

Vulcan and Stellantis in Joint Project to Develop Geothermal Renewable Energy to Supply Mulhouse Plant in France



PUBLISHED MAY 31, 2023
BY [STELLANTIS](#)

- Vulcan and Stellantis sign fourth agreement together after:
 - a binding lithium hydroxide supply agreement signed in 2021
 - an equity investment and lithium hydroxide supply agreement in 2022
 - a joint renewable energy project development term sheet for the Stellantis Rüsselsheim plant in Germany signed in 2023
- Agreement represents first joint project in France for the potential use of geothermal energy to decarbonize and localize the energy supply for Stellantis' European operations
- Stellantis' ambitious decarbonization strategy includes achieving carbon net zero by 2038 with a 50% reduction by end of the decade
- Vulcan is developing integrated lithium chemicals and geothermal renewable energy production, from its Zero Carbon Lithium™ Project in the Upper Rhine Valley in Germany and France with its sorption-type direct lithium extraction (DLE) optimization plant under construction in Germany following two years of successful pilot plant operations
- Agreement with Stellantis increases Vulcan's decarbonizing impact on the European electric vehicle industry, complementing the carbon avoidance from its Zero Carbon Lithium™ Project

AMSTERDAM – Stellantis N.V. and Vulcan Energy Resources Limited have signed a binding term sheet for the first phase of a multiphase project to develop new geothermal projects aimed at decarbonizing

the energy mix of Stellantis' Mulhouse industrial site in France, which is home to the DS 7, Peugeot 308 and e-308, 508, and the new 408. Based upon current assumptions, the project could provide a significant portion of the industrial site's annual energy needs starting in 2026.

We are proud to announce another step in our partnership with Vulcan, which demonstrates our commitment to increase the use of decarbonized energy solutions across our facilities," said Arnaud Deboeuf, Stellantis Chief Manufacturing Officer.

"Geothermal is one of many solutions we are exploring to achieve our carbon net zero goal by 2038, in alignment with our Dare Forward 2030 strategic plan.

The first phase of the project, located at the southernmost extent of Vulcan's focus area in the Upper Rhine Valley, will include a pre-feasibility study (PFS) for the construction of geothermal renewable energy assets for Stellantis' facility, carried out by Vulcan which will also assess potential for lithium production. If successful, the next phase will focus on 3D seismic exploration and more advanced studies and development. Subject to a successful PFS, Stellantis and Vulcan aim to develop the project jointly on a 50:50 basis.

In November 2022, Vulcan announced that it had started a number of initiatives to expand its geothermal renewable energy and Zero Carbon Lithium™ business into France and specifically Alsace, which accounts for roughly one third of the Upper Rhine Graben. Vulcan has applied over the Mulhouse area for an exclusive lithium and geothermal license to secure another 480 km² of development area within the Upper Rhine Graben Valley Brine Field.

According to the term sheet, Vulcan's team will perform a lithium mineral resource assessment according to the JORC Code. Vulcan Zero Carbon Lithium™ project is aligned with the creation of the

French Mineral Resources Observatory" that aims to analyse the French critical raw materials resources and provide recommendations for public investment that will be supported by the recently announced new 2 billion euro "French Critical Raw Materials Fund

Stellantis embraces a holistic approach to decarbonization and is on track to become a carbon net zero corporation, all scopes included, by

2038, with single-digit percentage compensation of remaining emissions. The agreement with Vulcan Energy marks Stellantis' second potential use of renewable geothermal energy to decarbonize and localize its energy supply at an industrial site.

Vulcan's core mission is decarbonisation, through renewable energy and carbon neutral lithium supply," said Vulcan Managing Director and CEO, Dr. Francis Wedin. "Vulcan is here to support Stellantis, our largest lithium customer and one of our major shareholders, to decarbonise its operations in Europe. While we remain focused on our Phase One geothermal-lithium developments in the center of the Upper Rhine Valley Brine Field, this project is a complementary opportunity to expand our future development pipeline to some of the outer lying areas in the Upper Rhine Valley, supported by industrial partners like Stellantis.

Stellantis is a major industrial player in the automotive sector in the Grand Est. This is why the Region wanted to support the group in its transition to electric. With this strategic partnership, transformation to create the industry of the future and the fight against global warming are taking shape in our Region thanks to a rational exploitation of geothermal energy,

said Franck Leroy, President of the Grand Est Region.

The agreement with Stellantis also increases Vulcan's decarbonizing impact on the European electric vehicle industry, complementing the carbon avoidance from its Zero Carbon Lithium™ Project, and creating shareholder value.

Stellantis N.V. (NYSE: STLA / Euronext Milan: STLAM / Euronext Paris: STLAP) is one of the world's leading automakers and a mobility provider. Its storied and iconic brands embody the passion of their visionary founders and today's customers in their innovative products and services, including Abarth, Alfa Romeo, Chrysler, Citroën, Dodge, DS Automobiles, Fiat, Jeep®, Lancia, Maserati, Opel, Peugeot, Ram, Vauxhall, Free2move and Leasys. Powered by our diversity, we lead the way the world moves – aspiring to become the greatest sustainable mobility tech company, not the biggest, while creating added value for all stakeholders as well as the communities in which it operates. For more information, visit www.stellantis.com.

