

## HOW MUCH WOULD SERBIA GAIN FROM THE JADAR PROJECT?

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The debate around the Jadar project has, quite rightly, been primarily focused on its environmental aspects. However, Rio Tinto, the Serbian President, and the government of the Republic of Serbia often emphasize the alleged enormous positive economic effects of the project for Serbia. This article analyzes and shows, based on available facts, that the Jadar Project, whose negative environmental effects are increasingly clear to both domestic and international audiences<sup>5</sup>, would have uncertain and, at best, negligible economic effects for Serbia, while causing significant expenditures for the national budget, as well as long-term financial and other risks.

### Key findings:

- **According to Rio Tinto's projections, Serbia would have negligible total revenues from the Jadar Project: €17,4 million annually, which equates to €2,6 per capita annually;**
- **Serbia would also finance, for the benefit of Rio Tinto, the entire infrastructure for the Jadar Project, valued at several hundred million euros (roads, railways, water supply, gas pipeline, electricity infrastructure, etc.);**
- **Serbia would have no ownership share in the Jadar Project, and Rio Tinto would fully control the extracted lithium; even if Serbia was to get 20% of the capital of the "Jadar" Project, it would still have negligible revenues: €27 million annually, which equates to €4,1 per capita annually;**
- **In the event of an environmental disaster (floods, tailings spills, etc.), Serbia would bear the enormous costs for remediation, potentially amounting to hundreds of millions of euros;**
- **The government plans to grant €419 million in subsidies, non-transparently and without guarantees, for the construction of an electric battery factory to a little-known Slovak company, InoBat, which has Rio Tinto as a shareholder<sup>6</sup>, even though it has no experience in large-scale battery production.**

**Therefore, based on economic and financial analyses, and due to the enormous risks associated with its implementation, the Jadar Project is not justified and should be halted.**

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<sup>5</sup> <https://www.sanu.ac.rs/snimak-naucnog-skupa-projekat-jadar-sta-je-poznato/>, <https://www.nature.com/articles/s41598-024-68072-9>

<sup>6</sup> <https://www.riotinto.com/news/releases/2021/rio-tinto-invests-in-inobat>

## THE JADAR PROJECT: NEGLIGIBLE ECONOMIC EFFECTS FOR SERBIA

The only available assessment of the economic impact of the Jadar Project (hereinafter "the Project") by the investor, Rio Tinto, is found on the Rio Tinto Serbia website<sup>7</sup>. Rio Tinto's officials, Serbia's President, and the government of the Republic of Serbia all refer to this study (hereinafter "the Study"). It was paid for by Rio Tinto and commissioned from the little-known London consulting firm, Ergo Strategy Group<sup>8</sup>.

It is evident that the investor's goal was to show through the Study that the Project's contribution to the Serbian economy and public finances is significant. However, the Study itself shows that these effects are minimal and that the only potential beneficiary of lithium mining could be Rio Tinto.

For example, on page 45 of the Study, there is an estimate of €1 billion in annual revenues from the Project. It further states that €305 million in costs for goods and services, including wages, will be deducted from total revenues. It is important to note that these costs would be almost exclusively paid to foreign suppliers for machinery, other equipment, chemical reagents, technical consultations, etc., with no significant income and almost no benefit for Serbia.

After deducting the costs for goods and services from the total revenue, the Study presents the distribution of the remaining estimated annual gross added value of €695 million. Of this amount, Rio Tinto is projected in the Study to collect €450 million, or two-thirds of the operating profit from the Jadar Project, for its invested capital.

Although the Study does not present the internal rate of return for this Project, **the cash flow of the investor, i.e., the financial flows of Rio Tinto for the Jadar Project, is shown in a graph on page 54** (see Appendix to this paper for an analysis of cash flows for Rio Tinto and Serbia based on this graph).

During the first five years of the Project, Rio Tinto is expected to invest around €2,45 billion,<sup>9</sup> and afterwards, it anticipates starting production and generating revenues of a total of €13,95 billion (from year 6 to year 37 of the Project), which is over five and a half times the invested capital. During the last three years of the Project, mine closure costs of around €250 million would most likely be paid from financial reserves realized during the Project, as mentioned in the Study. Therefore, Rio Tinto **plans a net profit, without discounting financial flows<sup>10</sup> of €11,5 billion** (€13,95 billion - €2,45 billion).

