RESOURCES

VULCAN ENERGY

Zero Carbon Lithium™

Corporate Presentation
Q1 2020

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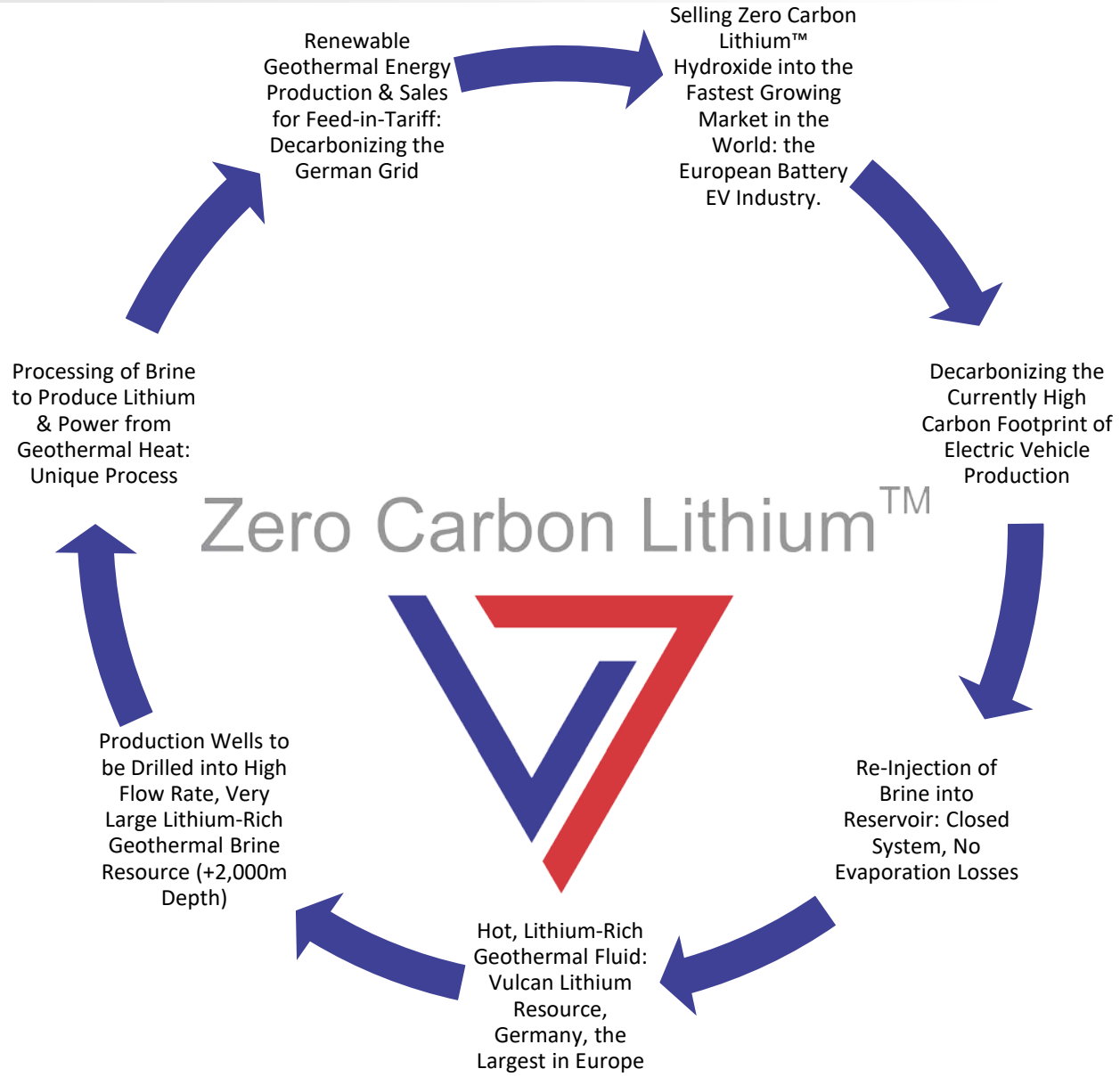
Competent Person Statement

The information in this report that relates to Mineral Resources is extracted from the ASX announcement made by Vulcan on the 20th of January 2020, which is available on www.v-er.com. The information in this presentation that relates to the Scoping Study for the Vulcan Lithium Project is extracted from the ASX announcement “Positive Scoping Study – Vulcan Zero Carbon Lithium Project”, released on the 21st of February 2020 which is available on www.v-er.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Mission Statement & Summary



Vulcan Energy Resources seeks to decarbonize the currently high carbon footprint of lithium-ion batteries used in electric vehicles, by producing a unique, world-first Zero Carbon Lithium™ product from its Vulcan Project, which is the largest lithium project in Europe, and located in the heart of the EU's rapidly growing battery "Mega-Factories".

Vulcan will disrupt and lead the resource industry towards a Zero Carbon future.

Vulcan Summary: Best-in-Class for the 2020s

VULCAN ENERGY RESOURCES
Zero Carbon Lithium™

1.

World's 1st & Only Zero-Carbon Lithium™ Process

- ❑ **Purpose-built** process to be **uniquely Zero Carbon**
- ❑ Co-generation of geothermal energy from production wells will power lithium extraction
- ❑ **Negative CO_2/t** LiOH H_2O, **decarbonising** the grid while producing lithium, compared with **~15 tonnes CO_2 for hard-rock**

2.

Positive Scoping Study

- ❑ World-leading industry experts in lithium extraction and geothermal behind first of its kind study
- ❑ Provides solid basis for feasibility studies to commence shortly

3.

Dual Revenue Potential

- ❑ Dual Lithium Hydroxide & Renewables Project
- ❑ Principal revenue potential from selling **battery-quality LiOH H2O** chemicals into the European market
- ❑ Secondary revenue potential from planned **renewable** geothermal power generation, which benefits from Feed-in-Tariff.

4.

Size & Quality: Europe's Largest Lithium Resource

- ❑ JORC Mineral Resource Estimate[1] **13.95 Million Tonnes** LCE Indicated & Inferred
- ❑ **One of the largest lithium resources in the world**
- ❑ High Li grades for geothermal brine which has readily available heat & power
- ❑ Large enough to be **Europe's primary source** of **battery-quality lithium hydroxide**

5.

Location: Centre of Fastest Growing Market

- ❑ **EU fastest growing lithium market in the world. Unprecedented demand forecast** from growth in EVs
- ❑ Located in Germany, in the **centre of the** industry
- ❑ **Zero local supply** of battery quality lithium hydroxide
- ❑ **Removes dependence** on China for this designated Critical Raw Material

6.

Local Partners & Infrastructure Access

- ❑ MoU with German geothermal operator Pfalzwerke geofuture, part of large Pfalzwerke Group
- ❑ Allows for access to producing wells to advance pilot processing
- ❑ Potential for fast-track to production from existing infrastructure

7.

The Right Team For The Job

- ❑ Expert multi-disciplinary team local to project area in Germany
- ❑ Decades of experience in developing & permitting geothermal brine projects
- ❑ International project finance, lithium market & direct lithium extraction processing expertise

8.

