

Black Rock Mining Mahenge Graphite Mine

Simply Better Graphite: Investor Update

121 & Indaba Mining Conferences, Cape Town

February 2025



BLACK ROCK
MINING LIMITED

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The information in this report that relates to estimates of Mineral Resources and Ore Reserves has been extracted from the Company's ASX announcement released on 3 February 2022 titled "BKT Confirms 25% increase in Measured Resources." The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates of Mineral Resources or Ore Reserves in the original market announcement continue to apply and have not materially changed.

Production Target

The information in this report that relates to a production target, or forecast financial information derived from a production target has been extracted from the Company's ASX announcement released on 10 October 2022 titled "Black Rock Completes FEED and eDFS Update". The Company confirms that all material assumptions underpinning the production target, or forecast financial information derived from the production target, in the original announcement continue to apply and have not materially changed.

Forward Looking Statements

Various statements in this presentation constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates" and similar expressions are intended to identify forward-looking statements. Black Rock cautions shareholders and prospective shareholders not to place undue reliance on these forward looking statements, which reflect the view of Black Rock only as of the date of this presentation. The forward looking statements made in this presentation relate only to events as of the date on which the statements are made.



Black Rock at a glance

Premium graphite player

Developing the Mahenge graphite project in Tanzania:

- Tier 1 scale (2nd largest reserve globally)
- Forecast first quartile costs due to hydro-dominated grid
- Very low carbon-footprint products (decarbonisation)

Backed by largest ex-China anode producer POSCO:

- Strategic Alliance: Black Rock major shareholder at 10.1%
- Cornerstone offtake partner (3 offtake agreements)¹
- Providing up to US\$50m in funding¹
- Exploring other opportunities to collaborate

US\$229m of funding in place

- US\$179m funding signed with DBSA, IDC and CRDB²
- US\$50m in funding signed with POSCO¹

Substantial upside if Black Rock team can execute:

- Mahenge NPV₁₀ US\$1.4bn (A\$2.1bn)³

¹Slide 22 provides more details of Black Rock's Strategic Alliance with POSCO.

²DBSA & IDC are both wholly-owned subsidiaries of the South African Govt. See ASX release 16 Sept 2024.

³Project metrics updated Oct 2022. NPV post-tax, post Govt 16% free carry. More detail on Slide 10.

Capital structure

ASX ticker	BKT
Share price (29 January 2025)	\$0.034
Shares on issue	1,252.0m
Options and performance rights	84.4m
Market capitalisation (undiluted)	A\$43m
Cash (31 Dec 2024)	A\$2.1m
Debt (31 Dec 2024)	Nil

Major shareholders⁴

Copulos Group	11.9%
POSCO Group	10.1%



⁴As per latest substantial interest notices

Black Rock team

Board of Directors



Richard Crookes, Non-exec Chairman: Geologist with over 30 years executive experience in the resources and finance industries; raised capital and financed a number of projects globally, including across Africa. Previous roles include Investment Director at Mining PE Fund EMR Capital, Executive Director in Macquarie's Metals & Energy Capital and Chief Geologist / Mining Manager at Ernest Henry Mining.



John de Vries, MD & CEO: Mining Engineer with over 40 years experience in mine development and operations; professional experience spans Africa, the Pacific, the former Soviet Union, North and South America and Australia. Previously General Manager Technical Services with St Barbara, integral in the 2014 turnaround; earlier operational management roles at BHP Nickel West, Orica Mining Services and Western Mining Corp.



Ian Murray, Non-exec Director: Finance Executive with over 20 years corporate experience in the publicly listed resources sector; led highly successful project developments, major acquisitions, company restructures and stock exchange listings. Previous roles include CEO of Gold Road Resources, CEO and CFO of DRDGold Ltd, Director of Rand Refinery Ltd and GoldMoney.com, and senior positions at KPMG, PwC and Bioclones.



Ursula Phillips, Non-exec Director: Ms Phillips has over 10 years experience in management of major organisations spanning technology, operations and risk, and more than 20 years in complex program management and transformation. Ms Phillips' prior experience includes CTO for Tattarang, CTO at PepsiCo ANZ and Chief Information / Chief Risk Officer at Real Pet Food Company.

Management



Stuart McIntyre, GM Corporate Development: Mining analyst with over 15 years experience. Previous roles include sell-side mining analyst for Royal Bank of Canada and Blue Ocean Equities and associate at Cutfield Freeman, a mining-focused corporate finance boutique in London. Stuart has degrees in Civil Engineering and Commerce from the University of Sydney and a diploma of corporate finance from the London Business School.



Daniel Pantany, GM Engineering & Technical: Civil Engineer with over 25 years experience in mining project development in Africa and Australia across a broad range of project delivery roles including EPCM, EP, and lump sum EPC contracts. His most recent position was with CPC Engineering including secondment as Project Engineering Manager for Syrah's Balama project. Black Rock's Study Manager for Mahenge since 2018.



Paul Sims, CFO: A highly credentialled finance resources executive with over 25 years of executive experience in the resources industry, spanning both commercial and financial roles at BHP, Western Mining Corp, Minara Resources and Karara Mining. Mr Sims has extensive experience in debt finance, project management and cost control. He has a Bachelor of Business degree from Curtin University and is a Fellow of CPA Australia.



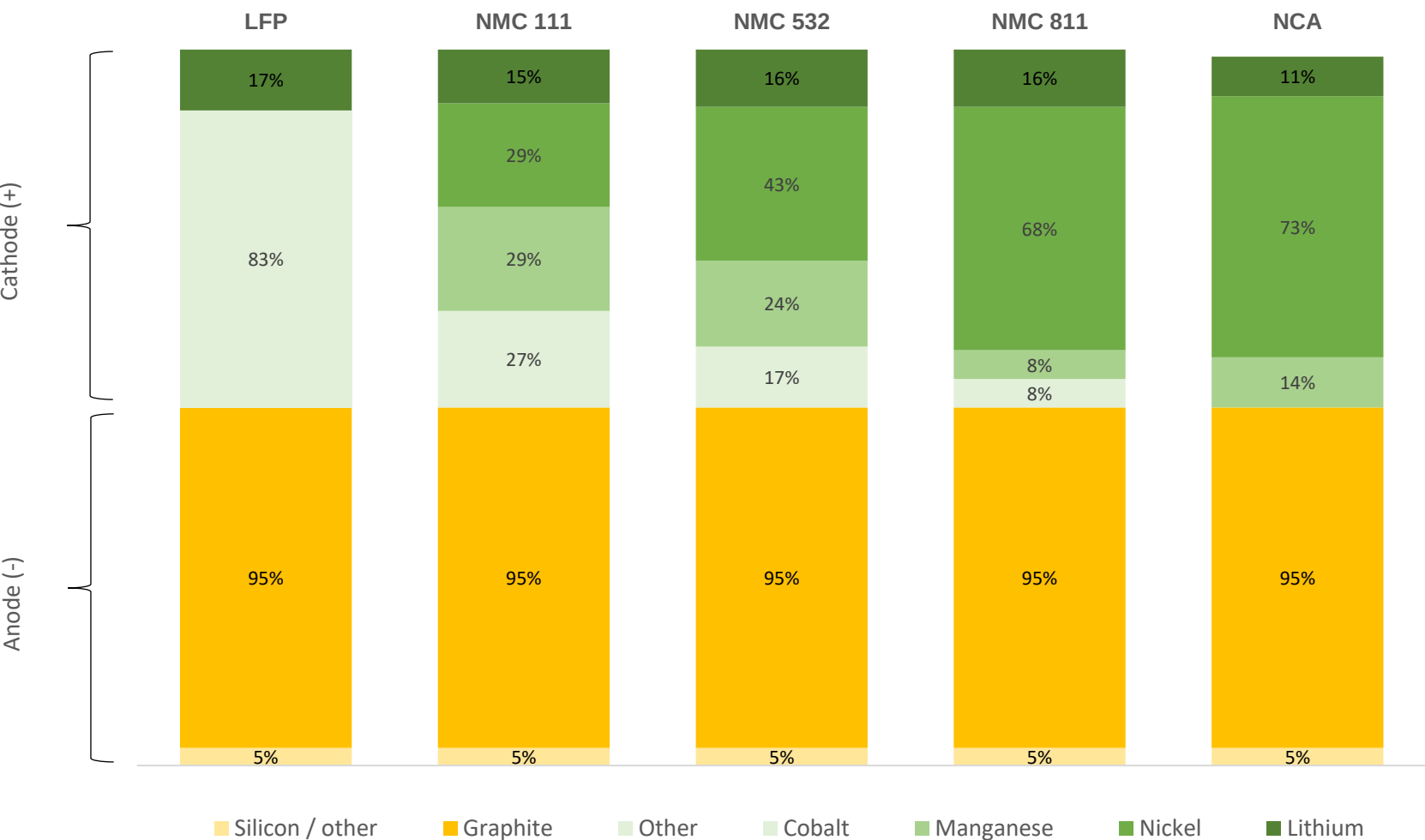
Rae Wyatt, Chief People and Sustainability Officer: Experienced HR professional with 15 years experience in the resources industry, specialising in project development and stakeholder engagement with communities. Ms Wyatt has most recently held senior roles at Clean TeQ (Sunrise Metals), Gold Road and Macmahons. She has a degree in commerce from Curtin University in HR and Industrial Relations and is a graduate of AICD.

