



Sustainability Report

2024

Empowering the
European Energy and
Mobility Transition

About this Report

This 2024 Sustainability Report (the Report) was prepared by Vulcan Energy Resources Ltd (Vulcan) to outline the actions taken during the reporting period to empower the European energy and mobility transition. It is intended to illustrate how the Vulcan Team (the Team) will deliver on this purpose for the benefit of investors, shareholders and other stakeholders while creating shared value, minimising environmental and social impacts, and maintaining governance integrity.

Reporting standards

This Report is aligned with the Task Force on Climate-Related Financial Disclosures (TCFD). However, the TCFD framework has now been fully integrated into the International Sustainability Standards Board's (ISSB) Sustainability Disclosure Standard. Vulcan's listing on the Australian Securities Exchange (ASX) will trigger future mandatory sustainability reporting against the Australian Sustainability Reporting Standard (ASRS), which is closely aligned with the ISSB. Although not yet mandatory reporting for Vulcan, Appendix 1 details where ASRS-specific content is included in this year's Report, this has not been subject to external assurance.

By explaining how sustainability is deeply embedded in Vulcan's commercial success, and by demonstrating how Vulcan creates value over the long-term for all its stakeholders, this Report also seeks to incorporate selected aspects of integrated reporting as defined by the International Integrated Reporting Council.

Report parameters

The reporting period covers 1 January 2024 to 31 December 2024 and references in the Report to 'Year' refer to this period unless otherwise stated.

Currency is expressed in Euros (€) unless otherwise stated. An average AUD to EUR exchange rate of 0.61 has been used in the Sustainability Report for the financial year ended 31 December 2024.

Entities included in the reporting scope include Vulcan and its subsidiaries. All references to Vulcan Energy, Vulcan, the Company, Vulcan Group or the Group, as well as the Team are in reference to Vulcan and its subsidiaries. All information and references in this Report are related to the full financial year, 1 January 2024 to 31 December 2024, unless otherwise stated. This Report has been approved for release by Vulcan's Board of Directors.

This Report should be read in conjunction with Vulcan's Annual Reporting Suite which includes the 2024 Annual Report, 2024 Group Management Report (Konzernlagebericht) and the 2024 Corporate Governance Statement.

Vulcan's Reporting Suite is available on the Company's website: <https://v-er.eu>



Report partners

The Double Materiality Assessment (DMA), Environmental and Social Impact Assessment (ESIA) and structure of this Report have been completed with the assistance of global sustainability consultancy firm, ERM. The Greenhouse Gas (GHG) Emissions Inventory has been prepared with the assistance of Sustainable Business Consultants. Emissions data for 2023 was externally verified by Climate Active for the Australian business and by Climate Impact Partners for the German businesses. All GHG emissions and certifications included in this Report refer to the calendar 2023 reporting period unless otherwise stated. All other data contained in this Report was prepared by internal subject matter experts and has not been subject to external assurance.

Forward looking statements

This Report contains certain forward-looking statements. Often, but not always, forward-looking statements may be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "target", "propose", "anticipate", "continue", "outlook" and "guidance", or other similar words.

By their nature, forward-looking statements inherently involve known and unknown risks, uncertainties and

other factors that may cause actual results, performance, and achievements to be materially greater or less than estimated, including those generally associated with the lithium industry and/or resources exploration companies. Any such forward-looking statements, opinions and estimates in this Report (including any statements about market and industry trends) are based on assumptions and contingencies, all of which are subject to change without notice, and may ultimately prove to be materially incorrect. Forward-looking statements are provided as a general guide only and should not be relied upon as, and are not, an indication or guarantee of future performance.

Neither Vulcan nor any of its directors, officers, agents, consultants, employees, or advisers give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions, forward-looking statements and conclusions contained in this Report.

Contact

Vulcan welcomes feedback and questions about environmental, social and governance (ESG) performance and related disclosures, please contact us on info@v-er.eu and direct your enquiries to the Sustainability Team.



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We acknowledge the traditional custodians of the land on which Vulcan's Australian office is situated, the Whadjuk-Noongar people. Vulcan recognises their continuing connection to this country and pays respect to elders, past and present. Vulcan operates principally in the Upper Rhine Valley of Germany and France, an area of rich cultural heritage and local peoples. Vulcan cherishes this cultural inheritance and takes all steps necessary to preserve and protect cultural heritage in its operations.

Audit, Risk & ESG Committee Chair message

Dear Vulcan Shareholders,

On behalf of the Board, I am delighted to share Vulcan's 2024 Sustainability Report with you. Vulcan achieved several key strategic milestones in 2024, offering greater insight into the geothermal energy and lithium processes and operations that will underpin our Phase One Lionheart Project. Vulcan remains well positioned to be a significant provider of renewable heat and power to local communities and empower the energy transition through the delivery of our carbon neutral lithium.

Our Central Lithium Electrolysis Optimisation Plant (CLEOP) in Frankfurt is now producing battery-quality lithium hydroxide monohydrate (LHM) and, together with our Lithium Extraction Optimisation Plant (LEOP), confirms our ability and commitment to produce lithium chemicals in Europe, from locally-sourced European raw materials.

We're proud to have secured conditional European Investment Bank Board approval for up to €500m in debt finance to participate in Phase One of the Lionheart Project. Vulcan believes that the conditional approval of this finance from one of the largest climate finance providers globally is testament to, and an endorsement of, our sustainability credentials and the strategic importance of our Project to Europe's energy transition.¹ This was further echoed when leading international ratings agency, S&P Global, awarded our Green Financing Framework a Dark Green rating - the highest of six possible shades and the highest ever received by a mining and metals company globally. Vulcan was also recognised by Sustainalytics as an ESG Industry Top Rated Company for 2024.

In September, we published an update to our Environmental and Social Impact Assessment (ESIA), to include the Phase One Lionheart Project (the Project). The ESIA is a prerequisite to the raising of sustainable or "green" debt finance and is an important third-party validation of the Project's sustainability credentials. This assesses the potential environmental and social impacts of the Project, and the recent update reiterated there will be several positive impacts to people and the environment, and no anticipated impacts greater than 'minor' post-mitigation.

During the year we have maintained a strong level of local community engagement and support across all our operations. Our community events such as our Open Door Day, school visits and our local heat supply information event, were well attended in 2024. Each event gave the Team valuable opportunities to hear local feedback and explain how we intend to decarbonise the energy and lithium supply chain, create jobs and increase energy security for the areas in which we operate.

With mandatory sustainability reporting standards on the horizon, the Vulcan Board completed training in the EU Corporate Sustainability Reporting Directive (CSRD), Corporate Sustainability Due Diligence Directive (CSDDD), the German Supply Chain Due Diligence Act (LkSG) and other public disclosures, to upskill the Board on the latest legislation, provide insights as well as ensuring transparency. Vulcan also completed our first CSRD-aligned Double Materiality Assessment as a precursor to the adoption of CSRD, the results of which have helped shape the disclosures in this Report.

We recognise that our journey in coming years will require a relentless focus on sustainability to achieve our goals. As Vulcan progresses towards construction and the scope for potential impacts increases, we remain dedicated to implementing measures that support our mission of becoming the world's first integrated sustainable lithium and renewable energy business.

Our commitment to sustainability has been a key competitive advantage since our inception, and we will continue this commitment going forward, delivering value to both our community and our shareholders.

I would like to thank everyone at Vulcan for their ongoing dedication to upholding the highest sustainability standards.



We understand the importance of collaboration and welcome feedback on this Report from both our shareholders and other stakeholders.

Josephine Bush
Chair

¹ Refer to the Company's announcement entitled "EIB Board approves participation in Phase One financing" and dated 12 December 2024 as released on the ASX.

2024 sustainability snapshot

CLIMATE CHAMPION



Generated approximately
18,500 MWh
of renewable
electricity

Avoided
7,284 tCO₂-e
(location based)
on the German
electricity grid*

S&P Global
Green Financing
Framework
**Dark Green
rating**

DETERMINED



**First fully
integrated
production**
in Europe of
battery-quality
lithium chemicals,
from resource to
final product

**Formed partnership
with BASF**
to explore the use of
geothermal heat sources
for decarbonising
BASF's largest site,
while also benefiting
the communities
of Frankenthal and
Ludwigshafen

**GEOSMART
Project**
completed, designed
to deliver reliable,
baseload geothermal
renewable heating to
local communities

INSPIRING



Sustainalytics
**top-rated
company**

**No negative
feedback** received
from updated publicly
disclosed ESIA
indicating broad
community support

€100m grant
for the HEAT4LANDAU**
Project towards
renewable heating supply
for communities



* Under the GHG Protocol Methodology, there are two methods available for calculating Scope 2 emissions – emissions from purchased electricity, steam, heating and cooling. The location-based method reflects the average emissions intensity of grids on which energy consumption occurs.

**Funded by the European Union - NextGenerationEU. The expressed Views and opinions expressed are solely those of the author(s) and do not necessarily reflect the views of the European Union or the European Commission. Neither the European Union nor the European Commission can be held responsible for them.



OUR PURPOSE

We will empower a carbon neutral future

OUR MISSION

Becoming Europe's leading sustainable lithium business and enabling energy security through geothermal energy.

BATTERY-QUALITY
LITHIUM

RENEWABLE
HEAT

RENEWABLE
POWER

TECHNOLOGY

TEAM

A world-leading scientific and commercial team in the fields of lithium and geothermal energy.

INNOVATION

Adapting existing technologies to efficiently produce lithium from geothermal brine.

SUPPLY CHAIN

Strategically placed in the heart of the European EV market to decarbonise the supply chain.

Vulcan's Sustainability and ESG Framework

OUR VALUES



CLIMATE CHAMPION

We will pioneer a carbon neutral future. We stand up for what truly matters.



DETERMINED

We are eager to succeed and determined to shape tomorrow. We tackle any challenge in front of us.



INSPIRING

We are united in our passion for a better world. We rise and inspire ourselves and others.



About Vulcan

At the heart of Vulcan is its unique proposition: the decarbonisation of two traditionally carbon-intensive industries, the energy industry and lithium supply chain, to empower the European energy and mobility transition.

OneVulcan is who we are. It's our shared culture, the way we work together, and the mindset that drives us forward. It unites us across teams, locations, and challenges, ensuring that we stay true to what makes Vulcan Energy unique.

Vulcan Values

The three Vulcan Values – Climate Champion, Determined, Inspirational – provide a strong foundation for the Company as it continues to grow and evolve. These values also feed directly into the Company's Sustainability and ESG framework where they permeate all aspects of the business and the spirit of the Company's purpose and mission. Throughout 2024, Vulcan continued to embed these values across the Company to unify and energise staff, under the OneVulcan philosophy.

The OneVulcan Value Recognition has been included in the monthly, company wide All Hands meetings to acknowledge the dedication and hard work of employees who embody Vulcan's core values every day. The OneVulcan Value Recognition honours those employees who go above and beyond in their roles in aligning to Vulcan values, contributing to its success and fostering a positive work environment.

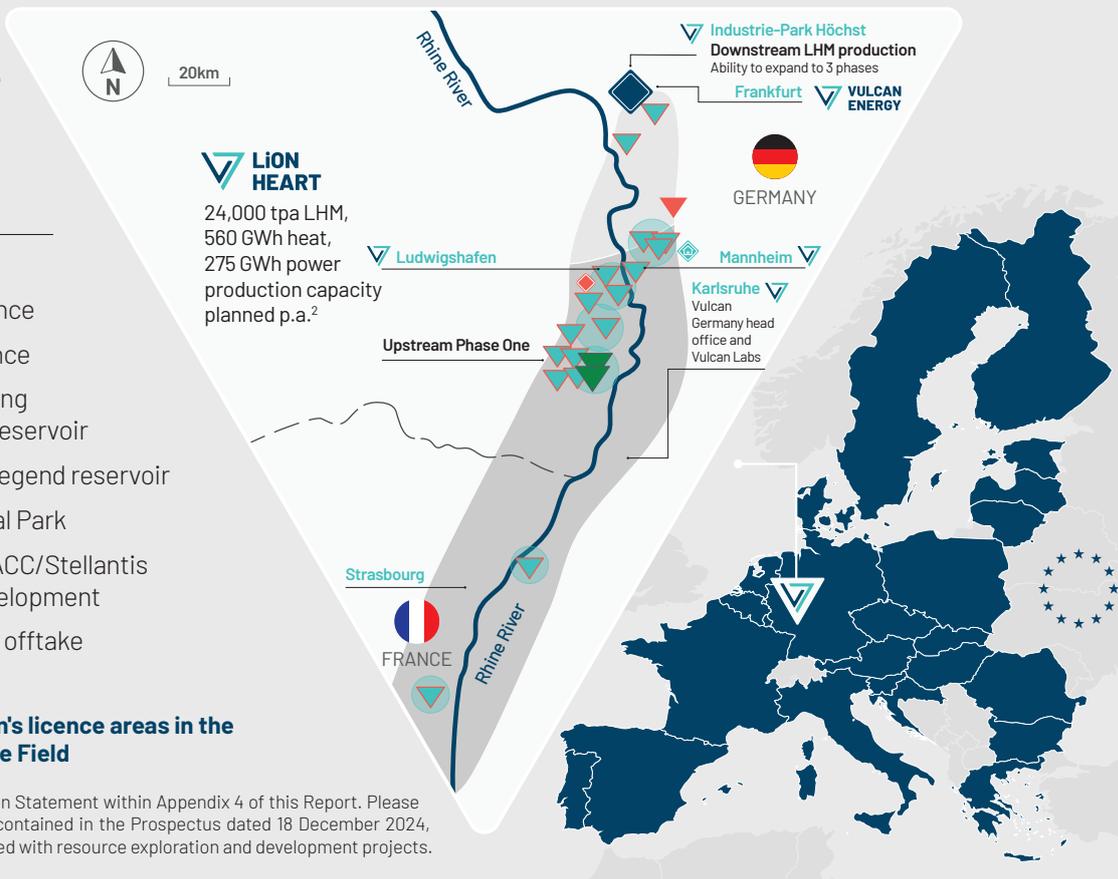


Licence areas for Vulcan's Phase One Lionheart Project and beyond

LEGEND

- Lithium and geothermal licence
- Production licence
- Primary producing Buntsandstein reservoir
- Secondary Rotliegend reservoir
- Höchst Industrial Park
- Kaiserslautern ACC/Stellantis Gigafactory development
- Renewable heat offtake agreement

Overview map of Vulcan's licence areas in the Upper Rhine Valley Brine Field



² Refer to the Competent Person Statement within Appendix 4 of this Report. Please also refer to the risk factors contained in the Prospectus dated 18 December 2024, including those risks associated with resource exploration and development projects.

Empowering the European energy and mobility transition

Vulcan has designed its Phase One Lionheart Project (the Project) using existing commercial technologies which will co-produce renewable power, heat and lithium from the same geothermal brine source, while minimising environmental impacts and creating shared value.

Geothermal brine

The brine, sourced from the Upper Rhine Valley Brine Field in Germany, contains enough heat to power Vulcan's lithium extraction process, with sufficient residual heat to supply renewable district heating to local communities and produce renewable electricity for export to the grid.

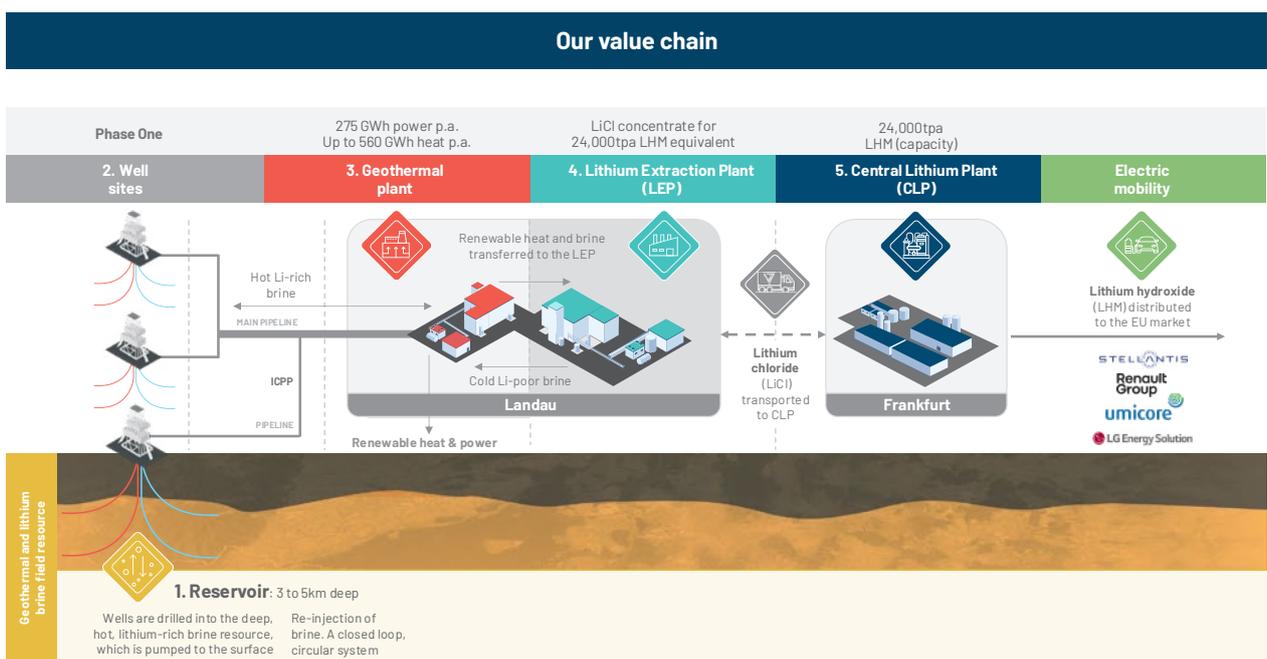
Vulcan owns and operates a geothermal renewable energy plant at Insheim, and has signed an agreement to acquire another one at Landau. The Company also has an in-house drilling company, Vercana, which provides a distinct commercial advantage for Vulcan, due to the high demand for geothermal renewable projects in Europe. Vulcan has acquired two electric drill rigs with the capacity to drill to the target depth required for deep geothermal energy wells in the area.

