VULCAN ENERGY

Green Financing Framework

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CONTENTS

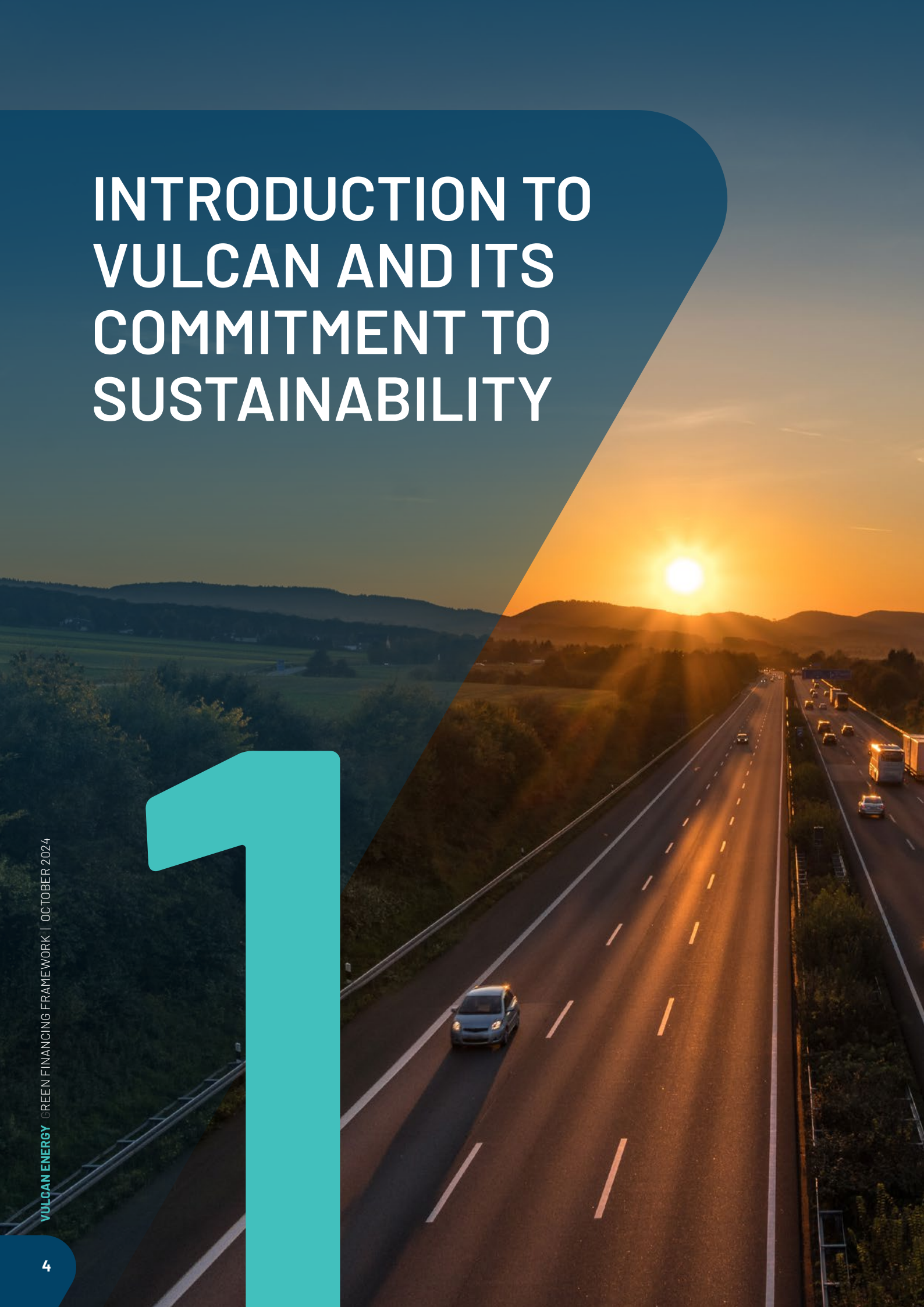
VULCAN ENERGY RESOURCES LIMITED'S (VULCAN OR 'THE COMPANY') GREEN FINANCING FRAMEWORK (THE FRAMEWORK) AIMS TO DEMONSTRATE TO DEBT MARKET PARTICIPANTS HOW THE COMPANY'S PROJECTS AND ACTIVITIES CAN ENABLE CLEAR ENVIRONMENTAL AND SUSTAINABLE BENEFITS.

Section 1 provides an introduction and overview of Vulcan's sustainability strategy and explains why Vulcan's activities can be considered as green enabling.

Section 2 is the detailed Green Financing Framework aligning with the Green Bond Principles published by the International Capital Market Association (ICMA) in June 2021 and Green Loan Principles (GLP) published by the Loan Market Association (LMA), Asia Pacific Loan Market Association (APLMA), and Loan Syndications and Trading Association (LSTA) in February 2023.

Appendix I intends to demonstrate the conformance of Vulcan's ZERO CARBON LITHIUM™ Phase One Project (the Project) with June 2024 Green Enabling Projects Guidance document.

INTRODUCTION TO VULCAN AND ITS COMMITMENT TO SUSTAINABILITY



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1.1 COMPANY OVERVIEW

FOUNDED IN 2018, VULCAN'S PURPOSE IS TO EMPOWER A CARBON NEUTRAL FUTURE, THROUGH THE EFFICIENT CO-PRODUCTION OF LITHIUM AND RENEWABLE ENERGY FROM GEOTHERMAL BRINE[1]. VULCAN IS FOCUSED ON DELIVERING THE WORLD'S FIRST INTEGRATED ZERO CARBON LITHIUM™ AND RENEWABLE ENERGY PROJECT.

By adapting existing technologies to efficiently extract lithium from geothermal brine, Vulcan aims to deliver a local source of sustainable lithium for Europe, built around a carbon neutral strategy with exclusion of fossil fuels. Already an operational renewable energy producer, Vulcan will also provide renewable electricity and heat to local communities.

Vulcan's combined geothermal energy and lithium resource is the largest in Europe[2], with licence areas focused on the Upper Rhine Valley in Germany and France.

Vulcan is committed to partnering with organisations that share its decarbonisation ambitions and has binding lithium offtake agreements with some of the largest cathode, battery, and automakers in the world, including Stellantis, Renault, Umicore, LG Energy Solution and Volkswagen.

Project overview

As illustrated in the figure below, Vulcan's integrated Project consists of co-producing geothermal energy and battery-grade[3] lithium through lower-impact extraction and processing methods when compared to traditional methods. Vulcan applies Adsorption-type Direct Lithium Extraction (A-DLE)[4], through its proprietary inhouse sorbent, VULSORB®, to efficiently extract the mineral from geothermal brines, a resource which has, until now, been underutilised[5]. VULSORB® has shown high performance relative to off the shelf A-DLE products, with most of the reagents being recycled.

Post-extraction, the lithium chloride (LiCl) mineral is electro-chemically converted into lithium hydroxide monohydrate (LHM), to be used in electric vehicle (EV) battery production.

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1 Geothermal brine is a hot and concentrated saline solution, having circulated through the very hot rocks of geothermal areas and are sometimes, as in this case, enriched with metals such as lithium.

2 According to public, JORC-compliant data. See Upgrade of ZERO CARBON LITHIUM™ Project Resources, 29 September 2023

3 Lithium hydroxide monohydrate (LHM) that has been refined to a high purity level and is specifically intended for use in the production of lithium-ion batteries. This high-purity lithium is crucial for ensuring the performance, safety, and longevity of the batteries. Battery grade lithium typically has strict specifications regarding impurity levels, particle size distribution, and other quality parameters to meet the stringent requirements of battery manufacturers.

