

Black Rock Mining Ltd

11:05 12 Mar 2019

Black Rock Mining focuses on 2020 vision for Mahenge Graphite Project

- DFS optimisation and Chinese procurement works are both upcoming milestones
- Additional production take or offtake agreements may come from the latest pilot plant testing
- Financing progression is an important milestone needed to start construction this year and become a producer next year

What does Black Rock do?

Black Rock Mining Ltd (ASX:BKT) specialises in exploration and development in Tanzania. It is run by John de Vries, a mining engineer who has more than 30 years experience leading multi-disciplinary teams in the mining and support industries. De Vries' focus is on building shareholder value through successfully delivering a mine that builds and supports the Tanzanian community.

What does Black Rock own?

The key asset is the wholly-owned and licensed Mahenge Graphite Project in Tanzania.

Mahenge is only 70 kilometres by road from a Tanzania Zambia Railway Authority rail network that runs direct to the country's principal port at Dar es Salaam.

Black Rock revealed yesterday it had raised \$3 million with an oversubscribed placement to high-quality investors to finance final engineering activities at the mining project to make it construction-ready.

The company's Mahenge project has one of the largest JORC-compliant flake-graphite mineral resource estimates in the world, with 212 million tonnes grading 7.8% total graphitic carbon (TGC).

Its ore reserve of 70 million tonnes grading 8.5% TGC and could support a 25-year mine life where 250,000 tonnes of graphite are mined each year.

The ore reserve is the second largest contained graphite reserve of any listed company while its resource is number four.

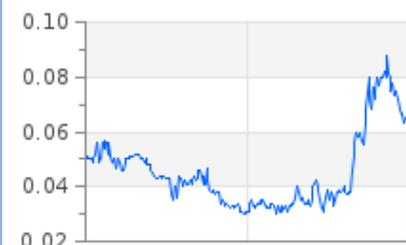
Black Rock published a bankable definitive feasibility study (DFS) for the project in October 2018 and modelled a 32-year mine valued at US\$895 million (now A\$1.3 billion) using an after-tax unlevered net present value (NPV10) calculated at a 10 discount.

The study's corresponding internal rate of return (IRR) was 42.8%.

Price: A\$0.065

Market Cap: A\$38.06M

1 Year Share Price Graph



March 2018 September 2018 March 2019

Share Information

Code: BKT

Listing: ASX

52 week High Low
A\$0.09 A\$0.03

Sector: Mining

Website: www.blackrockmining.com.au

Company Synopsis:

Black Rock Mining Ltd (ASX:BKT) is focused on exploring and developing its Mahenge graphite project in Tanzania.

Author:

Proactive Investors Australia

+61 (0)2 9280 0700

action@proactiveinvestors.com.au

Black Rock's all-in sustaining cost (AISC) margin was 63.6%.

The DFS put average steady state production rate at 250,000 tonnes a year of concentrate grading 98.5%, while total life-of-mine concentrate production was 6.6 million tonnes at 98.5%.

Black Rock has the option of producing ultra purity flake of 99% LOI the project, given its pilot plant and laboratory successes.

Capital expenditure (capex) needed for phase I production of 83,000 tonnes a year was US\$115 million, taking into account a 10% contingency.

Capex for phase II, which will add another 83,000 tonnes a year of production, was US\$69.5 million with a 15% contingency.

Phase III capex for another of 83,000 tonnes a year was US\$84.2 million with a 15% contingency.

The company's life-of-mine C1 costs free-on-board (FOB) at Dar were US\$401 a tonne, while its life-of-mine all-in sustaining costs for Dar were US\$473 a tonne and its concentrate basket FOB cost was US\$1,301 a tonne.

Who will buy Black Rock's products?

At the time of its DFS, the company had already inked a three-year 90,000-tonne-a-year blended Mahenge graphite concentrate supply deal with Heilongjiang Bohao Graphite Company Limited.

The three-year agreement committed Black Rock to supplying 30,000 tonnes of blended graphite concentrate in year 1, 50,000 tonnes in year 2, and up to 90,000 tonnes in year 3.

West Perth-based Black Rock's deal fully booked and exceeded the concentrate capacity of the first plant in its scaled-up production model.

Later that month Black Rock signed an agreement with China-based Qingdao Fujin Graphite Company Limited to supply 15,000 tonnes per year for up to three years.

Qingdao Fujin focuses heavily on the small to mid-size battery market and produces anode product for customers across Asia and China.

