

## Vulcan to commence seismic surveys on geothermal heat project with BASF

Vulcan Energy (Vulcan, ASX: VUL, FSE: VUL, the Company) is pleased to announce it has received the approvals to commence seismic surveys for its geothermal heat development project in the Ludwigshafen region of Germany, which the Company is undertaking in partnership with the world's largest chemicals producer, BASF SE (BASF).

This follows the signing of the agreement with BASF in November 2024 to collaborate on a renewable development to supply BASF's Verbund site Ludwigshafen with baseload heat. The BASF agreement also includes the potential construction of a commercial Lithium Extraction Plant in Ludwigshafen, BASF's headquarters and home to the largest integrated chemical complex globally.

### Highlights

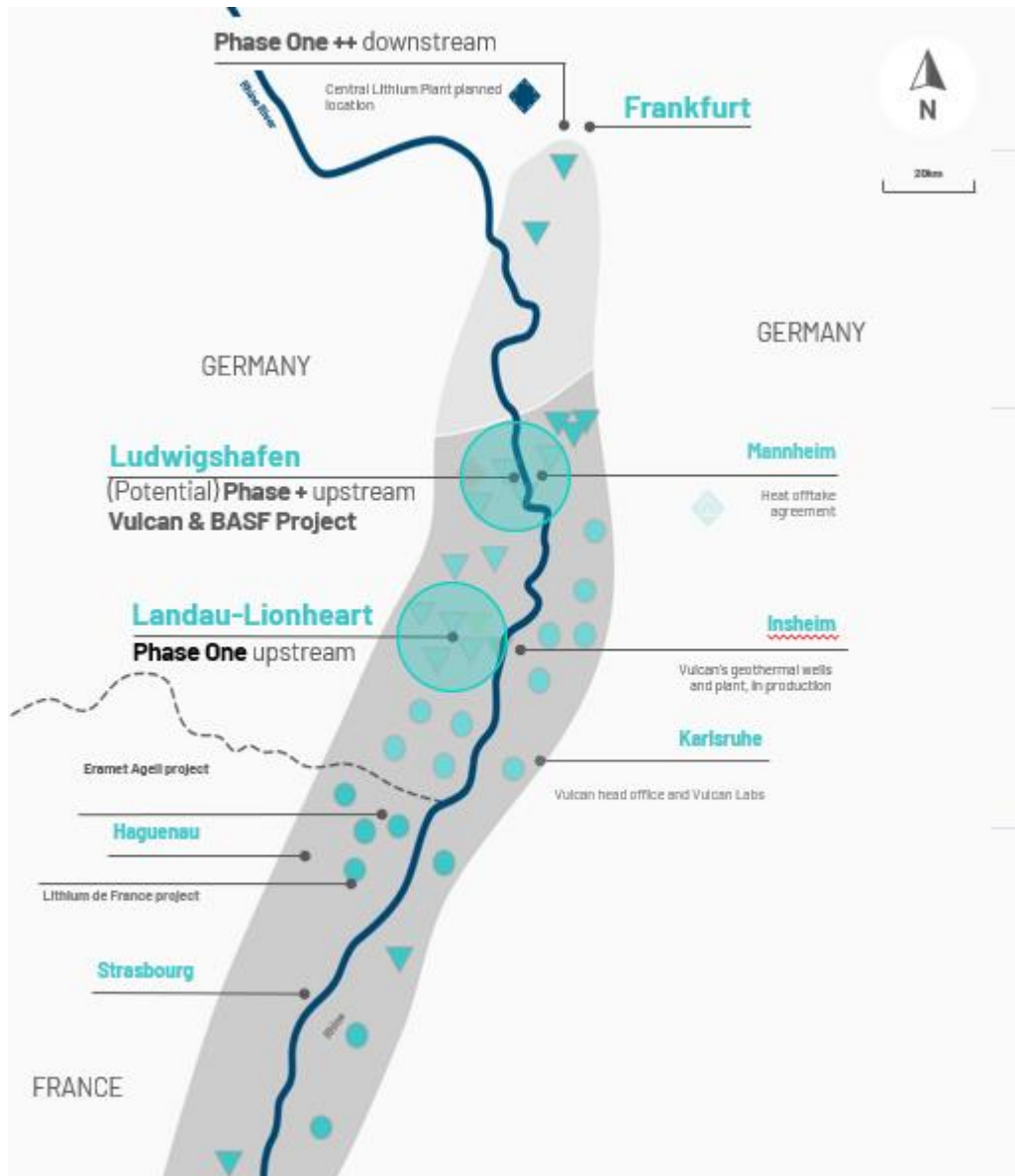
- The official approvals have now been obtained for the first stage of development, with two dimensional (2D) seismic survey measurements to be carried out from late February to early March
- The survey will be conducted on approximately 75 kilometres of roadway within Vorderpfalz, a region on the western border of Germany's Upper Rhine Valley Brine Field (URVBF), including the towns and municipalities of Bad Dürkheim, Deidesheim, Mutterstadt, Frankenthal and Ludwigshafen
- The results of the 2D seismic survey will determine optimal location/s for the next stage of development and will be followed by a 3D seismic survey. The Company will be responsible for co-ordinating the planning of the 2D and 3D seismic surveys, the results of which will be used to plan locations for geothermal and lithium production/re-injection wells
- The development aims to utilise geothermal energy from the URVBF to provide renewable heat for BASF's main plant
- In addition, the development aims to provide a sustainable district heating supply for the Ludwigshafen and Frankenthal areas, with the Company also planning to utilise the extracted heated brine to produce sustainable lithium
- The Company will seek to replicate the development model across the URVBF in future phases, building affordable renewable heating production to contribute to the decarbonisation of European industry and the public heating sector. The same brine from the same deep geothermal wells can also then be utilised to produce lithium for lithium-ion batteries.