Lithium processing

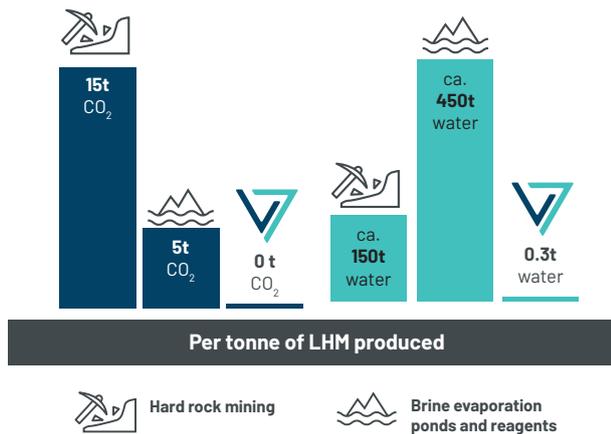
Vulcan uses a two-stage process to convert lithium contained in brine into a battery-quality product before the depleted brine is returned to the well sites. In the first step, naturally heated brine from underground is brought to the surface, producing heat and power. The lithium is then extracted from this brine through an adsorption-type direct lithium extraction (A-DLE) process using Vulcan's proprietary adsorbent, VULSORB®, and natural heat from the brine, resulting in a lithium chloride (LiCl) solution. The cycle is then closed by returning the brine to the subsurface. In the second stage, the LiCl solution is refined through electrolysis to lithium hydroxide monohydrate (LHM), ready for commercial use.

In November 2023, Vulcan opened its Lithium Extraction Optimisation Plant (LEOP), marking the first step in establishing a fully integrated domestic lithium supply chain. Since its commissioning, Vulcan has been continuously improving the processes to produce a highly pure LiCl solution, gaining insights to refine and scale operations for the commercial lithium extraction plant (LEP).

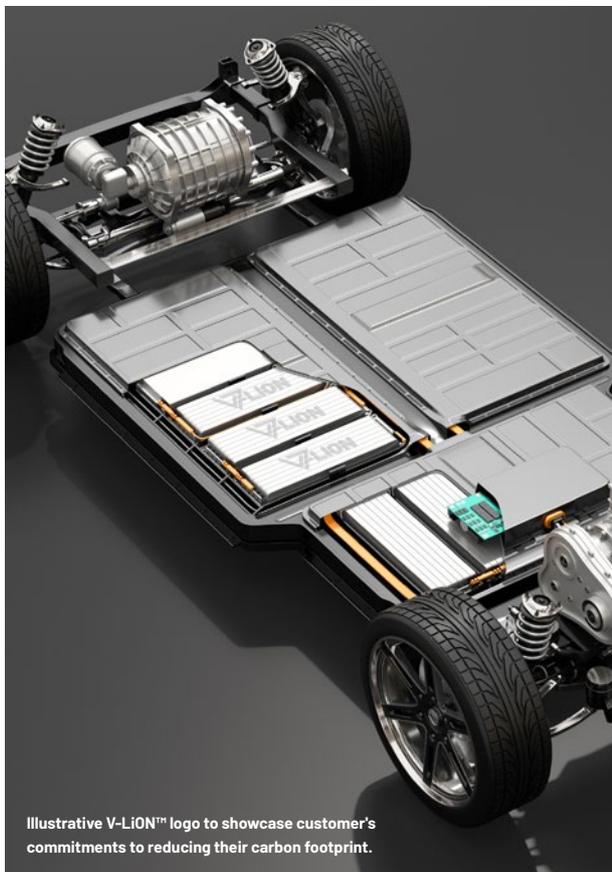
Building on this progress, Vulcan passed a significant milestone for its emerging lithium business this year with the commissioning of Europe's first lithium electrolysis optimisation plant – the Central Lithium Electrolysis Optimisation Plant (CLEOP). This enables the production of high-quality lithium from raw material to end-product, for the first time in Europe, for the benefit of its rapidly growing electric vehicle industry.



A-DLE is a more efficient lithium extraction method than legacy extraction methods and has lower operating costs³, fewer impurities and less intensive land and water requirements. A-DLE has been in commercial use since the 1990s and now accounts for about 10% of global commercial lithium production⁴. With major companies now investing in building new projects with this technology, such as Eramet and Rio Tinto, a new era of lithium production is emerging as DLE minimises costs, reduces dependence on offshore supply chains and shortens development time.



The source for this data was provided by Minviro, the underlying assumptions can be found in Appendix 3.



Phase One Lionheart Project

The commissioning of the two-stage lithium production process in the optimisation plants was a technical achievement for Vulcan. This reinforced the Company's transition from its development phase towards realisation of the Phase One Lionheart Project, in which Vulcan will produce commercial quantities of Europe's domestically sourced and produced lithium chemicals.



Throughout 2025, Vulcan will supply battery-quality lithium to offtake partners for pre-qualification testing ahead of commercial production. This initiative is designed to accelerate the pre-qualification process in the lead up to commercial production and supply. In 2024, Vulcan developed V-LiON™ as the brand name for its battery-quality lithium. V-LiON™ represents sustainable, premium lithium for electric vehicles (EVs) and serves as a symbol of fully domestically produced lithium in Germany, supporting Europe's mobility transition. Vulcan Group is seeking trademark protection for the V-LiON™ logo. If successfully registered, the Company intends to licence the trademark to customers, allowing them to demonstrate their commitment to reducing their carbon footprint by partnering with suppliers that provide greener and more sustainable products.

A premium industry-leading lithium product for battery electric vehicles

- V** is for Vulcan. We strive to be climate champions.
- Li** is for high purity, sustainable* and versatile, battery-quality lithium products.
- O** is for zero fossil fuels directly used in our onsite process to produce lithium and the co-production of renewable energy for local communities.
- N** is for no net greenhouse gas emissions across our project life.

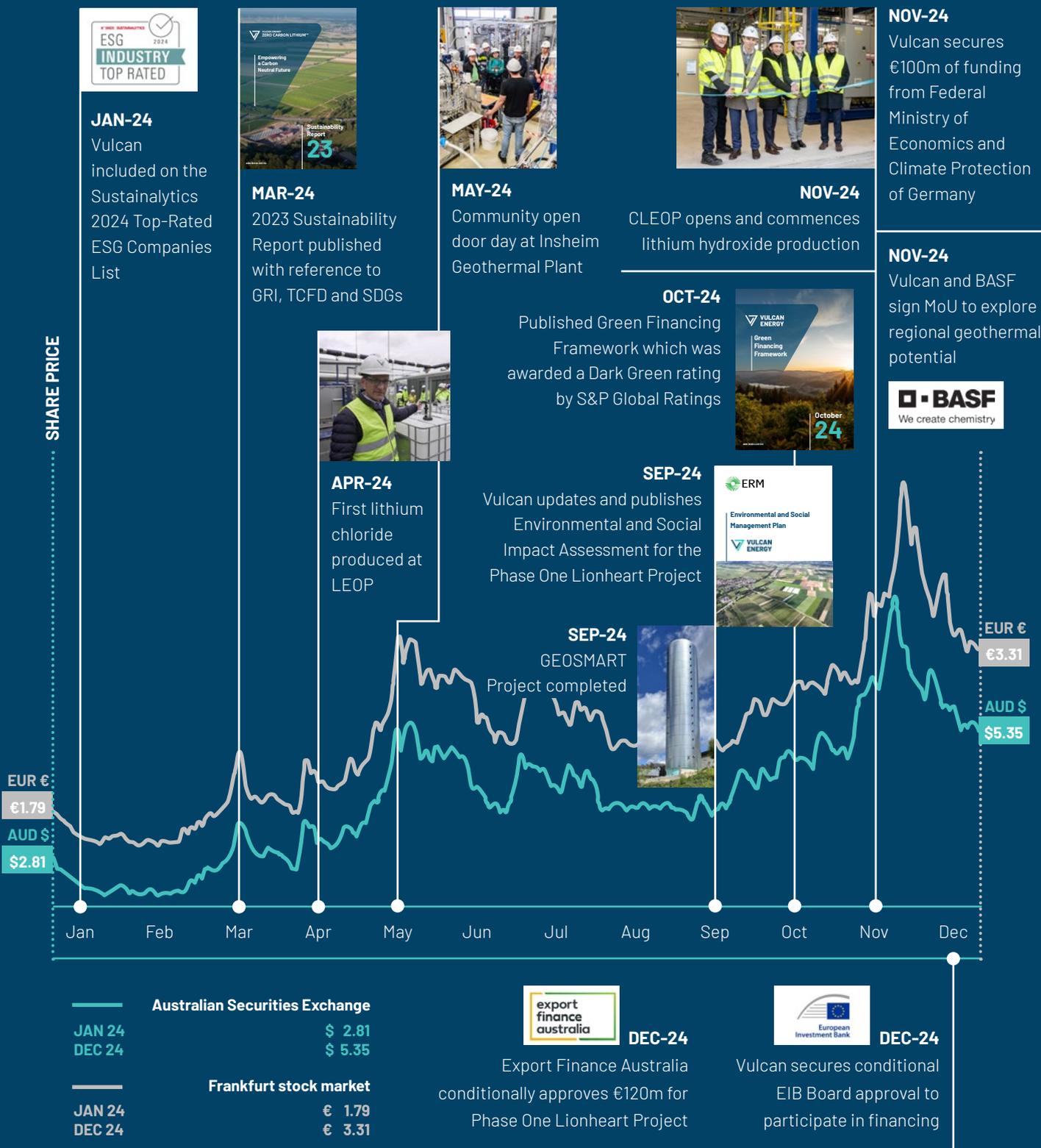
*Minviro 2023 Life Cycle Assessment results reported in 2023 Sustainability Report.

³Source: Benchmark Mineral Intelligence

⁴Goldman Sachs Research, *Global Metals & Mining: Direct Lithium Extraction – A potential game changing technology*, April 2023

Sustainability milestones and targets

2024 sustainability milestones



As of March 2024 current share price for VUL: \$3.850

Targets

Performance against 2024 targets

2024 Targets	Target achieved	Result
Complete EU CSRD-aligned materiality assessment	✓	Double Materiality Assessment completed giving clearer oversight of priority sustainability topics
Carry out pre-assurance assessment for EU CSRD readiness	✗	No longer applicable due to the EU Omnibus
Conduct Board member training on climate risks	✓	Board training conducted on CSRD, CSDDD, and the Supply Chain Act including climate risks
20 health, safety and environment (HSE) leadership rounds per month	✗	39 HSE leadership rounds ⁵ completed. Management has acknowledged this is an unsatisfactory result however, there has been no observable negative impact to health and safety performance. To increase the rounds in 2025, Vulcan has assigned targets to individual employees, ensuring leadership rounds are tracked per person and not per site
Score all new suppliers according to ESG criteria	✓	All new suppliers have been scored against ESG criteria

Targets for 2025

ESG targets will support the Company's sustainability performance and Company Purpose with progress routinely monitored and regularly reported. We are committed to the continuous development of our sustainability strategy, ensuring its seamless integration into our core business operations. Vulcan is actively setting future medium-term and longer-term sustainability targets, aligned with the Company's strategic objectives, and will be implementing robust measures to track our progress. Our goal is to drive transformative, sustainable growth and operational excellence across all facets of our organisation. Below are our short-term targets for 2025.

	Sustainability targets	Timeframe
Environment 	Zero significant environmental incidents	Annual
	Achieve 100% debt financing and close out environmental action plan	2025
	Commence commercial delivery of renewable heat to local communities	2025
	LCA updated at each study phase and commencement of operations	As scheduled
	Phase One Lionheart Project physical climate change risk assessment	2025
Social and safety 	Zero work-related fatalities	Annual
	Year-on-year improvement of lost time injury frequency rates	Annual
	Zero significant community incidents	Annual
	20 HSE leadership rounds	Monthly
	Deliver 100% debt financing social action items to plan	2025
Governance 	Sustainable supply chain assessments and process for all major suppliers	2025
	Minimum 40% female board representation	Annual
	Appointment of Lead Independent Non-Executive Director	2025
	Ecovadis sustainability ratings assessment	Annually from 2025

⁵ See page 26 for further details on HSE leadership rounds.

Landmark technical achievement with CLEOP opening



ARTIS-Photographie | Uli Deck - Vulcan's Co-Founder, Dr Horst Kreuter; Co-Founder and Executive Chair, Dr Francis Wadin; Mike Josef, Lord Mayor of Frankfurt; Vulcan's Managing Director and CEO, Cris Moreno; and Deputy Prime Minister of Hessen Kaweh Mansoori during the CLEOP opening on 8 November 2024

Vulcan commenced lithium hydroxide production from the processing of high purity lithium chloride (LiCl) solution at its Central Lithium Electrolysis Optimisation Plant (CLEOP), in November 2024 – a significant achievement in the history of the Company.

Commercial extraction of lithium that is both cost competitive and causes minimal environmental impact has long been a key challenge for the lithium industry. Vulcan however, believes it has solved this challenge with its upstream extraction and downstream processing facilities, located close to the raw material's source in the Upper Rhine Valley Brine Field (URVBF), Germany.

The technical achievement of the CLEOP, which was officially opened at Industrial Park Höchst Frankfurt, Germany, on 8 November 2024, completed the sequence necessary to establish Vulcan's lithium extraction and refinement process for product qualification purposes.

The technology Vulcan has developed at the LEOP and the CLEOP enables the extraction and refinement of lithium to take place within compact facilities, which significantly reduces the Company's environmental footprint when compared to other lithium extraction methods, such as open-cut mines or evaporation ponds.

The successful production of sustainable LHM from raw material to end-product, while respecting the environment, is a landmark achievement, contributing to the decarbonisation of Europe's rapidly-growing electric vehicle market.

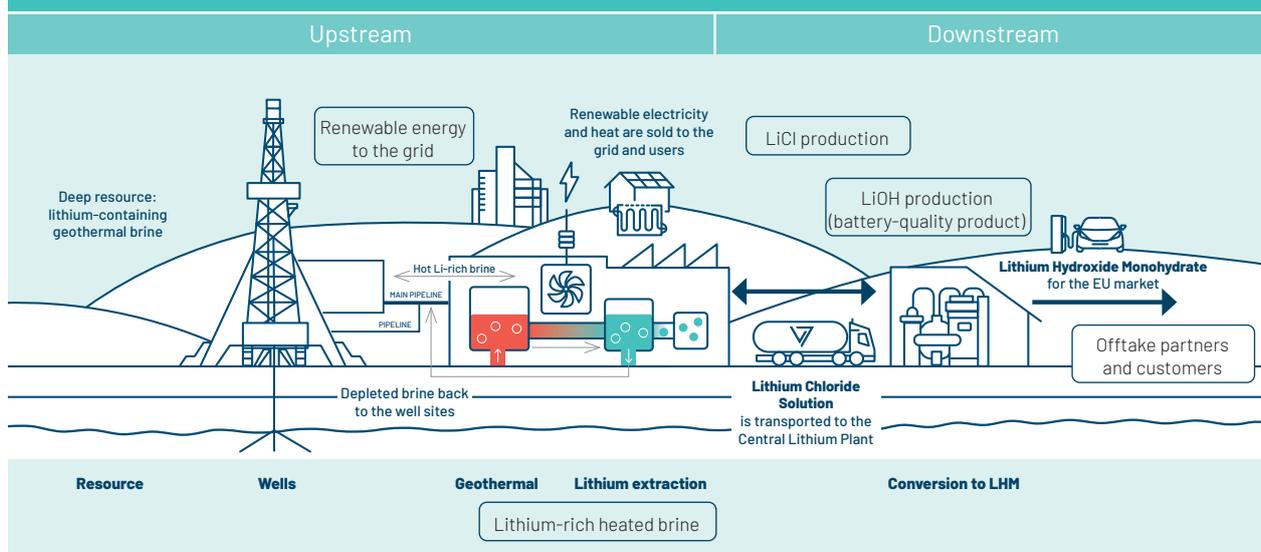
Vulcan's Chief Technology Officer, Stefan Brand, believes Vulcan's A-DLE technology and ethos of sustainability is driving its success:



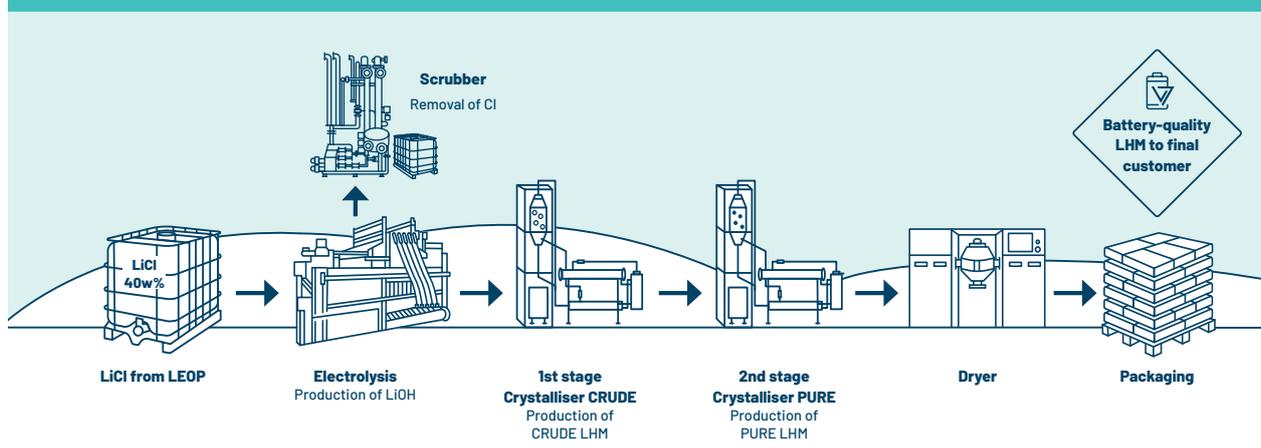
The fact that we have been able to domestically source and extract lithium chloride, and refine it to lithium hydroxide monohydrate within Germany and the EU, in a sustainable way, is a great technical achievement."