4 Geothermal lithium rich brines are particularly suited to A-DLE process due to (i) better control of brine temperature as there is no need to heat the brine needed for the use of A-DLE technology, (ii) reduction in carbon emissions from third party power suppliers as the stream collected is used directly to provide energy to the A-DLE operations, and (iii) Vulcan has adapted its A-DLE technology based on the physical and chemical characteristics of its geothermal brine in order to optimise lithium recoveries and eluate concentration

5 https://www.sciencedirect.com/science/article/pii/S2666792423000276

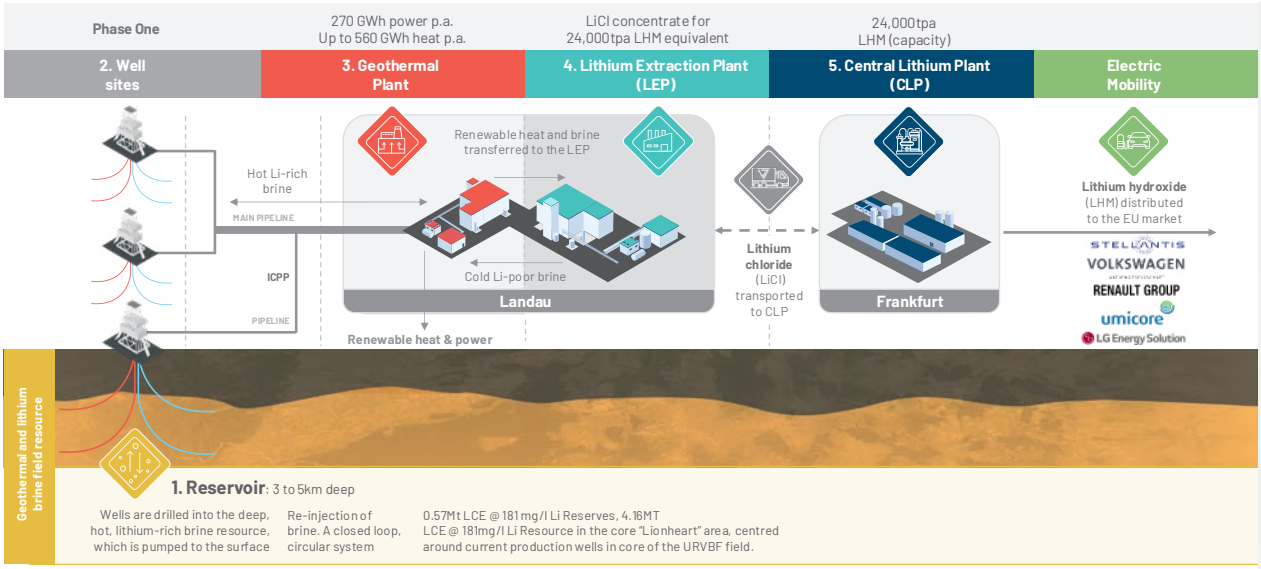

FIGURE 1: VULCAN'S INTEGRATED RENEWABLE ENERGY AND ZERO CARBON LITHIUM™ PROJECT

Vulcan's Phase One Project consists of the first commercial phase of lithium production from Vulcan's proven, brine producing Lionheart upstream development area. The Company is ramping up the existing geothermal energy generation in addition to commencing production of renewable heat for local communities. Strategically placed in the heart of the European EV market to decarbonise the supply chain, Vulcan is rapidly developing Phase One of the Project to target timely market entry, with the ability to expand to meet the unprecedented demand building in European markets.

VULCAN'S PHASE ONE PROJECT WILL PRODUCE UP TO 275 GWH POWER P.A. AND UP TO 560 GWH HEAT P.A. ON THE ENERGY SIDE, AND LICL CONCENTRATE WHICH IS CONVERTED TO 24,000TPA LHM EQUIVALENT, SUFFICIENT TO SUPPLY AROUND HALF A MILLION EVS PER ANNUM.

LIONHEART WILL HAVE SEVEN WELL SITES.

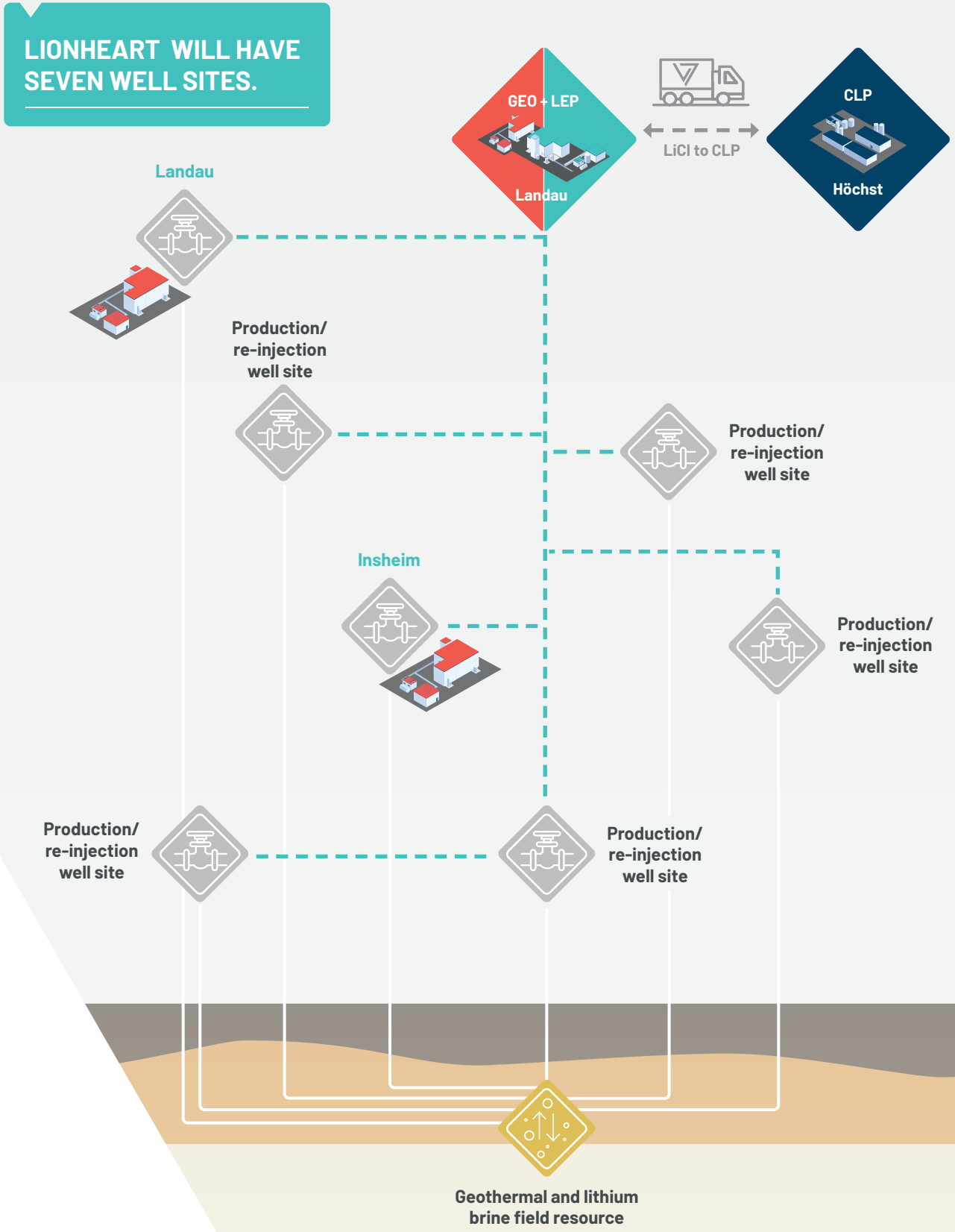

FIGURE 2: PHASE ONE PROJECT WELL SITES AND CENTRAL LITHIUM EXTRACTION PLANT (CLP)

AS ILLUSTRATED IN THE FIGURE BELOW, SUBSEQUENT PHASES ARE PLANNED FOR VULCAN'S ADDITIONAL LICENCE AREAS IN THE UPPER RHINE VALLEY BRINE FIELD. VULCAN'S LICENCE AREA COMPRISES 17 AREAS WITH A TOTAL AREA OF 2,234 KM^2, WHICH CAN BE EXPANDED IN STAGES.

