

Europe's Green Transition, a plan to make the bloc's economy climate neutral by 2050, required Serbia's fertile [Jadar Valley](#), where locals grow raspberries and keep bees, to make huge sacrifices to allow other countries to build electric cars.

The deposit in this region has enough lithium to produce a million **EV batteries**, and multinational [mining giant Rio Tinto](#) wanted to spend \$2.4 billion to build Europe's largest lithium mine at this location. However, local residents and environmental activists stood against the project, claiming that it would cause irreparable damage to the environment. The project was officially halted in January last year after months of protests, and Rio Tinto's lithium exploration permits were revoked. But to this day it is not known whether the project is really "buried".

There is widespread suspicion that the project was only temporarily canceled and that the issue could be back on the agenda as economic benefits are seen, especially in light of the expected adoption of the [EU's Critical Raw Materials Act](#).

Europe has big plans to phase out fossil fuel cars. In July 2022, **the European Union** proposed a ban on the sale of new gasoline and diesel cars until 2035. Blok wants to replace those cars with electric vehicles, made from locally produced raw materials such as lithium. The biggest producers of lithium are currently Australia, Chile and China. But Europe has ambitions to produce more of the materials needed for electric cars at home. These materials are extremely expensive to ship and transport. It is much cheaper and safer to have these operations near battery factories or car manufacturing plants.

For Europeans, it is also a safety issue. Officials have warned that the EU cannot allow itself to replace its current reliance on fossil fuels with dependence on critical raw materials.

The problem is that Europeans don't trust mining companies in their backyards. The resistance that Rio Tinto faced in Serbia is not unique. Portugal also witnessed protests against lithium mining last year. Mining company Vulcan Energy has paused its lithium activities in Germany's Upper Rhine region after facing opposition from the local community.

However, Serbia's fierce opposition to the mine poses a major problem for the European Union's ambitions to source lithium closer to home. Namely, the EU cannot achieve its climate goals without raw materials such as lithium, and the bloc will need 18 times more lithium by 2030, and 60 times more by 2050.

Rio Tinto's offensive in the village of Gornje Nedeljice began shortly after the mining group discovered a completely new type of mineral in the area in 2004. The mineral, called jadarite after the Jadar valley where it was found, contained both borates and lithium - two

materials that play a role in the green transition. Lithium is used in EV batteries, while borates can be used to develop wind and solar energy projects.

In the following years, Rio Tinto employees made an effort to get involved in life in the village of Gornje Nedeljice. The company also aired ads on local TV stations, telling local residents that together they can save the planet.

Locals weren't too worried when Rio Tinto announced it wanted to build a modest mine on just 20 hectares. They said that it will be a modern mine that will not harm nature. However, in 2022, the villagers discovered that the plans for their village had changed drastically - Rio Tinto wanted to build a mine on 600 hectares.

Local residents explain that they started fighting the mine when they found out that the company had been lying to them for 14 years - when they found out how big the mine really was. Then the question of the environment started to arise.

The Guardian has seen a study funded by Rio Tinto, which says the mine will cause irreversible changes to ecosystems and local rivers. The study recommended abandoning the planned exploitation and processing of jadarite minerals.

At that moment, local anger towards Rio Tinto ignited national frustrations regarding Serbia's relationship with foreign mining companies - investors are attracted to the small country because it borders the EU, but does not have the same strict regulations.

In April 2022, thousands of people took part in protests in Belgrade that became known as the "environmental uprising". Those protests lasted intermittently until the end of the year. Activists of the "Right to Water" initiative believe that the [Government of Serbia](#) plans to open 40 mines in the next 15 years, including seven lithium mines, judging that Rio Tinto is a metaphor for all the different investors and all the mines planned in Serbia.

The villagers of Gornje Nedeljice believe that Rio Tinto has invested too much to stop, regardless of the result. The company has created its own technology for extracting jadarite, which is not used anywhere else in the world. Although the government has canceled the project, there are no signs that Rio Tinto is about to walk away. The machines remained, and the mining company continued to buy local real estate.

The era after the Rio Tinto standstill

On the other hand, there are estimates that Germany and the Czech Republic will use the chance that Serbia had for opening lithium mines, because they will open those mines. Analyzes show that the price of lithium will increase fourfold in the coming years, with a tendency to continue its dizzying growth.

The climate in society does not favor the mining companies in Serbia, but this does not mean that a very dynamic mining business is not developing in the background of the

country. Although the final outcome of the exploration is uncertain and requires significant investments, the **Ministry of Mining and Energy** continues to receive a large number of applications for issuing permits for mining exploration. The question here is why would anyone invest money if the chance of finding ore is only one percent?

In short, it can be said that the business model of companies that start mining exploration in Serbia aims for them to find a partner who will later buy them out, and thus take over the exploration rights. They want to earn money either by selling the company to a bigger player, that is, by getting an ownership stake in the company that bought them. Following a similar model, several domestic mining companies were transferred to foreign ownership. Mining experts estimate that large companies do not deal with the initial stages of exploration, but jump in only when the explorations have progressed more seriously. Currently, there are only two serious players in mining in Serbia - Rio Tinto and [Zijin](#). Environmental activists say that mining companies engaged in exploitation and applied geological research have no intention of leaving Serbia and that there will be more and more of them.

Lithium deposits in the EU

Significant lithium deposits were also discovered in EU members, such as Germany and the Czech Republic, while smaller deposits are found in Spain, Portugal, Austria, France and Finland.

The latest US Geological Survey report shows that Serbian lithium accounts for just over 1 percent of the world's total, compared to 24 percent in Bolivia, 21 percent in Argentina and three percent in Germany.

It is estimated that extracting ore from sources near Basel and Frankfurt in Germany would produce much less carbon dioxide than mining and processing [Serbian lithium](#), but the Greens in the German government oppose this. These deposits in the Rhine Valley are located at great depths and require new extraction technologies that can cause earthquakes, and their ecological and economic viability is still not sufficiently explored. As for the Czech site, shares in European Metals Holdings jumped in January on both the Sydney and London stock markets after it was announced that its Cinovec lithium project had been classified as a strategic project. It is the largest European resource of lithium. This means that the project will be prioritized for a grant from the Just Transition Fund, which supports the green transition of regions of the European Union that rely on fossil fuels and have high emissions.

The financing could speed up project development and shorten the time to production of the first ore.

European Metals controls exploration permits for the Cinovec lithium/tin project in the Czech Republic. The utility company ČEZ, in which the state has a 70-percent stake, holds 51 percent of the shares in the project, through its local subsidiary Geomet. When operational, the Cinovec mine will produce 29,386 tons of lithium hydroxide per year over its 25-year production life, according to an updated feasibility study released in early January.