

Developing a high-quality graphite project for the rapidly growing global battery market

2017 ANNUAL GENERAL MEETING

CORPORATE PRESENTATION

ASX:KNL FSE:FMK

premium quality graphite **uniquely tanzanian**



DISCLAIMER

Securities Disclaimer

This presentation is for informational purposes only and does not constitute an offer to sell, or solicit to purchase, any securities. Such offer can be made only through proper subscription documentation and only to investors meeting strict suitability requirements. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

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. The company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forward looking statements will be achieved.

Competent Person

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Spinks, who is a Member of The Australasian Institute of Mining and Metallurgy included in a list promulgated by the ASX from time to time. Andrew Spinks is a director of Kibaran 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 Spinks 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 Mineral Resources is based on information compiled by Mr David Williams, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. David Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams 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”. David Williams 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 the Ore Reserve has been compiled by Mr Steve O'Grady. Mr O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy, is a full time employee of Intermin Engineering and produced the Mining Reserve estimate based on data and geological information supplied by Mr Williams. Mr O'Grady has sufficient experience that is relevant to the estimation, assessment, evaluation and economic extraction of Ore Reserve that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr O'Grady consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.



OUR VISION

premium quality graphite uniquely tanzanian



“To become a high margin producer of premium quality large flake graphite in Tanzania and a long-term stable supplier of graphite for the high growth battery market”

THE RIGHT TEAM TO ADVANCE EPANKO



Board and Management

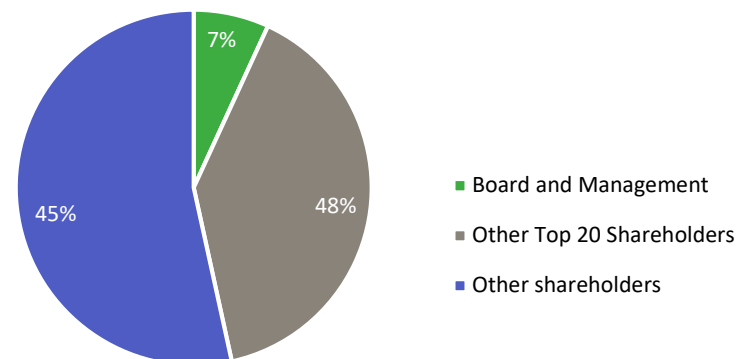
A strong mix of mining, commercial and graphite experience

Robert Pett (Non-Executive Chairman)	Minerals Economist with over 30 years' experience in developing resources and mines in Australia and Africa. Founding Chairman of Resolute Mining with a strong track record of board governance and leadership in listed companies.
Andrew Spinks (Managing Director)	Geologist with over 25 years' experience. Expertise in exploration, mining and management across a range of commodities and geographies. Former resident of Tanzania at the Golden Pride mine.
Grant Pierce OAM (Executive Director)	Mining engineer, over 25 years' experience, including development of African mines Tulawaka, Golden Pride and Edikan. Order of Australia Medal 2003 for social development in rural Tanzania.
Christoph Frey (Non-Executive Director)	German-based graphite industry professional with over 24 years' graphite experience in Russia, Europe, Africa and China. Direct experience in both traditional and evolving graphite markets including the production of spherical graphite.
John Conidi (Non-Executive Director)	Member CPA with 20 years of experience acquiring, developing and managing publicly listed businesses. Significant experience in acquiring and developing technology companies.
Howard Rae (Chief Financial Officer)	Chartered Accountant with over 20 years' experience across the resources industry in Australia, Asia and Africa, focussing on business development and financing new mining operations.
Nick Katris (Company Secretary)	Chartered Accountant with over 10 years' accounting experience in mining industry.

Capital Structure (ASX:KNL, FSE:FMK)

Shares on Issue	244.2m
Share Price (8 November 2017)	\$0.17
Market Capitalisation	\$41.5m
Available Cash (Net Cash 1 Oct + R&D 2017)	\$3.3m
Unlisted Options – Various expiries & exercise prices	3.05m
Top 20 Shareholders	47.9%

Supportive Shareholder Base



premium quality graphite uniquely tanzanian



OVERVIEW – THE CASE FOR KIBARAN

premium quality graphite uniquely tanzanian

Epanko is positioned as one of the most advanced graphite projects globally

- Increased Bankable Feasibility Study (BFS) production case to 60ktpa to support new demand
- BFS conforms with international project financing standards, IFC Performance Standards (Equator Principles) and World Bank Environmental, Health & Safety Guidelines
- All key documents in place for project financing process

Robust marketing strategy

- High percentage of large flake products from simple processing differentiates Epanko
- Offtake and sales agreements secured with blue-chip European and Japanese graphite and lithium-ion battery industry participants ensures sale of all production
- Strategy matches the “reality” of prevailing graphite markets