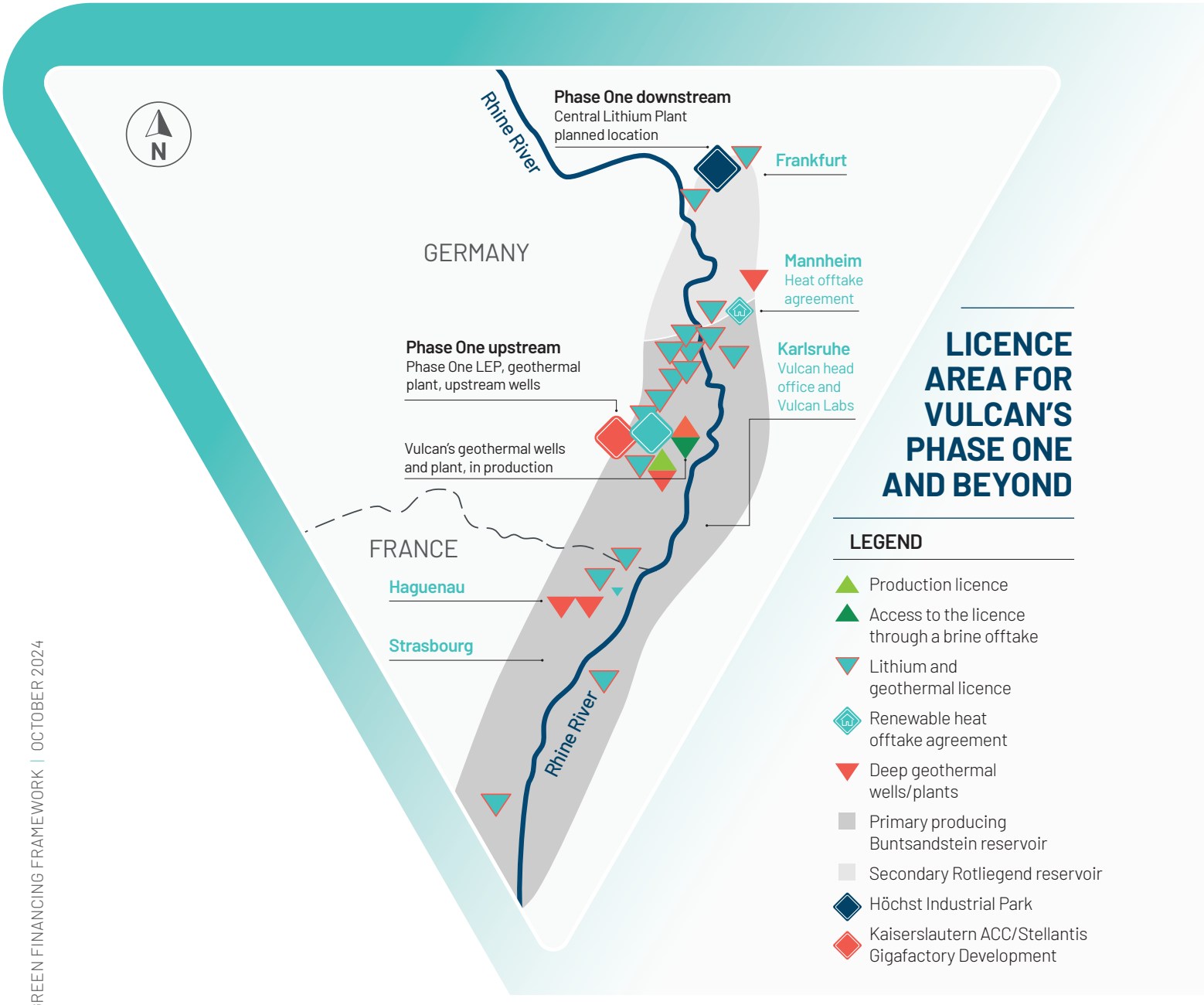

FIGURE 3: VULCAN'S LICENCE AREA IN THE UPPER RHINE VALLEY

Vulcan's Project contribution to the decarbonisation of the European auto industry and German energy sector

Due to its unique properties[6], lithium represents a critical component of current battery technologies. It is used in the electrolyte, as well as in the anode and cathode of rechargeable batteries. In the International Energy Agency's climate-driven scenarios[7], mineral demand for use in EVs and battery storage is a major force, growing at least thirty times between 2020 and 2040. Lithium is set to record the fastest growth, with demand growing by over 40 times in the Sustainable Development Scenario by 2040.

The European Union has a target for all new cars to be zero emission by 2035, meaning by 2030, Europe alone will require more than one million tonnes of lithium chemicals per annum for EVs. In this context, lithium is considered by the European Commission as a critical raw material[8] when EU demand is expected to increase twelve-fold by 2030.

At a global level, lithium extraction currently comes from two primary sources: lithium brine extraction from South American and Chinese salt flats or *salars* through reagent-based extraction and evaporation ponds, and extraction through hard-rock mining, located principally in Western Australia. Processing of extracted lithium is concentrated in China, which controls 80 per cent of global production of battery-grade lithium. While hard rock operations have a comparatively higher carbon footprint, the approach using reagents and evaporation pond operations have been repeatedly criticised for water depletion in some arid regions of South America, negatively impacting local communities and wildlife[9].

With companies now having an increasingly heightened duty of care across all their value chains, Vulcan aims to supply the growing demand for sustainable lithium procurement from battery producers and automakers. Vulcan's integrated renewable energy and ZERO CARBON LITHIUM™ Project is the first of its kind. The co-production of geothermal energy and battery-grade lithium has a lower environmental impact in terms of extraction and processing methods and, in addition, brings wider community benefits due to very low water consumption and land use. This is supported by the results of comparative LCA studieswhich were commissioned by Vulcan and carried out by Minviro. (Further details are available in the "Green Financing Framework – Use of Proceeds" section).

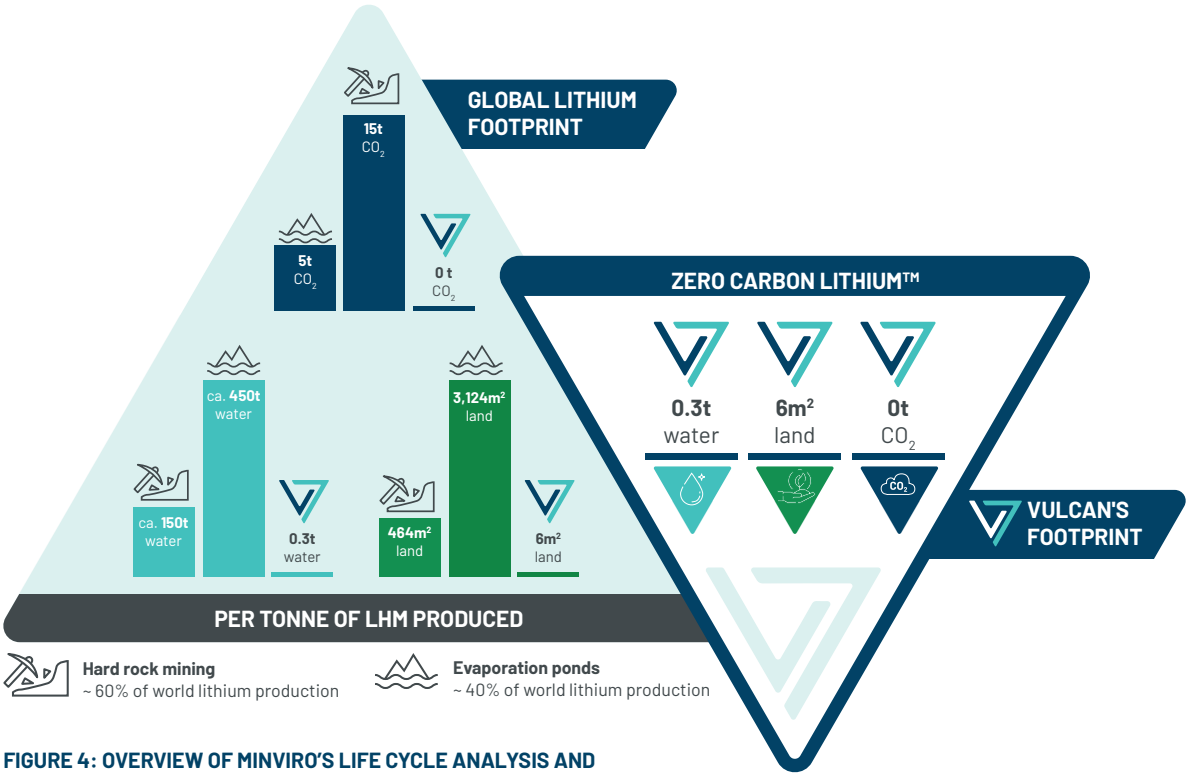

FIGURE 4: OVERVIEW OF MINVIRO'S LIFE CYCLE ANALYSIS AND COMPARISON WITH CONVENTIONAL LITHIUM MINING

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[6] Of all metals, lithium has the highest electrochemical potential (-3.05V) and the highest weight-specific capacity (3860 Ah/kg). At approximately 250 Wh/kg the energy density of LIBs is the highest, the life cycle the longest, the temperature range the widest and the self-discharge rate of 1-2% per year the lowest compared to other battery types

[7] https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions

[8] https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en

[9] https://www.sciencedirect.com/science/article/pii/S2666792423000276

Vulcan uses *zero carbon* in its trademark to refer to the climate change impact of the LHM extraction and processing. Vulcan is currently aiming for zero combustion of fossil fuels in its process to produce LHM once fully operational. The latest update of the LCA, undertaken in 2024, found that Vulcan's integrated renewable energy and ZERO CARBON LITHIUM™ Project has an overall net climate change impact contribution of –2.0 kg CO_2 eq. per kg $LiOH.H_2O$. This included the estimated greenhouse gas emissions from lithium production and transport including import of energy from the grid, and estimated emissions avoided due to export of geothermal electricity and heat into the grid and district heating respectively.

Already a renewable energy producer, Vulcan aims to begin producing renewable heating in 2025 to the local communities in its Phase One area. It is also planning further phases of renewable energy and lithium co-production, and to this end, in 2022, signed a binding 20-year renewable heat offtake agreement with MVV Energie AG (MVV), the utility for the City of Mannheim, to provide renewable heat to 25,000 –35,000 households in the City from a planned future phase of development in this area.

