

### Potential market for global players

In Serbia, 25 large companies currently conduct geological explorations, mainly metallic raw materials, lithium and boron. These are large foreign-owned companies registered in Serbia, some of which are global leaders in the field.

One of the most important mining projects in Serbia is the copper and gold deposit of Čukaru Peki, near Bor, implemented by the company Rakita, whose majority owner is the Chinese Zijin, also the owner and Mining Smelter Basin Bor.

Zijin took over the Canadian company Nevsun late last year, which has the right to explore at the Čukaru Peki site, one of the richest deposits of copper and gold in the world.

The Chinese company then announced that the offer for the purchase of all issued shares and shares in the company Nevsun was successful. Nevsun's shareholders sold almost 90 percent of the shares, and Zijin took over all deposited shares for 1.2 billion US dollars. Thus, the Chinese company succeeded in doing what the Canadian Lundin failed last year, whose 1.1 billion US dollars offer was rejected by the Nevsun's Board of Directors. They recommended shareholders to sell their shares to the Chinese, local media reported.

According to a preliminary economic study, based on a method known as the "political economy analysis" (abbr. pea), the value of the Bor deposit was estimated at about seven billion US dollars.

Mining of this mine will bring Serbia five percent of the net income from the mineral raw materials mining tax, and an additional 15% from the tax.

In addition, the economic and social aspects of the project involve employment opportunities of the local population and attraction of new investors, as well as cooperation with local companies.

In the vicinity of the Ore Processing Plant in RTB, the construction of a new, state-of-the-art smelter is planned, which will further lower the prices of ore extraction and processing from the area of Čukaru Peki.

According to preliminary analyses, published on Rakita's website, Nevsun's subsidiary, which had exploration rights in Serbia, but not or mining rights, total estimated resources are estimated at 35 million tons of ore, with a mean copper content of 2.9% and gold of 1.7%.

By purchasing Nevsun, the Chinese became the 100% owners of the right to explore copper at the Čukaru Peki site – Upper Zone, and owners of 60.4% of the right to explore Čukaru Peki site – Lower Zone, a joint venture with Freeport-McMoRan (which owns 39,6% of exploration rights).

Just as a reminder, the Chinese mining giant Zijin, specializing in the research and development of gold, copper, zinc and other mineral raw materials, whose market capitalization amounts to approximately 10 billion US dollars, has become the owner of 63% of RTB Bor by cashing in 63 million US dollars for recapitalization. The company committed

to pay 200 million US dollars to settle the “historic debt” (this promise was indeed fulfilled in January this year) and will invest 1.26 billion US dollars.

Exploration in the area around Bor is carried out by the Canadian company Avala Resources, Stara Planina Resources, Tilva, Balkan Mineral Resources and others.

Another important world-class project in Serbia includes one of the most significant global sites of lithium borate, Jadar, located in the vicinity of Loznica, developed by the British-Australian Rio Tinto Corporation. If the project was developed, it would enable supply of a significant percentage of world demand for lithium.

As the lightest metal in the world, lithium is used for a wide range of products, with the most important ones being batteries for hybrid and electric vehicles, as well as mobile phones and laptops. The deposit also contains borates, used to produce glass-resistant heat, optical fibres, ceramics, fertilizers, detergents, etc.

Jadar’s deposits are estimated at 135.7 million tons, with an average concentration of 1.86% of lithium oxide.

According to information available on Rio Tinto’s website, the project is currently in a pre-feasibility phase. To start the feasibility phase, significant investments are needed for technical analysis and mine and technological plant design.

Production could start in 2023, if the Feasibility Study shows sustainability and the company receives the necessary approvals.

Rio Tinto has invested some 100 million US dollars in project development since 2004. In July 2017, the Government of Serbia signed a Memorandum on the implementation of the Jadar Project, which enables the creation of joint working groups to oversee the development of studies and the permitting process.

Rio Tinto is also involved in the project of gold and copper exploration at Majdanpek, together with the Australian company Raiden Resources, where it plans to invest 40 million US dollars.

### **Legal framework**

The Law on Mining and Geological Explorations, adopted in December 2015, created a more favourable environment for future mining investments.

One of the most significant changes introduced by the law is the concept of mineral and other geological resources of strategic importance. These are oil, gas, coal, copper, gold, zinc, pine, lithium, oil shale and other resources subsequently determined by the Government. In the case of mineral resources of strategic importance, the land expropriation procedure can be realized even when mining is carried out by private companies.

The holders of the exploration permit have the right to apply for extension of their priority mining rights at least 30 days before the expiry of the exploration permit in order to prepare the documentation informing the mining field approval decision.