World's Most Rapidly Advancing Lithium Project

- ❑ Maiden Resource & Scoping Study completed in **just five months**
- ❑ **Targeting short-term production start,** in line with lithium supply-demand inflection point

[1]See VUL announcement 20/01/2020

1. Zero Carbon Lithium™ Products: Unprecedented Demand

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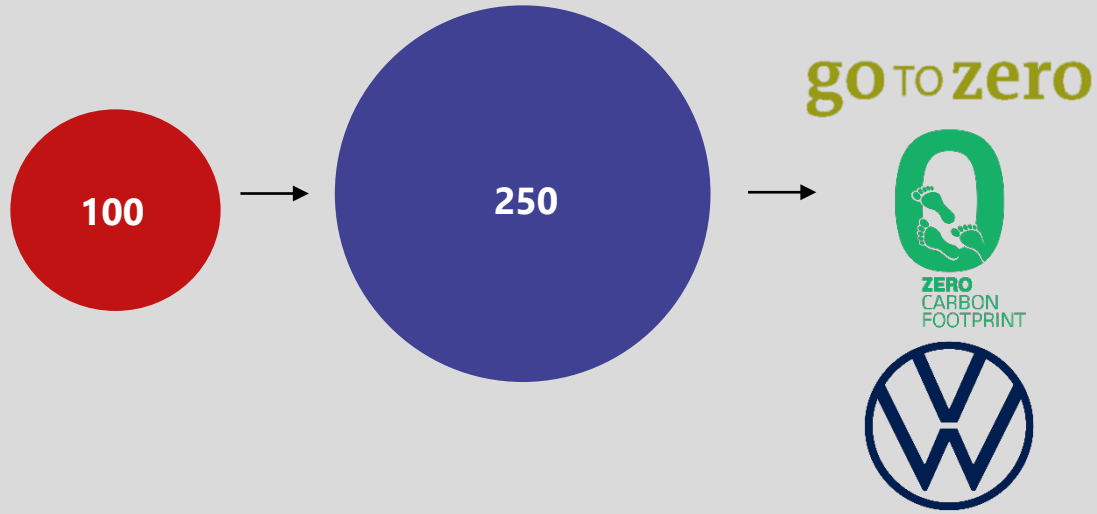
Zero Carbon Lithium™

- EV raw material supply chains have a carbon footprint problem.
- Volkswagen is placing **great importance on having a CO_2-neutral production supply chain** for its new EV line-up, with sustainability metric for suppliers on par with price.
- Other European OEMs following suit.
- The European Commission has flagged **"CO_2 Passports"** for electric vehicles, which will detail their full CO_2 impacts.
- EU has declared a climate emergency and aims to **cut 55% of emissions by 2030, net zero by 2050.**
- The world's conventional lithium supply chains are not geared towards low carbon intensity production, so **Europe will need to build its own.**

Embodied Manufacturing tCO_2 Emissions (Normalized)



Source: Adapted from Volkswagen Presentation, ID. Insights, Sustainable Mobility, 2019

"Volkswagen's delivery promise: CO_2-neutral production including supply chain"

"Sustainability as selection criteria on par with quality and price"

1. Independently-Verified Zero CO_2 Credentials: World-First

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Zero Carbon Lithium™

Europe's Choice: "No need for high energy mining, crushing, grinding and roasting processes used in hard-rock lithium deposits."

Minviro Independent ISO 14044 Study

Hard-rock spodumene in Australia/Portugal with downstream fossil-fuel fired processing: roasting rocks in China: **13-15 tonnes CO_2/t LiOH•H_2O**

Salar-type lithium brine in South America: **5 tonnes CO_2/t LiOH•H_2O with heavy water impact** on a dry environment

Vulcan geothermal-type brine project: **negative CO_2/t LiOH•H_2O**, **decarbonizing** both the European grid and lithium supply chain simultaneously.

Zero Carbon Lithium™ Products: Premium, Peerless and Disruptive

2. Positive Scoping Study

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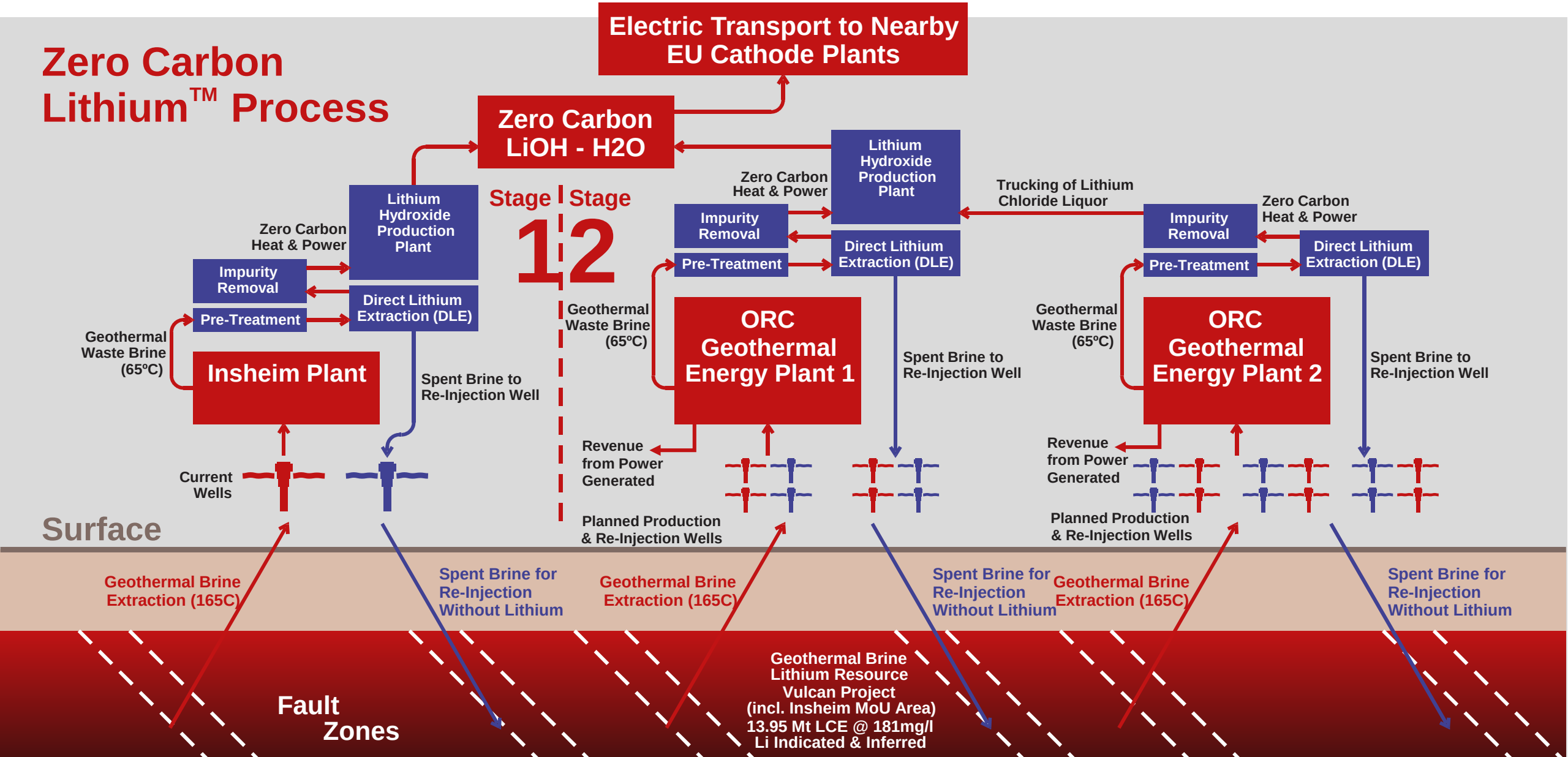
Zero Carbon Lithium™