Growth opportunities to enhance project returns

- Feasibility study due for completion in Q4 2017. Production case trebled to 20,000tpa from initial start of 6,000tpa
- Major breakthrough on purification process eliminating the use of Hydrofluoric acid mineralisation.
- Conversion of flake graphite to spherical graphite at Epanko to add significant value.
- Project economics do not include product sales into the high growth lithium-ion battery markets



BFS KEY HIGHLIGHTS

- 50% increase in production to 60ktpa over an 18 year life of mine positions Kibaran to be a major baseload supplier of high value graphite products to traditional and emerging graphite markets
 - Low pre-production capital of US\$88.9m
 - C1 operating costs FOB Dar es Salaam of US\$500/t
- BFS delivers a high returning project:
 - Pre-tax NPV₁₀ of US\$211m, internal rate of return:38.9%
 - Annual EBITDA of US\$44.5m (A\$59.3m)
 - Economics do not include sales into the high-growth lithium-ion battery markets
- Metallurgical test work demonstrates potential to produce a 99% carbon concentrate from fresh ore with no additional milling or cleaning stages
- BFS signed off by bank appointed Independent Engineer ('SRK') after rigorous due diligence
- Project conforms with stringent IFC and World Bank Social, Environmental and Safety Standards
- Executed marketing strategy with strong alignment to German industry and the battery supply chain in Japan, Korea and Taiwan
 - 44ktpa - binding sales and offtake agreements in place covering initial production
 - 16ktpa - under negotiation with existing partners and leading German carbon groups
- Feasibility study on production of battery grade graphite to add further value and due Q3 2017



FUNDING STRATEGY

- Completed BFS is a key catalyst for lenders, with bank financing demanding the highest technical, social and environmental standards
- Recently finalised RAP establishes critical project implementation plans and is a pre-requisite for lender credit approval processes
- Debt discussions continuing with KfW, Nedbank, EFIC and commenced with the Tanzanian Government regarding the implementation of the new mining legislation
- Next steps:
 - establish Tanzanian regulatory framework for the Epanko development
 - finalise proposed construction arrangements
 - prepare submission for the untied loan guarantee ('UFK') from the German Government for the supply of graphite to Kibaran's German customers
- In parallel with debt program, progressing discussions with strategic equity investors, including sales partners, industry participants and private equity groups

KFW IPEX-Bank





FUNDING STRATEGY CONTINUED

ALL FUNDING DOCUMENTS COMPLETED

- Bankable Feasibility Study on Epanko Graphite Mine for the production of 60ktpa
- KfW-IPEX Bank - Independent Engineers Report
- Resettlement Action Plan

RECENT POSITIVE TANZANIAN NEWS

- Regulations supporting recent legislative changes in draft and expected shortly
- Splitting of Minerals and Energy Ministry
- Ms Angellah Kairuki appointed Minister for Minerals
- Settlement between Barrick and Government announced
- Majority of the new provisions are not expected to impact Epanko given graphite is an industrial mineral product of 96% carbon that will be sold as a final product
- 3% royalty rate remains unchanged for graphite



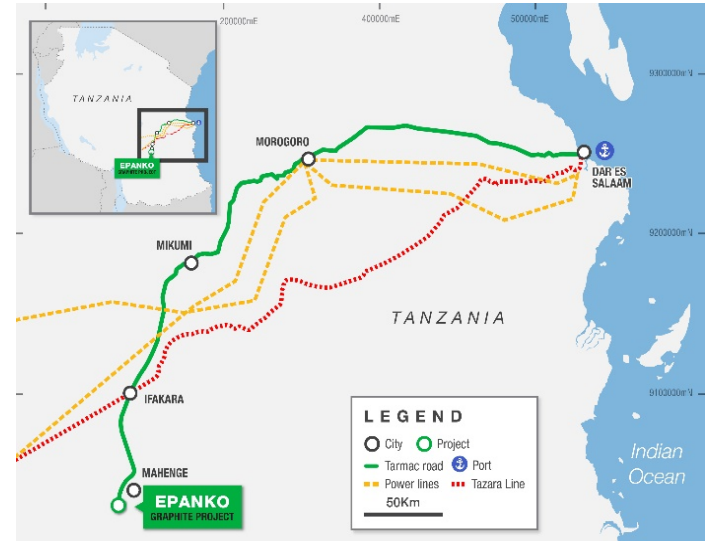
EPANKO SUPPORTED BY EXISTING INFRASTRUCTURE



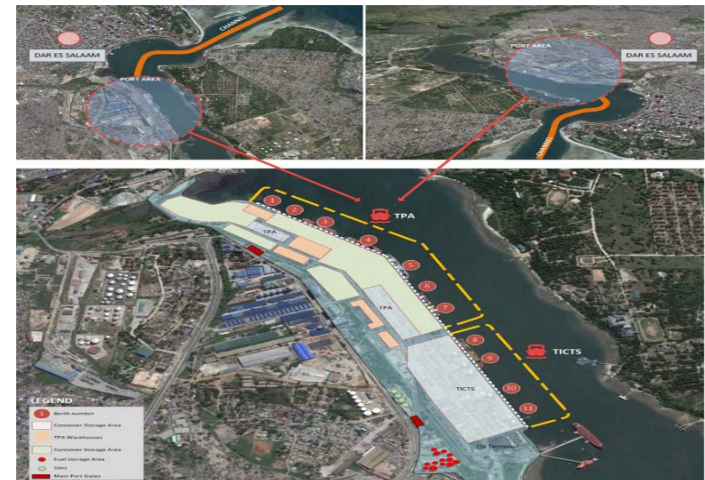
premium quality graphite uniquely tanzanian

