# Graphite -

where great things grow from humble beginnings



## **Author:**

Will Coverdale

Mining Analyst: MEng (Mining), MBA

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Tanzoz Australia Pty Ltd is a private company developing the Chenjere graphite project in southern Tanzania. TanzOz seeks financing to commence a staged development programme which could commence with a modest 7,500 tpa graphite project. Preliminary discussions already underway further solidifying interest in offtake for the material.

Stage 1. will involve a US\$400k funding to commence a 1,375 m drilling programme. Objective of drilling is twofold namely, increase confidence in identified shallow resource, whilst extending resource to +1,000m of strike and therein increase total resource tonnage.

Existing identified resource extensions provide a pathway to production for a 10-year mine life with further potential to expand to 50,000tpa of graphite (Stage 2.).

### **Key milestones:**

- Completed several exploration campaigns including geophysics, trenching and drilling to understand the extensiveness of the graphite mineralisation within its project area
- Extensive Metallurgical testing, detailed testing for Lithium ion battery use, expandability tested
- Completed scoping studies on a project producing 7,500 tpa graphite (TG) concentrate
- Identified and confirmed +50kms of graphite mineralisation on the Tanzoz 72sq km prospecting licences

#### **Key attributes:**

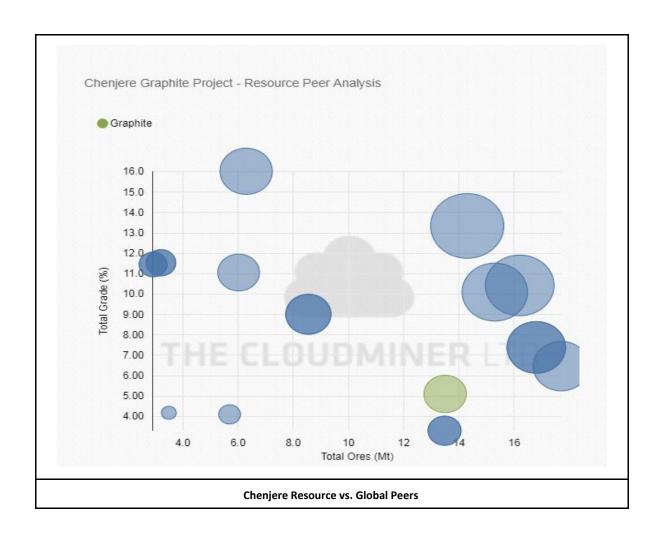
- Chenjere Project has a granted Mining License (ML)
- The project contains large flake concentrate. TanzOz is focused on directly marketing to the premium graphite market products
- Other project attributes include a potentially large resource base, a low strip ratio with free dig starter pits



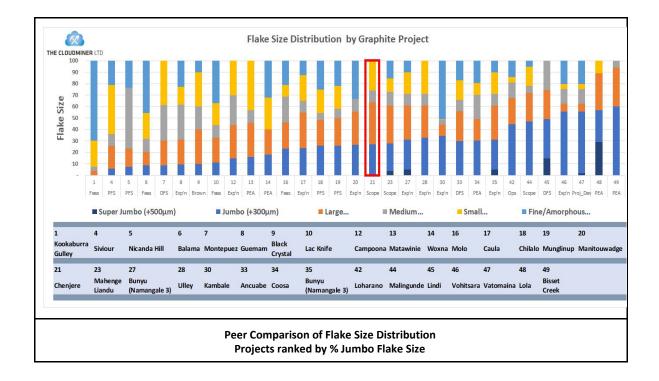
- Close to infrastructure for accessing export markets
- Low start-up capital, estimated at only US\$6m to develop the 7,500 tpa operation
- Tanzoz will then build additional processing capability to match the offtake up to 50ktpa, within their existing 72km2 licence. Of which, 50km of identified graphite mineralisation, will comfortably provide a LOM of +25years at 50ktpa
- Exploration upside; current JORC MRE is over 500m of strike, with high grade halo at 6.1% TGC contained

#### Funding & exit strategy:

- TanzOz are seeking expressions of interest to finance its Chenjere project using a staged approach. An initial tranche of US\$400k followed by US\$6.6m to finance confirmation drilling and construction respectively which includes offtake financing
- TanzOz would look to list on either ASX, TSX or AIM







#### **Project Comparison:**

The project is a relatively simple small-scale open pit operation that is close to the port town of Mtwara in south-east Tanzania, an area that is host to a number of noteworthy graphite projects.

Tanzoz has been **granted their mining licence** covering 9.83 km2 in the eastern portion of 4855/2007.

TCM has extensively benchmarked this project based on multiple variables including but not limited to; capital intensity, tonnes & grade, metallurgical recovery, flake size distribution, production capacity etc.

Whilst Chenjere does not boast the highest-grade resource, the project contains a high portion of large flake size material as illustrated in the above chart. Suggesting that there is a high probability that the potential market for their product will be for the application in high-tech applications ranging from lithium-ion batteries, structural composite parts and fire retardants to name a few. All of these markets and potential applications requires graphite to have expandable properties that are also conducive for spherenisation.



