Black Rock Mining
Mahenge Graphite Mine

Simply Better Graphite: Investor Update

Paydirt Battery Materials Conference, Perth

March 2023

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The information in this presentation that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes (Consultant with Trepanier Pty Ltd) and Mr Prisin Moshi (Senior Geologist with Black Rock Mining Limited). Mr Barnes and Mr Moshi are members of the Australian Institute of Mining and Metallurgy and have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

The information in this presentation that relates to Ore Reserves is based on and fairly represents information compiled by Mr Beng Ko, under the direction of Mr John de Vries. Mesrrs de Vries and Ko are both employees of Black Rock Mining and members of the Australasian Institute of Mining and Metallurgy. Mr de Vries holds options in the company as part of his total remuneration package. Mesrrs de Vries and Ko has sufficient experience in Ore Reserve estimation relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Mineral Resources and Ore Reserves”.

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Black Rock and the Mahenge Graphite Mine

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Black Rock at a glance

Premium graphite player

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Developing the Mahenge graphite project in Tanzania:
- Tier 1 scale (2nd largest reserve globally)
- First quartile on the global cost curve (see slide 12)

Backed by largest ex-China anode producer POSCO:
- Strategic Alliance: BKT's major shareholder
- LOM offtake partner for fines for Module 1
- Providing US$10m prepay (payment to come)
- Provides customer validation (after years of testing)

All key Govt agreements and permits in place

Debt process well advanced
- Independent Expert reports complete, site visits complete
- Aiming for credit-approved Term Sheets in Q2 CY23

Substantial upside potential if BKT team can execute:
- Mahenge NPV_{10} US$1.4bn (A$2.1bn)[1]
- Substantial graphite deficits predicted near-term

[1]Project metrics updated October 2022. NPV post-tax, post deducting Govt 16% free carry.
Additional project disclosures provided on Slide 11

Capital structure	
ASX ticker	BKT
Share price (16 March 2023)	$0.12
Shares on issue	983.0 M
Options and performance rights	61.9 M
Market capitalisation (undiluted) (@$0.12c)	A$118 M
Cash (31 Dec 2022)	A$11.0 M
Debt (31 Dec 2022)	Nil

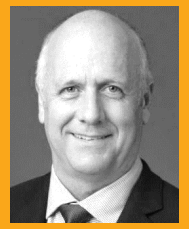
Major shareholders	
POSCO Group	13%
Copulos Group	12%

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 35 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.

Management

Steuart 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. Steuart 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 22 years experience in mining project development in Africa and Australia across a broad range of 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. BKT'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.

Greg Wheeler, CCO: An experienced finance and commercial manager who started his career within PwC and spent 10 years with ship manufacturer Austal, where he was responsible for managing the Finance, Accounting, IT and HR functions of the global business. Mr Wheeler then joined global trading and shipping player Wellard during a period of strong growth, including public listing and was responsible for financial systems and processes.

Rae Wyatt, GM People, Culture & Sustainability: 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.

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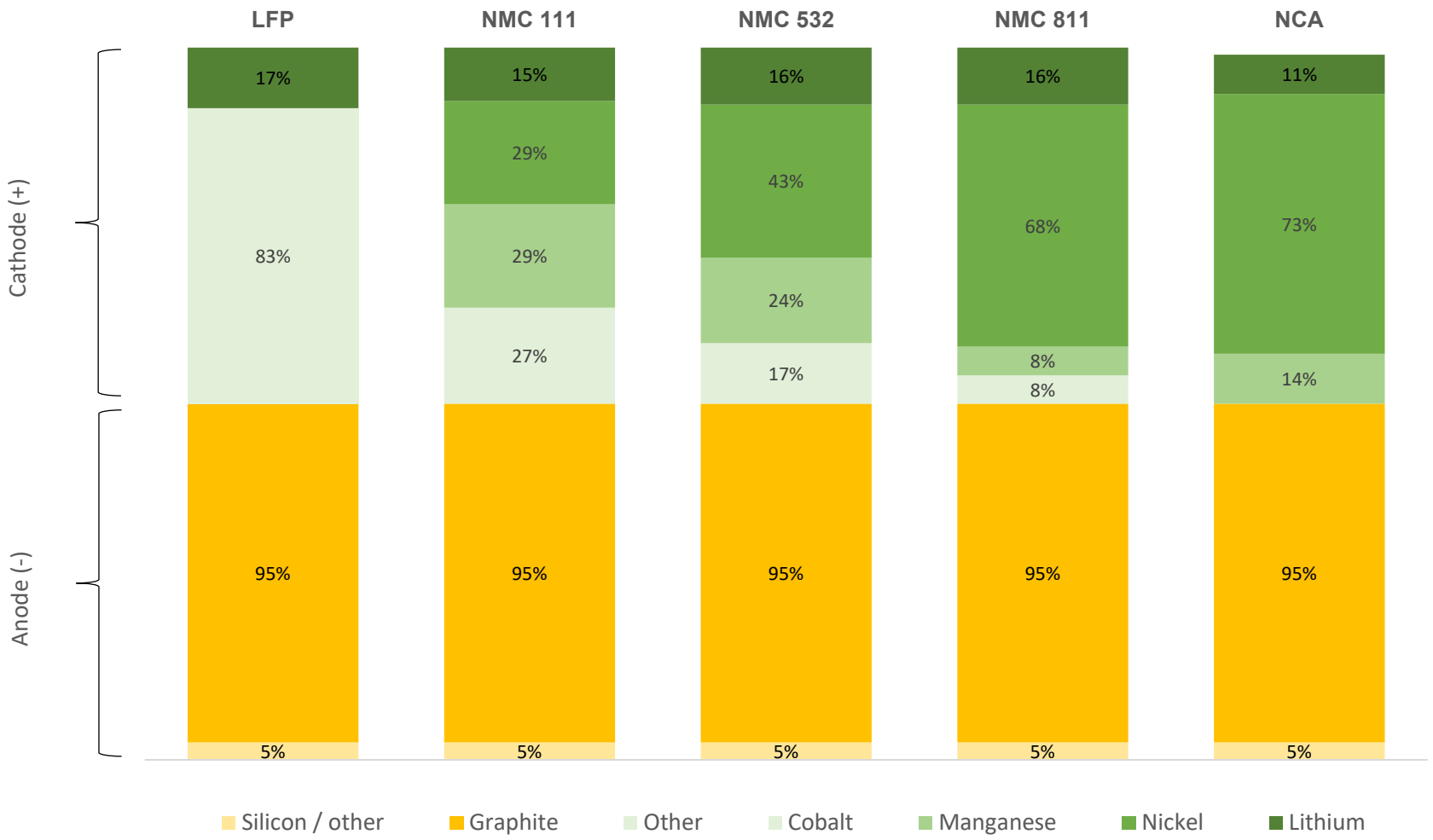
Graphite in batteries

There is more graphite in Li-ion batteries by volume than any other material, regardless of battery chemistry.

