

Essel ME Group to bring low-cost potash to market in 2018

By IM Staff

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The India-headquartered company plans to start potash production at its Bada project in Eritrea next year, promising to operate one of the least capital-intensive mines in the agrimineral market. Yoke Wong

Essel ME Group, a subsidiary of diversified Indian conglomerate Essel Group, acquired the exploration licence for the 1bn tonne Bada potash mine in Eritrea in May 2015. The project is located in the northernmost part of the country's Danakil region, which is home to a number of potash exploration ventures.

The potash deposit at Bada begins

18 metres below the surface, making it an unusually shallow occurrence for the mineral and meaning the site is suitable for an open cast mining operation, Essel ME Group told IM.

As a result, the company is confident that it can deliver its first potash output in early 2018, at a relatively low cost of production. Essel estimates that the all in cost of producing Bada potash will be less than \$40/tonne.

"We finished our electricity resistivity testing in mid-2017, with very fruitful results, enabling us to go ahead with extra drilling at the Bada prospect," Punkaj Gupta, joint managing director and group CEO said.

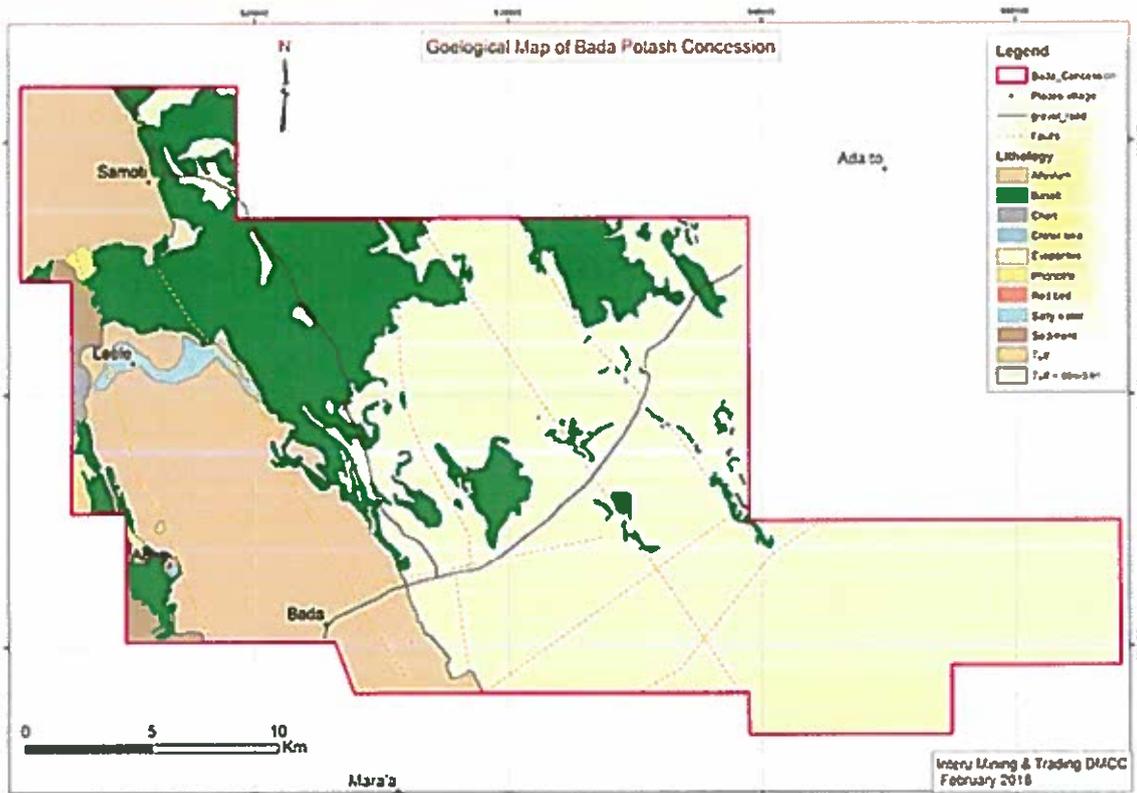
The project also has a logistical advantage, as it is within easy reach of the Red Sea which it can use as an export route to ship potash to China and India, two of the largest agrimineral importers in the world.

"The site is favourably located close to existing infrastructure and is approximately 330km from Eritrea's capital city, Asmara and 230km from established port facilities in Massawa," Essel explained. "This provides direct access to key end markets in Europe, Africa, India, China and South East Asia."

The company is also examining the feasibility of constructing its own jetty on Eritrea's Red Sea coast, 40km from the Bada project, to further improve its logistics.

Compared to major potash-producing regions, such as Saskatchewan in Canada and those in Belarus, where the nearest sea ports are more than 120km from the mines, Bada is in a position to benefit from much lower logistics costs.

The Bada development has received strong support from Eritrean government, which has so far not imposed any resource taxes or export duties on domestically-produced potash.



Challenges

"We have faced numerous challenges at the Bada Potash prospect, gypsum being one of them. To address the issue, we have located certain sectors where we also found clastic with gypsum and the ground seems to hold a lot of stability and strength," Gupta said.

Gypsum is a relatively weak mineral, meaning that the parts of the mining area where gypsum occurs can be unstable.

To address this issue, Essel has isolated areas of the Bada site where the rock is weakest, and others where the subsurface layers are strong and stable enough to support mining activity.

Essel has also faced the difficulty of moving large volumes of potash from mine to port, since the area's existing infrastructure, while being good for access, is not suitable for transporting heavy loads.

The company plans to overcome this by constructing a 60km railway between the mine and the Red Sea, which after an initial investment – the value of which Essel has yet to disclose – will ultimately reduce transport costs.

Outlook

Although the global potash market has been oversupplied for the past 15 years, Essel ME Group is confident that the market is set to rebalance in the near future, supporting prices for the mineral.

"The price of potassium chloride is increasing in markets including Brazil, the US, Asia, and Europe, and global supply and demand of potash fertiliser is starting to even out," Gupta told IM.

The company also noted that the growing worldwide population and the corresponding increase in demand for food will continue to support potash demand. This trend "underscores the fundamentals of the fertiliser market, as we need to make agricultural land more productive," according to Essel.

Furthermore, biofuels, which are playing an increasingly significant role in the drive for renewable energy solutions across the world, are made from high nutrient absorbing crops such as corn and the cultivation of biofuel feedstock is set to further increase fertiliser demand.