



**Breakaway
Research**

Tanzoz Australia

A Quality Large Flake Graphite Play in Pre-IPO Stage

Outline of a New Graphite Project

November 2018

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Company Information

CAPITAL STRUCTURE

Share Price (A\$) - target	1.05
Ord Shares issued	8.22 m
Market Cap undiluted (A\$) - pre-development	8.63 m
Est. Cash (31 August 2018) (A\$m)	0.1 m
Total Debt (A\$m)	0.0 m
Enterprise Value (A\$m)	8.58 m

DIRECTORS

Managing Director	Alistair Smith
Director	Seth Dickinson
Director	Craig Ross
Director	Bjorn Zikarsky
Director	Dan Hoppe

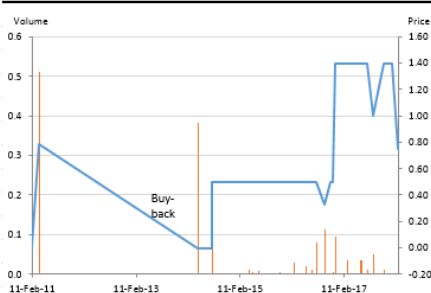
SUBSTANTIAL SHAREHOLDERS

Alistair Smith	18.33%
Seth Dickinson	16.09%
Craig Ross	16.05%
Square Resources (director related)	12.35%
Dan Hoppe	10.67%
Other shareholders	26.50%

COMPANY DETAILS

Address	Level 2, 32 Park Road Milton QLD 4064 Australia
Phone	+61 7 3369 8869
Web	http://www.tanzoz.com/

PRICE CHART



Source: Company

Key Points

- **Tanzoz Australia Pty Ltd is a private company developing the Chenjere graphite project in southern Tanzania. The Company has completed several exploration campaigns including geophysics, trenching and drilling to understand the extensiveness of the graphite mineralisation within its project area.**
- **Tanzoz has completed scoping studies on a project producing 7,500 tpa graphite (TG) concentrate as a cash positive starter project with later capacity to expand. The project is exciting as it focuses on producing large flake concentrate which directly markets to the premium graphite market products. Other project attributes include a potentially large resource base, a low strip ratio with free dig starter pits. The project location is close to infrastructure for accessing export markets.**
- **The project capital is estimated at only US\$6m to develop the 7,500 tpa operation. However, the Company has recommended a US\$400,000 confirmatory drilling campaign to derisk the resource base by firming up oxide mineralisation along strike – evident from geophysics and trenching.**
- **Breakaway Research has estimated project returns which includes an NPV of US\$15.7m and IRR of 76%. It is Tanzoz's intention to raise US\$6.4m at A\$1.05 per share. At this share price the Company would have:**
 - **An NPV of A\$1.26 per share (US\$0.94/share).**
 - **A Price/Earnings ratio of 3.3 times.**
 - **A Price/Cashflow ratio of 3.6 times.**
- **Encouragingly these parameters reflect full production at 7,500 tpa TGC rate but ignores scope for future expansions. Hence it is an ideal low risk 'starter project' in a prospective terrain capable of supporting a larger operation.**
- **Meanwhile Tanzania is now moving forward after introducing new Mining Policy changes. Both Walkabout Resources and Strandline Resources have had mining leases granted in recent weeks indicating the country is now ready for business.**

Tanzoz is now seeking expressions of interest to finance its Chenjere project using a staged approach – an initial tranche of US\$400k to finance the confirmatory drilling followed by a US\$6m tranche to fully develop the 7,500 tpa TCG project to production. The high component of large flake graphite in the deposit means it will be well positioned in the graphite market in the future.

The Company is seeking finance through either joint venture partners, investment by sophisticated investors or offtakers. Tanzoz ultimately plans to list on the ASX.

This is not a recommendation or offer to purchase shares.



Company Overview

Tanzoz is a private company with the Chenjere graphite project

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Chenjere is attractive from its large flake size – 63% greater than 180 micron size....

Stage 1 costs US\$400k and proves up 10 years of resources....

Stage 2 costs US\$6m and moves the project into production at a 7,500 tpa rate ...

The Chenjere project is located in the southeast of Tanzania near a number of other graphite projects....

Tanzoz Australia Pty Ltd (“Tanzoz”) is a private Australian company with graphite interests in Tanzania. The team behind Tanzoz has been working in Tanzania for more than a decade and have experience across a variety of projects and commodities.

The Company has secured the Chenjere Graphite Project which is in the southern part of Tanzania, near the Mozambique border (see Figure 1). The area also hosts a number of graphite projects which are held by ASX and TSX listed companies. The Magnis and Paco Gem projects both lie immediately north of Chenjere.

The Tanzoz team selected the project due to characteristics of the mineralisation including its large flake size component (63% > 180 microns), the option of commencing mining with low strip ratio – free dig starter pits and its proximity to infrastructure and export markets.

The Company is now seeking financing for a staged programme to develop a 7,500 tpa graphite project with preliminary discussions already confirming significant offtake interest. The two-stage programme provides for a Stage 1 – a US\$400k 1,375 m drilling programme to confirm shallow resources extensions which will then provide a 10 year mine life at a range of production levels.

At the completion of Stage 1, financing is required for the Stage 2 development of a US\$6m plant producing 7,500 tpa graphite in concentrate. This project generates positive cash flows and provides a robust return on investment. It also de-risks the potential for a later expansion to greater than 20,000 tpa graphite which is likely to be attractive given the positive outlook for large flake graphite.

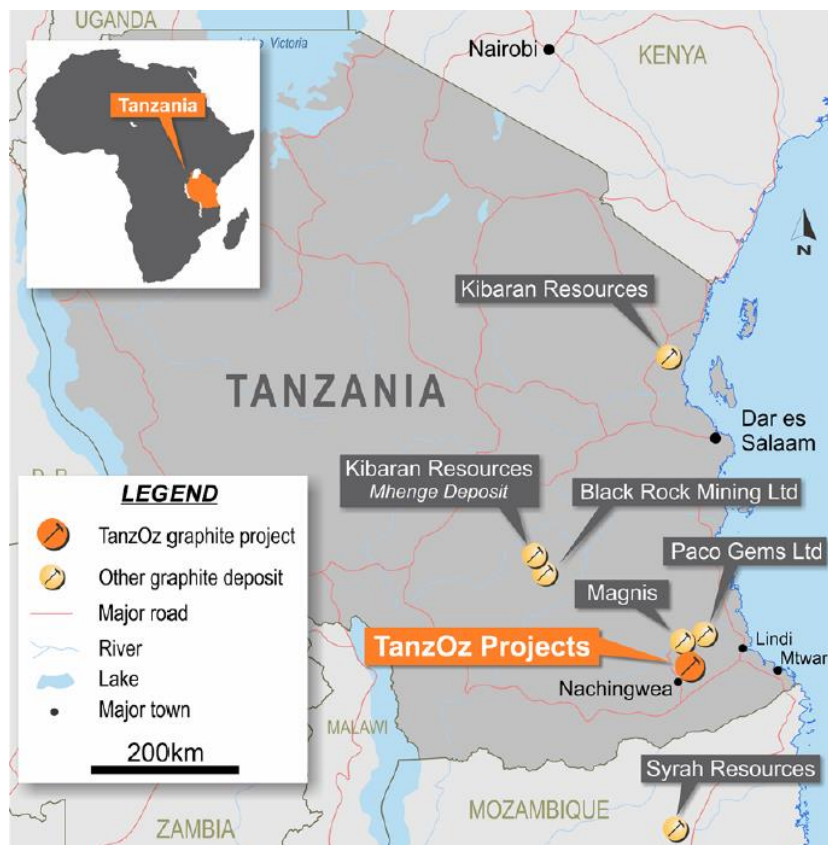


Figure 1. Location of Chenjere – The Tanzoz project (Source: Company).



The export Port Mtwara is located 170 km from the project

The location is the Chenjere Project is well positioned in terms of actual and proposed roads, gas lines and high voltage transmission lines to support the proposed plant as well as access to the export port of Mtwara. Port Mtwara is located 170 km by road from the project and is serviced by daily flights from Dar es Salaam.

The project region is known for its cashew and mango production and its developing gas industry.

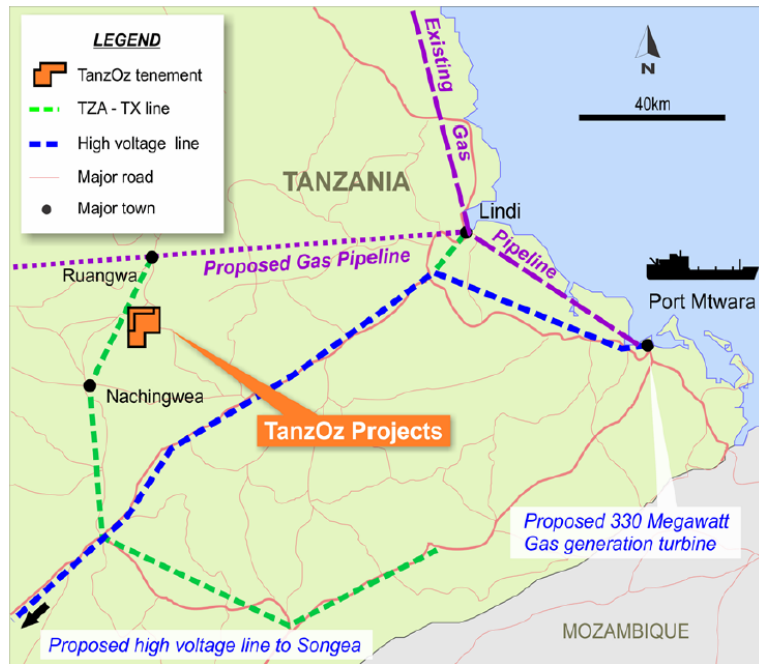


Figure 2. Location of regional infrastructure (Source: Company).