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

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)

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Natural graphite increasing in batteries

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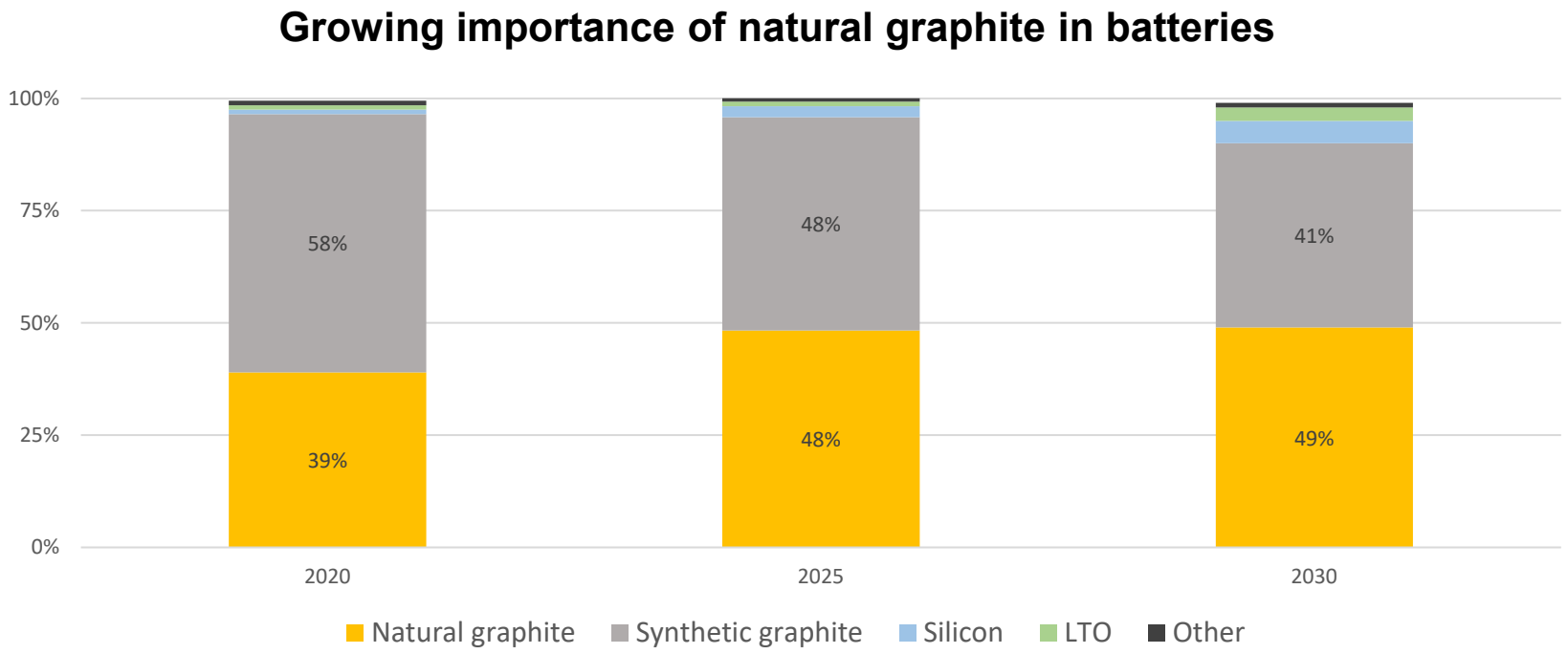
The use of natural graphite in batteries has been growing and is expected to surpass synthetic graphite in 2025.



Demand for LIBs	kt	kt	kt
Synthetic graphite:	179	625	1,438
Natural graphite	182	1,079	2,805

- Natural graphite is less energy intensive to produce, much less expensive and provides greater energy density than synthetic graphite
- Tesla/Panasonic already uses 50/50 natural graphite/synthetic graphite and the “in-development” 4680 battery is expected to comprise 55-60% natural graphite / 40-45% synthetic graphite

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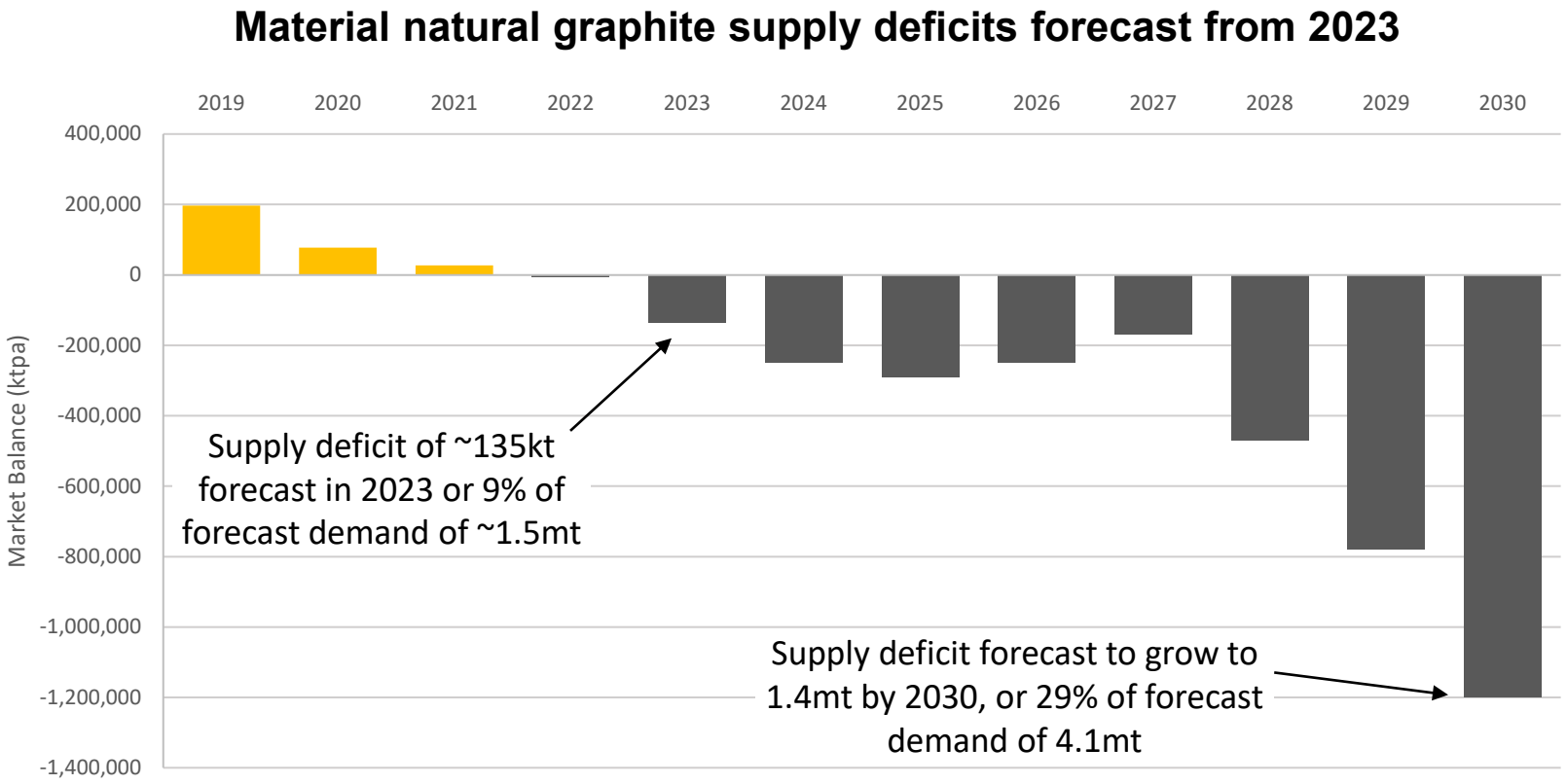
Sources: Public releases, Benchmark Mineral Intelligence, BMO, Tesla, Black Rock Mining

Strong outlook for natural graphite

Benchmark forecasting material natural graphite supply deficit in 2023



Strong demand driven by:

- Strong uptake of electric vehicles and for decarbonisation
- Natural graphite expected to exceed synthetic graphite in batteries by 2025 (vs. historic split of 60/40 SG/NG)
- Another strong demand segment is graphite foils (requires large flake graphite)

Constrained supply due to:

- Qualification requirement can add several years to development of mines
- Project debt tends to be more difficult for graphite developers due to inability to hedge graphite and dominance of China in downstream processing of graphite

Sources: Public releases, Benchmark Mineral Intelligence Q4 CY22, Black Rock Mining

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Strong outlook for natural graphite

Expert Consensus pricing appears conservative given the magnitude of the forecast supply deficits

