

Danakali finds timing on its side

Timing – both political and marketing – is very much on Danakali Ltd's side as the potash hopeful looks to finalise funding arrangements for its Colluli project in Eritrea.

Danakali's development of Colluli has been a long time in the making – it first entered the project in 2009 – but rarely has the company enjoyed such positive momentum on a number of fronts.

Perhaps most vital is the reintegration of Eritrea into the international community. The East African country found itself sidelined for much of the last decade stemming from ongoing border disputes with Ethiopia. The unrest led to international sanctions being placed on the country, however, the signing of a peace accord in mid-2018 has opened the former Italian colony up to international investors. Danakali chief executive Niels Wage told **Paydirt** the diplomatic actions were already resulting in noticeable change.

"It's early days but we are definitely seeing a massive increase in positive

momentum," Wage said. "Every time I have been since they signed the peace treaty it has been really good, with more activity on the ground.

"The IFC and World Bank have re-established discussions with Eritrea and there are investors very keen on projects here."

Having international investor interest in Eritrea must be a welcome, if unusual, experience for Danakali given how long it has been operating in the country. Ironically, the investor interest comes despite the attitude of Government rarely changing over the course of the company's involvement.

"The Government is very supportive of Colluli and other projects," Wage said. "There is very positive momentum and our timing is good, a lot more investors talking to us since the sanctions were dropped."

Eritrea's reintegration may have given Danakali an injection of optimism but developing a potash operation in an infrastructure-poor country would still appear

to have several, near-insurmountable, challenges. Like most bulk commodity operations, potash projects must have multiple advantages around mining, processing and logistics to be competitive against other development opportunities. According to Wage – who has spent more than 20 years in the potash sector with BHP Ltd and others – Colluli has more advantages than any other potash development in the world.

"It's not a challenging project," Wage said. "I've been involved in potash projects all over the world where we had to deal with challenges such as 1,000m shafts or complicated aquifers. The beauty of Colluli is it is very shallow – one of the shallowest deposits in the world at 16m – and because it is in solid salts it is straightforward mining and the processing is proven technology. There is no reinventing things."

In potash more than most commodities, simplicity can equate to vital capital and operating cost savings.

"Other projects need solution mining



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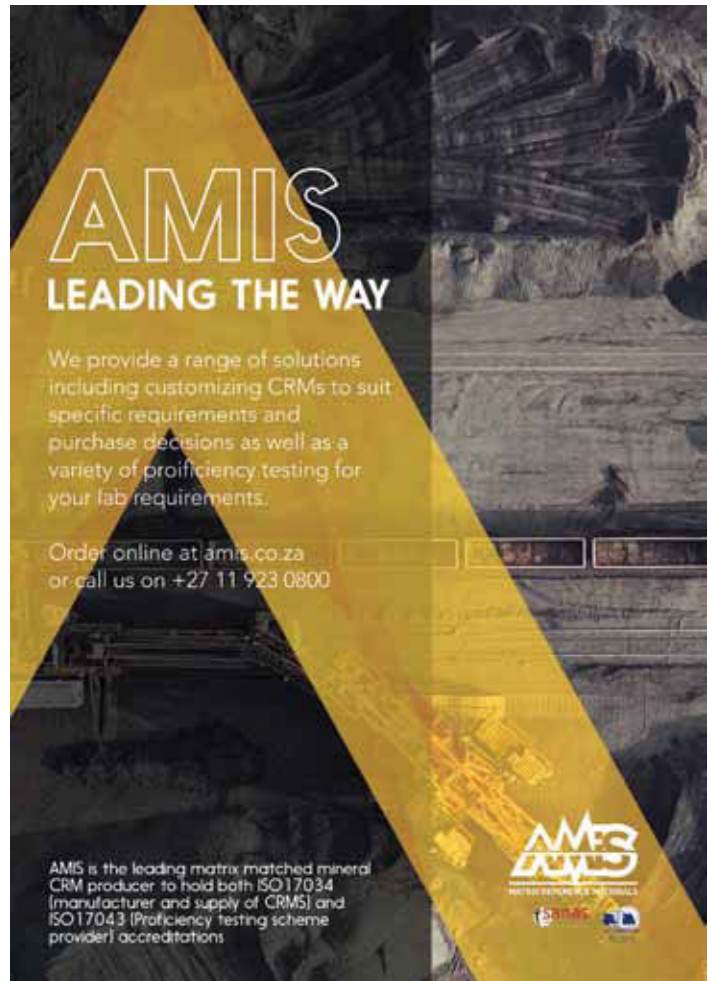
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and evaporation which may take month or even years to produce,” Wage said. “Colluli’s simplicity; truck-and-shovel mining, at surface means its costs are much lower than most competing projects.”