Chenjere Tenement Status

The Chenjere tenements cover 72.7 km² and comprise two exploration tenements, namely; 4855/2007 and the more recent addition of 11072/2016.

The Chenjere tenements cover 72.7 square kilometres.....

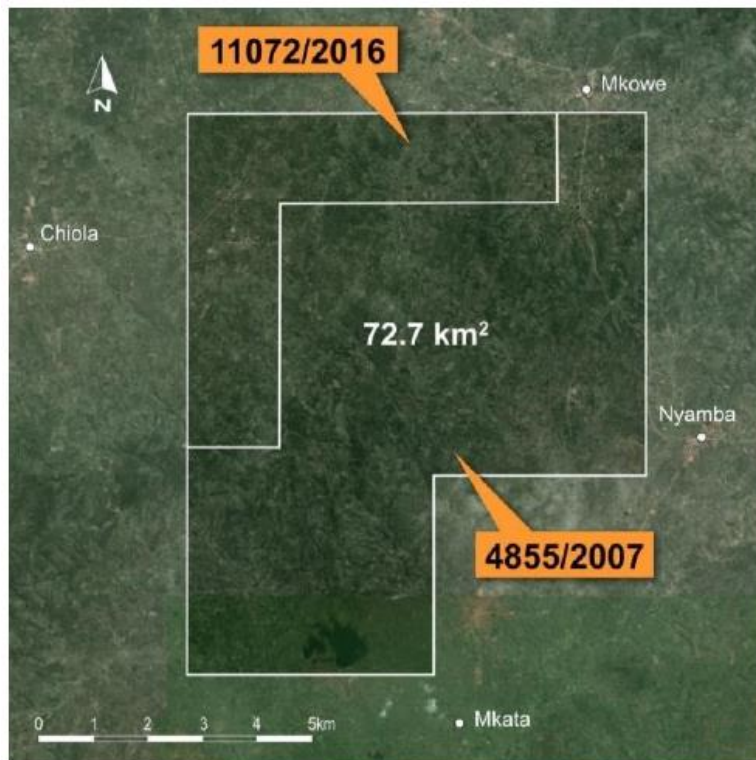


Figure 3. The two exploration licences covering the Chenjere project (Source: Company).



Tanzoz has applied for a mining licence covering 9.83 km² in the eastern portion of 4855/2007. While there have been granting delays due to the changes in Tanzanian Government Policy and Regulations (see later section on Tanzania), the Company has been advised it has progressed in the queue and could be granted prior to the end of the year. Encouragingly, Walkabout Resources has just been granted a mining licence for its Lindi Jumbo Graphite Project in August 2018 demonstrating that the Tanzanian Government has resumed granting mining licences. Elsewhere, Strandline Resources has also been granted a mining licence in August 2018 for its Fungoni Heavy Mineral Sands (HMS) Project located 25kms south of Dar es Salaam Port in Tanzania.

The Tanzoz application covers an area containing the Nakapelo, Namahema, Magani and Ngimbwa prospects (see Figure 3). The application was lodged in August 2018 and will be valid for 10 years from the date of granting. After this period, it can be extended for a further 10 years. In addition, Tanzoz is planning to lodge further mining lease applications to cover other graphite zones within the exploration tenements.

Tanzoz has applied for a mining licence in the east of the project area ...

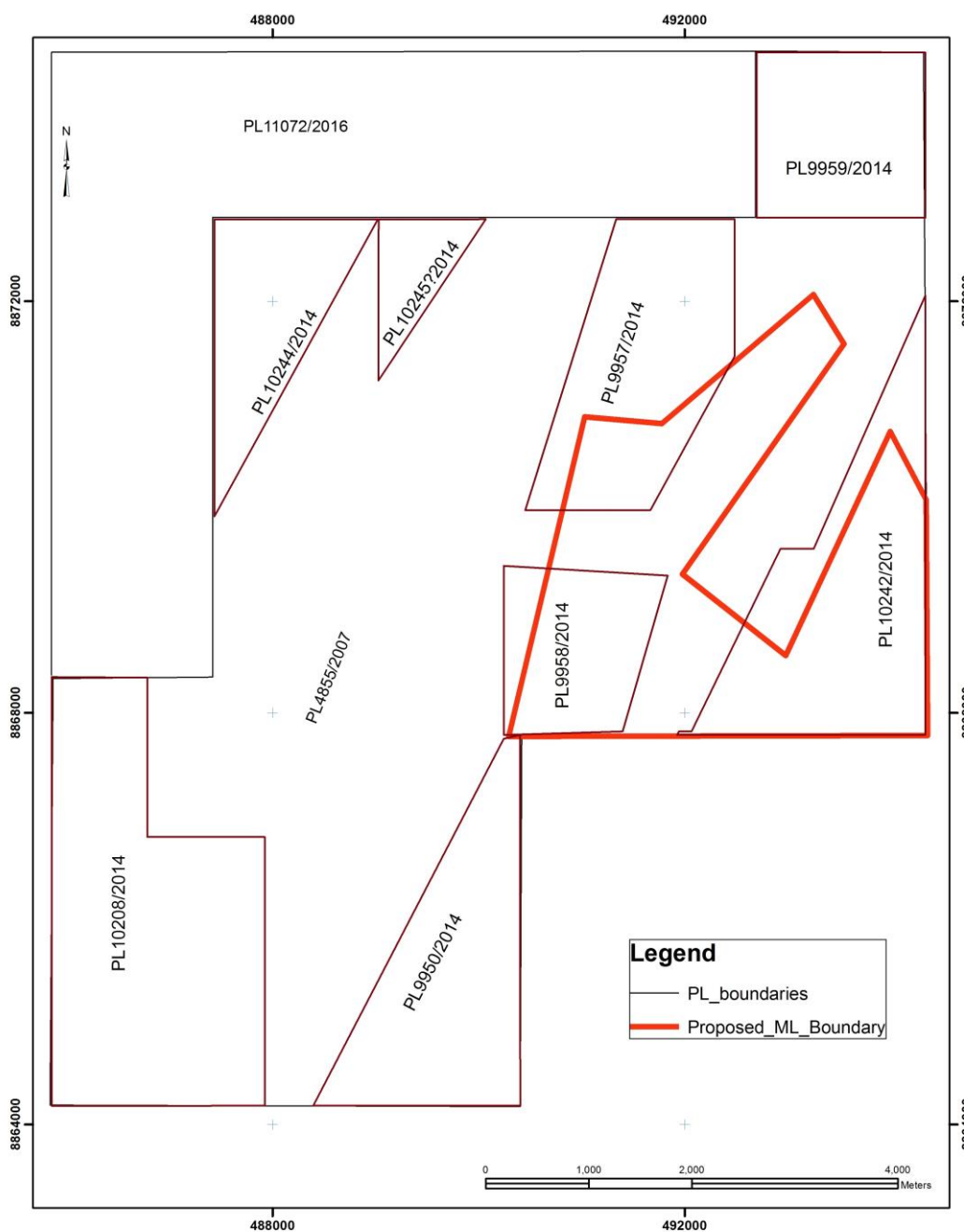


Figure 4. Tanzoz's mining lease application area (Source: Company).



Chenjere Geology & Prospectivity

Mineralisation in the Mozambique Belt is widespread

The Chenjere project area is underlain by crystalline basement rocks that form part of the East African Orogen, formerly known as the Mozambique Belt, and constituting part of the complex collision zone that led to the amalgamation of Gondwana in the Ediacaran (latest Neoproterozoic).

Mineralisation in the Mozambique Belt sequences is widespread and varied including Cr, Pt, Ni and magnesite in ultramafic; syngenetic Fe-Mn-Ba-base metal occurrences; Cu-occurrences in intermediate rocks; metamorphogenic graphite, kyanite, gemstones and asbestos; pegmatites with Nb/Ta, REE, Be, Li, muscovite and gemstones.

The project area geology comprises high pressure-temperature granulite-facies rocks, wherein gemstone mineralisation is well pronounced (green garnets). Garnet-biotite and graphitic gneisses and amphibolites have a NNE-SSW strike with cross-cutting pegmatite veins.

The geology is granulite facies gneiss, schists and amphibolites ...

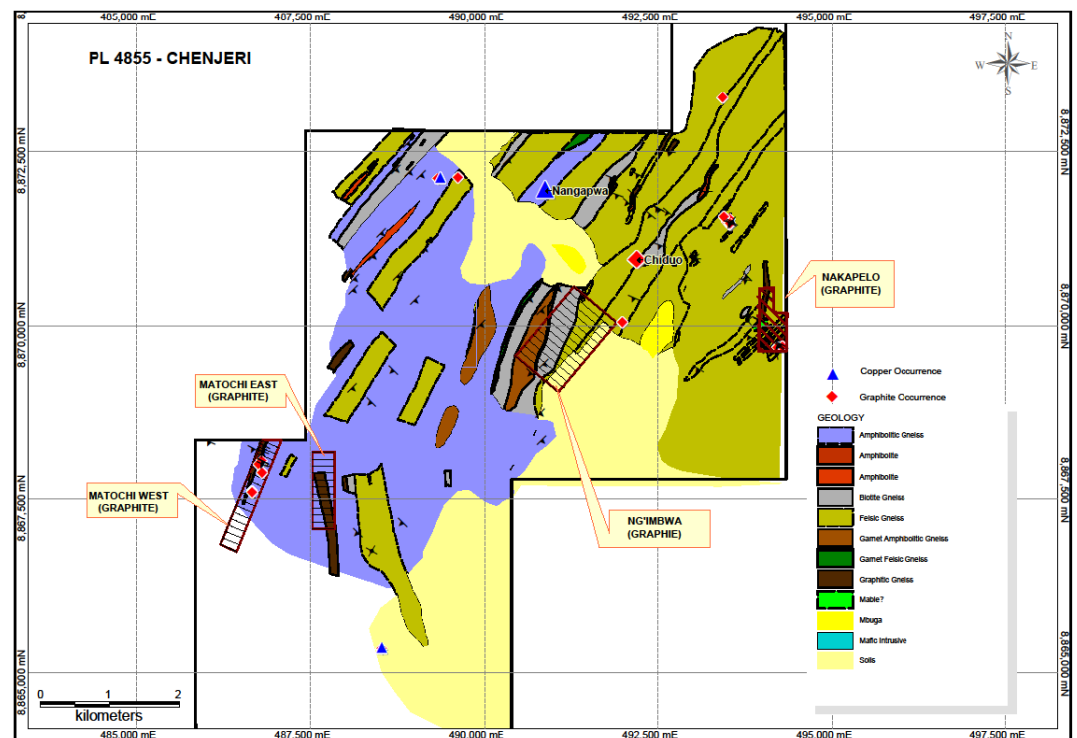


Figure 5. Geology of southeastern Tanzania and location of the Chenjere project (Source: Company).