Graphite in batteries

Li-ion batteries typically contain ~7-10x more graphite than lithium.

LFP batteries expected to be 50% of global passenger EV sales within 2 years*

Graphite is the dominant anode material, regardless of battery chemistry

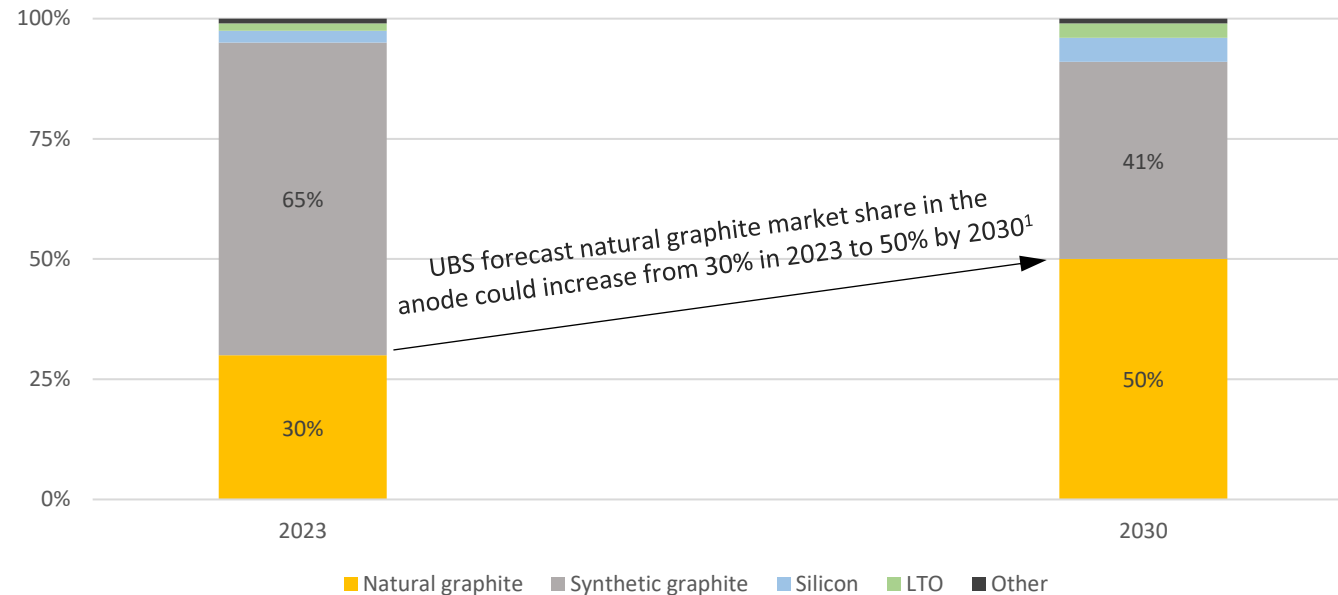


Source: Pallinghurst-Traxys battery analysis. %s represent the proportions of cathode and anode in each battery respectively. NCA batteries contain 2% aluminium (not shown)
*Bloomberg New Energy Finance Report, 12 June 2024:
<https://about.bnef.com/blog/electric-vehicle-sales-headed-for-record-year-but-growth-slowdown-puts-climate-targets-at-risk-according-to-bloombergnef-report/>

More natural graphite in batteries

The use of natural graphite in batteries has potential to grow from 30% of the anode to 50% by 2030

Growing importance of natural graphite in batteries



In late Sept 2023, UBS published a research report on natural graphite¹:

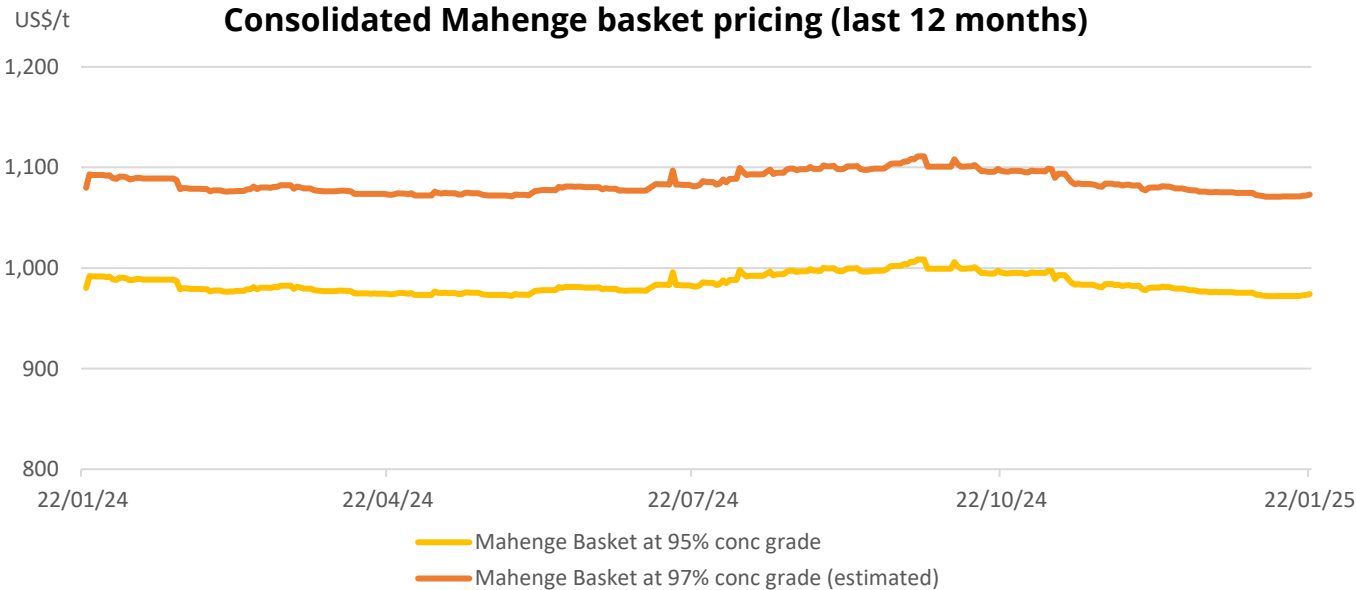
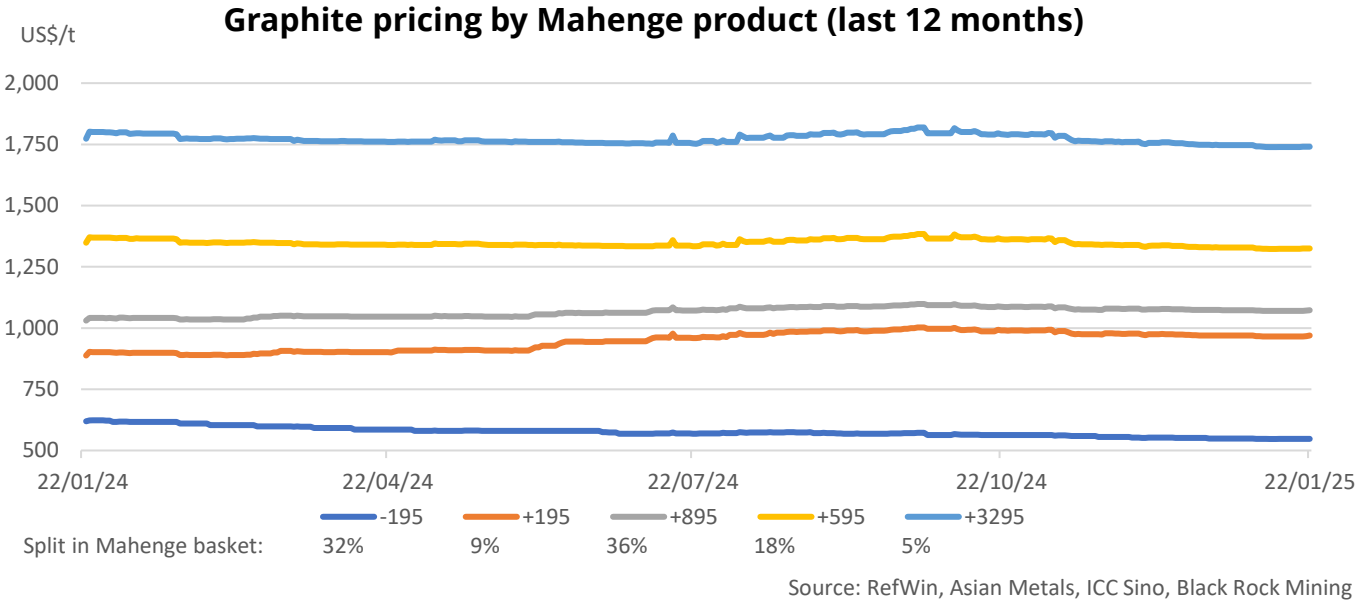
- **Natural graphite looks to be preferred in low-cost lower-carbon profile LFP batteries**
- Natural graphite market share in the anode could increase from 30% today to 50% by 2030
- Forecasting a 6x growth in natural graphite demand by 2030 to 6.3mt