Another change introduced by the new law is the requirement for the mining operator to provide a bank guarantee, bill of exchange or corporate guarantee to ensure land rehabilitation and restoration after mining. The guarantee should amount to at least 30 percent of the value of rehabilitation works, in accordance with the detailed mining design. The law provides that the mining of mineral resources is carried out on the basis of the following approvals issued successively: mining field approval; mining works approval/ mining facilities construction approval; mining facilities use approval.

Municipalities no longer have the authority to issue licenses for geological exploration and mining, which was previously rated as one of the largest bureaucratic obstacles.

On the other hand, some environmental activists criticized the law “because it is based on the principle that mining, as an activity that is among the absolute largest polluters in Serbia, has no special responsibility for water protection, environmental protection and nature protection”.

### **Environmental aspects**

Unlike neighbouring countries, where strong environmental movements are active, local ecologists are on the defensive. There is virtually no wider information on air, water and land impacts of mining projects, not taking into account the general information of operators themselves, which contain general areas such as “high safety standards”, “mitigating environmental impact” and promises that “necessary measures for protecting people and the environment”.

Nobody even mentions local referendums where citizens would declare whether they want a mine in their neighbourhood.

“In the Balkans countries, due to high metal prices and job creation opportunities, governments ignore the high environmental costs of opening new mines.

In Bulgaria, for example, the collapse of inefficient mines and heavy industry, has led many residents to move to cities, leaving villages with a high level of unemployment. More than a million people emigrated abroad in search of work.

Knowing that there are deposits of gold and silver, has led to a rush to open mines in untouched natural areas and disagreements over whether Serbia, Macedonia or Bulgaria should encourage agriculture and tourism or strive for short-term mining profits.”

This is part of an article published on [climateneutralnetwork.net](http://climateneutralnetwork.net) on the occasion of the implementation of the gold and silver project of Euromax Services, in the Trun region of Bulgaria, near the border with Serbia, the area covered by the Natura 2000 network and under special protection in accordance with European regulations.

The project was opposed by a local environmental group, which advocates the development of eco-tourism as an alternative to the mine. “When gold mining ends in 20 years, the country will look like a moon’s surface,” said the representative of the local environmental organization.

The story of the mine was given an epilogue in June 2017, when Trun residents largely opposed mine development in the local referendum.

A similar problem was solved in Macedonia regarding the opening of two gold mines on the Kožuf mountain in Gevgelija. Namely, the Municipal Council of Gevgelija in March last year rejected a request for continuation of geological exploration at Kožuf by the company Reservoir Minerals.

This was the second negative response by Gevgelians after they said “No” at the referendum to the exploration of the metallic mineral resources in their municipality.

“All citizens voting on a referendum should be aware that gold mines cannot be opened in Europe due to the use of cyanide solutions in the process of ore processing. Cyanide is a deadly toxin destroying all the living things around the spillage through water. Such environmental catastrophe resulted in massive death of all the living things in the Danube River occurred in 2002 at the Baia Mare mine in Romania and since then European regulations on gold mines have been changed. For these reasons, Romania, Bulgaria and Greece have rejected all attempts to open gold mines over the past several years.

The same Canadian company Euromax was rejected in all countries in the Balkans and was accepted in Macedonia, in the mine Ilovica, Strumica. Now it is offered as a concessionaire with dirty technology of deadly cyanide in Gevgelija. Gevgelija has a real chance to save lives and health, and help other citizens prevent the opening of a dozen of planned mines. After the failure of this referendum, we will ask for a review of the decision on the Ilovica mine, and we will seek responsibility for all those involved in this, as it were, a corruption scandal,” the Democratic Renewal of Macedonia, DOM said ahead of the referendum.

When it comes to the gold mine and copper Ilovica-Štuka, whether the mine will be opened is still an enigma for the citizens of Macedonia. This was confirmed last month by Macedonian Economy Minister Krešnik Bekteši, who said that the investment of Euromax Resources will be able to continue only if all environmental standards are met and if the citizens agree.

Canadian company Euromax Resources remains of the view that it will not use cyanide and sulphuric acid in the technological process and notes that by removing cyanide from ore processing the primary product of the Ilovica-Štuka mine will be copper, not gold and copper.

In 2017, the Government of Romania also adopted a decision banning cyanide-based technology at all stages of silver and gold extraction for a period of ten years, following an incident in 2000, when cyanide spilt from the mine to the rivers, even reaching the Danube, which is considered one of the biggest environmental catastrophes in Europe in recent history.