

## Quarterly Activities Report for the period ending 30 June 2025

During the period ending 30 June 2025 (the Quarter), Vulcan Energy (Vulcan, ASX: VUL, FSE: VUL, the Company) made significant operational progress in advancing the execution of the Phase One Lionheart Project (the Project).

### Highlights from the Quarter

- Commenced drilling of the first new well for the Project at the Schleidberg well site near Landau, Germany, representing the fifth well in the Project area and start of project execution of sub-surface works
- Main heat offtake agreement for the Project signed with German energy supplier EnergieSüdwest AG (ESW), for the supply of geothermal renewable heat. The Company has agreed to supply various districts in the Landau area with renewable heat produced from several production sites, which make up Vulcan's Project, for a period of 35 years
- Approval received for building permits for the 30MW geothermal renewable energy plant and electrical substation that form part of the Project. The Company will use this plant in Landau to supply an increased amount of baseload, renewable power, both for sales into the grid and for its own operations
- Proceeded to detailed due diligence for the €1bn German Raw Materials Fund (RMF) in April and, as a result, committed to including government participation in the financing of its Project
- Completed the acquisition of geox GmbH (Geox), including its operational geothermal wells, renewable energy generation assets and a geothermal and lithium licence around the City of Landau, Germany. The assets will be used as part of the consolidation of Vulcan's wider upstream Project
- Extension to the conditional debt commitment letter signed in December 2024 as the Company progressed discussions with banks in financing its Project. The letter has been extended until September 2025, reflecting the Company's revised financing timeline targeting finalisation of debt agreements in H2 2025
- Continued to produce battery-quality lithium hydroxide monohydrate (LHM) material from its optimisation/qualification plant to be sent to offtake partners
- Announced as the winner of The Australian Financial Review's Sustainability Leaders for 2025 in the Resources, Energy & Utilities category. In addition, the Company was awarded a special distinction for the Sustainability Leader – Medium Organisation category.

### Subsequent events

- Approval of €104m (~A\$187m) grants by German governments, designed to enable strategic domestic lithium production and processing to service European electric vehicle battery production. The grants are being funded by the German Federal Government and the states of Rhineland-Palatinate and Hesse under the lead of the Federal Ministry of Economy and Energy (BMWE) within the Temporary Crisis and Transition Framework (TCTF) scheme

- Successful completion of a €30m (~A\$53.6m) strategic placement to maintain execution of critical path scope for the Project. The placement was corner-stoned by BNP Paribas' Clean Energy Solutions Fund – a thematic fund that invests in companies driving the global shift toward a low-carbon economy – with a €15m (~A\$26.8m) subscription. A select group of strategic corporate and institutional investors participated for the remaining €15m (~A\$26.8m), including existing strategic corporate shareholders in the Company
- Successful completion of an updated lithium brine Resource estimation, together with a maiden geothermal energy Resource estimation for the Mannheim licence area of Germany's Upper Rhine Valley Brine Field (URVBF). The lithium brine Resource estimation update for the Mannheim sector estimates the total lithium brine Resource (Indicated and Inferred) has increased 76%.

*Managing Director and CEO, Cris Moreno, commented: "During the June Quarter, we continued to make progress on many of our strategic and commercial objectives. Pleasingly, it was also a strong period operationally, with the start of drilling at our fifth well, a particular highlight for the company, and a major milestone representing start of sub-surface works for the Phase One lithium and renewable energy Project."*

*"With our biggest milestone, completion of Phase One financing, targeted for the second half of the year, it is shaping up to be a transformative year for the Company as we seek to deliver long-term value for our shareholders."*

## **Health and safety**

- There was one Lost Time Injury (LTI) during the reporting period which occurred at the Company's Schleiberg well site near Landau, Germany. It is the second LTI reported during the past 12 months, with strict adherence to health and safety protocols continuing to be a key priority for the Company
- The Company held its annual Safety Days on 13 and 14 May 2025, attracting strong interest and attendance from staff across all divisions. The two-day event featured practical sessions and insights on workplace safety, prevention and health.