Exploration by Tanzoz has involved:

- Mapping, soil and grab sampling.
- Trenching and pitting.
- Airborne VTEM survey.
- Follow-up ground electromagnetic (EM) surveys.
- RC and diamond drilling.
- Resource modelling.
- Metallurgical testing (suitability for battery production and expandability).

Exploration has been extensive involving both geophysics, trenching and drilling....

The most effective exploration approach has been trenching across linear features identified from the geophysics with graphite-rich horizons represent good conductors. The linear features total more than 50 km in length and many have been tested with more than 18,000 m of shallow



trenching. Several of the horizons which have demonstrated encouraging carbon grades have been subsequently drilled – in particular, the Nakapelo prospect in the east of the Chenjere project area and the focus of the mining licence application.

The graphite deposits consist mainly of segregations (lenses and streaks) of semi-massive to massive graphite and graphite disseminations that are hosted in schistose rocks. The thicker graphitic bearing units are a felsic schist with +/- fuchsite mineral accessories without biotite and garnet.

Graphite mineralisation on PL4855 and the surrounding area occurs as flake graphite and if it is unbroken it typically has hexagonal edges. Three flake categories have been recognised in the deposit; large flakes over 300 µm in size, medium-sized flakes ranging from 150 to 300 µm and fine graphite flakes which are below 150 µm. Commercially a larger flake size attracts a higher price.

The graphite deposits are hosted in schistose rocks ...

The graphitic horizons are good conductors and can be identified by geophysics

These form linear features....

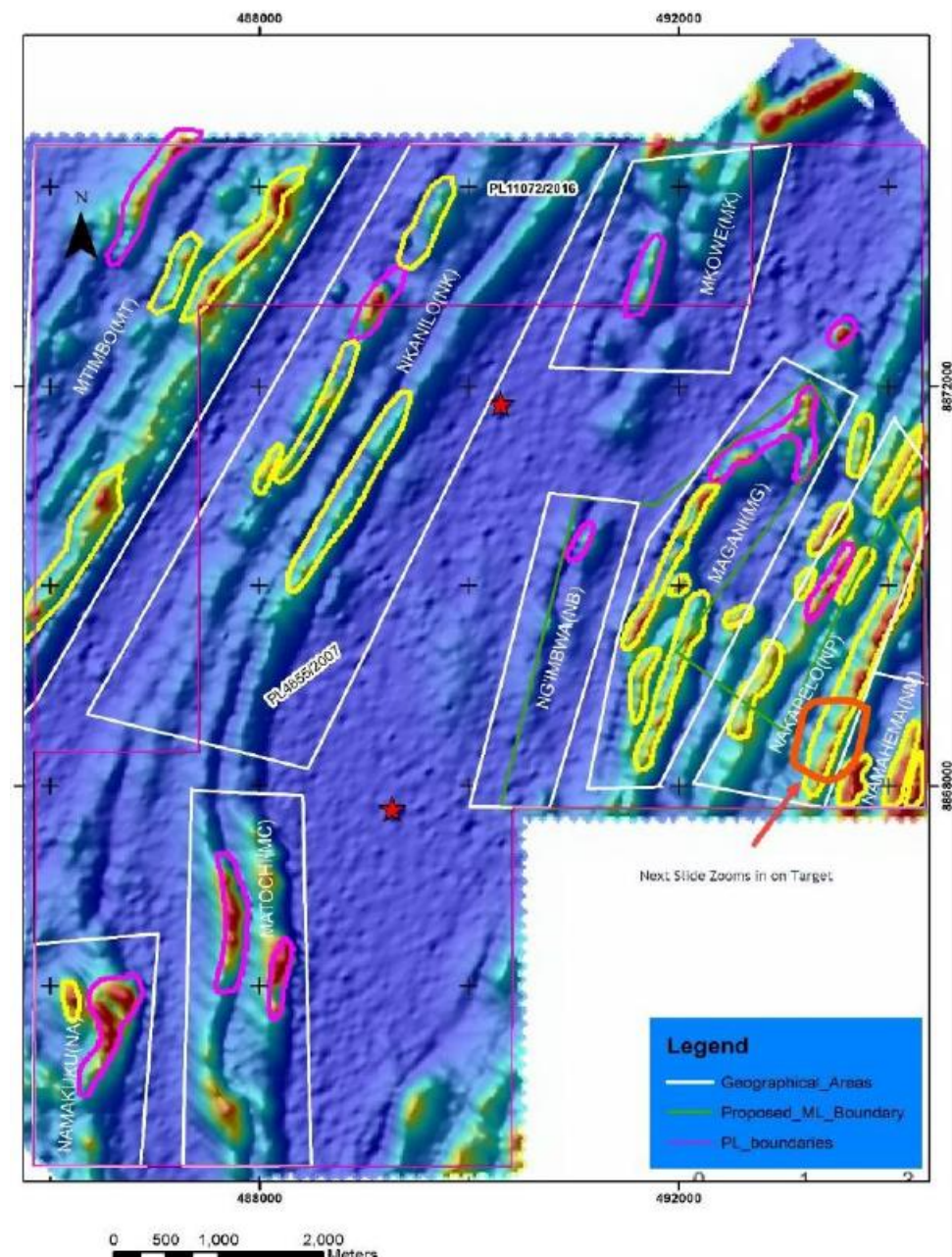


Figure 6. Geophysical EM linear anomalies in the Chenjere Project (Source: Company).



The linear features identified by the geophysics are highlighted on Figure 6 with graphicitic conductors potentially standing out as anomalies. The geophysics, trenching and drill collars on the Nakapelo prospect in the east of the tenement are highlighted below in Figure 7.

Detailed exploration has focused on the Nakapelo prospect and includes trenching and drilling ...

This area is within the mining licence application ...

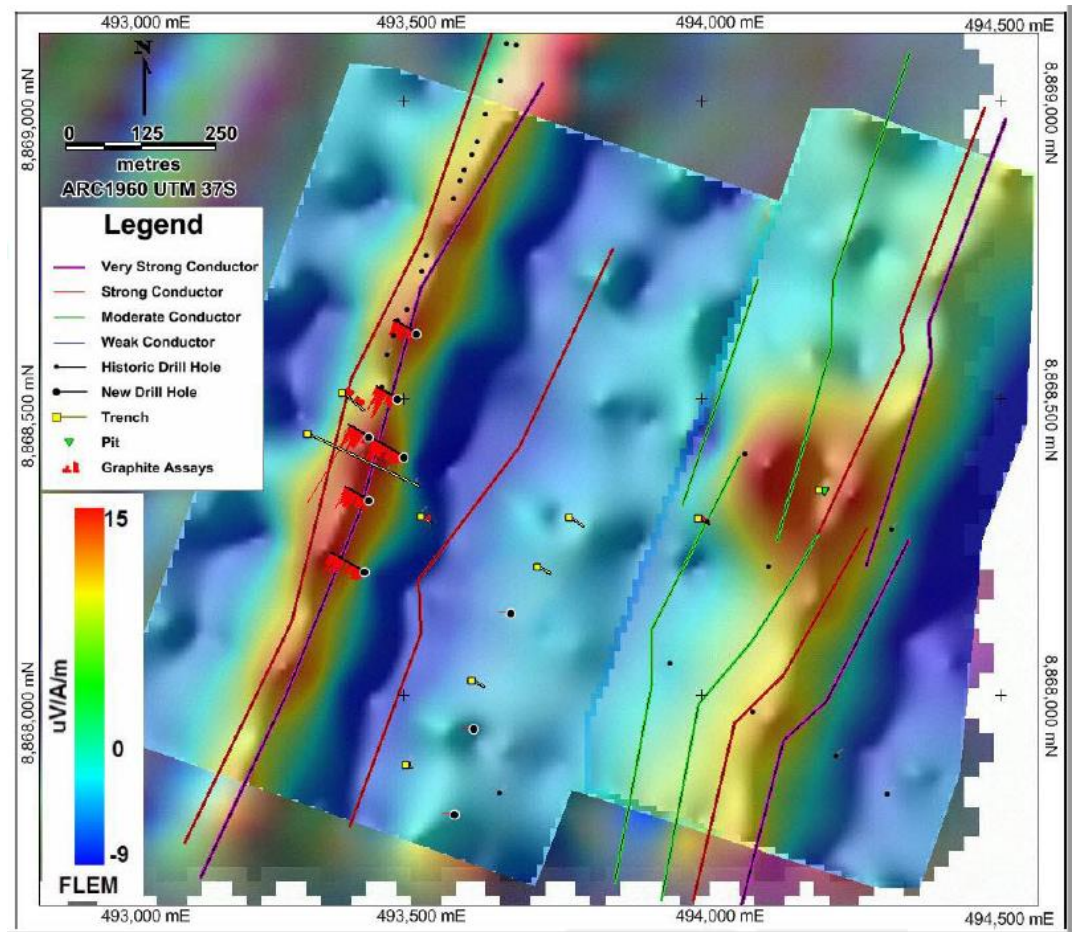


Figure 7. Geophysical anomalies, drilling and trenching in the Nakapelo prospect- Chenjere Project (Source: Company).



