

16 November 2023

Leading the charge globally for new natural graphite supply

NEED TO KNOW

- Chinese graphite export controls may drive up prices and accelerate development of ex-China supply chains
- BKT progresses funding with first debt agreement
- Mahenge one of the most advanced projects globally

Chinese graphite export controls: Announced on Oct. 20, China is planning to implement export controls on certain graphite products including natural flake graphite for anodes from Dec. 1. China will supply about 70% of the world's natural graphite in 2023, and nearly all battery-grade anode active material. We expect the restrictions will drive increased purchasing from non-China natural graphite buyers near term and may significantly improve prices for product from diversified supply chains, including potential future production from Mahenge.

Material progress on debt process: The Development Bank of Southern Africa (DBSA) has approved a ~US\$60mn loan for Mahenge which will form part of the overall Project debt funding. Discussions with other potential lenders (including Development Finance Institutions and several Tanzanian commercial banks) are ongoing with additional progress expected near-term. BKT is targeting up to 50% debt for Module 1 via traditional project finance from a combination of lenders.

Three key factors make Mahenge one of the most advanced graphite projects globally: 1. Battery-grade product qualification with partner POSCO, 2. Binding and non-binding offtake agreements and options for ~90% of Stage 1 production, 3. Well-progressed debt and equity funding discussions. We expect the full debt package and a binding agreement with POSCO for the cornerstone equity investment (up to US\$40mn) will be reached in coming months, with interest from parties accelerated by the China export restrictions.

Investment Thesis

High-quality flagship asset; modular approach lowers risk: Mahenge, with its large graphite mineral resource and second-largest Ore Reserves globally, can produce up to 350ktpa of high-quality graphite concentrate at first-quartile costs. BKT is employing a capital-light, high-returning four-stage approach to developing Mahenge, with expansions beyond Module 1 funded out of cash flow.

Tier-1 partner POSCO verifies quality of project; POSCO needs BKT: POSCO is the largest anode producer outside of China and plans to increase its natural graphite anode production from ~40ktpa (2022) to ~180ktpa (2030). POSCO is a major BKT shareholder and has a binding offtake agreement for 100% of fines Module 1 (as well as MOUs for further product). POSCO's deep relationship with BKT underlines Mahenge role in POSCO's long-term plans.

Graphite prices set to improve: Lithium-ion batteries (LIBs) contain 7-10X times more graphite than lithium, but prices have been suppressed by oversupply of unprofitable synthetic graphite in China. As demand from batteries grows, we expect to see upward pressure on natural graphite prices, potentially accelerated by China's export restrictions and a push for diversified supply.

Valuation A\$0.43 (Unchanged)

Our BKT valuation of A\$0.43, fully diluted, is based on BKT's Mahenge Project. We apply an 80% probability weighting to account for outstanding project risks (financing, construction, commissioning), and dilution for a A\$200m equity raise (inclusive of POSCO) to fund BKT's equity contribution to the project.

Risks

Key risks include inability to access funding, project delays, escalation in capital costs, falls in the graphite price, inability to sell large flake into the high-value markets, and continuity of key persons.

Equities Research Australia

Mining and Energy

Michael Bentley, Analyst
michael.bentley@mstaccess.com.au



BLACK ROCK
MINING LIMITED

Black Rock Mining (ASX:BKT) is a mining company focused on graphite projects in Tanzania. The main project is the Mahenge Graphite Project, a world-class deposit of high-quality graphite ore. The company's goal is to become a leading producer of high-grade graphite for use in lithium-ion batteries and other high-value applications.

<https://blackrockmining.com.au/>

Valuation	A\$0.43 (Unchanged)
Current price	A\$0.10
Market cap	A\$110m
Cash on hand	A\$8.7m (as of 30 Sept 2023)

Upcoming Catalysts and Newsflow

Period	
4QCY23	Binding agreement for POSCO funding
4QCY23	Finalised credit-approved term sheets for project debt
4QCY23	Potential for POSCO to exercise its right to a BKT Board Seat
1QCY24	Potential sell-down of a stake in the project to provide funding
Dec 2023	Commencement of Chinese graphite export controls

Share Price (performance comparison)



Source: FactSet, MST Access.