- Stefan Brand, Chief Technology Officer

Vulcan's fully integrated Phase One Lionheart Project



Central Lithium Electrolysis Optimisation Plant



Definitions	
LiCl	Lithium Chloride
LiOH	Lithium Hydroxide
LHM	Lithium Hydroxide Monohydrate
Cl	Chlorine



The integration of upstream A-DLE production from deep, naturally heated brine reservoirs with downstream conversion to lithium hydroxide monohydrate is a significant step towards realising Vulcan's Phase One Lionheart Project. Once fully operational, we will be using renewable electricity and no fossil fuels in the process which marks us as one of the world's most sustainable, cost-efficient, and scalable lithium supply chains."

- Cris Moreno, Managing Director and CEO

The LEOP and CLEOP will now be used to optimise operating processes, carry out product qualification, and train Vulcan's operating personnel.



Approach to sustainability

From the outset, Vulcan has entrenched sustainability into its Purpose and Mission, Vulcan is determined to empower a carbon-neutral future by positioning itself to be Europe's foremost sustainable lithium producer and championing energy security through geothermal energy. The Company's evolving sustainability strategy and framework reflects a steadfast dedication to continuous improvement and innovation for long term business success.

Recent Double Materiality Assessment results, decarbonisation planning and climate risk assessments are expected to further steer the development of the sustainability strategy during the coming year in preparation for setting medium- and long-term sustainability targets. Vulcan is embedding best practice sustainability performance within all areas of the organisation, building trust through transparent communication and collaboration with stakeholders, establishing governance frameworks to oversee sustainability programs and ensure accountability through regular monitoring and reporting of performance. Vulcan is committed to continuously enhancing its sustainability strategy, positioning Vulcan as a global leader in the transition to a sustainable future.

Overview

Vulcan is deeply committed to achieving its objectives and continuously enhancing its approach to sustainability over the long term. In the 2024 year, the Team continued to make significant strides in advancing Vulcan's sustainability agenda. Priority focus areas included fulfilling key financing requirements, enhancing understanding of climate-related risks, improving GHG accounting, and establishing a strong foundation for developing the Company's long-term sustainability strategy through detailed materiality and risk assessments. Activities to progress Vulcan's 2024 sustainability agenda included:

- undertaking and validating its first CSRD-aligned Double Materiality Assessment
- updating and publicly disclosing the Phase One Lionheart Project Environmental and Social Impact Assessment (ESIA)
- calculating Vulcan's 2023 GHG Inventory and developing an expanded GHG Inventory tool that includes future GHG projections over the life of the Project
- commencing the Project's physical climate change risk assessment
- issuing Vulcan's independently assessed Green Financing Framework.



Vulcan's Sustainability and ESG Framework

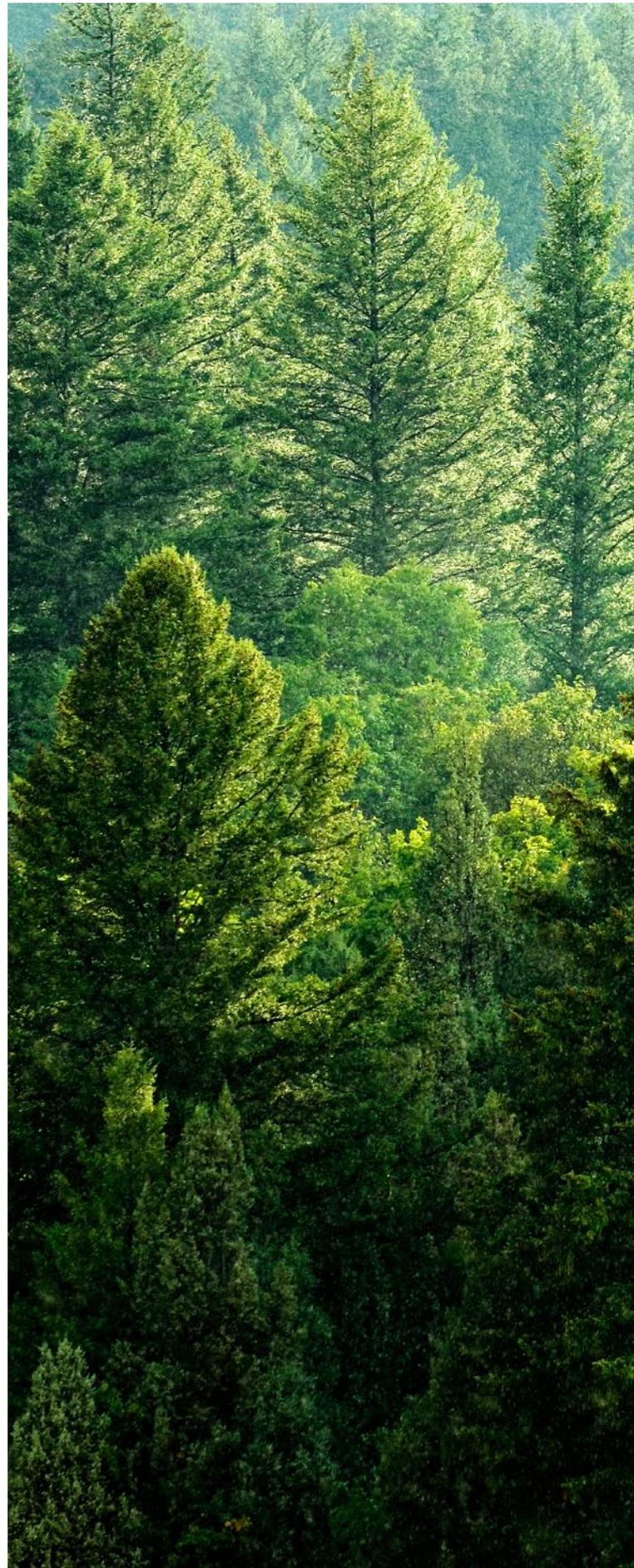
Vulcan's Sustainability and ESG Framework, first defined in 2022, is presently under review as the Company prepares to transition from planning and financing to the construction and execution phase. Vulcan's purpose is to empower the energy and mobility transition in Europe, to have the lowest operational carbon footprint in the lithium supply chain and enable energy security through geothermal energy. By leveraging the right people, innovative technology and Vulcan's strategic position within the European supply chain, Vulcan intends to execute its strategy to be a global leader in the production of renewable energy and lithium while minimising environmental and social impacts.

Double Materiality Assessment

Vulcan completed its first Double Materiality Assessment (DMA) in 2024. The approach was fully aligned with the EU's CSRD and associated European Sustainability Reporting Standard (ESRS). A more detailed financial assessment of the identified climate-related risks and opportunities, as mandated by the Australian Sustainability Reporting Standard (ASRS), will be conducted in 2025 as Vulcan prepares for its inaugural ASRS-aligned disclosure. The DMA analysed ESG impacts, risks and opportunities (IROs) across two categories:

- **Impact materiality:** How Vulcan's operations and practices affect the environment, people and communities.
- **Financial materiality:** ESG IROs that could significantly influence Vulcan's performance, development or financial value.

Materiality refers to whether a sustainability topic is important to a company's financial performance or to its impact on people and the environment. In preparation for the CSRD, Vulcan has completed a thorough analysis of its end-to-end supply chain, including undertaking interviews with internal and external stakeholders, and has chosen to adopt a review of the 6 capitals as per the approach advocated for by the IIRC and the DMA approach embedded within the CSRD. The final results were synthesised and validated by both Vulcan's Executive and the Audit, Risk and ESG Committee.

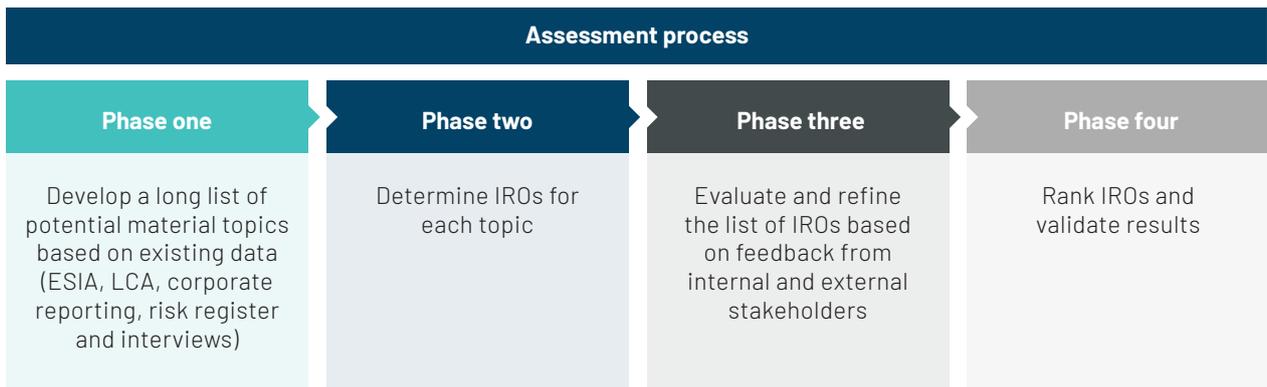


Value creation (six categories of capital)

The International Integrated Reporting Council identified six categories of 'capital' that contribute to a company's value creation as inputs or outputs. These forms of capital extend beyond financial metrics to include economic, environmental and social factors that are interrelated and interdependent. In incorporating selected elements of integrated reporting, Vulcan has chosen to undertake an assessment of these forms of capital in relation to its operations to better understand its risks and opportunities.

As part of the DMA, Vulcan's value chain was mapped to understand how Vulcan takes these inputs and converts these into outputs in the process of value creation. This mapping takes a holistic approach, incorporating both the positive and negative impacts Vulcan has on each of these categories of capital. This will support informed decision-making to minimise risks and maximise opportunity. In this assessment, it was found that Vulcan's operations will have minimal impacts on natural capital. Given the history of industry in the regions where it operates, surrounding natural capital has already been subject to soil and groundwater contamination leading to a lower biodiversity baseline.





Double Materiality Assessment outcome

All topics identified as material to Vulcan are outlined below, along with references to additional information found within this Report. Identified material risks will be included in Vulcan’s enterprise risk management register for ongoing monitoring and management including potential corresponding mitigation or adaptation actions.

ESRS	ESRS topic	ESRS subtopic	Description	Reference
E1	Climate change	Climate change mitigation and energy	Enabling decarbonisation of Europe’s transport and provision of local renewable electricity and heat	Throughout the Report, particularly: Empowering the European energy and mobility transition
E5	Circular economy	Resource inflows and outflows	Provision of lithium with low environmental impact	Throughout the Report, particularly: Empowering the European energy and mobility Transition Minimising environmental impacts
S1	Own workforce	Working conditions	Skilled job creation and health, safety and wellbeing of employees	Talent attraction and retention Health, safety and well-being
S2	Workers in the value chain	Working conditions	People-related impacts in the supply chain	Workers in the value chain
S3	Affected communities	Communities’ rights	Community engagement and licence to operate	Our communities
G1	Business conduct	NA	Governance	Sustainability governance framework Sustainability governance policy ESG risk management



Rhineland-Palatinate, Germany

ESG assessments and affiliations

Sustainalytics

In 2024, Vulcan was recognised by Sustainalytics as an ESG Industry Top Rated Company. Sustainalytics' ESG Risk Ratings covers more than 14,000 companies across 42 industries and identifies the top companies in their industry. This status was maintained in 2025.



S&P Global Ratings

Vulcan was assessed and awarded a Dark Green rating for its Green Financing Framework, the highest ever received by a metals and mining company globally. Vulcan was also awarded a Dark Green rating across the Green Enabling Project and Renewable Energy categories.



United Nations Global Compact

As part of Vulcan's membership of the UNGC, we have continued our Communication on Progress (CoP), accessible via the UNGC website. The UNGC encourages companies to align strategies and operations with universal principles on human rights, labour, environment and anti-corruption, and take actions that advance social goals.



United Nations
Global Compact



A world-first Dark Green global rating by S&P for a resources company has reaffirmed Vulcan's sustainability credentials, coming at an important time in Phase One Project financing."

- Felicity Gooding, Executive Director and Group CFO

Creating shared value

Meaningful engagement with all of Vulcan's stakeholders is key to its success and ongoing licence to operate. Vulcan aims to facilitate the European shift toward sustainable energy and mobility, ensuring that people will also benefit from the move away from fossil fuels. Shared value may include benefits such as job creation, energy security, cost savings and improved public health. By illustrating Vulcan's role in delivering access to renewable alternatives, the Team can demonstrate how the Company creates shared value beyond that of shareholders alone.

Communities

Communities are groups of people bound together by a common feature, who have an interest in, or are effected by, Vulcan's Project operations. For Vulcan these groups include local communities near well sites or plants, local worker communities, school communities and so on. Refer to the Stakeholder engagement section of this Report for further details.

Our communities

Vulcan is committed to working with communities and stakeholders to ensure positive and long-lasting outcomes. Vulcan acknowledges the importance of understanding and mitigating potential negative impacts of its operations. Where the ESIA identified potential impacts of the Project, it confirmed that planned mitigations will reduce these impacts to minor levels. Vulcan is committed to ensuring these impacts are mitigated to as low as reasonably practicable. Full details of the ESIA can be found at <https://v-er.eu/esia/>

As operations grow and evolve, the Team continues to maintain an open dialogue with all Vulcan stakeholders to communicate the Company's direction, potential impacts and benefits and to identify, acknowledge and resolve any queries or concerns in a transparent manner.

Stakeholder engagement

During 2024 Vulcan engaged with its internal and external stakeholder groups through a variety of activities and channels, some ongoing and some one-off, to provide information on the Company's activities, operations and plans for the future. A summary of the engagement activities and channels follows on the next page.