2. Direct Lithium Extraction: Commercial Future of Lithium

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DLE Plants: Commercially Operating Now

Multiple **operational, commercial plants** world-wide, including:

- The Vulcan Project will utilize a Direct Lithium Extraction (DLE) process to extract lithium from the brine, driven by **readily-available heat & power** used to produce premium, battery quality **Zero Carbon Lithium™** hydroxide.
- DLE used at **Livent's** Hombre Muerto operation in Argentina for **25 years producing consistent product:** 25ktpa LCE production
- Zangge DLE Lithium Project is fully operational in Qinghai, China with a capacity of 10ktpa LCE. Sunresin supplied equipment.
- Lanke DLE Lithium plant also in Qinghai, China: 20ktpa production in 2019, expanding **to 30ktpa** in 2020.

Livent SUNRESIN

DLE from brines used by multiple commercially operating projects. Lithium industry is shifting to DLE processes, because:

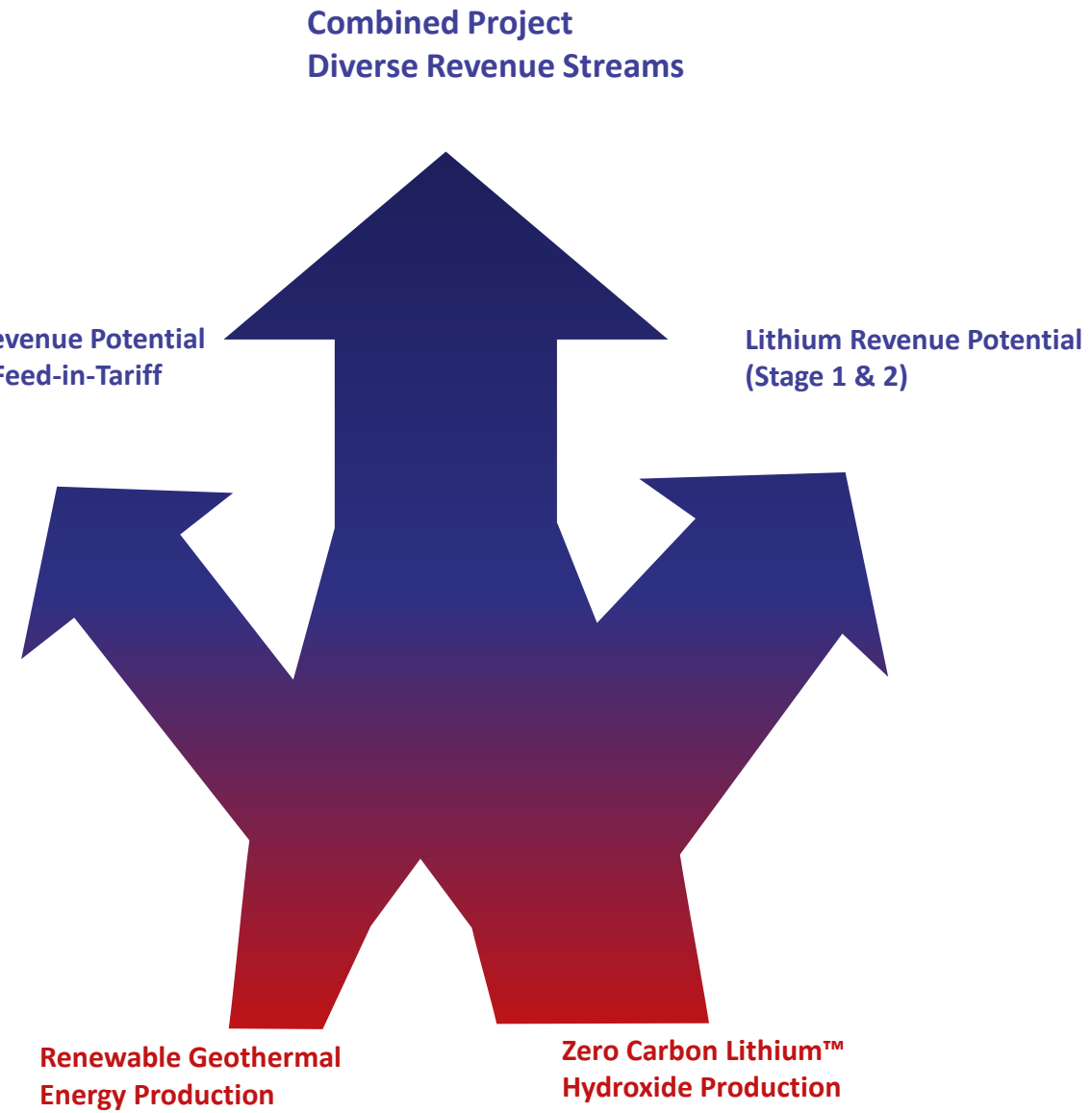
- Lithium extraction in hours instead of months.
- Not weather-dependent like evaporation, in increasingly unstable climate.
- Ability to produce consistent chemical product for battery industry.
- Spent brine re-injected into reservoir with no evaporation losses. No water stress unlike current South American projects.

DLE Plants: In Development

AXIONIT Anson Resources LAKE RESOURCES NRG METALS INC. Cypress DEVELOPMENT CORP. ENERGY SOURCE lithium STANDARD POWERING THE FUTURE BHE RENEWABLES A Berkshire Hathaway Energy Business CONTROLLED THERMAL RESOURCES Lilac solutions

3. Dual Revenue Potential

- Potential to split project funding into renewables & lithium project with separate investors.
- When combined, the project is underpinned by favourable Feed-in-Tariff rates for geothermal energy produced.
- Exposure to upside of lithium price environment, widely forecast to improve in 2020s.
- Combined project revenue streams de-risk overall operation.