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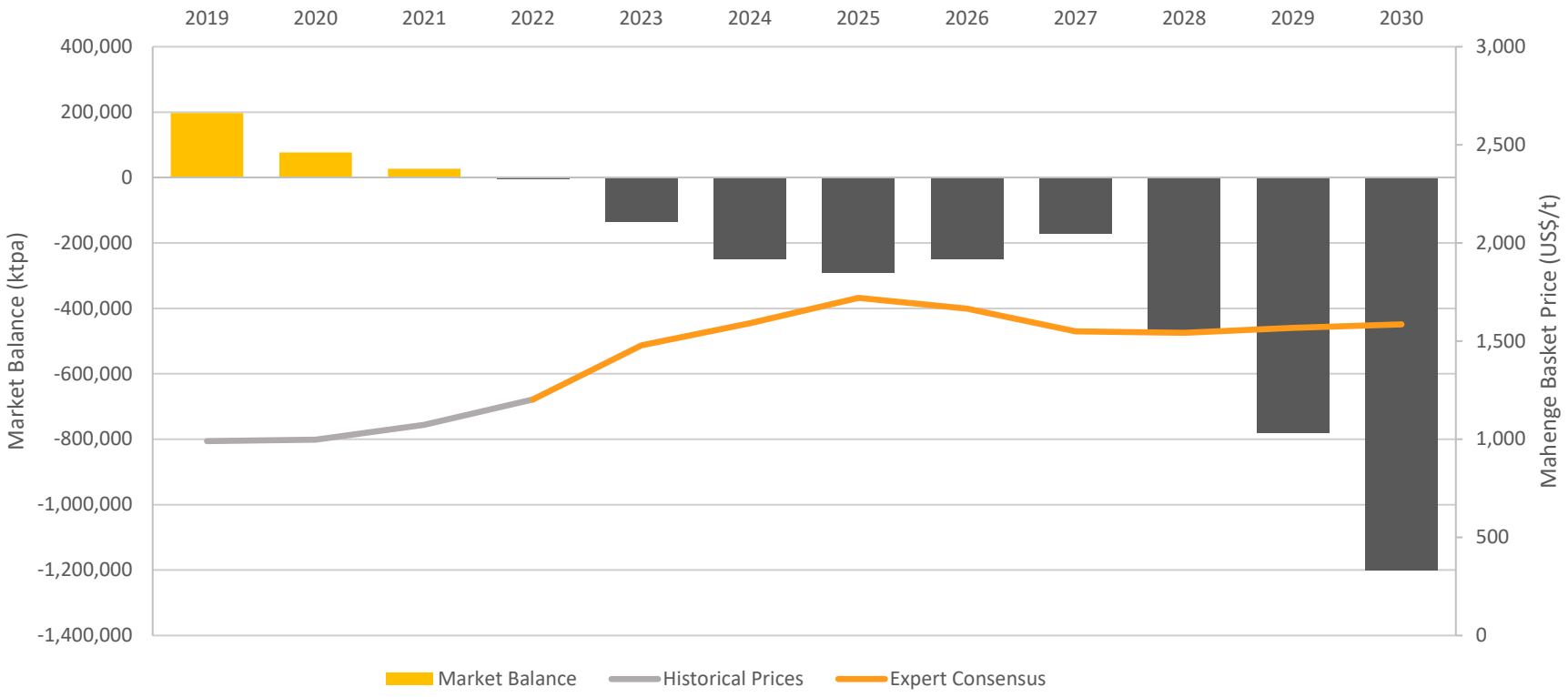
Material natural graphite supply deficits forecast from 2023



		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Expert Consensus - 97% conc grade	US$/t	1,203*	1,479	1,592	1,721	1,665	1,550	1,542	1,568	1,585	1,611	1,643	1,643
Year on year change	%		23%	8%	8%	-3%	-7%	-1%	2%	1%	2%	2%	0%

Sources: Public releases, Benchmark Mineral Intelligence, Black Rock Mining, Asian Metals, ICC Sino, RefWin

Note: Expert Consensus comprises average graphite forecast prices provided by Benchmark Mineral Intelligence, Fastmarkets and Wood Mackenzie. Historic prices for 97% conc have been estimated. *Estimate based on ~12month average prices to end Sept 2022

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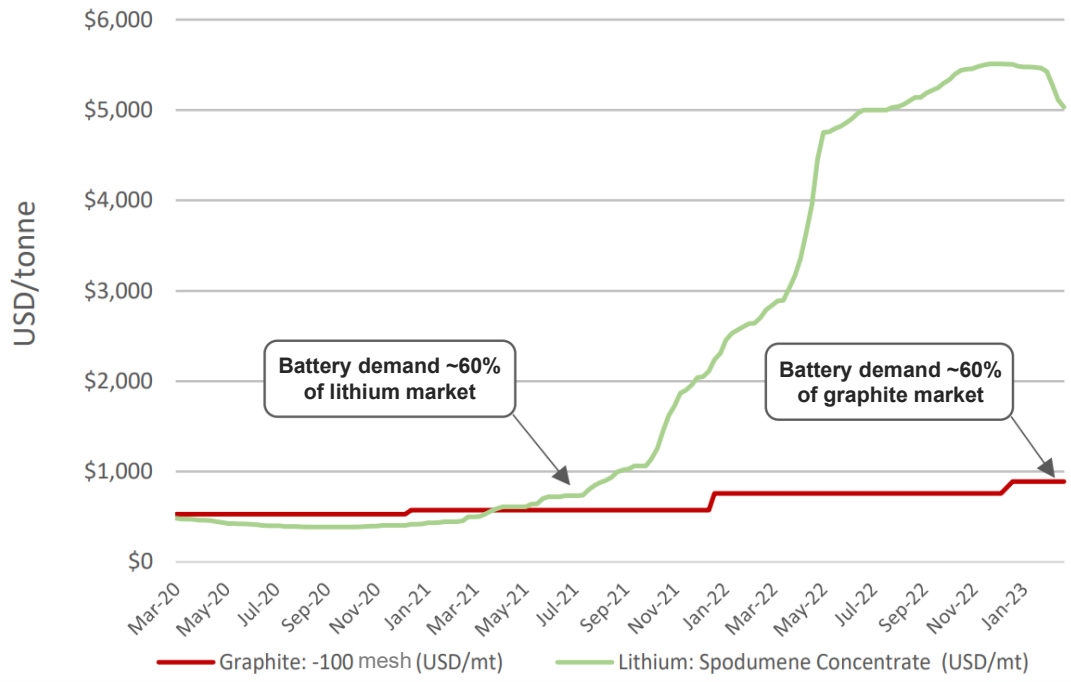
Battery demand for graphite at a tipping point?

Battery demand for graphite expected to hit ~60% in 2023

Could battery demand start to drive graphite pricing from 2023?



		2019	2020	2021	2022	2023(f)
Lithium	Battery % of total market	47%	55%	65%	70%	~80%
	Market Size	361kt	483kt	586kt	699kt	803kt
Graphite	Battery % of total market	26%	32%	43%	55%	~63%
	Market Size	754kt	802kt	990kt	1,261kt	1,575kt

