

“The scale and high grade nature of the Jadar mineralisation provides the potential for a long life operation in the first quartile of the industry cost curve for both products,” the company said in a press release.

Pre-feasibility studies have shown that the Jadar project has the potential to produce both battery grade lithium carbonate and boric acid. Rio Tinto has declared a maiden ore reserve of 16.6-million tonnes, grading 1.18% lithium oxide and 13.4% boron trioxide at its Jadar lithium/borate project in Serbia. According to the company, the mineral resource comprises 55.2 Mt of Indicated Resource at 1.68% Li₂O and 17.9% B₂O₃ with an additional 84.1 Mt of Inferred Resource at 1.84% Li₂O and 12.6% B₂O₃.

The deposit is located on the doorstep of the European Union, one of the fastest growing electric vehicle (EV) markets in the world. Boric acid is a key raw material for advanced glass and fertilizer products and would be integrated with and complementary to Rio Tinto's established position in this market.

Jadar, one of the largest greenfield lithium projects in development, would be capable of producing approximately 55 thousand tonnes of battery grade lithium carbonate, as well as 160 thousand tonnes of boric acid (B₂O₃ units) and 255 thousand tonnes of sodium sulfate as by-products per year.

“It represents a significant investment for Serbia with both direct and indirect economic benefits and would become the country's second-largest exporter,” Rio said.

At the end of July 2020, the project moved into feasibility study, with an investment of almost \$200 million on a scope that includes engineering, land acquisition, workforce, and supply preparation for construction, permitting and the early infrastructure development. Rio Tinto said the feasibility study is expected to be complete at the end of 2021 and, if approved, construction could take up to 4 years.

Source: mining.com