This forecast would require ~5mt of new natural graphite supply by 2030 or around 14 new mines the size of Syrah's Balama mine (based on a nameplate capacity of ~350ktpa)².

Given the significant barriers to entry for new natural graphite supply, Black Rock believes this scenario would likely lead to substantial supply deficits and much higher graphite prices.

Healthy margins at spot prices

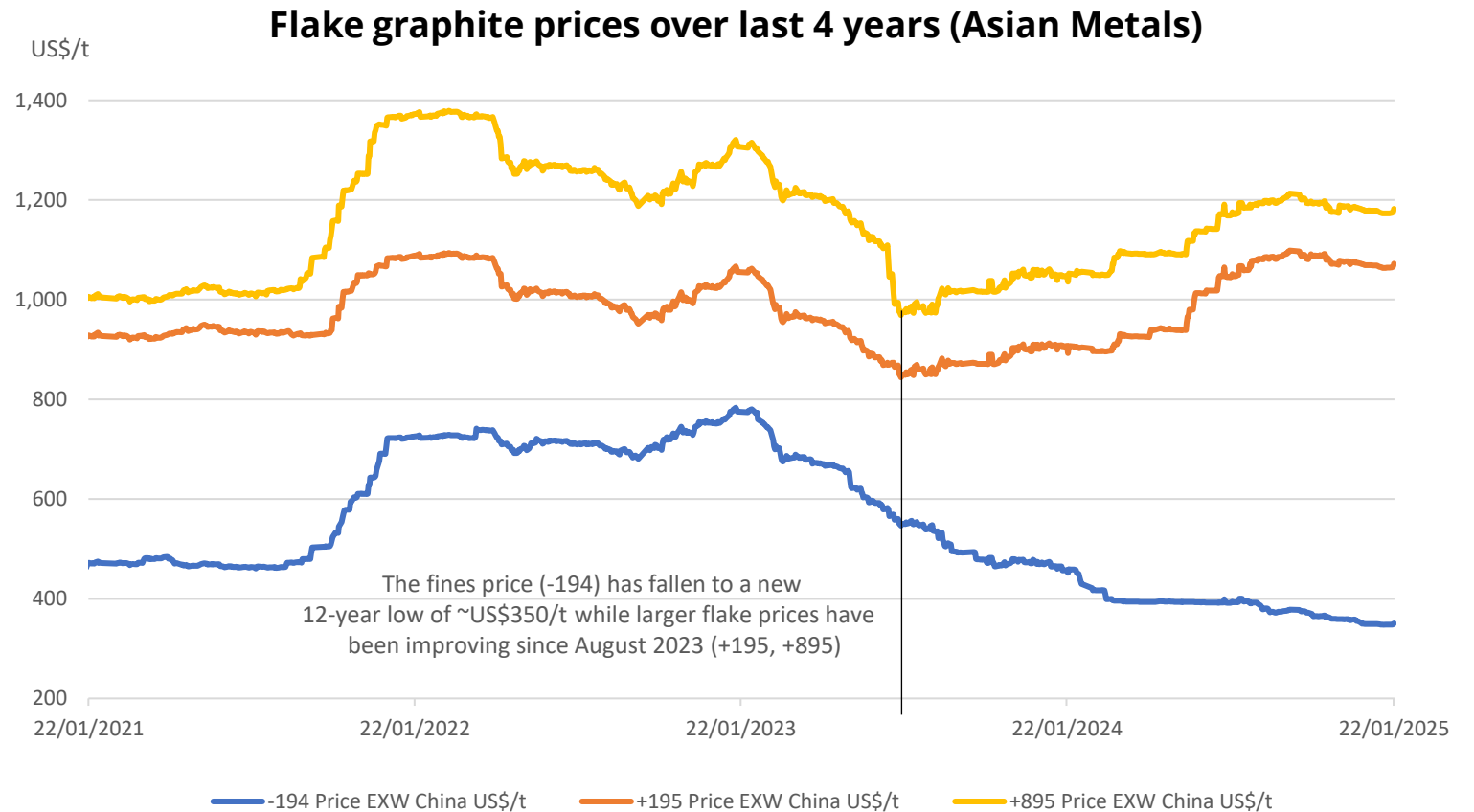
Current graphite prices support healthy potential margins at Mahenge at forecast AISC of US\$518/t



Black Rock sensitivity: 10% increase in basket price = 20% increase in unlevered NPV ⁷

Diversified revenue stream

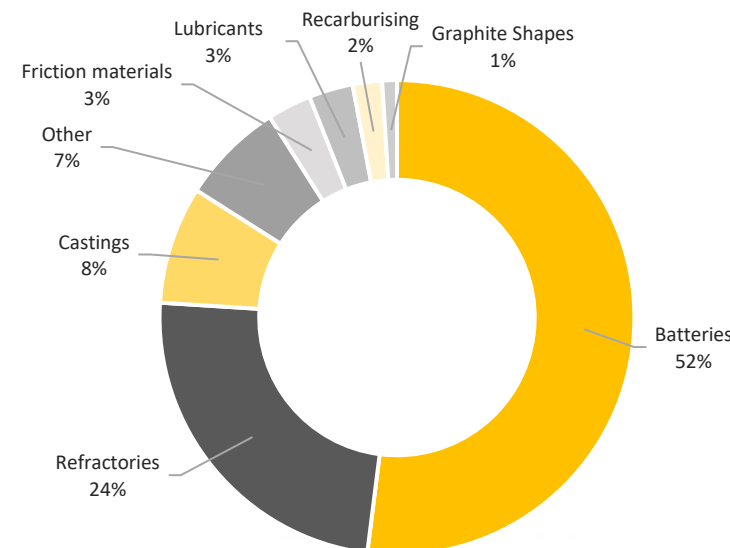
Mahenge basket price has been relatively steady as weaker fines price has been offset by stronger large flake price



Source: Asian Metals

Graphite Uses

Black Rock has a diversified product mix with 60% exposure to the high margin large flake market



SMALL FLAKE (FINES)

- Lithium-Ion Batteries
- Paint & Coatings
- Lubricants
- Pencils



LARGE FLAKE

- Flame Retardants
- Refractories
- Aviation
- Lithium-Ion Batteries



JUMBO FLAKE

- Flame Retardants
- Gaskets & Seals
- Expandable Graphite
- Fuel Cells

Price increases with flake size
→



Source: European Advanced Carbon and Graphite Material Association (ECGA 2024). <https://ecga.net/main-uses-of-graphite/>

A snapshot of the Mahenge Graphite Project

Simple open pit mine development with outstanding forecast returns¹

US\$1.4bn

NPV_{10 nom} post tax, post 16% FC

36%

Post-tax, ungeared IRR

89ktpa

Module 1 production* (1mtpa)

US\$231m

Module 1 capex + power line*

347ktpa

Steady production (4 x 1Mtpa)

95 – 99%+ TGC purity
59% +80 mesh, 41% -80
Concentrate product

US\$1,709/t

Basket graphite price***

US\$518/t

All-In-Sustaining-Cost**

26 years

Initial operating life

¹See Black Rock ASX release dated 10 October 2022, Black Rock completes FEED and eDFS Update. All technical parameters, including in the estimation of Mineral Resources or Ore Reserves, underpinning the estimates continue to apply and have not materially changed. The estimated Ore Reserves and Mineral Resources underpinning the production and financial forecasts were prepared by Competent Persons in accordance with the requirements in Appendix 5A (JORC Code).

