous squares. The larger, northeast square measures 5.0 km east-west by 5.2 km north-south.

		The smaller, southwest square measures 2.9 km east-west by 2.5 km north-south. • The geometry of the Buntsandstein Group strata at the Ortenau Property has a gentle south-east dip. The top and base surface elevations of the Buntsandstein Group under the Ortenau license is from -2,222 to -2,586 m below sea level with an average thickness of 373 m. • In the 3-D geological model, the Buntsandstein Group encompasses 100% of the Ortenau license. • The Ortenau Exploration license is 373.60 square kilometres (37,360 hectares) in size and is centered at approximately: UTM 421900 m Easting, 5384900 m Northing (Zone 32N WGS84). • The Ortenau license is spatially orientated in a northeast-trending direction with the license corners measuring 19.7 km and 28.7 km (elongated southwest-northeast direction) and 11.9 km and 16.6 km (width-wise corner orientated west-northwest to east-southeast and east-west, respectively).
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• This PFS study utilises Lithium brine resource estimates for the Ortenau and Taro licenses at the Vulcan Property. • The workflow implemented for the calculation of the Vulcan lithium-brine resource estimations was completed using: the commercial mine planning software MicroMine (v. 20.5). • The resource is calculated using a volumetric approach. Critical steps in the determination of the Taro and Ortenau lithium-brine resources include: ○ Definition of the geology, geometry and volume of the subsurface Buntsandstein Group domain aquifers underlying the Ortenau license. ○ Definition of the geology, geometry and volume of the subsurface Buntsandstein Group and Rotliegend Group domain aquifers underlying the Taro license. ○ Hydrogeological characterization and an historical compilation and assessment of mean porosity within the URG Permo-Triassic strata. ○ Determination of the concentration of lithium in the Permo-Triassic brine aquifers based on Vulcan's brine sampling programs. ○ Demonstration of reasonable prospects of eventual economic extraction are justified. ○ Estimate the in-situ lithium resources of Buntsandstein Group brine underlying the Ortenau license using the equation: <i>Lithium Resource = Total Volume of the Brine-Bearing Aquifer X Average Effective Porosity X Average Concentration of Lithium in the Brine.</i> • A previous maiden Ortenau license Lithium Inferred Resource estimation was prepared by the Mineral Resources CP on November 26, 2019 (see Vulcan ASX announcement dated 4 December 2020). The 2019 resource estimation used regional URG GeoORG

	• Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	subsurface to create the geological model and calculate the aquifer and brine volumes. • During 2020, Vulcan reinterpreted 2-D seismic data and detailed lithological and downhole wireline log data from the Brühl well, which is located approximately 81 km north of the Ortenau license but penetrates the same Buntsandstein unit of interest. • The detailed seismic data and downhole data enabled the Mineral Resources CP to develop a robust 3-D geological model and understand the hydrogeological characteristics of fault zones within the Permo-Triassic strata. Accordingly, the Mineral Resources CP has updated Vulcan's lithium-brine resource estimations for the Ortenau license. The current resource estimations replace and supersede the November 26, 2019 Ortenau resource report. • A previous maiden Lithium brine Inferred Resource estimation was prepared by the Mineral Resources CP on November 26, 2019, and thereafter on 31 August 2020. The 2019 resource estimation used regional URG GeoORG subsurface to create the geological model and calculate the aquifer and brine volumes. During 2020, Vulcan acquired 2-D and 3-D seismic data and detailed lithological and downhole wireline log data from the nearby well, which is located approximately 18 km northeast of the Taro license. The detailed seismic data and downhole data enabled the Mineral Resources CP to develop a robust 3-D geological model and understand the hydrogeological characteristics of fault zones within the Permo-Triassic strata. Accordingly, the Mineral Resources CP has updated Vulcan's lithium-brine resource estimations for the Taro license. The current resource estimations replace and supersede the November 26, 2019, and August 31, 2020 resources. • The only element being estimated is lithium, and consideration of deleterious elements is beyond the scope of this early-stage project and resource estimate (i.e., is dependent on mineral processing and lithium recovery flowsheets). • During 2020, Vulcan commissioned 3 independent laboratories, or chemical engineering consulting companies, to perform Direct Lithium Extraction adsorption testwork on Upper Rhine Graben Permo-Triassic brine to produce lithium chloride concentrates that can be processed into battery chemicals. The analytical results verified the principles of brine pre-treatment techniques and Direct Lithium Extraction operations with initial findings of greater than 90% LiCl recovery from the geothermal brine. Vulcan experimentally demonstrated the removal of transition metals and silica that are expected to be incompatible with common adsorption media. • Two separate geological domains were wireframed for the updated Ortenau license resource model and estimations, and include: 1) Buntsandstein Group, and 2) 24 fault zones within the Buntsandstein Group strata. • The Buntsandstein Group domain is represented by the upper and lower surfaces within the 3-D model. • Four separate geological domains were wireframed for the updated Taro license resource model and estimations, and include: 1) Buntsandstein Group, 2) Rotliegend Group, 3) 12 fault zones, and 4) a

