

When did it start?

The "Jadar" deposit, as well as the jadarite mineral itself was discovered in 2004, and the International Mineralogical Association officially recognized it as a new mineral in November 2006 and named it "Jadarit", after the river.

Jadar is a unique deposit of world-class lithium and boron, and is located near the town of Loznica in Western Serbia.

No similar deposit exists anywhere in the world; however, lithium has been obtained from continental saline solutions (Bolivia, Chile, Argentina) or from solid rocks – pegmatite (Australia, Russia, Canada, Austria), or from both sources (America and China). Due to the high concentration of lithium and boron per ton of excavated ore, Jadar is ranked as one of the most important lithium deposits in the world.

Although the Rio Tinto/Rio Sava project currently only involves the construction of a mine and an ore processing plant, the idea is likely to build a large battery factory for electric cars in Europe, to make batteries in Serbia.

The project by British-Australian mining company "Rio Tinto" has invested \$450 million. It is currently in the process of preparing a feasibility study, which was expected to be completed by the end of 2021.

If the project is realized, three final products are planned – lithium carbonate, used in the production of batteries and electric vehicles, boric acid and sodium sulfate.

Voices against the mine, first information is revealed and the beginning of the protests

Climate experts claim that opening a mine in this area would be a bad solution for the interests of the local community. Running the mine would require pumping large amounts of water, which could lead to drought during the summer and floods during rainy periods. In addition, the toxic cocktail of chemicals used to extract lithium from the ground could also infiltrate nearby rivers, streams and water supply.

The original Impact Assessment Study that followed the Spatial Plan of the Special Purpose Area Jadar from December 2019 was revealed during the New Year's holidays.

It was adopted without adequate discussion and without much of the data required to be presented in the Study.

The Impact Assessment Study for Jadar was adopted without the company having registered a patent, which would specify exactly which technology would be used to extract lithium.

Protests against Rio Sava began in December 2019 and were related to the adoption of the Spatial Plan of the Special Purpose Area Jadar.



That was the first significant piece of information that saw the light of day. At that time, viewing it as an acceptable economic solution, the Rio Sava company already announced the project for a landfill by the Jadar river.

Protests soon spread throughout Serbia, built on and merged with those against small hydro power plants, air pollution or Chinese investments such as Ling Long in Zrenjanin, Zijin in Bor or the steel factory in Smederevo.

Is there an environmentally friendly way to mine lithium that limits the impact on nature to a minimum?

According to local NGO PAKT, there is still too little information about extracting lithium in an eco-friendly way. It seems that ecological experts do not know, the public does not know, and the company does not know either because there are only two mines in the world using a similar lithium extraction process.

Miroslav Mijatović from the same NGO stated that what is known is that both mines with similar extraction of lithium, from rock material, are based in China and the United States. However, in both cases, the mines are in deserts and their impact on the environment reaches up to 150 km in diameter.

Given the track record of the company in Australia, there is very little trust in Rio Tinto and the Serbian governmentthat the mine would be established according to Serbian and EU environmental legislation and standards.

In September 2020, the company was accused of polluting rivers in Papua New Guinea by releasing toxic substances. More than 150 citizens of Bougainville in Papua New Guinea have complained that Rio Tinto's actions have caused health problems for 12,000 people living in the area.

This happened immediately after the Director and two general managers of the company resigned following a scandal with the destruction of World Cultural Heritage sites associated to Aborigines in Australia. Rio Tinto's mines in Western Australia have destroyed the caves of these 46,000-year-old natives.

Land purchases

In the past months, the process of buying land from the local population has begun, however, Rio Tinto still has to obtain numerous permits from the state.

According to local NGO PAKT Loznica, Subzone 1A of access to the mine is 140.24 hectares, subzone 1B of production and industrial activities is 79.8 hectares and subzone 3B is 167.12 hectares. So far, according to the latest data from the Real Estate Cadastre in Loznica, the company has taken possession of 140 hectares.

Studies on environmental impact



Meanwhile, Rio Tinto commissioned 12 studies on environmental impacts that have not been disclosed. Environmental Impact Assessment of a potential lithium mine according to Serbian laws is underway, however it is yet to be concluded, is not transparent or public, and there are no public consultations.

According to the company's announcements, 16 impact assessment studies will be prepared before the comprehensive study, which would look at the cumulative impact of the mine on the environment.

The public still does not know if the company has done anything about it so far, but one thing is sure – all studies have to be in the public domain before adoption.

Laws on Referendum and Expropriation

The proposed Law on Expropriation and the Law on Referendum were partly related to the opening of mines in the Jadar Valley.

Public concern was related to articles defining *public interest*. This expression was not sufficiently elaborated in the Law and the main question from the locals was whether the Rio Tinto investment could actually be in the public interest.

Namely, the Law also suggested that private property in the *public interest* could be confiscated from the owner temporarily for 3 + 2 years, which would favor Rio Tinto in conducting its research on the site.

The state could temporarily seize land even without the owner's permission. In the event of land expropriation, locals could be left without property for a maximum of one month. Even with the old Law remaining in force, this legal institute is still in effect, but it takes a little more time to take possession of someone's private property.

When it comes to the Law on Referendum, it was important for the residents of the Jadar Valley to preserve the legal census for local and regional referendums, which was a turnout of at least 50%. With new Law, it is enough to have a simple majority, 50% of those who came out to vote.

After a series of protests in November and December 2021, which took place throughout Serbia, the Law on Expropriation has been withdrawn in its entirety.

What can the European Union do?

Given the strategic relevance of the exploitation of Lithium, all of this takes place in the context of a larger geopolitical question, namely one of securing resources for the green transition, decarbonization of the economy and mobility.

What the EU can do is exert pressure on the Serbian institutions to change the Law on the Study on Environmental Impact Assessment and Environmental Impact Assessment in an adequate manner.



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It seems that the most important matter is to extend the deadline for public discussion on the Study, the establishment of an independent regulatory body dealing with Impact Assessment Studies modeled on the Office of the Commissioner and reestablishment of an independent Green Fund.

That would avoid the appearance of the EU dumping its environmentally hazardous production processes on Serbia, especially given that Serbian citizens are less and less convinced they will ever become EU citizens, Boell writes.