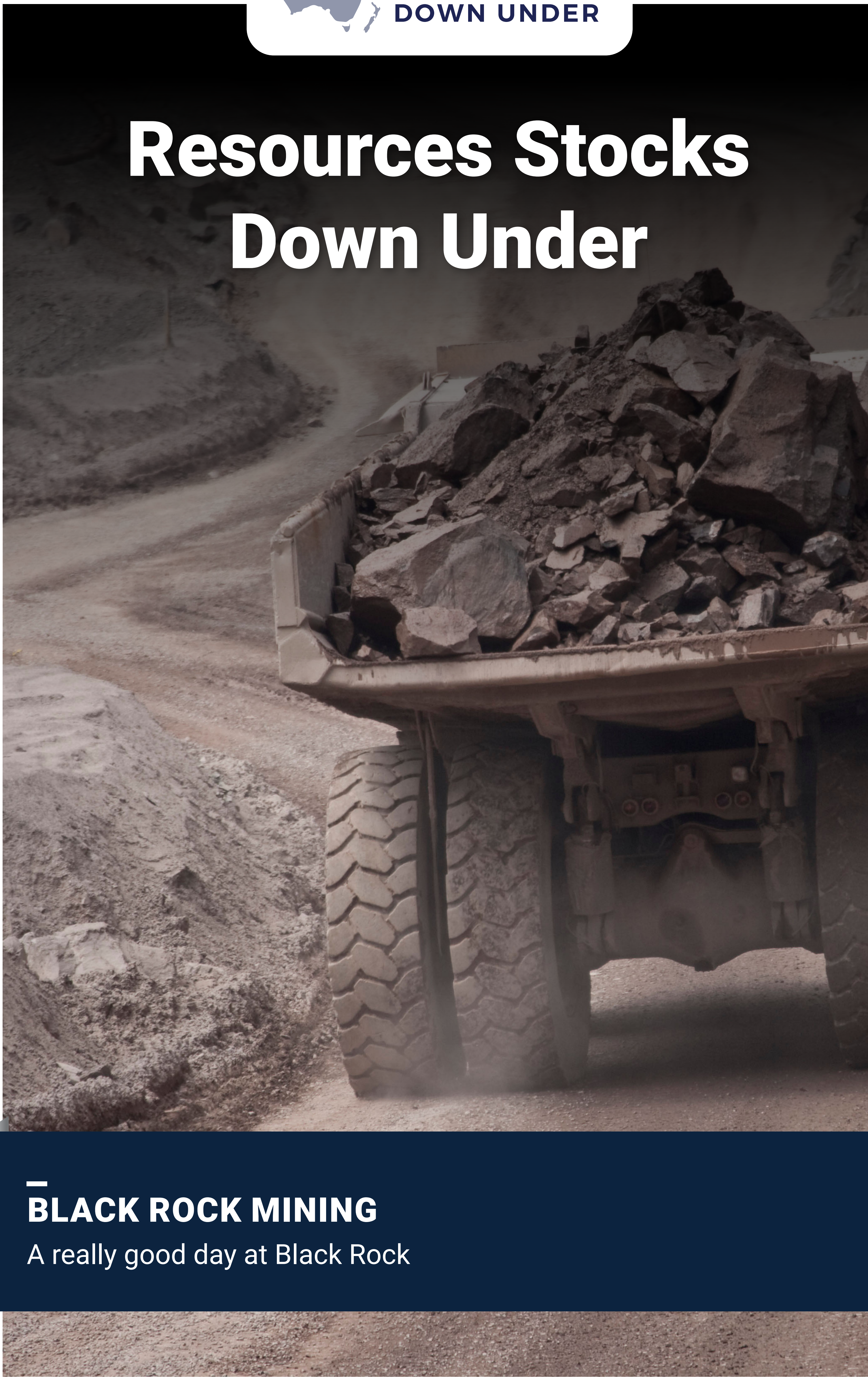
Resources Stocks Down Under



BLACK ROCK MINING

A really good day at Black Rock

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Stocks Down Under rating: ★★★★

ASX: BKT
Market cap: A$208.6M

52-week range: A$0.11 / A$0.27
Share price: A$0.24

Black Rock Mining, developer of the Mahenge Graphite Project in Tanzania, was changing hands at 16.5 cents when we last looked at the company in the 10 June 2021 edition of Resources Stocks Down Under. It has re-rated nicely since then, helped by the December 2021 signing of a Framework Agreement that gives the government of Tanzania their mandatory 16% of the project. With 2022 the year that will likely see this monster project get funded, we think there's more upside to this one.