Payback of the invested €2,45 billion would take, without discounting cash flows, only five years because, from year 6 to year 10 of the Project, Rio Tinto expects cash flows of around €2,55 billion. Thus, Rio Tinto would fully cover its own risk after less than a quarter of the Project's lifespan, and it

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<sup>7</sup> <https://riotintoserbia.com/en/jadar-project/economic-impact/>

<sup>8</sup> <https://ergostrategygroup.com/wp-content/uploads/2023/08/Ergo-Strategy-Group-Jadar-Economic-Impact-Assessment-Sep23-EN-spread.pdf>

<sup>9</sup> The figure of €2,45 billion is not explained, and therefore, it is questionable. In other words, the actual investment might be lower.

<sup>10</sup> Discounting financial flows recognizes the fact that the value of money depends on the moment it is received: one euro today is worth more than one euro received in one year. The difference lies in the interest rate that can be earned if the money is deposited during that year. Since economic projects are riskier than bank deposits, the rate at which their financial flows are discounted is significantly higher and is currently estimated to be around 10% annually in Serbia (WACC or Weighted Average Cost of Capital).

would start generating profits from the eleventh year of the Project and throughout the remaining thirty years of its duration.

**All of the aforementioned characteristics of the Project represent an extremely positive outcome for Rio Tinto as an investor.**

Moreover, although the budget subsidy for investors of ten thousand euros per new employee cannot generally be paid to mining companies, it is possible that Rio Tinto could qualify certain affiliated companies, and thus part of the 1.300 employees and/or 3.265 temporary employees during the construction of the mine, for these subsidies.

### **How much would Serbia gain from the Jadar Project?**

The experience of Zijin in Bor, where citizens of the People's Republic of China are being employed *en masse* due to a lack of domestic labor, shows that significant employment of local workers during the construction or operation of the mine cannot be expected. Although the Study anticipates €30 million annually for gross salaries, it cannot be expected that this would represent a significant gain for Serbia.

As for the revenues for the public finances of Serbia, they amount as per the Study to €184,5 million annually, which is extremely small for a project of this scale and, above all, for such an ecological risk. It should be noted that even this modest figure drastically overstates the real budget revenues that Serbia could in fact expect from the Project.

Much was said about **mining royalties** and various fees, but they do not total more than €40 million annually according to the Study (€24 million at the national level and €16 million at the local level, and only at the time of maximum production, which would be after the tenth year of the mine's operation). Moreover, as was the case with Zijin in Bor and Majdanpek, it is entirely possible that the government will decide to lower the royalty rate, further reducing that small revenue obtained from the exhaustion of non-renewable resources of the country.

The largest anticipated revenue would actually be the **corporate income tax**, estimated at €85 million annually. This confirms that Rio Tinto expects an annual pre-tax profit of €567 million (with a tax rate of 15%), along with dividend payouts of €333 million per year (with a 15% tax rate on the €50 million collected), which would represent the second largest source of potential revenue for Serbia from the Project.

However, Rio Tinto would not pay income tax during the first five years of the project, as it would accumulate losses during the construction phase, nor during the last three years when the mine would be closing. Additionally, according to the graph on page 54, both income and dividend taxes would be minimal from year 33 to year 37 of the Project, as the project's revenues would decrease while costs would persist. This means there would be no taxation of profits or dividends for a total of 13 years during the Project's lifetime.

Additionally, and very importantly, Rio Tinto, in accordance with Serbian tax regulations, would not pay income tax from year 6 to year 10 of the Project's duration, due to the carryover of losses incurred during the first five years. Then, it would undoubtedly seek and obtain an exemption from income tax

based on capital investments and employment during the following profitable ten years of the Project, i.e., from year 11 to year 20.

**This effectively means that Rio Tinto would only pay income tax for 12 years out of the total 40 years of the Project (from year 21 to year 32)<sup>11</sup>, while collecting annual dividends for 27 years of the total 40 years of the Project.**

**It should be noted that the Study indicates that the entire dividend would go to Rio Tinto, meaning that the Republic of Serbia would have no ownership stake in the Project. This is another very concerning fact that deviates from the agreements made in many mining projects, including those involving Rio Tinto.** For example, in a smaller lithium project in **Rwanda**<sup>12</sup>, Rio Tinto will have to invest to eventually achieve **75% ownership**. Additionally, Rio Tinto has accepted that without any investment, the Republic of **Guinea will receive 15%** of the capital in the Simandou project<sup>13</sup>, while **Madagascar will receive 20%** of the Fort Dauphin project<sup>14</sup>. This means that in Guinea and Madagascar, the states —i.e., taxpayers—have become co-owners of the projects without any investment, which is not provided for in our case.