Batteries Non-Batteries

Jan 2019
Syrah commissions ~350ktpa Balama graphite mine in ~750ktpa market

2021
Battery demand accounts for ~60% of the lithium market

2023
Battery demand accounts for ~60% of the graphite market

Source: MST Financial, Benchmark Mineral Intelligence, Black Rock Mining

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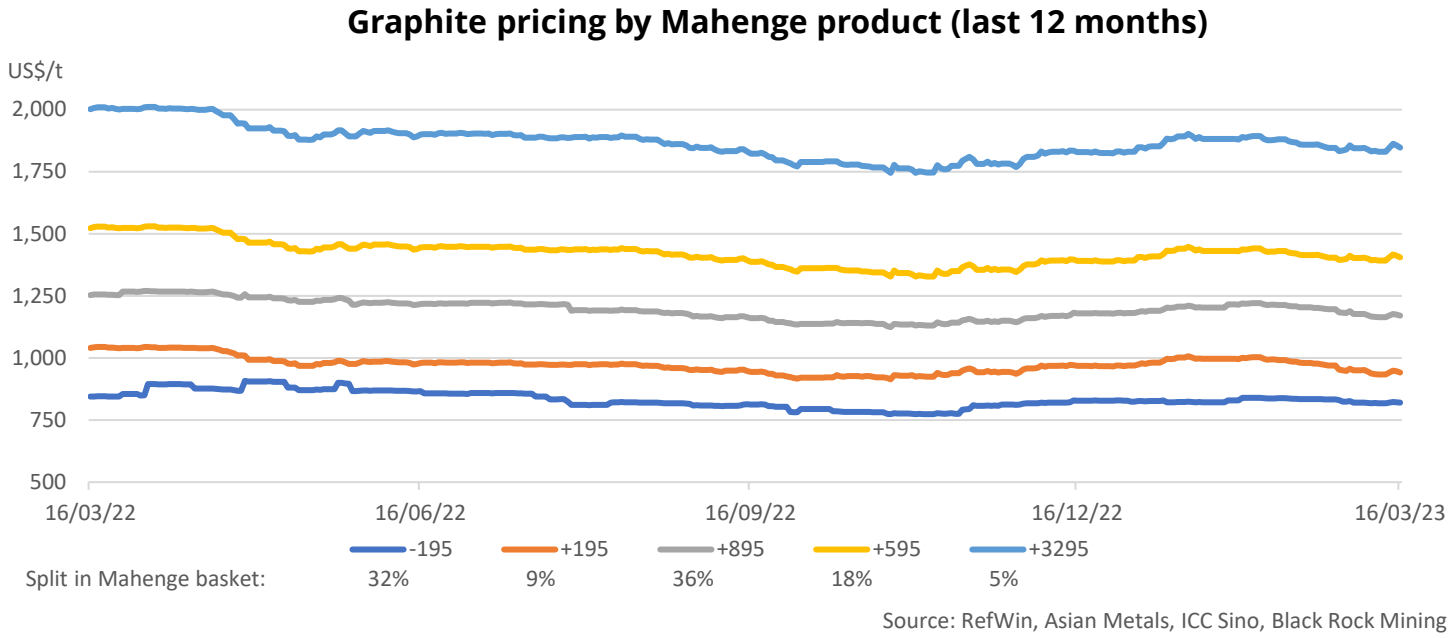
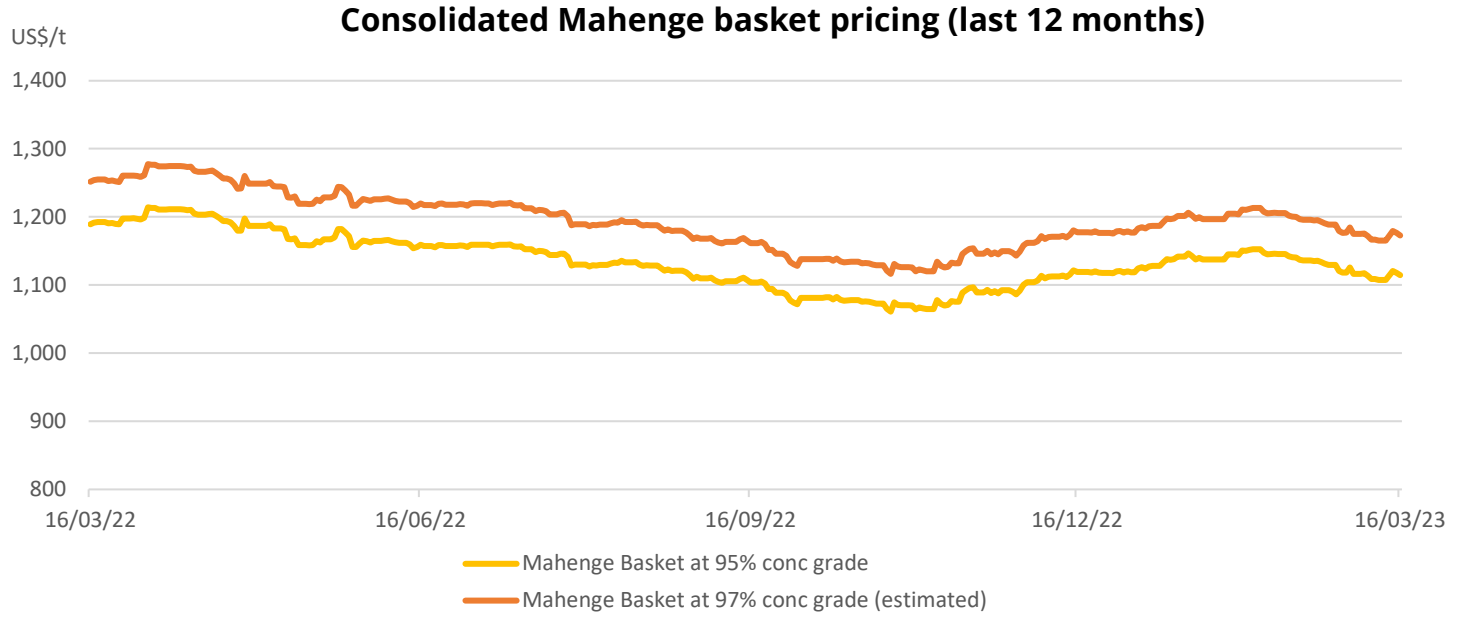
Robust graphite prices

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



Source: RefWin, Asian Metals, ICC Sino, Black Rock Mining



Source: RefWin, Asian Metals, ICC Sino, Black Rock Mining

BKT sensitivity: 10% increase in basket price = 20% increase in unlevered NPV

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A snapshot of the Mahenge Graphite Project

Simple open pit mine development with outstanding forecast returns[1]

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US$1.4B
$NPV_{10\ nom}$ post tax, post 16% FC

36%
Post-tax, ungeared IRR

89ktpa
Module 1 production* (1Mtpa)

US$182M
Module 1 development capex**

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

[1]See 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).
*Average over first 10 years. **Forecast Capex has been classified as a Class 3 estimate with accuracy of ±10% as defined by AACE International. Excludes US$33m to bring the power line forward for grid power from year 1. Black Rock is exploring options to fund the power line externally.
***Expert Consensus based on the average forecast from Benchmark Mineral Intelligence, Fastmarkets and Wood Mackenzie over the first 10 years. See Appendix.