Colluli also has infrastructure advantages even the new potash projects in Western Australia struggle to compete with.

“There is an assumption that Eritrea is low-development and that is absolutely correct but when it comes to Colluli, there is existing infrastructure there,” Wage said. “There are roads and ports already being used by other miners which we can take advantage of.”

The presence of an established mining operation in the form of the Bisha gold-base metal mine, gives Danakali a figurative and literal path to follow in Eritrea.

The company plans to utilise those existing logistical chains to reinforce Colluli’s low-cost start-up credentials. Although the project has a massive reserve and proposed mine life – 1.1bt @



Danakali surprisingly has a number of logistics options in Eritrea, including the Port of Massawa, 180km east of the project

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10.5% for 250mt contained SoP, sufficient for 200 years of production – Danakali has opted to scale production to fit its means.



The solid state of the Colluli orebody means Danakali will not be required to undertake complex solution mining or evaporation

The company will produce 472,000 tpa potash in the first five years of operation before doubling production from Year 6. Wage said the scaled approach would deliver capex savings as it would allow the company to utilise the existing logistics capacity.

“It is one of the reasons why we have chosen the module plan; it allows us to scale up, using the existing infrastructure capacity,” Wage said. “We have the Port of Massawa which is suitable for either container or bulk shipping and there are trucks already going between Bisha and the port. There are sections of the road which need upgrading but nothing major.

“We are conscious of the need to keep capex low, keep labour costs low. We could go to 1 mtpa immediately but that would double the upfront capex. That makes the development very manageable and it will allow us to prove we can deliver what we promise. By using what we have today we can show with the cash flow coming out of the operating that we can build the second module.”

If the reintegration of Eritrea into the international community has handed Danakali an opportunity to court foreign

investment, the broadening of the global sulphate-of-potash (SoP) market offers the company even deeper economic credentials.

Potash has been a well-established crop nutrient for decades but largely in the form of muriate-of-potash (MoP). However, as farmers adjust to the food demands of growing middle classes in emerging markets, SoP has become a highly sought after fertiliser.

“SoP will continue to win market share but not necessarily in competition to MoP,” Wage said. “As there are changes in diet and food to crops which are taste sensitive – such as fruit and vegetables, tea, coffee, etc. – demand for SoP is expected to increase.

“This is connected to changing diets and as people move away from staple crops towards fruit and vegetables, you really see growth in SoP demand.”

Danakali is plugged directly into the SoP market through its offtake and marketing agreement with fertiliser trader Eurochem.

“Eurochem sees in its distribution channels a lot of demand,” Wage said. “You can also make MPK in that potash

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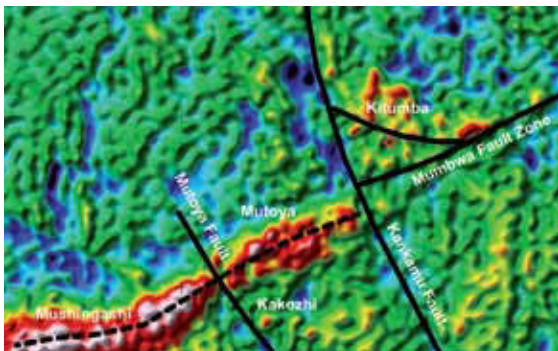
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The shallow, flat-lying nature of the deposit makes Colluli a rarity in the potash world



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we more SoP used, again because of the chloride content.”

Danakali is far from the only company banking on potash application expanding to new markets. The last three years had seen a proliferation of potash projects across the globe, including Western Australia. A common presumption would be that projects in WA, one of the world’s premier mining jurisdictions, would have ample cost advantages but Wage believes that when it comes to Colluli and its peers, the opposition is true.

“From a technical aspect, the WA projects are using different mining, extraction and processing techniques, they are further from the coast and the capex challenge is very different as well,” Wage said. “If you look at how far advanced they are, in terms of size, they will be suitable for the Australian market, and they obviously have advantages in that. But, we won’t be selling any tonnes into the Australian market; we’re near the markets of Europe, the Middle East and Russia so we can dominate when it comes to logistics for global markets.”

With product marketing and project economics seemingly in its favour, Danakali is confident it can close the funding gap so many of its resources peers, regardless of commodity, have struggled to navigate in the last three years.

“We have a bank mandate and we are finalising final approvals on that now,” Wage said. “That will be the milestone which triggers the strategic equity partner component which will comprise either an industry player or one of a whole host of institutions which are showing interest.

“We are confident we will be able to close the gap. There are groups which understand SoP but also who are looking for opportunities to develop African projects.”

– Dominic Piper