- Existing road access to Mahenge provides an effective logistics solution to Dar es Salaam
 - Construction of bridge across the Kilombero River, linking Ifakara and Ulanga Districts nearing completion and simplifies project logistics
 - Freeway flyover constructed to provide efficient access to Dar es Salaam port
 - Proximity to the Ifakara Rail siding provides a long term strategic logistics option as Epanko production increases
- Concentrate to be exported from the port of Dar es Salaam
- Diesel power for first 2 years of operation prior to connection to grid power at the Ifakara sub station
 - Grid power costs expected to be US\$0.09kwh vs diesel costs of US\$0.30kwh

Established Regional Infrastructure



Export Infrastructure at Dar es Salaam





A HIGH QUALITY GRAPHITE DEPOSIT WITH SCALE

- Mineral resource supports potential for depth and strike extensions of the Ore Reserve pit shells
- Mineralisation commences at surface with minimal cover
 - Average LOM strip ratio 0.4:1
- Favourable mineralogy delivers quality and drives robust project economics
 - High proportion of large flake sizes
 - Graphite is easily liberated and delivers high yield
 - Higher carbon grade achieved through simple processing
 - Low levels of in-situ deleterious elements

Epanko Mineral Resource Estimate >8% TGC

JORC Classification	Tonnage (Mt)	Contained Graphite (t)
Measured	7.5	738,900
Indicated	12.8	1,280,000
Inferred	10.4	1,030,600
Total	30.7	3,049,500

Epanko Drill Core Rock Texture



Epanko rocks have undergone extremely high metamorphic pressure and temperature forces that have created unique 'cheetah' like rock textures.



OUTLOOK OF WESTERN ZONE RIDGE LINE

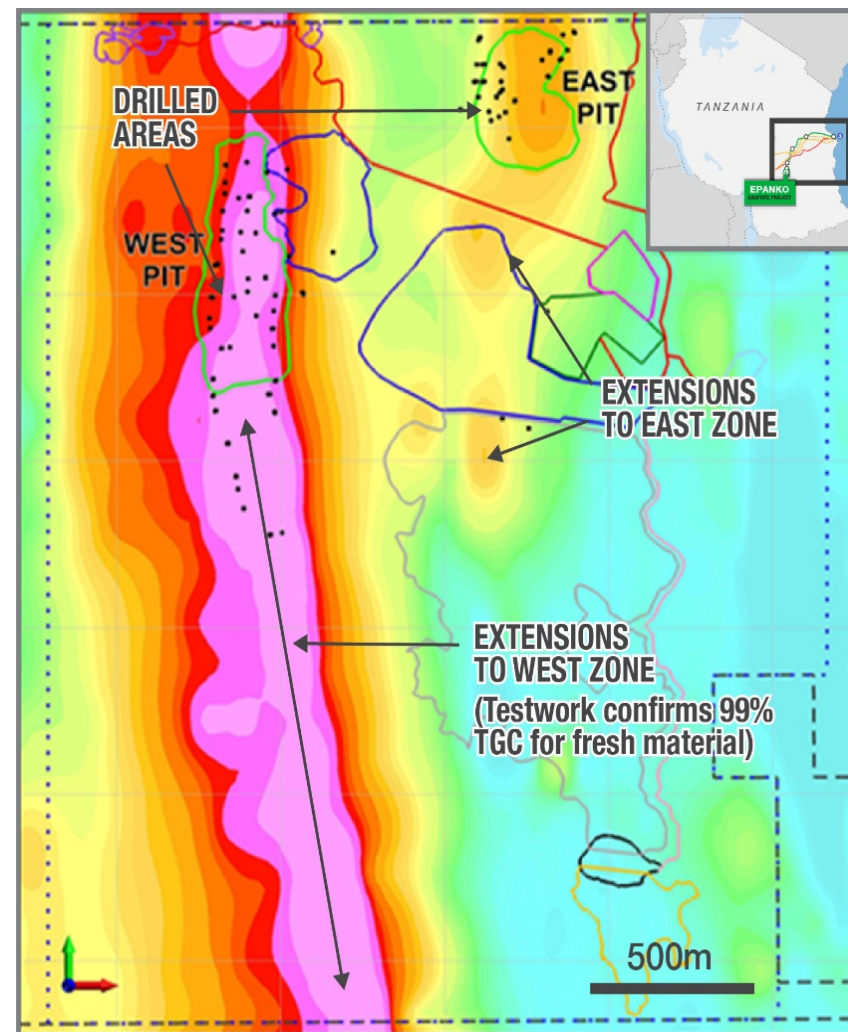
premium quality graphite uniquely tanzanian