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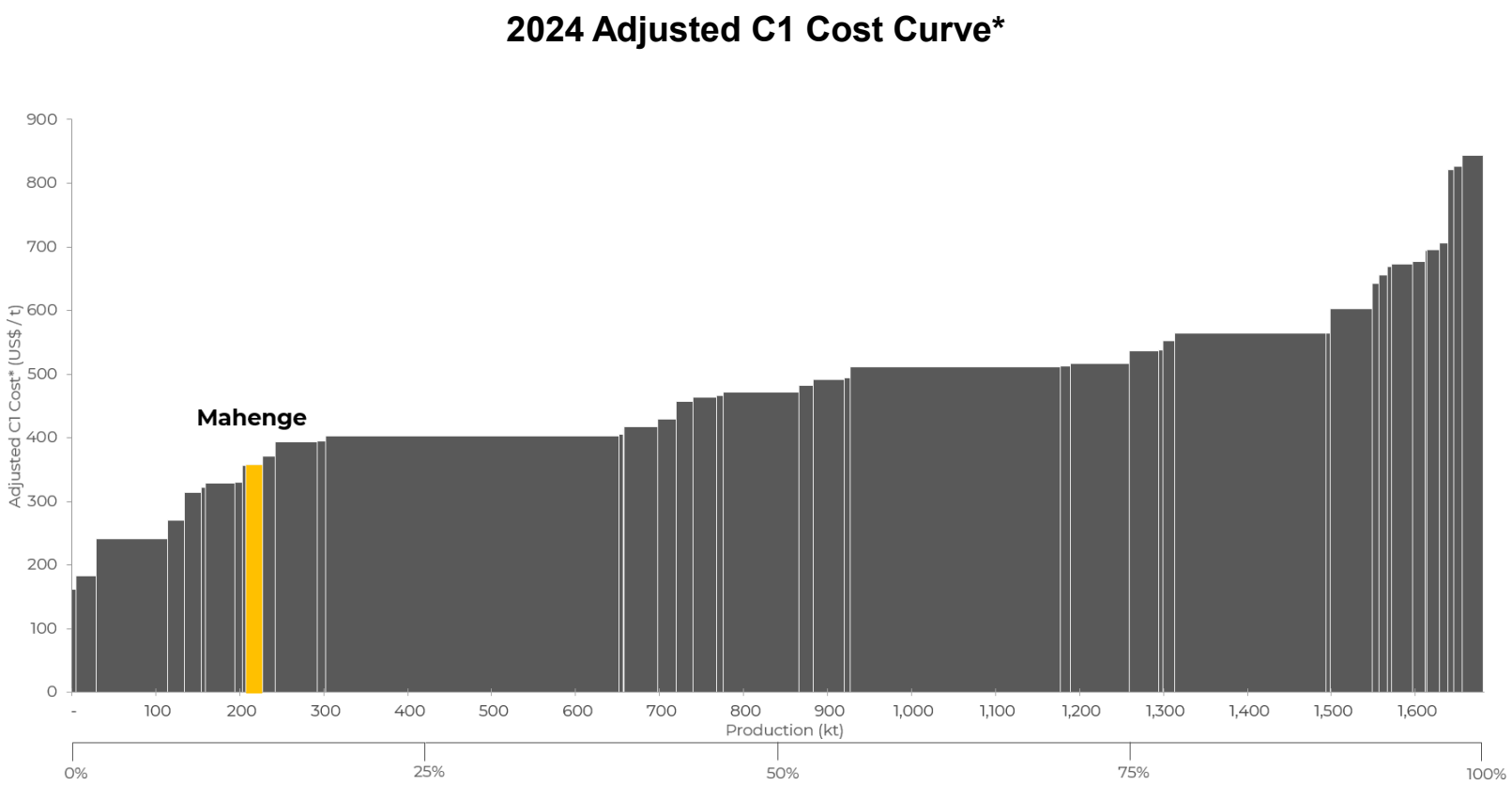
First quartile on the global cost curve

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



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 BKT's relative position by up to ~US$40-60/t per 1% above 95% pricing.

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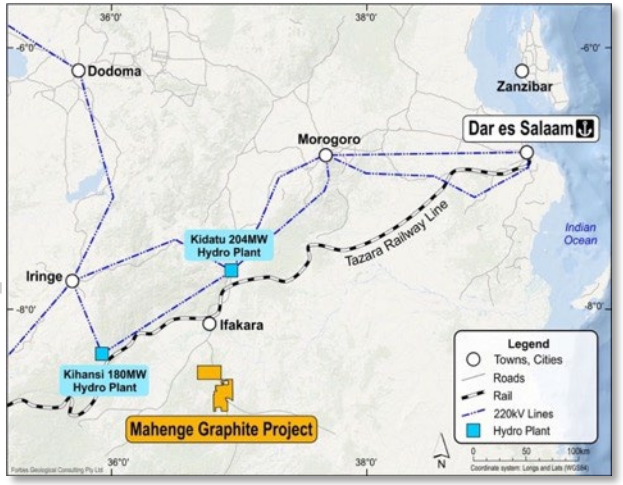
Why Mahenge?

Unique competitive advantages driven by Geology and Geography



GEOLOGY

- ★ Mahenge's 213mt resource makes it the 4th largest graphite resource in the world[1]
- ★ Low deleterious impurities and favourable metallurgy means that Mahenge is able to produce up to 99% TGC concentrate purity, solely with conventional flotation processing

GEOGRAPHY

- ★ Access to key infrastructure, Grid Power, Rail, Airstrip, Water and Tailings disposal (dry stack)
- ★ Logistics advantages with processing through Dar es Salaam high volume container port

Low Technical Risk

- ★ Substantial pilot plant operations of 610 tonnes
- ★ Direct access to rail, grid power, water allows for sustained lower cost operation
- ★ Production underwritten by strategic partnership with POSCO and off-take agreements

High Margin[1]

- ★ AISC margin of 61%
- ★ Mine has capacity to produce high purity products to achieve pricing premiums
- ★ Mahenge has a very low life of mine strip of 0.8:1

Low Capex[1]

- ★ Lowest peak capital expenditure per annual tonne of production of any development stage global graphite project
- ★ Modular operating model

Superior Economics[1]

- ★ NPV_{10} of US$1.376Bn
- ★ IRR 36%
- ★ 61% AISC Margin

[1]As released on ASX on 10 October 2022: Black Rock completes Black Rock completes FEED and eDFS Update. Refer to Black Rock's Mahenge eDFS Update 10 October 2022 and forecast project economics and footer on Slide 14.

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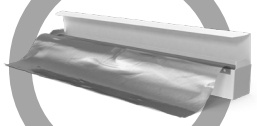
ESG focused ecosystem

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

posco

URBIX



Tanzanian Government

EQUATOR PRINCIPLES

IFC International Finance Corporation WORLD BANK GROUP
Creating Markets, Creating Opportunities

ESG CERTIFIED

Digbee ESG™

Environmental and Social Impact Assessment

Battery

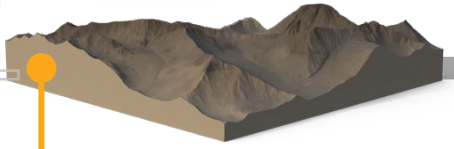
Large Flake

Customer Markets

FARU GRAPHITE CORPORATION

Permitted

Robust Compliance



Mahenge Graphite Deposit

- High-grade Graphite
- Low deleterious elements
- Low strip ratio

Hydro Electric Power

- Low carbon power supply, and transport footprint

Simple Processing

- Three stage polishing
- No wet screen
- Low energy

Dry Tailings

- Dry stack tailing
- Do not compete with local communities for water

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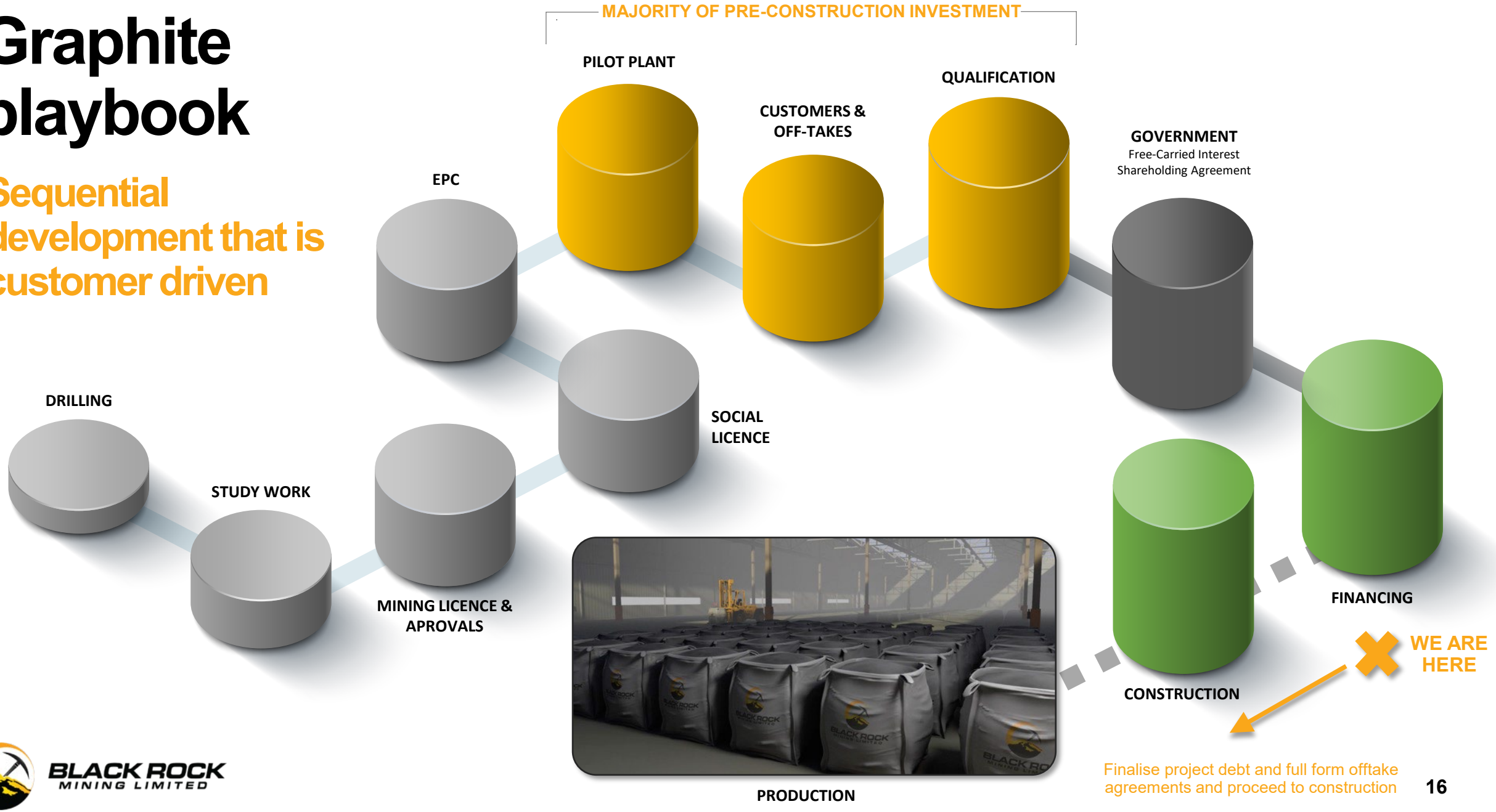
Graphite playbook