Year End June

MARKET DATA

Share Price	A\$/sh	0.100
52 Week Low	A\$/sh	0.080
52 Week High	A\$/sh	0.175
Market Cap	A\$m	110
Net Debt / Cash	A\$m	(9)
Enterprise Value	A\$m	101
Shares on Issue	m	1,097
With performance rights	m	1,154
After capital raise	m	2,533

INVESTMENT FUNDAMENTALS

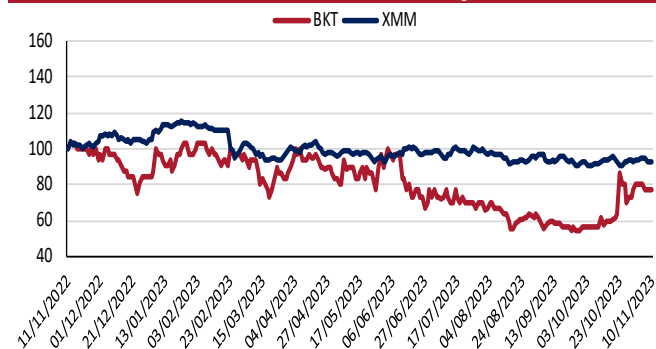
		Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Reported NPAT	A\$m	(6)	(9)	(11)	(34)	29
Underlying NPAT	A\$m	(6)	(9)	(11)	(34)	29
EPS Reported (basic)	¢ps	(0.6¢)	(0.9¢)	(0.4¢)	(1.4¢)	1.0¢
EPS Underlying (basic)	¢ps	(0.6¢)	(0.9¢)	(0.4¢)	(1.4¢)	1.2¢
P/E Reported (basic)	x	n/m	n/m	n/m	n/m	9.8
P/E Underlying (basic)	x	n/m	n/m	n/m	n/m	8.7
Operating Cash Flow / Share	A\$	(0.00)	(0.01)	(0.00)	(0.01)	0.01
Price / Operating Cash Flow	x	(23.4)	(13.2)	(24.9)	(7.6)	8.7
Free Cash Flow / Share	A\$	(0.01)	(0.02)	(0.03)	(0.09)	(0.04)
Price / Free Cash Flow	x	n/m	n/m	n/m	n/m	n/m
Free Cash Flow Yield	%	-11.9%	-23.4%	-32.3%	-92.3%	-36.0%
Book Value / Share	A\$	0.06	0.05	0.10	0.09	0.09
Price / Book	x	1.78	1.90	1.00	1.16	1.10
NTA / Share	A\$	0.06	0.05	0.10	0.09	0.09
Price / NTA	x	1.78	1.90	1.00	1.16	1.10
Year End Shares	m	977	1,097	2,476	2,476	2,476
Market Cap (spot)	A\$m	98	110	248	248	248
Net Cash / (Debt)	A\$m	26	11	131	(97)	(186)
Enterprise Value	A\$m	72	98	116	345	434
EV / EBITDA	x	n/m	n/m	n/m	n/m	1.4x
Net Debt / Enterprise Value		(0.3)	(0.1)	(1.3)	1.0	1.8

PRODUCTION AND PRICING

		Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Ore Mined	kt	-	-	-	-	1,107
Graphite Concentrate Produced	kt	-	-	-	-	87
Graphite Basket Price (97% grade)	US\$/t	1,160.3	1,081.5	1,133.0	1,187.5	1,245.2
AUDUSD	:	0.73	0.68	0.70	0.70	0.69

Source: BKT, MST Estimates

12-Month Relative Performance vs S&P/ASX Metals & Mining



Profit & Loss (A\$m)	Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Revenue	-	-	-	-	152
Expenses	(6)	(9)	(10)	(10)	(81)
EBITDA	(6)	(9)	(10)	(10)	71
D&A	(0)	(0)	(1)	(1)	(13)
EBIT	(6)	(9)	(11)	(11)	58
Interest	0	0	0	(23)	(24)
Tax	-	-	-	-	(5)
Underlying NPAT	(6)	(9)	(11)	(34)	29

Exceptional

Reported Profit	(6)	(9)	(11)	(34)	29
------------------------	------------	------------	-------------	-------------	-----------

Balance Sheet (A\$m)	Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Cash	26	11	331	103	14
Receivables	1	1	-	-	-
Inventory	0	-	-	-	-
PP&E	1	1	70	265	370
Exploration	30	47	47	47	47
Other					
Assets	57	61	448	415	430
Creditors	2	2	-	-	-
Debt	-	-	200	200	200
Other	0.73	2	2	2	4.54
Liabilities	2	4	202	202	205
Shareholder's Equity	55	58	247	213	226