In summary, the total revenues for the Serbian budget over the 40 years of the Project would amount to €3,8 billion before discounting cash flows, **which is three times less than Rio Tinto's net cash flows**.

With the discounting of cash flows at an annual rate of 10%, which currently represents the estimated level of WACC or "Weighted Average Cost of Capital" for Serbia, **in the best-case scenario, Serbia could receive approximately €696 million in today's euros over the entire 40-year duration of the project, or an average €17,4 million annually, or 2,6 euros per capita annually**. Revenues would remain negligible even if Rio Tinto does not use any tax incentive: Serbia would then receive 27,4 million euros annually, or 4 euros per capita annually.

**If, as announced by the President of Serbia<sup>15</sup>, the country was to get a share of the equity of the Project, say 20% (hence 20% of dividends paid), its income would still be negligible: 27 million euros per year, which represents 4,1 euros per capita per year. In the event that the company "Rio Tinto" does not use any tax relief and Serbia has 20% of the project, it would receive 37 million euros per year, which represents 5,6 euros per capita per year.**

However, even this very modest figure does not accurately reflect the true financial picture from Serbia's perspective, as the Study does not account for the costs of extensive infrastructure works that would benefit only the Jadar Project, and which are expected to be fully funded by the Republic of Serbia.

The reality is that when the costs of dedicated investments for the Jadar Project and for the benefit of Rio Tinto, as well as other subsidies for the electric mobility chain, are deducted, **Serbia's profit would be close to zero for entering into a project with enormous ecological and financial risks**.

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<sup>11</sup> [https://www.paragraf.rs/propisi/zakon\\_o\\_porezu\\_na\\_dobit\\_pravnih\\_lica.html](https://www.paragraf.rs/propisi/zakon_o_porezu_na_dobit_pravnih_lica.html)

<sup>12</sup> <https://aterianplc.com/lithium-joint-venture-with-rio-tinto-in-rwanda/>

<sup>13</sup> <https://www.riotinto.com/en/operations/projects/simandou>

<sup>14</sup> <https://www.riotinto.com/en/operations/madagascar/qit-madagascar-minerals>

<sup>15</sup> <https://www.euronews.rs/srbija/politika/142134/vucic-boricu-se-da-srbija-dobije-vlasnicki-udeo-u-projektu-jadar/vest>

## JADAR PROJECT: INFRASTRUCTURE FINANCING AND SUBSIDIES FROM THE SERBIAN BUDGET

For the Project to be realized at all, Rio Tinto expects Serbia to cover the costs of all preparatory infrastructure works at the expense of Serbian taxpayers. **Rio Tinto has not received similar privileges anywhere else in the world as it has in Serbia.**

For example, in the Simandou project in Guinea, Rio Tinto committed in July 2024 to pay \$3,5 billion out of a total of \$6,5 billion for necessary infrastructure (a 670 km railway, a port, etc.)<sup>16</sup>. In Quebec, the fourth-largest aluminum producer in the world, Rio Tinto initiated a €1 billion investment in 2023, where the combined participation of Canadian authorities will be €100 million<sup>17</sup>. In Australia, Rio Tinto decided in 2023 to pay \$395 million for a desalination plant in the Pilbara region for its own needs as well as those of the local population<sup>18</sup>. We have not identified any Rio Tinto project where the majority, especially all infrastructure costs, are covered by the state - except, apparently, the Republic of Serbia for the Jadar Project.

The government of the Republic of Serbia has not clearly and transparently presented and quantified the costs of the infrastructure works planned for the Jadar Project for the benefit of Rio Tinto.

However, key elements can be found in the Spatial Plan for the special purpose area for the realization of the project for the exploitation and processing of jadarite mineral "Jadar,"<sup>19</sup> particularly in section 4.2.2, "Infrastructure Systems." This is a document that was put out of force after mass protests in January 2022 and which the government—colluding with the Constitutional Court—subsequently reinstated.

Contrary to what Rio Tinto and Serbian officials repeatedly assert, enormous, dedicated infrastructure investments are required for the Jadar Project to be realized. It is evident that all these costs will be borne out by Serbia, as Rio Tinto has not mentioned any of its own participation in these investments, unlike in other projects.

This involves numerous roads to transport all the equipment needed for the construction of the mine, as well as for the enormous truck traffic to the tailings area during operations, with a truck rolling every seven minutes. Huge quantities of sulfuric acid, equivalent to two Olympic-sized swimming pools every three days, would be transported by a railway that must be built specifically for this purpose. Additionally, enormous amounts of water would be required, necessitating the construction of a pipeline from the Drina River to the mine.