Sequential development that is customer driven



Finalise project debt and full form offtake agreements and proceed to construction

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Development timetable

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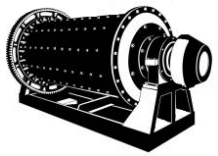
Aiming to have debt finance in place for Module 1 in the next few months.

Early works expected to commence near term

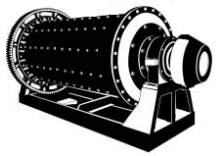
- Debt process well advanced, aiming for Term Sheets in Q2 CY23
- Black Rock is targeting up to 50% debt via traditional project finance
- Construction period 20 months[1]
- Targeting first production from Module 1 in CY24

Module 1
1mtpa



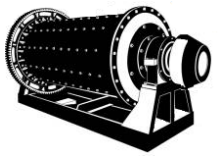
Capex US$182m[1]
Production 89ktpa+

Module 2
1mtpa



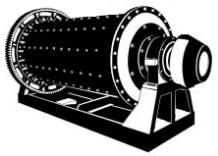
Capex US$107m[1]
Production 85ktpa+

Module 3
1mtpa



Capex US$117m[1]
Production 85ktpa+

Module 4
1mtpa



Capex US$104m[1]
Production 85ktpa+

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[1]Mahenge eDFS Update Oct 2022

Strong near term news flow

Black Rock is well advanced on a number of important de-risking milestones, expected over the next few months

Black Rock sees a number of potential de-risking milestones due near term:

- Potential POSCO milestones:
  - Signing full-form offtake agreement
  - Signing full-form prepay agreement for US$10m
  - Potential for POSCO to take up it's right to a BKT board seat[1]
- Potential debt financing milestones:
  - Aiming for credit-approved Term Sheets in Q2 CY23
  - Mandate debt lead arrangers shortly thereafter
- Other potential financing milestones:
  - Sell LOM rights to fines for Module 2[2] (and potentially Modules 3 & 4)
  - Sell a stake in the project if a suitably attractive price can be achieved[3]
  - Also assessing several other potential options with a focus on minimising dilution and maximising value per share

[1]POSCO has a right to appoint a BKT director if it maintains an equity stake in Black Rock of >10% (currently 12.8%)
[2]Exclusivity period for Conditional Framework Agreement with Urbix on fines for Module 2 expired in early Feb 2023
[3]Several large groups under Confidentiality Agreement undertaking due diligence. BKT unlikely to sell a stake unless a meaningful premium can be achieved

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BKT ready to deliver

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

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Milestones delivered

In the last 12 months Black Rock has delivered a number of important de-risking milestones for Mahenge

- Free Carried Interest Framework Agreement signed with Govt of Tanzania
- 500t pilot plant qualification run completed, the largest in the sector
- Term Sheet signed with POSCO for Offtake and US$10m Pre-payment
- ICA Partners appointed as debt finance advisors
- 25% increase in Measured Resources, now the largest in the sector
- Front End Engineering Design (FEED) contract awarded to CPC Engineering
- $25m Capital Raising via Placement
- Site visits hosted for investors, analysts, independent expert and Govt
- Black Rock team build: New CFO, CCO, GM Corp Dev, GM People & ESG
- In-country team build: New Board & CEO of Faru appointed
- Commencement of Resettlement Activities at Mahenge
- Special Mining Licence (SML) granted
- Front End Engineering Design (FEED) and update of eDFS (eDFS Update)
- Independent Technical Expert Report for debt process completed

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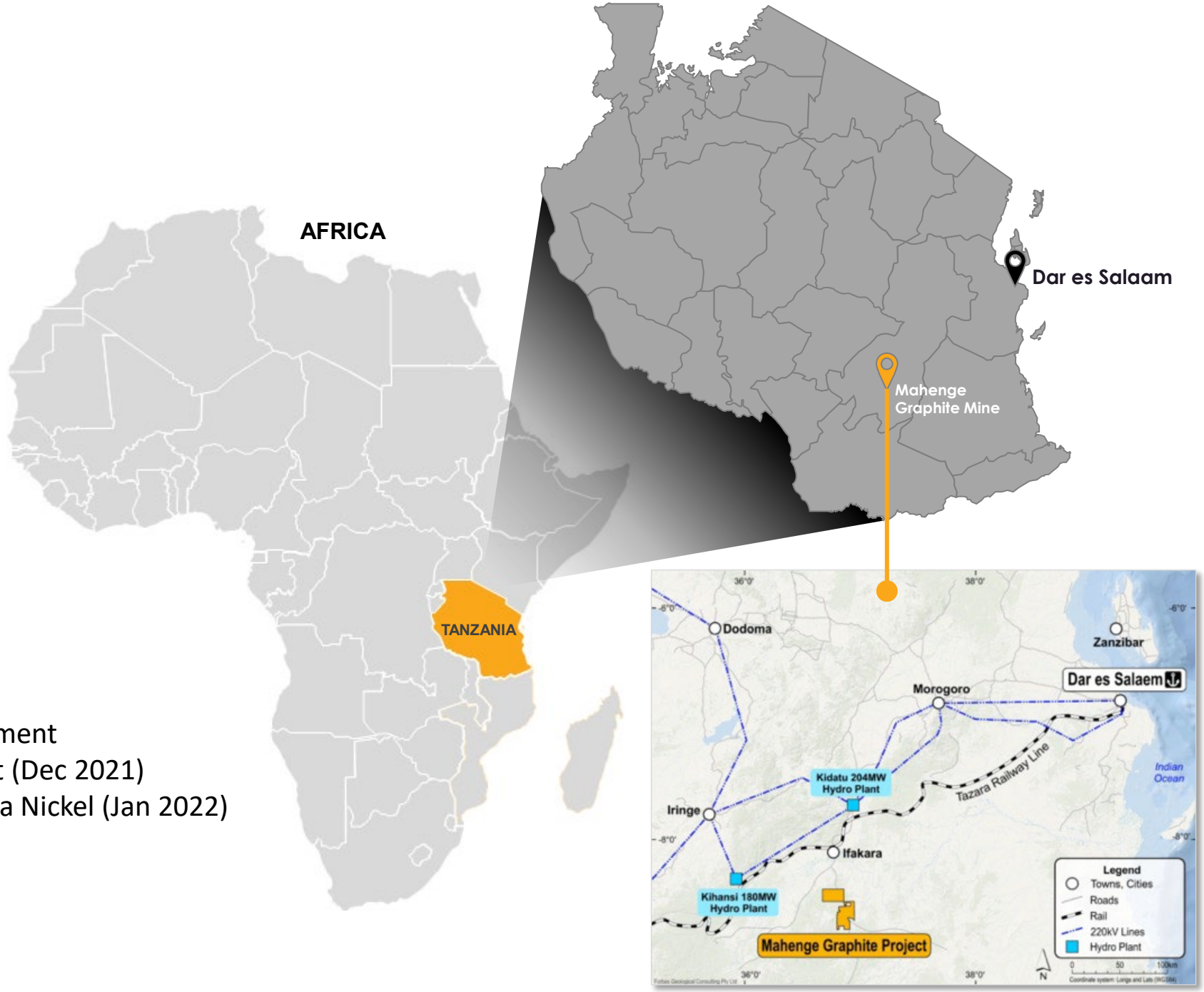
Premier location