Cashflow (A\$m)	Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Net Cash From Operations	(4)	(8)	(10)	(33)	28
Capex	(0)	-	(70)	(196)	(118)
Exploration	(7)	-	-	-	-
Other					
Net Cash From Investing	(7)	(17)	(70)	(196)	(118)
Equity	26	-	200	-	-
Borrowings	-	-	200	-	-
Dividend					
Net Cash From Financing	26	11	400	-	-
Effects of FX	0	0	-	-	-
Net Increase / (Decrease) in Cash	15	(15)	320	(229)	(89)

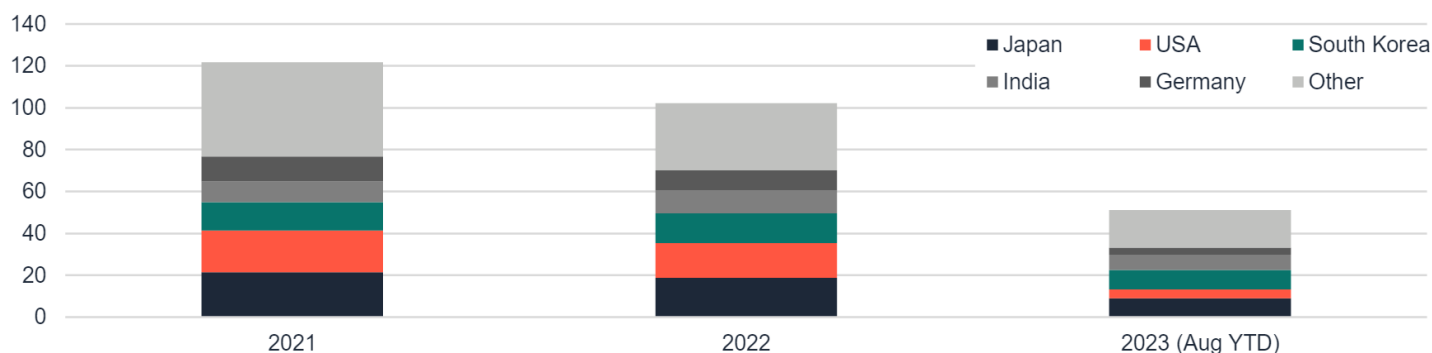
Chinese graphite export controls a wake-up call to kickstarting the global upstream industry

China will supply about 70% of the world's natural graphite in 2023 and almost exclusively holds the capacity to process the mineral into battery-grade material, along with most of the world's capacity to manufacture battery anodes, according to the International Energy Agency. Battery manufacturers in USA, Europe and Asia (ex-China) are largely reliant on China's anode active material (AAM) exports for their anode and battery cell production.

Furthermore, major AAM producers in Korea and Japan presently source essentially all anode precursor from China. Japan, South Korea and the US were the three major export destinations for China's natural graphite exports in 2023. China's anode materials delivery totalled 1.37 million metric tons in 2022, up 90% from a year earlier, with natural graphite anode material representing over 200 thousand tons (Gaogong Industry Institute). This is expected to grow in line with the rapid growth in battery cell production.

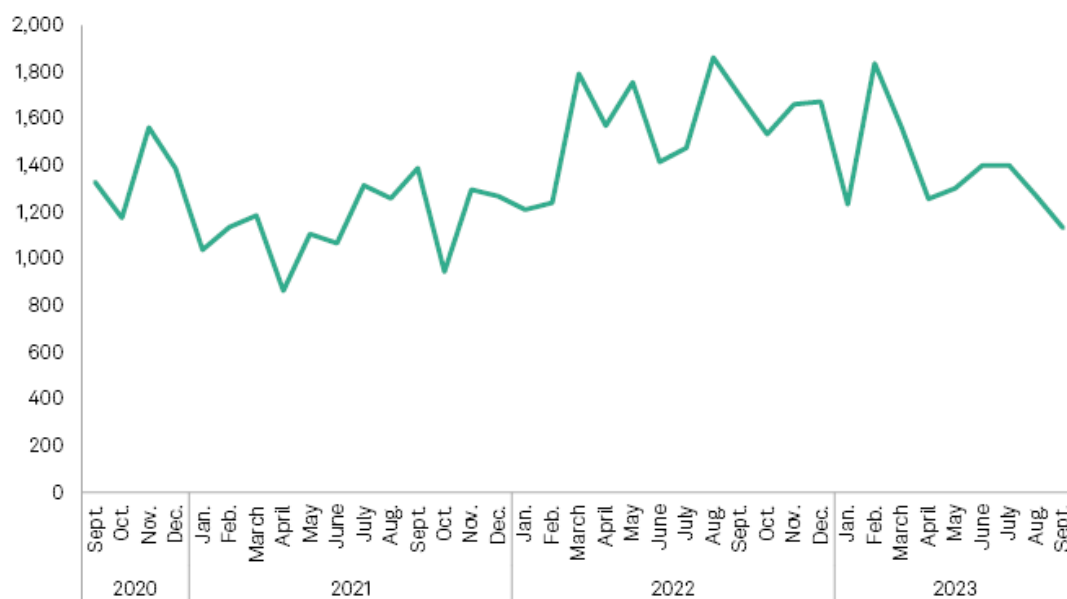
Depending on the scale and impact of China's export restrictions, anode producers outside of China will have to look for alternative sources of graphite to meet EV demand, noting that graphite projects take several years to develop and qualify to meet battery specifications.