Funding flexibility & project de-risking from multiple revenue streams

4. Size: Vulcan Project Resource is World-Class

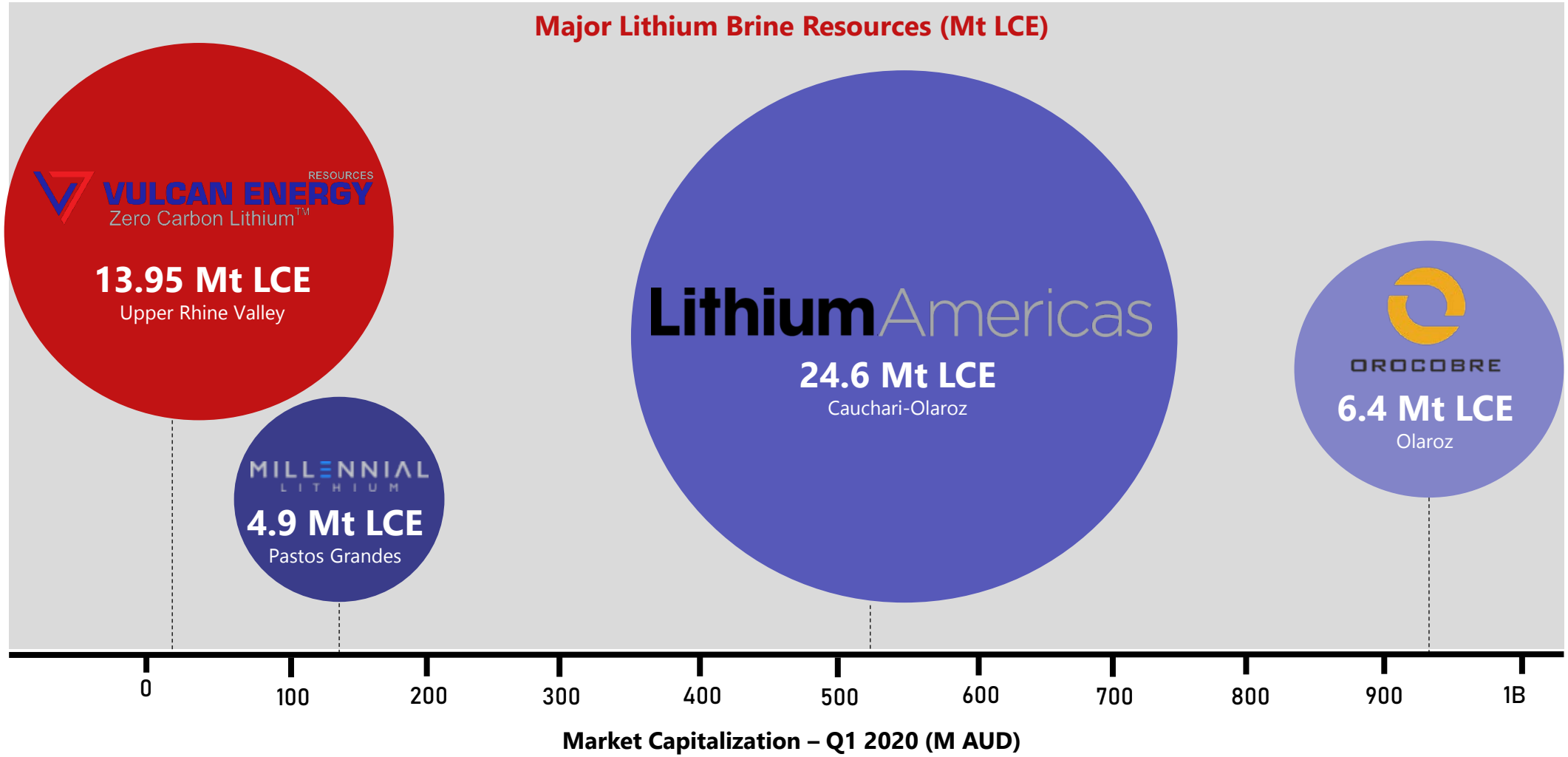
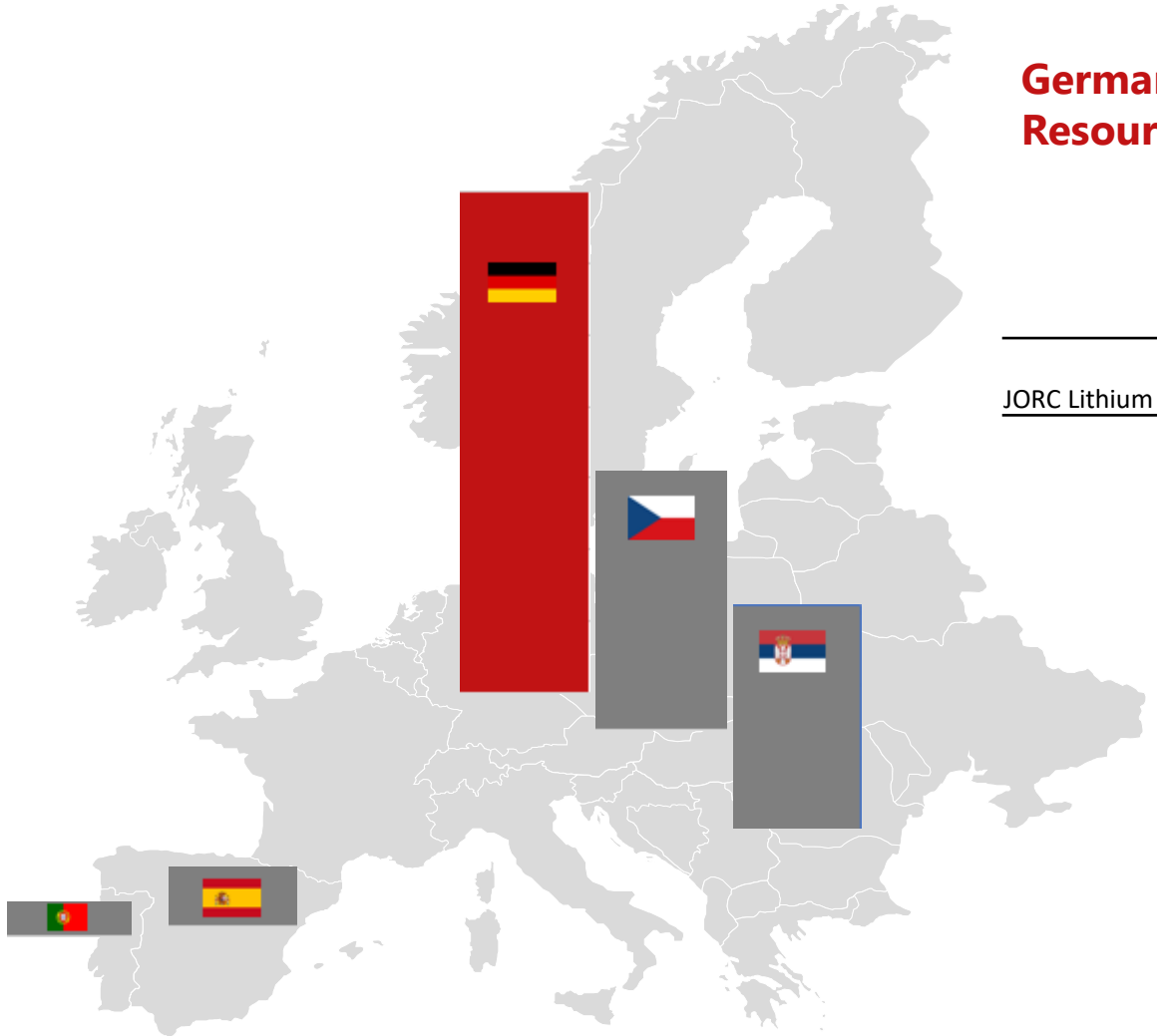