ARTIS-Photographie | Uli Deck - Community Open Door Insheim

Stakeholder engagement process

A summary of Vulcan's 2024 stakeholder engagement activities is provided in the below table:

Stakeholder group	Engagement activities and channels		Key topics of interest
Employees Those employed by Vulcan across countries, operations and offices	<ul style="list-style-type: none"> Weekly/ monthly all staff emails/newsletter Monthly All Hands meetings Quarterly Town Hall meetings Vulcan Works Council 1:1 feedback session HSE site and development training 	<ul style="list-style-type: none"> Monthly HSE leadership rounds Health and safety mobile app Health and safety training Whistleblower mechanism Annual performance reviews 	
Communities Local communities in the regions in which Vulcan operates	<ul style="list-style-type: none"> Open Door Day at Insheim Geothermal Plant, attended by ~200 people Multiple school classes at Insheim Geothermal Plant, attended by ~150 students District heating supply information event, Landau, attended by ~50 people Student program Research projects in partnership with local universities Fire department meeting with Vercana on emergency response policies 	<ul style="list-style-type: none"> Four event sponsorships: <ul style="list-style-type: none"> Insheim FC Legends Game Landau pole vault tournament Landau Public View European Football Championship Bréal Marathon Information centres Information road shows 	
Customers Lithium offtakers Heat offtakers Geothermal energy offtakers	<ul style="list-style-type: none"> CLEOP launch event Visiting LEOP <ul style="list-style-type: none"> Thüga, Landau energy and water services group German-Turkish Energy Group 	<ul style="list-style-type: none"> Face-to-face briefings/meetings 	
Suppliers Ranges of businesses, including both local and multinational businesses	<ul style="list-style-type: none"> Circulation of Occupational Health and Safety Plan Website 	<ul style="list-style-type: none"> Emails Direct engagement 	
Government and regulators Local, regional and national governments including Australia, Germany, Italy and the European Union	<ul style="list-style-type: none"> Seven official site visits: <ul style="list-style-type: none"> State Secretary Dr. André Baumann (Ministry of Environment, Climate and Energy) Thomas Strobl (Deputy Prime Minister of Baden-Württemberg and Minister for the Interior, Digital and Communities) Kaweh Mansoori (Deputy Prime Minister of Hesse and Minister for Economics) Manuel Hagel (Parliamentary Group Chairman and State Chairman of the CDU Baden-Württemberg) State Parliament Group of Rhineland-Palatinate Local politicians of Herxheim, Insheim, Rohrbach and Landau State Parliament Group of Rhineland-Palatinate 	<ul style="list-style-type: none"> CLEOP launch event: <ul style="list-style-type: none"> Kaweh Mansoori (Deputy Prime Minister of Hesse and Minister for Economics) Natasha Smith, Australian Ambassador to Germany Mike Josef, Lord Mayor of Frankfurt Face-to-face briefings/meetings Participation in industry Associations and advocacy 	
Investors Current and potential investors in Vulcan	<ul style="list-style-type: none"> ASX and FSE announcements Industry events Technical demonstrations Annual General Meeting and webinars Annual Report 	<ul style="list-style-type: none"> Quarterly Report Sustainability Report Company website updates Briefings 	

Topics of Interest

Environmental and climate sustainability

-  Climate change and energy
-  Environmental impact
-  Biodiversity
-  Circular economy

Social responsibility and community engagement

-  Community engagement
-  Diversity, equity, and inclusion
-  Health, safety, and wellbeing
-  Local employment
-  Human rights
-  ESG profile

Governance and ethical practices

-  Business ethics
-  Governance
-  Transparency
-  Compliance and regulation
-  Procurement
-  Industry engagement

Business performance and technology

-  Capital raising
-  Financial performance
-  Digitisation and cyber security
-  Operations

Feedback, queries and grievance mechanism

The Vulcan Stakeholder Engagement Team manages a variety of channels through which feedback, queries and grievances are received, recorded and responded to. These channels include email inboxes, city council meetings, municipal bulletins, a regional citizen telephone number, information centres, and information events at the Vulcan sites.

A comprehensive grievance mechanism for internal stakeholders (employees) and external stakeholders (residents and local communities) was formally established as part of the Stakeholder Engagement Plan (SEP). The SEP includes specific provisions such as: a grievance register, defined roles and responsibilities, and a strategy for the management of grievances in line with international requirements.

Grievances received by Vulcan are typically submitted in writing and all feedback is recorded in the grievance register. No grievances were received in 2024.

Community engagement

In 2024, a key focus of community engagement was the communities of Insheim and Landau. These are near the sites of Vulcan's Insheim power plant, the LEOP, and the future site of the planned Geothermal and Lithium Extraction Plant (G-LEP), with its six brine-fed production sites.

Vulcan ran a series of community engagement events and sponsored sporting events in Insheim and Landau over the course of the year. These events provided an opportunity to explain the benefits of district heating for the community and the potential for new local jobs, as well as plans to mitigate the impact of construction and heavy vehicle movements.

As part of Vulcan's grievance mechanism, project-specific email addresses have been introduced for the seismic surveying and drilling stages.

District heating, or *Fernwärme* in German, is a system in which heat is sourced or generated in a centralised location and then distributed to residences, businesses and industry in a local area, or district, through a network of insulated pipes.

Vulcan is committed to helping students gain valuable work experience and transition seamlessly into the workforce. Whether pursuing a bachelor's or master's degree, students have the opportunity to join Vulcan as working students or interns, contributing directly to the Team's success and supporting the respective departments.

In 2024, 20 students completed work experience at Vulcan, gaining hands-on experience and professional insights. Additionally, Vulcan offers students the chance to write their thesis with the Company, fostering a strong connection between academic theory and real-world practice. Through these initiatives, Vulcan ensures that students are well-prepared for their future careers while bringing fresh perspectives to the Company.

Government engagement

As Vulcan moves towards Project execution, engagement with the local and federal German Government in 2024 focused on supporting the development of domestic renewable heating and critical raw materials projects, such as Vulcan's. This is being further bolstered through the Critical Raw Materials Act.

Vulcan established a good working relationship with regional authorities and the State Mining Authority and welcomed the measures taken by the EU and the German Government to promote projects for critical raw materials.

Representatives from all levels of German government attended a variety of official Vulcan site visits in 2024. This included the opening of CLEOP which was attended by local and national ministers, industry leaders and the Australian Ambassador to Germany, which Vulcan believes highlights the significance of the Project to both Germany and Australia.



This government support was reinforced through the provision of a €100 million German Recovery and Resilience Plan grant from the German Federal Ministry of Economics and Climate Protection and the European Recovery and Resilience Facility. The funding, allocated under the Guideline for Federal Funding for Efficient Heating



Networks, will help facilitate Vulcan's HEAT4LANDAU* project, providing geothermal district heating networks for the city of Landau.



Thomas Strobl visit to CLEOP (Deputy Prime Minister of Baden-Württemberg and Minister for the Interior, Digital and Communities)

Stakeholder Engagement Plan

Vulcan developed the SEP with support from ERM in 2023 and published an updated version in September 2024. The SEP aligns with international best practices and standards, particularly the IFC Performance Standards on Environmental and Social Sustainability and Equator Principles IV.

The SEP is a living document that will be routinely updated by Vulcan as the Project progresses. The SEP follows two streams: a strategic, company-wide approach and a modular approach for the regions, which details separate actions where necessary to comply with local and regional requirements.

*Funded by the European Union - NextGenerationEU. The expressed Views and opinions expressed are solely those of the author(s) and do not necessarily reflect the views of the European Union or the European Commission. Neither the European Union nor the European Commission can be held responsible for them.

The Plan promotes early and transparent engagement with all stakeholders including communities local to Vulcan's projects, investors and workers. This may be through events to share information, employee communications and corporate disclosures.

A general overview of the contents of the SEP includes the following:

- International and national regulatory standards
- Stakeholder mapping, i.e. identification, exchange format including analysis of outcomes
- Vulnerability assessment, including risk analysis
- Grievance mechanism and access to remedy
- Monitoring, management and documentation
- Reporting
- Roles and responsibilities with an action plan for each section.

IFC Performance Standards are part of the International Finance Corporation's Sustainability Framework and provide guidance on identifying risks and impacts. They are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations in relation to project-level activities. The Standards cover topics including environment, social, labour and community.

Equator Principles IV are a financial industry benchmark for determining, assessing and managing environmental and social risk in projects. They are intended to serve as a common baseline and risk management framework for financial institutions to identify, assess and manage environmental and social risks when financing Projects.

Community open door at Insheim Powerplant



ARTIS-Photographie | Uli Deck - Community Open Door Insheim

Vulcan's Open Door Day took place at the Company's geothermal power plant in Insheim, at the beginning of May 2024.

More than 200 people attended on the day and were invited on a tour of the plant to find out more about the technology and Vulcan's current and future operations.

Both the integrated renewable energy and lithium extraction process attracted interest, with valuable feedback received from visitors. This important dialogue format allowed Vulcan to explain its goals and plans, and develop a deeper understanding of the concerns and needs of the community.



Markus Cechovsky, Director Geothermal Production



We have come from Edenkoben to find out about lithium extraction. **We like the idea of buying an electric car.** The tour was very good. We learnt a lot and our previous concerns that geothermal drilling could trigger earthquakes were completely dispelled."

- Visitor



I am studying environmental sciences at the University of Landau. I find the technology of lithium extraction exciting. In terms of **climate protection, regeneration and sustainability**, the project is very interesting to me."

- Visitor

Employees

Vulcan seeks to attract and retain diverse, talented and passionate employees to enhance overall performance and create a sustainable, resilient, and innovative organisation.

Vulcan is supportive of the need for a just transition as industry moves away from fossil fuels. The Team recognises that some of the skills inherent in the oil and gas industry are transferable to Vulcan's operations and a number of former oil and gas workers are now employed at Vulcan.

Talent attraction and retention

The ability to attract and retain a diverse and engaged workforce is an important component for Vulcan to achieve its operational goals and sustainable business practices to deliver shareholder value. In 2024, Vulcan developed a People and Culture Strategy informed by the Vulcan Values. The strategy, to be implemented in 2025, covers the four pillars of human resourcing:

1. Recruiting / onboarding / employer branding
2. Employee and leadership development
3. Employee retention
4. Performance management.

Employee feedback highlights that Vulcan's unique mission – to become Europe's leading sustainable lithium business – is a key asset for the Company's hiring and retention. There were a total of 104 new hires in 2024, with an average retention rate after probationary period of more than 90%.

Vulcan ended the year with a total of 375 full time equivalent (FTE) employees – an increase of 4 FTE from 2023. In December 2023, Vulcan closed its subsidiary Vulcan Energy Engineering in Augsburg, and incorporated it into Vulcan's head company, and relocated activities to Karlsruhe. This centralisation of activities further empowers the OneVulcan philosophy. As it enters its next phase Vulcan will be hiring for drilling, add construction and operation personnel, most of which are highly skilled or technical workers contributing to the renewable energy and geothermal sectors, which are rapidly expanding in Germany.



ARTIS-Photographie | Uli Deck - L to R: Vulcan's Executive Director and Group CFO, Felicity Gooding; Australian Ambassador to Germany, Natasha Smith; Managing Director and CEO, Cris Moreno; and Executive Chair, Dr Francis Wedin, at the official opening of the CLEOP on 8 November 2024.



Vulcan team at the 2024 Christmas event



Insheim school class visit



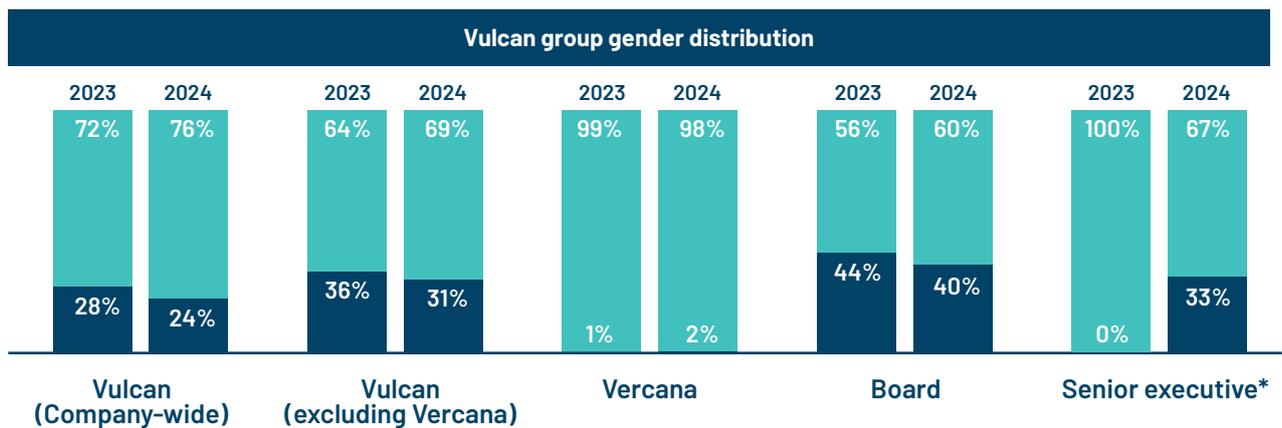
Open door day

Vulcan achieved strong levels of diversity in terms of nationality in 2024, spanning 38 different nationalities. Vulcan appointed its first Inclusion Officer to help bridge the geographical, cultural and linguistic spread of the Company. Unity and collaboration across the Company were strengthened in 2024 with several annual employee engagement events, including monthly All Hands meetings.

A continuing challenge for Vulcan’s Recruitment Team is the low number of women in the pool of potential hires for STEM-related (science, technology, engineering and mathematics) roles.

This is reflected in the fact that male employees currently make up just over three quarters of the Company’s workforce.

In Germany, the number of first-year women in STEM courses increased from 31% in 2012 to 35% in 2021. As these women graduate, Vulcan will continue to focus on improving gender diversity across the business by collaborating with university research students and offering work placements to suitable candidates. At the Board level, the Company has met its target of 40% female representation.



MALE **FEMALE**

*The Company has defined “senior executive” for these purposes as a member of the executive Key Management Personnel, being the Executive Chair, Managing Director, CEO and Group CFO.

Parental leave

All Vulcan employees are entitled to parental leave in accordance with Australian and German regulations.



Employees that took parental leave in 2024

6 Male | 5 Female



Returned from parental leave in 2024

5 Male | 0 Female



International Women's Day Brunch

From laboratory to decarbonising the lithium industry



Katerina Vizelkova, Process Engineer

Katerina Vizelkova, a chemical engineer, was previously working in a research role at the Karlsruhe Institute of Technology in Germany when she made the decision to leave the laboratory to follow her passion to work in an industry role at Vulcan.

Originally from the Czech Republic, Katerina studied her bachelor's and master's degrees in chemical engineering in Prague, before moving to Germany for her PhD in power engineering and environment. During this period, her personal interest in environmental protection and sustainability grew significantly.

The role at Vulcan attracted Katerina because the Company's purpose aligns with her own sustainability interests, and because of the innovative way in which Vulcan's lithium will be sustainably produced.



When I began work at Vulcan my role was focused on the lithium extraction pilot plant in the Insheim power plant. This work was research-intensive, and I was investigating how extraction worked under different atmospheric and high pressure conditions."

– Katerina Vizelkova

Katerina is now focusing on the optimisation and improvement of the LEOP plant itself, where she is responsible for overseeing the DLE process, collecting and evaluating technical data and continually refining the process to become more efficient.

She has now been with Vulcan for three years and enjoys the dynamic nature of the work and is particularly motivated by the significant progress the Project has made during her tenure with the Company.

Health, safety and well-being

At Vulcan, everyone is empowered to create a safe and supportive workplace, always looking out for one another. Vulcan has taken steps to further embed accountability for health and safety into the business in 2024, starting with key performance indicators (KPIs) for the Leadership Team, including an aim to achieve year-on-year improvement of lost time injuries (LTIs) across all operations annually.

In 2024, Vulcan recorded one LTI related to a boom lift accident which bruised the operator's chest. To address the LTI, Vulcan implemented corrective actions which included a thorough investigation to identify root causes, enhanced safety training programs, and the introduction of additional safety measures to prevent recurrence; in this case, an additional person is required to supervise the user during boom lift operations.

Throughout the reporting year, Vulcan developed and began tracking a comprehensive set of health, safety, and environment (HSE) leading and lagging indicators, which were approved by the Board. Leveraging the extensive experience of the Leadership Team in executing major projects and operating industrial plants, Vulcan established and reinforced the appropriate HSE behaviours for both direct and indirect teams to follow.

As Vulcan transitions into the next phase of construction and execution, the potential for health and safety risks is expected to rise, necessitating heightened vigilance and awareness from everyone. To address this challenge, the HSE Team has enhanced and expanded the occupational risk assessment strategy, training programs and accountability measures. The Team remains dedicated to cultivating a diligent health and safety culture. In 2024 a priority was training the Vercana and Insheim companies on three ISO standards:

- ISO 45001:2015 - Occupational Health and Safety Management System
- ISO 14001 - Environmental Management
- ISO 9001 - Quality Management.

A new Occupational Health and Safety (OHS) Plan was also drafted and circulated among 140 suppliers and contractors in October. It includes risk management guidelines for contractors conducting construction activities or drilling and is fully aligned with German health and safety regulations and industry best practices, including the International Association of Oil & Gas Producers (IOGP) standards. The OHS Plan is a living document that is continuously reviewed and updated in line with feedback and observations from the workers about new risks as they arise.

HSE leadership rounds

HSE leadership rounds are visits by the executive leaders to Vulcan's work sites with briefings by the HSE Team. These rounds are important to maintain engagement with executives on health and safety issues. The rounds require the Team to actively participate in site health and safety audits and provide feedback on anything they may observe that could help improve HSE processes.

In the reporting period, 39 HSE leadership rounds were completed. The HSE leadership rounds, introduced as a new initiative in 2024, did not achieve the target of 20 rounds per month. Management has acknowledged this is an unsatisfactory result. To increase the rounds in 2025, Vulcan has assigned targets to individual employees, ensuring leadership rounds are tracked per person and not per site. This approach enhances accountability and improves tracking. Additionally, findings from visits are now automatically shared with the site responsible and monitored for any remedial actions being completed.

Risk assessment

Vulcan identifies and manages health and safety risks and hazards in line with ISO 45001 standards. The primary risk assessment tool is the occupational risk register, which is used to identify risks and hazards for specific work tasks, equipment or substances, so mitigation measures can be established. The register is revised and updated regularly to reflect onsite learning, and it will be expanded as Vulcan operations transition to the Project execution phase.

Before the start of any activity at site level, operational onsite attendees must complete a site-wide "last-minute risk analysis" process. In addition, risks for specific manual tasks are identified through a job safety analysis (JSA). The JSAs are reviewed daily at the workers' meetings that take place before morning and evening shifts, to ensure all staff are aware of the risks and mitigation measures for specific tasks. During the reporting period, Vercana completed 170 JSAs.