## **Integrated renewable energy and lithium production**

### **Renewable energy operations**

- Operations continued at Vulcan's Natürlich Insheim geothermal renewable energy plant with production of approximately 3.280MWh of gross baseload, renewable power, at an average selling price of €0.260/kWh, generating €0.85m gross revenue
- In June 2025, the Insheim geothermal power plant underwent a scheduled shut-down for maintenance purposes. This planned outage was essential to ensure the continued safe and efficient operation of the facility.

### **Well site preparation and rig readiness**

- The Company's 100%-owned drilling subsidiary, Vercana, commenced drilling the first new well for the Project at the Schleiberg well site near Landau, Germany, on 27 May 2025

- The Company currently operates four production and re-injection wells in its Project area, and the Field Development Plan for the Project involves adding 24 production and re-injection wells to create a larger, integrated renewable energy and sustainable lithium project
- Commencement of drilling at Schleidberg represents the fifth well in Vulcan's Phase One Project area, and start of project execution of sub-surface works for the Project



Figure 1: Start of drilling at the Schleidberg well site near Landau, Germany in May 2025

### Lithium Extraction Optimisation Plant (LEOP)

- High-quality 40% lithium chloride (LiCl) solution was produced using Adsorption-type Direct Lithium Extraction (A-DLE) with VULSORB®, Vulcan's internally developed aluminate-based lithium extraction adsorbent, at the upstream optimisation plant LEOP, and transferred to the downstream CLEOP at Industrial Park Höchst for the production of LHM
- The brine supply to LEOP transitioned from brine trucking from the Insheim well site to direct supply of hot artesian brine from the production well of the neighbouring Geox well site.

### Central Lithium Electrolysis Optimisation Plant (CLEOP)

- During the reporting period, the Company finalised a qualification strategy to pre-qualify its material prior to entering full commercial production, as a means of fast-tracking the start of sales of qualified, battery-quality LHM material. This involved the production and dispatch of battery-quality LHM material, branded V-LiON™, to offtake partners, from Vulcan's qualification plant, prior to the full commercial plant completion and start of production

- Previous internal and external lab analysis indicates that the Company's product is within battery-quality specification.

### Phase One project execution preparation

- Approval was received in June 2025 for building permits for the 30MW geothermal renewable energy plant and electrical substation that form part of the Project. The Company will use this plant in Landau to supply an increased amount of baseload, renewable power, both for sales into the grid and for its own operations to produce lithium with a carbon neutral footprint, burning zero fossil fuels in the process. The Company is already commercially producing geothermal, baseload power in Germany for approximately 6,500 homes from a smaller 4.8MW plant nearby and producing renewable heat from a separate location.

### Commercial and financing

- During the reporting period, the Company completed the acquisition of Geox, including its geothermal wells, renewable energy generation assets and a geothermal and lithium licence around the City of Landau, Germany. These assets represent a consolidation of Vulcan's wider upstream Project assets
- The Company announced an extension to the conditional debt commitment letter signed in December 2024 as the Company progresses discussions with banks in relation to financing its Project. The debt commitment letter has been extended until September 2025, reflecting the Company's revised financing timeline targeting finalisation of debt agreements in H2 2025. The commercial bank group consists of (i) four Structuring Banks (ABN AMRO, ING, Natixis CIB and UniCredit), and (ii) three additional international project finance banks. The four structuring banks have been engaged in the financing structuring process since May 2024 alongside the EIB and ECAs (Bpifrance AE, Export Development Canada, Export Finance Australia (EFA), and SACE).
- The Company proceeded to detailed due diligence for a €150m equity participation by the German Raw Materials Fund (RMF) during the Quarter and, as a result, committed to including government participation in the financing of its Project. Subsequently, the Company adjusted its Project financing target timeline to allow for the potential inclusion of the RMF in its financing package and is now targeting H2 2025 to finalise these agreements and commence full project construction.
- As part of optimising its lithium offtake agreements for Project financing, the Company is in advanced negotiations with a premium German automaker, with which it has signed a Letter of Intent (LOI) to enter into a binding lithium hydroxide offtake agreement for an eight-year period. The Company has freed up ca. 3% of its planned lithium sales volume in its first ten years of production by mutually agreeing to a termination of its agreement with Renault Group. Vulcan is targeting the finalisation of the agreement with the premium German automaker mid-year, to align with its financing timeline.