		host rock envelope spaced 450 m away from each fault zone (in both directions from the fault). • The Buntsandstein and Rotliegend domains are represented by the upper and lower surfaces from the 3-D model. • The dimensions of the fault zone domain correlate with the seismic data, in which: ○ The displacement of the fault zone in the seismic profiles determined whether the fault was ‘active’ or ‘inactive’ ○ The minimum and maximum vertical displacement of the fault was measured, and the total displacement was multiplied by a coefficient factor of 1.3 to determine the width of the fault zone in the geological model. The value, 1.3, represents the average ratio of vertical to horizontal displacement in measured outcrop sections in the URG. ○ Hence, the fault zone domains in the resource estimation are believed to be a reasonable representation of any given fault. • The extent of Buntsandstein Group and Buntsandstein Group fault zone resource domain wireframes were clipped to the boundary of the Ortenau license. The wireframes were created by constructing 2-D strings of each wireframe by using the top and bottom of the Buntsandstein stratigraphy and/or observed and calculated width of the fault zone. The 2-D strings were then connected to create a solid 3-D wireframes. • The volume of the Buntsandstein aquifer domain underlying the Ortenau license was calculated using the 3-D wireframes created in MicroMine. The aquifer volume underlying the Ortenau license is summarized as a total Buntsandstein Group domain aquifer volume of 117.97 km³ and a total Buntsandstein Group fault zone domain aquifer volume of 17.00 km³. • A brine volume was calculated by multiplying the aquifer volume (in m³) times the average porosity times the percentage of brine assumed within the pore space (100% as there is no oil within the Permo-Triassic samples collected by Vulcan and CO₂ gas is in its dissolved state at reservoir pressures). • A regional mean matrix porosity of 9.5% was used for the Buntsandstein Group aquifer. A fracture porosity value of 3.1% was added for the fault zone domain such that a fault zone porosity of 12.6% was assigned for the fault domain within the Buntsandstein Group aquifer. In the Mineral Resources CP’s opinion, the porosity values are conservative. • The brine volume underlying the Ortenau license is summarized as a total Buntsandstein Group domain brine volume of 11.21 km³ and a total Buntsandstein Group fault zone domain brine volume of 2.14 km³. • The dimensions of the host rock envelope domain have been allocated at 450 m on either side of the fault. Justification for this domain is based on an iterative production scenarios in which the placement of production and injection wells stimulates a hydraulic gradient that

