

# Vulcan Zero Carbon Lithium™ Project PFS Update

# **Highlights:**

- Appointment of international team of experts to support Pre-Feasibility Study (PFS):
  - o **gec-co** GmbH; engineering studies for geothermal plant.
  - o **GeoT** GmbH; geology and hydrogeology, geothermal subsurface well design and production study.
  - o IBZ Salzchemie GmbH & Co.; chemical engineering.
  - o Hatch Ltd.; design and engineering studies for lithium plant.
  - o **APEX Geoscience** Ltd.; resource modelling & estimation.
  - o **Optiro** Pty. Ltd.; financial modelling.
- PFS to be further supported by:
  - Vulcan Executive Director Dr. Horst Kreuter, geothermal expert and German geothermal industry veteran.
  - o Vulcan Director Dr. Katharina Gerber, geothermal lithium and battery chemistry expert.
  - Vulcan CTO Direct Lithium Extraction (DLE) Alex Grant, cofounder of a DLE company recently backed by Bill Gates' Breakthrough Energy Ventures fund.
- Ongoing bench-scale lithium extraction test work and pilot plant engineering, with updates expected soon.

Vulcan Managing Director, Dr. Francis Wedin, commented: "We have assembled a highly credentialed technical team for our Vulcan Zero Carbon Lithium  $^{\text{M}}$  Project PFS. The team combines world-class expertise and a proven record of success in lithium plant engineering, direct lithium extraction, geothermal surface and sub-surface engineering, brine chemistry treatment and geological modelling. Securing highly respected German consultants and team members to lead this study provides a breadth of knowledge in the local conditions, which is critical to achieving our goal of supplying the EU battery market with Zero Carbon Lithium  $^{\text{TM}}$  products from 2023. We look forward to providing further updates on the PFS work shortly."

ASX Release 11 June 2020 ASX: VUL FRA: 6KO

#### **Highlights**

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

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

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

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

Fast-track development of project under way towards production.

## **Corporate Directory**

Managing Director Dr Francis Wedin

> Chairman Gavin Rezos

Executive Director Dr Horst Kreuter

Non-Executive Director Ranya Alkadamani

Non-Executive Director Dr Katharina Gerber

CFO-Company Secretary Robert Ierace

#### **Fast Facts**

Issued Capital: 53,670,002 Market Cap (@45c): \$24m

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## Recent activities by the Company:

- Securing EU backing for the Vulcan Zero Carbon Lithium™ Project.
- Presentation to European Commission and European Investment Bank Vice-Presidents, alongside VW, BASF, EDF.
- Recruitment of German lithium chemistry & geothermal lithium expert Dr. Katharina Gerber to the Vulcan Board.
- Appointment of strategic communications expert Ranya Alkadamani to the Vulcan Board.
- Agreement to acquire 3D seismic package to accelerate project development.
- Commencement of lithium test work for Pre-Feasibility Study.
- Positive Scoping Study.

#### **About the team**

## global engineering and consulting (gec-co) GmbH

- German geothermal engineering company.
- Extensive geothermal surface power plant design experience in Germany and worldwide, including in the Upper Rhine Valley where the Vulcan Project is located.

# GeoThermal Engineering (GeoT) GmbH

- German geothermal geology consultancy, based near the Vulcan Project in the Upper Rhine Valley
- Broad and successful experience in development of the sub-surface part of geothermal projects.

#### IBZ Salzchemie GmbH & Co.

- German chemical engineering consultancy.
- Expertise with handling of geothermal brines and in chemical engineering for brine pretreatment processes.

#### Hatch Ltd.

- Tier-one, international engineering consultancy.
- Industry leader in and recent track record of successful lithium plant engineering, procurement and construction (EPC). Unique experience in geothermal lithium brine developments.

#### APEX Geoscience Ltd.

- Over 25 years of diverse geological consulting experience, including modelling of deep, confined aquifers with lithium-rich geothermal brine.
- 3D geological modelling, resource estimation and National Instrument 43-101, JORC and SAMREC compliant Technical Reporting.

# Optiro Pty. Ltd.

- Resources consulting and advisory group.
- Extensive expertise in commercial advising of clients throughout the resources cycle with emphasis on geological, engineering, and financial operations.



# For and on behalf of the Board

**Robert Ierace** 

Chief Financial Officer - Company Secretary

For further information visit www.v-er.com

# Zero Carbon Lithium<sup>™</sup>