As discussed by Breakaway; "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. Ex-China users currently sourcing graphite from China will require additional sources of supply and which is likely to support prices".

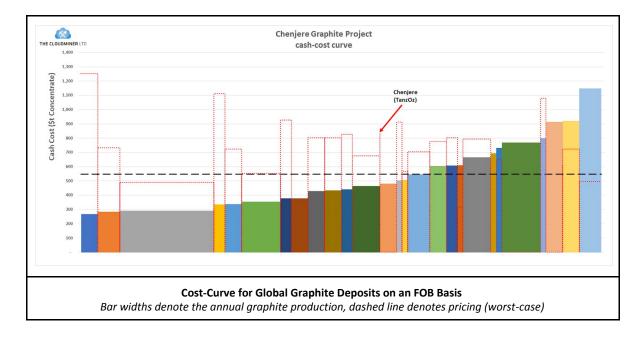
Internal Study	Unit	Amount	
Production Scenario	ktpa	7.5	50
Revenue	\$ m	64.9	1,047
Project Operating Cost	\$ m	26.2	389.6
Project Capital Cost	\$ m	5.5	32
Ongoing Capital Cost	\$ m	1.6	8
NPV (10%)	\$ m	15.7	161.3
IRR	%	76	60
Operating Cost (FOB Mtwara)	\$/t (con)	522	415
Operating Margin (before Royalties)	%	51	66
Average Annual Average EBITDA	\$ m	4.8	9.8
Life of Mine	yrs	+10	+17

Privately owned TanzOz intends to kick the project off with a modest scale of production. Projected returns from stage 1 of the outlined project development strategy suggest that the project is economically robust.

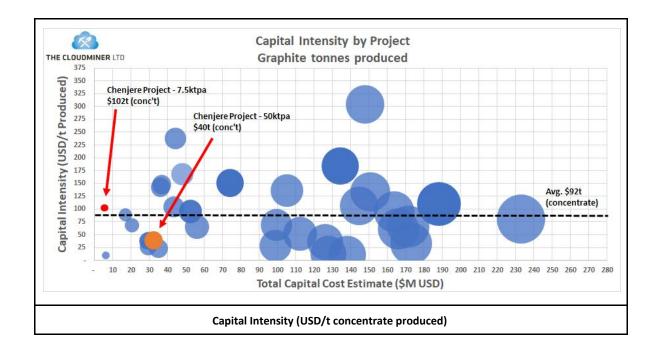
According to Breakaway Research, "the project modelling has demonstrated a cash positive project with an NPV10 at US\$15.7m and an IRR of 76%. Using the existing capital structure and assuming a new financier invests US\$6.4m at A\$1.05 per share, the NPV per share is A\$1.26 per share – representing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

Despite the modest production of 7,500 tpa of graphite product in stage 1., Tanzoz's forecast margin is a solid US\$782 per tonne of concentrate. Tanzoz has forecast it can potentially maintain or improve this margin by expanding its production rate to above 50,000 tpa in stage 2. At Stage 1.; Chenjere project is positioned approximately midway compared with its industry peers in terms of weighted average cash-cost and could move lower down on the cash-cost curve if it were to ramp-up to the stated 50,000 tpa.



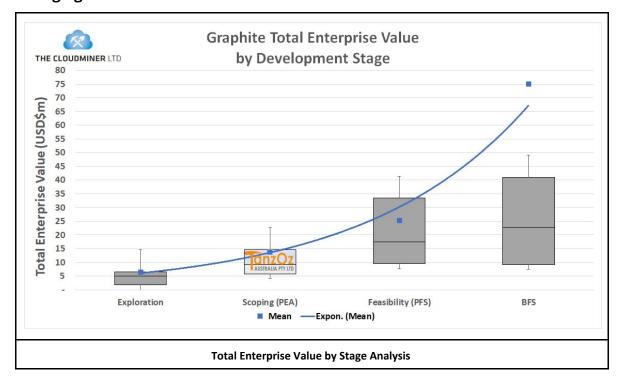


Chenjere's capital intensity of only \$102/t (concentrate) puts it slightly above the mean against its peers, currently \$92/t. However, Chenjere's economic strength lies in its modest start-up capital and positioning to grow organically over time as confidence and understanding of the graphite market grows.





#### A rough guide to valuation:



While Tanzoz is unlisted, a comparison of the market capitalisation of its competitors suggests that Tanzoz is relatively cheap. Based on The CloudMiner's analysis of nearly 50 graphite companies globally, the lower and upper valuation range for a graphite project at a Scoping or PEA stage should sit around \$6m to \$15m USD respectively.

A view that is also echoed by Breakaway Research. 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.



## **Management Team:**

For more information on the board members and management, refer to <a href="http://www.tanzoz.com/directors">http://www.tanzoz.com/directors</a>

# **Full Breakaway Research Report:**

https://www.thecloudminer.com/online resources