Figure 8. Trenching on the Chenjere Project and a sample of graphitic schist (Source: Company).

The data from the drilling and trenching has enabled Tanzoz to commission CSA Global to estimate a resource for the Nakapelo prospect (see Figure 9).



Existing resources have been defined for part of the Nakapelo prospect....

Classification	Domain	Weathering State	Million Tonnes	TGC%	Contained Graphite (Kt)
Inferred	Higher grade core	Oxide and Transition	0.9	6.1	50
		Fresh	3.1	6.3	200
		Combined Total	4.0	6.3	250
Inferred	Lower grade halo	Oxide and Transition	1.3	3.6	50
		Fresh	4.3	3.4	150
		Combined Total	5.6	3.5	190
Inferred	Total	Combined Total	9.5	4.6	440

Figure 9. The Mineral Resource was estimated by CSA Global within constraining wireframe solids defined above a nominal 3% TGC cut-off. The Mineral Resource is reported from all blocks within these wireframe solids (Source: CSA Global).

CSA report that in the resource outlined above, the interpreted mineralised graphitic schist domains are interpreted to extend 100 m past drill hole locations to the north and south and to a nominal depth of 150 m below surface. Based on the geophysics, the deposit is considered open north and south, and while depth extent is open, it will be limited by the potential for economic extraction.

The mineralisation constitutes a high-grade core and low grade halo...

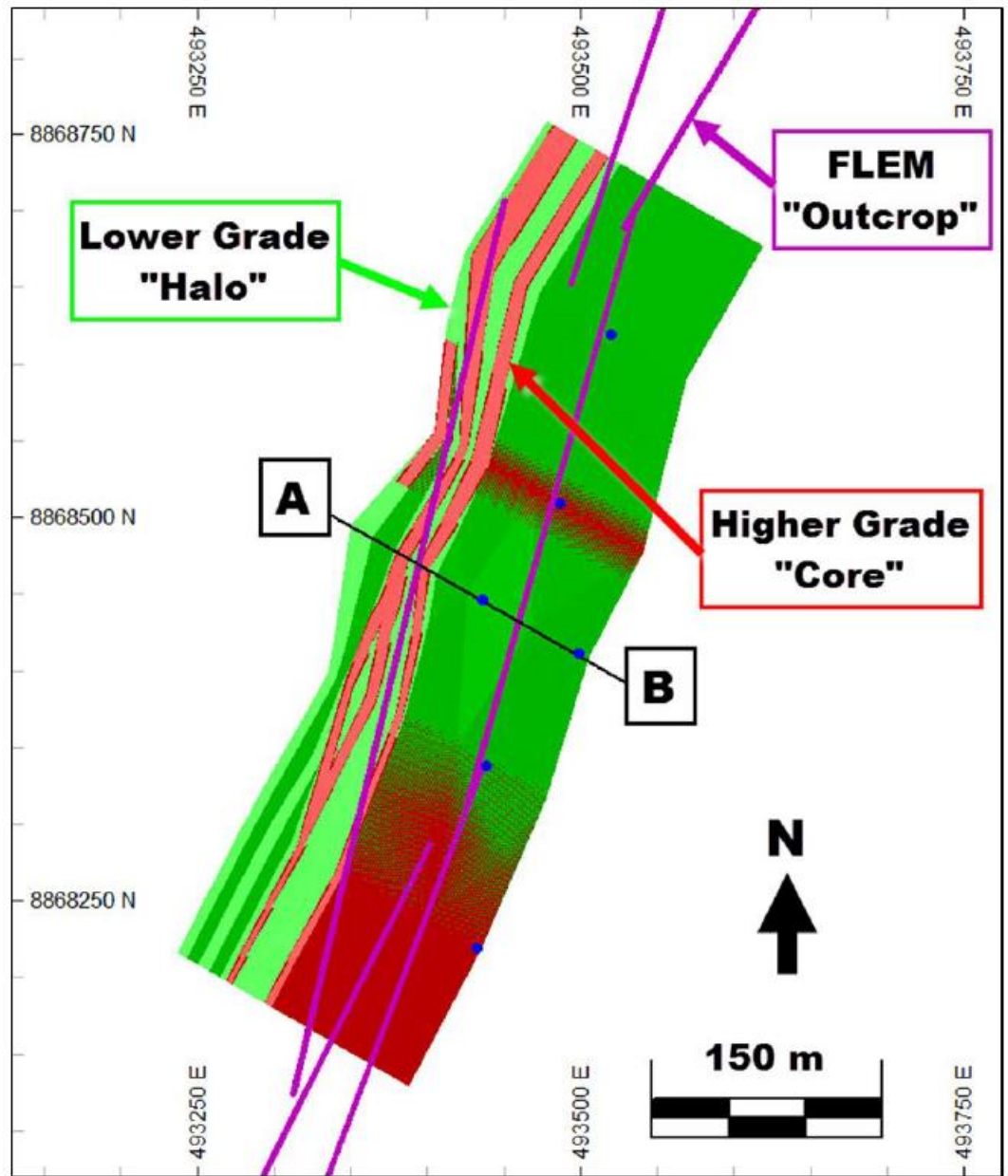


Figure 10. Plan view of Nakapelo mineralisation interpretation showing drill collar locations (Blue)(Source: CSA Global).



The mineralised graphitic schists are interpreted to strike at approximately 20° N and dip at 45° towards 110°. The defined resource has an approximate strike length of 600 m but has mentioned, mineralisation is interpreted to continue along strike and with a true width estimated between 30 m and 40 m.

The structure of the graphitic units is relatively simple....

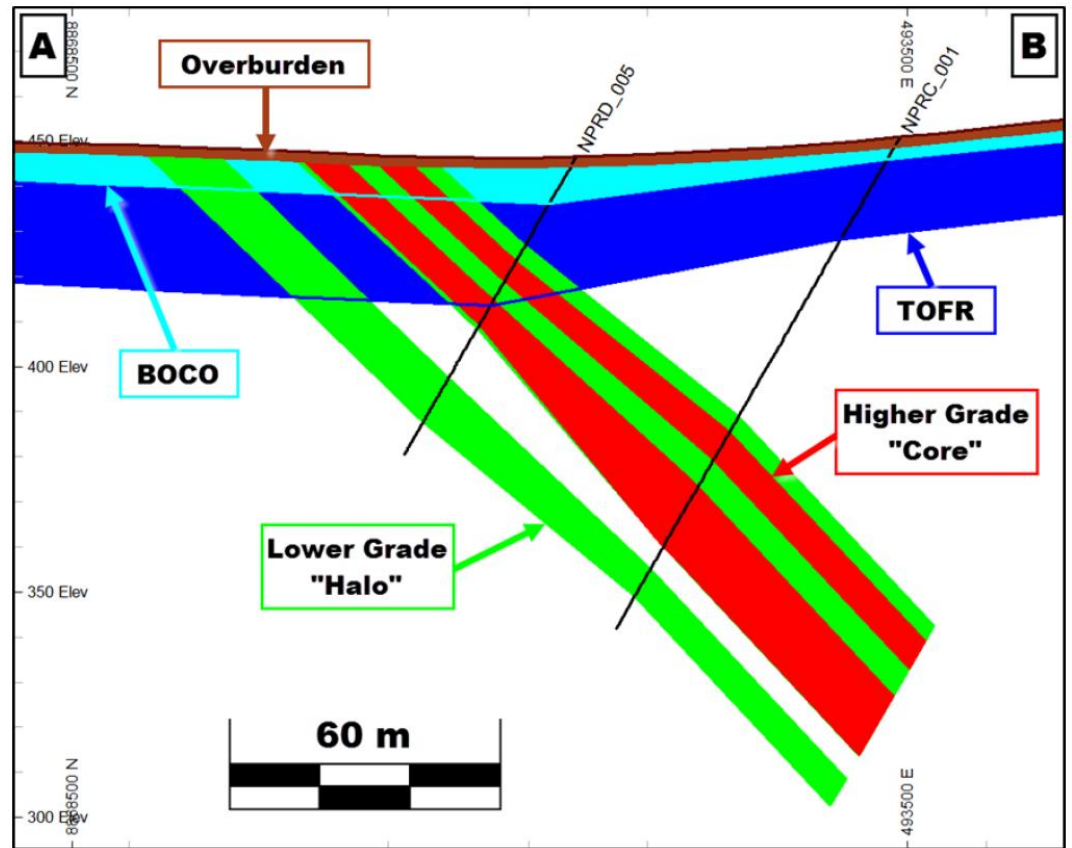


Figure 11. Nakapelo schematic cross section with view location as shown in plan view (Figure 10) (Source: CSA Global).

With the mineralisation likely to be continuous along strike, shallow open pit mining appears the best option...

Tanzos has investigated both shallow and deeper open pit mining parameters with a series of shallow open pits representing the most attractive economic case – particularly as the project does not appear resource constrained along strike. A series of shallow open pits or even one continuous open pit have lower strip ratios and does not require drilling and blasting, therefore lowering overall unit mining costs.