Figure 1: China global exports of natural graphite (kt)



Source: Syrah Resources presentation

Figure 2: Monthly average price of China exports of natural graphite (US\$/t)



Source: S&P Global Market Intelligence

Progress on Debt Process for Mahenge's Funding

BKT has made material progress with respect to the debt funding for Mahenge.

The Development Bank of Southern Africa (DBSA) has approved a ~US\$60mn loan for Mahenge which will form part of the overall Project debt funding. The Development Bank of Southern Africa is one of the leading African Development Finance Institutions, wholly owned by the Government of South Africa. The DBSA has a mandate to accelerate sustainable socio-economic development in South Africa, the Southern African Development Community (SADC) and the wider Sub-Saharan Africa by driving financial and non-financial investments in the social and economic infrastructure sectors.

Discussions with other potential lenders (including Development Finance Institutions and several Tanzanian commercial banks) are ongoing with additional progress expected near-term. The Company expects lender Board approvals from several potential lenders to be notified to the Company during Q4 2023.

BKT is targeting up to 50% debt for Module 1 via traditional project finance from a combination of lenders, with the debt funding intended to fund Module 1 and supporting infrastructure, including a 220kV powerline and associated switchyards at Mahenge townsite.

Once those Board approvals are received, Black Rock will then seek to negotiate and execute full form facility agreements with successful lenders, and confirm the structuring of the Project financing package.

Refresher on POSCO and BKT A Crucial Relationship for Both Parties

The partnership between BKT and POSCO underscores the viability of the Mahenge Graphite Project and reduces BKT's risk. POSCO is BKT's major shareholder with 11.5% of the issued capital in BKT, and the two parties have signed several offtake agreements.

New agreement: solidifying a growing BKT-POSCO alliance

Agreement so far

BKT has entered into a non-binding Memorandum of Understanding (MOU) with its strategic partner, POSCO International Corporation. This MOU outlines a long-term supply of fines (~100 material) graphite from Module 2, complementing the current binding agreement for ~30ktpa LOM fines from Module 1 (see below for more on existing agreements between BKT and POSCO).

In exchange for this commitment, POSCO will invest up to US\$40m or take a stake of up to 19.99% in BKT, whichever is lower. Currently, both parties are actively working to convert the non-binding MOU into a binding agreement. The proceeds of this investment are to be used to build Module 1.

Potential financial structure

Discussions to finalise the POSCO investment are ongoing. The most likely timing for completion would be to correspond with the debt and equity funding of Stage 1 of the project.

Based on an assumed funding need of ~US\$260m, and debt of ~US\$120m and POSCO prepay of US\$10m, the equity required to be raised would be approximately US\$130m (A\$200m). Based on our estimated raising share price of A\$0.15 (we expect share price appreciation post debt announcements and POSCO investment binding agreement), for POSCO to raise its equity share of BKT to 19.99%, it would need to contribute ~A\$54m (US\$35m).

Converting to binding agreement would boost project development plans

The addition of the MOU further confirms the interest POSCO has in the project. Converting the MOU into a binding agreement would be a key catalyst for project development.

Existing agreements: key relationship for both parties – POSCO is important to BKT, but BKT is very important to POSCO

The most recently announced MOU reinforces the collaboration between the two companies and improves BKT's debt financing opportunities. We note that POSCO and BKT already have several agreements in place.