Chart compares resources from companies at different stages of development as detailed in Appendix 3, with Vulcan Lithium Project which is a mixture of Indicated and Inferred Mineral Resources as per VUL ASX announcement 20/01/2020. The Company is not aware of any new information or data that materially affects the information included in the announcement. All material assumptions and technical parameters underpinning the Mineral Resource in the relevant announcement continue to apply and have not materially changed. Market capitalisations converted to A$m as at 23 January 2020

4. Size: Upper Rhine, Germany, is Europe's "Lithium Valley"



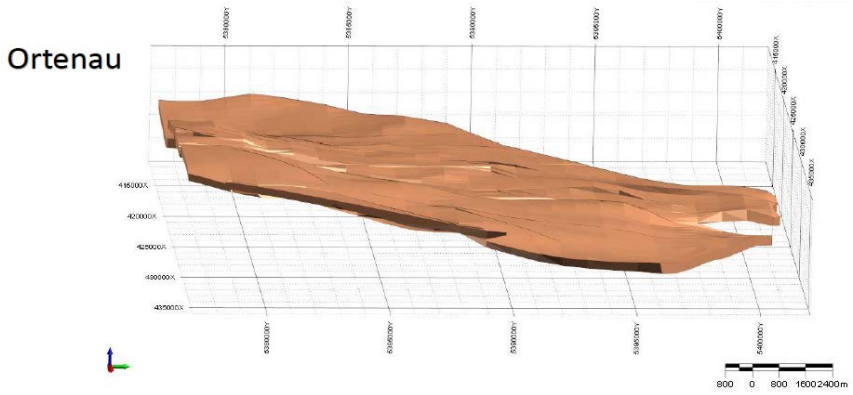
Germany: Largest JORC Lithium Mineral Resource Endowment in Europe

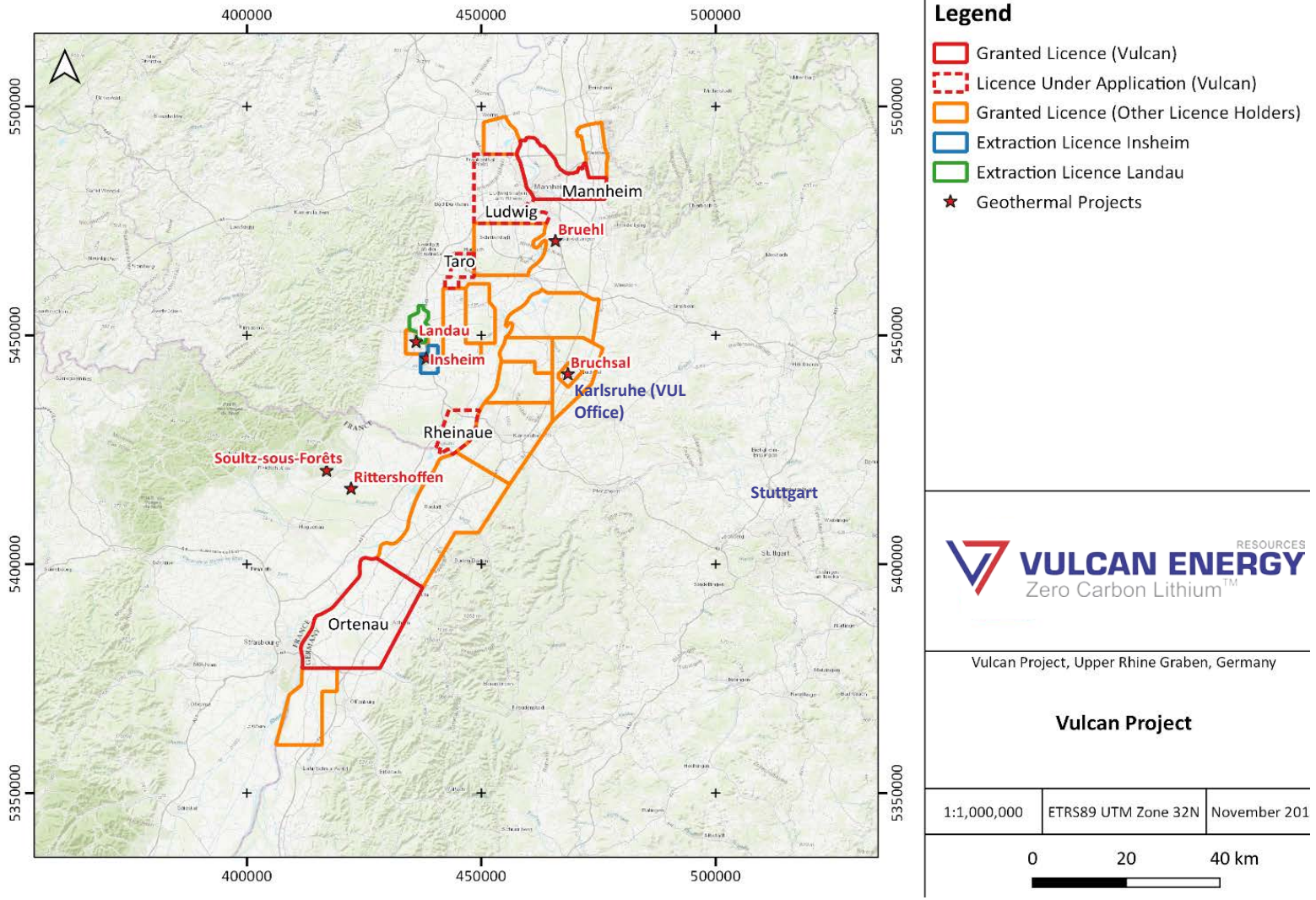
	Germany (Vulcan Project)	Czechia	Serbia	Spain	Portugal
JORC Lithium Mineral Resource Endowment (Mt LCE)	**13.95**	7.17	6.24	1.68	0.71

Image shows resources collated from companies at different stages of development as detailed in Appendix 3, with Vulcan Lithium Project which is a mixture of Indicated and Inferred Mineral Resources as per VUL ASX announcement 20/01/2020. The Company is not aware of any new information or data that materially affects the information included in the announcement. All material assumptions and technical parameters underpinning the Mineral Resource in the relevant announcement continue to apply and have not materially changed.