Katerina Vizelkova, Process Engineer

The Team seeks feedback from employees to ensure risk assessments are up to date through two key channels:

1. A health and safety mobile app for employees to submit information in real time about any HSE-related incidents, near misses or suggestions to improve processes. Over 100 notifications were received from workers about identified risks in 2024. The app will be extended to contractors in 2025.
2. A QR system for health and safety managers to flag risks in an automated system and create actions for implementation of mitigations through scanning the QR codes on their badges.

Safety training

All employees receive safety training at Vulcan, a critical tool in the promotion of a strong health and safety culture. The training sessions are designed to be interactive and engaging, and use online modules where appropriate. These modules were streamlined in 2024 to ensure workers only receive training that is relevant to them and their role.

Types of health and safety training include:

- Onboarding for new recruits
- Mandatory online training for site entry (e.g. for contractors and visitors)
- Specific health and safety training for:
 - First aiders
 - Fire fighters
 - Waste management
 - Hazardous chemicals management
- Safety officer training.

During the year, 10,048 online training sessions were conducted. Currently office employees receive an average of 16 to 18 training sessions while operators receive an average of 40 to 60 training sessions per year. This is in addition to on-the-job operational and job-specific training. Vercana staff also undertook an additional full day of safety training to address specific drilling-related safety risks.

Safety systems

Vulcan continues to promote “Care Moments”, nine Life-Saving Rules from the IOGP that form a framework proven to help prevent fatal injuries during high-risk activities. Each rule was circulated company-wide and linked with explanatory videos about how to integrate them into daily work practice. The topics for the nine rules are:

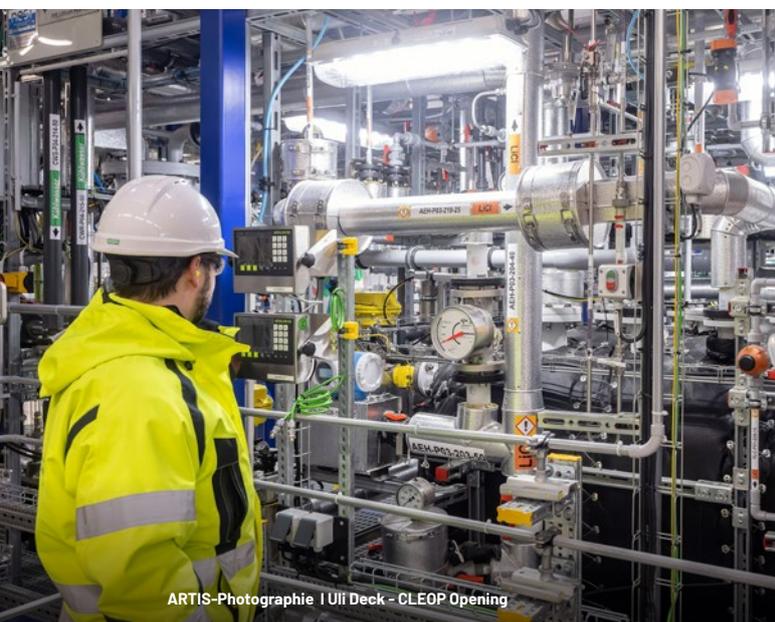
1. Bypassing safety controls
2. Confined space
3. Driving
4. Energy isolation
5. Hot work
6. Line of fire
7. Safe mechanical lifting
8. Work authorisation
9. Working at height.

Health and safety performance

One lost time injury (LTI) was recorded in 2024, and two recordable incidents, which means the number of injuries and the injury rate fell when compared to 2023. With just one LTI, and low incident numbers across several years, it is difficult to draw firm conclusions about the decrease or to identify any trends. However, the Team is working hard to ensure continued safe operations as it moves to the next phase, project execution.

Safety statistic	2022	2023	2024
Lost time incidents (LTIs)	0	4	1
Lost time incidents frequency rate per 1,000,000 hours worked (LTIFR)	0	5.7	1.5
Total recordable injury frequency rate per 1,000,000 hours worked (TRIFR)	No data recorded	8.6	4.5
Fatalities	0	0	0

All safety statistics include both employees and contractors.



Betriebsrat

A common feature of companies in Germany is the "Works Council", or *Betriebsrat*, a group of employees who provide a liaison role between employer and employees. Works Councils differ from unions as they represent employees at the Company level, rather than at a national or industry level.

VER GmbH Works Council

In 2024, the staff of Vulcan's German subsidiary, Vulcan Energie Ressourcen GmbH (VER GmbH), elected their first Works Council made up of seven employees. Management involves the Works Council in appropriate decision-making processes to ensure a more peaceful work environment with greater stability and safety than might otherwise be the case.

In 2024 the VER GmbH Works Council assumed its responsibility to monitor VER GmbH's compliance with relevant labour, safety, gender and equal pay rights. In addition, the Social Partners signed a Company Agreement clarifying the details of the newly introduced shift work roster, thus increasing acceptance and transparency.

In the spirit of the OneVulcan philosophy, the Vulcan Team is committed to cooperating with the VER GmbH Works Council to address issues that will improve the experience of working at VER GmbH.



Being a member of the VER GmbH Works Council is a unique opportunity to co-determine the meaning of OneVulcan. We have the privilege of working with fellow employees and our employer alike to find the best possible definition of what OneVulcan stands for from the employee's perspective. We enjoy making VER GmbH a business success and a great place to work."

- Joint statement | Works Council

Other workers

Workers in the value chain

Vulcan is committed to upholding and respecting the human rights of all people including employees, the communities in which the Company operates, and those within its value chain. In this context, Vulcan respects and upholds freedom of association and the right to a fair wage. The Company aims for all employees to be treated fairly and without discrimination due to age, race, gender, political or religious belief, culture, family commitments, physical or mental ability, marital status, or sexual orientation.

Vulcan's commitment to Human Rights is included in the Company Code of Conduct and Ethics and Supplier Code of Conduct. Vulcan's pre-qualification survey for suppliers includes questions relating to the potential supplier's code of conduct, human rights policies and if they have conducted supply chain analysis in accordance with Germany's Act on Corporate Due Diligence Obligations in Supply Chains (Lieferkettensorgfaltspflichtengesetz (LkSG)).

When undertaking its CSRD-aligned DMA, Vulcan mapped its entire value chain for the first time. The Company is now working hard to deepen its understanding of any potential upstream and downstream impacts of its business such as human rights and modern slavery risks.

Human rights and modern slavery

Vulcan is developing a standalone Human Rights Policy to ensure that the Company addresses its commitment to international human rights instruments and standards, such as the United Nations Guiding Principles on Business and Human Rights and the Organisation for Economic Co-operation and Development (OECD) Guidelines on Responsible Business Conduct for Multinational Enterprises.

Vulcan prohibits the use of all forms of slavery, child or forced labour within its operations and the operations of its suppliers; refer to [Supply Chain Governance](#) section for Vulcan's approach. Suppliers are expected to comply with the requirements of the *Australian Modern Slavery Act 2018 (Cth)* and EU Directives as they apply. This includes having the necessary processes and procedures in place to investigate, assess and address the risk of modern slavery within their operations, and those of their supply chain including implementing appropriate due diligence and remediation programs.

Customers and consumers

Customers: offtake agreements

Although formal commercial production of Vulcan's LHM is yet to begin, the Team has been able to demonstrate many advantages of the final product including its sustainability and European origin to a variety of customers, particularly in the battery-powered electric vehicle sector. The Company has executed multiple LHM offtake agreements to this end.

Vulcan is in discussions with the city of Landau and Energie Sudwest AS (ESW) to supply geothermal heat generated in the Project to ESW for sale to customers for district heating purposes. Remaining heat not used by ESW will be returned to Vulcan to generate electricity that will be sold to the grid.

Vulcan has a geothermal heat offtake agreement with MVV Energie AG, the utility for the city of Mannheim, and is in discussions with other municipal and industrial partners for future phases of renewable heat supply. Vulcan has binding lithium hydroxide offtake agreements with European-focused offtakers: Stellantis, Volkswagen, Renault, Umicore and LG Energy Solution.

Supporting customers in decarbonisation - BASF

Vulcan and BASF SA, Europe's largest chemicals company, signed a memorandum of understanding to explore the use of geothermal energy at BASF's Ludwigshafen site, also located in the Upper Rhine Valley.

The partnership aims to jointly evaluate opportunities to harness natural heat from deep geothermal sources to supply BASF's largest site with renewable energy capable of meeting baseload power requirements in the future. To optimise opportunities from the Project's geothermal resource, Vulcan also plans to build a lithium extraction plant at the site.

Beyond industrial applications, deep geothermal energy offers the potential for district heating in surrounding urban centres, including Frankenthal and Ludwigshafen. This energy availability could play a key role in transitioning the local community to a sustainable long-term municipal heating source. Vulcan and BASF are collaborating with regional energy suppliers – Technische Werke Ludwigshafen and Stadtwerke Frankenthal – to evaluate whether the geothermal energy from the Project can supply low-emission heating to households in these urban areas.

VULSORB® expanded South American footprint

Vulcan has expanded its technological footprint into South America through its technology licensing agreement with development company EAU Lithium, which is strategically placed in Bolivia, in South America's "lithium triangle". Vulcan's VULSORB® enables A-DLE processing, which uses less water than legacy extraction processes and so is of particular interest in water-scarce areas of the region.

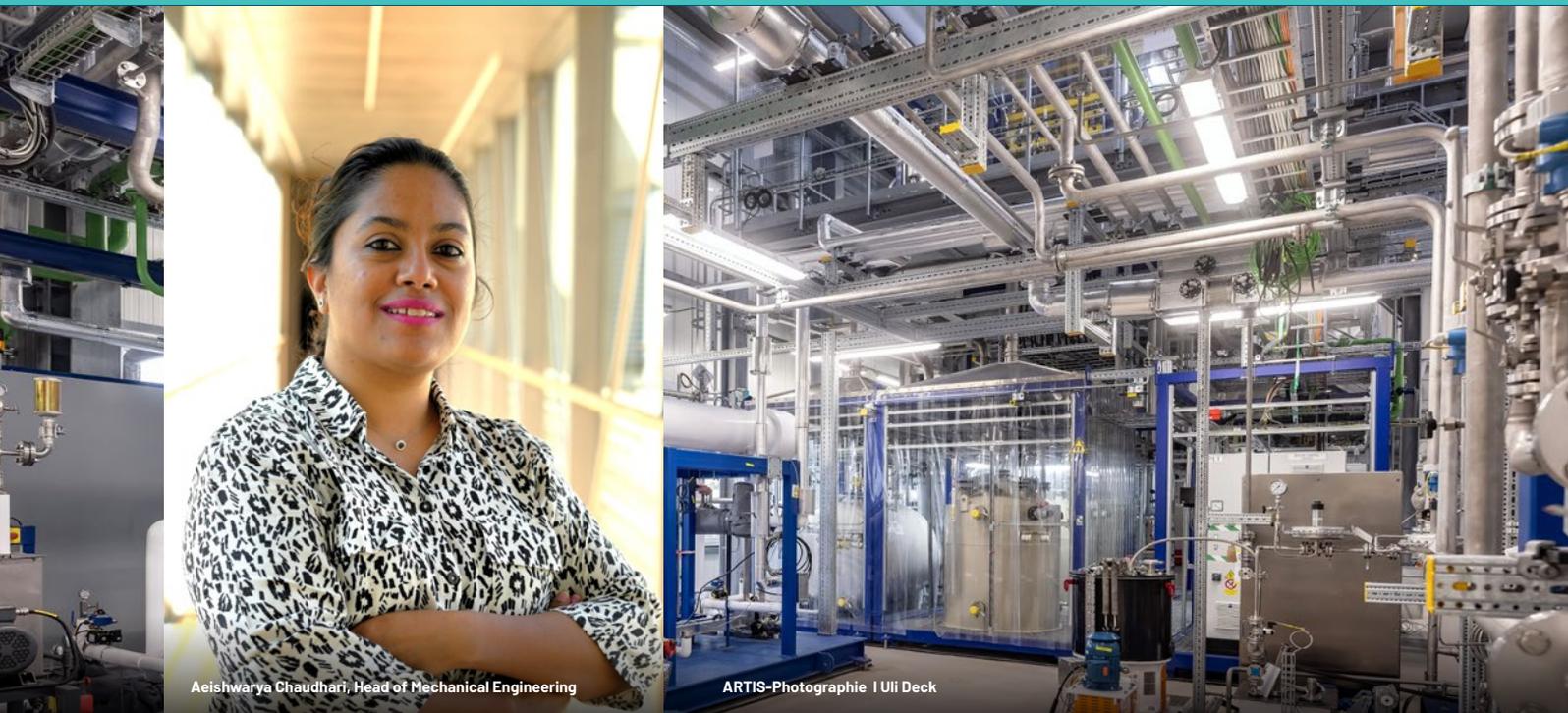
EAU Lithium, in partnership with Bolivia's state-owned lithium company Yacimientos de Litio Boliviano and Vulcan Energy, is undertaking testing to overcome the challenges faced when extracting Bolivian lithium using legacy techniques, due to the high magnesium content of the salt pans from which the lithium brine is sourced. In 2024, Vulcan signed an agreement with EAU Lithium, to test Bolivian lithium brines using Vulcan's proprietary VULSORB® A-DLE technology.

Bolivia is reportedly home to one of the world's largest lithium resources, and Vulcan has the ability to further expand its footprint of sustainable lithium production through a technology licensing model.



Vulcan and BASF SE sign agreement in the presence of local politicians and utility representatives in November 2024

Engineering a sustainable alternative



Aishwarya Chaudhari, Head of Mechanical Engineering

ARTIS-Photographie | Uli Deck

Aishwarya Chaudhari joined the Vulcan Team as its Head of Mechanical Engineering in August 2024. She studied her Bachelor of Mechanical Engineering at Veermata Jijabai Technological Institute in Mumbai, one of India's oldest and most reputable engineering colleges.

Following this degree, Aishwarya worked in projects across refineries, petrochemicals, and chemical industries for close to 17 years, between India, Singapore and Germany, before switching industries to follow her personal interest in sustainability.

Aishwarya undertook further study with the BatteryMBA by Battery Associates for aspiring battery industry leaders, before landing her role at Vulcan. She was particularly drawn to the opportunity to work on a low-carbon intensive lithium project that uses A-DLE, a more sustainable and innovative method compared to other legacy lithium mining techniques.

Aishwarya was also excited about the potential to provide the additional benefit of renewable district heating to support local communities.

At Vulcan, Aishwarya is responsible for the safe and effective design of all mechanical equipment and piping for the Project. In 2024, her team dedicated their efforts to the conceptual engineering phase, driving innovative design improvements to enhance efficiency.



The beauty of this organisation is that you know your work is valued."

- Aishwarya Chaudhari

Minimising environmental impacts

Vulcan's leadership believes in the positive contribution the Company can make to decarbonisation. The Team also recognises that without sufficient mitigation measures in place, its operations could also have negative impacts on the environment. To this end, Vulcan is working hard to understand and minimise the Company's impacts.

Environmental and Social Impact Assessment

An Environmental and Social Impact Assessment (ESIA) is a prerequisite for raising sustainable debt finance and is an important third-party validation of forecasted environmental and social impacts. Vulcan conducted its first ESIA in 2023, which the Company updated and published in 2024.

In this updated ESIA, the Project continues to have no potential impact greater than "minor" post-mitigation measures being implemented and will have some positive social impacts. This supports Vulcan's vision for a project with a lower environmental impact, especially in regard to carbon, water and land footprint, compared to alternative lithium extraction and processing operations.

Vulcan will continue to work on implementing the mitigation measures recommended by the ESIA. A summary of the ESIA findings is included in this Report.



Summary of ESIA findings

Identified Impact	Construction phase		Operation phase		Decommissioning phase	
	Pre-mitigation significance	Post-mitigation significance	Pre-mitigation significance	Post-mitigation significance	Pre-mitigation significance	Post-mitigation significance
Physical environment						
Geology, soils and geohazards	Moderate	Minor	Minor	Insignificant	Minor	Insignificant
Noises	Major	Minor	Moderate	Minor	Moderate	Minor
Air quality	Minor to moderate	Minor to insignificant	Insignificant	Insignificant	Minor to moderate	Minor to insignificant
Surface water	Minor	Insignificant	Minor	Insignificant	Minor	Insignificant
Groundwater	Moderate	Minor	Moderate	Minor	Minor	Insignificant
Water and wastewater	Moderate	Minor	Minor	Insignificant	Moderate	Minor
Biological environment						
Loss of fauna	Minor to moderate	Insignificant	Insignificant	Insignificant	Minor	Insignificant
Disturbance to fauna (light, noise, vibrations, dust)	Moderate	Minor	Minor	Insignificant	Moderate	Minor
Barriers to fauna species movement	Minor	Insignificant	Minor	Insignificant	N/A	N/A
Pollution of aquatic ecosystems	Minor	Insignificant	Minor	Insignificant	Minor	Insignificant
Introduction / spread of invasive alien plants	Minor to moderate	Insignificant	N/A	N/A	Minor	Insignificant
Social environment						
Energy provision	N/A	N/A	Positive	Positive	N/A	N/A
Employment opportunities	N/A	N/A	Positive	Positive	N/A	N/A
Land use and visual impacts	Minor	Insignificant	Insignificant	Insignificant	Minor	Insignificant
Traffic and land access	Minor to moderate	Insignificant	Insignificant	Insignificant	Minor to moderate	Insignificant
Security	Minor	Insignificant	Insignificant	Insignificant	Minor	Insignificant
Occupational health and safety	Moderate	Minor	Minor	Insignificant	Minor	Insignificant
Cultural heritage	Moderate	Minor	Insignificant	Insignificant	Minor	Insignificant

KEY: ■ Insignificant | ■ Minor | ■ Moderate | ■ Major

For further information of the ESIA please refer to <https://v-er.eu/esia/>

Climate change

Emissions

Life Cycle Assessment

Since 2021, Vulcan has partnered with consultancy Minviro to conduct Life Cycle Assessments (LCA) of its Phase One Lionheart Project, with the aim of understanding the environmental footprint of its planned operations over time. The LCA has been updated periodically to reflect engineering changes, with the most recent LCA Report issued in March 2024 and its results shared in Vulcan's 2023 Sustainability Report. The LCA has helped guide Vulcan in environmentally informed decision-making throughout 2024.

