



Lindi Jumbo Graphite Project

It's all about the flakes...

ADU Conference  
August 2018

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THE INNOVATION OF GRAPHITE MINING



walkabout  
RESOURCES LTD



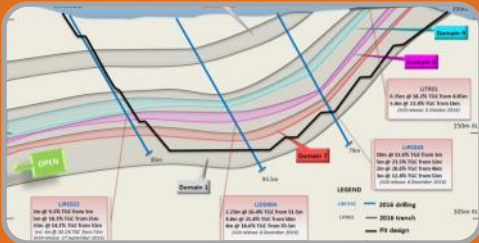
## Highest reserve grade in Tanzania at 16.2% TGC for life-of-mine

- Very low opex and capex due to high grade
- First 5 years at 20% TGC from outcropping high grade bands



## Exceptional ratio of large and jumbo flake sizes

- Very high revenue due to flake size distributions
- Very high demand for the specialised end use products



## Geometry and location allow low cost, low risk mining start up

- Surface mining with visual differentiation of high grade ore leverages value
- Minimal mining risk due to orebody geometry and shape



# The high grade premium product value leverage



Higher grade equals;

- Lower working costs
- Lower capital costs
- Improved metallurgical performance – higher input = higher output
- Improved product purity – less gangue materials
- Reduced flake damage due to less process churn and recycling

Opex and Capex

High grade reduces opex and capex because less tonnes are processed for the same output

MARGIN

Revenue is increased because the ratio of higher value larger flakes is more – increasing the basket price

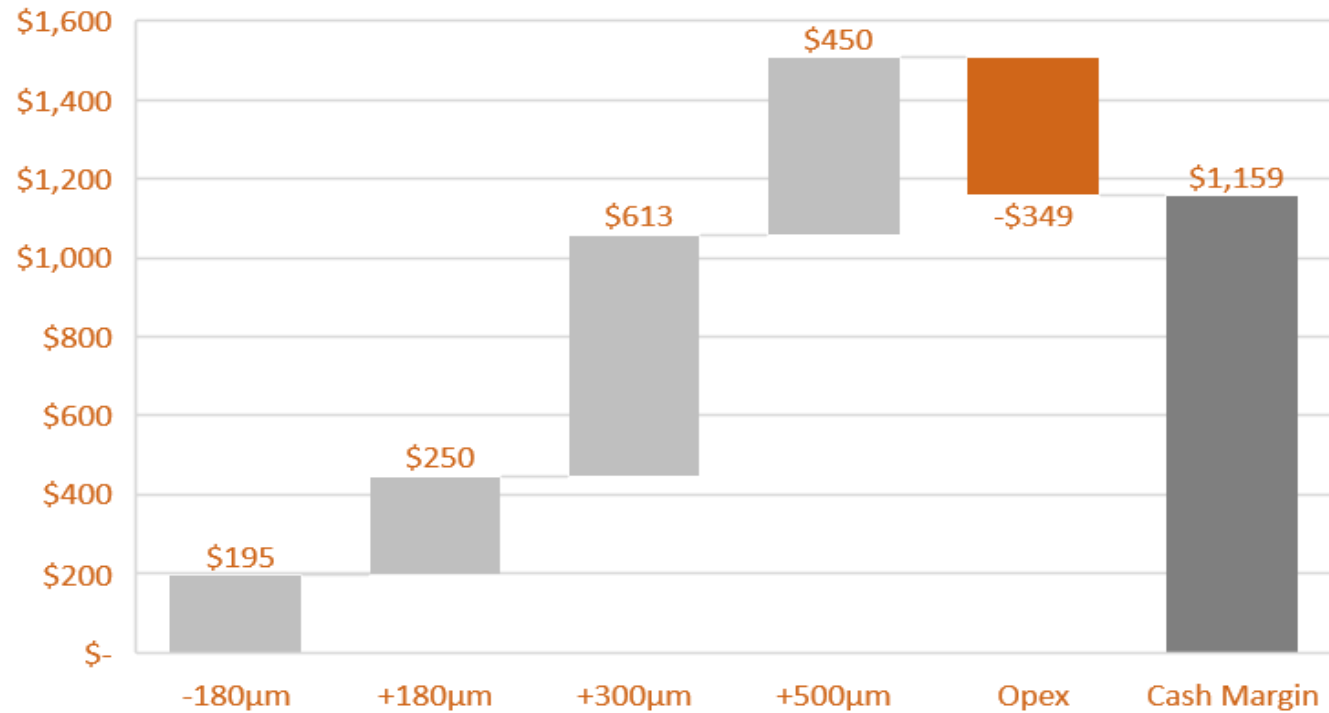
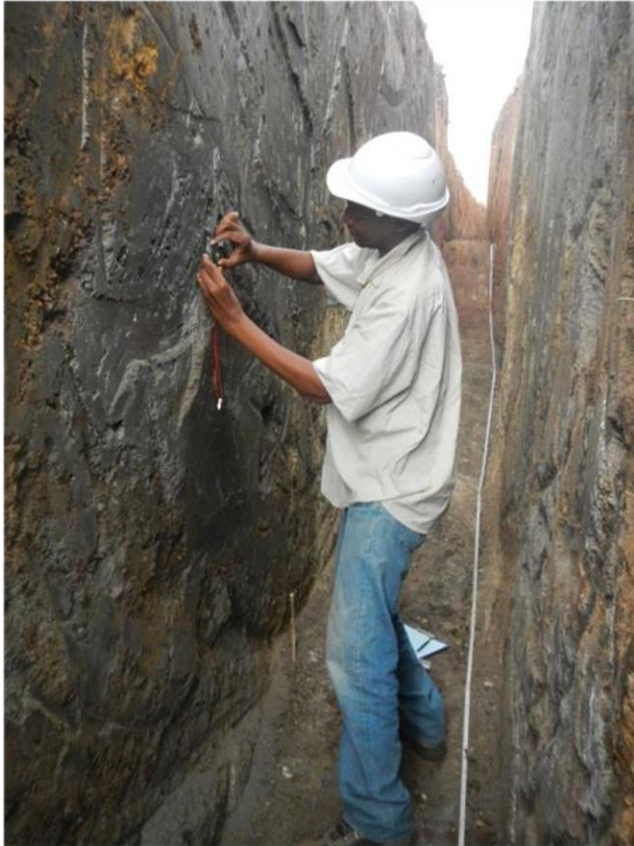
Increased Revenue from Premium Product

Larger weighted average flake sizes equal;

- Higher weighted average revenue – basket price
- Higher product demand
- More exposure to negotiated price settlements - upside
- Lower logistics cost ratio per value tonne
- Reduced flake damage due to less process churn and recycling



# Contribution of the flake size premium



Margin contribution by flake size category and opex (US\$/tonne)





Project	Company	Location	Status
Balama Project	Syrah Resources	Mozambique	Operating
Montepuez Project	Battery Minerals	Mozambique	Licensed and Construction
Epanka Project	Kibaran Resources	Tanzania	Licensed and Ready
Ancuabe Project	Triton Minerals	Mozambique	Detailed Design
Nachu Project	Magnis Resources	Tanzania	Licensed and Ready
Chilalo Project	Graphex Mining	Tanzania	Licensed and Ready
Ulanzi Project	Blackrock Mining	Tanzania	Preliminary Feasibility
Namangale Project	Volt Resources	Tanzania	Preliminary Feasibility
Lindi Jumbo Project	Walkabout Resources	Tanzania	Licensed and Construction

Source: Market announcements  
Some adjustments have been inferred in order to standardize data

Criteria for peer selection;

- ASX listed, non-private,
- Declared Mineral Resource or Reserve
- Accredited metallurgical test-work
- Sufficient study level to have comparative numbers





## Comments on project study comparisons;

- Most studies internationally are compiled by different sets of engineers with varying datasets – limited standardisation,
- Resource and Reserve size is not an important valuation criteria, (there is no shortage of graphite in the world)
- Studies use varying ambitious Resource Definition sizes to ramp up NPV while the graphite market does not really support this practice,
- Design strategy must consider practical market realities,
- The dominance of China makes them price givers as demand supply relationships will be controlled.

## How do we normalise study and design metrics for comparative purposes?

- Measure indexes against per unit sales tonnes,
- Consider operating cost forecasts as a function of grade and design strategy and believe them,
- Capital expenditure is normally related to grade and operational scale chosen,
- Capital intensity is a standardising measure orebody quality,
- Use standard pricing assumptions for the product suite at industry nominal concentrate grades,
- Assume all production is sold into revenue,
- Discount gross LOM NPV's as a comparative measure.

# The peer review – normalising the numbers



Project	Published Flake Ratio over 180 microns	Calculated Basket Price <sup>1</sup>	Cash Margin <sup>2</sup>
	%	US\$/tonne sales	US\$/tonne sales
Balama	21%	865	585
Nachu	66%	1,335	776
Epanko	55%	1,039	539
Ulanzi	54%	1,042	664
Chilalo	69%	1456 <sup>3</sup>	966
Montepuez	34%	907	529
Namangale	39%	950	286
Ancuabe	55%	1,275	641
Lindi Jumbo	75%	1,508	1,159