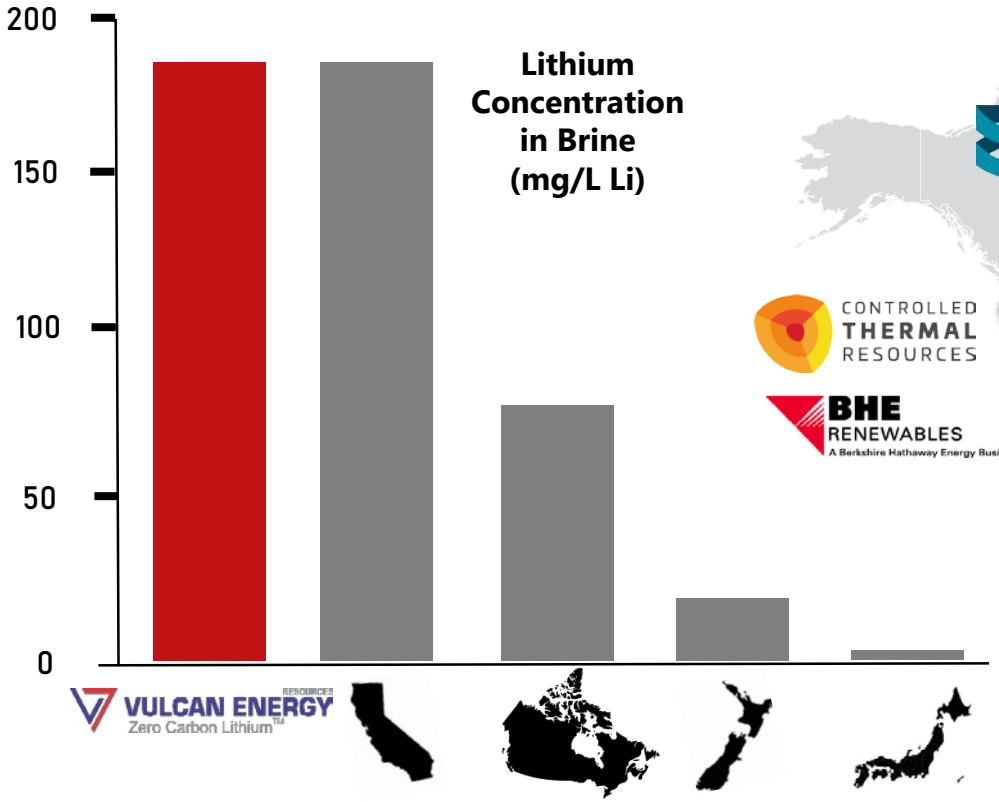
4. Size: Large, Strategic Project Area in the “Lithium Valley”

- Most well-explored graben system in the world: large quantities of existing 2D and 3D seismic data to **shortcut development timeline.**
- **Dominant** license landholding in lithium-rich brine field - ~ 800 km^2 of license area.
- Thousands of historical wells and multiple operating geothermal wells in the region provide **a wealth of data** and **readily accessible brine**.
- Geothermal brine production socially & environmentally accepted in region with vineyards and communities next to existing operations.





4. Quality: Rare Lithium Grades, Heat & Brine Flow Rate



- Vulcan geothermal brine field exhibits Li values one to two orders of magnitude greater than typical geothermal brines[1]: average of 181 mg/L Li.
- Typical geothermal brine fields have lithium values in the order of 1-10 mg/L Li[1].
- Only other known geothermal field with similar lithium grades & flow rate is Salton Sea, California[1].
- Sept 2019, Livent invested $5.5M in E3 Metals to produce LiOH•H2O from a brine with grades of 75 mg/L Li (less than half Vulcan's grade).
- Areas with heated brines are common, but the fluids are rarely also both lithium-rich & high flow rate.
- **Processing advantage of readily available heat & power** versus South American Li salar brines.

[1]See Appendix 3

5. Location: Centre of Fastest Growing Lithium Market

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Brandenburg, 2021
Capacity Unknown

Salzgitter, 2024
16 GWh, later 24 GWh

Erfurt, 2022
14 GWh later 100 GWh

Sunderland, 2010
2.5 GWh

Willstät, 2020
1 GWh

Germany & France, 2022
16 GWh, later 64 GWh

Germany, 2023
20 GWh, later 24 GWh

Germany, 202X
4 GWh, later 8 GWh

Mo I Rana, 2023
Ramp up to 32 GWh

Skellefteå, 2021
32 GWh later 40 GWh

Brandenburg 2021
Ramp up to 8-12 GWh

Bitterfeld, 2022
10 GWh

Wroclaw, 2018
6 GWh, later 70 GWh

Nysa 2021
Cathode Materials

Nysa 2020
Cathode Materials

Komarom 1 + 2, 2020
7.5 GWh, later 23.5 GWh

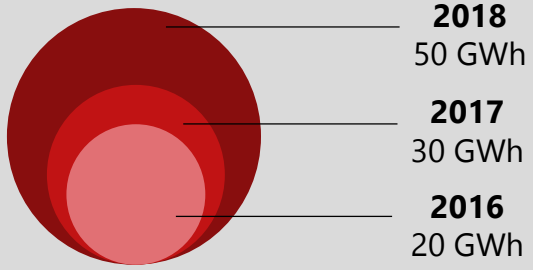
Göd, 2018
3 GWh, later 15 GWh

Europe, 202X
Capacity unknown

Vulcan's negligible distance to markets is a cost advantage as well as carbon advantage.

5. Location: Unprecedented Growth in Demand for Li in EU

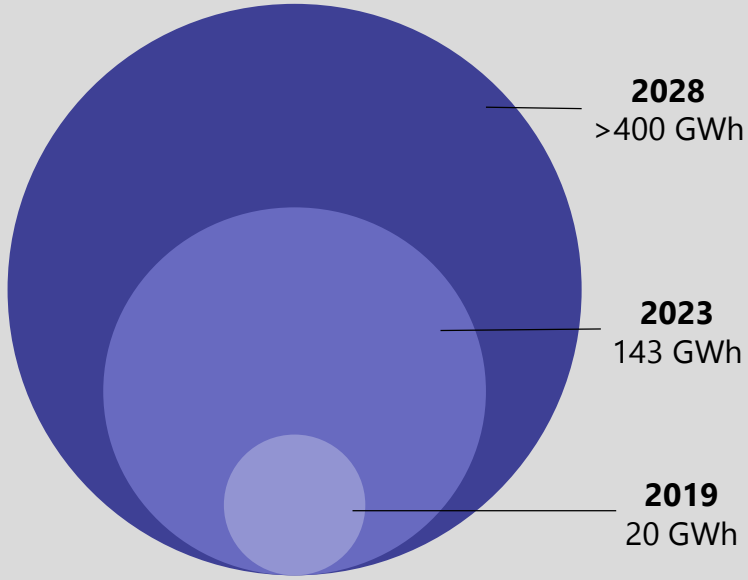
China Lithium-Ion Battery Cell Production to 2018



Source: Adapted from Ministry of Industry & Information Technology of China

In the 2010s, China experienced the world's highest growth in lithium-ion battery production for electric vehicles.
It caused a lithium supply shortage & 300% lithium price spike.