VTEM SHOWS HIGHLY CONDUCTIVE UNDRILLED WESTERN ZONE WITH SIGNIFICANT POTENTIAL

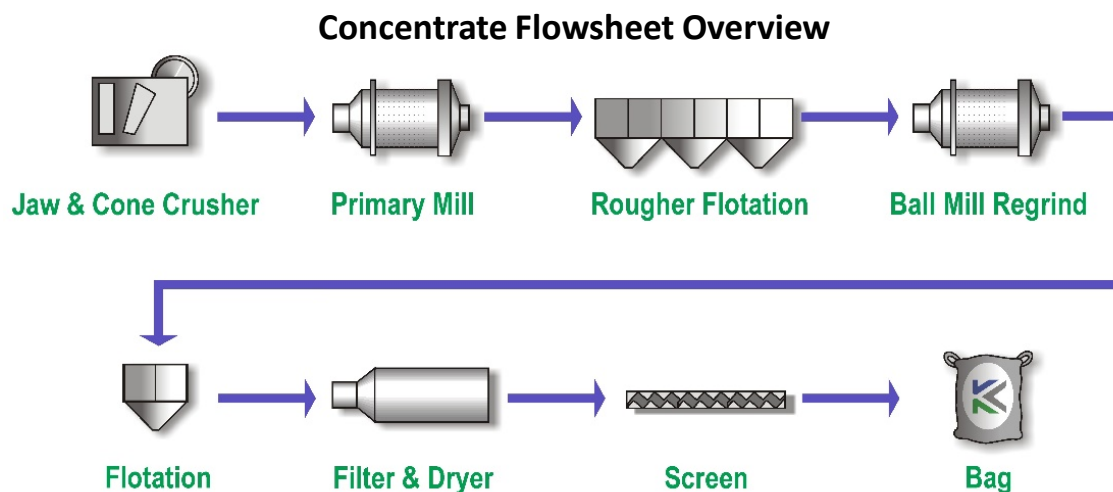
- Significant mineralisation exists outside of the Mineral Resource estimate modelled on an 8% TGC cut-off compared to the 5% TGC cut-off utilised for the Ore Reserve
 - Mineral Resource at lower 5% TGC is 113.3Mt at 7.2% TGC grade for 8.1Mt contained graphite
 - Importantly the 7.2% TGC grade under the 5% TGC cut-off above is higher than comparable Tanzanian deposits of relative scale
- High conductivity identified in VTEM survey highlights the potential for the delineation of additional mineralisation along strike and at depth
- Only 1.13km of the 4km strike identified by VTEM survey has been drilled on the West Pit
 - Remains open at depth with the deepest reported graphite intersection at 200m
 - Potential to provide significant tonnages of additional graphite mineralisation





HIGH GRADE, LARGE FLAKE PROVIDES FLEXIBILITY IN PROCESS FLOWSHEET DESIGN AND PRODUCTS

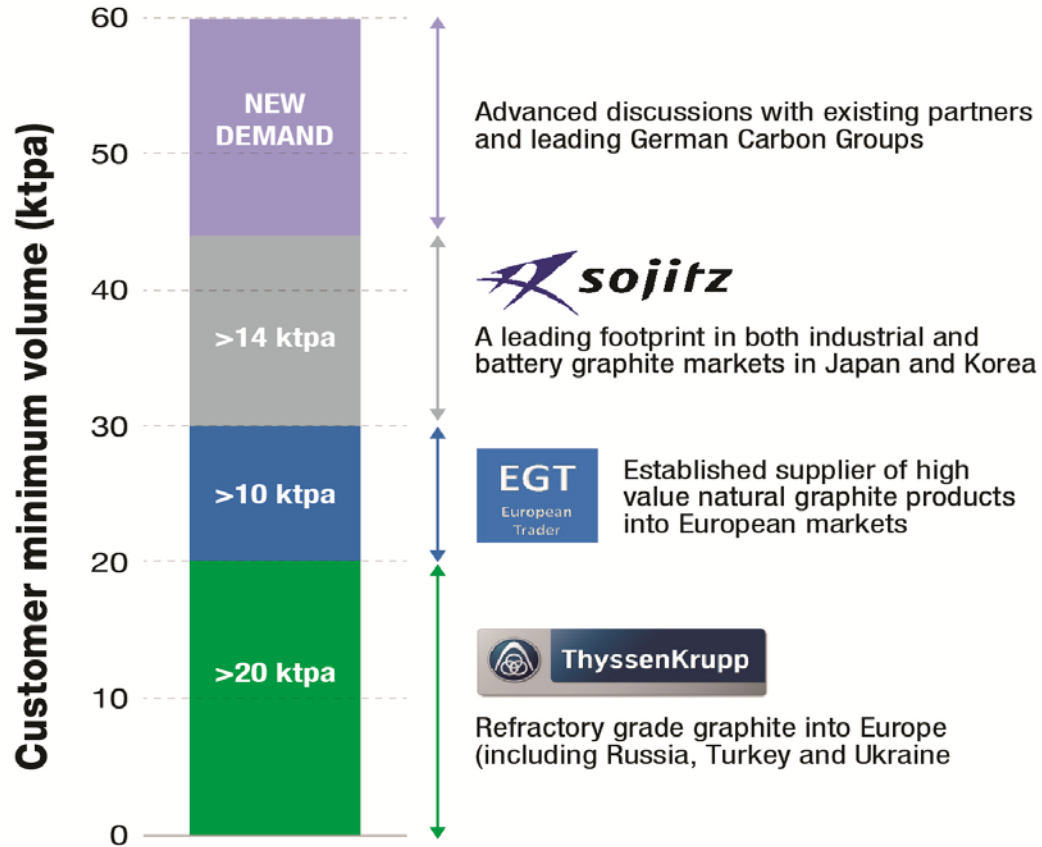
- Process flowsheet based on established industry processes and equipment
- High level of independent testwork to support BFS including 200t bulk sample
 - Bulk sample was toll treated through an operating graphite production plant
- High level of variability testwork completed
 - Confirmed the potential to produce a 99% carbon concentrate for <150 micron flake from fresh ore
- Increased understanding of flowsheet dynamics to produce desirable properties for both industrial uses and high growth markets
 - Epanko has the highest proportion of >150 micron flake and has designed a flowsheet to preserve flake size in this product range