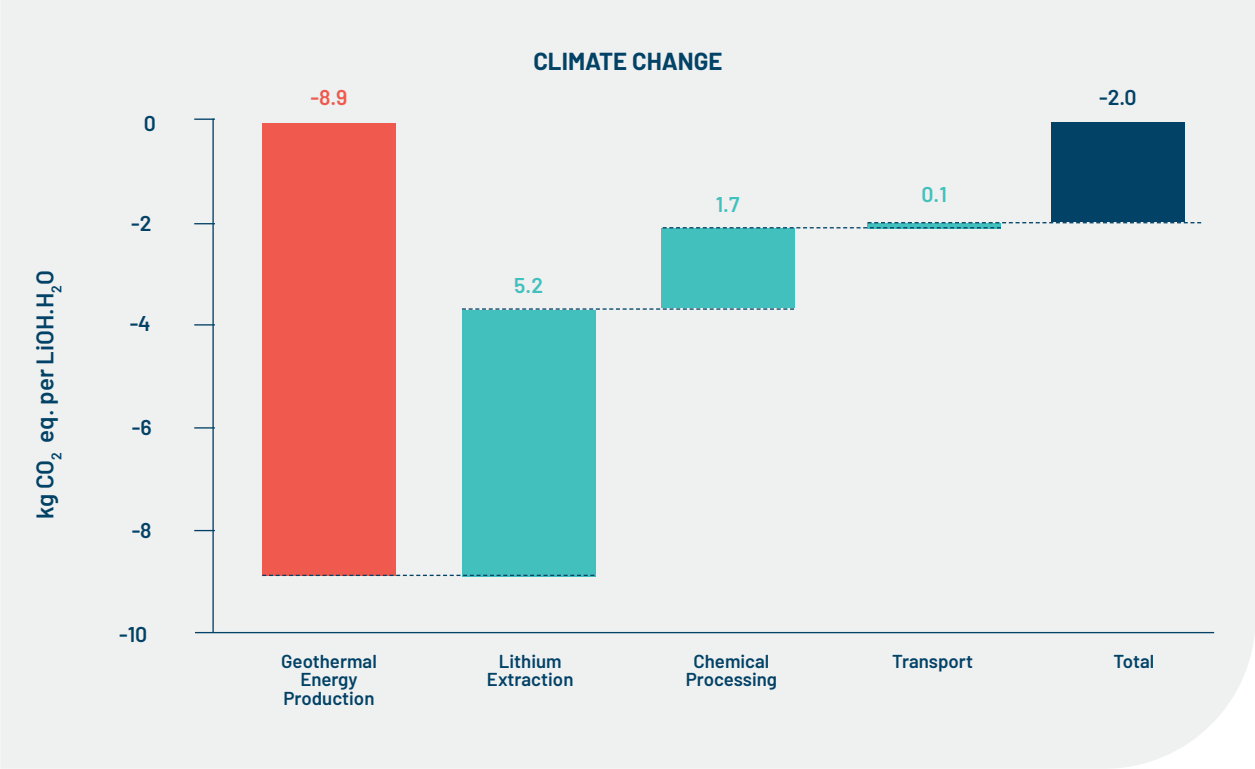


FIGURE 5: CLIMATE CHANGE IMPACT BY PRODUCTION STAGE

Source: Prospective Life Cycle Assessment Study of LHM Production at the Zero Carbon LithiumTM Project (Prepared by Minviro for Vulcan Energy Resources Ltd 22nd of March 2024)

TABLE 1: SUMMARY OF PHASE ONE'S POSITIVE OUTCOMES

The table below serves to graphically summarise the benefits of the Phase One Project previously mentioned in section 1 of the document.

Positive outcomes of the Project include:	
Renewable source of heating for local communities	The Project will generate a new source of heating and electricity supply, which energy suppliers will then be able to distribute to households to augment the existing infrastructure. The Project would ultimately supply up to approximately 560 GWh of heat per year and up to 275 GWh of electricity. Considering average per capita heat consumption in Germany, the Project will positively affect about 90,000 people. This positive impact will be created during operation and its success may act as a blueprint for the expansion of similar projects throughout other areas.
Creation of jobs and financial contribution to local economy	Vulcan estimates that between 790 to 1400 employees will be hired during drilling, construction and operation, most of which are highly skilled or technical workers such as drilling staff, operators, maintenance, and project engineers. It will contribute to employees' work experience and skills, particularly following additional training required for their respective positions. This may lead to further employment and additional upskilling, especially in the renewable energy and geothermal sector, which are rapidly expanding in Germany. From construction phase through to operation, Vulcan estimates thousands more direct and indirect jobs will be created, as a result of the energy transition, decarbonisation and electrification of transport. Additionally, the Project, will generate financial benefit to regional municipalities, through the contribution of corporate taxes to support the investment in public services and infrastructure in local communities.
Green enabler by increasing local and regional supply of critical minerals	This Project will help fortify and begin expanding a central source of sustainable lithium within Germany. Vulcan currently owns the largest combined geothermal energy and lithium resource in Europe and the Upper Rhine Graben is rich in lithium resources. Given the rapidly increasing regional demand for batteries, the EU wants to obtain 80% of the required lithium volume for batteries from domestic sources in the medium to long term. 8 Phase One alone has the potential to mitigate and avoid millions of tonnes of CO2 emissions for lithium and renewable energy production
Reduced carbon footprint	Vulcan's lithium production processes are carbon neutral per tonne of lithium produced using the LCA method, which is significantly less than other methods of producing lithium hydroxide. Over its lifetime, the Project will minimise greenhouse gas emissions associated with lithium production and contribute to decarbonising the grid and local heating network. This will contribute to Germany's overall efforts to combat climate change and achieve carbon neutrality.
Innovation and research	The Project will involve innovative technology and research, thus guiding advancement in green technologies. Vulcan aims to provide lithium and baseload renewable heat and power with a very low environmental impact, compared to conventional approaches, so innovation and research are key to our success. Our technologies support development towards a comprehensive understanding of reservoir properties to optimise reservoir development and to assess and control reservoir productivity. The company also leverages technologies for efficiently producing and delivering base-load heat and electricity and extracting lithium effectively from the geothermal brine with a carbon neutral footprint.

1.2 ORIGINS IN SUSTAINABILITY

Purpose and governance

AT VULCAN, SUSTAINABILITY IS EMBEDDED INTO THE COMPANY'S PURPOSE OF EMPOWERING A CARBON NEUTRAL FUTURE, AND ITS PERFORMANCE, BY ACTIVELY DECARBONISING THE ENERGY AND LITHIUM INDUSTRIES IN A WAY WHICH MINIMISES ENVIRONMENTAL AND SOCIAL IMPACTS.

PURPOSE

To empower a carbon neutral future.

MISSION

Becoming Europe's leading ZERO CARBON LITHIUM™ business & enabling energy security through geothermal energy.

ZERO CARBON LITHIUM™

RENEWABLE ENERGY

TECHNOLOGY

TEAM

A world-leading scientific & commercial team in the fields of lithium & 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 VALUES

CLIMATE CHAMPION

DETERMINED

INSPIRING

FIGURE 6: VULCAN'S SUSTAINABILITY AND ESG FRAMEWORK

Embedded within Vulcan's Sustainability and ESG Framework and informing every level of the Company's business model, Vulcan is driven by sustainable decision making across three key themes:

- **Quality of Life:** improving the quality of life for people, land and sea
- **Balance:** maximising shareholder returns without compromising the needs of future generations
- **Innovation:** sustainable innovation and excellence in execution

These themes are supported by ESG initiatives that deliver Vulcan's Sustainability and ESG Framework and objectives.