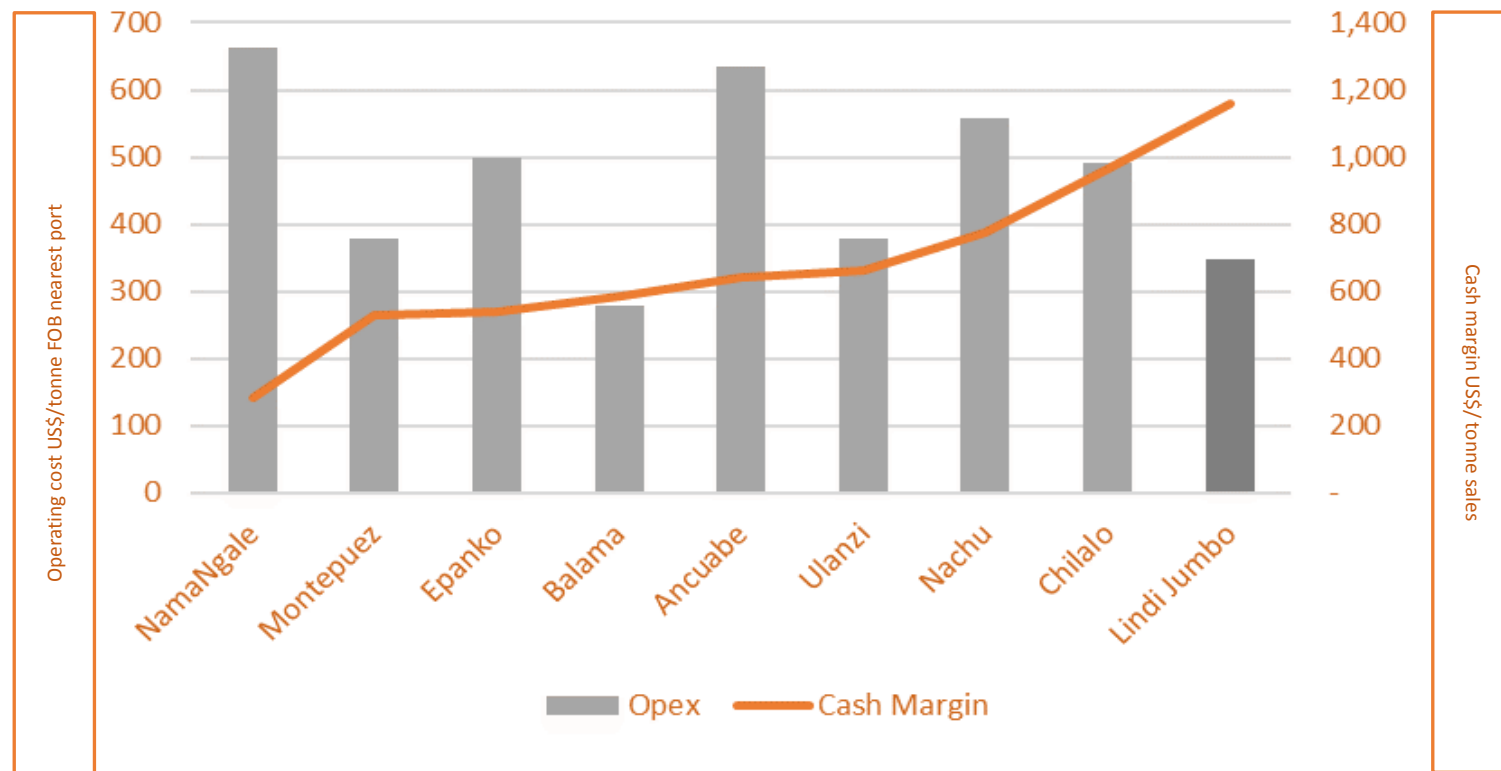
Source: Market announcements

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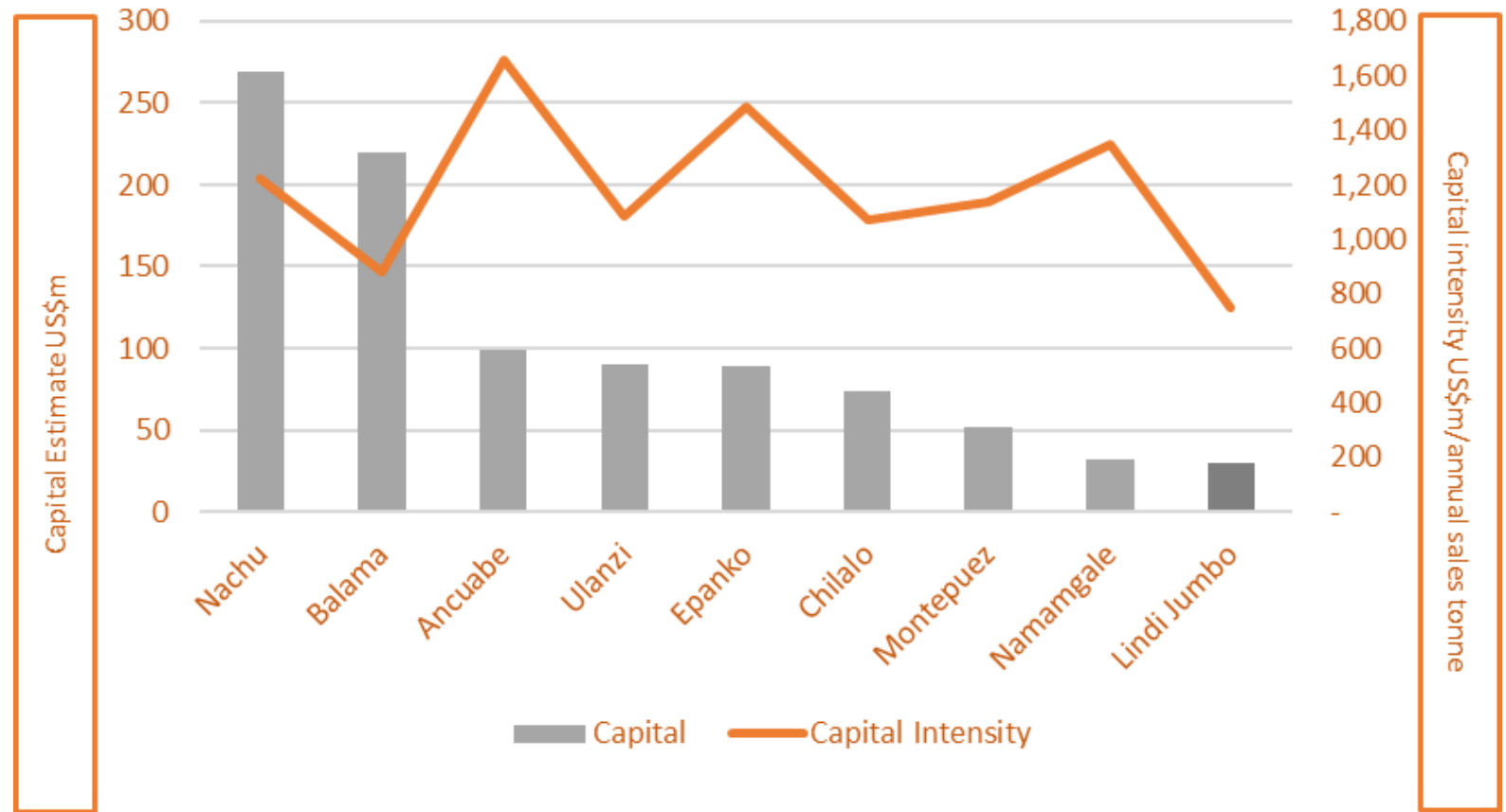
1. Basket price calculated using same price assumptions
2. Cash margin derived off calculated basket price and published unit opex
3. Chilalo basket price adjusted by -23% for out of spec concentrate grades

Product Specifications and assumed prices for normalisation							
95%-97% TGC							
+500 microns	35 Mesh	+300 microns	50 Mesh	+180 microns	80 Mesh	-180 microns	<80 Mesh
USD 3,000		USD 1,750		USD 1,000		USD 750	