OFFTAKE AND SALES AGREEMENTS MATCHED TO DEMAND AND POSITIONED FOR GROWTH MARKETS



premium quality graphite uniquely tanzanian





GRAPHITE MARKET OUTLOOK

GRAPHITE MARKET ENCOUNTERED A MAJOR TURNING POINT

- Turning point driven by Chinese government decision to go solely Electric Vehicles by 2030.

Positive Outlook

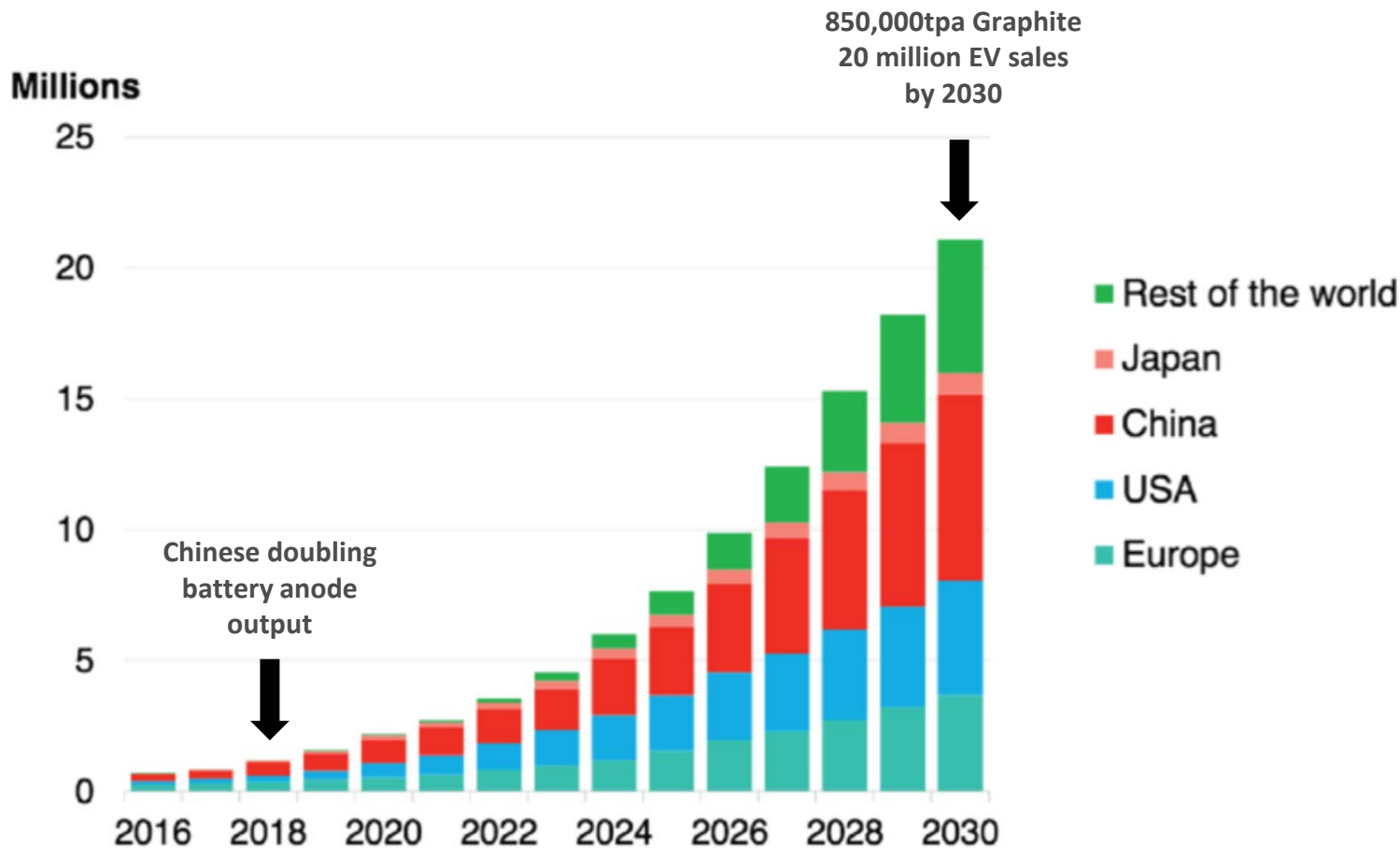
- Prices for natural flake graphite and battery (spherical) grade graphite prices significantly increased.
- Chinese battery anode manufacturers doubling installed capacity in 2018
- Restriction in supply due to environmental pressure producers in China by their Government for both natural flake graphite and synthetic graphite.
- Market shortage of high-quality battery-grade graphite meeting market specifications
- Increased pressure on the use of Hydroflouric (HF) graphite with some provinces banning the use of HF which is the key acid in the current purification method for Battery (Spherical) grade graphite



