The Jadar Project is a world-class lithium borate deposit discovered by Rio Tinto in 2004. It is a unique deposit near the town of Loznica, Serbia, containing jadarite - a new lithium sodium borosilicate mineral. Jadar is the only place in the world where this mineral can be found. Incidentally, jadarite has a similar chemical composition to the fictional kryptonite of Superman fame. Jadar has been ranked as one of the most significant lithium deposits in the world and if developed, has the potential to supply a substantial amount of the global demand for lithium and boric acid.

Jadar is a combined mine and mineral processing greenfield project. When developed, Jadar will be a modern underground mine with efficient processing plant and sustainable waste facilities. Jadarite will be mined using modern underground mining methods and best available techniques to secure the safety and sustainability of our mining and processing operations.

Rio Tinto has developed a new, innovative technology for the production of lithium carbonate and boric acid from the mined ore. A global team of Rio Tinto experts have developed a small-scale test plant at Rio Tinto's research centre in Bundoolo, Melbourne, Australia to test the new technology. So far, some 2,000 tests have been run to secure the most optimal mineral process for extraction of industrial chemicals from the Jadarite ore.

Rio Tinto has invested and committed more than US$450 million on the Project to date. Significant efforts are being invested in technical and economic analysis in order to develop and validate our understanding of the project before a final investment decision is made to move the project into the construction phase.

We continue to develop confidence in the Project as it progresses through various development phases. This document provides information about the Project and the latest Project updates.

Lithium and borates are essential for our daily lives and a low-carbon future.

Lithium is used in a vast array of products, most notably, batteries for hybrid and electric cars.

Borates are building blocks for fiberglass, glass, ceramics, fertilizers, detergents, wood preservatives and numerous other products – many of which we use every day.
Rio Tinto’s sustainable development approach generates value for all stakeholders. Rio Tinto’s strategy to invest in long-life, low-cost, expandable operations means that we operate on extended time horizons. These long-term commitments provide opportunities to plan, implement and deliver sustainable contributions to social wellbeing, environmental stewardship and economic prosperity everywhere we operate.

Global collaboration is the key to Jadar’s success. Strong teamwork is essential to a project of this magnitude. Global experts from the fields of geology, exploration, mining, process design, project management, marketing, communities, and other areas are collaborating to bring the project to life. This collaboration is a testament of the depth of knowledge that exists in Rio Tinto to undertake greenfield projects like Jadar.

Declared Jadar Mineral Resources equal to 136 million tonnes. Rigorous ore body knowledge studies and analysis completed over the years increased confidence in the size and composition of the Jadar ore body. In March 2017, Rio Tinto upgraded the Jadar Mineral Resources in accordance with international standards - JORC - to 136 million tonnes. For the first time, part of the resource has been classified as Indicated. The resource also contains inferred resources. Total equivalent borate product resources are 21Mt B₂O₃ and equivalent lithium product resources are 2.5Mt Li₂O, confirming that Jadar is a significant source of borates and lithium.

During the Feasibility study phase, Serbian and international experts in different disciplines (from mining to processing to communities) will continue to progress detailed engineering and design of the underground mine, processing facility and supporting infrastructure alongside critical permitting. Assessing the viability of the Project requires also completing technical, environmental and socio-economic studies. With an eye on the future operation, detailed operational design, supply chain and supplier engagement and management system design are also undertaken.

Sustainability

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We are committed to building long-term partnerships. The Jadar Project is committed to forming respectful, lasting, and mutually beneficial relationships with landowners and the local community, the Serbian government, and other stakeholders - now and through the life of the operation.