The resulting wastewater would require a new, much larger sewage network and a treatment facility before being discharged into the Jadar River. The high electricity consumption would necessitate the construction of new power lines, substations, and a local distribution network. A special branch of the gas pipeline is also planned, with a wider protection zone of 400 meters (page 106 of the Jadar Spatial Plan).

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<sup>16</sup> <https://www.riotinto.com/en/news/releases/2024/conditions-on-simandou-investment-now-satisfied>

<sup>17</sup> [https://www.riotinto.com/en/news/releases/2023/rio-tinto-to-expand-its-ap60-low-carbon-aluminium-smelter-in-quebec#:~:text=SAGUENAY%2C%20Canada%2D%2D\(BUSINESS%20WIRE,at%20Complexe%20Jonqui%C3%A8re%20in%20Canada.](https://www.riotinto.com/en/news/releases/2023/rio-tinto-to-expand-its-ap60-low-carbon-aluminium-smelter-in-quebec#:~:text=SAGUENAY%2C%20Canada%2D%2D(BUSINESS%20WIRE,at%20Complexe%20Jonqui%C3%A8re%20in%20Canada.)

<sup>18</sup> <https://www.riotinto.com/en/news/releases/2023/rio-tinto-to-invest-in-pilbara-desalination-plant>

<sup>19</sup> <https://www.mgsi.gov.rs/lat/dokumenti/javni-uvod-u-nacr-prostornog-plana-podrucja-posebne-namene-za-realizaciju-projekta>

The government of the Republic of Serbia must present estimates of the costs associated with such a diverse range of dedicated infrastructure projects, as well as the accompanying costs of expropriation. **Undoubtedly, their burden on Serbia's budget would amount to several hundred million euros.** For example, there are indications that the gas pipeline will cost around €75 million, while one of the roads will cost €76 million. It is up to the government and other state authorities to finally provide various estimates for further analysis.

**Therefore, if the calculations included investments in infrastructure, Serbia would not actually gain any financial benefit from the Jadar Project.** The certain costs of constructing the necessary infrastructure from the budget during the early years of the Project would likely exceed even the hypothetical total maximum of €696 million that Serbia would gain over a long period of 40 years.

Unfortunately, the overall financial reality is even more unfavorable for Serbia than this depiction, as the government of the Republic of Serbia intends to grant enormous subsidies to other highly risky projects in the remaining value chain of electric mobility.

Specifically, **the government of the Republic of Serbia decided in September 2023 to approve record subsidies of €419 million to the little-known Slovak company InoBat<sup>20</sup>, despite it having no experience in large-scale production of electric batteries.**

What guarantees does Serbia receive from the owners of that company, in particular the Slovak government and Rio Tinto, who are its shareholders, that the money of Serbian taxpayers will be returned if InoBat goes bankrupt or faces serious difficulties? The company InoBat has recently contracted with the Chinese company Gotion, which would provide the *know-how*<sup>21</sup>, to build a battery factory in Slovakia. Will that mean that the factory in Serbia would only recycle batteries?

This question is not theoretical at a time when some of the largest producers of electric batteries, such as the Swedish company Northvolt, are themselves on the brink of bankruptcy<sup>22</sup>.

As the Study itself acknowledges on page 13, lithium mining does not provide a comparative advantage in the production of batteries or electric vehicles. To quote: "Serbia's competitive advantage as a producer of lithium lies in its large and high grade jadarite resource. However, succeeding down the value chain, for example in the battery or electric vehicle industry, requires a different set of competitive advantages altogether, including skilled labour, cheap and ideally renewable energy, and efficient infrastructure. This explains why countries such as China, Korea, Japan, and some European countries have so far led the way."

Granting enormous subsidies to an inexperienced, unproven Slovak company in the harsh electric battery industry does not represent a convincing strategy for transitioning from mining to battery production, **especially considering that Rio Tinto, and not the Republic of Serbia, would own all the products from the mining and would decide where to sell them.**

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<sup>20</sup> <https://www.inobat.eu/newsroom/inobat-signs-mou-with-republic-of-serbias-ministry-of-finance-and-the-municipality-of-cuprija-to-build-its-second-giga-battery-manufacturing-and-recycling/>

<sup>21</sup> <https://www.inobat.eu/newsroom/gib-to-build-an-advanced-gigafactory-in-slovakia/>