# Peer review – operating cost and cash margin

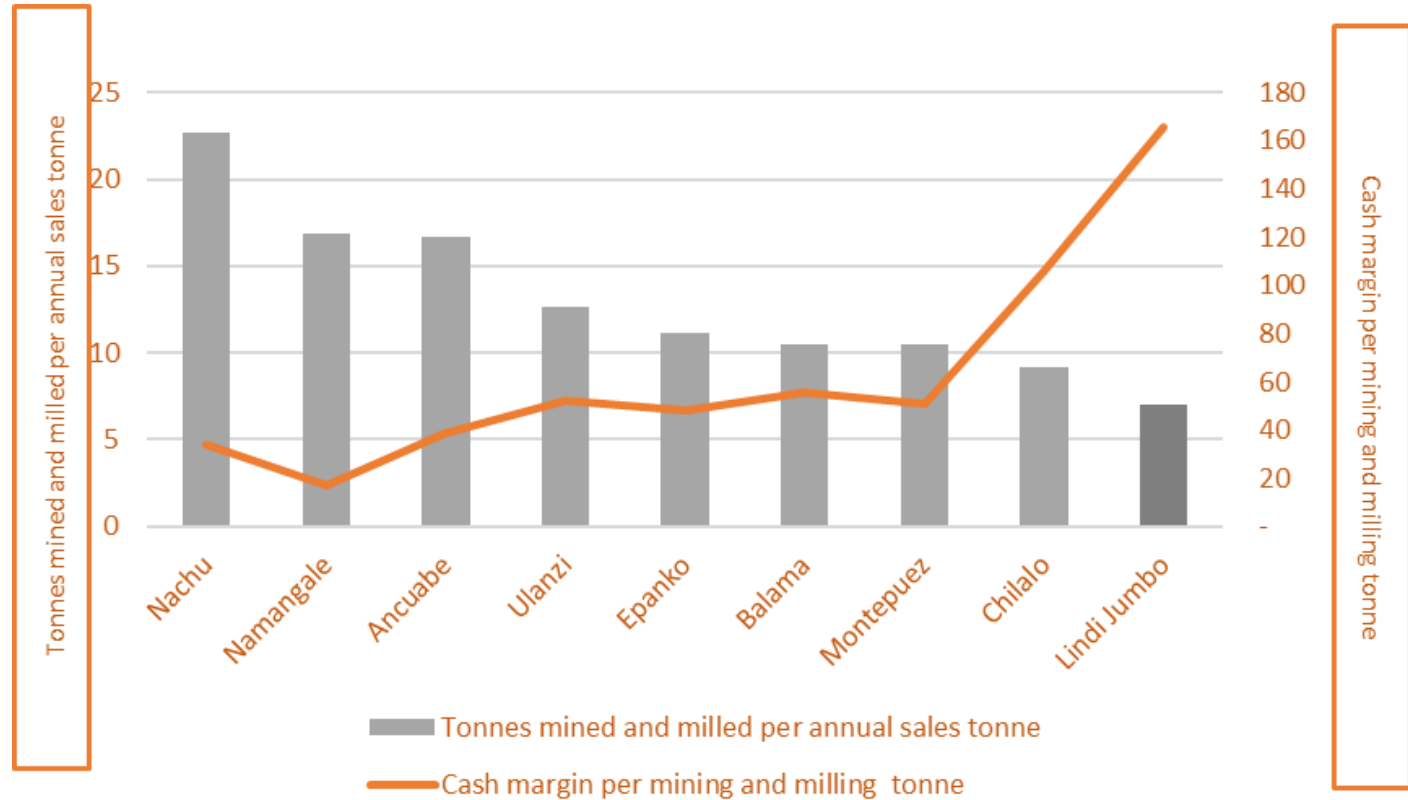


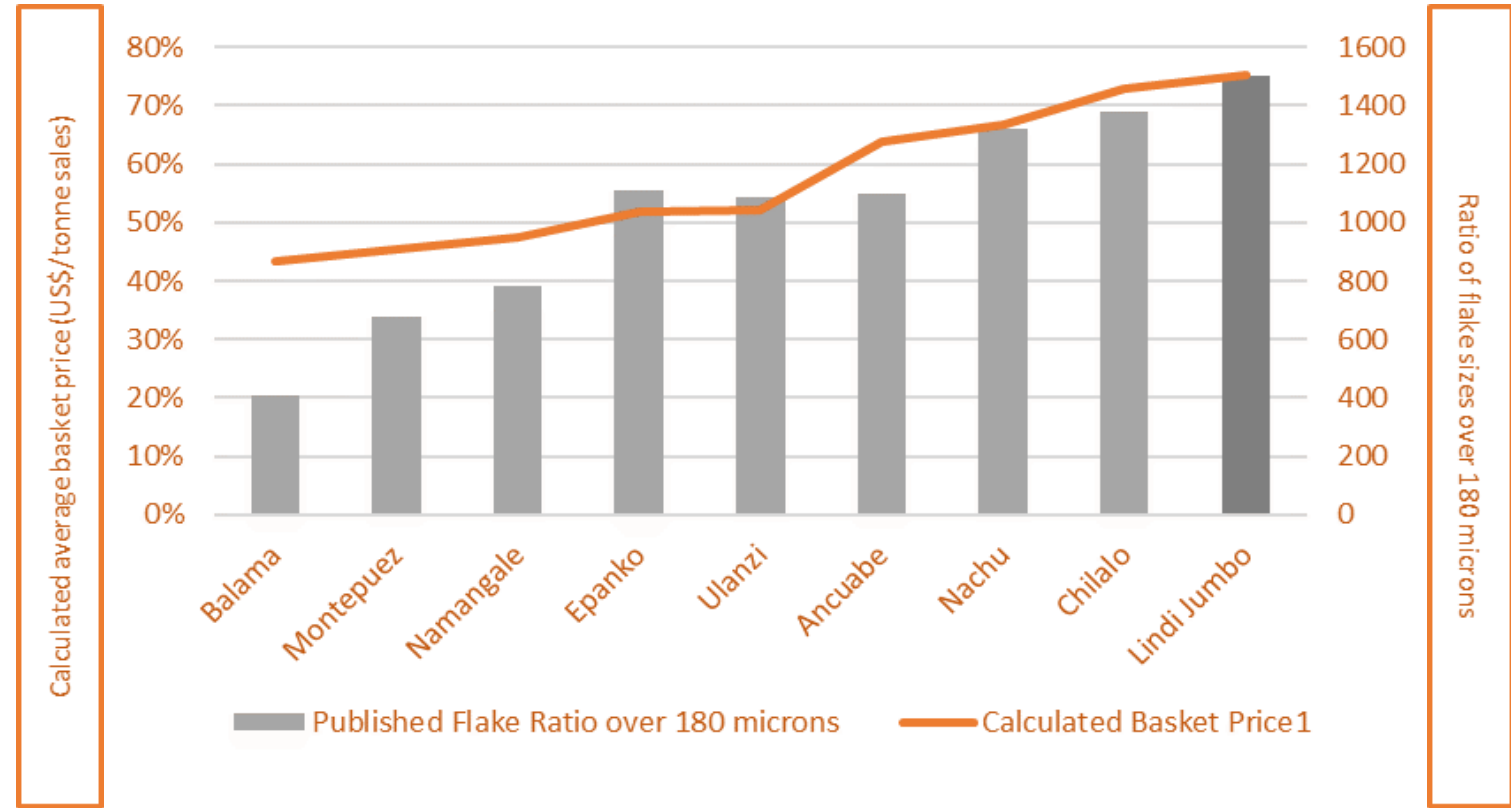




Source: Market announcements  
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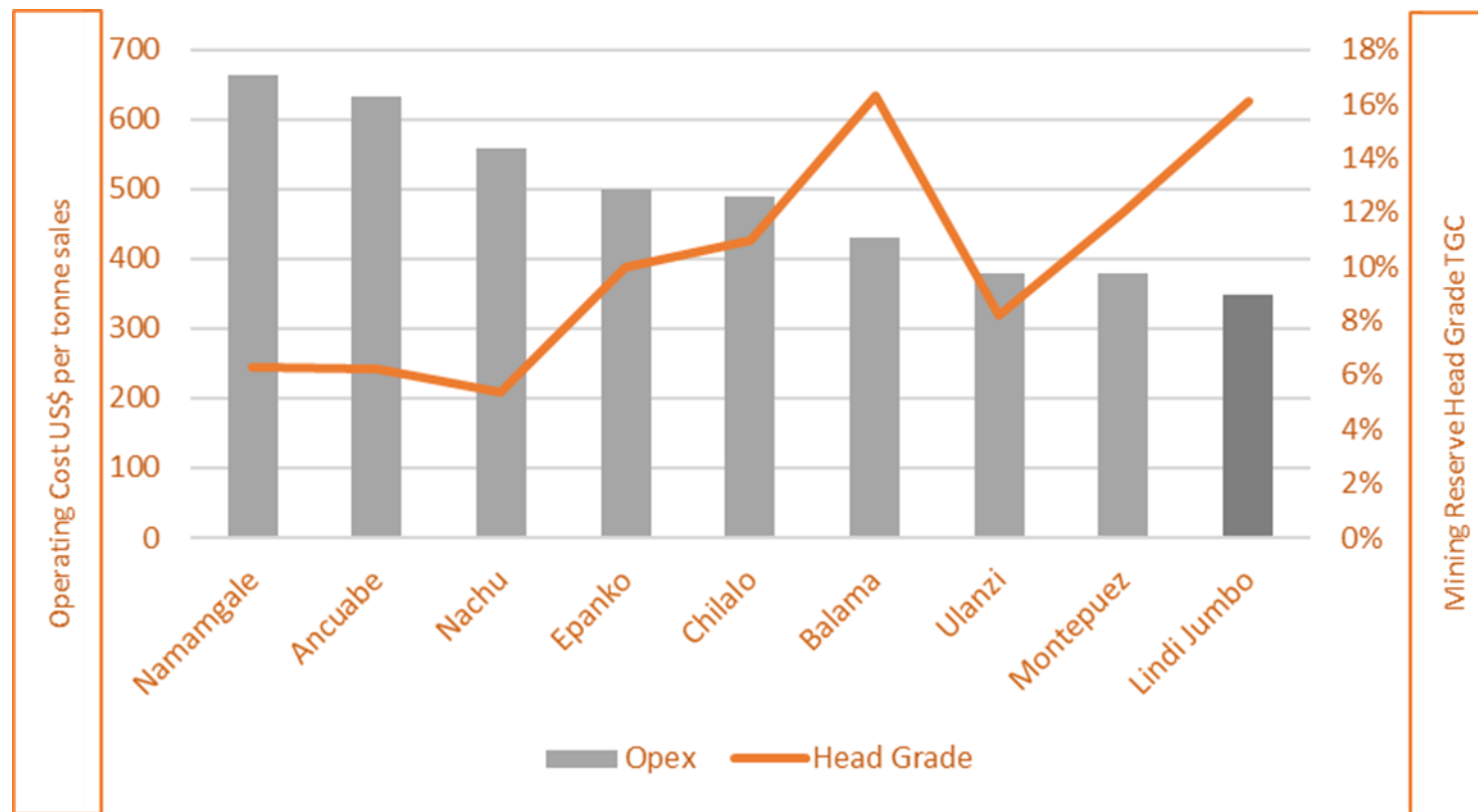






Source: Market announcements  
 Some adjustments have been inferred in order to standardize data  
 Chilalo basket price adjusted by -23% for out of spec concentrate grades









## Project Management

- Detailed design engineering complete to 90%
- EPC Agreement final
- Tanzanian contract partners in final Agreement and re-pricing
- Full time Project Manager based in Africa

## On Site

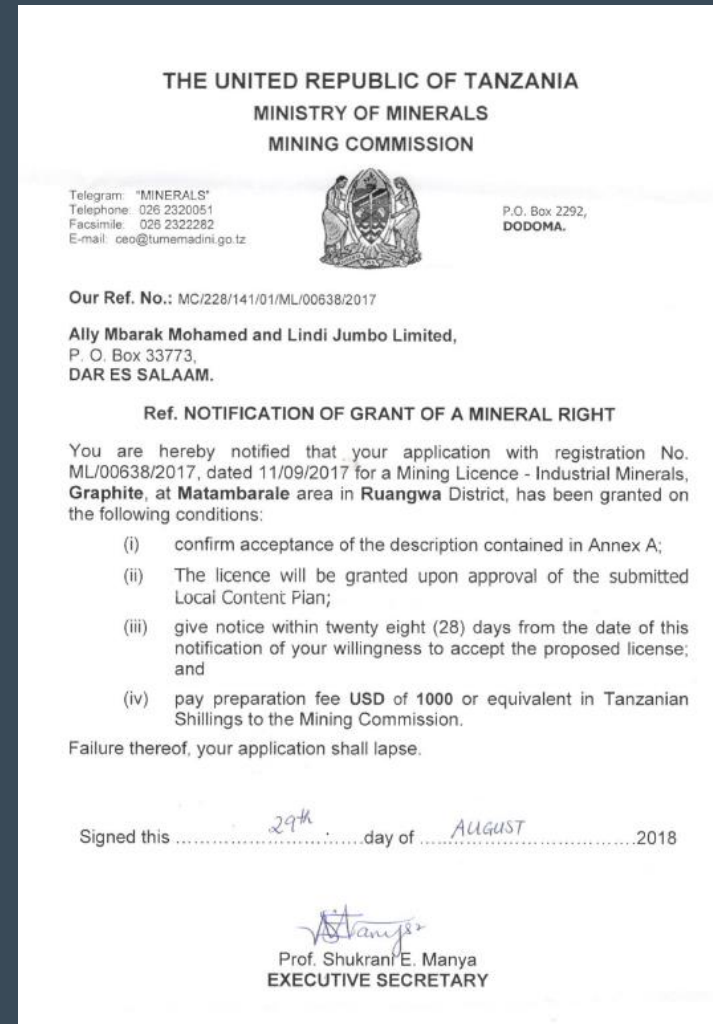
- Relocation Assistance Program (RAP) approval in final draft
- Additional drilling completed for Resource extension and upgrade
- Contractor site visits taking place now to establish mobilisation protocols