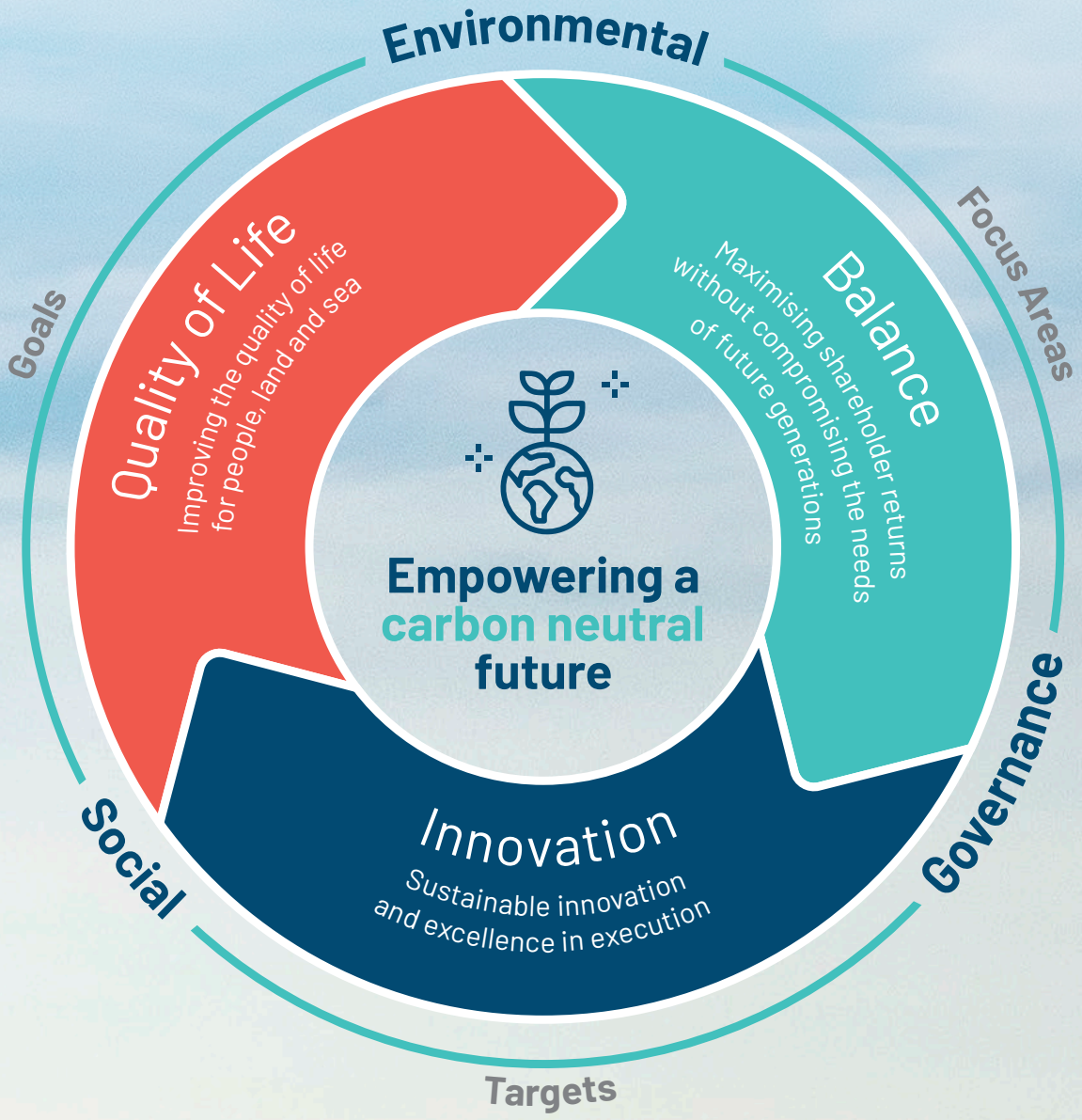


FIGURE 7: VULCAN COMPASS

ESG-related risks and opportunities are overseen by the independently appointed Board, and specifically addressed within the Audit, Risk and ESG Committee. Board meetings are held at least six times a year, with committee meetings at least once per quarter.

ESG responsibilities have been delegated among the management team with the Group CFO responsible for financial ESG-related issues and the Head of Sustainability responsible for the development of Vulcan's Sustainability Strategy, Framework and Roadmap, as well as being the contact point for collaboration and third-party verification. Each of Vulcan's key management personnel (KMP's) are given responsibility for ESG matters as related to their role.

Vulcan has set ESG targets to support its sustainability performance and company purpose with progress routinely monitored with regularly reported.

SUSTAINABILITY TARGETS

	Sustainability Targets	Timeframe
ENVIRONMENT	Zero significant environmental incidents	Annual
	Deliver 100% debt refinancing environmental action items to plan	2025
	Commence commercial delivery of renewable heat to local communities	2025
	LCA updated at each stufy phase and commencement of operations	As scheduled
	Phase One Project physical climate change risk assessment completed	Q1 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	Q1 2025
GOVERNANCE	Sustainable supply chain assessments and process for all major suppliers	2025
	CSRD and ASRS double materiality and readiness assessments	2024
	Minimum 40% female board representation	Annual
	Appointment of Lead Independent Non-Executive Director	2025
	Ecovadis sustainability ratings assessment	Annually from 2025

FIGURE 8: VULCAN COMPANY ESG TARGETS

Vulcan's status as a true ESG champion has been externally verified, with the Company rated on the Sustainalytics' 2024 Top-Rated ESG Companies List.[10]

SUSTAINALYTICS ESG 2024 INDUSTRY TOP RATED

[10] https://v-er.eu/sustainability/ Sustainalytics' ESG Risk Ratings covers more than 14,000 companies across 42 industries and identifies the top companies in their industry.

GREEN FINANCING FRAMEWORK

2

THE VULCAN GREEN FINANCING FRAMEWORK FUNDAMENTALLY AIMS TO PROVIDE TRANSPARENCY AND ACCOUNTABILITY TO MARKET PARTICIPANTS. THIS IS DEMONSTRATED THROUGH CLEAR DISCLOSURE OF VULCAN'S ENGAGEMENT IN ALLOCATING GREEN FINANCING PROCEEDS TOWARDS ITS OPERATIONS DEMONSTRATING POSITIVE ENVIRONMENTAL IMPACT. THE FRAMEWORK IS ALSO DESIGNED TO FOSTER OPEN COMMUNICATION WITH INVESTORS, EMPLOYEES, AND THE PUBLIC, WHILE ALIGNING WITH INDUSTRY BEST PRACTICES.

The Framework and Appendix 1, focusing on Vulcan's Phase One Project, is meticulously designed to align with the following best practices in the market and sustainable finance standards:

- Green Bond Principles (GBP), published by the International Capital Market Association (ICMA) in June 2021 (with June 2022 Appendix 1)
- Green Enabling Projects Guidance document published by the International Capital Market Association (ICMA) in June 2024
- Green Loan Principles (GLP), published by the Loan Market Association (LMA), Asia Pacific Loan Market Association (APLMA), and Loan Syndications and Trading Association (LSTA) in February 2023.

In accordance with the GBP and GLP, the Company asserts that it will adopt the four key pillars below as set out in the Framework:

1. Use of proceeds
2. Process for Project evaluation and selection
3. Management of proceeds
4. Reporting.

Any future changes in the GBP and GLP may be implemented in future versions of the Framework, which is intended to either maintain or improve the current levels and granularity of transparency and reporting disclosures, including the corresponding review by an external reviewer.

Use of proceeds

An amount equivalent to the net proceeds of any green financing will be allocated solely to financing and/or refinancing, in whole or in part, new and/or existing Eligible Green Projects that meet the following eligible type of investments and eligibility criteria. Green financing may include green loans or green bonds contracted/ issued by Vulcan or any of its subsidiaries/ Project companies.

Eligible type of investments may be:

- Capital expenditure and selected operating expenditure (such as maintenance costs that either increase the lifetime, or the value, of the assets) of tangible assets meeting the eligibility criteria described in the Use of Proceeds section of the Framework;
- Research and Development (R&D) or exploration expenditure aimed at developing new products and solutions as per the eligibility criteria described in the Use of Proceeds section of the Framework. Those expenditures will not represent more than 30% of the allocated net proceeds of any green financing;
- Equity investments for the acquisition of a controlling stake in "pure-players".[11]

[11] Companies having (i) at least 90% of revenue, or if not applicable 90% of the balance sheet, derived from Eligible Categories described in the Use of Proceeds section of the Green Financing Framework and (ii) the remaining 10% of their revenues should not derive from fossil fuels

Eligible categories and eligibility criteria:

<table>
<tr><th>Eligible Categories</th><th>Eligibility criteria</th><th>Knowledge and skills</th></tr>
<tr><td>Green Enabling Project – clean transportation and battery stationary storage</td><td>Investments in the development, construction, operation and maintenance of Vulcan's assets, dedicated to the extraction and processing of LHM that are subject to the demonstration of alignment with all the following criteria (further details in Appendix 1):
<table>
<tr><th>Specific criteria</th><th>Detailed description to be demonstrated</th></tr>
<tr><td>Necessary for an enabled Green Project's value chain</td><td>• LHM product, a necessary component of Green Project 's value chain consistent with net zero scenarios.</td></tr>
<tr><td>Clear, quantifiable and attributable environmental benefit</td><td>• 100% of Vulcan's contracted revenues from the sale of LHM, is expected to be used in lithium-ion batteries that will be applied in EVs or Battery Energy Storage System (BESS)
• Improved environmental performance on carbon, water and land use compared with other forms of comparable lithium hydroxide production and based on project life-cycle assessment considerations</td></tr>
<tr><td>No carbon lock-in</td><td>• Main production process should not lead to locking in high GHG emitting activities relative to other technologically feasible and/or commercially viable solutions</td></tr>
<tr><td>Mitigated adverse social or environmental impacts</td><td>• No significant environmental or social impacts after implementing mitigation measures evidenced by an independent Environmental and Social Impact Assessment (ESIA) aligned with Equator Principle 4 and IFC Performance Standards</td></tr>
</table></td><td>Climate change mitigation
 
</td></tr>
<tr><td>Renewable energy</td><td>Investments in the development, construction, operation and maintenance of Vulcan's assets, dedicated to the production of heat and energy from geothermal energy demonstrating life cycle GHG emissions lower than 100 g CO2e/kWh (further details in Appendix 1)</td><td>Climate change mitigation
 
</td></tr>
</table>

[12] Is one that delivers a clear environmental benefit, as described in the Green Bond Principles.
[13] Representing on average more than [95]% estimated produced volumes

Project evaluation and selection process

GREEN FINANCING GOVERNANCE

The overall governance of the Framework and any green financing issued under this Framework will be overseen by Vulcan's Audit, Risk and ESG Committee.

