

Exploration of unused minerals and metals represents a major challenge, and requires time and significant resources. It often takes even 10 or more years to identify and confirm the quality and the scope of deposits. It is therefore necessary that by using the legislative framework, tax and fiscal regime to encourage exploration in Serbia that later evolves into exploitation - a moment until when the companies engaged in geological studies have negative cash balance. They invest time and money, but revenues for the company and for the state don't exist until the ore is being exploited. Mineral resources and metals have no value until they are dug.

Since 2003, foreign companies have invested around 300 million euros in potential projects in Serbia. These are long-term projects, and so far the achieved results give reason for optimism. The investments would be multiplied if there was a mine opening, and could amount up to several billion euros.

The raw materials that are mostly contained in Serbian ores include copper, lithium, gold, polymetallic deposits and molybdenum. In the second group, potentially significant resources are the ores of nickel, cobalt, iron, antimony, and possibly uranium, tin, tungsten, platinum group of elements that could, under certain conditions - primarily technological, economic, technical and other, possibly be valorized in the future.

Foreign companies, mostly Canadian and American, which founded branches in Serbia, have the permits for exploration of mineral resources. Among them the most significant are Rio Sava exploration, Avala Resources ltd, Rakita exploration, South Danube Metals, Dunav minerals, Balkans expl. & Mining, Deli Jovan exploration, Dunav Resources, Murex, Empire Mining, Stara Planina resources, Appalacian resouces, Lithium Li Balkan, Balkan Gold, Ultra Balkans and Mineco. In addition to this list, there are already active mines that in addition to the license have also the legal obligation to prolong service life of the mine by constant exploration.

The biggest investor in this field is the Canadian company Avala Resources, present in Serbia since 2005, which invested around 160 million dollars in exploration of gold and copper in multiple locations (Bigar, Korkan, Kraka Pešter). The most important project is the Timok deposit in the eastern Serbia, where exist the possibility for opening of the first gold mine in our country.

Another Canadian company, Dunav Resources is engaged in exploration of gold, copper and molybdenum (Mačkatica, Kiseljak) and has invested 45 million dollars so far. Last year, the two companies announced a merger, in order to integrate exploration activities in Serbia. Engaged in the exploration of gold and copper is also the company Rakita Exploration, a subsidiary of the US based company Freeport McMoran, which invested 15 million dollars in

exploration in Brestovec, since 2010.

Within the project Jadar, implemented by the Australian giant Rio Tinto, the reserves of jadarite, a unique Serbian mineral containing boron and lithium, are being explored. So far, 70 million dollars has been invested in exploration. In this mineral form the lithium is not present anywhere else in the world, so Jadar represents a single, unique lithium deposit with global significance and importance. It has a wide application potential in information technology, construction and agriculture. Forecasts show that until 2017 the demand for lithium could double, primarily due to the expected increase in production of rechargeable batteries.

The project 'Čukaru Peki' is a property of the company Rakita Exploration, which is a subsidiary of Freeport-McMoRan company with headquarters in the United States, one of the largest global companies for ore exploration and extraction. Rakita at the moment has three exploration rights in Bor County and so far has invested app. \$ 15 million in Serbia. The British company Mineco Ltd is one of the most important investors when it comes to the exploration of lead and zinc. Since 2010, the Mineco has invested approximately \$ 6 million in exploration works near Bosilegrad. It was confirmed that there is a sufficient quantity of ores at this location, although the startup of the mine requires additional significant investments.

Zinc and lead are widely used in various industries. Major part of the world's zinc production is used for galvanizing the steel (over 50%) and in the production of metal alloys, while among the many consumers of lead, certainly most prominent are the production of lead-acid batteries and the construction industry.

Serbia is also rich in mineral deposits of borate, which has commercial application in over 500 products, among which the most important are cellular phones. At this moment the total domination in the borate market belong to the above-mentioned company Rio Tinto and the Government of Turkey. However, the discovery of significant reserves of borates in the region of Piskanj near Raska, by the Canadian company Erin Ventures, could change this image.

Some of the existing mines in Serbia, RTB Bor and Farmakom's Lece and Zajača, face major problems due to debts incurred on various grounds. This mining giant, after three failed attempts of privatization, remained in state ownership. Even though it records income growth in the past six years, the key problem remains a colossal debt, which at the end of 2012 amounted to 315 million euros, while the revenues depend on copper prices in the world's stock exchanges. Meanwhile, the debt has increased due to increased investment in the construction of a new Smelter and Factory of sulfuric acid, in the modernization of

mining equipment and reconstruction of existing plants. However, RTB Bor has no obligation to settle debts until the completion of the restructuring process.

However, companies Freeport McMoran and Chilean Codelco, which already collaborate on projects within the Bor basin, show interest for further investment, which leaves room for the possibility that this giant can survive without entering into a new attempt of privatization.

The prove that the privatization of a mine can be successful, is the example of the lead and zinc mine Rudnik near Gornji Milanovac, a property of Mineco and its partners since 2004. Mineco has a majority stake in Veliki Majdan near Ljubovija, which was the subject of bankruptcy in 2006, when it was overtaken by Mineco. Existing debts were settled by the new owner, and both mines are performing well thanks to significant investment in the modernization of equipment, reconstruction of existing and financing of new infrastructure facilities.

Source; Serbia-energy.eu