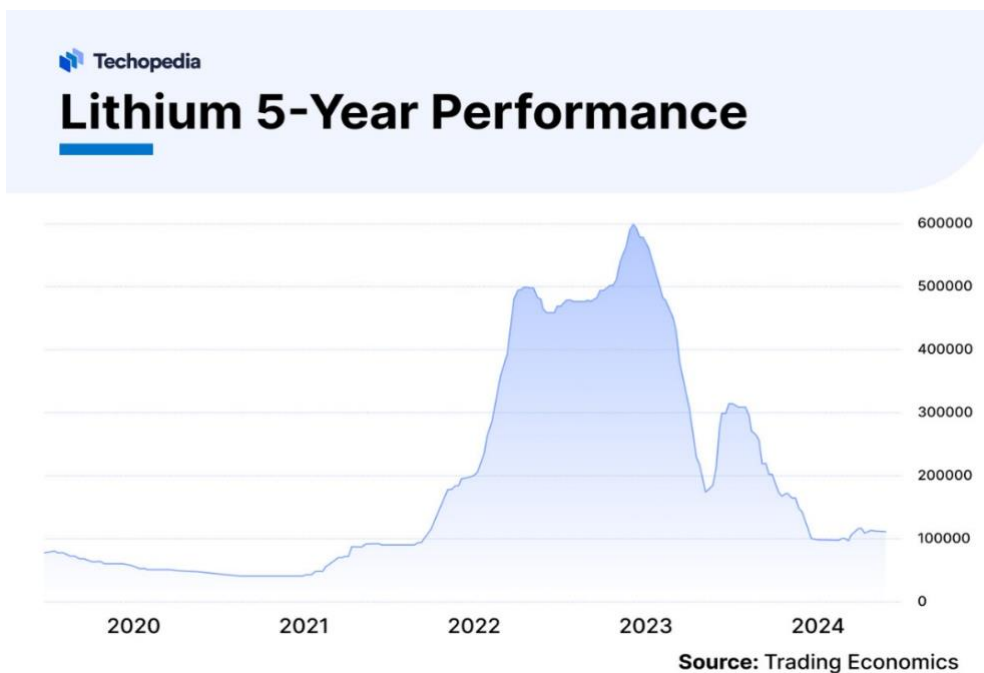
<sup>22</sup> <https://www.reuters.com/markets/deals/northvolt-subsidiary-files-bankruptcy-2024-10-08/>

Regarding electric vehicles, the presence of Mercedes at the conference on critical raw materials in Belgrade in July 2024<sup>23</sup> is another paradox, given that Fiat, which plans to produce an electric version of the Panda in Kragujevac, will not wait for lithium from the Project. This vividly illustrates that there is **no industrial link between lithium and electric vehicles**, which is a common narrative among Project promoters.

The reality is that **the government of the Republic of Serbia plans to spend likely around one billion euros of Serbian taxpayers' money in the next five years for, in the best case, zero net profit over the next thirty-five years of the Project.** However, if the enormous environmental and climate risks, as well as the risks and costs of managing vast quantities of mining waste and hazardous raw materials from processing ore are taken into account, the reality for Serbia could be much worse.

### JADAR PROJECT: SIGNIFICANT FINANCIAL AND OTHER RISKS FOR SERBIA

The key assumption of the Study, which justifies the Jadar Project, is that lithium carbonate will be sold at an average price of \$15.600 per ton over the life of the Project, which is very optimistic. Namely, the price of the basic raw material, lithium carbonate, on which the profitability of the entire Project depends (see chart, in yuans), has dropped by 81% in just two years and amounts to \$10.049 on October 23, 2024<sup>24</sup>.



The causes of the drop in lithium carbonate prices are multiple, with three main ones being: 1) A decrease in demand for electric vehicles, which are still significantly more expensive than internal combustion engine vehicles; 2) An abundant supply of lithium carbonate due to the opening of new mines in South America, where the largest deposits are located (see map) and production costs are the most attractive, e.g., \$2.100 per ton in Chile; 3) A reduction in the use of lithium in batteries with