The Audit, Risk and ESG Committee will:

- Determine green financing requirements and allocate funds to eligible projects
- Ensure ongoing project eligibility and replace non-compliant initiatives
- Oversee external reviews and audits
- Regularly assess the Framework to align with evolving corporate, sustainability and market dynamics
- Validate reporting to investors and lenders
- Monitor Project performance and address any related controversies, and monitor and manage the associated reporting.

The Committee will convene at least quarterly or on an ad hoc basis as needed to determine, oversee, and review the green financing proceeds.

ESG RISKS MANAGEMENT AND EXTERNALITY MITIGATION

Vulcan is committed to understanding and mitigating environmental and social impacts of its operations, as outlined in its Sustainability and ESG Framework[14] and in its Environmental Policy[15].

[14] https://v-er.eu/app/uploads/2023/11/Sustainability-and-Framework.pdf

[15] https://v-er.eu/app/uploads/2023/11/POL_220525_Environmental-Policy-1.pdf

Commitment to international standards and best practices

Vulcan systematically monitors key aspects of business risks. ESG is built into Vulcan's risk assessment processes, ensuring the Company identifies and adequately addresses all material risks related to environmental management practices, working and safety conditions, anti-bribery and corruption practices, human rights, and compliance with relevant local and international laws and regulations.

Vulcan is committed to certifying all its project operations under international standards ISO14001 (Environment) and ISO45001 (Occupational Health and Safety).

The Company also reports on the management of its environmental and social impact according to international standards, including:

- IFC Performance Standards on Social and Environmental Sustainability (2012)
- Equator Principles IV (2020)
- IFC General Environmental, Health and Safety (EHS) Guidelines[16]
- International Labour Organization (ILO)'s fundamental conventions concerning the abolition of child labour, the elimination of discrimination at the workplace and the elimination of forced and compulsory labour; and
- International best practice regarding the mitigation of impacts and consideration of minorities and vulnerable persons.

Vulcan intends to apply these standards for all phases of the project development and will include a program for management of environmental and social impacts during the pre-construction phase.

An Independent Environmental and Social Review (IESR) systematically assesses adherence to local environmental and social legislative requirements, Equator Principles 4 (2020), and the European Union (EU) Taxonomy (2023). A mitigation action plan is systematically implemented in order to resolve any issues raised by the IESR.

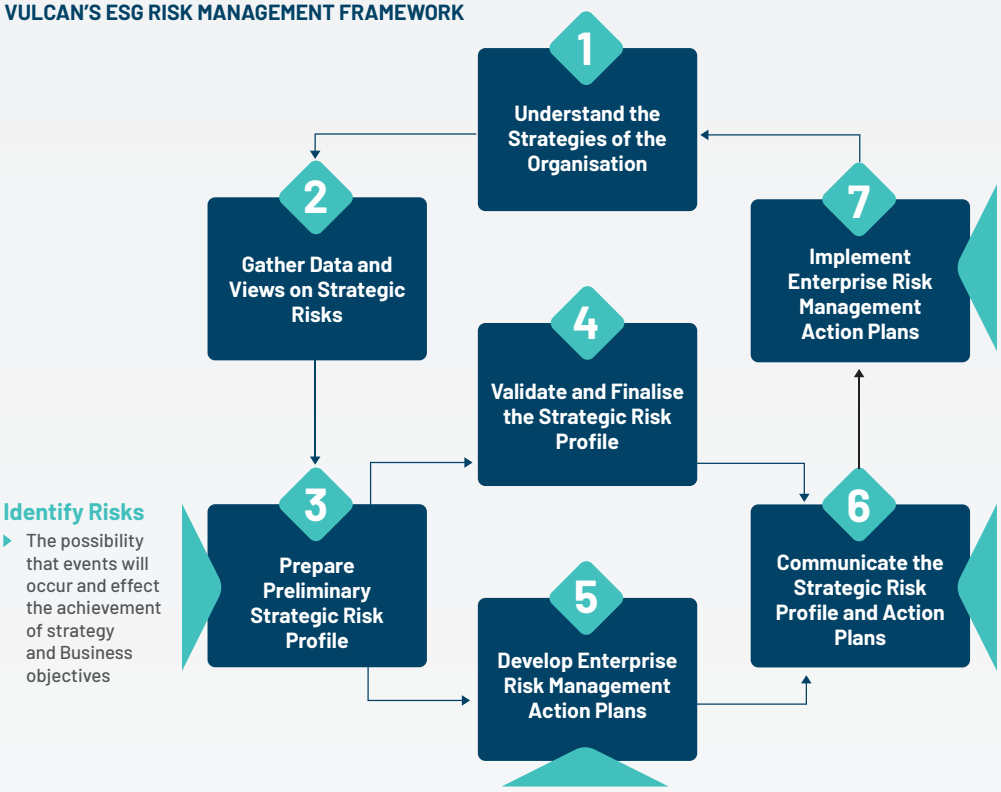
Internal procedures

The Company follows the 2004 COSO Enterprise Risk Management – Integrated Framework as the principal mechanism to identify and assess risks. This is a seven-step process whereby the consideration of risk is driven from an understanding of the Company's strategy.

This flow chart illustrates how Vulcan identifies, assesses and manages all enterprise risks, which include those related to climate change and social impacts.

[16] https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=nPtguVM

VULCAN'S ESG RISK MANAGEMENT FRAMEWORK



Identify Risks

- The possibility that events will occur and effect the achievement of strategy and Business objectives

Ongoing Monitoring and Assessment of Changes

- Constantly changing business environment requires ongoing monitoring
- Need to identify and assess substantial changes
- Revise strategies and risk profile as appropriate

Communication Risk Information

- Directors
- Executive management
- Line management
- Risk and control units

Identify and Select Risk Response

- Mitigation activities
- Risk monitoring
- Updating assessment process
- Risk reporting

In order to prioritise the most salient risks for the Company, a traffic light system is utilised where likelihood is scaled from "Rare" to "Certain" across five levels and consequences range through seven scales from "Insignificant" to "Catastrophic", with the numbering aligned to the scale of consequences (from 1-35).

Vulcan's Board and leadership team utilises a range of methods for managing climate and social related risks via a delegated risk-ownership structure. These include:

- conducting a risk matrix review twice a year;
- regular risk management reporting to the Audit, Risk and ESG Committee;
- the formation of specific committees as required (such as the Projects Execution Committee and Supply Chain Council), which hold deep dive workshops as and when necessary; and
- linkage of pertinent climate and social related issues to KPIs (further details in Appendix 1).

Management of proceeds

Vulcan's finance team will manage the net proceeds from any green financing. The company has established systems to monitor and account for the allocation of the proceeds. Funds will be specifically earmarked for allocation to Eligible Green Projects, as determined by the Audit, Risk and ESG Committee and in accordance with the outlined evaluation and selection process and/or as defined in the term sheets of the financings dedicated to the Eligible Green Projects.

So long as the green financing is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to Eligible Green Projects made during that period.

The Company aims to allocate the proceeds from any green financing issuance within 24 months of the issuance settlement date. Until full allocation, unallocated proceeds will be held in cash, cash equivalents, or short-term, liquid instruments, managed in accordance with the Company's finance policy.

An independent external auditor will conduct the verification of the proceeds allocation and the remaining unallocated balance until full allocation is achieved.

Reporting

Vulcan will publicly disclose annually its allocation and impact reporting (as described below), starting a year after the issuance or closing of green financing and as necessary in case of material change in the eligibility of the Eligible Projects.

In addition, in case of a material controversy on an Eligible Green Project, Vulcan will provide investors or lenders with information on key issues at stake and actions put in place.

This combined approach ensures transparency and accountability to both lenders, investors and the public regarding the use of green financing proceeds and their environmental and social impact.