Binding offtake agreement for fines from Module 1

BKT's binding agreement with POSCO encompasses the supply of the entire (25–30ktpa) planned fines (-#100) production from Mahenge's Module 1.

MOU for large flake Module 1

BKT holds a non-binding MOU with POSCO for a 6ktpa supply of large flake graphite concentrate from Mahenge Module 1, accounting for an extra ~7% of projected production.

Development finance for Module 1

POSCO is providing development finance for Module 1. This includes:

- a US\$10m prepayment: The contract stipulates a US\$10m prepayment, which will be offset through product delivery, and guarantees a 100% LOM offtake for graphite fines from Module 1
- an MOU for POSCO to invest US\$40m or take a 19.99% stake in BKT, whichever is lower.

Other opportunities

POSCO and BKT have signed an MOU to explore other opportunities to develop an Inflation Reduction Act compliant supply chain.

Who is POSCO, and why does it matter?

POSCO Holdings Inc, a leading South Korean steel conglomerate with a market capitalisation exceeding US\$20bn, is making substantial strides in the battery materials sector. The conglomerate's 60%-owned battery business, previously known as POSCO Chemical and now rebranded as POSCO Future M Co., Ltd, is a major player in anode production. The conglomerate's primary trading arm, POSCO International Corporation, is 70.7% owned by POSCO Holdings Inc and plays a crucial role in securing raw materials for the group.

In 2022, POSCO was the largest anode producer outside of China. **POSCO plans to spend US\$93b on growth projects by 2030, with 46% of its planned 2023–2025 capex spend on LIB materials.**¹

POSCO plans major growth in its graphite anode production...

POSCO plans to increase its natural graphite anode production from ~40ktpa in 2022 to an estimated 182ktpa by 2030 (Figure 3). To support this goal, the company has an offtake agreement with BKT for 30ktpa of -#100 mesh material. As far as we know, POSCO has no other graphite concentrate agreements, and no other developer has passed its strict qualification process.

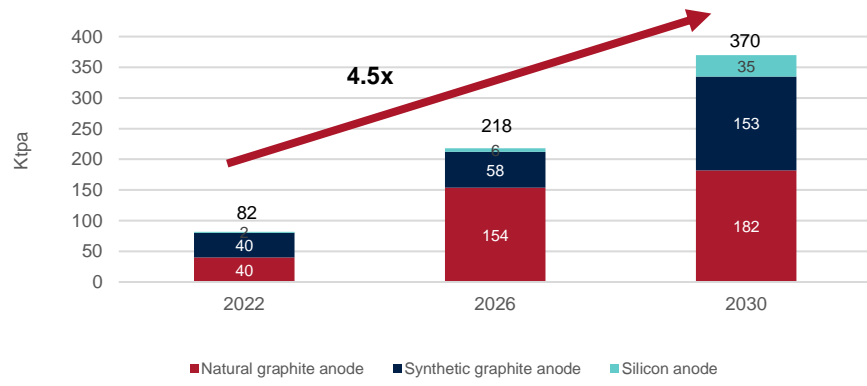
...and so it needs what BKT is selling

Figure 4 shows POSCO's graphite concentrate needs for its growth, using the standard industry conversion rate to Spherical Graphite (SPG) of 35%. BKT's Mahenge Module 1 offers ~30ktpa of concentrate, which is only ~6% of 2030's requirements. Even with Module 2's contribution, this meets less than 12% of POSCO's total requirements.

Given POSCO's ambitious growth plans, we believe it would likely be interested in securing additional offtake from Mahenge's Module 3 and 4 to ensure a stable and reliable supply chain.

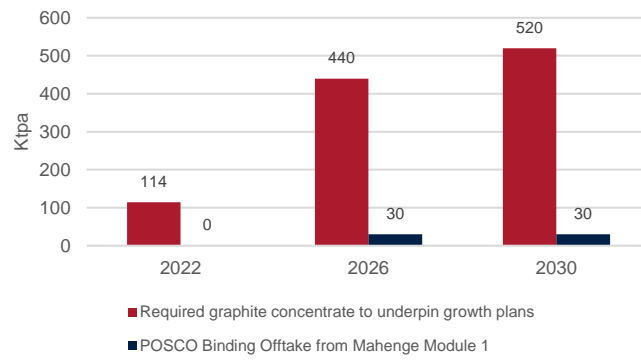
¹ Source: <https://www.reuters.com/markets/commodities/south-koreas-posco-plans-93-bln-investment-by-2030-2023-07-03> (3 July 2023)

Figure 3: POSCO's growth plans for its anode business



Source: BKT.