### Future phase update

Ongoing discussions in relation to future phase licence regions continued throughout the reporting period in addition to the following:



## Mannheim, Germany

- Following a 3D seismic survey, the Company successfully completed an updated lithium brine Resource estimation, together with a maiden geothermal energy Resource estimation, for the Mannheim licence area. The lithium brine Resource estimation update for the Mannheim sector estimates the total lithium brine Resource (Indicated and Inferred) has increased from 1,833kt LCE @ 153 mg/Li to 3,225kt LCE @ 155 mg/Li, which is an increase of 1,392kt LCE<sup>1</sup>
- A large-scale in place maiden geothermal Resource of 2,848 PJ (Indicated) and 10,539 PJ (Inferred) has also been estimated for the Mannheim sector of which 171 PJ (Indicated) and 377 PJ (Inferred) are considered recoverable. The Company intends to continue to complete geothermal energy Resource estimations under the Australian Geothermal Reporting Code for all its development areas within the URVBF.
- The Company is progressing a Scoping Study for the Mannheim licence which is located 40km to the northeast of Phase One. The study will look to add further production in addition to the Phase One integrated lithium and geothermal renewable energy development including expansion of the downstream lithium hydroxide monohydrate (LHM) facility in Industrie-Park Höchst. It is envisaged Vulcan will deliver baseload geothermal heat from the Mannheim region geothermal resource to the district heating network of MVV Energie AG (MVV), one of Germany's leading energy companies, while simultaneously extracting sustainable lithium for EV battery production. Negotiations with MVV to revise the current heat offtake agreement remain ongoing.

## Ludwigshafen, BASF joint project, Germany

- Results of the 2D seismic survey in the Vorderpfalz region were processed and interpreted during the reporting period. The survey is an important step in implementing a consistent renewable heat supply for the region and BASF, one of the world's largest chemical producers. The measured data will form the basis of a 3D seismic survey, as the next step of development
- Public funding talks towards the next stage of development also progressed during the Quarter.

## Environmental, Social and Governance (ESG)

### Australian Financial Review award

- The Company was announced as the winner of The Australian Financial Review's Sustainability Leaders for 2025 in the Resources, Energy & Utilities category in June 2025. In addition, the Company was awarded a special distinction for the Sustainability Leader – Medium Organisation category. The list, undertaken by The Australian Financial Review in partnership with Schneider Electric, celebrates Australian companies making progress in tackling sustainability challenges while delivering business value.



### Management plans

- Environmental and social management plans were developed and implemented prior to the commencement of well site and drilling activities at Schleidberg. These include Environmental and

<sup>1</sup> This consists of the Indicated Resource increasing from 288kt LCE @ 153 mg/Li to 820kt LCE @ 155 mg/Li and the Inferred Resource increasing from 1,545kt LCE @ 153 mg/Li to 2,405kt LCE @ 155 mg/Li.

Social Management Plan (ESMP), Noise Management, Traffic Management, Waste Management, Cultural Heritage Management, Emergency Response, Permitting Operating/ Special Operating Plans, Crisis Management and Stakeholder Engagement.

### Stakeholder and community events

- During the reporting period, the Company continued to actively engage with local communities and regional stakeholders. Vulcan once again hosted its Open Day at the Insheim geothermal power plant on 17 May 2025, with a total of 150 stakeholders from the region, including residents, in attendance
- As part of the further involvement of local stakeholders, the Company introduced a monthly Citizens' Consultation Hour at the Landau Infocenter, with the first event taking place on 3 June 2025
- Several universities and schools from the Company's exploration licence areas visited the Vulcan geothermal plant in Insheim, where students learned about geothermal energy, climate protection, and career opportunities in the energy transition



Figure 2: Open Door Day at Insheim, May 2025.

### Additional ASX Disclosure Information

ASX Listing Rule 5.3.1: Exploration and Evaluation expenditure during the Quarter was €nil.

ASX Listing Rule 5.3.2: Development expenditure during the Quarter was €8.1m. Expenditure predominately related to the Phase One area Schleiberg production wellsite preparation and drilling (€3.9m), preparatory works for the construction of the Central Lithium Electrolysis Optimisation Plant, Central Lithium Plant and Lithium Extraction Plant (€1.4m), Trappelberg wellsite preparation (€0.9m), Insheim wellsite preparation (€0.7m) and other expenditure (€1.2m).