European Lithium-Ion Battery Cell Production Forecast to 2028



Source: Adapted from Benchmark Mineral Intelligence & Individual Company Announcements on Battery Capacity

In the 2020s, the same is forecast to happen in Europe, on a much larger scale.

Vulcan Energy Resources Target Market

Source: Adapted from Benchmark Mineral Intelligence & Individual Company Announcements on Battery Capacity. Assumes 0.9kg LCE/kWh for average EV battery.

Vulcan will capitalize on the fastest growing lithium market in the world, which has zero local supply.

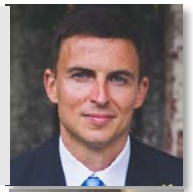
6. German Utility Partnership: Shortcut to Development

- MoU agreement signed Nov 2019 with subsidiary of **German utility Pfalzwerke Group – Pfalzwerke geofuture**, for JV at operational Insheim geothermal plant to produce lithium hydroxide.
- **Transformational** agreement for Vulcan, gives access to lithium-rich, **producing brine operations** neighbouring Vulcan's existing project area.
- Vulcan to earn up to **80% of lithium rights** at Insheim (subject to completion of formal JV agreement) by completing Pre-Feasibility (PFS) and Definitive Feasibility (DFS) Studies.
- Pfalzwerke Gruppe is a German and international energy provider with annual revenue (2018) in excess of €1.3 billion.
- Insheim geothermal plant (shown) a shining example of geothermal best-practice, **operating in harmony with local community and environment since 2012.**
- Potential for Stage One **Zero Carbon Lithium™** hydroxide production at existing plant and infrastructure.

7. The Right Team for the Job

VULCAN ENERGY RESOURCES
Zero Carbon Lithium™

Dr. Francis Wedin – Managing Director & CEO
Founder of Vulcan Zero Carbon Lithium™ Project. Previously Executive Director of ASX-listed Exore Resources Ltd. Management experience in resources sector on four continents; bilingual; dual Swedish/EU & Australian nationality. Lithium industry executive since 2014. Three discoveries of JORC Lithium Resources on two continents including Lynas Find, now part of Pilbara Minerals' Pilgangoora Project in production supplying the Chinese market (ASX:PLS). PhD & BSc (Hons) in Mineral Exploration & MBA in Renewables.



Gavin Rezos - Chair
Executive Chair/CEO positions of two companies that grew from start-ups to the ASX 300. Extensive international investment banking experience; investment banking Director of HSBC with senior multi-regional roles in investment banking, legal and compliance functions. Currently Chair of Resource and Energy Group and principal of Viaticus Capital. Previously Non-Executive Director of Iluka Resources, Alexium International Group and Rowing Australia.

Dr. Horst Kreuter – CTO Geothermal
CEO of Geothermal Group Germany GmbH and GeoThermal Engineering GmbH (GeoT). Co- Founder of Vulcan Zero Carbon Lithium™ Project. Successful geothermal project development & permitting in Germany and worldwide. Widespread political, investor and industry network in Germany and Europe. Based in Karlsruhe, local to the project area in the Upper Rhine Valley.

Alex Grant
CTO Direct Lithium Extraction

Dr. Jens Grimmer
Senior Geologist, Lithium Expert

Dr. Michael Kraml
Senior Geochemist

Thorsten Weimann
Geothermal Plant Engineering Expert

Tobias Hochschild
Senior Geologist

World-Renowned Independent Geological & Engineering Expertise:

Optiro

APEX Geoscience Ltd.

GeoThermal ENGINEERING

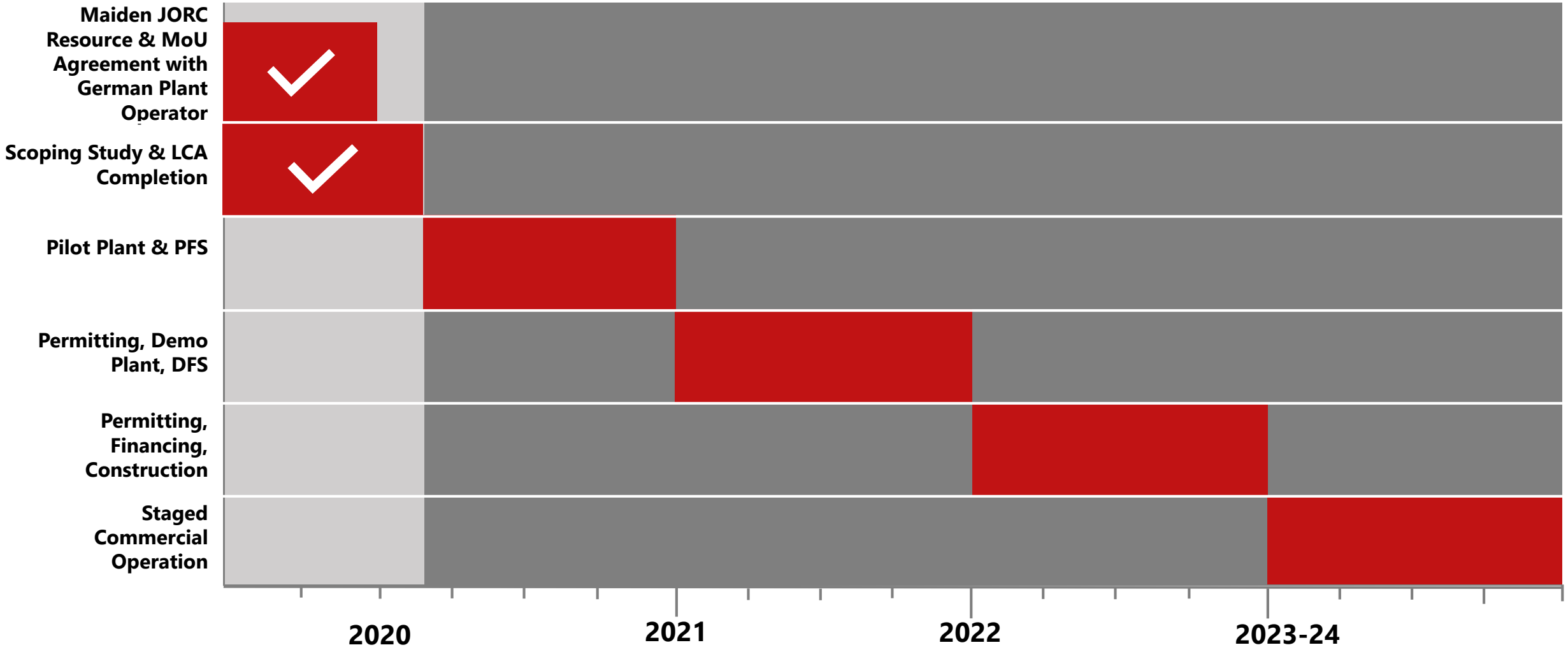
HATCH

gec-co GLOBAL ENGINEERING & CONSULTING

Strong Lithium Industry, Geothermal & Project Finance Experience

8. World's Most Rapidly Advancing Lithium Project

VULCAN ENERGY RESOURCES
Zero Carbon Lithium™



Summary | Vulcan: A Unique Investment Proposition

1. World's 1st & Only Zero-Carbon Lithium™ Process: Branded, Premium Product
2. Positive Scoping Study
3. Diversified Revenue Potential
4. Size & Quality: Europe's Largest JORC Lithium Resource
5. Location: Centre of Fastest Growing Market
6. Respected Local Partners & Infrastructure Access
7. The Right Team For The Job
8. Rapidly Advancing Lithium Project