Figure 4: POSCO's graphite concentrate requirements



Source: BKT.

Investment Thesis and Catalysts

Key pillars of our investment thesis

High quality asset – and ready to go

Shovel-ready project at world-class deposit: The Mahenge Project is a Tier-1, shovel-ready graphite project located 450km by road from Tanzania's largest port, Dar es Salaam. BKT holds an 84% stake in the project through a joint venture company, Faru Graphite Corporation (Faru), while the Tanzanian Government owns the remaining 16% (free carry).

Mahenge geologically and geographically blessed: The Mahenge Project boasts one of the world's largest graphite mineral resources, measuring 213Mt at 7.8% total graphitic carbon (TGC). It holds the second-largest Ore Reserves worldwide, with 70mt at 8.5% TGC. These Ore Reserves support a mining operation that can produce up to 350kt/year of graphite.

The Mahenge deposit's high-quality graphite ore has low impurities and large flake size, and requires minimal processing in order to produce a very high-grade concentrate, differentiating it from other graphite deposits. Of the total graphite to be produced at Mahenge, ~60-70% will be well-suited for high-value end-value products that require large natural flake size, and ~30-40% will be highly suitable for the rapidly growing battery anode market. It is worth noting that all of the product can be directed towards the battery anode market if deemed value accretive.

Strength at the company level, low operating cost and financing progressing

First-quartile costs: The Mahenge Project has first-quartile cost position on the global cost curve, driven by access to low-cost hydro-dominated grid power. BKT's energy mix consists of 60–70% hydro and 30–40% gas, a sustainable mix that provides a competitive edge in terms of the company's cost structure and environmental position.

Benefitting from experienced management: BKT's management team is made up of individuals with extensive experience, including Daniel Pantany (GM Engineering & Technical), who worked on Syrah's Balama project from Front-end Engineering Design through to commissioning and whose insights have been incorporated into the design of Mahenge. The company has also hired David Griffiths, the former General Manager of Syrah's Balama project.

Financing is moving quickly with discussions underway: BKT is seeking ~US\$260m to fund the Mahenge Project and targeting debt of US\$120m plus the US\$10m POSCO prepay. The company is exploring various financing options and undertaking discussions with potential lenders, who conducted site visits to the project in February 2023. BKT expects to receive credit-approved term sheets soon. We believe the approval of the 26-year Special Mining License in September 2022 and updated capital expenditure estimates put BKT in a solid position to advance financing discussions.

Graphite growing in importance – with natural graphite to play a larger role

Macro outlook – graphite poised to be lithium 2.0: While the importance of lithium-ion batteries (LIBs) is widely understood, the crucial role that graphite plays in the anode for all types of LIBs is often overlooked, with LIBs requiring 7–10x more graphite than lithium.

Due to supply shortages and rapid acceleration of EV demand, lithium prices have risen significantly (+800%) in recent years. Ongoing deficits are predicted in the graphite market in the near future; as an example, Benchmark Mineral Intelligence forecasts deficits to exceed the entire natural graphite market (1.2mt in 2022) in 7 years.

BKT's position is set to strengthen as sustainability requirements tighten: As Western nations begin implementing sustainability requirements, the dominance of synthetic graphite could start to lessen. Already, Europe has instituted battery sustainability standards, mandating the disclosure of each component's carbon footprint. These measures are scheduled to take effect from 2024, with a more inclusive framework coming into play by mid-2025 (see European Commission commentary [here](#)). This increased visibility into synthetic graphite's carbon footprint could provide a boost to BKT's natural graphite products. Over time, as these sustainability standards potentially become widespread in the US and other countries, it could further enhance BKT's standing.

Valuation: Risked NPV of A\$0.43/Share (unchanged)

Our valuation for BKT is A\$0.43 per share on a fully diluted basis. This represents substantial upside potential of 307% from the current share price.

In our view, the market is undervaluing the high-quality, shovel-ready Mahenge deposit, for which there are offtake agreements and upcoming catalysts. Graphite's strong structural tailwinds are currently underappreciated, and we anticipate tight medium-term fundamentals in the market, with potential for growth similar to lithium.

Valuation summary

Figure 5 presents a summary of our valuation, which uses a discount rate of 12% and a probability risk weighting of 80%. We value the net assets at A\$1,000m (risked, as at Jun-24) compared to the current market cap of A\$110m. We have rolled our valuation period forward to Jun-24 and assume project funding (debt and equity) is fully resolved in 2H FY24.