GRAPHITE MARKET OUTLOOK

Electric Vehicles driving demand for graphite with EV Penetration 35-47% by 2040

premium quality graphite uniquely tanzanian

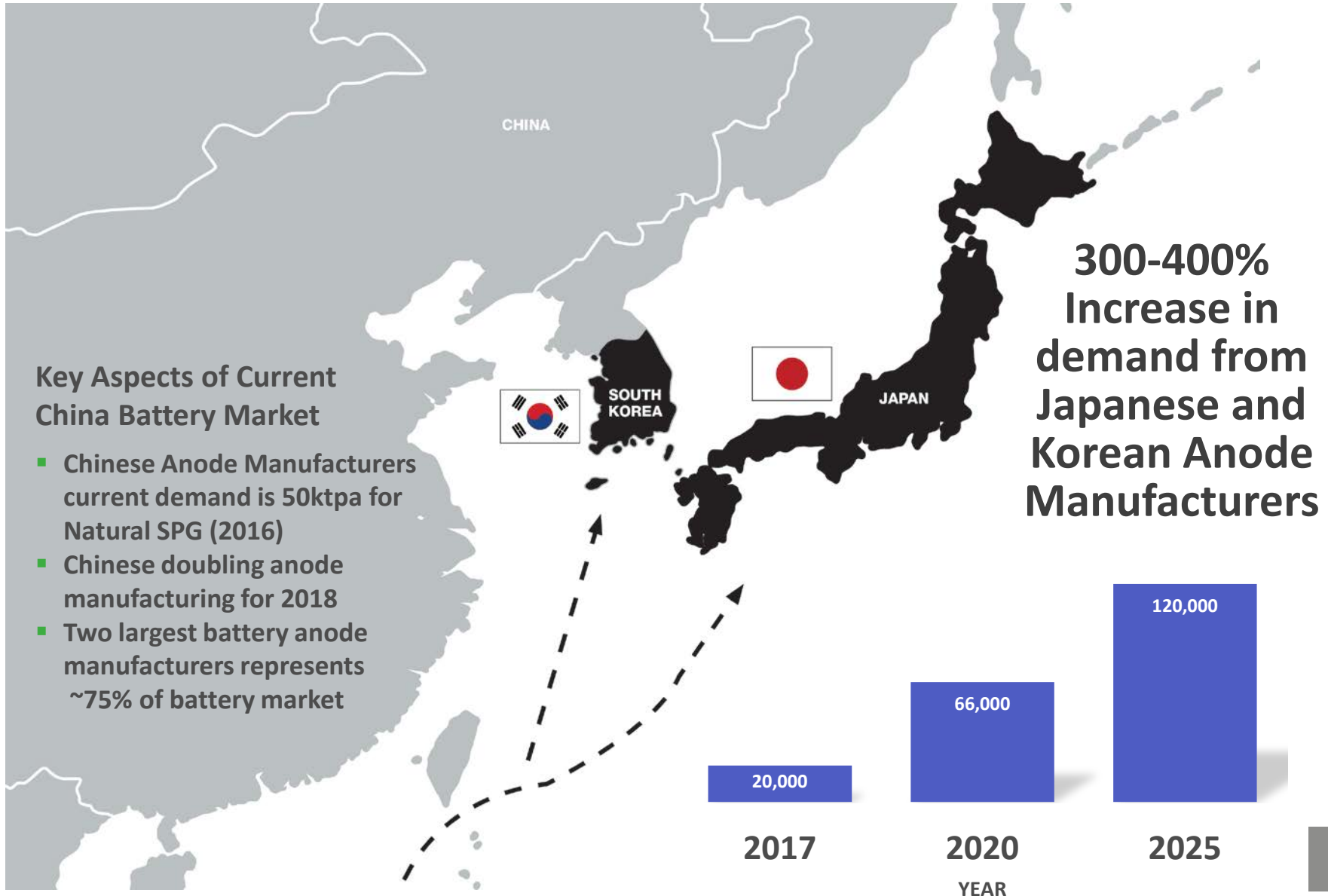


(Source : Bloomberg New Energy Report)