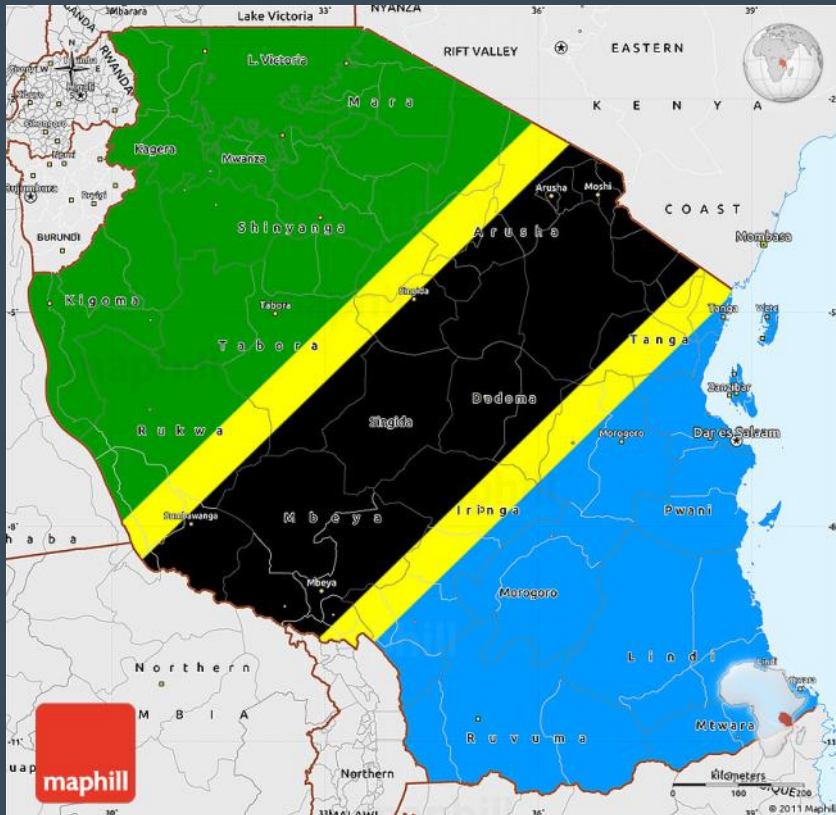
## Funding

- Programme can commence with current funds in treasury
- Follow up on China Silk-Road deferred loan for China costs
- Final funding shortfall now being pursued



# Lindi Jumbo project is now fully permitted – construction phase commenced





- Restructuring of Ministry now complete
- Mining Commission now functioning and delivering
- Control and management systems being established
- Much higher level of certainty now exists
- Still a good place to explore

Working environment

- Delays were unfortunate
- Some issues not yet finalised
- Intent of changes are understood
- Industry wants to work with Government – not the enemy
- None of the issues were deal breakers for WKT


Process execution





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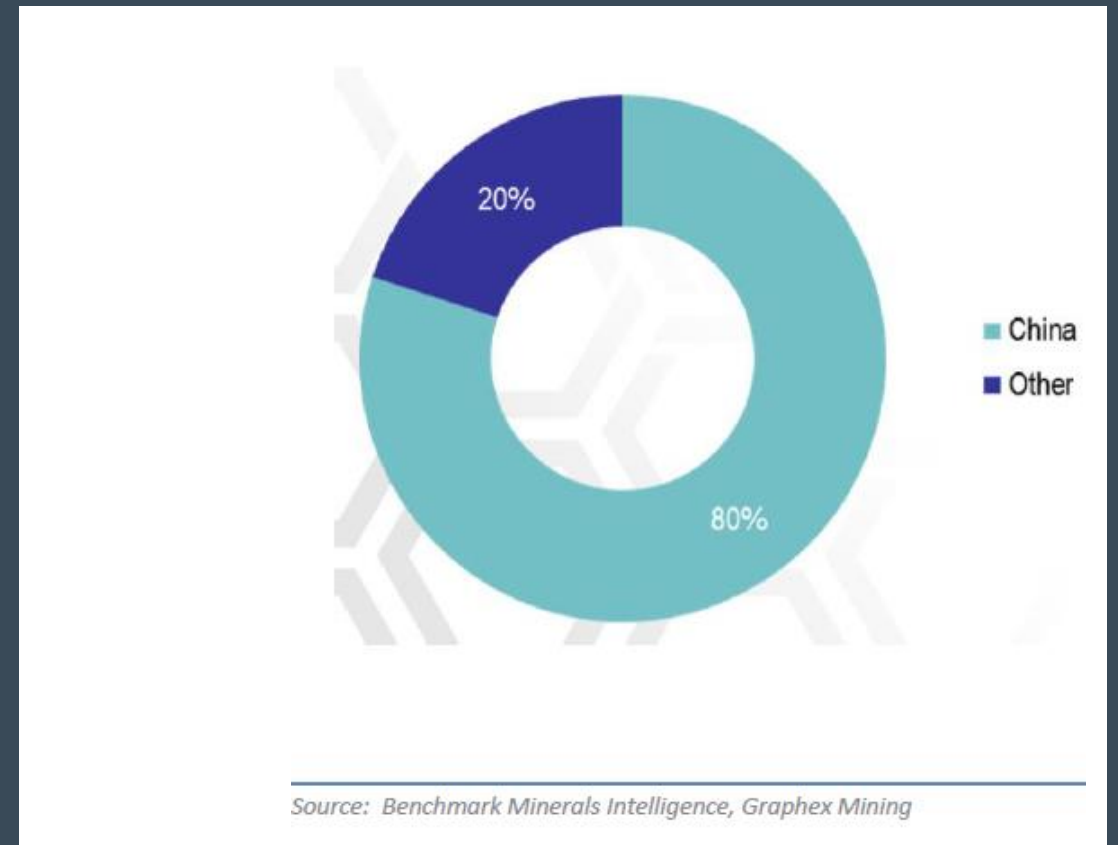
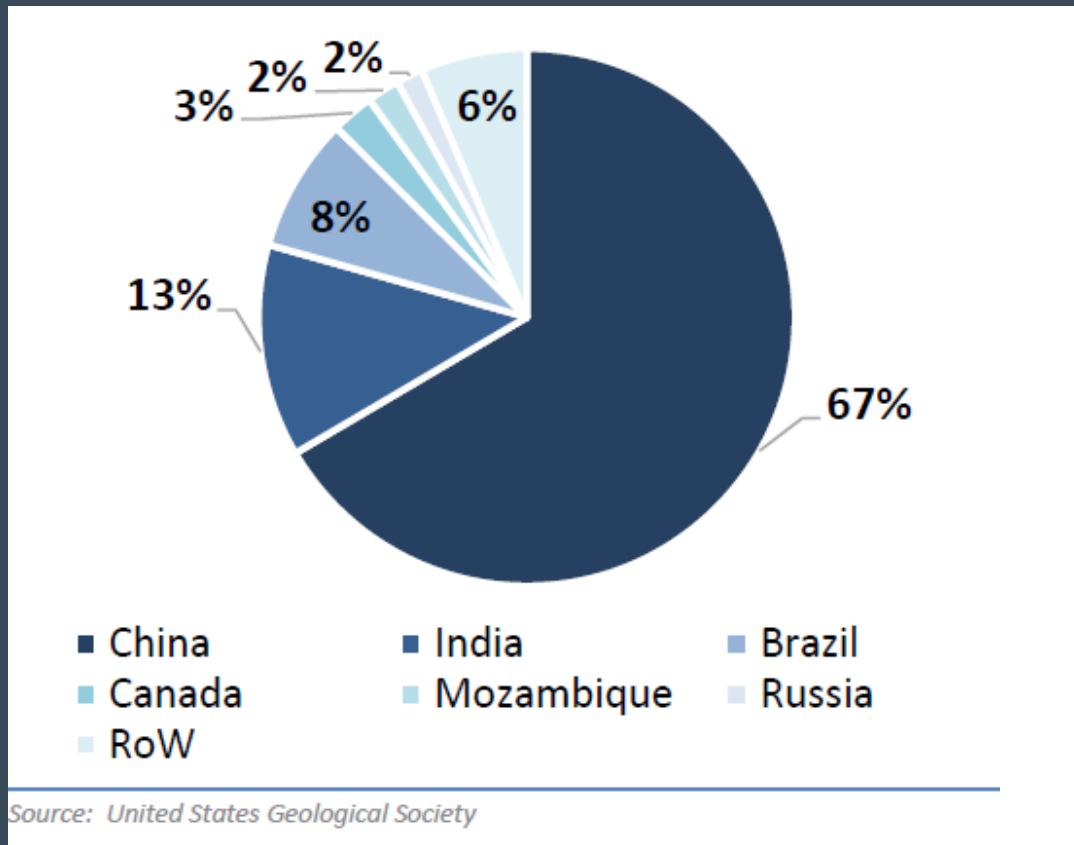
HSBC 