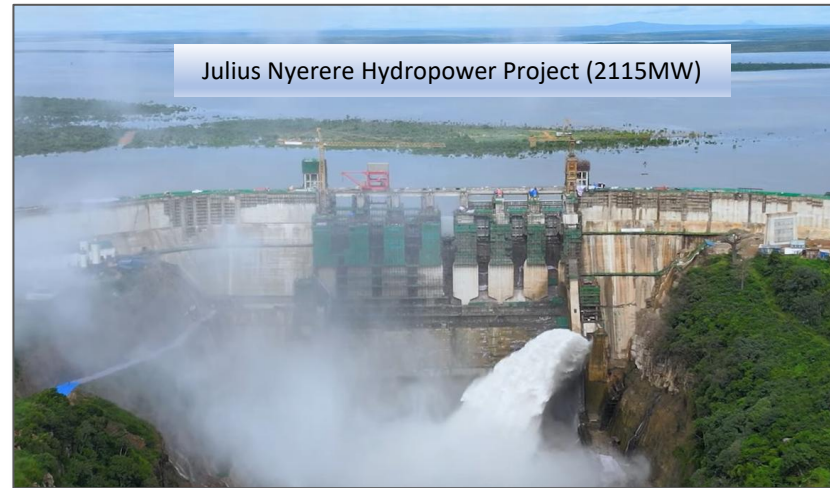
*Includes US\$182m for Module 1 capex + US\$33m for power line + US\$16m for early works & other costs (not included in the eDFS Update). Power line capex plus interest to be recouped over the first 4 years and power costs expected to be ~US8c/kWh. Forecast Capex has been classified as a Class 2 estimate with accuracy of ±10% as defined by AACE. **Average over first 10 years. ***Expert Consensus is the average forecast from Benchmark Mineral Intelligence, Fastmarkets and Wood Mackenzie over the first 10 years.



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Why Mahenge?

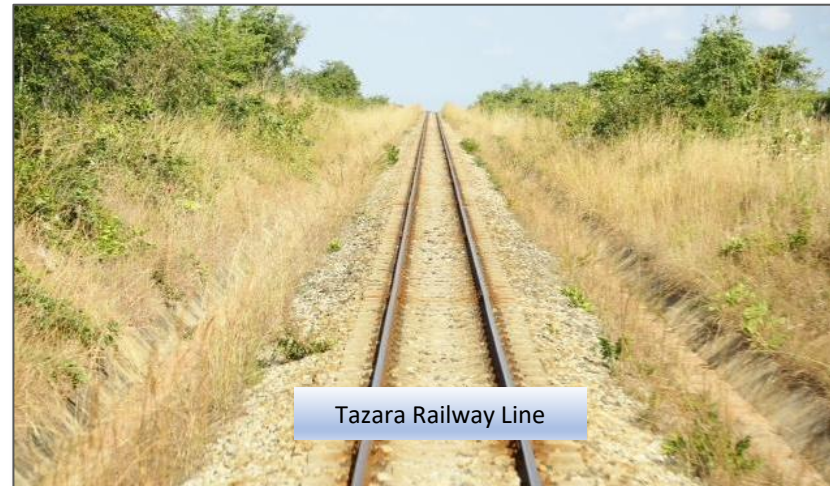
Unique competitive advantages driven by geology and substantial existing infrastructure



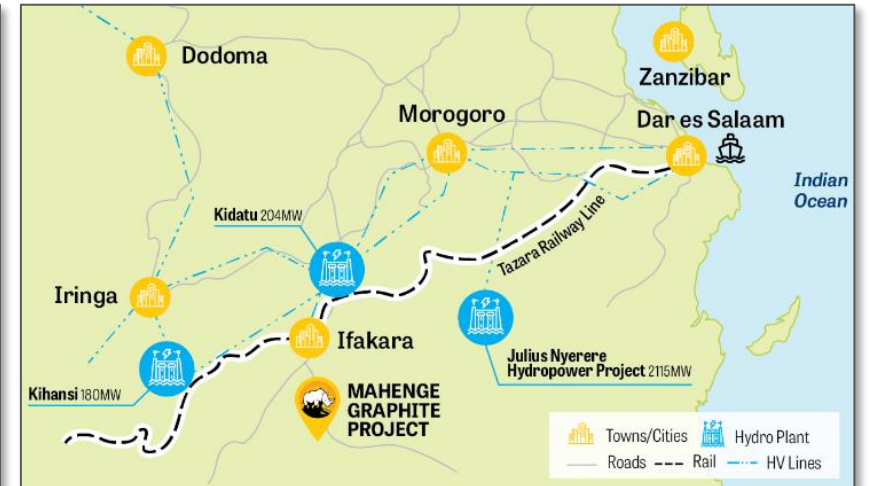
Julius Nyerere Hydropower Project (2115MW)



Large container port in Dar es Salaam



Tazara Railway Line



Geology

- ★ Mahenge's 70.5mt Reserve makes it the 2nd largest graphite Reserve in the world
- ★ Low deleterious impurities and favourable metallurgy means that Mahenge is able to produce up to 99% TGC concentrate purity, solely with conventional flotation processing