Well positioned in East Africa's growing Graphite belt



Tanzania seeking to encourage investment
- BKT signed FCI Agreement with Govt (Dec 2021)
- BHP committed US$100m in Kabanga Nickel (Jan 2022)

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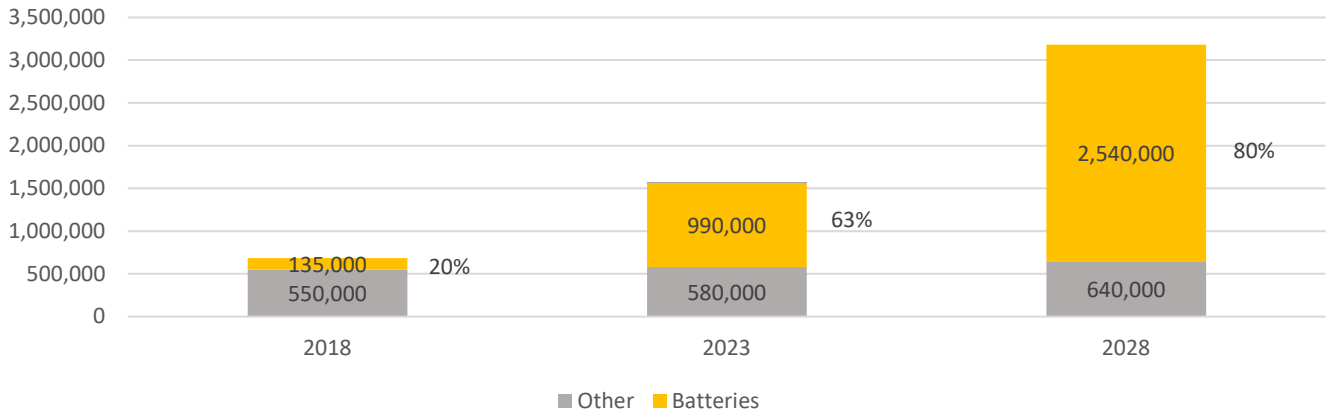
Graphite uses

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

Price increases with flake size

SMALL FLAKE (FINES)	LARGE FLAKE	JUMBO FLAKE
Lithium-Ion Batteries	Flame Retardants	Flame Retardants
Paint & Coatings	Refractories	Gaskets & Seals
Lubricants	Aviation	Expandable Graphite
Pencils	Lithium-Ion Batteries	Fuel Cells

Natural graphite: Growing importance of battery demand



Source: Public releases, Benchmark Mineral Intelligence Q4 2022, Roskill, Black Rock Mining

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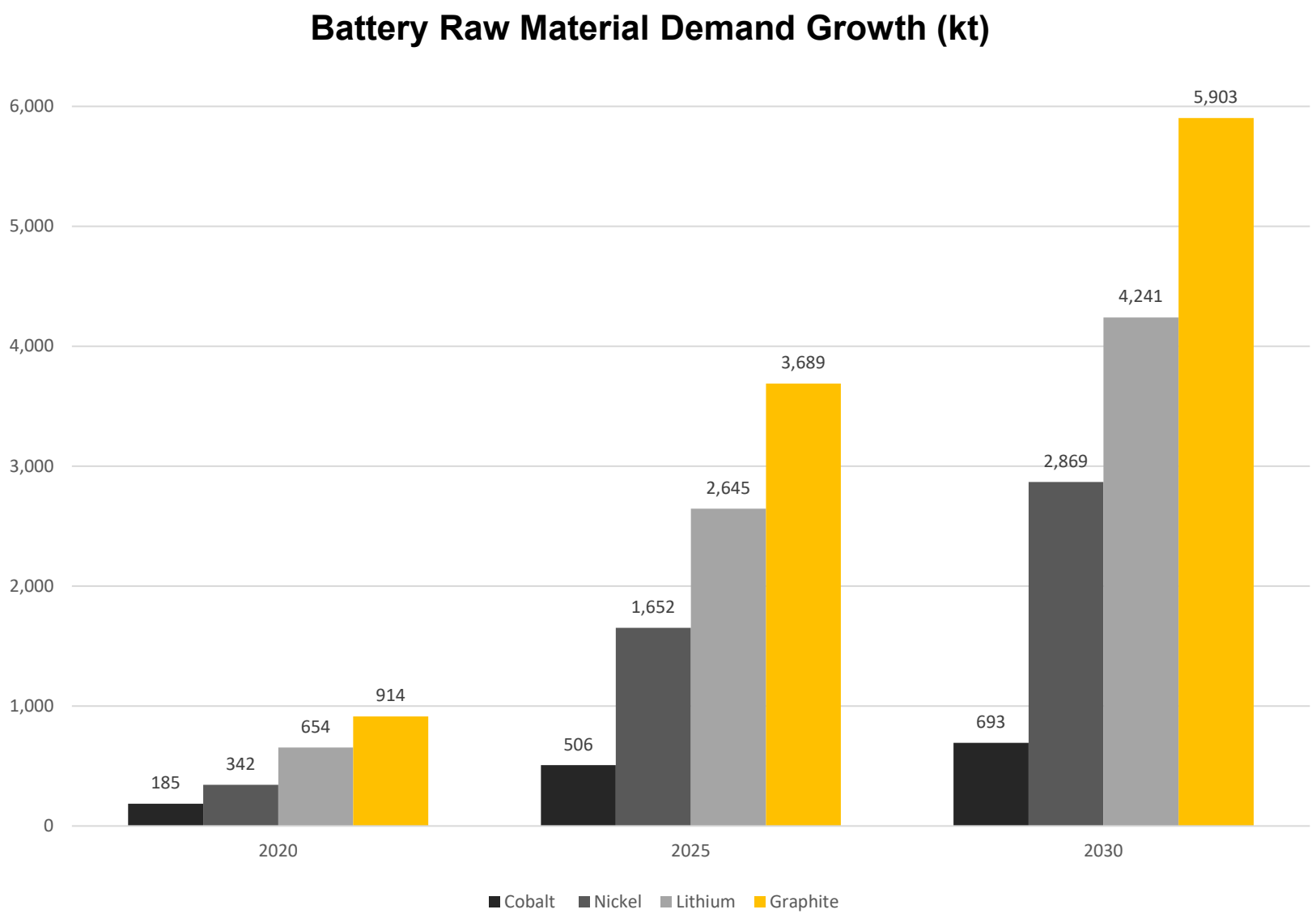
Battery demand growth

A synchronised global technology change is underway and is expected to drive strong demand for battery materials



Sources: Public releases, Benchmark Mineral Intelligence Jan 2022, Black Rock Mining