		sequesters brine from the host rock matrix porosity to flow back toward the fault zone fracture porosity zone. • The extent of all 4 resource domain wireframes were clipped to the boundary of the Taro license. The wireframes were created by constructing 2-D strings of each wireframe by using the top and bottom of the Buntsandstein-Rotliegend stratigraphy and/or width of the fault zone and host rock envelope. The 2-D strings were then connected to create a solid 3-D wireframes. • The volume of the Permo-Triassic aquifer domain underlying the Taro license was calculated using the 3-D wireframes created in MicroMine. The aquifer volume underlying the Taro license is summarized as: ○ A total Buntsandstein Group aquifer volume of 19.95 km³, of which, 1.94 km³ occurs within the fault zone domain and 5.29 km³ occurs within the host rock envelope. ○ A total Rotliegend Group aquifer volume of 4.39 km³, of which, 0.23 km³ occurs within the fault zone domain and 0.97 km³ occurs within the host rock envelope. • A brine volume was calculated by multiplying the aquifer volume (in m³) times the average porosity times the percentage of brine assumed within the pore space (100% as there is no oil within the Permo-Triassic samples collected by Vulcan and CO₂ gas is in its dissolved state at reservoir pressures). • Regional mean matrix porosities of 9.5% and 9.0% were used for the Buntsandstein Group and Rotliegend Group aquifers (including the host rock envelope domain). A fracture porosity value of 3.1% was added for the fault zone domain such that a fault zone porosity of 12.6% and 12.1% was assigned for the fault domain within the Buntsandstein Group and Rotliegend Group aquifers, respectively. In the Mineral Resources CP's opinion, the porosity values are conservative. • The brine volume underlying the Taro license is summarized as: ○ A total Buntsandstein Group brine volume of 1.96 km³, of which, 0.24 km³ occurs within the fault zone domain and 0.50 km³ occurs within the host rock envelope. ○ A total Rotliegend Group brine volume of 0.40 km³, of which, 0.03 km³ occurs within the fault zone domain and 0.09 km³ occurs within the host rock envelope. • The average lithium-in-brine concentration used in the resource estimations is 181 mg/L Li and is based on the average of 23 samples that were analyzed by trace metal ICP-OES analysis at 3 independent laboratories. • No top cuts or capping upper limits have been applied, or are deemed to be necessary, as confined Lithium brine deposits typically do not exhibit the same extreme values as precious metal deposits (and this statement is applicable to the Permo-Triassic aquifer Lithium brine data in this study). • The lithium resource estimate is then calculated using the equation expressed in this table cell above.

		The 3-D geological model, aquifer and brine volume calculations and resource estimations were checked and validated by the Mineral Resources CP.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not applicable. The lithium resource is a brine-hosted resource.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A lower cutoff of 100 mg/L Li is used in this Lithium brine resource estimation. It is the opinion of the CP that this cutoff is acceptable because: 1) confined aquifer deposits traditionally have lower concentrations of lithium (in comparison to unconfined lithium-brine salar and hard rock lithium deposits), and 2) numerous commercial projects are developing direct lithium extraction methods using low lithium concentration source brine.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	- It is the CPs opinion that geothermal facilities and Lithium brine extraction operations are a good fit co-production opportunity. - The Lithium brine extraction pilot plant (or commercial operation) could be situated after the heat exchanger, and therefore would not influence the main purpose of the geothermal plant. - Assuming the lithium extraction process causes only small compositional changes to the brine (which has been preliminary shown in the geochemical data assessed in the Technical Report), the lithium-removed brine, as well as any evolved gases, could return to the subsurface aquifer via the reinjection well. Hence it is assumed both companies (geothermal and lithium) are extracting their own commodity of interest with virtually no interference between the two processes. - It is also assumed that Vulcan could drill their own wells at the Vulcan Property's licenses. The 3-D geological models completed for each license shows there is a high degree of faulting with potential for high fluid flow in the Permo-Triassic strata underlying all of the Vulcan Property licenses.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	- Confined aquifer Lithium brine deposits traditionally have lower concentrations of lithium in comparison to unconfined Lithium brine salars and hard rock lithium deposits. In addition, the aquifer deposits typically occur in areas where solar evaporation is not an option. Consequently, several laboratories (commercial, academia, independent) are attempting to develop modern technology that will beneficiate and recover the Lithium brine from these types of deposits in real time. The developers are aware that the technology must incorporate lower source concentrations of lithium and are therefore testing Lithium brine at low lithium concentrations. Accordingly, there are several laboratories that are experimenting with rapid lithium extraction techniques and/or conduct testwork on low lithium source brine, including starting source levels of approximately 50 mg/L Li. - It is the opinion of the Mineral Resources CP that the extraction of lithium from confined brine aquifers has advanced in the last 2-3 years such that the technology is commercially viable. For example, Standard Lithium Ltd. has successfully advanced their LiSTR Direct