Share price chart

Source: Tradingview

Last week in Resources Stocks Down Under we talked about how the Tanzania is coming back into favour as a mining investment destination under its new President, Samia Suluhu Hassan. That theme has been good for the ASX-listed graphite project developers in the country, and particularly good for Black Rock Mining, because its Mahenge Project down in Morogoro Region is one of the larger projects likely to get off the drawing board in the near future. We're talking a JORC 2012 resource of 212 million tonnes at 7.8% Total Graphitic Content (TGC) and reserve of 70 million tonnes at 8.5% TGC. That reserve is so big, it's the second largest graphite reserve in the world while the resource makes it the fourth largest.

How do you say 'show me the money' in Swahili?

We last wrote about Black Rock Mining on 10 June last year and 2022 is an important year for the company and its Mahenge project. The company has South Korea's POSCO as both a major shareholder and an offtake partner. It has its Framework Agreement in place with the government of Tanzania allowing it to operate in the country and giving the Tanzanian government its 16% free-carried interest. And the Definitive Feasibility Study (DFS) has laid out the blueprint for an initial mining operation worth US$1.16bn in Net Present Value. Now all that needs to happen is for Mahenge to get project funding.

Mahenge isn't going to come cheap. When Black Rock Mining last updated its DFS in July 2019 it talked about progressively expanding the project in four 'modules' of 85,000 tonnes per annum production capacity each. Module 1 alone costs US$116m in capital expenditure and by the time the operators have built module 4 the total bill will run to US$338m.

Still, the US$1.16bn NPV that you get with a 10% discount rate modelling a steady state of 340,000 tonnes per annum over 26 years comes with a juicy 44.6% Internal Rate of Return, the fruits, in part of an operation that can sell product at US$1,300 a tonne that it can produce for an All-In Sustaining Cost (AISC) of just under US$500 a tonne. And it's important to remember that the US$116m is really all it takes to get started, because the other three modules can be funded from free cash flow. And while we're on the subject of modules, if you're just on module 1 and not doing growth capex for the other three modules, AISC is actually closer to US$400 a tonne. Talk about a decent margin project!

Outsized demand

There's a simple reason why Mahenge is likely to get the requisite project financing this year: outsized future demand. The world is going to need a heck of a lot of graphite in the years ahead, because graphite is a core part of the lithium-ion batteries powering the 21st century economy, no matter what chemistry you're using. In 2020, something like 900,000 tonnes of graphite went into batteries. Some observers think that by 2030 demand will be more like 6 million tonnes. As a consequence, the graphite market could be in deficit as early as 2023. In that environment, look for the larger, lower cost projects, like Mahange, to get funded sooner rather than later.

Also helping the case for Mahenge is the amount of offtakes already in place. Module 1 is already 90% spoken for under either a binding offtake or an option agreement. We see potential for the other 10% to find a notional home this year as well.

Kamsamnida, POSCO

A lot of people sat up and took notice in December 2020 when POSCO took a 15% equity stake in Black Rock Mining via a placement at A$0.082 per share. The Korean company, which once upon a time was just a humble iron and steel outfit, is now a formidable player in the global battery materials supply chain.

Although Mahenge's mineral make-up lends itself to the high margin, large graphite flake market (with large or 'jumbo' flakes often used in graphite foils and fire retardants), the project has enough small flake (or fine) graphite to support POSCO's commercial specifications. POSCO is already investigating the possibility of large-scale production of Spherical Purified Graphite (SPG) after previous successful testing. To give an idea of how valuable that is, China, as the major exporter of SPG, was pulling in around US$3,000 per tonne for the product. It probably gets more like US$5,000 per tonne today given the increases in graphite prices industry observers have noticed since about September last year.

If Mahenge's project financing is secured in mid-2022 for module 1, construction will likely begin shortly after that. Allow a 15-month construction period and it's not unreasonable to expect the first graphite from Mahenge to be shipping out of Dar Es Salaam in the second half of next year.

Even before the project funding package is secured, other catalysts for a re-rating can include the issue of a Special Mining Lease to aggregate the existing Mahenge Mining Leases and more news on the offtake front. Ahead of that, Black Rock Mining is four stars.

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