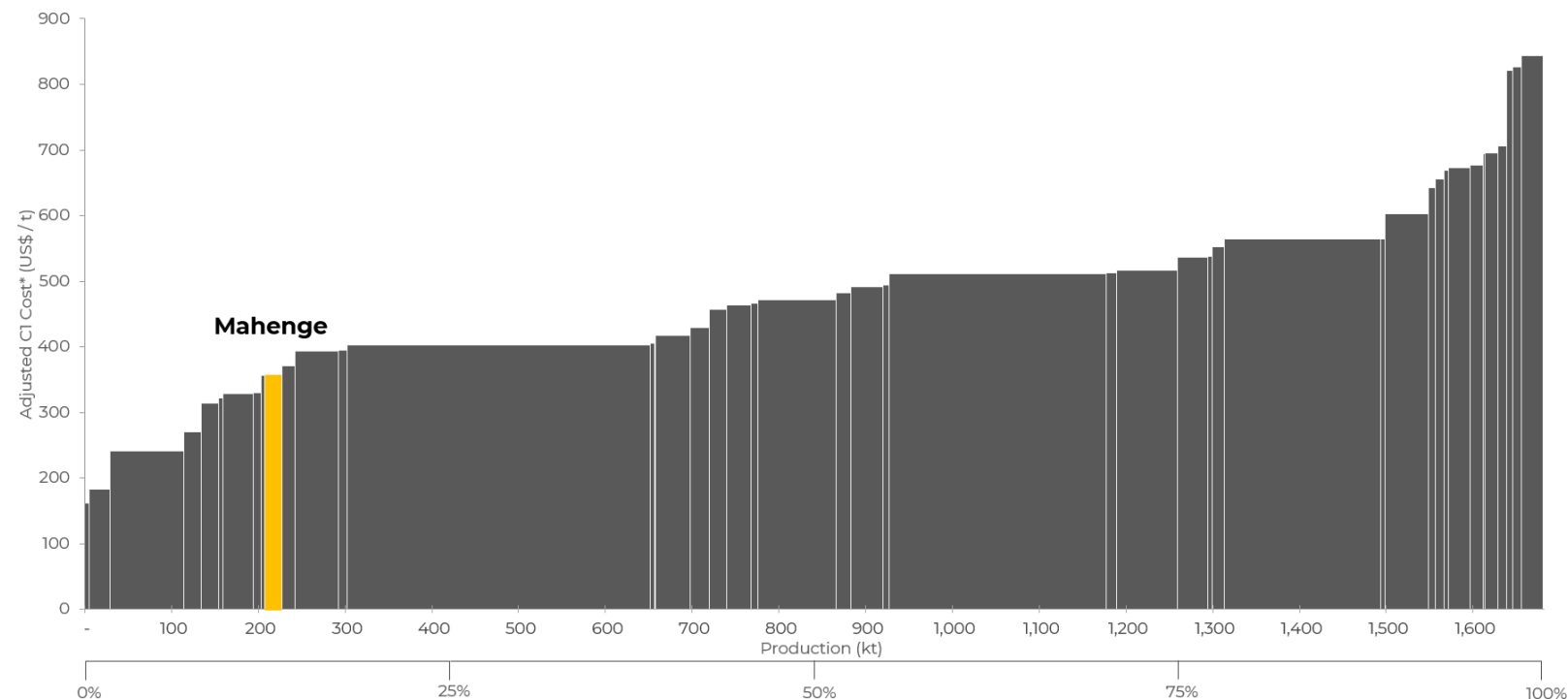
Substantial existing infrastructure

- ★ Access to key infrastructure, hydro-dominated & competitively priced grid power, rail, airstrip, water and dry stack tailings disposal
- ★ Logistics advantages with processing through Dar es Salaam high volume container port

Forecast first quartile costs

First quartile assets are higher margin and more robust through the cycle

2024 Adjusted C1 Cost Curve*



Sources: Benchmark Mineral Intelligence Flake Graphite Report Q2 CY22, Black Rock Mining, Company Data

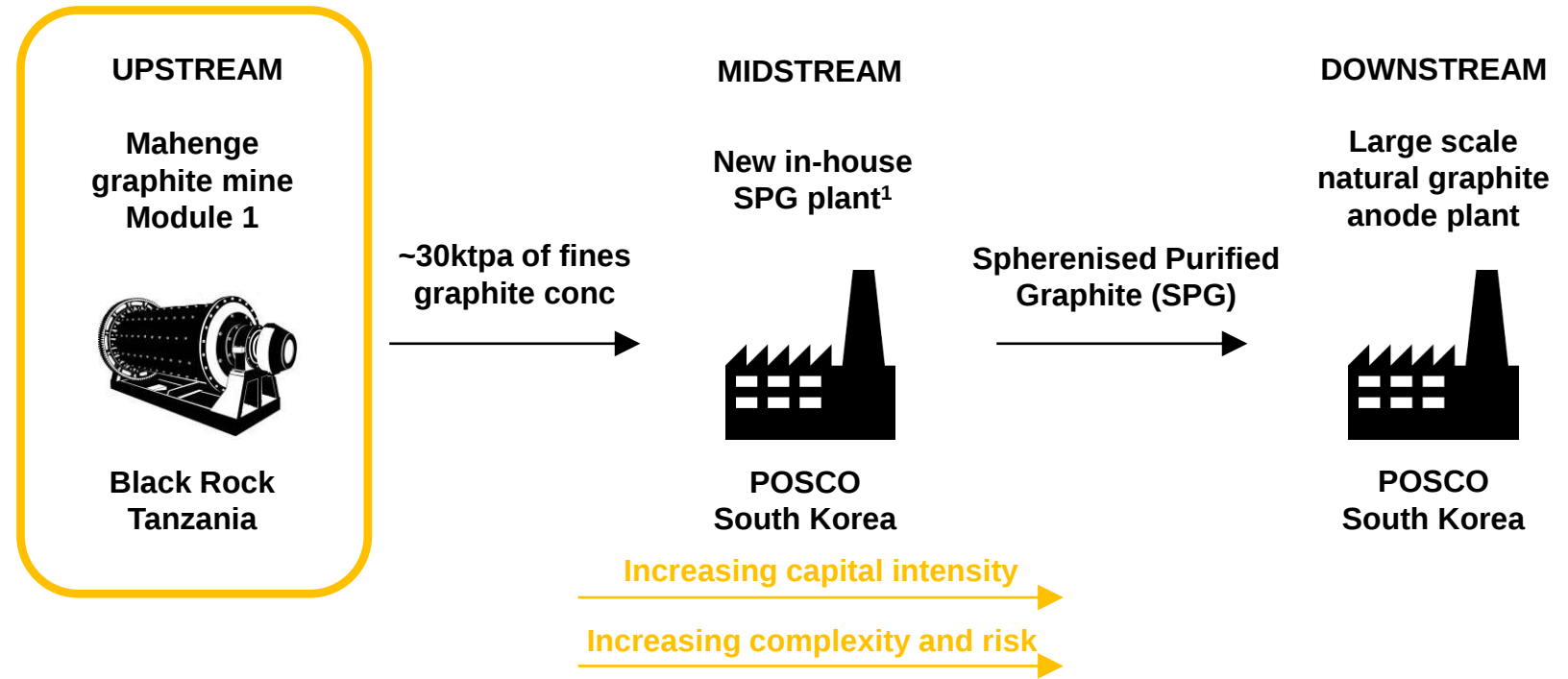
C1 Cash Costs are defined as Cash Costs excluding royalties and sustaining capex.

*C1 Costs adjusted for flake size distribution: Based on forecast pricing for 94-95% in 2024, Mahenge's average price is forecast to be US\$107/t above the peer average due to a higher proportion of large flake. Mahenge's Adjusted C1 Costs of US\$359/t are based on C1 Costs of US\$466/t less the US\$107/t for above average revenue compared to the peer group.

Ignores the benefit of Mahenge's higher purity concentrates of up to 98% which could potentially improve Black Rock's relative position by up to ~US\$40-60/t per 1% above 95% pricing.

A simpler development plan

A lower risk, much lower capex pathway to cashflow than most peers



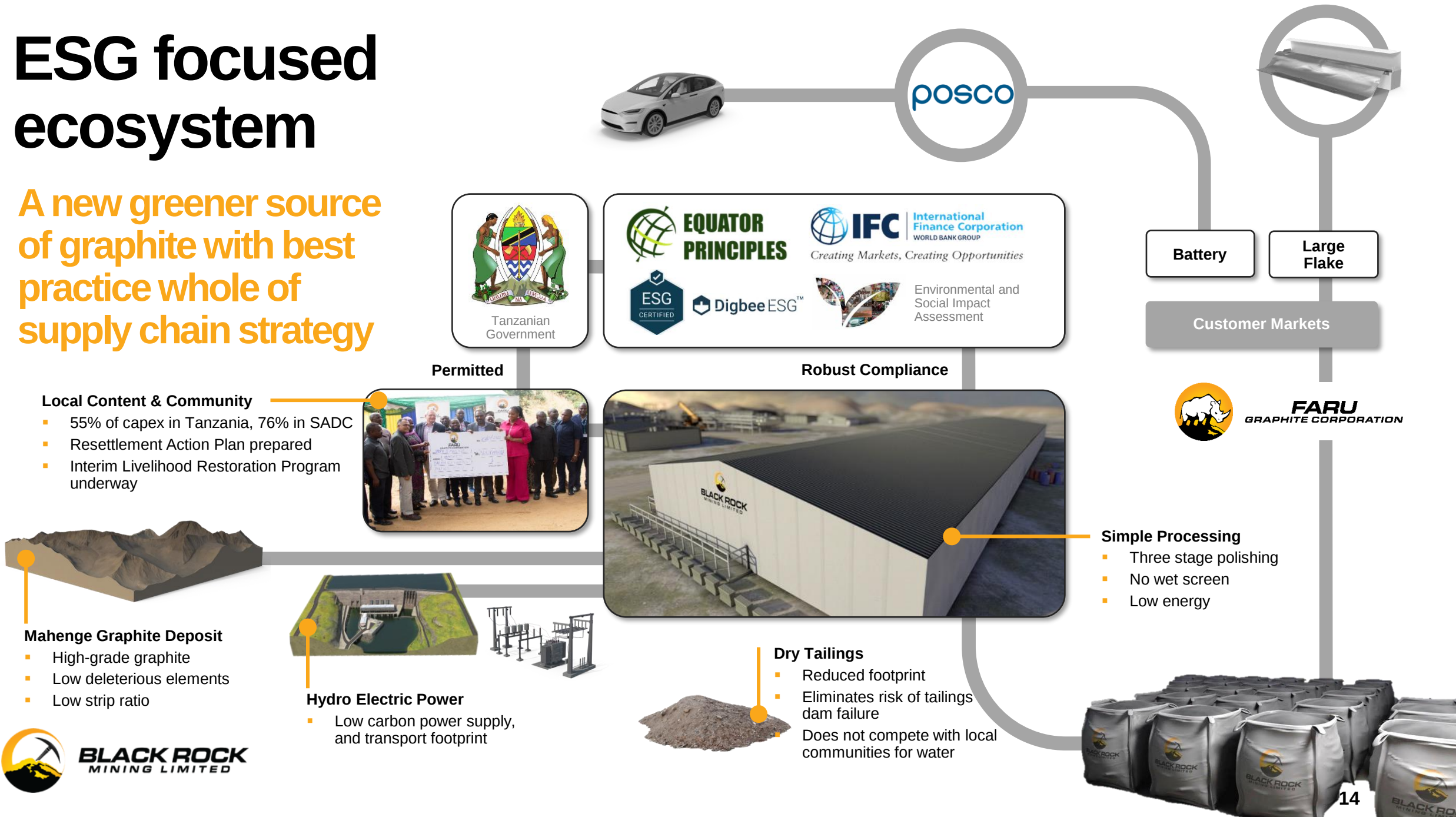
Black Rock initially focused on an UPSTREAM business only. i.e. Focused on the section of the supply chain where it has *competitive advantages*, *proven expertise* and which makes *healthy margins at current prices*.