		Lithium Extraction Technology through the bench scale and pilot stages and is proceeding to industrial demonstration scale. During 2020, Vulcan conducted initial bench-scale mineral processing (DLE) testwork on URG Permo-Triassic brine. The analytical results verified the principles of brine pre-treatment techniques and Direct Lithium Extraction operations with initial findings of approximately 90% LiCl recovery from the geothermal brine. Vulcan has also experimentally demonstrated the removal of transition metals and silica that are expected to be incompatible with common adsorption media.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	- Recent Government policy emphasizes conservation and hence promotes development of renewable sources, such as solar, wind, biomass, water, and geothermal power. It is the opinion of the CP that green energy opportunities such as Lithium brine projects will be viewed favourably by the German Government. - The CPs relies completely on statements provided by Vulcan that a geothermal exploration license in the region of the mining authority of Rheinland-Pfalz grants the user exclusivity to co-produce lithium from the brine, should a permission to extract lithium be requested. This statement is reportedly reiterated from discussion between Vulcan and the mining authorities. - In the URG, increased anthropogenic activity such as hydraulic fracturing, gas extraction and enhanced geothermal systems can potentially lead to induced seismicity. Seismic risk can be mitigated by: - Performing regularly actual seismic monitoring, particularly before the implementation of stimulation works, - Ceasing to stimulate the reservoir, or - By reducing production flow rates when seismicity occurs during the operational phase.
Bulk density	- Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. - The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	- Bulk density is not applicable, or necessary to be applied, to the liquid, brine-hosted resource. - The lithium resource was calculated using the volume of the brine bearing aquifer, the average effective porosity, the percentage of brine in the pore space and the average concentration of lithium in the brine.

Audits or reviews.	The results of any audits or reviews of Mineral Resource estimates.	Vulcan's Lithium brine Project is an early-stage exploration project. No audits have been conducted on the resource estimations calculated at the Vulcan Lithium brine Project.
Classification	- The basis for the classification of the Mineral Resources into varying confidence categories. - Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). - Whether the result appropriately reflects the Competent Person's view of the deposit.	- The Vulcan Ortenau license Lithium brine project has reasonable prospects for eventual economic extraction based on aquifer geometry, delineation of fault zones using re-interpreted seismic data, brine volume, brine composition, hydrogeological characterization, porosity, fluid flow, and advancement of the Company's Direct Lithium Extraction technology. - This lithium-brine Technical Report has been prepared by a multi-disciplinary team that include geologists, hydrogeologists, geothermal specialists, and chemical engineers with relevant experience in the Permo-Triassic brine geology/hydrogeology and Lithium brine processing. There is collective agreement that the Vulcan Project has reasonable prospects for eventual economic extraction, and Mr. Eccles P. Geol. takes responsibility for this statement, as Mineral Resources CP. - The updated Taro license Lithium brine resource estimations are classified as Indicated and Inferred Resources. - Pertinent points to support an Indicated Resource classification at the Taro license include: 1) a greater level of confidence in the subsurface geological model because of Vulcan's acquisition of detailed seismic data, 2) acquisition of a detailed downhole geophysical dataset to analyze the hydrogeological characteristics of a fracture zone within a geothermal well, and 3) knowledge of Vulcan's commissioned DLE absorption mineral processing testwork and results. The Indicated Resource area is approximately 12.9 square kilometres and represents 39% of the overall Taro license. - The Taro license updated Inferred Resource includes all Buntsandstein Group and Rotliegend Group resource area that is not within the Indicated Resource domains (i.e., fault zone or host rock envelope adjacent to the fault zones; or 61% of the Taro license). - The updated Ortenau license Lithium brine resource estimations are classified as Indicated and Inferred Resources. - Pertinent points to support an Indicated Resource classification at the Ortenau license include: 1) a greater level of confidence in the subsurface geological model because of Vulcan's acquisition of detailed seismic data, 2) acquisition of a detailed downhole geophysical dataset to analyze the hydrogeological characteristics of a fracture zone within a geothermal well, and 3) knowledge of Vulcan's commissioned DLE absorption mineral processing testwork and results. - The Indicated Resource represents a 12.6% portion of the overall Ortenau license. - The Ortenau license updated Inferred Resource includes all Buntsandstein Group resource area that is not within the Indicated Resource fault zone domain.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an	In the opinion of the Mineral Resources CP, the Ortenau and Taro license Lithium Indicated and Inferred Resource estimations reasonably reflect the Lithium brine resource of the modelled Permo-

	approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Triassic aquifer at the Taro license and Buntsandstein Group aquifer at the Ortenau license. • The Mineral Resources CP is adequately confident in the continuity of geology, depiction of the fault zones, volume of the Buntsandstein (Ortenau) and Permo-Triassic (Taro) aquifer domain, lithium concentration and reliability of quality, quantity, and distribution of the input data. • As the resource is calculated using a volumetric approach, any changes to the 3-D model, the Permo-Triassic and fault zone wireframes, lithium concentration and/or the porosity will affect the calculated resource estimate. • Risks and uncertainties as they pertain to the Lithium brine resource estimations include: ○ Brine access and supply security. Vulcan is either reliant on current geothermal producers to obtain a continual source of brine or must drill their own wells. ○ Risks and uncertainties associated with exploration. Because there are no wells producing brine from the Buntsandstein Group or Permo-Triassic strata at the Ortenau and Taro licenses, exploration will play a major role in determining the viability of this Vulcan Project. As exploration continues, it will reduce the inherent risks and increase the probability of success. ○ The resource evaluation in this the Technical Report and this IER has wireframed ‘all’ faults within the Buntsandstein Group strata underlying the Ortenau and Taro licenses into fault zone and host rock envelope domains. The reader should be aware that the reality of any geothermal exploration program is that only a portion, or portions, of the fault zones will be targeted with a production well(s) at the Ortenau and Taro licenses. It is possible that additional wells are drilled to expand the production zone but its unlikely that this would sequester Lithium brine from all the fault zones modelled in this resource evaluation. ○ Justification for the host rock envelope domain at Taro is based on iterative production scenarios where the hydraulic gradient and brine flow direction is adjusted through the placement of production and injection wells. In this scenario, dilution factors caused by injecting the spent brine into the hydraulic system are unknown and could influence the timeline of an operational Lithium brine extraction program. ○ Localized high permeabilities can lead to channelling effects such that the geothermal reservoir potentially becomes restricted to only occurring within the fault zone. Thus, the exploitation of fault zones can constitute a trade-off between high permeability and reduced reservoir volumes.

JORC Code 2012 Table 1. Section 4: Estimation and Reporting of Ore Reserves

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	- Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. - Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	- The Mineral Resource estimate was undertaken by the Mineral Resources CP as outlined in Sections 1-3 above and takes into account the reasonable potential for eventual extraction, as the specific yield values and permeabilities used for estimation are allocated by unit. Units with lower drainable porosity and low permeability have a lower conversion to Reserves, regardless of the Resource volume they occupy, as less of the material can be extracted over the life of mine. - Ore Reserves are defined based on the Indicated Mineral Resources, with the Resources in question now in the Indicated Category, as required by the JORC Code.
Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	The Competent Persons have not visited the site due to COVID restrictions. However, the technical team which conducted the Production Study are very familiar with the Vulcan Project, being local to the area.
Study status	- The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. - The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	- A Pre-Feasibility Study (PFS) has been completed, with Hatch Ltd., a major international engineering consultancy, leading the lithium extraction section. GeoT conducted a well production study as part of this PFS. The evaluation of brine extraction, DLE and lithium hydroxide production and the associated modifying factors discussed more in detail below support the definition of Probable Reserves. - The PFS has defined a production well field configuration with simulations of brine extraction over the proposed life of mine undertaken to evaluate the evolution of pumping, potential impacts and to develop a production schedule for the Vulcan Project. The schedule is based on the installation of 15 production wells across two license areas (Taro and Ortenau) over the life of the study.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A cut-off of 100mg/L Li has been applied to the Resource used in the Production Study.
Mining factors or assumptions	- The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimization or by preliminary or detailed design). - The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	- Indicated Mineral Resources from the Ortenau and Taro licenses were converted to Probable Mineral Reserves, based on the results of the PFS and consideration of the modifying factors identified in the PFS. Some site-specific information from the Upper Rhine Valley brine reservoir is available, with some assumptions due to the deep nature of the Resource. - The mining method is dictated by the deposit type, in which brine is hosted in pore spaces between grains of sediments and within natural fault fractures. Deep wells are installed to allow flow of brine to the wells and exploitation of the brine by pumping from the wells, developing cones of depression around the individual wells as brine flows to the wells. - There is no open pit or underground excavation (because the brine is pumped out from wells) and no geotechnical parameters are directly