China – Global Mine Production 1.2 million tonnes

China dominates global expanded graphite supply

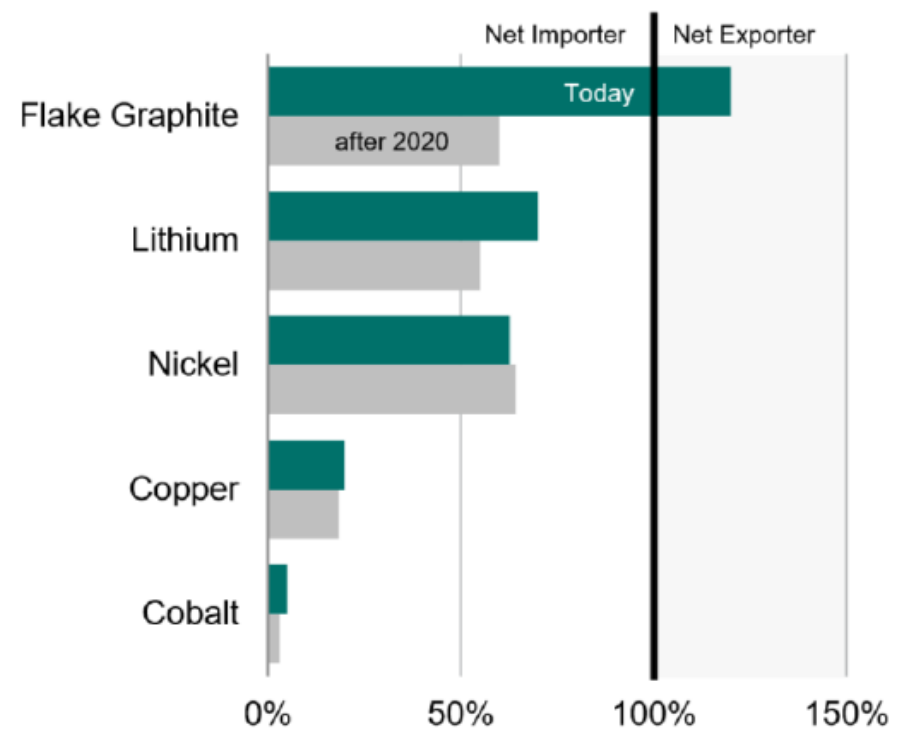
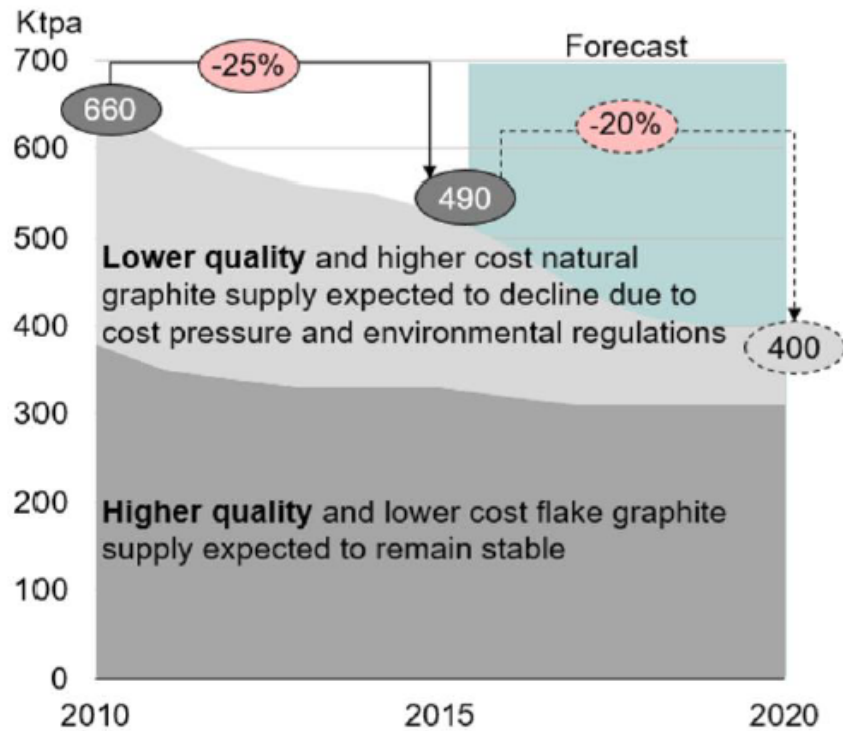


# China – the drive to renew supply and sustain market dominance



China's declining domestic supply due to resource depletion and environmental preservation

China's transition to net importer of graphite places greater emphasis on investment and development of resources externally

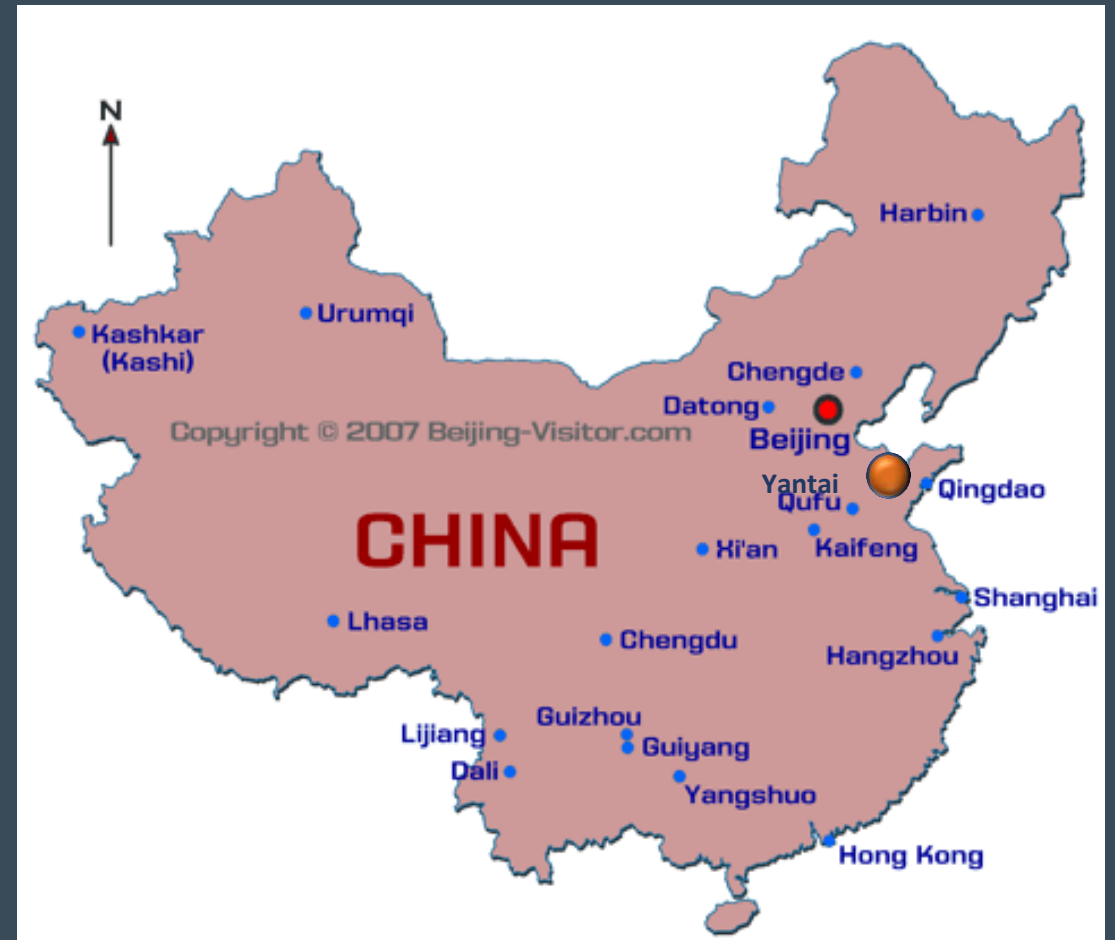


Source: Syrah Resources, CRU, Metal Bulletin

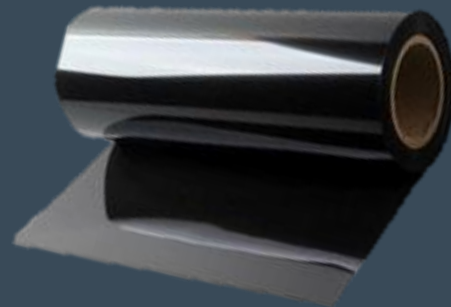
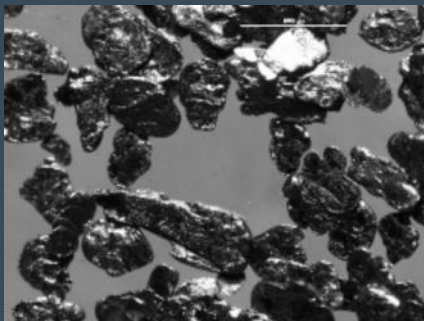
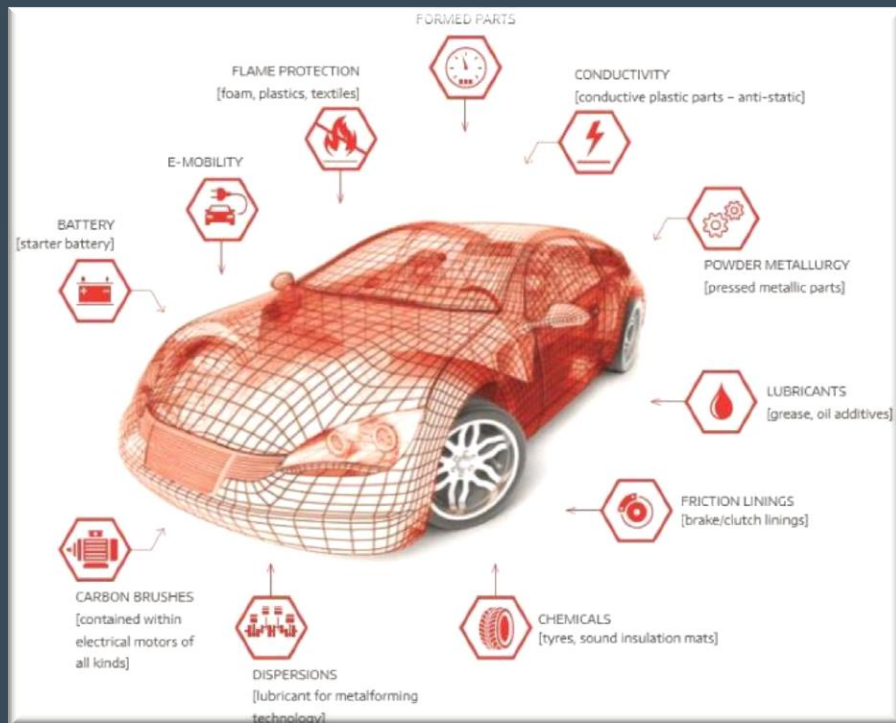