Figure 5: Base-case valuation summary

Black Rock Mining Valuation					Previous Valuation
	Discount rate	Risk weighting	AUD\$m	AUD\$/sh	AUD\$/sh
Mahenge	12.0%	80.0%	1,000	0.43	0.37
Total operating assets			1,000	0.43	0.37
Corporate/SG&A	12.0%		(43)	(0.02)	(0.02)
Net cash/(debt)			123	0.05	0.08
Net Asset Value			1,080	0.47	0.43
Current Share price				0.115	0.115
Upside				307%	276%

Source: MST estimates.

Key assumptions

Key assumptions are in Figure 6. Given the project's location in Africa, we apply a 12% nominal discount rate, and we assume US\$260m in initial development capital. Our graphite basket price (average for initial 10 years) is US\$1,238/t real, offering upside if prices exceed our forecasts.

Figure 6: DFS assumptions underpinning our base-case valuation

Assumptions	MST
PROJECT ASSUMPTIONS	
Project Ownership (%)	84%
Strip Ratio (waste : ore)	0.8
Ore Reserve Grade (% TGC)	8.2%
Concentrate Grade (% TGC)	97.3%
Average Recovery (%)	92.8%
Average Material Mined (ktpa)	7,234
Average Ore Mined (ktpa)	4,019
Mine Life (years)	26
Development Capex module 1 (US\$m)	260
Debt to equity (inc. prepayments)	-50:50
COST & FINANCING ASSUMPTIONS	
Discount Rate (%)	12%
Inflation Rate (%)	3%
Debt interest rate	12%
Share price for Equity raising (A\$/share)	0.15
PRICING & EXCHANGE RATE ASSUMPTIONS	
AUDUSD	0.65
Graphite Price (Real) (US\$/t)	1,238
Basket Price Price (US\$/t) - Average first 10 years	1,458
Royalty Rate (%)	3%
Corporate Tax Rate (%)	30%

Source: MST estimates.

Near-term catalysts

- **Credit-approved term sheets from lenders** (4QCY23)
- **Binding funding agreement with POSCO** for investment of US\$40m or an increase in POSCO's BKT stake to 19.99% (4QCY23)
- **Potential sell-down of a stake in the project** to fund development and reduce dilution (subject to attractive pricing) (4QCY23)
- **POSCO could exercise its right to a BKT board seat** (4QCY23). POSCO retains this right as long as it maintains a stake of at least 10% in BKT. If POSCO were to take a seat on the board, it would be a further indication of its long-term commitment to the success of the project, and we would expect this to be well received by the market.
- **Commencement of Chinese graphite export controls** (1 Dec 2023)

Risks to share price and valuation

Company-and project-specific risks

- **Insufficient access to funding:** the availability of funding for the project is not guaranteed. A lack of sufficient funding could have a negative impact on the stock.
- **Delays to development:** any delays in moving into construction, post-funding, would be a negative for the stock.
- **Inability to sell large flakes into high-value markets:** ~60% of BKT's basket consists of large flake graphite, which can be sold in the high-end market. If there is a lack of demand for this product, BKT will have to crush and grind the graphite into a finer form to sell into the fines market, resulting in reduced revenue and increased operational costs.
- **Key person dependence:** individuals, including the CEO, may have relationships and experience critical to advancing the Mahenge Project. The loss of such personnel may significantly compromise BKT's ability to advance the project.
- **Cost inflation:** inflation is becoming a global theme and is particularly concerning in the mining industry. If operational or capital costs increase without a corresponding increase in the commodity price, the project's margins will be reduced which could impact its economics and viability.
- **Logistical:** constructing a processing plant in a remote area and potential delays and cost overruns

Macro risks

- **Graphite price** – this is the key valuation sensitivity
- **Foreign exchange rates**
- **Increasing interest rates** and the potential impact on the cost of debt finance
- **Technology** – LIBs becoming redundant due to substitution

Country-specific risks

The Mahenge Project, operating in Tanzania, may face several country-specific risks. For example, changes in government policies or regulations could significantly affect the project's success.

- **Political instability:** any changes to government policies or leadership could impact the Mahenge project, as such changes may cause adverse changes in laws, taxes, or other regulations that could increase costs or decrease revenues.
- **Regulatory environment:** any adverse changes in regulations or laws could potentially impact the project's success.

