

The CEO of Rio Tinto Ltd., Jacob Stausholm, said that the company has not given up on the “Jadar” lithium project in Serbia, TV N1 reported today.

Reuters reported that Stausholm said at a briefing for investors in Sydney that “Jadar” represents “unbelievable value”, he said.

Reuters recalls that Rio Tinto announced in July that it was “exploring all options” regarding the Jadar project when it comes to local community concerns.

The Prime Minister of Serbia, Ana Brnabić, recently stated that she does not see the possibility of the “Jadar” project being revived, but that she still regrets it, because, according to her, it was a historic opportunity for the development of Serbia.

Serbian President Aleksandar Vučić said last night on RTS that he likes to talk about lithium, “that it is terribly important and that we made a terrible mistake by stopping the ‘Jadar’ project.”

Although, at least officially, mining of lithium has been abandoned, according to the Handelsblat daily, Serbia is one of those countries that, according to Germany’s plan, should be encouraged to exploit lithium in order to strengthen European battery production and reduce dependence on China.

It is, as stated, a secret document that Berlin submitted to the European Commission (EC) which lists 20 specific proposals and projects that should start the EU’s “Global Gateway” initiative from the deadlock in response to the Chinese project. Belt and Road” and infrastructure investments.

Not a single lithium mine has yet been opened in the EU, although it is planned that the EU will reach zero carbon dioxide (CO₂) pollution by 2050, and that tens of millions of electric cars will be driven by 2030.

There are projects that are in the development phase. Lithium is extracted only in Portugal, but for the needs of ceramics, while the opening of a large mine, like the one planned in Serbia, is still awaited. The reasons are expected, namely the negative impact of the mine on the environment.

The Barroso project in Portugal was supposed to be the first large-scale lithium mine in the EU, but the opening has been delayed several times, sometimes indefinitely.

In 2021, the first temporary permit was issued after a preliminary environmental impact report. However, it stopped there, because water pollution, energy consumption, steps after digging and crushing were not solved. In addition, the mine is strongly opposed by the local population and environmental associations.

Optimists believe that the mine could start working in 2023, since at the beginning of this year the government of Portugal approved it in principle, however, the municipalities where the mines should be opened announced the initiation of the procedure for the ban on mining.

It was originally announced that 10 percent of the world’s reserves were located there, but

until today the projection was reduced to one percent. The estimated capacity is 27 million metric tons, and the company that wants to mine in Portugal is Savannah resources. While the uncertainty continues, the Portuguese government has announced that they will not be in a hurry to grant permits.

Several more lithium mines are planned in the EU, and the best-known example is in Germany, where a project is underway where lithium would be obtained with the help of geothermal energy for the extraction of lithium-rich salt water from the Upper Rhine. The final product lithium hydroxide would then be obtained by electrolysis. That lithium should have a zero point of carbon pollution, however in Germany they want to avoid water pollution as well.

The entire project was conceived as an isolated system where the water would be completely purified, and only then released. This is a new approach with obtaining lithium from water, according to the first estimates it pollutes the environment far less than mines. Research is underway, started in 2021, and this year the State Institute for Geology and Mining determined that the impact of the planned wells on the environment, taking into account their size, scope and intensity of action, cannot be assessed as significant. If everything goes according to plan, the beginning of commercial exploitation is possible from 2025.

The French company Imeris has announced that in 2028 it will start mining a lithium deposit in the Central Massif, which should last 25 years. Since the second half of the 19th century, the site has been home to a quarry that produces 30,000 metric tons of kaolin per year for tile production.

This company states that with 34,000 metric tons of lithium hydroxide per year, they would enable around 700,000 electric vehicles to be equipped with lithium-ion batteries.

The “Cinovec” project, implemented by European Metals Holding, is 100 kilometers from Prague in the Czech Republic. It aims to produce nearly 30,000 metric tons of lithium for batteries annually over a period of 25 years.

According to the 2022 feasibility study of European Metals, “Cinovec” has the potential to become the cheapest lithium rock producer in the world. The ore could produce at \$5,000 to \$6,000 per metric ton.

It is not yet known whether that will happen, just as it is not known when the mine could start operating. “Cinovec” is, they say, the fourth largest deposit without salt water in the world. With the completion of the investment in April 2020, the project started the work program, but not the production.

An updated Preliminary Feasibility Study (PFS) for the project was completed in June 2019 when the Final Feasibility Study was initiated but not yet complete. This mine is located close to companies that make cars, but also to Tesla’s giga battery factory.

European Lithium is developing the Wolfsberg project in Carinthia, 270 kilometers south of

Vienna. This mine project plans to mine 10,000 metric tons of lithium hydroxide per year. According to the company, this will equip the batteries of around 200,000 electric vehicles. They hope to achieve an operating rate of 800,000 metric tons per year with a mine life of over 10 years. The company expects to start production in 2025.

Finnish mining and battery chemicals company Keliber is currently running a project in western Finland with the goal of reaching production of 15,000 metric tons of lithium hydroxide per year, starting in 2025. The company also strives for sustainable production. The lithium they plan to extract will, they say, have a smaller carbon footprint than the competition. This is because the refinery is located 70 kilometers from the mine. More than half of the electricity in the Finnish national grid is produced from renewable energy sources. As a result, the refining process will be more environmentally friendly. In addition to the above, there are several other projects in Europe that are in the development phase. The presence of lithium in several other locations is also being investigated in Serbia.

As things currently stand, more serious lithium production in Europe, that is, the European Union, will not begin before 2025.

The pressure of industries and large capital will certainly increase, and the rise in the price of lithium, which is expected to increase several times over the next decade, is also certain. Whether the EU will succeed in reconciling mining projects with environmental standards or whether it will enter the green transition with potential devastation on its own or surrounding soil, will be seen soon. The EU certainly needs supply chains that are closer to the continent, but also non-Chinese supply.

The European Green Deal of 2020 indicated that some environmental standards would be lowered, while the RipoverEU plan, published after Russia's attack on Ukraine, further prioritized the switch to renewables as part of efforts to rapidly reduce use of Russian fossil fuels, Beta writes.