- Engineering Procurement and Construction Partner – Jinpeng Mining and Material in Yantai
- Agreed Offtake Partner Qingdao
- Agreed Offtake Partner in Jixi City
- Technology Partner BGRIMM in Beijing

- CNBM Investment Proposal for Deferred Loan of All In China Costs
- Yantai Jinpeng Mining and Machinery Co. Ltd. Is WKT's largest shareholder
- Letter of Support for funding from Sinasure



# Lindi Jumbo target markets – growing with technology



## Expandable market – Flame retardants

- *Halogen-free* intumescent flame retardant materials (automotive industry, plastics, isolation etc.)
- *Advantages* for use in flame retardants – low material use, free of heavy metals, non-polluting, relative low cost, reduces fume formation
- Flame retardant industry forecasted to grow significantly
- Chinese building regulations to make it compulsory to use flame retardants in building materials
- Large expansion volumes of Super Jumbo, Jumbo and Large flakes expected to attract stronger pricing due to limited supply out of China

## Speciality parts and foils

- Moulded parts from natural graphite – smooth surface, resistant to chemicals, density can be adapted (seals heat management, glass industry)
- Foils made of high purity natural graphite without the addition of binding agents (0.1 to 2mm thick) (heat management, seals, chemical industry)

Refractories and battery markets for finer fractions



# Social and community – essential mine development responsibilities





# Lindi Jumbo summary – designed to reduce risk

## Investor risk reduction

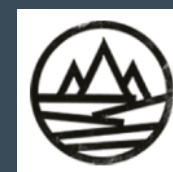
1. Highest mineable grade in Tanzania with LOM average mill feed of >16.2% TGC.
2. Lowest unit operating cost ~ US\$349 per tonne in concentrate FOB - port of Mtwara.
3. Lowest start up capital at US\$29.7m.

## Market risk reduction

4. Exceptional Product with highest ratio flakes above 180µm in concentrate above 95% TGC.
5. Premium product is facilitating attractive market partnerships.
6. This delivers higher weighted average basket price (\$1,534) due to flake size distribution.

## Start up risk reduction

7. Manageable and realistic start up production rate with expansion potential built in.
8. Strategy to be one of the first to market.
9. Front End Engineering Design (FEED) carried out in parallel with fund raising

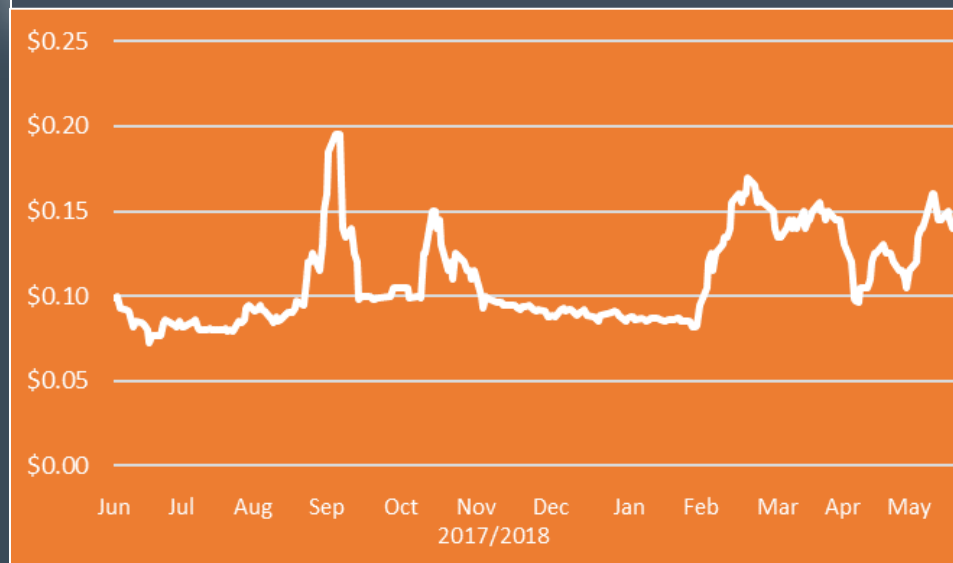


# Walkabout Resources Ltd – Corporate Overview

## Capital Structure

ASX Code	WKT
ASX Share Price at 29 Aug 18	\$0.14c
Shares on Issue	271m
Options	40.7m
Market Capitalisation	A\$38m
Cash	A\$5.2m
Top 40	46%
Hong Kong Tiande Pty. Ltd.	8.6%

## Share Price 12 mths



## Board and Management with significant African experience

Trevor Benson	Executive Chairman	Investment Banker, African and Chinese experience
Allan Mulligan	Executive Director	Mining Engineer, extensive African project experience
Andrew Cunningham	Technical Director	Geologist, extensive African experience
Thomas Murrell	Non Executive Director	Marketing specialist, independent

# Disclaimer

## Securities Disclaimer

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## Forward looking Statements

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## Competent Persons

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Cunningham, who is a Member of The AIG included in a list promulgated by the ASX from time to time. Andrew Cunningham is a director of Walkabout Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Andrew Cunningham consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

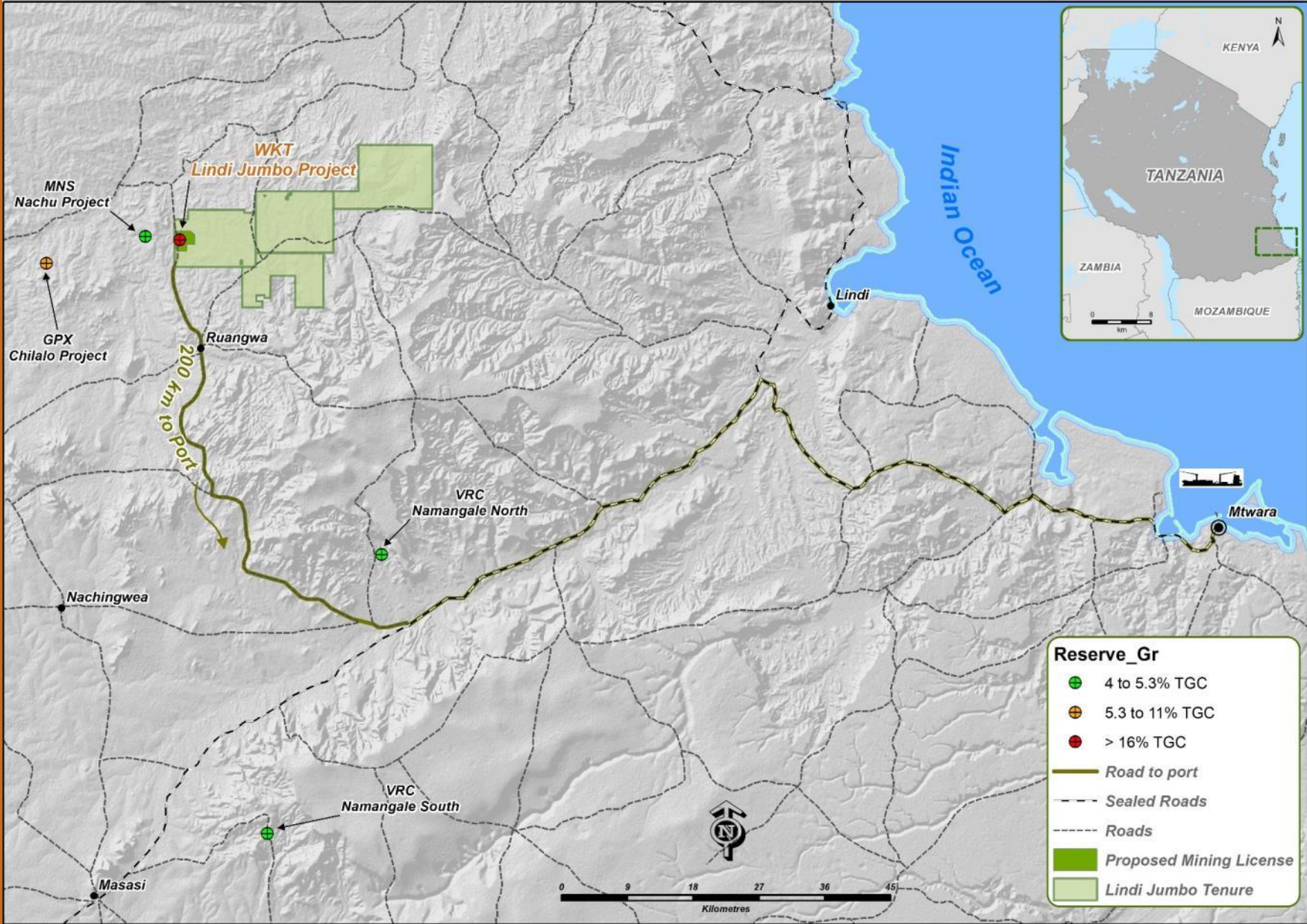
The information in this report that relates to Metallurgical test work and results is based on information compiled by Dr Evan Kirby, a Competent Person who is a member of Australian Institute of Mining and Metallurgy. Dr Kirby is a full time employee of Metallurgical Management Services, a specialist metallurgical consultancy and an independent consultant to Walkabout Resources Ltd. Dr Kirby has sufficient experience that is relevant to the style of mineralogy and type of deposit under consideration and the typical beneficiation thereof. Dr Evan Kirby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