Vulcan is committed to making robust and responsible environmental decisions but acknowledges that some trade-offs may be necessary, such as in construction where sourcing certain materials with a low-carbon or carbon neutral footprint is not yet commercially feasible. For example, there are limited low carbon alternatives to cement or steel that are commercially viable at the scale required for the Project. Vulcan's priority is to directly reduce emissions of its operations wherever possible. Vulcan currently offsets its emissions and has carbon neutral certificates for both its Australian and German businesses.

For those emissions that cannot be avoided during future phases in a commercially feasible manner, Vulcan aims to explore options to offset its residual operational emissions.

Current emissions

Vulcan renewed its carbon neutral certifications for its Australian business through Climate Active and for its German business through Climate Impact Partners in the 2023 reporting year. The 2024 emissions are currently in the process of verification and will be included in future reports. The Company is also a member of the Karlsruhe Climate Alliance (Alliance) and has partnered with the Alliance to improve performance and standards.

For 2023, Vulcan continued to use the GHG protocol to calculate Scope 1, Scope 2 and Scope 3 emissions. Total emissions for 2023 across all operations were 26,100 tCO₂-e, a nine-fold increase on 2022 reflecting the construction and operations of the CLEOP and LEOP.

In addition to this, Vulcan generated approximately 18,500 MWh of renewable electricity through its geothermal operations, which resulted in the avoidance of 7,284 tCO₂-e (location based) or 5,990 tCO₂-e (market based) GHG emissions on the German grid⁶. These avoided emissions are not included in Vulcan's current carbon neutral certificates.

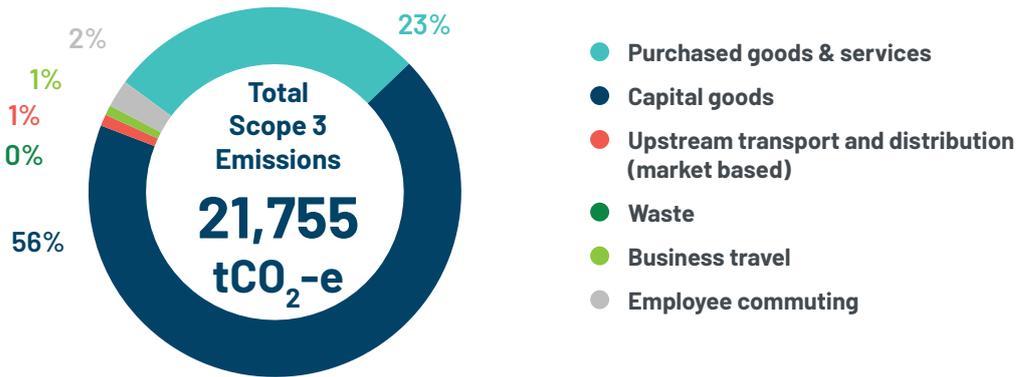
GHG Scope 1, 2 and 3 emissions comparison for Vulcan

	2021	2022	2023
Scope 1	-	25	9
Scope 2	-	128	4,336
Scope 3	-	2,623	21,755
Total tCO₂-e	1,629*	2,776	26,100

*Vulcan did not separate emission scopes in the 2021 reporting period

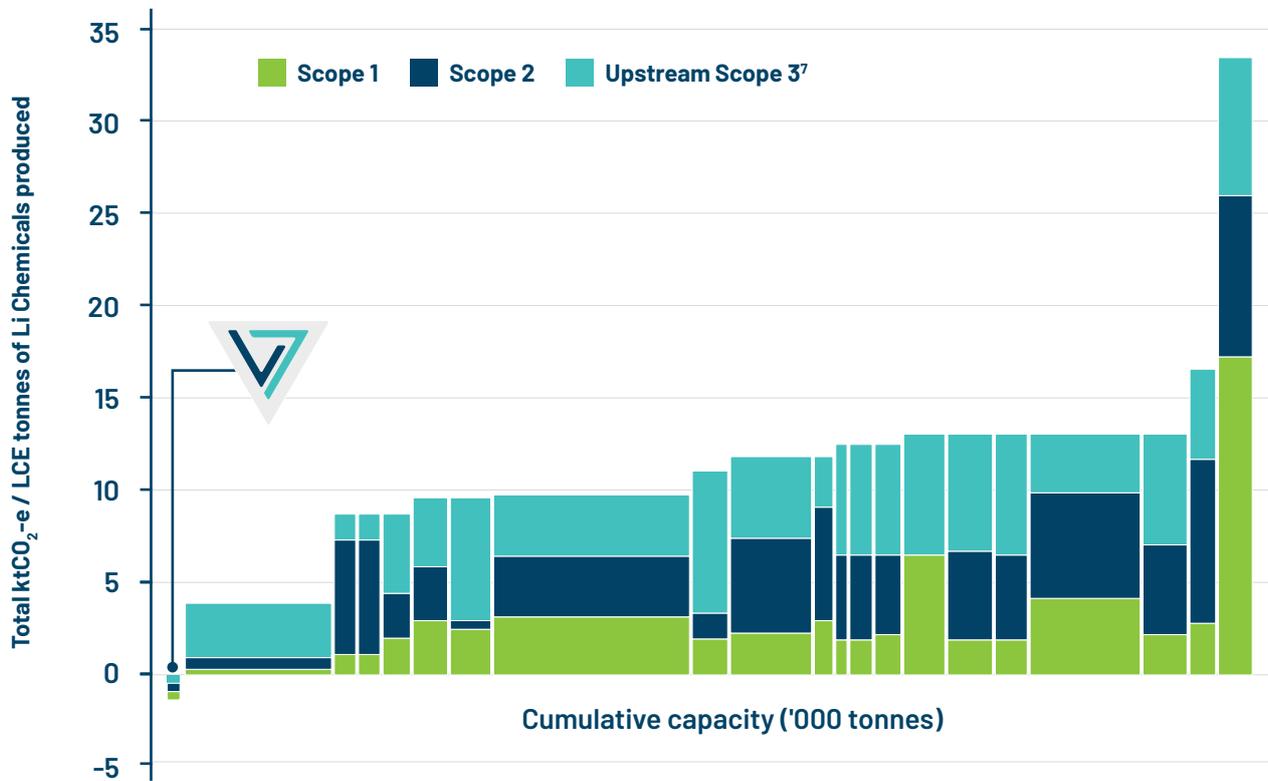
⁶ Under the GHG Protocol Methodology, there are two methods available for calculating Scope 2 emissions, emissions from purchased electricity, steam, heating and cooling. **Location-based** reflects the average emissions intensity of grids on which energy consumption occurs. **Market-based** reflects emissions from electricity that companies have purposely chosen (or their lack of choice).

Scope 3 2023 emissions by source



Research by Benchmark Minerals Intelligence has forecast Vulcan as the lowest emitter per tonne of lithium carbonate equivalent among its peer lithium chemical production companies by 2030 as shown in the graph below.

Forecast comparison of the GHG emissions intensity of lithium chemical production companies in 2030



In 2025, Vulcan plans to develop a decarbonisation roadmap to establish an emission reductions strategy that aligns with its mission, values and long-term vision for both existing and future operations in a responsible and transparent manner. This roadmap is expected to focus on potential solutions for decarbonising residual Scope 1 and Scope 2 emissions associated with construction activities and the transport of lithium chloride by road between the LEP and central lithium plant (CLP), where practicable. Once fully operational, the projected emissions for the Project are expected to be low⁸, with the Project designed to have no fossil fuels used in the extraction and conversion processes. In 2025, Vulcan will also work towards setting science-based emissions targets and will seek to align the decarbonisation roadmap to these targets.

⁷ Benchmark Minerals Intelligence - Upstream Scope 3 emissions include the production and transportation of raw materials, fuels, machinery and equipment, and waste treatment. Also refer to Appendix 3 of this Report.

⁸ See Appendix 3 of this Report.

Climate change risk management

In 2024, Vulcan initiated a climate change risk assessment, with the support of sustainability consulting firm ENGIE Impact, to gain a deeper understanding of the potential impacts of climate change on the Project in the short, medium and long term, and under three climate scenarios (RCP 1.9, RCP 4.5 and RCP 8.5).

Climate scenarios					
		Business ambition	Energy transition	Market & policy	Physical hazards
+ 1.5°C	Scenario 1: SSP1-RCP1.9 Speedy Net Zero (<2°C warming by 2100)	High	Rapid transition towards renewable	Progressive & steady	Lower change in frequency & intensity
	Scenario 2: SSP2-RCP 4.5 Slow and steady (<2-3°C warming by 2100)	Medium	Gradual transition to renewables	Gradual shift	Moderate change in frequency & intensity
+ 4.5°C	Scenario 3: SSP5-RCP8.5 Hot House World (>4°C warming by 2100)	Low	Continued reliance on fossil fuels	Minimal & Inertial	Higher change in frequency & intensity

In 2025, Vulcan in collaboration with ENGIE Impact will complete the qualitative assessment of these physical and transition climate risks, quantify the potential financial impacts of material risks, and identify applicable mitigation and adaptation measures. Following completion of these assessments, prioritised climate-related risks will be incorporated into Vulcan's enterprise risk management register. The work is being undertaken with the following considerations:

Key considerations



Evolution

Ensuring the assessment is aligned with the latest physical climate risk hazard trends (e.g. drawing on recent extreme event experiences and current data) as well as the evolving nature of the business as it moves into commercial production.



Methodology

Ensuring alignment with both the EU ESRS and Australia's ASRS, as well as the Equator Principles IV and IFC Performance Standards, to provide long-term consistency and points of comparison over time from a strong baseline.



Long-term vision

Taking a long-term future view while building on the strong foundations of previous work such as Vulcan's ESG Risk Management Framework, ESIA and DMA.



Preparation for scenario analysis

Preparing a risk assessment that is suitable for the scenario analysis required by ASRS and the International Financial Reporting Standards (IFRS).

The results of this assessment will be shared in Vulcan's 2025 Sustainability Report.

Biodiversity and ecosystems

Vulcan is committed to operating responsibly and limiting the potential impacts of construction and operations on local biodiversity and ecosystems. The Project is located in the Western European Broadleaf Forests eco-region, an area which was once dominated by ancient mountain beech forests. However, today the impact of human activities is readily apparent with large areas which have been cleared for agriculture, settlements and industrial activities. The semi-intact natural habitats that remain are restricted to the Protected Areas of the Natura 2000 network.

Minimising impacts on biodiversity

Land use for human activities is regarded as the most significant driver of terrestrial biodiversity loss. Vulcan's A-DLE lithium extraction and processing method requires a smaller footprint than legacy lithium production methods. These typically use evaporation ponds or open-pit mining, both of which require large areas and involve significant disturbance to the natural habitat.

In Vulcan's A-DLE process, brine is extracted from the subsurface and processed on a relatively small site to produce lithium, before the remaining brine is re-injected into the ground.

Vulcan's land use, therefore, is limited to well sites, pipelines, powerplant and processing facilities. For this reason, Vulcan's lithium production method has a lower environmental impact in terms of land use, than legacy lithium extraction methods.

In addition, Vulcan's project components (well sites, interconnected pipeline and power, G-LEP and CLP) have been positioned to not intersect or overlap with any Protected Areas in the region. There are two Natura 2000 sites near Vulcan's Landau operations: 'Standortübungsplatz Landau' is roughly 50 m from the planned Landau pipeline alignment, while 'Erlenbach und Klingbach' is located within 500 m of a drill site.

Vulcan acknowledges the proximity of these sites and is exploring ways to avoid any potential impacts on these areas and their biodiversity values. This includes installing appropriate wildlife fencing along the Project perimeter near these sites to prevent small mammals and reptiles from entering the construction zone and developing a land/habitat rehabilitation and restoration plan that includes progressive rehabilitation.

Vulcan's Phase One Lionheart Project



1 Vulcan's 100% owned Inheim Geothermal Power Plant and wells (operating)

2 Geox well site and Lithium Extraction Optimisation Plant

3 G-LEP - Option agreement signed to secure site

4 Schleidberg - Vulcan's next production well site

Water resources

Subsurface water resources

Geothermal renewable energy production and lithium extraction are both dependent on deep brine aquifers, accessed by electric drill rigs. The high temperature brine is separated from shallow freshwater aquifers by kilometres of impermeable rock layers, with no impact anticipated on local potable groundwater.

Terrestrial water resources

Vulcan's operations are not located in water-stressed areas; however, the Team is committed to advancing its understanding of the risk of increased water scarcity due to climate-related changes in precipitation levels in Western Europe. Small streams are the only hydrological features found within Vulcan's area of influence. The nearest large river system to the Project site in Landau is the Rhine River, which is located approximately 14 km east. The River Main, the largest of the Rhine tributaries, runs near CLEOP and the planned CLP at Industriepark Höchst in Frankfurt. The Project will only have minor impacts on these systems without mitigation; however, with mitigation the Project will have an insignificant to nil impact.

Based on the results of Vulcan's most recent LCA, it is predicted that Vulcan's A-DLE process will have a lower freshwater footprint compared to alternative lithium projects because it does not rely on evaporation ponds and the freshwater used will be recycled through reverse osmosis, powered by geothermal energy.



Integrity driven governance

Vulcan is committed to the highest standards of corporate governance practice and regulatory compliance, promoting ethical and responsible decision making. The Company believes that sustained positive environmental impact and social responsibility can only be achieved through a commitment to integrity-driven corporate governance.

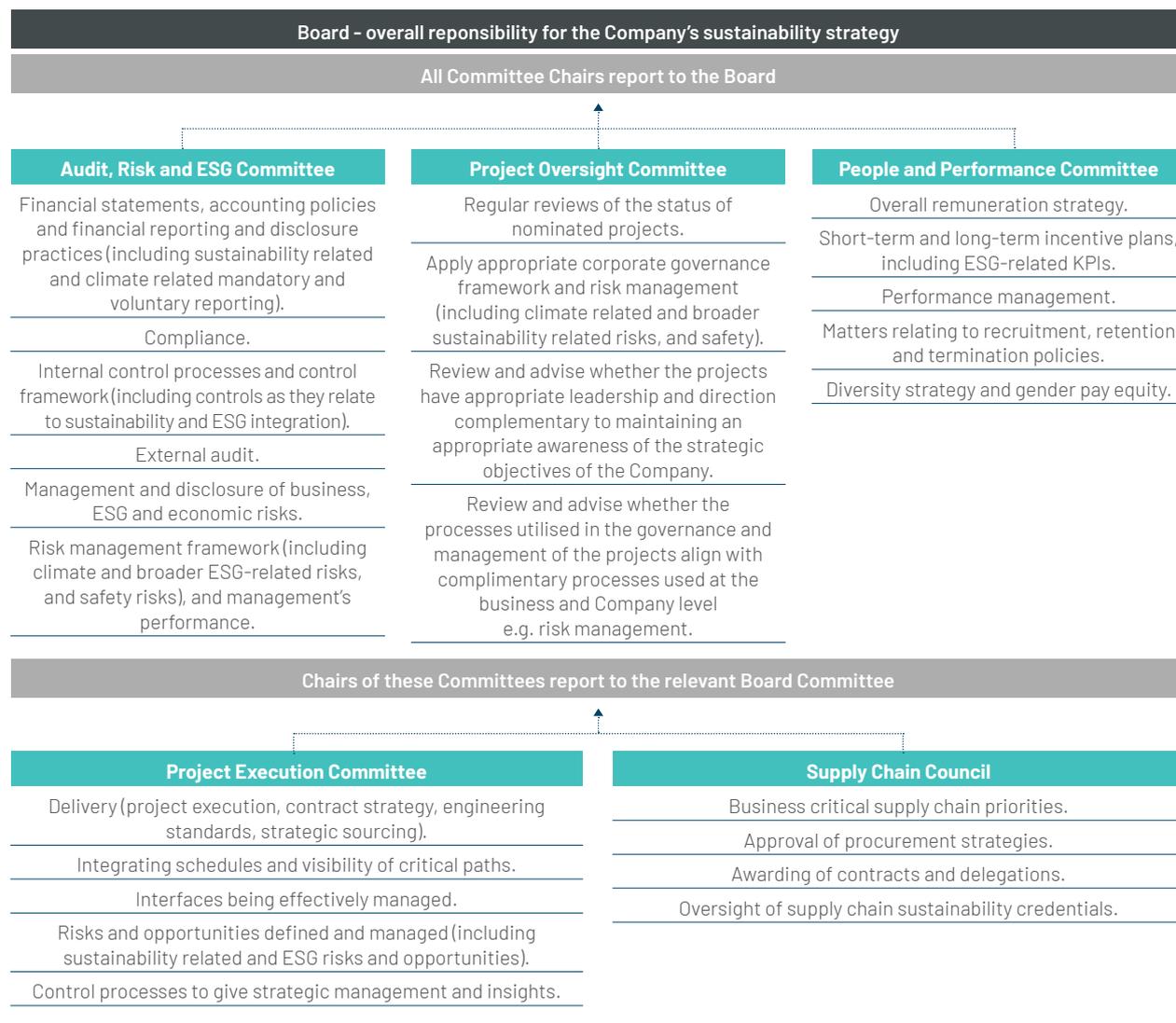
Sustainability governance framework

Integrity-driven governance comes through transparency and oversight, so Vulcan has developed a comprehensive internal reporting framework to ensure climate-related and broader sustainability risks are identified and tracked throughout the organisation.