	• The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made, and Mineral Resource model used for pit and stope optimization (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	measured. The future change of lithium concentration in wells will be monitored as part of the future monitoring and pumping activities. • No dilution or brine recharge has been factored into this study due to the nature of the deep brine resource and the stage of the study. • The mining recovery conversion from Resources to Reserves is typical of results for lithium brine operations, taking account of losses/recoveries through the recovery method and production plant, and recovery from the sediments hosting brine. • Minimum mining widths are not relevant in the context of this Vulcan Project. • Inferred Resources are not considered for the purposes of the production plan and Reserves. • The infrastructure required for brine extraction is the establishment of the proposed wellfield and the associated pumps and pipework to allow the brine to be pumped up to the geothermal plant and DLE plant.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralization. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical testwork undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale testwork and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• The metallurgical process proposed is Direct Lithium Extraction (DLE), using a sorbent-based extraction method, as used by several producers worldwide, including in Argentina and China. This will be followed by lithium hydroxide production using modified chlor-alkali methods. The majority of the proposed equipment is in use in either DLE lithium projects or in the chlor-alkali industry, although the specific sorbent used as a basis for this study, as well as the specific electrolysis technology, is not in commercial use at this time. These technologies are considered appropriate for the production of lithium hydroxide following the required testwork, development and engineering. • Limited metallurgical testwork was carried out with bulk brine samples at vendors and at independent laboratories and is considered appropriate for initial indications of performance to support the Vulcan Project. Extensive testwork remains to be performed before or during the DFS to finalize design, equipment selection, process configuration and all performance characteristics. • The testwork was carried out by highly experienced lithium brine processing testwork Company IBZ Geochemie GmbH, supervised by Vulcan's chemical engineering team
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterization and the consideration of potential sites, status of design options	• No waste rock characterization studies are needed, due to the well-type lithium brine extraction method proposed. • Consideration has been given to local environmental and social restrictions when reviewing potential well sites.

	considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Environmental permits and studies are being commenced by the Company towards the next stage of project development, including production well drilling at Taro and 3D seismic surveys at Ortenau.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.	- The Vulcan Project is in the Upper Rhine Valley, which is an area extremely well serviced by infrastructure. - A preliminary study has shown potentially available land areas for plant development. - Power, transportation, and highly skilled labor are readily available throughout the area. Water is readily available, although whether the water will be sourced from municipal sources or local shallow groundwater wells will be determined at a site-specific level. - Transportation can be via electric trucks and/or barges on the Rhine to local chemical/industrial parks.
Costs	- The derivation of, or assumptions made, regarding projected capital costs in the study. - The methodology used to estimate operating costs. - Allowances made for the content of deleterious elements. - The source of exchange rates used in the study. - Derivation of transportation charges. - The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. - The allowances made for royalties payable, both Government and private.	- The Vulcan Project PFS has used costs based on vendor quotations and the extensive knowledge of Hatch and Gec-Co engineers. - Operating costs were estimated based on the definition of the extraction process, testwork which has been undertaken to define the process, vendor inputs, and benchmarks. Vendor quotations were used for reagent and DLE sorbent costs, which together with electricity are the largest component of the Vulcan Project operation costs. Manpower levels are based on Hatch and Gec-Co experience. Manpower costs are based on published rates. Electricity prices and chemical prices correspond to expected costs for products delivered at the project's location. - The process requires the removal of deleterious elements to specifications for the final high-quality product and has been considered in the estimation of costs. - The lithium hydroxide price has been estimated using experienced industry analyst forecasts, as well as trade statistics collated by Vulcan's in-house lithium market expert, Vincent Ledoux Pedailles. - All costs were estimated in Euros. - Costs of all production supply items have been taken at the proposed plant, thus there is no transport cost to add from the supply side. - Prices for lithium hydroxide considered in the economic evaluation, correspond to CIF Europe prices, with all cost items necessary to transport produced lithium hydroxide to European markets included in the operations costs. These costs include trucking the lithium hydroxide to cathode plants, which are the expected destinations for this product. - Lithium hydroxide is a specialist product and is historically sold under contract, with prices specific to the purity provided by individual producers. The Company will be supplying battery quality lithium hydroxide to the specific requirements and specification of cathode manufacturers. - Since no lithium production currently exists in Germany, royalty rates, if any, will need to be discussed with the Mining Authority, and have been provisionally set at zero, based on Section 32-2 of the German Mining Law, which allows for an exemption of royalties, given Vulcan would be "ensuring a supply of raw materials to the market, for improving the utilization of deposits or for protecting any other national economic interests".
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head	The head grade has been determined by the resource model which has been developed for the Vulcan Project and is based on regional

	grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	drilling, geochemistry and seismic data, which was used to produce the Indicated Resources. - Commodity prices are based on forward estimates by experienced industry consultants Fastmarkets and Canaccord. - All costs were estimated in Euros. For lithium pricing, a US-Euro conversion rate of 0.85 has been used in calculations. - Transportation costs are included in the estimation of operating costs (see section above). - Product sale prices and potential penalties are discussed in the previous section. - The operating costs are for lithium hydroxide only and do not include any allowance for by-product credits, except for HCl and renewable energy. Renewable energy produced by the geothermal plant will be sold into the grid at a fixed feed in tariff rate of €0.25 per kWh, in accordance with the German Renewable Energy Law.
Market assessment	- The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. - A customer and competitor analysis along with the identification of likely market windows for the product. - Price and volume forecasts and the basis for these forecasts. - For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	- The Company is well placed to benefit from the market window caused by the significant increase in demand related to electric vehicle uptake in Europe. - The Company is well placed on the cost curve, and will produce a final product, unlike many hard rock competitor companies. The Vulcan Project will fall in the lower part of the cost curve, being competitive with other existing and forecasted new lithium projects. - Canaccord and Fastmarkets average annual prices for lithium hydroxide to remain above \$15,000/t long term on both a nominal and real (inflation adjusted) basis. This price level reflects the requirement for producers to invest in new capacity to satisfy future consumption and to incentivise the financing of new projects. - The Vulcan Project will produce battery quality lithium hydroxide, to the specifications of European cathode manufacturers.
Economic	- The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. - NPV ranges and sensitivity to variations in the significant assumptions and inputs.	- The economic analysis was undertaken by Optiro Ltd., using information compiled for the Vulcan Project by Hatch, GeoT and Gec-Co. The Vulcan Project economics were estimated with discount rates between 6% for the geothermal operation and 8% for the lithium operation. This was used to evaluate the range in NPV. - Sensitivity analyses are shown in the body of this document. The Vulcan Project is generally resilient to most major factors and is most sensitive to lithium price and brine flow rate variation.
Social	The status of agreements with key stakeholders and matters leading to social license to operate.	In keeping with the stage of the Vulcan Project at Pre-Feasibility level, the Company has not concluded any agreements with local stakeholders. As part of the next stage of the Company's project development activities, the Company's stakeholder liaison team has commenced engagement and consultation at local, state and federal levels.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	The PFS has identified a number of risk factors, both related to the natural environment and other aspects of the Vulcan Project. The natural risks identified are considered to be manageable, assisted by the extensive experience of the Vulcan team in developing geothermal projects in the Upper Rhine Valley.

	- Any identified material naturally occurring risks. - The status of material legal agreements and marketing arrangements. - The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent	Material legal agreements are understood to be in good standing. The properties are granted exploration licenses. Vulcan holds the rights to geothermal energy, brine and lithium in Ortenau, whereas at Taro it holds the rights to geothermal brine, due to differing state application processes from different interpretations of the same federal mining law. Vulcan understands in consultations with the state mining authorities that having the rights to geothermal brine at Taro also give it exclusive rights to lithium, since the lithium is contained within the brine. A separate application has also been submitted for lithium rights. There is no current marketing arrangement in place, but an offtake agreement or similar is likely be negotiated prior to or as part of Vulcan Project financing. Applications will be submitted for production well drilling at Taro, and 3D seismic surveys at Ortenau followed by production well drilling and are expected to be granted in the timeframes anticipated.
Classification	- The basis for the classification of the Ore Reserves into varying confidence categories. - Whether the result appropriately reflects the Competent Person's view of the deposit. - The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The Reserves have all been classified as Probable, in keeping with the resources used being all in the Indicated category.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Reserves have been independently reviewed by GLJ Ltd., who provided the Competent Person sign-off of production targets and reserves estimates.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and,	- The Probable Mineral Reserve is considered to have a reasonable level of confidence based on the original quality of information collected, the local and international experience of the technical team interpreting the information, the continuity of the mineralization and the understanding of the geology, plus the demonstrable amenability to extract by pumping from deep wells in the Upper Rhine Valley. This statement relates to the global Probable Reserve, which is based on the Indicated Resources. - Modifying factors include, but are not limited to, mining, processing, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and government factors. The permitting of the Vulcan Project by the government, which requires relevant environmental approvals depending on each location, is considered as a modifying factor. This a potential schedule risk, but based on information from the Company, the CPs have reason to believe that there is a reasonable probability for full approvals.

	if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognized that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	