*Picking the low hanging fruit*



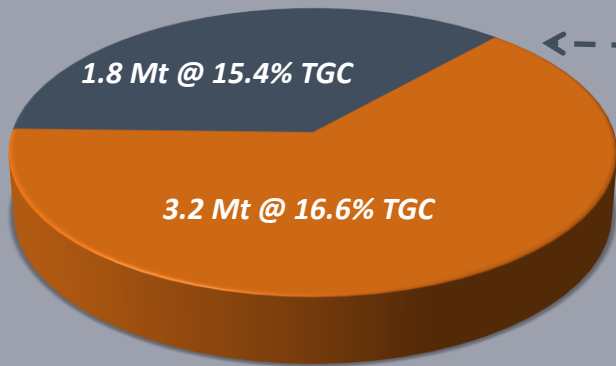
# Prime Location Close to Infrastructure and Deepwater Port



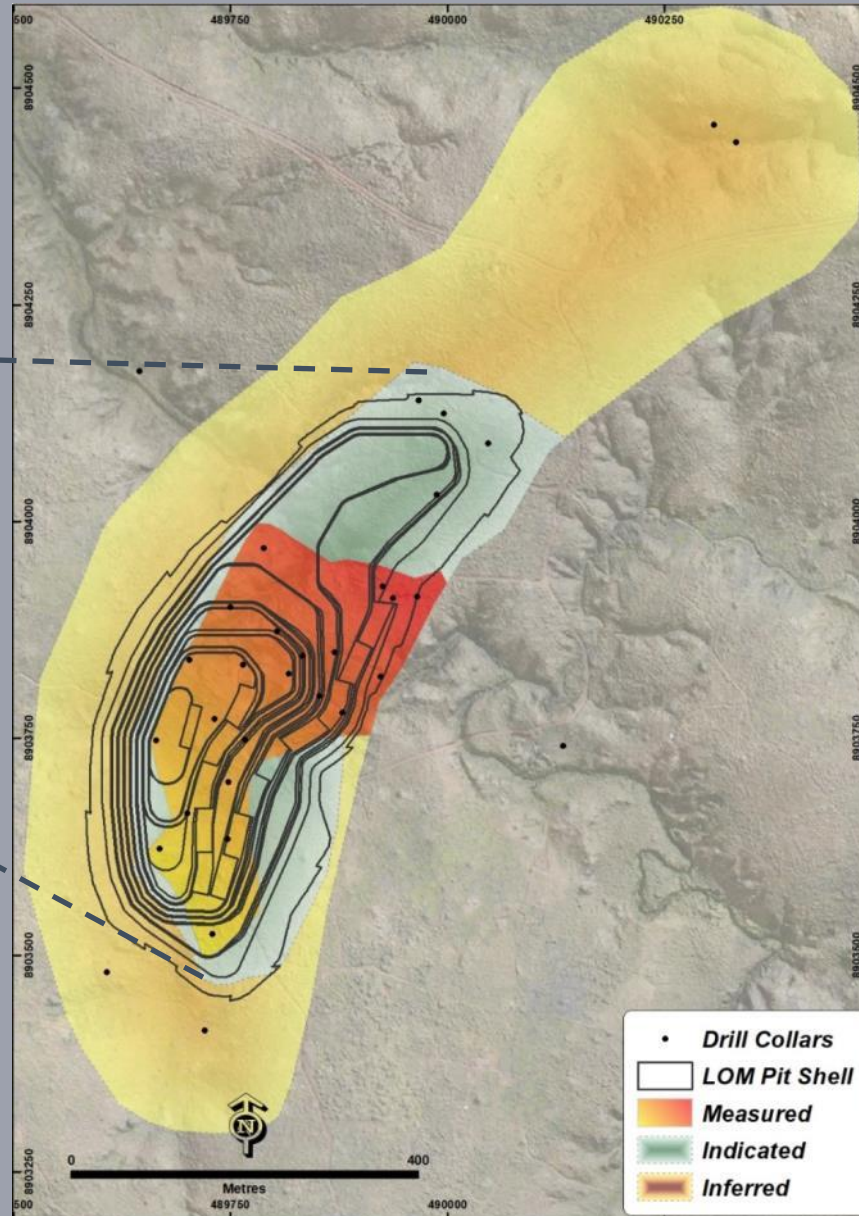


# 3.2 Mt of High Quality Large Flake Graphite Concentrate

## Ore Reserve



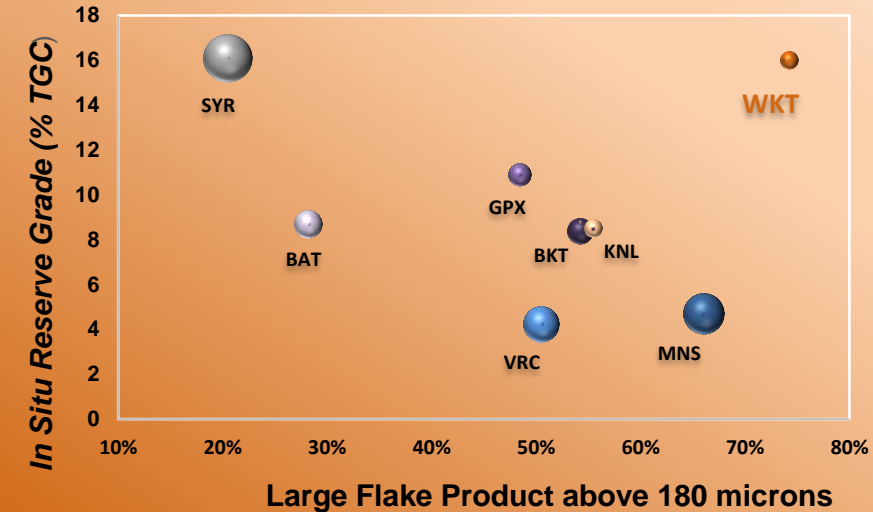
- Proven Ore Reserves
- Probable Ore Reserves



Ore Reserves	Mt	TGC Grade (%)	Contained Graphite (tonnes)
Proven and Probable	5.01	16.1	809,081
Mineral Resource	Mt	TGC Grade (%)	Contained Graphite (kt)
Measured	6.4	12.2	780,800
Indicated	5.5	11.0	605,000
Inferred	17.6	10.6	1,865,600
<b>Total</b>	<b>29.6</b>	<b>11.0</b>	<b>3,256,000</b>

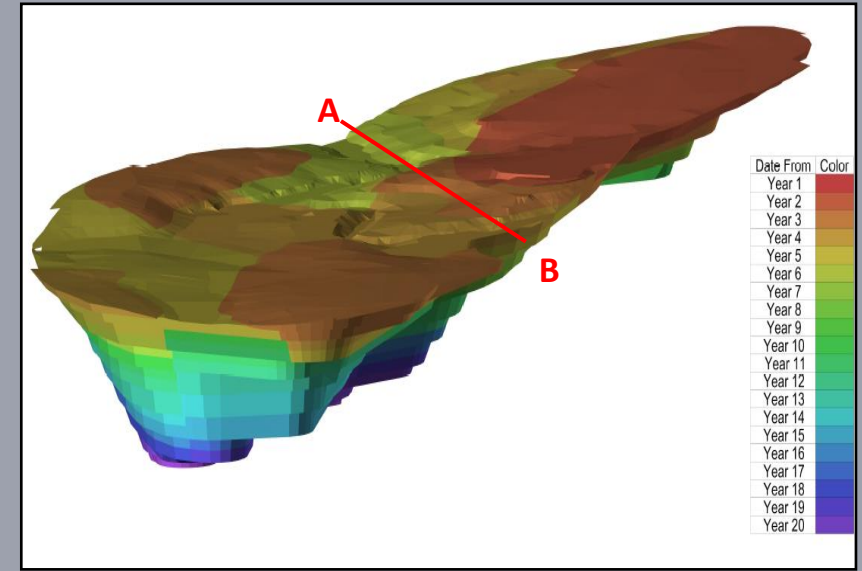
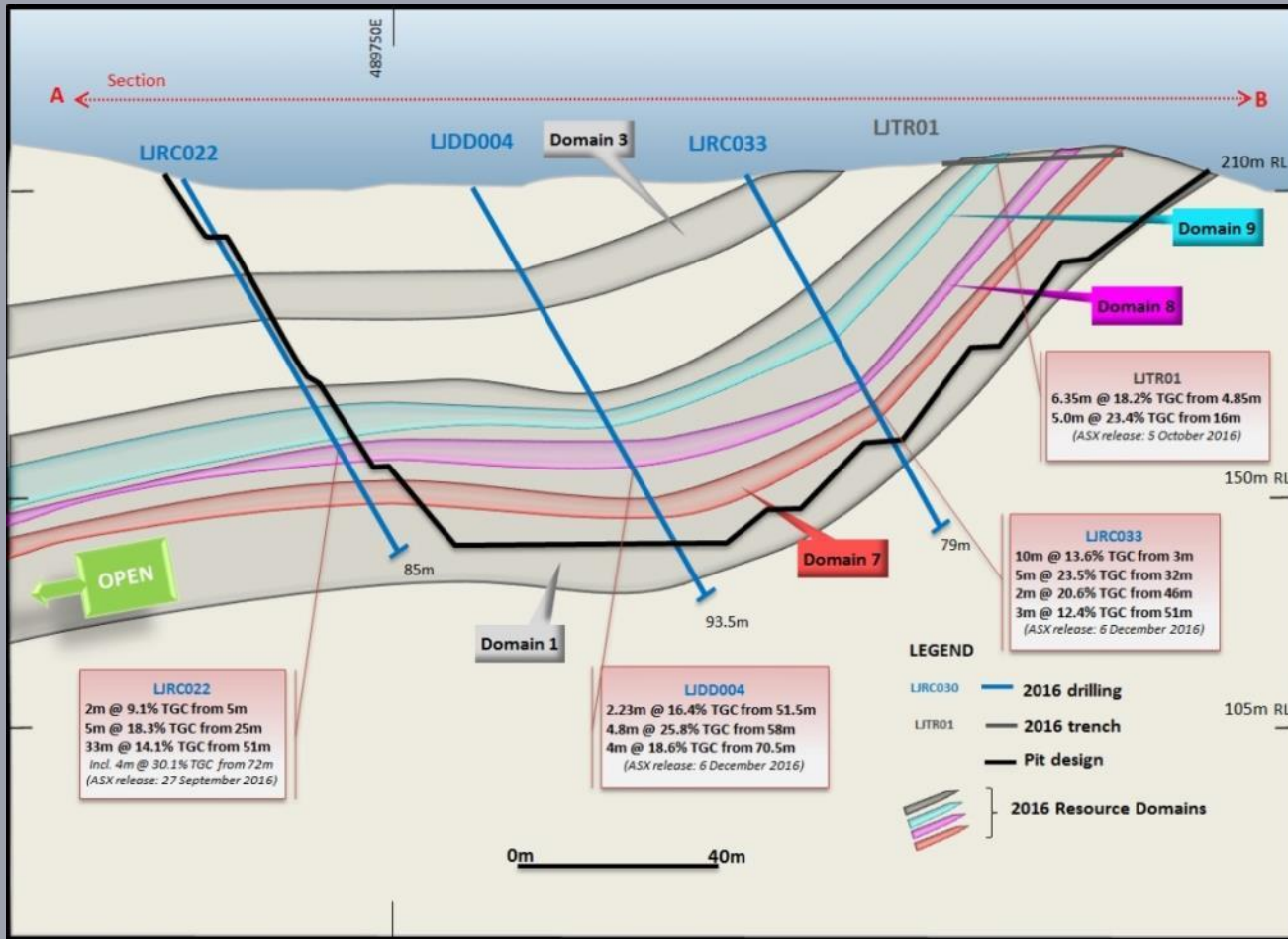
\* Appropriate rounding applied  
 \* Cut off of 5% TGC (Low Grade Domain 4 excluded)