POSITIONED FOR THE EXPECTED GROWTH

premium quality graphite uniquely tanzanian

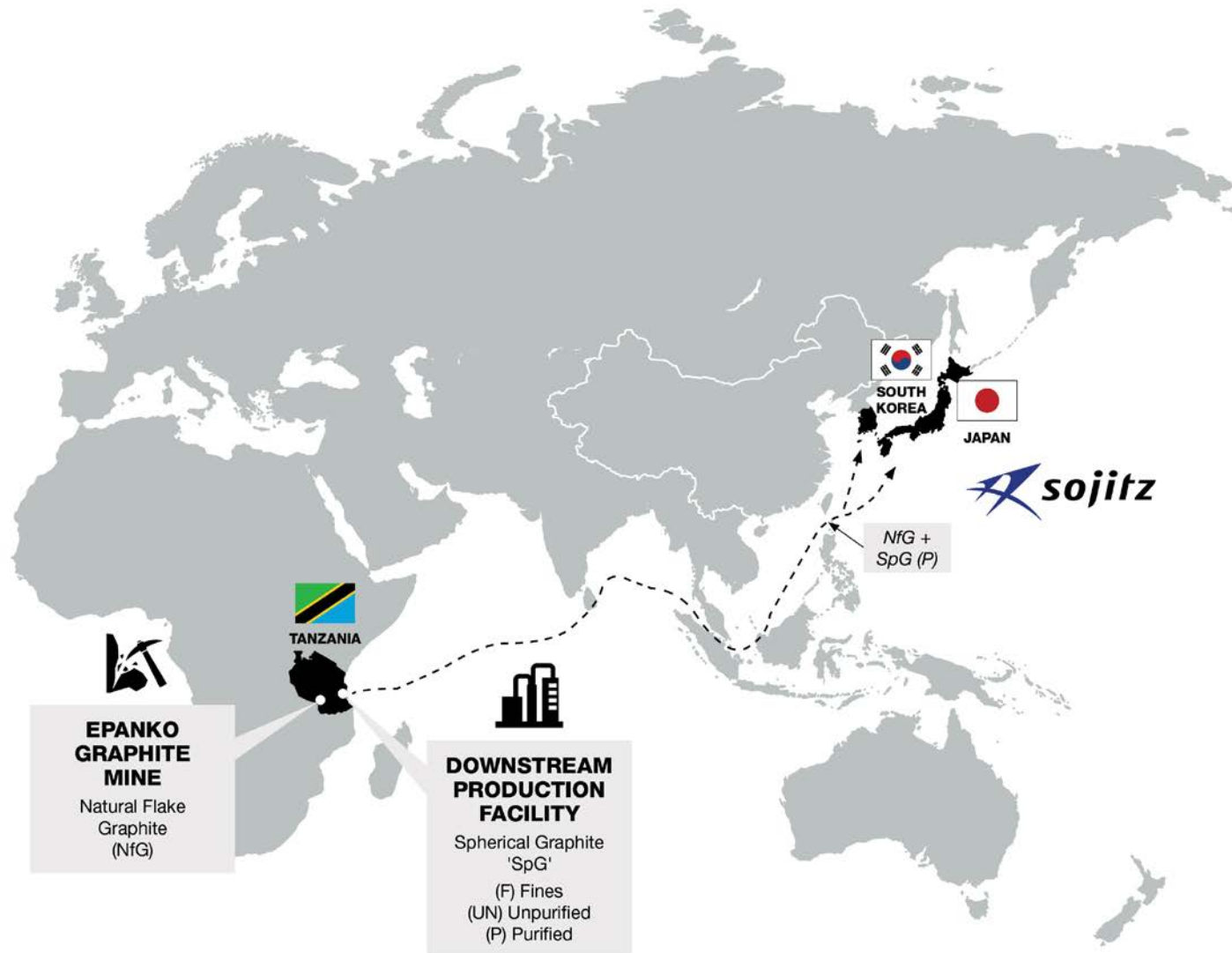




STRATEGIC LOCATION

- A global Spherical Graphite mine to market strategy

premium quality graphite uniquely tanzanian





FEASIBILITY STUDY – BATTERY GRAPHITE

STUDY UPDATE

- Major breakthrough in purification process to produce battery grade graphite
- Study expected December Quarter - 20ktpa with initial production case of 6ktpa of spherical graphite
- Facility located in Dar es Salaam
- First product sample produced via optimised flowsheet