Breakaway has completed financial modelling based on shallow open pit mining the Nakapelo prospect at a processing rate 7,500 tpa graphite (Cg) in concentrate and this is presented later in the section titled *Project Financial Modelling* this report. However, quantification of the revenue is important to estimate the project’s financial returns.

Chenjere Graphite Characteristics - Flake Size

Tanzos has commissioned ACTLabs Geometallurgy of Ontario to estimate the size distribution of the graphite flakes from six samples using both an Equivalent Circle as well as a Maximum Diameter methodology in flake size. In the former, the size is calculated by converting the flake area into equivalent circle (i.e. rounded particle).

The size distribution graphs presented below use the two methodologies (see Figures 12 and 13). D50 and D80 represent the diameters where 50% and 80% pass through the sieve aperture.



Flake size measured across 6 separate samples using two different techniques appears encouraging

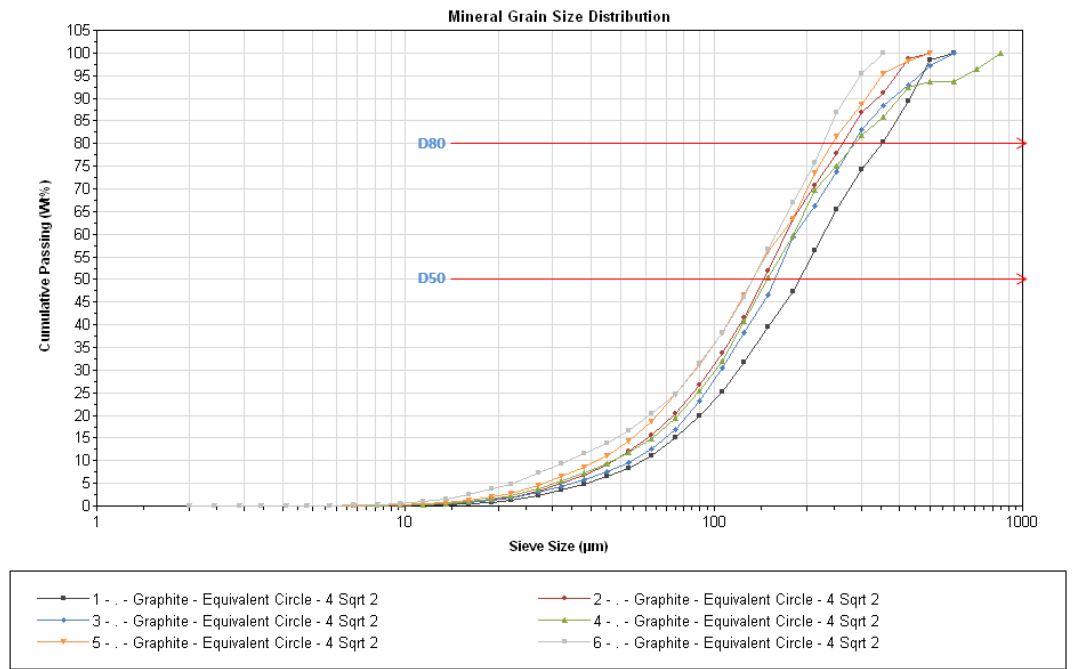


Figure 12. Mineral grain size distribution of graphite as defined by Equivalent Circle.

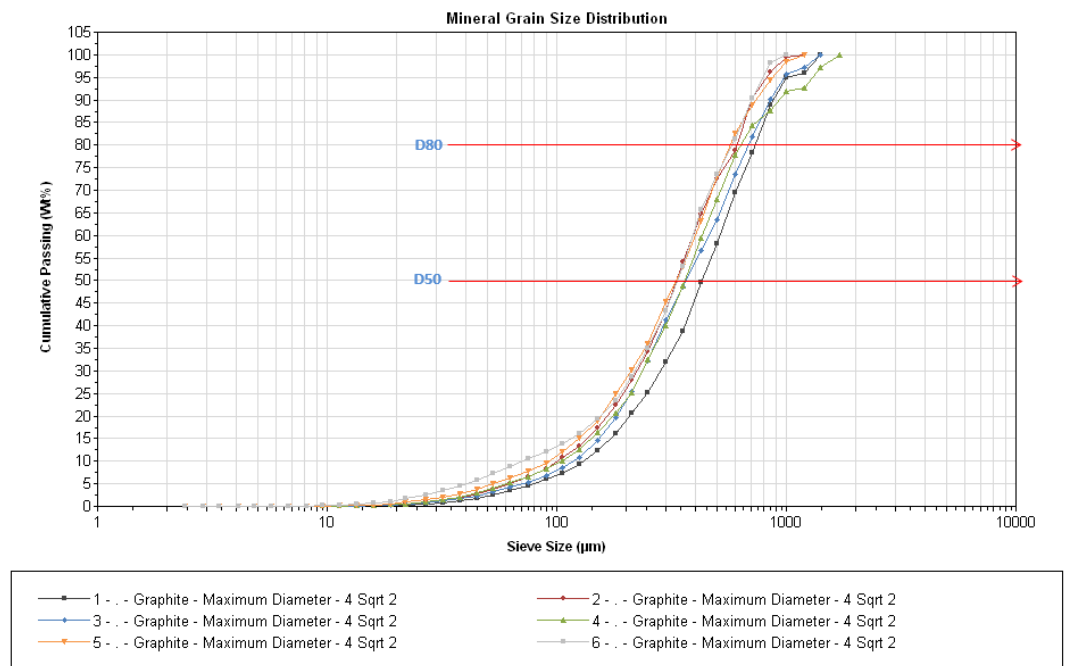


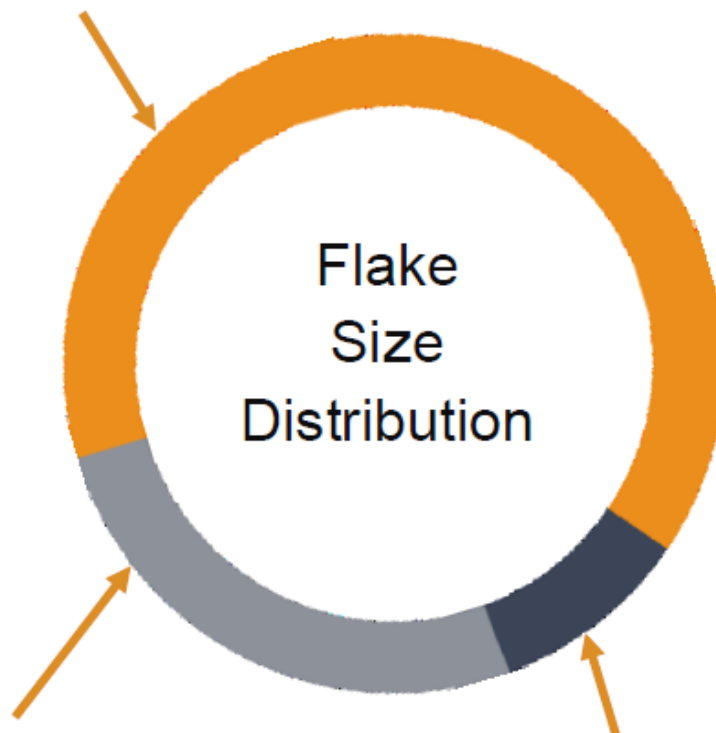
Figure 13. Mineral grain size distribution of graphite as defined by Maximum Diameter.

Tanzoz has interpreted and simplified the above results in Figure 14 which highlights that more than 63% of the graphite flakes will exceed 180 µm.



63% @ 97.5% purity
 +180µm & +300µm Large Flake

The results suggest 63% of the flake size is greater than 180 µm.....



27% @ ~94% purity
 -150µm Fine Flake

10% @ 90% purity
 +150- 180µm Medium Flake

Figure 14. Simplified graphite size distribution as interpreted by Tanzoz (source: Company).

The Company has estimated that its average graphite concentrate revenue would potentially be US\$1,162 per tonne based on its flake size distribution and product prices ranging from US\$1,950/t for Jumbo Flake to only US\$850/t for Small Flake as it revenue sources.

Larger flake sizes attract significant premia....

Run of Mine Production		Percentage	
Jumbo flake		27%	
Large flake		37%	
Medium flake		10%	
Small flake		26%	
Sales value per Flake Size		Flake Size	US\$/tonne
Jumbo flake		+300 µm	1,950
Large flake		+180 µm	1,200
Medium flake		+150 µm	1,000
Small flake		-150 µm	850
Marketing discount			10%
Value per Run of Mine concentrate product			
Jumbo flake		474	41%
Large flake		400	34%
Medium flake		90	8%
Small flake		199	17%
Total Product Value		1,162	100%

Figure 15. Forecast graphite concentrate average product composition and value (source: Company).



Graphite Market

Graphite is used in a variety of applications ranging from lithium-ion batteries and fuel cells to electricity generation from wind and to structural composite parts used in aircraft. However, not surprisingly it is the demand from the production of batteries which is forecast to be the fastest-growing application during the period to 2022 – from both consumer electronics and electric vehicles.

Batteries now dominate the outlook for graphite

.....

Importantly, lithium-ion batteries require 20 to 30 times more graphite than lithium.

Natural graphite

Natural graphite is the fastest-growing type in the global graphite market during the forecast period, 2017 to 2022 according to MarketsandMarkets research.¹ Natural graphite is preferred by manufacturers across various end-use industries, owing to its largely due to its lower cost.

Flake graphite is the fastest-growing subtype of natural graphite in the global graphite market used in several applications, including refractories and batteries, owing to its high purity and large crystals. Importantly, Flake Analysis by independent consultants, Coulometrics, indicates that Tanzoz's flakes are well suited for lithium ion battery applications showing high reversible capacity as well as good expandability.

Demand for flake graphite is likely to increase....