*Vulcan's Managing Director and CEO, Cris Moreno, commented: "Securing the necessary approvals for the first stage of development is an important step in further advancing our geothermal heat and lithium project in the Ludwigshafen area. Together with BASF, we will be utilising geothermal energy in such a way that ensures the area has access to a sustainable, climate-neutral energy source."*

*"Critically, this development reflects our broader integrated business approach, whereby we will seek to replicate this model across the URVBF through strategic partnerships with large, industrial companies like BASF. This approach not only drives sustainable energy supply in the regions but heavily contributes to Europe's transition to green electromobility."*

*BASF Senior Vice President - Infrastructure at Ludwigshafen, Tilmann Hezel, said: "This project represents one of the most important transformation projects on our site, which will potentially cover a significant proportion*

of our future energy requirements without the use of fossil fuels.”



Vulcan's future phase developments to support Europe's energy transition

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#### For and on behalf of the Board

Daniel Tydde | Company Secretary

#### Further information

**Annabel Roedhammer** | Vice President Communications | [aroedhammer@v-er.eu](mailto:aroedhammer@v-er.eu) | +49 1511 410 1585

**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>1</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.

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Vulcan has carried out a definitive feasibility study ("DFS") and bridging engineering study ("Bridging Study") for its Phase One Project, the results of which were announced to the ASX in the announcements Phase 1 DFS Results dated 13 February 2023 (DFS Announcement) and Bridging Study Results on 16 November 2023 (Bridging Study Announcement). This announcement may include certain information relating to the DFS and the Bridging Study. The DFS and Bridging Study are based on the material assumptions and parameters outlined in their respective announcements. While Vulcan considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Bridging Study or DFS will be achieved. This announcement may also include certain information relating to Phase Two of its Project, Vulcan has not yet carried out a definitive feasibility study for Phase Two of its Project.

### Competent Person Statement

The information in this announcement that relates to estimates of Mineral Resources and Ore Reserves is extracted from the Bridging Study Announcement which is available to view on Vulcan's website at <http://v-er.eu> Vulcan confirms, that:

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<sup>1</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.

- a) in respect of any estimates of Mineral Resources and Ore Reserves included in this announcement:
  - i. 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; and
  - ii. 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
- b) 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.