In January, the company agreed to a third graphite production take deal, with Taihe Soar, for the annual supply of up to 100,000 tonnes.

The three-year Taihe deal effectively booked up 205,000 tonnes, or 82%, of the project's planned production of 249,000 tonnes.

Black Rock's production take agreements require all three plant modules modelled in the DFS to be built.

What is Black Rock's focus?

Black Rock is advancing both final engineering works and financing efforts for

building Mahenge project.

The company hopes to start construction this year and become a producer next year.

It aims to target multiple graphite end-users for its future products, including expanded graphite markets and the electric vehicle battery market.

Black Rock has been working with EPC partner Yantai Jinyuan on DFS optimisation work to reduce capex through Chinese procurement processes, with the partner to also run a 20-tonne demonstration plant.

A large sample will be tested at the pilot plant in a commercial-sized spheronisation circuit to evaluate yields and support market price discovery.

The Australian company has tipped it expects the plant is likely to lead to EPC formation, US\$20 million of vendor support and up to US\$20 million of additional vendor-sponsored external support.

Potential investors, existing production take parties and extra potential offtakers from China, Korea and Japan were to visit the plant this month.

Earlier this month, Black Rock highlighted the TGC grading had again been achieved with a 93% recovery of oxide ore from Mahenge during a FEED (front end engineering design) process being undertaken at laboratory scale in China by the company's Chinese EPC (engineering, procurement and construction) partner Yantai Jinyuan Mining Machinery Ltd.

Concentrate previously produced at a 90-tonne Canadian pilot plant by SGS Lakeshore Laboratories from Mahenge's Ultra Purity-FP Flake Graphite had a minimum purity of 99.0% LOI (loss-on-ignition) during testing and a good reception from potential customers.

Black Rock added to the \$1.3 million cash it had on December 31 with its \$3 million capital raising from institutional and sophisticated investors unveiled yesterday.

Inflection points

DFS optimisation and Chinese procurement works

Additional production take or offtake agreements

A fourth module for concentrate production to build on the three modelled in the three-phase DFS

Financing progression as the company aims to successively build the project

CEO & executive director John de Vries notes mining licence achievement

"A really important milestone... the end of the principal permitting stage of the project; and from now on (the company) just moves forward with detailed engineering work and financing," CEO & executive director John de Vries told Proactive investors two weeks ago.

"We're still confident that towards the end of 2020 we'll start seeing the first product of the world's best graphite concentrate hit the market."

Black Rock CEO & executive director John de Vries will deliver a presentation titled "Mahenge: Best in class graphite project" in Perth today at 1.20pm (10.20am local time) on day 1 of the March 12-13 Paydirt's Battery Minerals Conference. He will also take part in an Africa panel discussion at 6.20pm (3.20pm WST) today.

Proactive Investors facilitate the largest global investor network across 4 continents in 4 languages. With a team of analysts journalists & professional investors Proactive produce independent coverage on 1000's of companies across every sector for private investors, private client brokers, fund managers and international investor communities.

Contact us +61 (0)2 9280 0700 action@proactiveinvestors.com.au

No investment advice

The information on this Site is of a general nature only. It does not take your specific needs or circumstances into consideration, so you should look at your own financial position, objectives and requirements and seek financial advice before making any financial decisions. You acknowledge and understand that neither the Company, its related bodies corporate, the information providers or their affiliates will advise you personally about the nature, potential value or suitability of any particular security, portfolio of securities, transaction, investment strategy, or other matter. You should read our FSG and any other relevant disclosure documents and if necessary seek persona advice prior to making any investment decision.

You understand and agree that no Content (as defined below) published on the Site constitutes a recommendation that any particular security, portfolio of securities, transaction, or investment strategy is suitable or advisable for any specific person.

You understand that in certain circumstances the Company, its related bodies corporate, the information providers or their affiliates may have received, or be entitled to receive, financial or other consideration in connection with promoting, and providing information about, certain entities on the Site and in communications otherwise provided to you.

You understand that price and other data is supplied by sources believed to be reliable, that the calculations herein are made using such data, and that neither such data nor such calculations are guaranteed by these sources, the Company, the information providers or any other person or entity, and may not be complete or accurate. From time to time, reference may be made in our marketing materials to prior articles and opinions we have published. These references may be selective, may reference only a portion of an article or recommendation, and are likely not to be current. As markets change continuously, previously published information and data may not be current and should not be relied upon.

Before you act on any general advice we provide, please consider whether it is appropriate for your personal circumstances.