ALLOCATION REPORTING

The allocation reporting will include the following information:

- total amount of proceeds allocated to Eligible Green Projects and total amount of unallocated proceeds (if any) and description of the unallocated proceeds management;
- distribution of allocated proceeds between each eligible type of investments, eligible category listed in this Framework and geographical breakdown;
- state of advancement of the Project: main milestones achieved; and
- share of proceeds allocated to financing and refinancing.

IMPACT REPORTING

Vulcan commits to report annually until full allocation of any green financings on the environmental and social benefits of the Eligible Green Projects (re)financed. The reporting may include the following information, with those highlighted in bold to be published at least once a year.:

Categories	Indicative impact metrics
Green Enabling Project – estimates of the potential outcome of enabled Green Project	• Sales volume dedicated to battery cathode, lithium-ion battery, and automotive OEM producers, and associated estimated impact on battery and EV supply chain based on sales split. • Estimated annual number of EVs equipped with lithium and potential associated avoided emissions • Estimated annual number BESS equipped with lithium and potential associated avoided emissions
Green Enabling Project – estimates of clear environmental benefit	• Annual carbon footprint of the Project based on life-cycle assessment considerations • Estimated avoided emissions related to the substitution of Vulcan's lithium production when compared to relevant and comparable current global average
Green Enabling Project – mitigated adverse social or environmental impacts	• Estimated environmental performance on water, land use, biodiversity • Estimated stakeholder engagement performance KPIs such as stakeholder consultation frequency, community satisfaction index based on stakeholder perception surveys, number of grievances, grievance resolution time
Renewable energy	• Renewable power and heat produced (GWh) • Estimated avoided emissions related to the supply of power and heat when compared to local grid's average carbon footprint • Estimated number of households powered and heated

Complementary social metrics may also be published such as the number of jobs created.

The impact assessment is provided with the reservation that not all related data can be covered and that calculations therefore will be on a best effort basis. The calculation methodologies and associated assumptions will be further detailed in the reporting.

External reviews

PRE-ISSUANCE REVIEW

Vulcan has appointed S&P Global to provide a Second Party Opinion on the Green Financing Framework, including:

- its alignment with the Green Bond Principles (GBP), published by the International Capital Market Association (ICMA) in June 2021 (with June 2022 Appendix 1 and with June 2024 Green Enabling Projects Guidance document) and the Green Loan Principles (GLP), published by the Loan Market Association (LMA), Asia Pacific Loan Market Association (APLMA), and Loan Syndications and Trading Association (LSTA) in February 2023;
- its credibility and anticipated positive impacts of the use of proceeds; and
- the alignment of the Company's sustainability strategy, performance, and risk management in relation to the use of proceeds.

The Second Party Opinion is available on the Company's website[17].

The Company commits to have the Second Party Opinion updated in case of any material changes to the Framework.

POST-ISSUANCE EXTERNAL VERIFICATION

The allocation reporting will also be subject to external verification by an independent auditor (third party ESG and/or financial audit) until full allocation and in case of any material change to the allocation. The external verification will confirm the compliance of Eligible Green Projects (re) financed under the Green Financing Framework with the eligibility criteria defined in the use of proceeds section of this Framework.

The external auditor's verification assurance reports will be shared with lenders and/or investors and may be published on the Company's website.

[17] https://v-er.eu/sustainable-financing/

APPENDIX

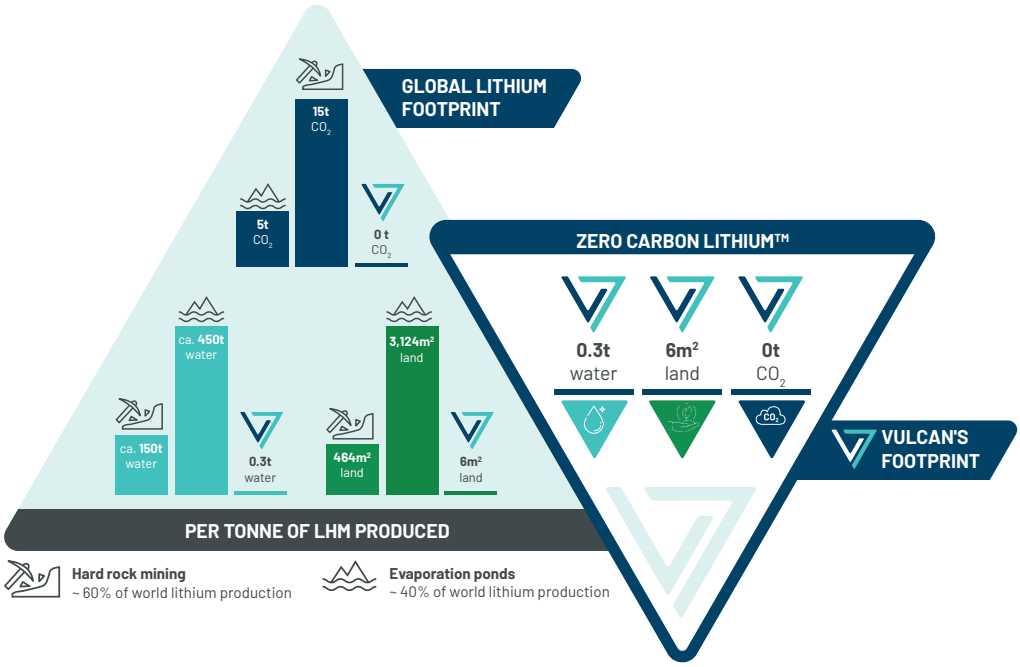
Eligibility Criteria	Actual eligibility of Vulcan's Phase One fully integrated project from brine extraction to lithium hydroxide monohydrate (LHM) distribution
Necessary for an enabled Green Project's value chain	**Lithium hydroxide product is necessary for the manufacturing of the EV battery supply chain.** Lithium is considered critical for the deployment of EV batteries as it is the key component of the lithium-ion battery. The four main components of a lithium-ion cell are the cathode, anode, liquid electrolyte and separator. Lithium-ion batteries (being today the dominant battery chemistry existing) have emerged as the frontrunner in energy storage for EVs, offering a compelling combination of performance and cost-effectiveness that has accelerated the growth of EVs in recent years. EVs offer superior battery life, unmatched energy density, efficient energy conversion and cost-competitiveness. According to the IEA, using Announced Pledge Scenario as a benchmark, anticipated mine supply in 2035 from announced projects meets only 50% of lithium requirements[18], which could act as a brake on the manufacture of batteries necessary for the decarbonisation of the transport sector.
	The manufacture of EV batteries can be considered as Green Enabled Project consistent with net-zero scenarios The manufacture of batteries (and its respective components such as battery active materials) can result in substantial GHG emission reductions for the transport sector. It is considered an environmentally sustainable activity as per the EU Taxonomy[19], and falls into the Clean Transportation Eligible Green Project category of the Green Bond principles. It contributes to UN SDG target 13 (to take urgent action to combat climate change and its impacts) and UN SDG target 11.6 (to reduce the environmental impact of cities). According to the Intergovernmental Panel on Climate Change (IPCC)[20], electromobility is revolutionising transportation, offering the biggest shift since the last major assessment report (AR5 published in 2014). Powered by low-carbon electricity, electromobility can significantly cut greenhouse gas emissions across the transportation sector (which represent around 25% of the European Union's total GHG emissions for example[21]). Vulcan's lithium extraction is therefore crucial for enabling a clean transportation value chain, ensuring the EV industry has access to lithium, the vital ingredient for batteries used in electromobility.
Clear, quantifiable, and attributable environmental benefit	**Attributable environmental benefit** The Company aims to produce 24,000 tonnes of LHM per annum allowing it to supply around 500,000 EVs per annum. 100% of Vulcan's contracted revenues from the sale of LHM are to be used in lithium-ion batteries that will be applied in EVs and potentially BESS. The Company has already signed offtake contracts with EV manufacturers Stellantis and Renault, battery manufacturer LG Energy Solution and cathode for batteries manufacturer, Umicore. Offtake contracts represent more than 95% of estimated product volumes by 2036. Avoided emissions of 500 000 EVs are estimated to be 1.3 Mt CO2 annually in Europe (EU28) in 2040, according to the LCA's hypothesis developed by Ricardo's report for the European Commission on the environmental impacts of conventional and alternatively fuelled vehicles.
No carbon lock-in	**Vulcan's main activities will not lead to carbon lock-in.** The Project is expected to be the first lithium project in the world to use zero fossil fuels in its LHM production process, powered predominantly by geothermal energy and renewable power, thereby eliminating the reliance on fossil fuels. The use of geothermal energy is a critical factor in preventing carbon lock-in. As a renewable energy source, geothermal energy provides a stable and continuous power supply with minimal emissions. Transport of intermediate lithium chloride product to the CLP will likely be via internal combustion engine trucks, at least initially. Vulcan is exploring the possibility of electric trucks, pending regulations. Moreover, the Enabled Green Projects are not correlated with significant fossil fuel operations and are supplying the relevant net zero scenarios of the mobility and energy sectors.