PRODUCT ADVANTAGES

- Graphite production conforms with IFC Performance Standards and World Bank Group Environmental Health and Safety Guidelines
- No Hydrofluoric (HF) acid required to achieve Spherical Graphite specification +99.96% Carbon, due to unique mineralogy.
- Staged growth to meet demand
- Spherical Graphite can meet all required specifications all world leading anode manufacturers





BATTERY (SPHERICAL) GRADE GRAPHITE PRODUCED

- Kibaran (KNL) produced 2 different types of SPG in a commercial plant in China: SPG 14.5 and SPG 20
- Feed material was -195 produced by flotation from Epanko ore
- SPG-Material was tested by different institutes and potential customers
- Positive feedback by all anode manufacturers
- Basic analytical results of the SPG are as follows:

Grade	SPG 14.5	SPG 20
Carbon Content	99,98%	99,98%
Ash	0,02%	0,02%
Moisture	0,10%	0,10%
d10	9.8 micron	12.1 micron
d50	14.8 micron	19.0 micron
d90	22.3 micron	29.2 micron
SSA	7.8 m ² /g	6.5 m ² /g
Tap Density	0,95 g/ml	0,96 g/ml



COATED SPHERICAL GRAPHITE

- SPG 14.5 was further investigated as Impurities were monitored after each process steps (measured by ICP)
- Graphitizing was taking place at 2800°C for 30 minutes

	spheronized	purified	coated	graphitized
	ppm	ppm	ppm	ppm
Si	5278	43	42	<9,9
Al	2812	18	18,9	<4,9
Fe	2581	14,2	18,5	0,7
Ca	2187	16,1	20,5	3
Cu	224	0,5	0,9	<0,4
Zn	9,1	0,8	0,4	<0,1
Ni	<27,5	<2,5	<1,7	<2,6
Cr	6	0,5	0,5	<0,1
Mg	775	3,3	3	<0,8
K	401	<9,4	<6,3	<9,8
Na	141	16,1	<2,2	<3,4
Mo	15,3	<0,2	<0,1	<0,2
Mn	33,6	0,7	0,8	<0,2
V	24,3	0,2	2	8,6

Purity development of SPG 14.5

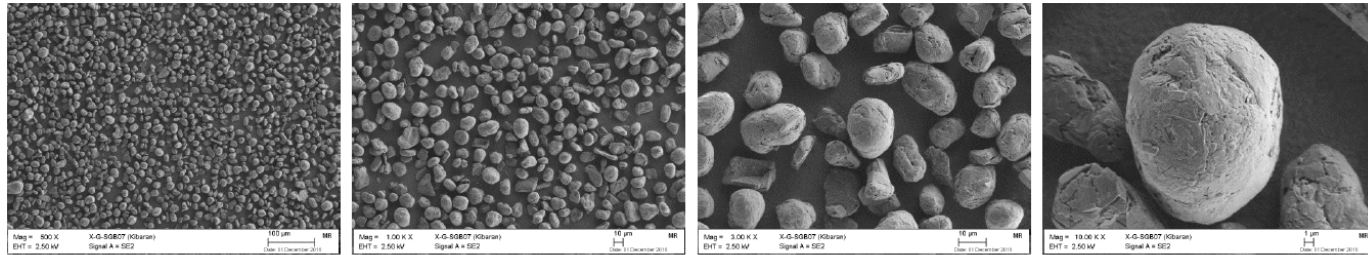
left: unpurified

right: purified, coated and graphitized



BATTERY ANODE MATERIAL

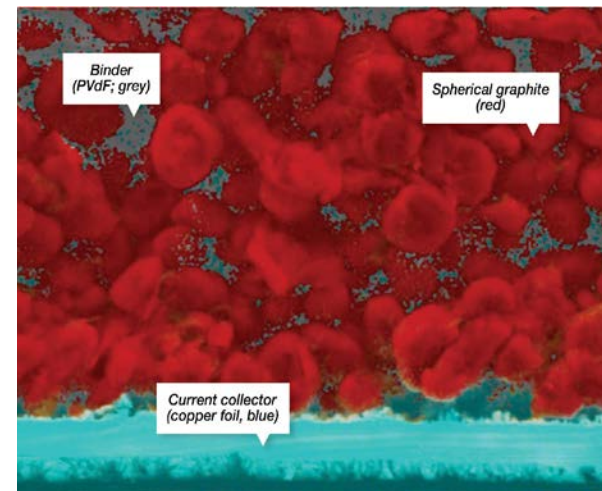
- Battery anode produced with SPG 14.5 in a leading German research institute



premium quality graphite uniquely tanzanian



Section through the anode cell showing Epanko Battery (Spherical) Graphite coated on to the anode copper foil





FUTURE - UNLOCKING VALUE

UPGRADED BFS TO 60KTPA

FURTHER AGREEMENTS

DEBT FINANCING

BATTERY GRADE FEASIBILITY



 **TanzGraphite(TZ) Limited**

Kibaran Resources Limited
Level 1/18 Richardson Street
WEST PERTH WA 6005
Ph: +61 8 6424 9000

www.kibaranresources.com