This approach is strongly differentiated from most peers and Black Rock:

- Does not compete with its customers
- Has much lower capital intensity
- Has much lower complexity and much lower risk

ESG focused ecosystem

A new greener source of graphite with best practice whole of supply chain strategy

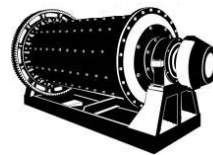


Development timetable

First production expected to be 24 months from FID

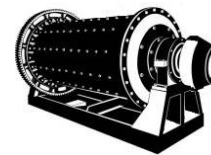
- US\$179m facility agreement in place with DBSA, IDC and CRDB¹:
 - US\$113m Term Debt
 - US\$20m Working Capital Facility
 - US\$20m Cost Overrun Facility
 - US\$26m Bank Guarantee for Mine Closure
- Up to US\$50m from POSCO agreed² (US\$40m equity + US\$10m prepay)
- Targeting first production in CY27, 24 months from FID³

Module 1
1mtpa



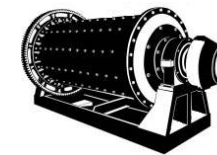
Initial Capex US\$231m⁴
Production 89ktpa+

Module 2
1mtpa



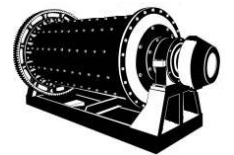
Capex US\$107m
Production 85ktpa+

Module 3
1mtpa



Capex US\$117m
Production 85ktpa+

Module 4
1mtpa



Capex US\$104m
Production 85ktpa+

¹Based on ~7.5-year tenor, interest rate based on SOFR + margin. More detailed debt terms provided in Schedule 1 of ASX release 16 Sept 2024.

²Slide 22 provides more detail on Black Rock's Strategic Alliance with POSCO

³FID is Final Investment Decision. 24 months comprises 4 months of early works + 20 month construction period.

⁴Initial Capex = US\$182m for Module 1 capex + US\$33m for the power line + US\$16m for early works & other costs. More detail on Slide 10.
Initial Capex excludes financing costs, interest during construction, taxes, working capital and lender requirements (DSRA, insurance, etc)

Potential de-risking milestones

Several key share price catalysts expected near term

Several potential de-risking milestones due near term:

- Financing milestones:
 - Signing POSCO offtake agreement + US\$10m prepay agreement ✓
 - POSCO agreement to invest up to US\$40m in Black Rock¹ ✓
 - US\$179m facility agreement signed with DBSA, IDC and CRDB² ✓
- Secure remaining regulatory approvals:
 - Bank of Tanzania approval for new project debt facilities ✓
 - Australian FIRB approval for POSCO's US\$40m investment ✓
 - Tanzanian FCC approval for POSCO's US\$40m investment ✓
- Key near term potential share price catalysts:
 - POSCO to take up it's right to a Black Rock board seat³
 - Potentially bring in partner at project level as a less dilutive option

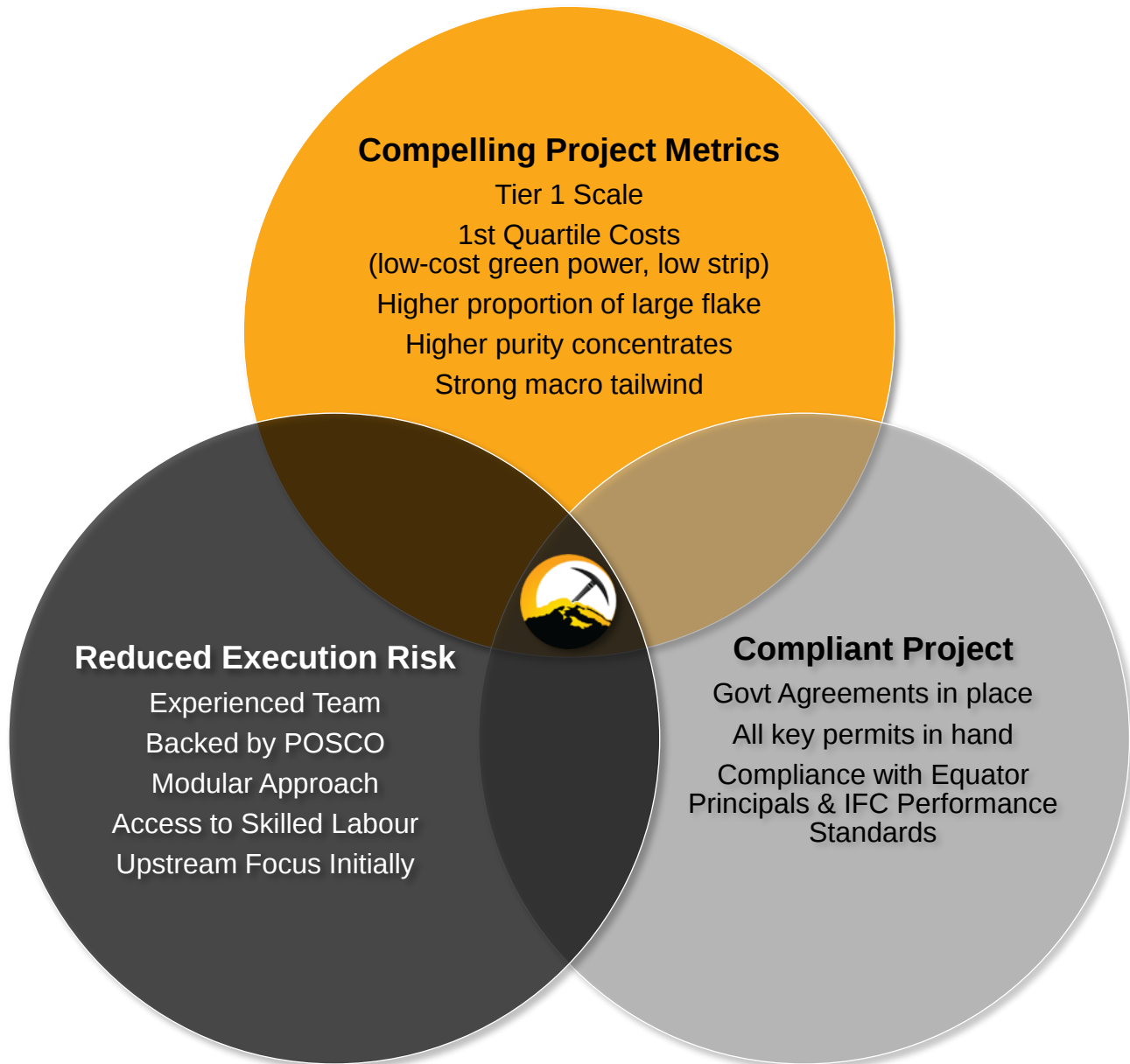
¹See ASX release 3 Sept 2024, POSCO Signs Binding Agreements for US\$40m investment in Black Rock. Subject to regulatory approvals and confirmation all necessary funding to build Module 1 is in place

²DBSA & IDC are both wholly-owned subsidiaries of the South African Govt. See ASX release 16 Sept 2024.