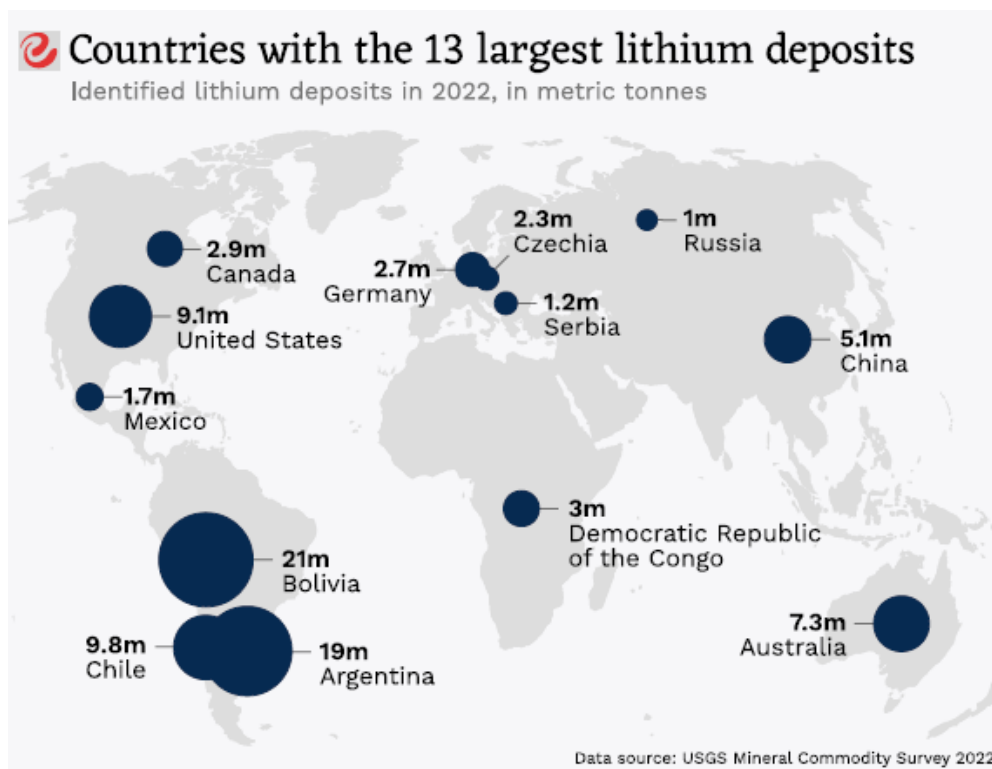
<sup>23</sup> <https://www.srbija.gov.rs/vest/801388/potpisan-memorandum-o-razumevanju-srbije-i-eu-u-vezi-sa-mineralnim-sirovinama.php>

<sup>24</sup> <https://www.dailymetalprice.com/metalprices.php?c=li&u=mt&d=1>

the emergence of substitutes, such as sodium-ion batteries, which are more economical, longer-lasting, and less toxic than lithium batteries.

As a result, a large number of lithium projects have either been cancelled or production has been significantly reduced. Even the world's largest producer of lithium batteries, China's CATL, has recently decided to close the largest lithium mine in China, located in Jiangxi province, which was supposed to cover 20% of China's, or 5% of the world's, lithium production. Overall, China has closed three of its six lithium mines and currently holds reserves that represent two years of global lithium consumption.

**Serbia, with 1,2 million metric tons of lithium reserves, represents only 1,3% of the total identified global lithium reserves** (see the map of 13 countries with the largest lithium deposits). This share is decreasing with new discoveries<sup>25</sup>, so it can be expected that Serbia will be a marginal player in the highly uncertain global lithium market.



Within the lithium market, the situation could be significantly worse for jadarite and other forms of extracting lithium from rock. This form of exploitation is structurally less attractive than lithium production from brine. In China, it is believed that 85% of the country's lithium potential is found in brine, not in ore<sup>26</sup>. The latest brine discovery: Smackover in Arkansas (USA) represents between 5 and 19 million metric tons of lithium and cover the entire world demand<sup>27</sup>. The company "Rio Tinto", with

<sup>25</sup> <https://pubs.usgs.gov/periodicals/mcs2022/mcs2022-lithium.pdf>

<sup>26</sup> <https://china.acclime.com/news-insights/lithium-industry-china/>

<sup>27</sup> <https://www.usgs.gov/news/national-news-release/unlocking-arkansas-hidden-treasure-usgs-uses-machine-learning-show-large>

the purchase of Arcadium Lithium for \$6.7 billion primarily for its DLE technology for brine<sup>28</sup> (see page 14 of the presentation of that transaction where Rio Tinto incomprehensibly presents Jadar as an already approved project where they have 100% ownership<sup>29</sup>), and many other actors primarily turn to that form of production. It yields much larger quantities of lithium with drastically lower environmental risks.

Therefore, there is a real risk that, even if lithium proves to be promising in general, the Jadar valley could be unnecessarily devastated and abandoned, while the giant subsidies paid by Serbian citizens would be permanently lost, as the company would withdraw and move on to a more promising project.