[18] International Energy Agency, Global EV Outlook 2023, https://iea.blob.core.windows.net/assets/ee01701d-1d5c-4ba8-9df6-abeeac9de99a/GlobalCriticalMineralsOutlook2024.pdf

[19] Commission Delegated Regulation (EU) 2021/2139: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R2139

[20] Intergovernmental Panel on Climate Change, Climate Change 2022, Mitigation of Climate Change, Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

[21] European Environment Agency, Transport and Mobility, June 2024, https://www.eea.europa.eu/en/topics/in-depth/transport-and-mobility?activeAccordion=4268d9b2-6e3b-409b-8b2a-b624c120090d

Eligibility Criteria	Actual eligibility of Vulcan's Phase One fully integrated project from brine extraction to lithium hydroxide monohydrate (LHM) distribution
Mitigated adverse social or environmental impacts	**Negative induced emissions** The Company has partnered with Minviro since 2020 to conduct a series of comprehensive Life Cycle Assessments (LCAs) aligned with International Organisation for Standardisation (ISO) standards. These LCAs are cradle-to-gate and cover the entire production process, from lithium extraction to the final product's transportation. The most recent LCA, completed in 2024[22] , determined that Vulcan's integrated renewable energy and lithium Project has a carbon footprint of negative 2.0 kilograms of carbon dioxide equivalent per kilogram of LHM produced. This calculation considered emissions from lithium extraction, transport, and grid electricity consumption, while also accounting for the carbon offset from exporting geothermal electricity and heat to the grid and district heating systems. Indeed, the overall mass and energy balance shows that renewable geothermal energy production exceeds the energy consumption required for the production of LHM. The main factor of influence of the climate change impact of the Project is the assumption of electricity used in the process, which is assumed to be 50% from the German grid and 50% from additional wind electricity. The effect of more or less wind electricity was explored in a sensitivity analysis, which showed the climate change impact can range between 3.2 kg CO_2 eq. per kg $LiOH•H_2O$ (100% electricity from grid) and -6.3 kg CO_2 eq. per kg $LiOH•H_2O$ (100% additional wind electricity). By comparison, the industry average for LHM production is around 12.4 kgCO_2 eq. per $LiOH•H_2O$ produced (Source: Minviro). Minviro has also calculated that the absolute avoided climate impact over the first ten years of the Project using the Innovation Fund methodology, which is estimated to be more than 4.1 million tonnes CO2eq. from the first ten years of Phase One of the integrated renewable energy and lithium project[23]. **Low water footprint** Supported by the results of comparative LCA studies carried out by Minviro, the Company believes that Vulcan's A-DLE lithium production method has also a lower environmental impact in terms of net water and land use, giving Vulcan a unique competitive edge. Indeed, the most recent LCA showed the net total water use impact of the process is 0.3m^3 world eq. per tonne $LiOH.H_2O$. Vulcan's process will involve reinjection of all the brine back to the subsurface, and recycling of fresh water in the process, leading to a very low net water usage. **Small land use footprint** Vulcan has a smaller environmental footprint in terms of land use resulting from the fact that its land use is restricted to well sites, pipelines (temporary), power plants, and processing facilities, eliminating the need for evaporation sites or mines and their associated tailing storage areas. 

[22] Refer to the FY2023 Sustainability Report https://www.investi.com.au/api/announcements/vul/04ca21c8-1b4.pdf
[23] Refer to the FY2023 Sustainability Report https://www.investi.com.au/api/announcements/vul/04ca21c8-1b4.pdf

Eligibility Criteria	Actual eligibility of Vulcan's Phase One fully integrated project from brine extraction to lithium hydroxide monohydrate (LHM) distribution
Mitigated adverse social or environmental impacts	**Low reagent consumption** In addition, the lithium chloride is converted into LHM through electrolysis, mitigating the use of chemicals generally consumed in other types of lithium processing.

Environmental and Social Impact Assessment completed

Vulcan completed a comprehensive Environmental and Social Impact Assessment (ESIA) for Phase One of its integrated renewable energy and lithium project in December 2023, with the support of ERM, one of the world's largest, specialist sustainability consultancies. Aligned with Equator Principle 4 and IFC Performance Standards, the ESIA identified no significant environmental or social impacts after implementing mitigation measures.

SUMMARY OF ESIA FINDINGS

Identified Impact	Construction Phase		Operation Phase		Decommission 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	Insignificant	Insignificant
Noise	Major	Minor	Moderate	Minor	Moderate	Insignificant
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	Minor	Insignificant	Minor	Insignificant
Waster and Wastewater	Moderate	Minor	Minor	Insignificant	Moderate	Insignificant
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	Insignificant
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

KEY: Insignificant | Minor | Moderate | Major

Moreover, RPM Advisory Services Pty Ltd was engaged by Vulcan to undertake the Independent Environmental and Social Review of the Project against the Equator Principles 4 and the International Finance Corporation (IFC) Performance Standards It is RPM's opinion that most of the environmental and social assessments required for the Project are in place, being prepared, or have been planned for, and provide a good foundation to understand the potential impacts on baseline conditions.

Building upon the ESIA's recommendations, Vulcan is committed to implementing a robust Environmental and Social Management Plan (ESMP). The Company is actively engaging with potential lenders as it progresses through the Phase One financing process.

Vulcan is also committed to understanding and mitigating environmental impacts, as outlined in its Environmental Management Policy. The Company adheres to all applicable environmental laws and regulations. The Company recently achieved re-certification of its ISO 14001:2015 Environmental Management System and ISO 9001 Quality Management System, setting objectives and ensuring compliance.

Moreover, Vulcan also committed to mitigating biodiversity impacts during construction and operation by minimising habitat disturbance, protecting sensitive areas, support local species and implementing a land and habitat rehabilitation and restoration plan.

Eligibility Criteria	Actual eligibility of Vulcan's Phase One fully integrated project from brine extraction to lithium hydroxide monohydrate (LHM) distribution
Mitigated adverse social or environmental impacts	**Community engagement** The Project is designed to work in harmony with local communities, providing interdependent opportunities and positive impacts such as job creation and renewable heating. Vulcan continuously fosters two-way dialogue with local communities to help the Company better understand how to maximise positive impacts. The ESIA identified positive impacts for local communities including job creation and renewable heating, which Vulcan is aiming to provide from 2025. It is noted that stakeholder engagement efforts have resulted in mostly positive perceptions of the Project. In particular, the Vulcan team emphasises to stakeholders the value-add that will result from this Project - the provision of local and renewable heat. Stakeholder engagement initiatives have predominantly focused on information and knowledge sharing, and managing public expectations. Vulcan notes this has most recently been demonstrated in the actions of the Landau City Council, and surrounding town councils, of which 8/9 voted in favour of Vulcan's field work plans. In 2023 the Landau City Council also voted in favour of geothermal development to supply the city with renewable heat, which will be supplied by the Project. In 2024, the Landau City Council voted 41 for, 3 against, in favour of the land development plan involving Vulcan's Geothermal and Lithium Extraction Plant (G-LEP) in the new industrial park designated D12." Community engagement helps the Company better understand how to maximise positive impacts, through pursuing mutual interests, while minimising any potentially negative impacts of operations for local communities. As Vulcan continues to transition to an integrated project development, execution, and operations company, the main focus of the team's community engagement is resolving queries from the public about how operations will work, and their impacts on communities and the local environment. Vulcan's approach has been to engage directly with surrounding communities, providing information about compliance with German regulations and best practices, as well as the ESIA's findings that any impacts were determined to be minor or insignificant after mitigation measures during all phases of Vulcan's integrated renewable energy and the Project. The Company has also signed an insurance policy for local communities in the case of an impact from the Project, to provide further reassurance that Vulcan is a company who is responsible and accountable.
Renewable Energy	The estimated GHG emissions intensity for Vulcans geothermal energy production is 30g CO_2 / kWh

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Vulcan has carried out a definitive feasibility study ("DFS") and bridging engineering study ("Bridging Study") for Phase One of its Zero Carbon Lithium™ Project ("Project"), the results of which were announced to the ASX in the announcements "Zero Carbon Lithium Project Phase OneDFS Results" dated 13 February 2023 ("DFS Announcement") and "Positive Zero Carbon Lithium™ Project Bridging Study Results" on 16 November 2023 ("Bridging Study Announcement"). This document may include certain information relating to the DFS and the Bridging Study. The DFS and Bridging Study are based on the material assumptions and parameters outlined in their respective announcements. While Vulcan considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Bridging Study or DFS will be achieved. This document may also include certain information relating to Phase 2 of its Project, Vulcan has not yet carried out a definitive feasibility study for Phase Two of its Project.

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