ASX Listing Rule 5.3.3: During the Quarter, no licences were acquired, nor disposed of. For further information see Table 1 below.

ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter per section 6.1 of the Appendix 5B amounted to €303,000. This is comprised of an allocation of the Managing Director remuneration of €62,000, Group Chief Financial Officer and Executive Director remuneration of €81,000, Executive Chair remuneration of €97,000 and Non-Executive Director fees of €63,000. Payments to related parties of the Company and their associates during the quarter per section 6.2 of Appendix 5B total €51,000. This amount is an allocation of the Managing Director's remuneration for work done on activities associated with Vulcan's Phase One Lionheart Project. Please see the Remuneration Report in the 2024 Annual Report for further details on Directors' Remuneration.

## Vulcan's integrated lithium and renewable energy project licence table

NAME	STATE	RESOURCES APPLIED FOR	AREA (KM <sup>2</sup> )	EXPIRY	OWNERSHIP AS AT 30 JUNE 2025	CHANGE IN OWNERSHIP	TYPE
<b>Rift-Nord</b>	RLP	Geothermal & lithium	61,83 (VER share), 149.74 km <sup>2</sup> total	6.2027	50 % VER GmbH, 50 % GET, Vulcan has rights to develop production projects with 100% ownership in the licence area	N/A	exploration
<b>Landau-Süd</b>	RLP	Geothermal	19.41	5.2034	100 % VER GmbH*	N/A	production
<b>Ilka</b>	RLP	Lithium		11.2025	100 % VER GmbH*	N/A	exploration
<b>Insheim</b>	RLP	Geothermal	19	11.2037	100% Natürlich Insheim GmbH	N/A	production
<b>LiThermEx</b>	RLP	Lithium		3.2027**	100% VER GmbH	N/A	exploration
<b>Ried</b>	Hessen	Geothermal, brine & lithium	289.92	7.2025	100 % VER GmbH	N/A	exploration
<b>Luftbrücke</b>	Hessen	Geothermal, brine & lithium	207.25	9.2026	100 % VER GmbH	N/A	exploration
<b>Waldnerturm</b>	BW	Geothermal, brine & lithium	20.43	12.2026	100 % VER GmbH	N/A	exploration
<b>Lampertheim II</b>	Hessen	Geothermal, brine & lithium	1.99	7.2026	100 % VER GmbH	N/A	exploration
<b>Ortenau II</b>	BW	Geothermal, brine & lithium	374.1	12.2025	100 % VER GmbH	N/A	exploration
<b>Mannheim</b>	BW	Geothermal, brine & lithium	144.49	6.2027	100 % VER Pty Ltd	N/A	exploration
<b>Taro</b>	RLP	Geothermal	32.68	8.2025	100% VER GmbH	N/A	exploration
<b>Lisbeth</b>	RLP	Lithium		9.2027	100 % VER GmbH	N/A	exploration
<b>Ludwig</b>	RLP	Geothermal & lithium	96.34	12.2027	100 % VER GmbH	N/A	exploration
<b>Therese</b>	RLP	Geothermal & lithium	81.12	12.2027	100 % VER GmbH	N/A	exploration
<b>Lampertheim</b>	Hessen	Geothermal, brine & lithium	108.03	7.2026	100 % VER GmbH	N/A	exploration
<b>Kerner</b>	RLP	Geothermal & lithium	72.26	12.2027	100 % VER GmbH	N/A	exploration
<b>Löwenherz</b>	RLP	Geothermal & lithium	75.43	12.2026	100 % VER GmbH	N/A	exploration
<b>Flaggenturm 2023</b>	RLP	Geothermal	166.75	12.2027	100 % VER GmbH	N/A	exploration
<b>Fuchsmantel 2023</b>	RLP	Lithium		7.2025	100 % VER GmbH	N/A	exploration
<b>Kachelhoffa</b>	FR	Geothermal	463.34	7.2029	100% Vulcan Énergie France	N/A	exploration
<b>Kachelhoffa minéral</b>	FR	Lithium		7.2029	100 % Vulcan Énergie France	N/A	exploration
<b>Cesano</b>	IT	Geothermal & Lithium	11.46	01.2027	50% Vulcan Energy Italy Pty Ltd., 50 % Enel Green Power	N/A	exploration
<b>Boccaleone</b>	IT	Geothermal & Lithium	4.31	07.2025	50 % Vulcan Energy Italy Pty Ltd., 50 % Enel Green Power	N/A	exploration

Table 1: Vulcan's licences as at the date of this report, with the licences of Phase One shaded in grey

\*See ASX announcement on 7 April 2025 for more information on completion of Geox acquisition

\*\*The LiThermEx licence was extended for a further two years to 23 March 2027 post reporting period.