The pressures coming from the EU, primarily from Germany, aim to increase Europe's independence in lithium supply within the electric mobility chain. In the fierce competition in the electric vehicle market, Europe and the U.S. are currently facing a strong challenge from China. This is demonstrated by the latest measure by the EU<sup>30</sup>, which, as of October 31, 2024, will introduce tariffs on Chinese electric vehicles that could increase up to 45%.

However, the EU is already deeply divided on this issue: Germany, which is most eager for Serbian lithium, has voted against the introduction of tariffs on Chinese vehicles, as it seeks to avoid potential Chinese countermeasures that would impact its well-developed auto industry. If Chinese cars, which are currently half the price of the US or European ones, were to win the race with the EU, or, more realistically, if the EU and China reach an agreement on electric car market respective shares, **the Jadar Project would become unnecessary.**

However, the loss of revenue from the Project is not the greatest risk. The centuries-long environmental consequences of the Project would remain, whether the mine is fully exploited or quickly closed. As demonstrated by the floods in the Jadar Valley in 2022, climate change brings significant new risks to all mining projects. For example, if a tailings dam were to fail, causing water contamination or other environmental disasters, Serbia would face decades of catastrophic financial consequences, requiring hundreds of millions of euros just for remediation.

Mining companies, other countries, or the European Union would never accept financial responsibility for any disaster in Serbia. Serbia would be left financially on its own, as was evident in the statements made by foreign officials who visited Belgrade in July 2024.

**In summary, the Jadar Project boils down to the following: Serbia would provide the lithium and infrastructure, Rio Tinto would take all the profits, and Serbia would bear full financial responsibility for all the associated risks.**

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<sup>28</sup> <https://www.reuters.com/markets/deals/rio-tintos-real-prize-arcadiums-lithium-extraction-technology-2024-10-10/#:~:text=It%20values%20Arcadium%20at%20a,has%20yet%20to%20produce%20lithium>

<sup>29</sup> [https://cdn.prod.website-files.com/66fe9e93e93e5e8d4a0f32ee3/6706193c4011b737e733a2f3\\_Acquisition%20of%20Arcadium%20Lithium.pdf](https://cdn.prod.website-files.com/66fe9e93e93e5e8d4a0f32ee3/6706193c4011b737e733a2f3_Acquisition%20of%20Arcadium%20Lithium.pdf)

<sup>30</sup> [https://www.reuters.com/business/autos-transportation/eu-votes-favour-hefty-tariffs-china-made-ev-imports-2024-10-04/#:~:text=LONDON%2C%20Oct%204%20\(Reuters\),for%20automakers%20now%20targeting%20Europe](https://www.reuters.com/business/autos-transportation/eu-votes-favour-hefty-tariffs-china-made-ev-imports-2024-10-04/#:~:text=LONDON%2C%20Oct%204%20(Reuters),for%20automakers%20now%20targeting%20Europe)

An experienced mining country like Chile has decided to first develop a national lithium strategy<sup>31</sup>, establish appropriate public enterprises (as Bolivia has done<sup>32</sup>), ensure its own expertise to assess the viability of various projects, and only then, according to its own standards and conditions, call for tenders for suitable industrial and financial partners.

## CONCLUSION

Based on available information, it can be concluded that the economic effects of the Jadar Project for Serbia are extremely uncertain, and in the best-case scenario, are close to zero.

**Based on the economic and financial analyses, as well as the enormous risks associated with its potential implementation, the Jadar Project is not justified and should be halted.**

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<sup>31</sup> <https://www.gob.cl/litioporchile/en/>

<sup>32</sup> <https://www.iea.org/policies/16654-law-no-928-law-of-the-national-strategic-public-company-for-bolivian-lithium-deposits-ylb>