³POSCO has a right to appoint a Black Rock director if it maintains an equity stake in Black Rock of >10% (currently 10.1%).

Black Rock ready to deliver

The significant Tier 1
scale Mahenge
graphite mine into an
undersupplied and
growing market





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Appendix



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Project Milestones

In the last 12 months Black Rock has delivered several critical de-risking project milestones for Mahenge



- US\$40m equity investment in Black Rock signed with POSCO in exchange for offtake rights for Module 2 fines¹
- US\$179m Facilities Agreement signed with DBSA, IDC and CRDB²
- Mahenge recognised by US State Department as a Mineral Securities Partnership backed project
- Mining services contract with TAIFA Mining and Civils Limited (Taifa) for an initial term of 3 years
- Full form offtake agreements executed for large flake graphite concentrate with two key cornerstone customers
- A\$10m in new equity raised from existing and new investors
- Appointment of Ms Ursula Phillips as Non-Executive Director

¹Slide 22 provides more details of Black Rock's Strategic Alliance with POSCO.

²DBSA & IDC are both wholly-owned subsidiaries of the South African Govt. See ASX release 16 Sept 2024.

ESG Milestones

**In the last 12 months
Black Rock has
delivered several
critical de-risking ESG
milestones for
Mahenge**



- Meeting environmental and social standards to satisfy debt approvals based on compliance with Equator Principals and IFC Performance Standards
 - ESIA for Mahenge complete (April 2023) and subsequent studies
 - ESIA for Faru John Rd complete
 - ESIA for Idenke Settlement Area complete
 - Supplementary ESIA for Power Line corridor complete
- All compensation contracts for Project Affected Persons on the SML now complete for Module 1 & Module 2
- Implementation of the Interim Livelihood Restoration Plan including farming value chain training and demonstration crops (7x more yield). New agricultural land opened up.
- Corporate Social Responsibility (CSR) Plan approved by Local Govt Minister and Ulanga District Council for CY24
- Signing MOU for the Idenke Settlement Area with Ulanga District Council
- Stakeholder Engagement in the region from village to District Council
- Completed first Annual Sustainability Report

Strategic Alliance with POSCO

Black Rock has a strong and growing relationship with POSCO

- POSCO is Black Rock's major shareholder holding a 10.1% stake
- POSCO is Black Rock's cornerstone offtake partner:
 - Module 1:
 - Binding offtake agreement for fines¹ (32% of volume)
 - MOU for 6ktpa of large flake² (7% of volume)
 - Module 2:
 - Binding offtake agreement for fines³ (32% of volume)
 - Marketing agreement for large flake
- POSCO is providing up to US\$50m in development finance for Module 1:
 - US\$10m binding prepayment¹
 - Up to US\$40m equity investment in Black Rock agreed³
- Exploring other opportunities to collaborate:
 - Also exploring other opportunities to develop an IRA-compliant anode supply chain

¹Source: [29 May 2023, Black Rock Signs Binding Offtake and US\\$10M Prepayment Agreements With POSCO](#)

²Source: [23 May 2023, Black Rock Expands Offtake Partnership with POSCO](#)

³Source: See ASX release 3 Sept 2024, POSCO Signs Binding Agreements for US\$40m investment in Black Rock. Subject to shareholder approval, regulatory approvals and confirmation all necessary funding to build Module 1 is in place. POSCO's US\$40m investment is subject to ASX maximum holding of 19.99% in Black Rock.

Tanzania: An improving jurisdiction for investment



- Moody's recently upgraded Tanzania to a B2 Positive due to reduced political risk and structural reform agenda¹
- Equinor/Shell/Exxon Mobil recently struck a deal for the development of an LNG terminal in Tanzania expected to cost tens of billions of dollars²
- BHP plans to invest US\$100m in the Kabanga nickel project
- Since Tanzania launched the Development Vision in 2020 to attract investment, the mining sector's contribution to GDP has grown from 3.5% to 9.7%³
- Tanzania has now agreed 11 framework agreements with foreign mining companies and is negotiating an additional 5 agreements⁴

¹Source: <https://www.thecitizen.co.tz/tanzania/news/national/moody-s-gives-tanzania-favourable-credit-rating--4206196>

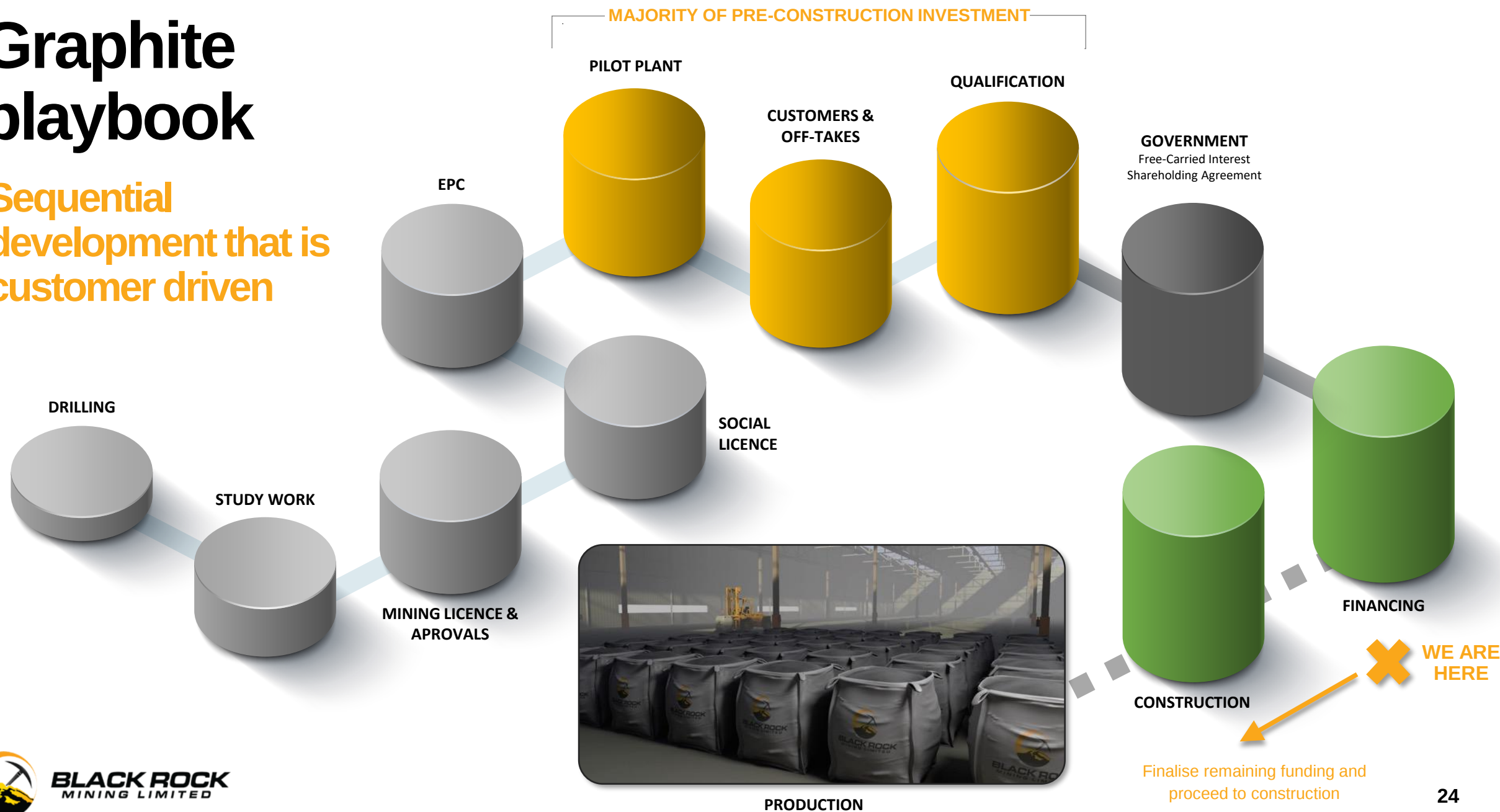
²Source: <https://www.reuters.com/business/energy/equinor-shell-exxon-agree-lng-project-with-tanzania-2023-05-19/>