Vulcan has clearly defined ESG-related roles and responsibilities across the Leadership Team to ensure accountability and clear reporting lines. Vulcan's sustainability governance structure, including roles, responsibilities and reporting lines, can be seen below.

The Chair of the Audit, Risk and ESG Committee, Josephine Bush, has been a Non-Executive Director of the Company since 2021, and brings extensive sustainable finance and strategy development experience.

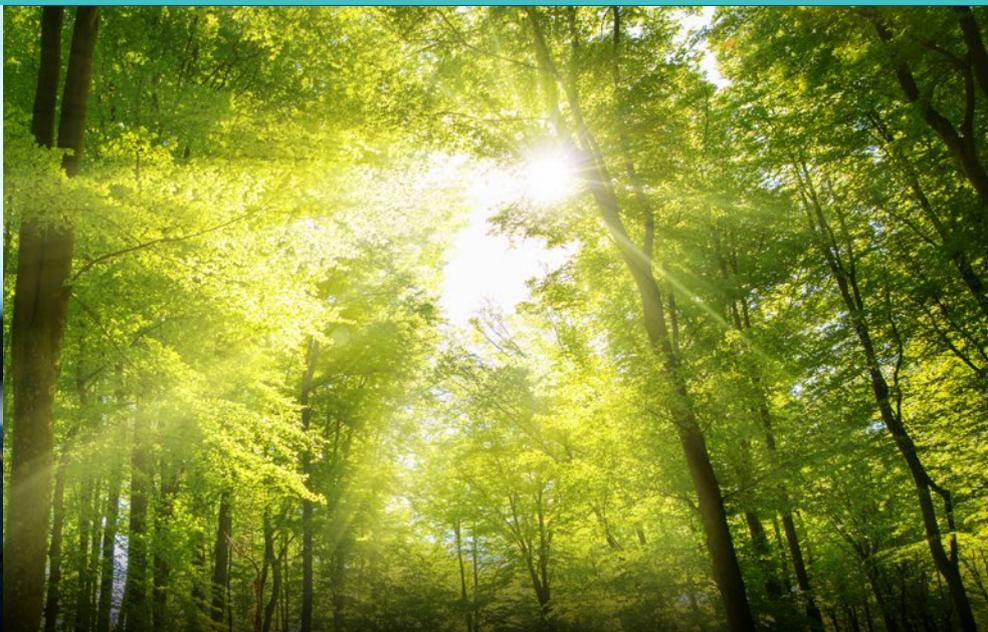
Samantha Langley, who has extensive experience of reducing GHG emissions in the mining industry, joined the Vulcan Leadership Team as Head of Sustainability in June 2024, to further advance the Company's sustainability agenda.



A new champion for sustainability



Samantha Langley, Head of Sustainability



Ensuring sustainability continues to run deeply through every aspect of Vulcan's operations is the task of Vulcan's new Head of Sustainability, Samantha Langley.

Appointed in June 2024, Samantha brings over 20 years' extensive experience in the mining and resources industry. Her professional journey includes roles within diverse mining operations, with her most recent position at BHP. Samantha's career has centered on site-based environmental and sustainability management, operational compliance and reporting, climate change action planning and decarbonisation project delivery across complex mining and mineral processing value chains.

Samantha's role at Vulcan encompasses both internal and external responsibilities. Notably, she played a key role in Vulcan recently achieving its S&P 'Dark Green' rating shortly after she joined: "Our work on sustainable financing for the Project has been one of the most rewarding aspects of my role, particularly being the first mining and metals company to receive a 'Dark Green' rating from S&P Global Ratings' for our Green Financing Framework.



Vulcan is a rapidly evolving company. In the short time since I've joined, we've made considerable progress on our sustainability journey, including completion of Vulcan's first Double Materiality Assessment and the update and public disclosure of our Environmental and Social Impact Assessment in September 2024. I'm proud to be part of a disruptive and innovative company that places great importance on ESG and the future of our planet. I'm driven by Vulcan's sustainability purpose and mission with the goal of helping to accelerate the transition away from fossil fuels with our LHM – a key ingredient for Europe's electric vehicle battery production market."

- Samantha Langley

Vulcan's Board of Directors

The corporate governance of Vulcan has been structured to give stakeholders confidence that the Company is run in a trustworthy, fair and transparent manner and that it meets, or exceeds, its stated goals and commitments. The Board of Directors (the Board) was restructured in 2024 to support Vulcan's transition from a development company into a project execution company. This evolution saw the Board welcome a new member, Angus Barker⁹, who brought a strong background in corporate finance and public company

board experience, while four members, Ranya Alkadamani, Mark Skelton, Gavin Rezos and Annie Liu, retired during the year. This brought the Board composition to four independent Directors at the close of the year.

The changes are intended to enable the Board's skills and experience to effectively support and guide management towards commercial production, while continuing to embed sustainability throughout the business.



Battery materials and renewable energy

Dr Francis Wedin
Executive Chair



Energy and chemicals

Mr Cris Moreno
Managing Director and Chief Executive Officer



Finance and mining

Ms Felicity Gooding¹⁰
Executive Director and Group Chief Financial Officer



Investment banking and government

Mr Angus Barker
Non-Executive Director⁵



Renewable energy

Ms Josephine Bush
Non-Executive Director, Audit, Risk and ESG Committee Chair



Chemicals and renewable energy

Dr Günter Hilken
Non-Executive Director, Projects Oversight Committee Chair



Chemical engineering

Dr Heidi Grön
Non-Executive Director



Investment banking

Mr Gavin Rezos
(retired December 2024)
Non-Executive Deputy Chair



Media and communications

Ms Ranya Alkadamani
(retired December 2024)
Non-Executive Director, People & Performance Committee Chair, Nominations Committee Chair



Energy and battery materials

Ms Annie Liu
(retired September 2024)
Non-Executive Director



Mining and energy

Mr Mark Skelton
(retired February 2024)
Non-Executive Director

Gender composition in reporting period

40% Female

60% Male

⁹ Mr Angus Barker was appointed Non-Executive Director effective 13 September 2024; appointed Lead Independent Director, Deputy Chair, People and Performance Committee Chair and Nominations Committee Chair, effective 1 January 2025.

¹⁰ Ms Felicity Gooding was appointed as an Executive Director on 1 January 2025.

Directors' meetings

The number of meetings held during the year and the number of meetings attended by each Director is contained in the table below.

	Full Board			Audit, Risk and ESG Committee			People and Performance Committee			Project Oversight Committee			Nomination Committee		
	Attended	Eligible to attend	Held	Attended	Eligible to attend	Held	Attended	Eligible to attend	Held	Attended	Eligible to attend	Held	Attended	Eligible to attend	Held
Dr Francis Wedin	7	7	7	4	4	5	3	3	3	2	2	5	3	3	3
Cris Moreno	7	7	7	4	4	5	3	3	3	2	2	5	1	1	3
Angus Barker ¹⁶	2	2	7	1	1	5	1	1	3	-	-	5	1	1	3
Josephine Bush	7	7	7	5	5	5	1	1	3	-	-	5	3	3	3
Dr Günter Hilken ¹⁵	6	7	7	-	-	5	1	1	3	5	5	5	2	3 ¹⁷	3
Dr Heidi Grön	6	7	7	5	5	5	1	1	3	3	5	5	1	3 ¹⁷	3
Gavin Rezos ¹⁰	7	7	7	5	5	5	3	3	3	-	-	5	3	3	3
Ranya Alkadamani ¹⁴	7	7	7	-	-	5	3	3	3	-	-	5	3	3	3
Annie Liu ¹³	5	5	7	-	-	5	2	2	3	-	-	5	-	-	3
Mark Skelton ¹²	-	-	7	-	-	5	-	-	3	1	1	5	-	-	3

The committee members during the year were as follows

ARESG Committee	People and Performance Committee	Project Oversight Committee	Nomination Committee
Josephine Bush Chair Gavin Rezos ¹¹ Dr Heidi Grön	Ranya Alkadamani ¹⁴ Chair Annie Liu ¹³ , Angus Barker (following Ms Liu's resignation) and Gavin Rezos	Dr Günter Hilken Chair (following Mr Skelton's resignation), Dr Heidi Grön and Mark Skelton ¹² (Chair until his resignation on 1 February 2024)	Ranya Alkadamani ¹⁴ Chair Gavin Rezos and Josephine Bush, as well as a representative from the Projects Oversight Committee

In addition to the scheduled Board and Committee meetings, Directors regularly communicate by telephone, email or other electronic means, and where necessary, circular resolutions are executed to affect decisions.

¹¹ Gavin Rezos retired effective 31 December 2024.

¹² Mark Skelton retired effective 1 February 2024.

¹³ Annie Liu retired effective 13 September 2024.

¹⁴ Ranya Alkadamani retired effective 31 December 2024.

¹⁵ Following Mr Skelton's retirement.

¹⁶ Angus Barker appointed Lead Independent Director and Deputy Chair; People and Performance Committee Chair and Nominations Committee Chair from 1 January 2025.

¹⁷ Dr Hilken and Dr Grön were to represent the Project Oversight Committee on the Nomination Committee subject to requirements.

ESG skills & experience

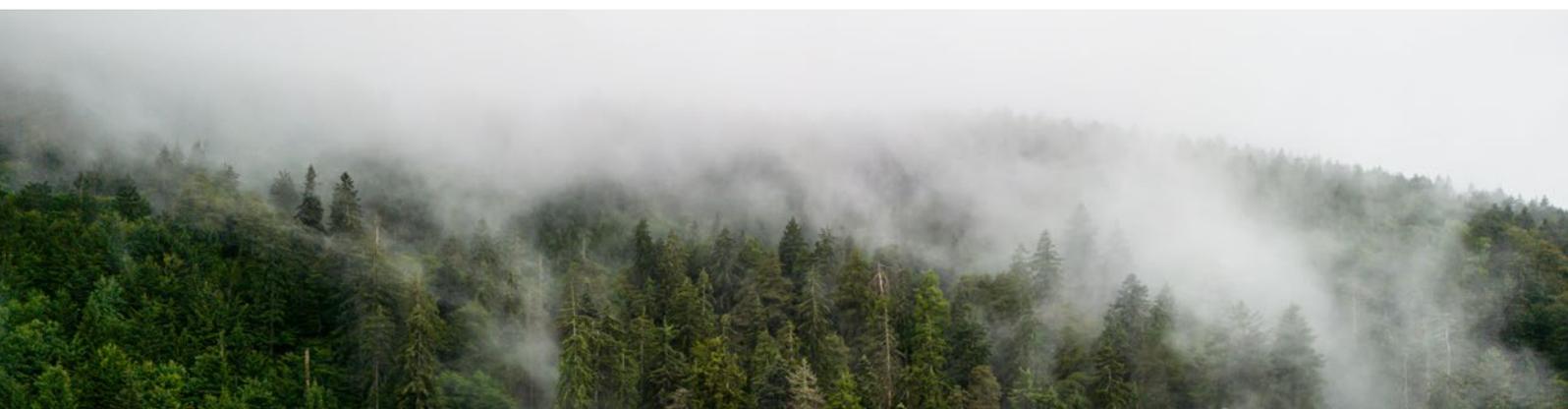
The Board oversees the Company's strategy, performance and management, and has overall responsibility for the Company's sustainability strategy. The Board undertook specialist training courses in 2024 to ensure their skills and knowledge were up to date with the latest additions to EU regulation. Training topics included:

- Corporate Sustainability Reporting Directive (CSRD)
- Corporate Sustainability Due Diligence Directive (CSDDD) and other public disclosures
- German Supply Chain Act
- EU Taxonomy.

Board members are carefully selected to ensure relevant and multi-disciplinary expertise. The composition of the Board is reviewed regularly against the Company's Board skills matrix. This is prepared and maintained by the Nomination Committee to ensure the appropriate mix of skills and expertise is present to facilitate successful strategic oversight and to manage and leverage any business and governance issues.

The following table sets out the composition of skills and experience of Vulcan's Board.

Experience	Knowledge and skills
Corporate leadership Successful experience in CEO and/or other senior corporate leadership roles.	Strategic expertise Setting and reviewing strategy and/or business development.
International experience Senior experience in multiple international locations.	Marketing and communications Media, stakeholder communication, investor relations, public relations.
Resources or technology industry experience Relevant industry (resources, energy, power, mining, exploration, processing) experience.	Risk and compliance Risk management and mitigation experience.
Other Board level experience Membership of other listed entities (last 3 years).	Capital markets Capital raising, mergers and acquisitions.
Capital projects Major resources capital project development and management.	Corporate sustainability ESG strategy development and associated corporate decision-making frameworks, ESG goal/target setting and oversight.
	Environmental Proven experience with climate change policy, sustainability, and carbon reduction.
	Social Positive human resource management.
	Governance Relevant exposure to controlling and operating organisational procedures and processes.



Sustainability governance policy

Vulcan's Environmental Management Policy (see ESG policy in the next section) sets out the Company's high-level commitment to understanding and mitigating environmental impacts associated with operations.

Vulcan Energie Ressourcen GmbH, the German holding company, received ISO 14001:2015 Environmental Management System in 2023 and ISO 9001 Quality Management System certification in 2022. ISO 14001:2015 specifies the requirements for an environmental management system in line with an environmental management policy to manage company sustainability, achievement of environmental objectives and fulfilment of compliance obligations. ISO 9001 works in tandem with ISO 14001:2015 to increase productivity, efficiency, and accountability within organisational processes. Certification to these standards is internationally accepted good practice and will help ensure the systems in place are robust.

ESG policy

Vulcan is focused on developing a robust sustainability governance framework that integrates into its broader Corporate Governance Framework. The Company's approach is supported by the development of corporate governance policies, which are available for review in the Corporate Governance section of the Company website.

Vulcan continues to build its corporate documentation pyramid which will include the following policies describing high-level commitments and standards, followed by directives outlining Company-specific approaches and, finally, processes specifying the steps to be taken for the execution of specific tasks.

- Anti-Bribery and Anti-Corruption Policy
- Community Relations Policy
- Conflict Minerals Policy
- Diversity Policy
- Environmental Management Policy
- Privacy Policy
- Risk Management Policy
- Social Media Policy
- Sustainable Supplier Policy
- Trading Policy
- Whistleblower Protection Policy.