<b>Appendix: Estimated cash flows for Rio Tinto and Serbia</b>										
in million euros										
Discount rate (Weighted average cost of capital) <b>10%</b>										
Year of Project	Cash flows for Rio Tinto	Discounted cash flows for Rio Tinto	Cash flows for Serbia without tax incentives	Cash flows for Serbia with tax incentives	Discounted cash flows for Serbia without tax incentives	Discounted cash flows for Serbia with tax incentives	Discounted cash flows for Serbia with 10% ownership and without tax incentives	Discounted cash flows for Serbia with 10% ownership and with tax incentives	Discounted cash flows for Serbia with 20% ownership and without tax incentives	Discounted cash flows for Serbia with 20% ownership and with tax incentives
1	-300	-272,7	9	9	8,2	8,2	8,2	8,2	8,2	8,2
2	-800	-661,2	9	9	7,4	7,4	7,4	7,4	7,4	7,4
3	-600	-450,8	9	9	6,8	6,8	6,8	6,8	6,8	6,8
4	-550	-375,7	9	9	6,1	6,1	6,1	6,1	6,1	6,1
5	-200	-124,2	9	9	5,6	5,6	5,6	5,6	5,6	5,6
6	350	197,6	185	100	104,4	56,4	123,2	75,2	142,0	94,0
7	500	256,6	185	100	94,9	51,3	112,0	68,4	129,1	85,5
8	600	279,9	185	100	86,3	46,7	101,8	62,2	117,4	77,7
9	550	233,3	185	100	78,5	42,4	92,6	56,5	106,7	70,7
10	550	212,0	185	100	71,3	38,6	84,2	51,4	97,0	64,2
11	550	192,8	185	100	64,8	35,0	76,5	46,7	88,2	58,4
12	550	175,2	185	100	58,9	31,9	69,6	42,5	80,2	53,1
13	550	159,3	185	100	53,6	29,0	63,2	38,6	72,9	48,3
14	500	131,7	185	100	48,7	26,3	57,5	35,1	66,3	43,9
15	500	119,7	185	100	44,3	23,9	52,3	31,9	60,2	39,9
16	500	108,8	185	100	40,3	21,8	47,5	29,0	54,8	36,3
17	500	98,9	185	100	36,6	19,8	43,2	26,4	49,8	33,0
18	500	89,9	185	100	33,3	18,0	39,3	24,0	45,3	30,0
19	500	81,8	185	100	30,2	16,4	35,7	21,8	41,1	27,2
20	500	74,3	185	100	27,5	14,9	32,4	19,8	37,4	24,8
21	500	67,6	185	185	25,0	25,0	29,5	29,5	34,0	34,0
22	500	61,4	185	185	22,7	22,7	26,8	26,8	30,9	30,9
23	500	55,8	185	185	20,7	20,7	24,4	24,4	28,1	28,1
24	500	50,8	185	185	18,8	18,8	22,2	22,2	25,5	25,5
25	500	46,1	185	185	17,1	17,1	20,1	20,1	23,2	23,2
26	500	42,0	185	185	15,5	15,5	18,3	18,3	21,1	21,1
27	500	38,1	185	185	14,1	14,1	16,7	16,7	19,2	19,2
28	500	34,7	185	185	12,8	12,8	15,1	15,1	17,4	17,4
29	500	31,5	185	185	11,7	11,7	13,8	13,8	15,9	15,9
30	500	28,7	185	185	10,6	10,6	12,5	12,5	14,4	14,4
31	500	26,0	185	185	9,6	9,6	11,4	11,4	13,1	13,1
32	350	16,6	185	185	8,8	8,8	10,3	10,3	11,9	11,9
33	100	4,3	9	9	0,4	0,4	0,4	0,4	0,4	0,4
34	75	2,9	9	9	0,4	0,4	0,4	0,4	0,4	0,4
35	75	2,7	9	9	0,3	0,3	0,3	0,3	0,3	0,3
36	75	2,4	9	9	0,3	0,3	0,3	0,3	0,3	0,3
37	75	2,2	9	9	0,3	0,3	0,3	0,3	0,3	0,3
38	0	0,0	9	9	0,2	0,2	0,2	0,2	0,2	0,2
39	0	0,0	9	9	0,2	0,2	0,2	0,2	0,2	0,2
40	0	0,0	9	9	0,2	0,2	0,2	0,2	0,2	0,2
<b>Total</b>	<b>11 500</b>	<b>1 041</b>	<b>5 112</b>	<b>3 837</b>	<b>1 097</b>	<b>696</b>	<b>1 288</b>	<b>887</b>	<b>1 479</b>	<b>1 078</b>
<b>Average cash flows per year</b>			<b>127,8</b>	<b>95,9</b>	<b>27,4</b>	<b>17,4</b>	<b>32,2</b>	<b>22,2</b>	<b>37,0</b>	<b>27,0</b>
<b>Cash flow per capita per year in euros</b>			<b>19,2</b>	<b>14,4</b>	<b>4,1</b>	<b>2,6</b>	<b>4,8</b>	<b>3,3</b>	<b>5,6</b>	<b>4,1</b>
Note: Rio Tinto didn't provide any financial projections										
Data used for projections: Graph page 54 (no figures) of the Ergo Strategy Group Study										