## Reserve grade and flake size distribution



\* Source – ASX company announcements  
 \* Planned annual production target reflected by the size of the bubble

# Shallow Access Open Pit Design



Trench 3 – 18m @ 26.4% TGC  
incl. 9.3m @ 33.1% TGC

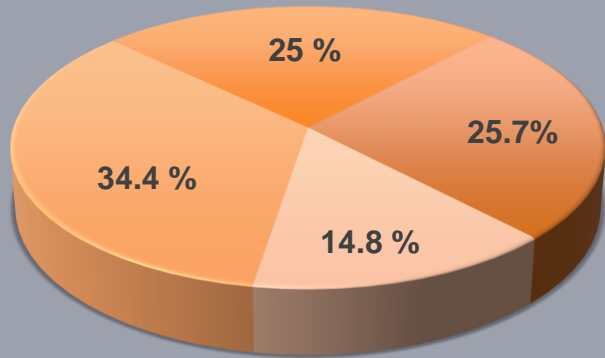
- High grade – visually distinct from surface
- Simple and modest mining operation
- Huge upside potential in immediate deposit area





# Exceptional Flakes, Exceptional Product

## Lindi Jumbo Concentrate Flake Size Distribution



■ Super Jumbo 
 ■ Jumbo 
 ■ Large 
 ■ The Rest

Product Type	Mesh	Base Case Sales Price (US\$/t)	2017 Forecast Prices (US\$/t)	Planned Annual Sales (tonnes)	% Contribution to revenue
Super Jumbo (+500µm)	+35	3,500	1,750	6,000	33.1%
Jumbo (+300µm)	+50	1,750	1,150	13,000	38.6%
Large(+180µm)	+80	1,000	790	11,000	16.0%
The Rest (-180µm)	- 80	750	590	10,000	12.3%
<b>Total</b>		<b>1,534</b>	<b>1,130</b>	<b>40,000</b>	<b>100.0%</b>

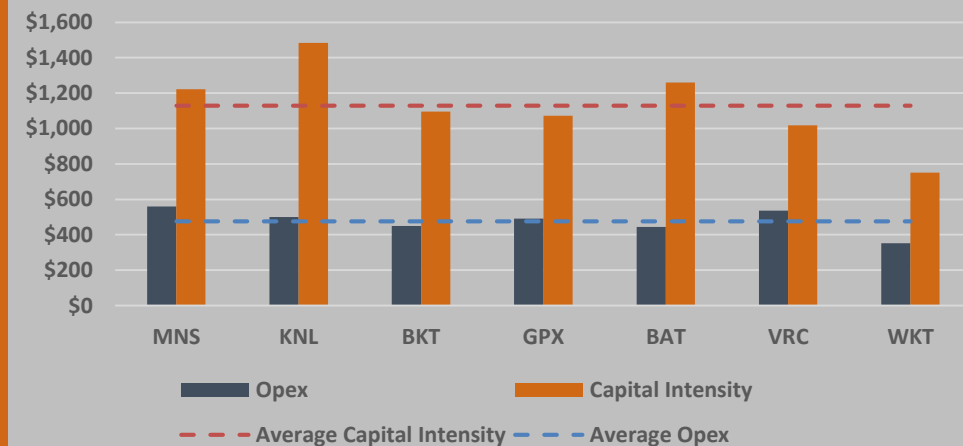
\* 2017 prices from UBS report

- “Best in Class” flake size distribution = High Basket Price
- **Simple processing** - High Purity & Recovery
- **Wide range** of applications
- Perfect for **expandable and speciality graphite** markets
- **Minimal variation** across deposit
- **Exceptional expansion ratios** (590 times)

# Capital Payback 19 Months - Updated DFS Robust Under TZN Changes

DFS Outcomes	Annual Averages	LOM Total (Base Case)	Units	LOM Totals (2017 Actuals)
Revenue	62.0	1,188	US\$m	762.7
Operating Costs (FOB Mtwara)		<b>349</b>	US\$/t	<b>349</b>
Capital Cost (Initial)		<b>29.7</b>	US\$m	<b>29.7</b>
EBITDA	46.2	885.7	US\$m	473.7
WKT Free Cash	28.0	494.4	US\$m	255.3
Pre-Tax NPV <sup>10</sup>		302.5	US\$m	145.5
Pre-Tax IRR		108.0	%	61.3
Post-Tax NPV <sup>10</sup>		180.2	US\$m	86.0
Post-Tax IRR		87.7	%	50.6
Payback Period		19	Mths	20
Operating Margin	77.4	77.5	%	64.9
<b>2017 Tanzanian Legislative Effects</b>				
Royalties	1.8	34.2	US\$m	21.5
Taxes Paid	12.6	255.1	US\$m	131.5
TZ Government Dividend	5.3	100.8	US\$m	51.5
Total to Tanzania	19.7	390.1	US\$m	204.5

## Peer Comparison - Capital Intensity and Opex



\* Source – ASX company announcements

\* Appropriate rounding applied

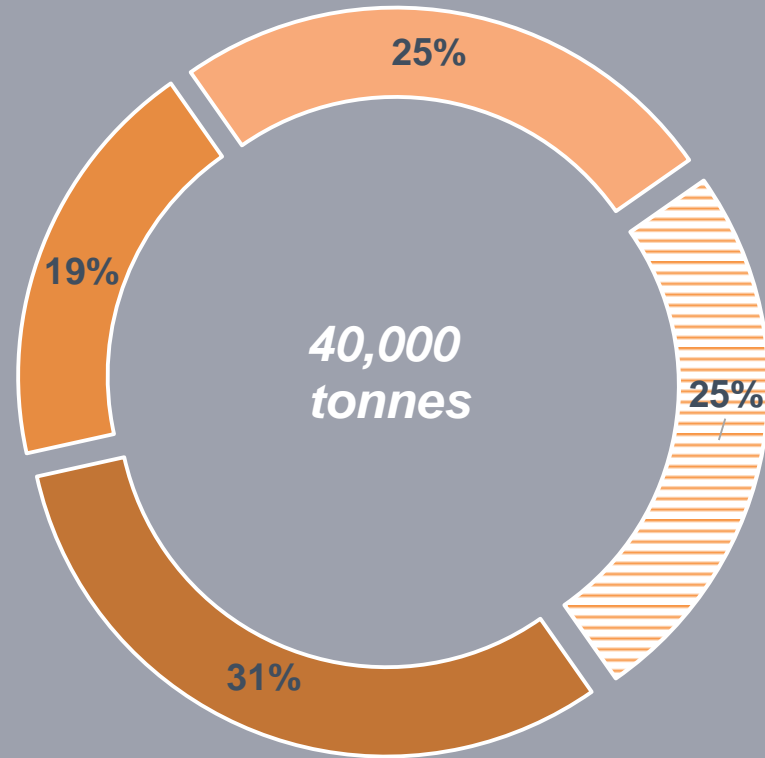
\* See ASX release of 24 August 2017. No changes to the DFS has been recorded since then



# Innovative Approach to Branding, Marketing and Offtake



- **Branding** - LINDI JUMBO PREMIUM FLAKE
- **Strategic Alliances** – Europe and China
- **Offtake** - HoA and MOU for 75% of product



- German Graphite Trader
- Chinese Graphite Trader

- Jixi Puxiang New Material Co. Ltd.
- Unallocated



# Robust Demand - Prices on the Move

Natural Flake Graphite (all at 95% TGC)	Mesh	Base Case Sales Price (US\$/t)	May 2017 Actual Prices (US\$/t)	Sept 2017 Actual Prices (US\$/t)	% Increase between May and Sept 2017
Super Jumbo (+500µm) <sup>1</sup>	+35	3,500	1,350	1,680	24%
Jumbo (+300µm)	+50	1,750	1,150	1,520	32%
Large(+180µm)	+80	1,000	720	1,100	53%
The Rest (-180µm)	- 80	750	470	777	65%
Total		1,534	870	1,216	38%
Expandable Graphite					
+300µm Exp 250x 98% TGC	+50		2,350	2,570	9%
+500µm Exp 400x 99% TGC	+35		3,150	3,850	22%

2017 prices from UBS report and industry actuals  
 1 – Highly specialised Product with low pricing transparency – Price was \$6,000/t in 2012

- Supply constrained by Chinese industry clean-up
- Rapid development of new fire retardant products
- Remaining graphite supply in China is low spec/small flake
- Chinese trading houses seeking to export to European markets
- Current focus on Lithium supply has left graphite neglected