³Source: <https://www.thecitizen.co.tz/tanzania/news/national/how-government-plans-to-boost-mining-s-gdp-contribution-to-10-percent-before-2025--4245214>

⁴Source: <https://dailynews.co.tz/why-mining-investment-forum-crucial-for-tz/>

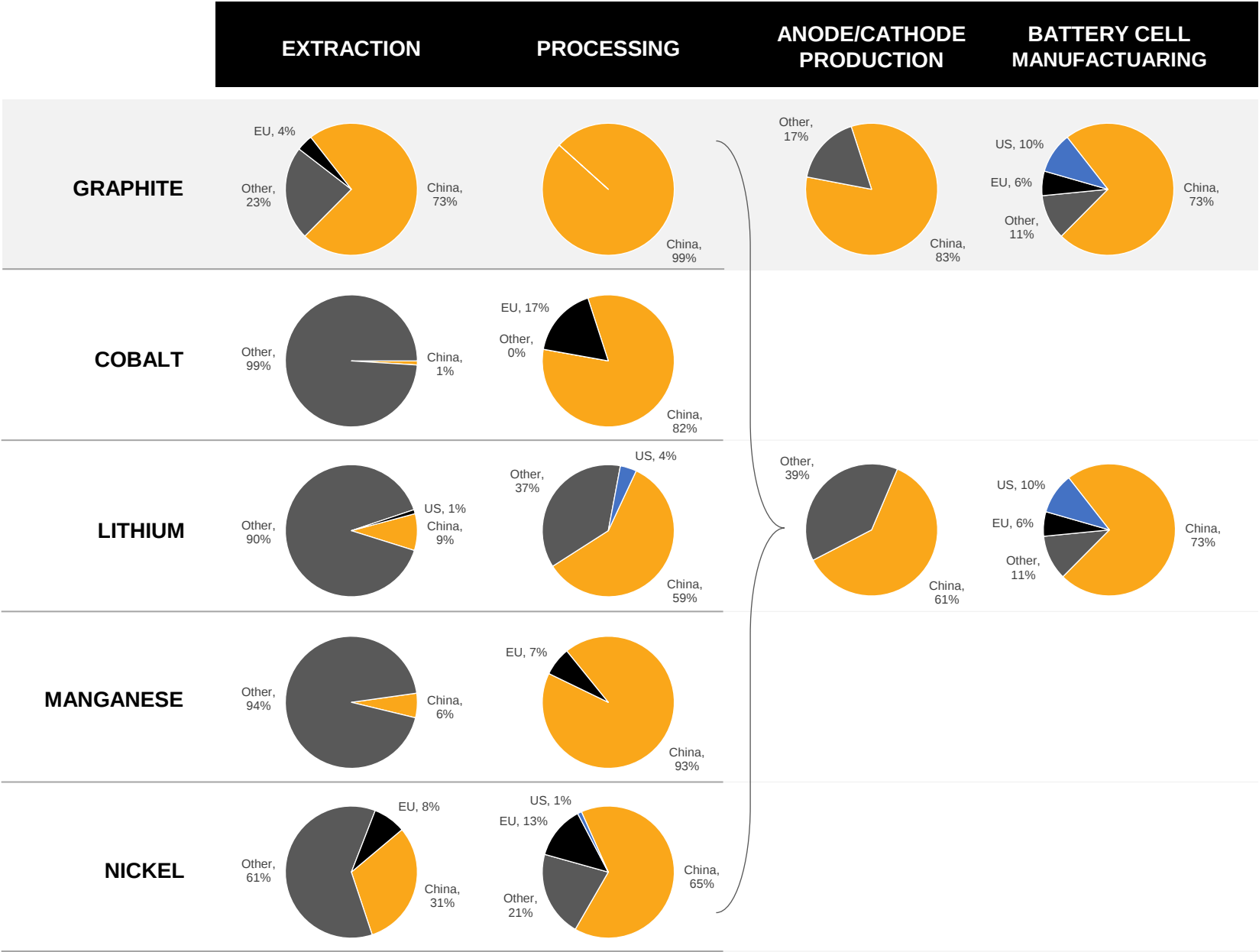
Graphite playbook

Sequential
development that is
customer driven



Li-ion battery raw materials supply chain by country

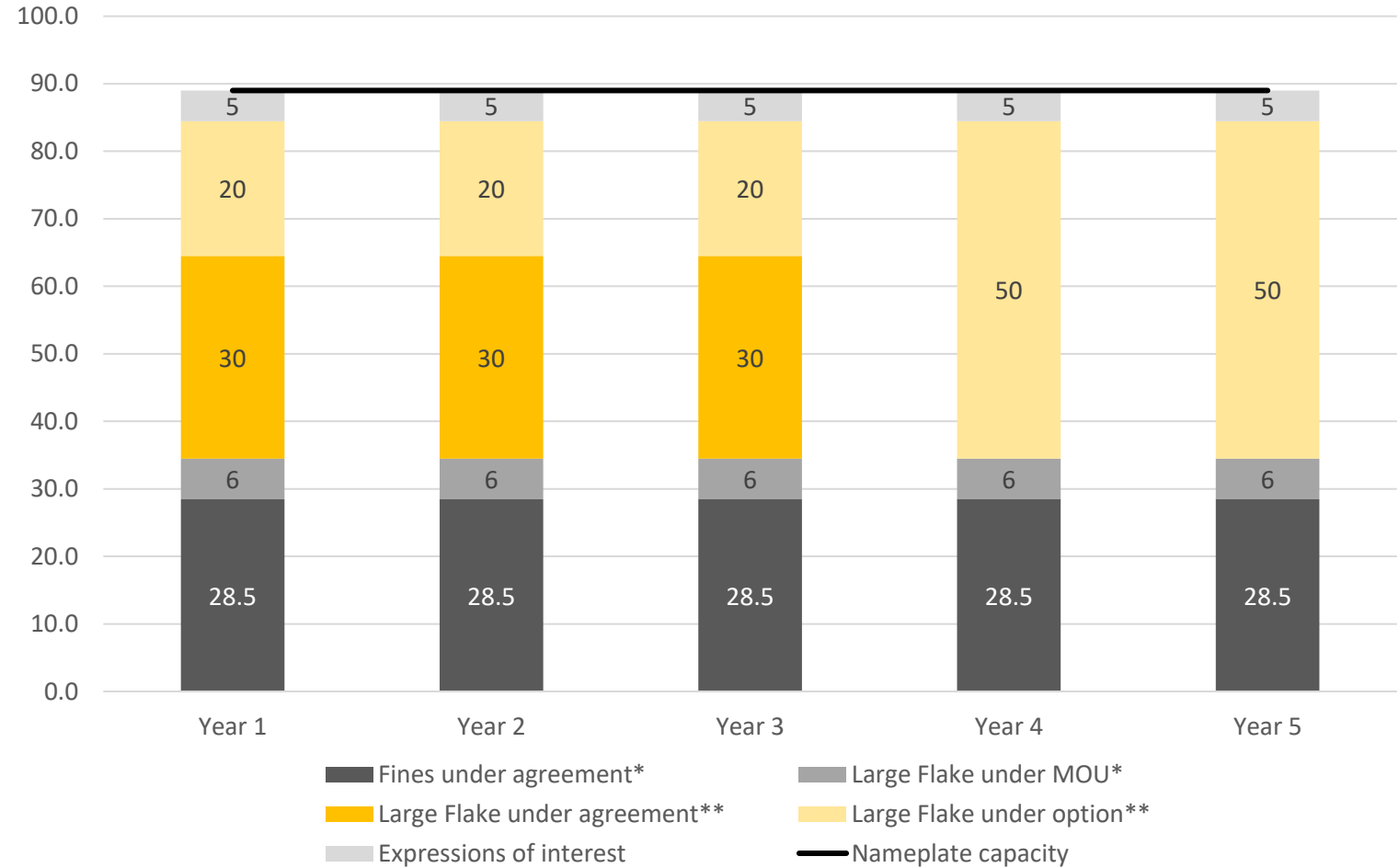
Graphite supply chain for batteries is more dependent on China than any other material



Offtake agreements

~95% of Mahenge's Module 1 production is under binding offtake, option or MOU

Mahenge Offtake for Module 1 (89ktpa)



*With POSCO. ** With Muhui International Trade (Dalian) Co. Ltd (Muhui) & Qingdao Yujinxi New Material Co. Ltd (Qinqdao)