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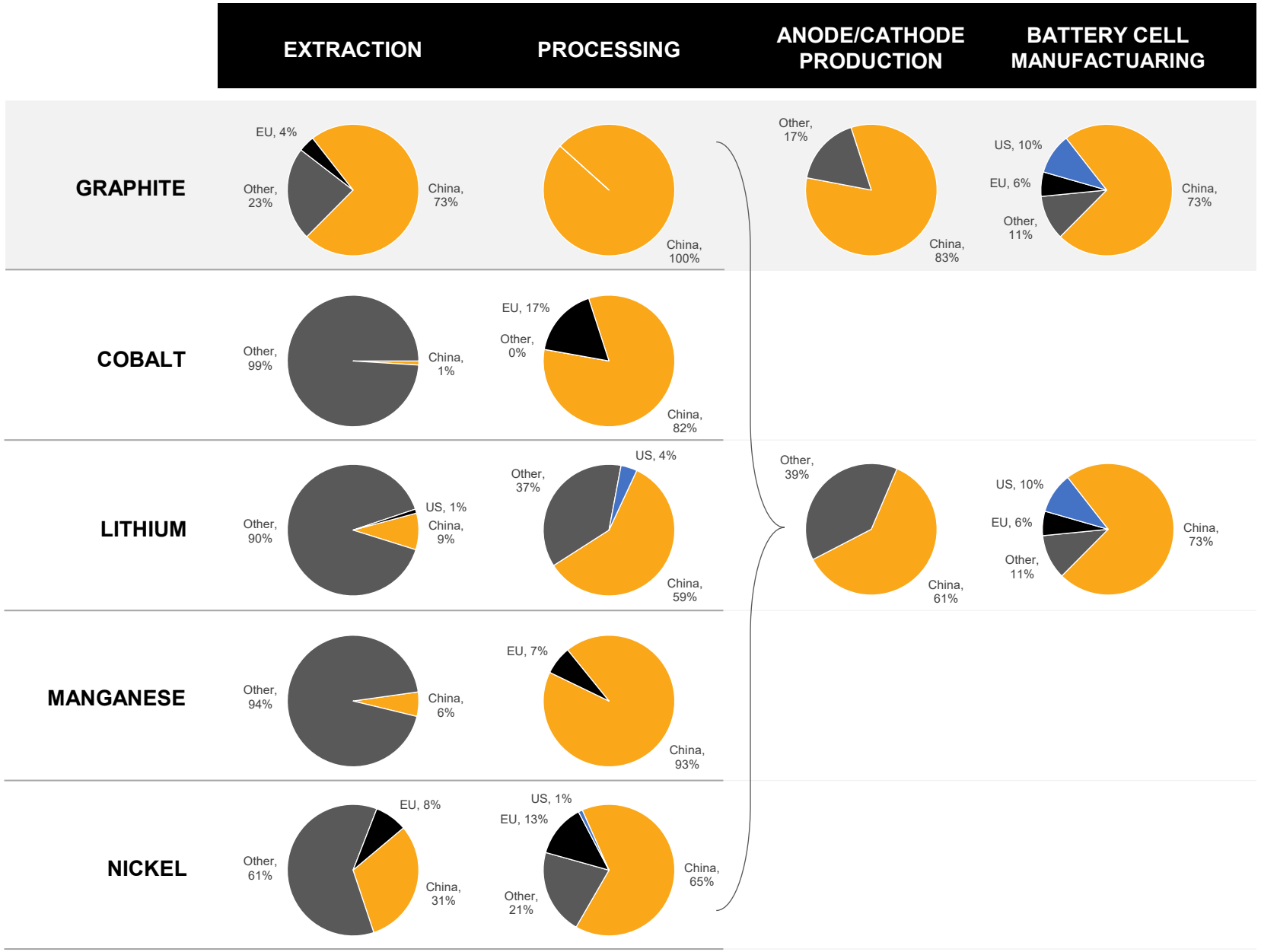
Li-ion battery raw materials supply chain by country

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



Sources: Public releases, Benchmark Mineral Intelligence, Black Rock Mining

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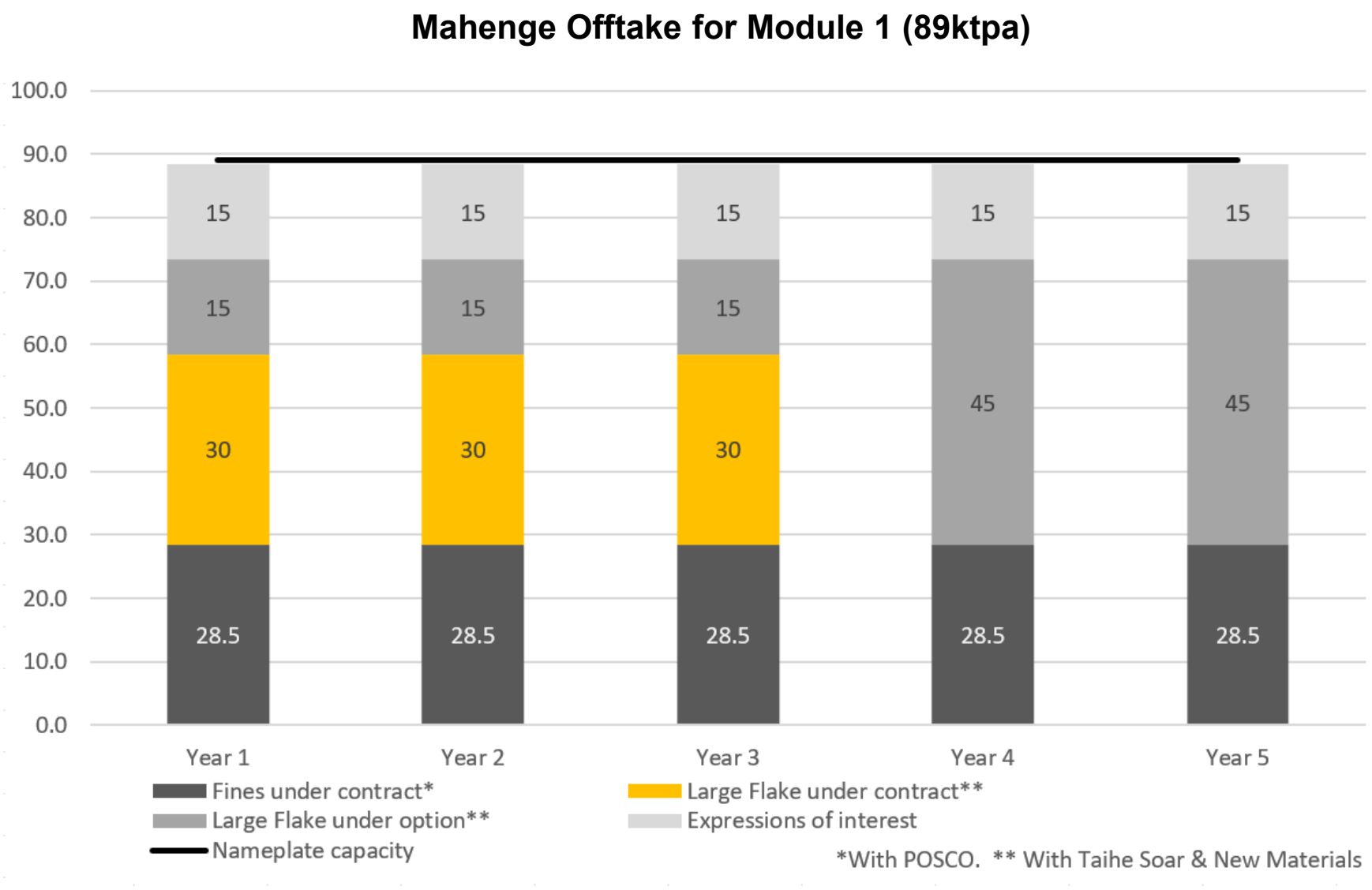
Offtake agreements

Over 80% of Mahenge's Module 1 production is under binding offtake or option



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