A combination of strong demand and restricted supply has driven strong growth in flake graphite prices (see Figure 16).

¹. <https://www.marketsandmarkets.com/Market-Reports/graphite-market-120270209.html>

flakes are well suited for lithium ion battery applications showing high reversible capacity as well as good expandability...

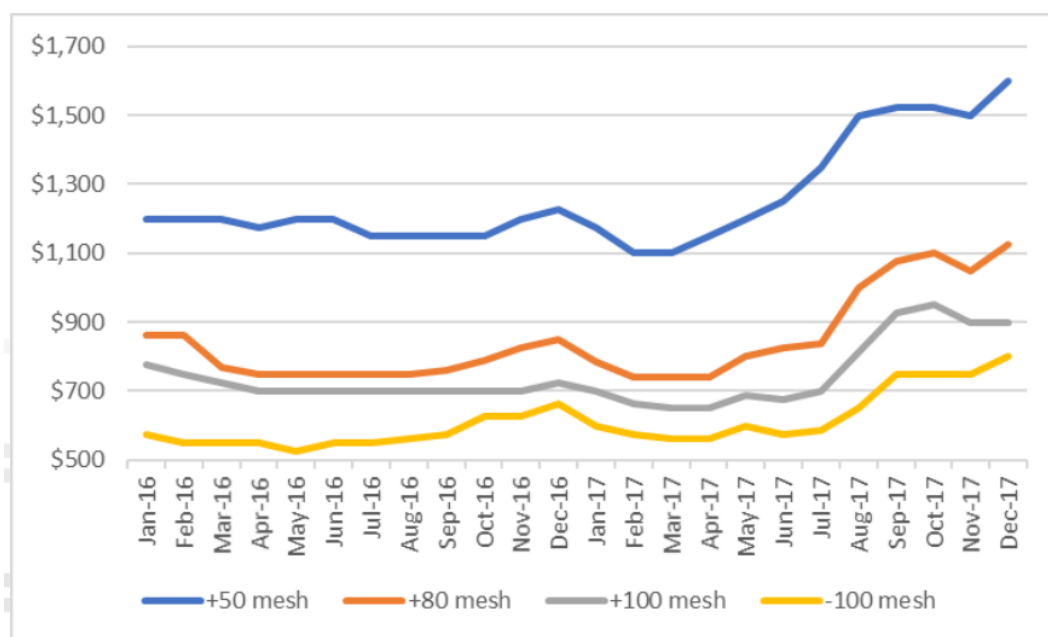


Figure 16. Recent flake price trends. (source: Source: Benchmark Mineral Intelligence, FOB China (94-95% TGC), Graphex).



	Sieve Mesh	Graphite flake size (µm)	Price/t (US\$)*
Amorphous Powder/Fine	-200	-75	~450
Small	-100/+200	+75	~850
Medium	-80/+100	+150	~1000
Large	-48/+80	+180	~1,200
Extra-large 'jumbo'	+48	+300	~1,950
Super jumbo	+35	+500	~3,500
Spherical (99.95% C)		~15	~2,800-2,900
Synthetic			~7,000 - 20,000

The premia for large flake graphite is highlighted in the table

Figure 17. Graphite spot price benchmarks (US\$/t 94-97% C) - early 2018 (source: SPAngel).

Market leader, Syrah Resources provided a recent market update on the graphite market noting in the near term that its fines price was influenced by China domestic market, inland logistic costs and VAT. However, the coarse flake market was relatively balanced to a slight deficit and the current prices were reflecting a combination of the Chinese domestic as well as international prices.

In the medium to longer term Syrah expects China to shift towards becoming a net importer of fines in 2019/2020 due to Li-ion battery anode demand and therefore the fines price fundamentals are forecast to improve as global fines market rebalances.

Meanwhile the global flake graphite market balance is in transition with China's higher cost supply likely to rationalise over the coming years due to resource depletion and environmental pressures; with production then stabilizing thereafter.

China is expected to become a net importer of both fines and flake

On the demand side almost all incremental demand growth comes from the lithium-ion battery sector with other applications such as expandable and shapes representing high value per tonne sales but in low volume markets. Indeed, SPAngel recently noted that expandable graphite demand is accelerating to dominate future markets on stringent construction trends, drawing significant large-flake deposit pressure.

Overall, consensus forecasts are that global trade flows will structurally change as China moves to become a net importer in 2019/20 as Chinese anode production grows. Hence ex-China users currently sourcing graphite from China will require additional sources of supply and which is likely to support prices.

The Global Electric Vehicle ("EV") market growth remains strong while China is accelerating within this market.



China's share of the electric vehicle market is growing faster than the rest of the world....

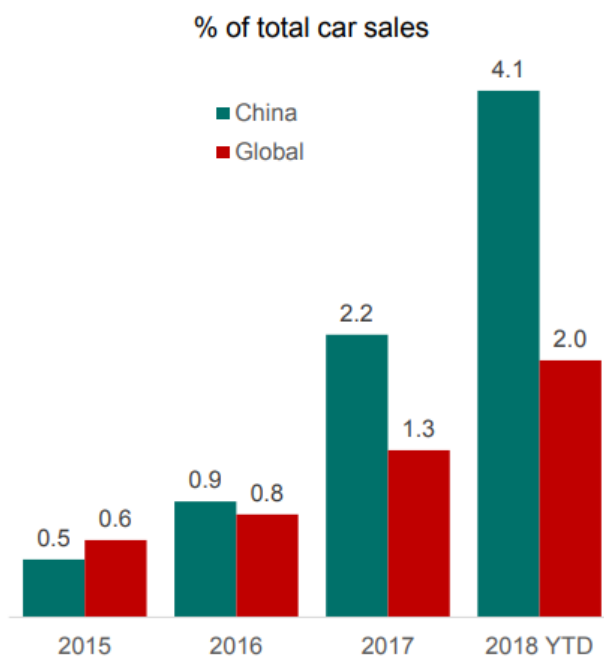


Figure 18. Electric Vehicle Market Share (Source: Syrah Resources, China Association of Automobile Manufacturers, McKinsey).

The forecast global natural flake market between China and ex-China highlights the decreasing supply but increasing demand emerging from China (Figure 19).

China and Ex-China supply is forecast to fall behind demand by 2020

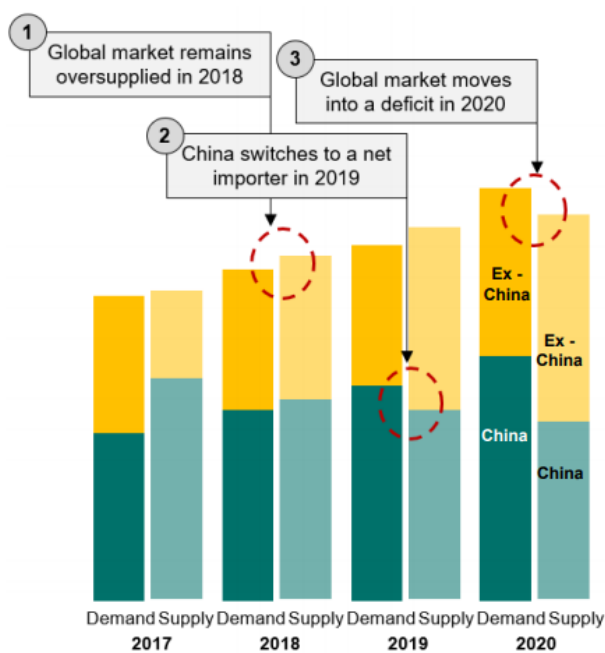


Figure 19. Global Natural Flake Graphite Market (Source: Syrah Resources).

Project Financial Modelling

A draft scoping study by CSA Global modelled pit shells on the resource outlined earlier in Figure 9 and assumed a ramp up in production to a steady state 30ktpa graphite in concentrate from year 3. We have based our modest 7,500 tpa graphite in concentrate production and financial modelling using the upper portion of this resource to minimise the strip ratio and assume free dig. Breakaway Research has not conducted a site visit or inspected drill core to clarify whether this is the case and relies on advice from Tanzoz management team.



The financial modelling is based on the upper portions of CSA Global modelled pit shells to provide an average stripping ratio.....

As the resource is likely to be continuous along strike as demonstrated by the geophysics and selected trenching, we have assumed that the shallow open pit mining parameters along strike using the same average strip ratio of 1.5. This forms the basis of the modelling in Figure 21.

The capital budget is presented in Figure 20 and totals US\$6m excluding the initial confirmatory drilling programme of SU\$400,000. This capital budget finances the Chenjere Project into production at 7,500 tpa graphite in concentrate production.

The resource does not appear to be constrained along strike as indicated by the geophysics....

Item	US\$
Design and Pre-works	750,000
Bulk sample flowsheet, Contracts, Increase JORC Resource	
Dam design and licencing, Bore field approvals	
Civil Construction Works	700,000
Access road upgrade, Stockpile pads	
Access road upgrade, Stockpile pads	
Tailings and sediment control dams	
Processing Plant– 7,500 tpa	2,200,000
Purchase cost, Transportation	
Site construction, commissioning	
Drying, sizing, bagging facility	
Mining	300,000
Mobilisation, clearing, topsoil stripping	
3 months production	
Services	650,000
Power, Water infrastructure, Communications	
Camp, stores and office facilities	
Workshop/fuel and oil facilities	
Admin and Licencing	510,000
Overheads, Accounts and Licencing annual rents	
Other	675,000
Security hardware	
Land purchases and compensation	
3 months working capital	
Contingency (4%)	215,000
Total	6,000,000

Figure 20. Chenjere Project Capital Budget (Source: Company).

Capex is US\$6m for an operating project....