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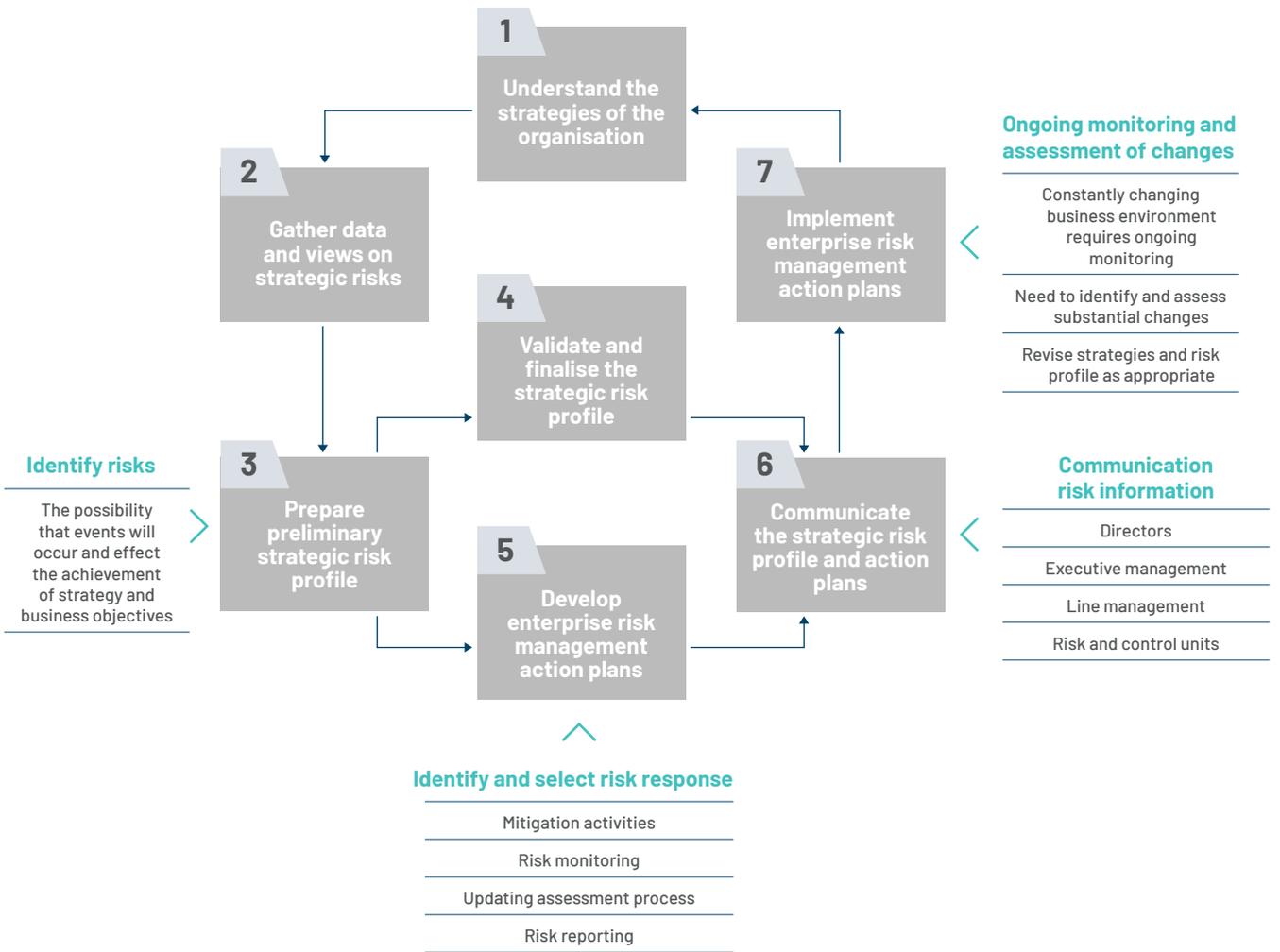
ESG risk management

Identification and management of sustainability-related risks is embedded in Vulcan’s enterprise risk management process. The primary entities for overseeing ESG risks are Vulcan’s Audit, Risk and ESG Committee and the Project Oversight Committee.

These committees work together to update Vulcan’s enterprise risk management register, establish risk mitigation strategies and assign specific risk owners.

The enterprise risk management register is reviewed comprehensively and shared with the Board and leadership at least every six months. However, individual risks are also updated, when necessary, to make the register responsive to the emergence of new risks or the changing priority of existing risks. Risks are prioritised according to their likelihood and severity of consequences. The DMA results will be incorporated into Vulcan’s enterprise risk management register in 2025.

Vulcan’s ESG risk management framework



Business conduct

As a dual-listed company on the Australian Securities Exchange (ASX) and the Prime Standard segment of the regulated market of the Frankfurt Stock Exchange (FSE), Vulcan complies with the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations ("Principles and Recommendations") and with the German Regulations as part of the dual listing under the German Federal Financial Supervisory Authority (BaFin).

Vulcan's Board believes that its Company policies and practices comply with the recommendations set out in the Fourth Edition of the ASX Principles and Recommendations, for which Vulcan produces an annual Corporate Governance Statement. Consistent with the regulatory and reporting obligations of the FSE, Vulcan's Annual Reporting Suite also includes the Group Management Report (*Konzernlagebericht*).

Integrity

Code of Conduct

Vulcan's Code of Conduct and Ethics (the "Code") underpins the Company's commitment to integrity and fair dealing in business affairs. It provides a framework for decisions and actions that relate to ethical conduct in employment.

The Code details the Company's commitment to foster an open and supportive environment in all activities and relationships, and ensures senior leaders demonstrate and reinforce the Vulcan Values in all aspects of business and in all interactions with the Team.

Employees and business partners are also required to act with the highest levels of ethics and integrity, in accordance with Vulcan's beliefs and Values and in the best interests of the Company. Material breaches of the Code must be reported to the Board or a Committee of the Board. In 2024, no material breaches of the Code were reported to the Board.

The Code can be found on the Company website at <https://v-er.eu>.

Anti bribery and corruption

As a company operating in Europe and Australia, Vulcan faces low risks of bribery and corruption in its locations and those of its tier one suppliers. However, Vulcan proactively enforces an Anti-Bribery and Anti-Corruption Policy to prevent the risk of any such abuses and promotes the reporting of misconduct through its Whistleblower Policy. During the reporting period, Vulcan's Board was not notified of any alleged instances of corruption or bribery, nor were any legal actions taken against the Company.

The policy can be found on the Company website at <https://v-er.eu>.

Data and cyber security

Vulcan uses multiple factors to protect Vulcan's data systems and that of its stakeholders, including suppliers, customers and employees. Vulcan guards against threats to data, from loss, corruption or unauthorised access, and has strong governance for how data, specifically personal data, is legitimately used and disclosed. With operations in Germany, Vulcan is bound by EU Data Protection Regulations.

Terms of Use and the Privacy Policy can be found on the Company website at <https://v-er.eu>.



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Supply chain governance

Sustainable supply chain

The Supply Chain Council (SCC) oversees the management of Vulcan's supply chain. The SCC includes representatives from Vulcan's Project Team, Commercial Team, Finance, Engineering, the Project Management Office, HSE, Operations and Field Development Teams. Among the SCC's responsibilities is a remit to ensure a fair and transparent procurement process that considers supplier sustainability requirements and credentials, optimises commercial value and manages risks.

To address these requirements all current and potential suppliers are asked to complete a self-assessment to evaluate their responses to key topics including environmental management, GHG emissions and human rights policies. Separate questionnaires are provided to large and small suppliers, based on company turnover, to ensure appropriate qualification.

Following submission, the Supply Chain department reviews the responses and manually assesses answers to open questions, using a predetermined system.

Suppliers with low ratings are contacted to ensure the questions have been understood and to discuss areas for improvement. Where possible, Vulcan will work together with suppliers to educate and support improvements. The longer term objective is to increase understanding of sustainability requirements and uptake of ESG standards within Vulcan's supply chain.

Vulcan recognises that, when it comes to local procurement, many smaller suppliers may not yet have formalised ESG practices with documentation. The SCC's approach in these instances is to balance ESG risk mitigation with other sustainability priorities in recognition of the small ESG impact these suppliers make to the overall procurement picture.

In 2024 the self-assessment process was used to help achieve the balance Vulcan aims to strike between the value of ESG risk mitigation and cost as the Company moves towards the goal of developing a predominantly European supply chain. For those smaller suppliers, a more streamlined assessment process is used to reduce the burden. Crucially, for its capital-intensive build phase, Vulcan's engineering, procurement & construction management contractor will assess potential suppliers based on ESG-related criteria including, but not limited to, human rights and sustainability issues. It is important to acknowledge that in some instances most companies will need to consider trade-offs in decision making to address the challenges in balancing environmental, social and economic goals. Vulcan remains committed to a transparent and well-governed ESG decision-making process.



Cris Moreno with JordProxa Director, Angus Holden

Outlook

Looking ahead, 2025 is set to be a year of growth for Vulcan as it transitions from development to construction of the Phase One Lionheart Project.

Leadership

Vulcan's leadership team will play a vital role in shaping the future of the Company in the year ahead. To help guide progress in this new phase, two key leadership appointments were made in January 2025: Group Chief Financial Officer, Felicity Gooding, joined the board as an Executive Director, and Non-Executive Director, Angus Barker was announced as Lead Independent Director and Deputy Chair. Felicity's appointment brings the Board total to seven at the start of the year, with three women and four men.

Lithium

The successful commissioning of CLEOP in late 2024 was a great achievement for the Company and in January 2025 the team produced the first battery-quality LHM at the facility, confirming Vulcan's ability to deliver on its unique proposition: the decarbonisation of two traditionally carbon-intensive industries and empowering the European energy and mobility transition.

While Vulcan's Phase One Lionheart Project is being constructed, LHM from CLEOP will continue to be used in ongoing qualification processes with Vulcan's European focused offtakers.

Construction

Construction will be a big theme for Vulcan in 2025, with the intended commencement of construction activities for two new commercial-scale lithium and geothermal processing plants: the G-LEP and CLP (subject to successful financing). Selection of engineering, procurement and construction contractors is now underway using Vulcan's procurement criteria to ensure the most sustainably aware and compliant contractors are employed in line with Vulcan's sustainable supply chain ambitions.

Vulcan all plans to start construction of the interconnected pipeline and power, which will connect well sites to the geothermal power plant and the LEP. In February 2025, the Company also mobilised its V20 electric drilling rig to the Schleidberg well site near Landau, Germany. Drilling new wells to increase production of geothermal-lithium brine is another step towards putting essential infrastructure in place for the Phase One Lionheart Project.

Finance

A visit from the German Chancellor to Vulcan's LEOP facility in Landau Germany in January 2025 highlighted alignment of Vulcan's purpose and mission with key policy priorities at the highest levels in the German Government. Vulcan will continue to progress government funding and approval processes.

Vulcan is targeting completion of its financing process for its Phase One Lionheart Project during 2025.



Heating

Vulcan and BASF have signed a memorandum of understanding to explore the use of geothermal energy at the chemical company's Ludwigshafen site as part of a strategic partnership. The two companies will jointly evaluate opportunities for harnessing natural heat from deep geothermal sources to supply BASF's facility with renewable energy capable of meeting base load power requirements in the future. The surrounding urban centres of Frankenthal and Ludwigshafen are also expected to benefit from the sustainable heat. To optimise the synergy effects from the project, Vulcan plans to build a lithium extraction plant to produce lithium.

Vulcan will commence 2D seismic surveys on its geothermal heat development project located in the Ludwigshafen region of Germany, in partnership with BASF.



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Sustainability

Vulcan was once again recognised by sustainability ratings agency Morningstar Sustainalytics as an ESG Industry Top Rated company in early 2025, validating the Company's strong ESG practices and providing important endorsement for attracting investment.

The results of the DMA will be integrated into Vulcan's business strategy to ensure sustainability considerations are embedded into decision-making processes, business planning and reporting.

In 2025, Vulcan will complete its qualitative physical and transition climate-related risk assessment, financially quantify material risks, and identify applicable mitigation and adaptation measures. Identified material risks will be incorporated into Vulcan's enterprise risk management register.

To support its ongoing commitment to climate change action and a low carbon future, the development of a decarbonisation roadmap for the Phase One Lionheart Project is under consideration to address residual GHG emissions within Vulcan's operational control. To accompany this roadmap, Vulcan will work towards setting science-based emissions targets in 2025.



Aerial shot of the Phase One Schleidberg well site (March 2024)

Appendix

Appendix 1: IFRS S2 & TCFD index

In 2017, the TCFD released climate-related financial disclosure recommendations to help companies provide information on their climate-related risks and opportunities. Vulcan released a TCFD Report in 2022 and its 2023 Sustainability Report and this 2024 Report are prepared with reference to the TCFD. In 2023, the TCFD integration was completed, with the ISSB Standards now reflecting its disclosure framework and adding additional and more detailed requirements.

IFRS S2 climate-related disclosures is the ISSB's standard for disclosing information about an entity's climate-related risks and opportunities. Australia's AASB S2 climate-related disclosures is closely aligned to IFRS S2, with both standards requiring entities to disclose material information that is useful to stakeholders making decisions regarding providing resources to the Organisation. The TCFD, IFRS S2 and AASB S2 are organised around four key content areas: Governance, Strategy, Risk Management, and Metrics and Targets. To continue to comply with TCFD and in early preparation for future mandatory disclosure under AASB S2, Vulcan has prepared disclosures partially aligned to the requirements of these pillars. Over the coming years, Vulcan will seek to close gaps in its reporting to fully align with AASB S2 as mandated.

Pillar	Recommended disclosure	Vulcan reference
Governance	a) Describe the Board's oversight of climate-related risks and opportunities.	Sustainability governance framework , p. 39 Sustainability governance policy , p. 44 ESG risk management , p. 45
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	Sustainability governance framework , p. 39 ESG risk management , p. 45
Strategy	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	Double materiality assessment , p. 15 Climate change risk management , p. 36
	b) Describe the impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning.	Double materiality assessment , p. 15 Climate change risk management , p. 36 <i>More detail to come in 2024 following the climate change risk assessment.</i>
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 20C or lower scenario.	Taskforce for Climate Related Financial Disclosures, 1 July to 31 December 2022 Report <i>Climate-related scenario analysis to be updated in the future</i>
Risk management	a) Describe the organisation's processes for identifying assessing climate-related risks.	Climate change risk management , p. 36 ESG risk management , p. 45
	b) Describe the organisation's processes for managing climate-related risks.	ESG risk management , p. 45
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	ESG risk management , p. 45
Targets and metrics	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Double materiality assessment , p. 15 Emissions , p. 34
	b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 GHG emissions, and the related risks.	Emissions , p. 34
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Taskforce for Climate Related Financial Disclosures, 1 July to 31 December 2022 Report

Appendix

Appendix 2: List of acronyms

A-DLE	Adsorption-type direct lithium extraction
ASRS	Australian Sustainability Reporting Standard
CLEOP	Central Lithium Electrolysis Optimisation Plant
CLP	Central Lithium Plant
CSDDD	Corporate Sustainability Due Diligence Directive
CSRD	Corporate Sustainability Reporting Directive
DLE	Direct lithium extraction
DMA	Double materiality assessment
ERM	Environmental Resources Management (consulting firm)
ESG	Environmental, social and governance
ESIA	Environmental and Social Impact Assessment
ESRS	European Sustainability Reporting Standard
EU	European Union
FSE	Frankfurt Stock Exchange
FTE	Full time equivalent
G-LEP	Geothermal and Lithium Extraction Plant
GHG	Greenhouse gas
HSE	Health, safety, and environment
ICPP	Interconnected Pipeline and Power
IFRS	International Financial Reporting Standards
IOGP	International Association of Oil & Gas Producers
IRO	Impacts, Risks and Opportunities
ISO	International Organisation for Standardisation
JSA	Job safety analysis
KPI	Key performance indicators
LCA	Life Cycle Assessment
LEP	Lithium Extraction Plant
LEOP	Lithium Extraction Optimisation Plant
LHM	Lithium hydroxide monohydrate
LiCl	Lithium chloride
LkSG	Lieferkettensorgfaltspflichtengesetz
LTI	Lost time injury
OECD	Organisation for Economic Co-operation and Development
SCC	Supply Chain Council
SEP	Stakeholder Engagement Plan
SSP2-RCP	Shared Socioeconomic Pathways - Representative Concentration Pathways
URVBF	Upper Rhine Valley Brine Field

Appendix

Appendix 3: Assumptions

All foreground data for the ISO compliant Life Cycle Assessment (LCA) is sourced from Vulcan's 2023 Bridging Engineering Study. The process design is assumed to be fully electrified. No fossil fuels are directly burned on site in the lithium production process. All background data is sourced from Ecoinvent Database 3.9.1. Electricity used at the geothermal plants and central lithium plants is assumed to be 50% sourced from the German average grid market mix, and for 50% from additional wind electricity purchased via "green" power purchase agreements. Vulcan is in discussions to source any power it needs from 100% renewable sources, so considers the 50% average grid mix to be a conservative assumption.

All electricity that is produced at the geothermal plants is assumed in the LCA to be exported to the German electrical grid. All saleable thermal energy that is produced from the geothermal brine is exported for regional district heating, with waste heat used in the process to extract the lithium. When used for regional district heating, it is assumed that it replaces average use of natural gas in the area.

Only transport of intermediate products is accounted for, being transport of lithium chloride concentrate from the lithium extraction plant to the central lithium plant, and transport of recycling streams from the central lithium plant to the lithium extraction plant. Overland transport assumes transport in a 16-32 metric tonne European emissions standard EURO 3 compliant internal combustion engine lorry. Electric transportation is being explored but not included in the LCA.

The LCA is conducted using preoperational average data points. This means the LCA results represent a static point in time based on the 2023 Bridging Engineering Study. The LCA was a cradle to gate study, meaning the downstream use phase of the lithium LHM product was not studied. Industry comparison data for hard rock mining and brine evaporation pond was provided by Minviro.

Appendix

Appendix 4: Competent Person Statement

The information in this Report that relates to Mineral Resources and Ore Reserves, and any Exploration Results and Production Targets is extracted from the ASX announcement made by Vulcan on 16 November 2023 (“Positive Zero Carbon Lithium™ Project Bridging Study Results”)¹, which is available to view on Vulcan’s website at <https://v-er.eu/>. Vulcan confirms that:

A) in respect of estimates of Mineral Resources and Ore Reserves, and any Exploration Results and Production Targets, included in this Report:

- 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
- The form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement; and

B) All material assumptions underpinning any production targets (and any forecast financial information derived from such production targets) included in this announcement continue to apply and have not materially changed.

¹ <https://www.investi.com.au/api/announcements/vul/22623520-1b3.pdf>

<https://v-er.eu>

ABN 38 624 223 132