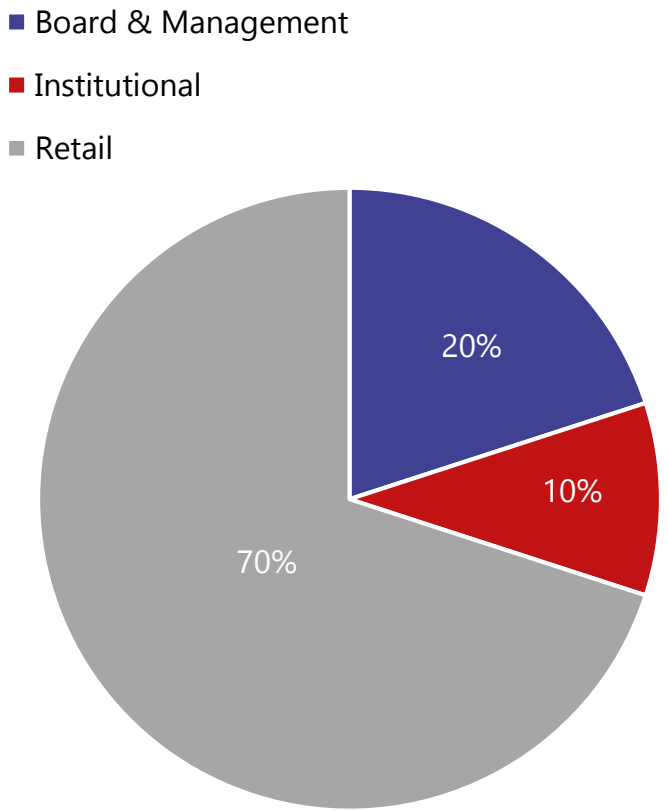
Zero Carbon Lithium™

Appendix 1: Capital Structure

ASX : VUL	
Shares on Issue	48,500,002
Options (28.5c expiring in December 2020)	12,687,512
Performance Milestone Shares*	13,200,000
Performance Rights**	6,350,000
Market Capitalization at 25c (undiluted)	~$12M
Enterprise Value at 25c (undiluted)	~$9M
Cash Position	~$3M
Top 20 Shareholders	~45%
Management (undiluted)	~20%

*Vendor Performance Milestone payments to be made on:
Class A: completion of Scoping Study (4.4M Shares) within 12 months
Class B: completion of Pre-Feasibility Study (4.4M Shares) within 24 months
Class C: securing an offtake or downstream JV partner (4.4M Shares) within 36 months

** 3,750,000 Performance Rights to Viaticus Capital comprising Class D, E and F rights (1.25m each), which vest on the same conditions as above.
2,600,000 Performance Rights comprising 800,000 Class A, 800,000 Class B and 1,000,000 Class C which vest at VUL share price of $0.40, $0.75 and $1.10 respectively.
Refer ASX Announcement 10 July 2019 for further details



Appendix 2: Proud Members of a Leading-Edge Industry

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CRMAlliance
Critical Raw Materials

EUROPEAN BATTERY ALLIANCE | EBA250
The industrial workstream of the European Battery Alliance

RUGGERO BERTANI
European Geothermal Innovation Award 2020
ENDORSED NOMINATION

VULCAN ENERGY RESOURCES
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KLiB
Kompetenznetzwerk Lithium Ionen Batterien

Bundesverband Geothermie

EGEC GEOTHERMAL

Appendix 3: Information for Slide 10, 11 and 13

Company	Code	Project	Stage	Resource Category	Brine M^3	Resource Grade (mg/l Li)	Contained LCE Tonnes	Information Source
Orocobre	ASX:ORE	Salar de Olaroz	Production	Measured & Indicated	1.8×10^9	690	6.4	Company Presentation 5 May 2014
Lithium Americas	NYSE:LAC	Cauchari-Olaroz, Chile (50% ownership. Thacker Pass not Included)	DFS Complete, Construction Underway	Measured, Indicated & Inferred	7.8×10^9	592	24.6	Resource Statement 7 May 2019
Millennial Lithium	CVE:ML	Pastos Grandes, Argentina	FS Complete	Measured, Indicated & Inferred	2.2×10^9	428	4.9	Resource Statement 31 May 2019

Company	Code	Project	Stage	Resource Category	Resource Tonnes	Resource Grade (Li2O)	Contained LCE Tonnes	Information Source
European Metals	ASX: EMH	Cinovec	PFS Complete	Indicated & Inferred	695.9	0.42	7.17	Corporate Presentation Released 20 November 2018
Rio Tinto	ASX: RIO	Jadar	PFS Underway	Indicated & Inferred	135.7	1.86	6.24	Corporate Presentation Released 21 March 2018
Infinity Lithium	ASX: INF	San Jose	PFS Complete	Indicated & Inferred	111.3	0.61	1.68	ASX Announcement Released 22 August 2019
Savannah Resources	AIM: SAV	Barroso	DFS Underway	Measured, Indicated & Inferred	27.0	1.00	0.71	Corporate Presentation Released May 2019
European Lithium	ASX: EUR	Wolfsburg	PFS Complete	Measured, Indicated & Inferred	10.98	1.00%	0.27	Corporate Presentation Released 22 March 2019

Elders, W., Cohen, L., (1983) The Salton Sea Geothermal Field, California, Technical Report. Institute of Geophysics and Planetary Physics, University of California

GeORG (2013) Projektteam Geopotenziale des tieferen Untergrundes im Oberrheingraben Fachlich-Technischer Abschlussbericht des INTERREG-Projekts GeORG. Teil 2: Geologische Ergebnisse und Nutzungsmöglichkeiten

Pauwels, H., Fouillac, C., Brach M. (1989) Secondary production from geothermal fluids processes for Lithium recovery 2nd progress report. Bureau de Recherches Geologiques et Minieres Service Geologique National

Pauwels, H. and Fouillac, C. (1993) Chemistry and isotopes of deep geothermal saline fluids in the Upper Rhine Graben: Origin of compounds and water-rock interactions. Geochimica et Cosmochimica Acro Vol. 51, pp. 2737-2749

Sanjuan, B., Millot, R., Innocent, C., Dezayes, C., Scheiber, J., Brach, M., (2016) Major geochemical characteristics of geothermal brines from the Upper Rhine Graben granitic basement with constraints on temperature and circulation. Chemical Geology 428 (2016) 27–47

The Company is not aware of any new information or data that materially affects the information contained in the above sources or the data contained in this announcement

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Thank You.

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FRA:6KO