Year		2019	2020	2021	2022	2023	2024	2025	2026
Operating Parameters									
Ore production	t	26,786	113,839	133,929	133,929	133,929	133,929	133,929	133,929
Grade TCG		5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Recovery		95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Prod - TGC in conc.	t	1,425	6,056	7,125	7,125	7,125	7,125	7,125	7,125
Strip Ratio		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Waste removal	t	40,179	170,759	200,893	200,893	200,893	200,893	200,893	200,893
Saleable Concentrate Production	t	1,425	6,056	7,125	7,125	7,125	7,125	7,125	7,125
Production percentage									
Jumbo flake		27%	27%	27%	27%	27%	27%	27%	27%
Large flake		37%	37%	37%	37%	37%	37%	37%	37%
Medium flake		10%	10%	10%	10%	10%	10%	10%	10%
Small flake		26%	26%	26%	26%	26%	26%	26%	26%
Revenue per tonne									
Jumbo flake	US\$/t	1950	1950	1950	1950	1950	1950	1950	1950
Large flake	US\$/t	1200	1200	1200	1200	1200	1200	1200	1200
Medium flake	US\$/t	1000	1000	1000	1000	1000	1000	1000	1000
Small flake	US\$/t	850	850	850	850	850	850	850	850
Revenue Apportionment									
Jumbo flake	US\$	750,263	3,188,616	3,751,313	3,751,313	3,751,313	3,751,313	3,751,313	3,751,313
Large flake	US\$	632,700	2,688,975	3,163,500	3,163,500	3,163,500	3,163,500	3,163,500	3,163,500
Medium flake	US\$	142,500	605,625	712,500	712,500	712,500	712,500	712,500	712,500
Small flake	US\$	314,925	1,338,431	1,574,625	1,574,625	1,574,625	1,574,625	1,574,625	1,574,625
Total Revenue	US\$	1,840,388	7,821,647	9,201,938	9,201,938	9,201,938	9,201,938	9,201,938	9,201,938
Operating costs									
Ore mining	US\$	112,500	497,250	608,400	632,736	658,045	684,367	711,742	740,212
Waste mining	US\$	168,750	745,875	912,600	949,104	987,068	1,026,551	1,067,613	1,110,317
Processing	US\$	138,184	610,772	747,297	777,189	808,276	840,607	874,232	909,201
Other operating incl. sales	US\$	22,768	100,634	123,129	128,054	133,176	138,503	144,043	149,805
Road haulage	US\$	57,000	251,940	308,256	320,586	333,410	346,746	360,616	375,041
Port charges	US\$	14,250	62,985	77,064	80,147	83,352	86,687	90,154	93,760
Overheads									
Administration & Marketing	US\$	272,250	315,180	324,635	334,374	344,406	354,738	365,380	376,341
Royalties	US\$	66,254	281,579	331,270	331,270	331,270	331,270	331,270	331,270
Total Costs	US\$	851,955	2,866,215	3,432,651	3,553,460	3,679,003	3,809,469	3,945,049	4,085,947
<i>Cost per concentrate tonne</i>	<i>US\$/t</i>	<i>598</i>	<i>473</i>	<i>482</i>	<i>499</i>	<i>516</i>	<i>535</i>	<i>554</i>	<i>573</i>
EBITDA	US\$	988,432	4,955,432	5,769,287	5,648,478	5,522,934	5,392,469	5,256,888	5,115,991
Depreciation & Amortisation	US\$	275,000	1,100,000	1,100,000	1,100,000	1,100,000	825,000	-	-
EBIT	US\$	713,432	3,855,432	4,669,287	4,548,478	4,422,934	4,567,469	5,256,888	5,115,991
Interest expense	US\$	0	0	0	0	0	0	0	0
Profit before tax	US\$	713,432	3,855,432	4,669,287	4,548,478	4,422,934	4,567,469	5,256,888	5,115,991
Tax	US\$	-	-	-	997,285	981,754	1,022,351	1,226,304	1,181,047
Net profit after tax	US\$	713,432	3,855,432	4,669,287	3,551,193	3,441,180	3,545,117	4,030,584	3,934,944
Shares currently on issue		8,222,335	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943
Shares issued with financing		8,465,608	-	-	-	-	-	-	-
Total shares on issue after financing		16,687,943	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943	16,687,943
EPS	US c/share	4.3	23.1	28.0	21.3	20.6	21.2	24.2	23.6
Cash flow per share	US c/share	-32.7	27.1	27.8	21.1	20.4	19.3	17.2	16.6
Cash flow									
Revenue	US\$	1,656,349	7,039,482	8,281,744	8,281,744	8,281,744	8,281,744	8,281,744	8,281,744
Expenses	US\$	469,050	2,470,643	3,645,510	3,774,833	3,909,232	4,048,906	4,194,064	4,344,922
Net cash flow	US\$	1,187,299	4,568,839	4,636,234	4,506,911	4,372,512	4,232,838	4,087,680	3,936,822
Capex	US\$	5,500,000	-	-	-	-	-	-	-
Working capital changes	US\$	1,141,317	54,043	5,443	5,653	5,871	6,098	6,334	6,578
Tax Paid	US\$	-	-	-	997,285	981,754	1,022,351	1,226,304	1,181,047
Project Cash Flow	US\$	- 5,454,018	4,514,796	4,641,677	3,515,279	3,396,630	3,216,584	2,867,709	2,762,353

The modelling is based only on a 7,500 tpa TCG project

It assumes that the US\$6.4 m is raised with a A\$1.05 per share placement....

Figure 21. Financial Modeling of the Chenjere Graphite Project.

Figure 21 also incorporates financial modelling to net profit after tax and cashflow. *Breakaway Research* has incorporated the existing share structure and assumed that an additional 6.4 m shares will be issued at A\$1.05 per share to finance the US \$6.4 m required to conduct a confirmatory drilling campaign (US\$400k) and the remainder (US\$6m) to develop the 7,5000 tpa TGC plant.

Project Financial Returns

The project modelling has demonstrated a cash positive project with an NPV₁₀ at US\$15.7m and a IRR of 76%. Using the existing capital structure and assuming a new financier invests US\$6.4m at A\$1.05 per share, the NPV per share is A\$1.26 per share – representing a 20% discount.



Price to earnings ratios and price to cash flow ratios at 3.3 times and 3.6 times are not demanding if the company was listed.

The project NPV₁₀ is US\$13.4m and potentially represents an attractive starter project....

IRR is 76%

Valuation Metrics		
AUD/USD		0.72
Share placement price	A\$	1.05
	US\$	0.76
Average earnings per share (first five years in production)	US cps	23.06
Price/Earnings Ratio	times	3.3
Average cash flow per share (first five years in production)	US cps	21.14
Price/cash flow ratio	times	3.6
Internal Rate of Return		76%
NPV Valuation		
Discount Rate		10%
NPV	US\$	15,728,695
Per share	US\$/share	0.94
	A\$/share	1.26
Market cap (after raising US\$6.4m at Placement Price)	US\$	15,728,695
Market cap (after raising US\$6.4m at Placement Price)	A\$	20,971,593

Figure 22. Valuation Metrics for the Chenjere Graphite Project and Tanzoz.

Project Comparison

Project comparisons are difficult in the graphite sector as there are several variables which are specific to each deposit before the consideration of mining parameters such as open pit stripping ratio, rock hardness, terrain, etc. However, the two key variables impacting value per tonne are firstly the grade (i.e. total graphitic carbon content – TGC) and perhaps more importantly, the flake size bearing in mind that large flakes attract substantial premia over small flake size.

Chenjere has a high flake content but modest grade....

There is a trend that the smaller flakes occur with higher grade deposits but this doesn't necessarily reflect ore value....

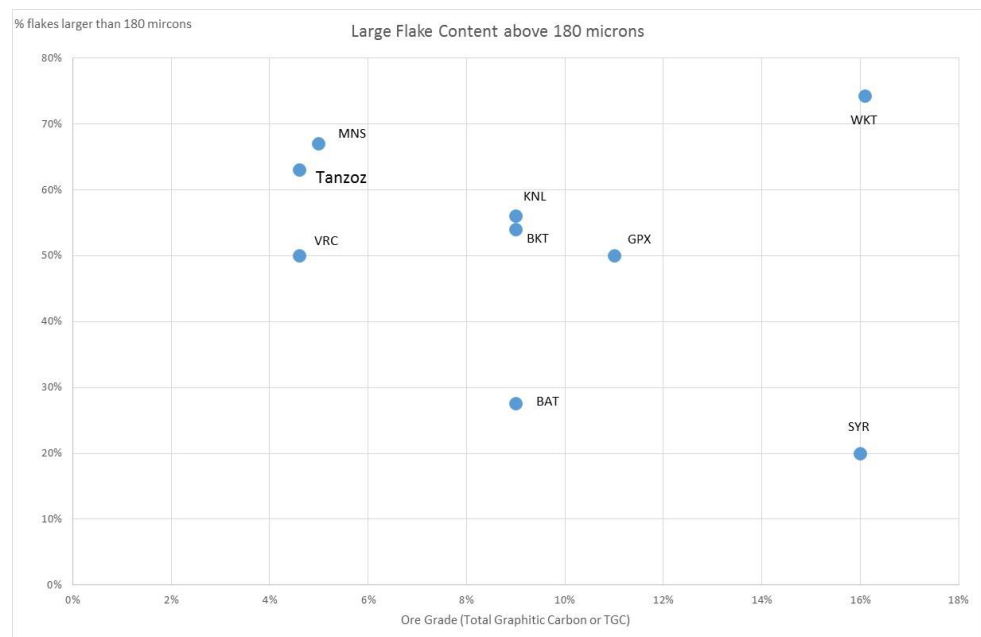


Figure 23. Comparison of ore grade versus the percentage of graphite with a flake size greater than 180 microns (based on data from Walkabout Resources).