## Mineral resources and ore reserves

Vulcan's lithium brine Mineral Resource estimates, as well as its Mineral Reserve estimates, did not change during the Quarter. However, subsequent to the Quarter the Company announced:

- its total lithium Resource estimate (Indicated and Inferred) increased to 29.1 Mt LCE<sup>2</sup>; and
- a large-scale in place maiden geothermal Resource of 2,848 PJ (Indicated) and 10,539 PJ (Inferred) has also been estimated for the Mannheim sector of which 171 PJ (Indicated) and 377 PJ (Inferred) are considered recoverable.

There was no change to the Company's Mineral Reserve estimate.

## For and on behalf of the Board

Daniel Tydde | Company Secretary

## Media

Judith Buchan, Communications Lead APAC | [jbuchan@v-er.eu](mailto:jbuchan@v-er.eu) | +61 411 597 326

Please contact Vulcan's Legal Counsel Germany, Dr Meinhard Grodde, for matters relating to the Frankfurt Stock Exchange listing on [mgrodde@v-er.eu](mailto:mgrodde@v-er.eu)

## About Vulcan Energy

Vulcan Energy (ASX: VUL, FSE: VUL) is building the world's first carbon neutral, integrated lithium and renewable energy business to decarbonise battery production. Vulcan's Lionheart Project, located in the Upper Rhine Valley Brine Field bordering Germany and France, is the largest lithium resource in Europe<sup>3</sup> and a tier-one lithium project globally. Harnessing natural heat to produce lithium from sub-surface brines and to power conversion to battery grade material and using its in-house industry-leading technology VULSORB®, Vulcan is building a local, low-cost source of sustainable lithium for European electric vehicle batteries. For more information, please go to <https://v-er.eu/>

## Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Vulcan operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Vulcan's control.

---

<sup>2</sup> This increase consists of the Indicated Resource for the Mannheim sector increasing from 288 kt LCE @ 153 mg/Li to 820 kt LCE @ 155 mg/Li and the Inferred Resource for the Mannheim sector increasing from 1,545 kt LCE @ 153 mg/Li to 2,405 kt LCE @ 155 mg/Li. For further information, please refer to the ASX Announcements dated 7 and 9 July 2025. The 29.1 Mt LCE total lithium Resource is comprised of 2.1 Mt LCE of Measured Resource @ 181 mg/L, 9.7 Mt LCE of Indicated Resource @ 177 mg/L and 17.3 Mt LCE of Inferred Resource @ 174 mg/L. Please also refer to the Competent Person Statement contained within this announcement.

<sup>3</sup> On a lithium carbonate equivalent (LCE) basis, according to public information, as estimated and reported in accordance with the JORC Code 2012. See Appendix 4 of Vulcan's Equity Raise Presentation dated 11 December 2024 for comparison information.

Vulcan does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Vulcan, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

This announcement is not an offer, invitation or recommendation to subscribe for, or purchase securities by Vulcan. Nor does this announcement 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.

#### Competent Person Statement

The information in this announcement that relates to estimates of Mineral Resources and Ore Reserves is extracted from the Bridging Engineering Study Results announcement on 16 November 2023, the Future Phase Pipeline – Mannheim Resources Growth announcements on 7 and 9 July 2025<sup>4</sup> and End of Validation review contained in the Prospectus released on 18 December 2024, all of which are available to view on Vulcan's website at <http://v-er.eu>. Vulcan confirms, that in respect of the estimates of Mineral Resources and Ore Reserves included in this announcement:

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

---

<sup>4</sup> The Mannheim Announcement relates solely to the lithium brine Resource estimation for the Mannheim sector.