Methodology & Disclosures

MST Access is a registered business name of MST Financial Services Pty Ltd (ACN 617 475 180 "MST Financial") which is a limited liability company incorporated in Australia on 10 April 2017 and holds an Australian Financial Services Licence (Number: 500 557). This research is issued in Australia through MST Access which is the research division of MST Financial. The research and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by MST Access is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a financial product you should read any relevant Product Disclosure Statement or like instrument.

This report has been prepared and issued by Michael Bentley of MST Access.

MST Financial also provides equity capital markets ("ECM") and corporate advisory services through its capital markets division, MST Capital Markets ("MST Capital"). MST Capital provides these services to a range of companies including clients of the MST Access service. As such, MST Capital may in future provide ECM and/or corporate advisory services to the company that is the subject of this research report and, accordingly, may receive fees from the company for providing such services. Within the past 12 months, MST and its associates have provided and received compensation for investment banking services, including acting as a Joint Lead Manager for the June 2023 capital raising of approximately A\$10.0 million for the subject company. However, MST Financial has measures in place to ensure the independence of its research division is maintained, including information barriers between its Capital Markets and Research teams. In addition, neither MST Access, nor any of its research analysts, receive any financial benefit that is based on the revenues generated by MST Capital Markets or any other division of MST Financial.

The analyst has received assistance from the company in preparing this document. The company has provided the analyst with communication with senior management and information on the company and industry. As part of due diligence, the analyst has independently and critically reviewed the assistance and information provided by the company to form the opinions expressed in the report. Diligent care has been taken by the analyst to maintain an honest and fair objectivity in writing this report and making the recommendation. Where MST Access has been commissioned to prepare content and receives fees for its preparation, please note that NO part of the fee, compensation or employee remuneration paid will either directly or indirectly impact the content provided.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently certified. Opinions contained in this report represent those of MST Access at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results and estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of liability: To the fullest extent allowed by law, MST Access shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained in this report. No guarantees or warranties regarding accuracy, completeness or fitness for purpose are provided by MST Access, and under no circumstances will any of MST Financials' officers, representatives, associates or agents be liable for any loss or damage, whether direct, incidental or consequential, caused by reliance on or use of the content.

General Advice Warning

MST Access Research may not be construed as personal advice or recommendation. MST encourages investors to seek independent financial advice regarding the suitability of investments for their individual circumstances and recommends that investments be independently evaluated. Investments involve risks and the value of any investment or income may go down as well as up. Investors may not get back the full amount invested. Past performance is not indicative of future performance. Estimates of future performance are based on assumptions that may not be realised. If provided, and unless otherwise stated, the closing price provided is that of the primary exchange for the issuer's securities or investments. The information contained within MST Access Research is published solely for information purposes and is not a solicitation or offer to buy or sell any financial instrument or participate in any trading or investment strategy. Analysis contained within MST Access Research publications is based upon publicly available information and may include numerous assumptions. Investors should be aware that different assumptions can and do result in materially different results.

MST Access Research is distributed only as may be permitted by law. It is not intended for distribution or use by any person or entity located in a jurisdiction where distribution, publication, availability or use would be prohibited. MST makes no claim that MST Access Research content may be lawfully viewed or accessed outside of Australia. Access to MST Access Research content may not be legal for certain persons and in certain jurisdictions. If you access this service or content from outside of Australia, you are responsible for compliance with the laws of your jurisdiction and/or the jurisdiction of the third party receiving such content. MST Access Research is provided to our clients through our proprietary research portal and distributed electronically by MST to its MST Access clients. Some MST Access Research products may also be made available to its clients via third party vendors or distributed through alternative electronic means as a convenience. Such alternative distribution methods are at MST's discretion.

Access & Use

Any access to or use of MST Access Research is subject to the [Terms and Conditions](#) of MST Access Research. By accessing or using MST Access Research you hereby agree to be bound by our Terms and Conditions and hereby consent to MST collecting and using your personal data (including cookies) in accordance with our [Privacy Policy](#), including for the purpose of a) setting your preferences and b) collecting readership data so we may deliver an improved and personalised service to you. If you do not agree to our Terms and Conditions and/or if you do not wish to consent to MST's use of your personal data, please do not access this service.

Copyright of the information contained within MST Access Research (including trademarks and service marks) are the property of their respective owners. MST Access Research, video interviews and other materials, or any portion thereof, may not be reprinted, reproduced, sold or redistributed without the prior written consent of MST.