As evident from Figure 23, Tanzoz has a lower average graphite grade but high percentage of large flake graphite. This contrasts with Syrah Resources with a high graphite grade but low percentage of large flake graphite.

In terms of a margin comparison, Tanzoz's forecast margin is US\$782 per tonne of concentrate despite reflecting a relatively low production rate at 7,500 tpa graphite in concentrate. Tanzoz has forecast it can potentially maintain or improve this margin if it expanded its production rate to above 20,000 tpa.

Chenjere margins are healthy and based on smaller production levels....

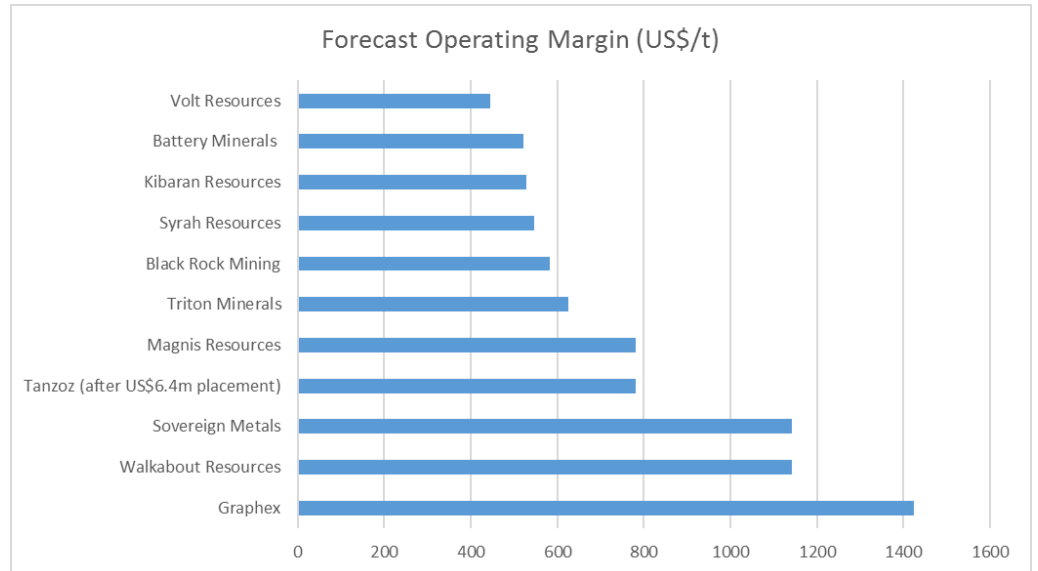


Figure 24. Comparison of project margins (Source: data from Graphex).

While Tanzoz is unlisted, a comparison of the market capitalisation of its competitors suggests that Tanzoz is relatively cheap. The market capitalisation of Tanzoz includes the issue of 8.5 m shares at A\$1.05 per share to finance the confirmatory drilling and development of the 7,500 tpa plant. (see Figure 25).

While unlisted, Tanzoz would have a market capitalisation at the lower end of ASX listed graphite companies....

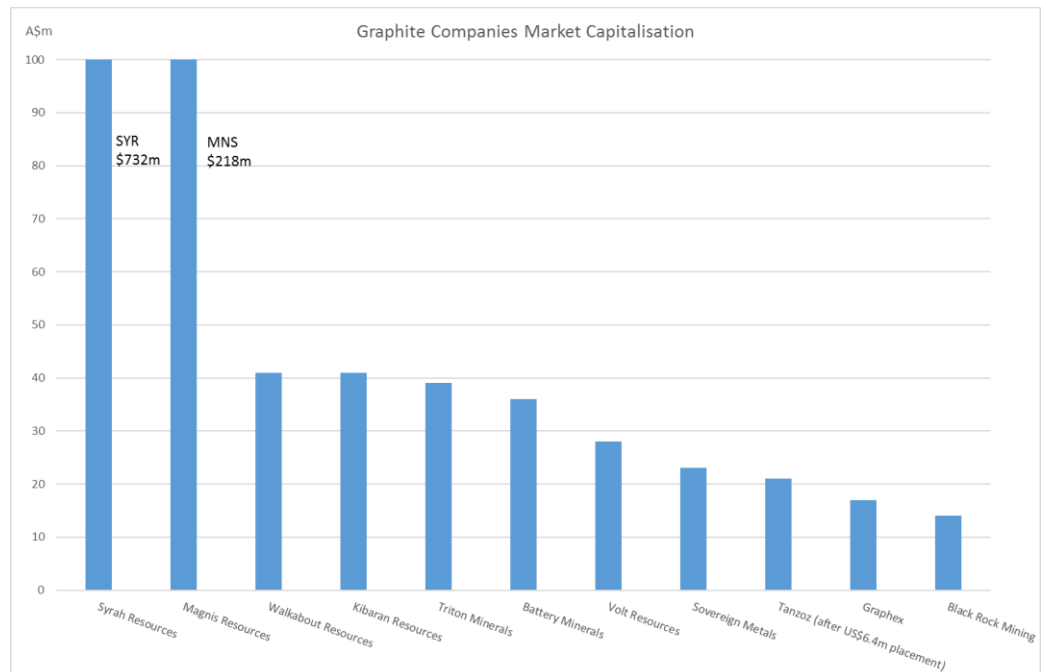


Figure 25. Market capitalisation of ASX listed graphite companies and Tanzoz.



Tanzania – Unexpected Risk Escalation Moderates

Tanzania has implemented changes to its mining policy over the last two years....

Tanzania has long been regarded as an attractive country for mineral exploration and mineral development. It is highly prospective for an array of minerals and has a stable political environment with sound legal and fiscal policies.

However, in 2016 the Government surprised the industry by announcing changes to mining legislation involving both the level of ‘in-country’ processing required before commodities were exported, as well as compulsory Government and local participation in projects.

President John Magufuli approved policy changes after the 2015 election and in July 2017, he suspended the issuance of all new mining licences and reallocated the approval for large-scale projects to a newly-appointed mining commission.

The new policies stem from:

- The government seeking to increase its revenue from projects and participate in windfall profits.
- A focus on value adding processing within Tanzania prior to commodity exports.
- Alignment with the mining policies of some other African countries regarding local participation.

Mining licences are now being granted....

The highest profile case has been Acacia (Barrick Gold Corp: 64%) and its Bulyanhulu mine which produces and exports a refractory gold-copper concentrate for smelting in Finland. The export of this concentrate has now been banned and the Government is requesting in-country processing – a task that would require the construction of an expensive smelter. However, the Government’s dealings with Acacia are more complex involving accusations of tax evasion.

Tanzoz’s mining lease application is currently being processed by the Tanzanian Government and does not constitute a major project. The Company believes its application is well advanced with granting expected in the current quarter. Granting is likely to be conditional on local participation and this is likely to be met with the engagement of one of Tanzoz’s local contractors.

As noted earlier in this report, both Walkabout Resources (graphite) and Strandline Resources (mineral sands) have received granted mining leases during August 2018 and this bodes well for Tanzoz meeting its timeframe.

Tanzoz Director Backgrounds

Tanzoz has been operating in Tanzania since 2007....

TanzOz Graphite Ltd incorporated in Tanzania in 2011 and while uranium exploration was the initial focus of the company, it progressed to graphite exploration. This company is a wholly owned subsidiary of TanzOz Australia Pty Ltd (TanzOz). The Tanzoz Group has been active in Tanzania since 2007.

The Board comprises:

Alistair Smith - Managing Director

Alistair is a national of Zimbabwe with extensive African experience, including 8 years in Tanzania and a track record of communication and negotiation skill sets across a diverse range of industries. His broad industry experience in project management brings a wealth of international experience to this exploration company. Alistair is a founding shareholder of the Tanzoz group of companies.

Seth Dickinson - Director

Seth holds a Bachelor of Engineering (Mining) and Graduate Diploma of Business Administration both from the University of Queensland. He holds a First Class Mine Managers ticket covering both open cut and underground mines. Seth has 30 years mining experience including mine



management, contract mining, feasibility studies and project management. He was project manager for the construction of two mines both successfully completed on time and on budget.

Craig Ross
Non-Executive Director

Craig is an experienced company director and a founding shareholder of the Tanzoz group of companies. Craig has previous investment experience in the value-adding cycle of exploration tenements as a major shareholder of Nebo Central Coal Pty Ltd. Nebo Central Coal was an early stage coal exploration company that progressed from investigating, applying for and acquiring exploration permits in the Bowen Basin through to mining leases and finally production.

Bjorn Zikarsky
Non-Executive Director

Bjorn has a Bachelor of Business from the University of Southern California and an MBA from The Wharton School of Business. Bjorn has over 14 years international experience in the financial services industry, including advisory, capital market transactions and private equity management. Until recently, Bjorn held the role of senior vice president of Nomura Australia responsible for the natural resources, metals and mining. He is currently CFO and Director of Square Resources Holding.

Dan Hoppe Dan
Non-Executive Director

Dan is an experienced business executive and company director within African and Australian markets. Dan has developed mining, agricultural and quarry projects from feasibility to operations in multiple countries including Australia and Western Africa in both management and executive roles. Dan has 18 years of operational engineering experience with leading equipment providers and contractors across the globe, covering industries such as open cut and underground mining, agriculture, bulk civil earthworks, building and construction sectors. Dan is a former Director and CEO of MonuRent Holdings Limited, studied at the University of Queensland and undertook his engineering trade within the Caterpillar dealership groups.



Disclosure

Breakaway Research Pty Ltd (AFSL 503622) receives commissions and consultancy fees for research including this report and may receive future commissions on transactions involving Tanzoz Pty Ltd. It also may hold direct and indirect shares in the company.

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