Founded in 2018, Vulcan's unique Zero Carbon Lithium™ Project aims to decarbonise lithium production, through developing the world's first net carbon neutral business, with the co-production of renewable geothermal energy on a mass scale. 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 net zero carbon strategy with strict 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^{18F4}, with license areas focused on the Upper Rhine Valley, Germany. Strategically placed in the heart of the European electric vehicle market to decarbonise the supply chain, Vulcan is rapidly advancing the Zero Carbon Lithium™ Project to target timely market entry, with the ability to expand to meet the unprecedented demand that is building in the European markets. Guided by our Values of Integrity, Leadership, Future-focused and Sustainability, and united by a passion for environmentalism and leveraging scientific solutions, Vulcan has a unique, world-leading scientific and commercial team in the fields of lithium chemicals and geothermal renewable energy. 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. As a motivated disruptor, Vulcan aims to leverage its multidisciplinary expert team, leading geothermal technology and position in the European EV supply chain to be a global leader in producing zero fossil fuel, net carbon neutral lithium while being nature positive. Vulcan aims to be the largest, most preferred, strategic supplier of lithium chemicals and renewable power and heating from Europe, for Europe; to empower a net zero carbon future.

STELLANTIS FORWARD-LOOKING STATEMENTS

This communication contains forward-looking statements. In particular, statements regarding future events and anticipated results of operations, business strategies, the anticipated benefits of the proposed transaction, future financial and operating results, the anticipated closing date for the proposed transaction and other anticipated aspects of our operations or operating results are forward-looking statements. These statements may include terms such as "may", "will", "expect", "could", "should", "intend", "estimate", "anticipate", "believe", "remain", "on track", "design", "target",

“objective”, “goal”, “forecast”, “projection”, “outlook”, “prospects”, “plan”, or similar terms. Forward-looking statements are not guarantees of future performance. Rather, they are based on Stellantis’ current state of knowledge, future expectations and projections about future events and are by their nature, subject to inherent risks and uncertainties. They relate to events and depend on circumstances that may or may not occur or exist in the future and, as such, undue reliance should not be placed on them.

Actual results may differ materially from those expressed in forward-looking statements as a result of a variety of factors, including: the impact of the COVID-19 pandemic, the ability of Stellantis to launch new products successfully and to maintain vehicle shipment volumes; changes in the global financial markets, general economic environment and changes in demand for automotive products, which is subject to cyclical; changes in local economic and political conditions, changes in trade policy and the imposition of global and regional tariffs or tariffs targeted to the automotive industry, the enactment of tax reforms or other changes in tax laws and regulations; Stellantis’ ability to expand certain of their brands globally; its ability to offer innovative, attractive products; its ability to develop, manufacture and sell vehicles with advanced features including enhanced electrification, connectivity and autonomous-driving characteristics; various types of claims, lawsuits, governmental investigations and other contingencies, including product liability and warranty claims and environmental claims, investigations and lawsuits; material operating expenditures in relation to compliance with environmental, health and safety regulations; the intense level of competition in the automotive industry, which may increase due to consolidation; exposure to shortfalls in the funding of Stellantis’ defined benefit pension plans; the ability to provide or arrange for access to adequate financing for dealers and retail customers and associated risks related to the establishment and operations of financial services companies; the ability to access funding to execute Stellantis’ business plans and improve its businesses, financial condition and results of operations; a significant malfunction, disruption or security breach compromising information technology systems or the electronic control systems contained in Stellantis’ vehicles; Stellantis’ ability to realize anticipated benefits from joint venture arrangements; disruptions arising from political, social and economic instability; risks associated with our relationships with employees, dealers and suppliers; increases in costs, disruptions of

supply or shortages of raw materials, parts, components and systems used in Stellantis' vehicles; developments in labor and industrial relations and developments in applicable labor laws; exchange rate fluctuations, interest rate changes, credit risk and other market risks; political and civil unrest; earthquakes or other disasters; risks and other items described in the Company's Annual Report on Form 20-F for the year ended December 31, 2022 and Current Reports on Form 6-K and amendments thereto filed with the SEC; and other risks and uncertainties.

Any forward-looking statements contained in this communication speak only as of the date of this document and Stellantis disclaims any obligation to update or revise publicly forward-looking statements. Further information concerning Stellantis and its businesses, including factors that could materially affect Stellantis' financial results, is included in Stellantis' reports and filings with the U.S. Securities and Exchange Commission and AFM.

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

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

information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

This announcement is not an offer, invitation or recommendation to subscribe for, or purchase securities by Vulcan. Nor does this announcement constitute investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.

Competent Person Statement:

The information in this report that relates to Mineral Resources and Ore Reserves (respectively) of the Company's Zero Carbon Lithium™ is extracted from the ASX announcements made by Vulcan on 15 December 2020 (

Updated Ortenau Indicated and Inferred Resource

) and 15 January 2021 ("Positive Pre-Feasibility Study"), which are available on www.v-er.eu. The information in this report that relates to Insheim's Mineral Resources is extracted from the ASX announcement made by Vulcan on 20 January 2020 (

Maiden Indicated Resource Insheim Vulcan Zero Carbon Lithium

), which is available on www.v-er.eu. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Press release distributed by Wire Association on behalf of Stellantis, on May 31, 2023. For more information subscribe and [follow us](#).

Media Assets

Embedded Media

Visit the [online press release](#) to interact with the embedded media.

<https://wireassociation.eu/newsroom/stellantis/releases/en/vulcan-and-stellantis-in-joint-project-to-develop-geothermal-renewable-energy-to-supply-mulhouse-plant-in-france-1168>

Stellantis

Newsroom: <https://wireassociation.eu/newsroom/stellantis>

Website: <https://www.stellantis.com/>

Primary Email: communications@stellantis.com

Social Media

Linkedin - <https://www.linkedin.com/company/stellantis/>

Twitter - <https://twitter.com/stellantis>

Facebook - <https://www.facebook.com/Stellantis>

Youtube - <https://www.youtube.com/channel/UCKgSLvI1SYKOTpEToycAz7Q>
