

Poised to supply China's growing expandable graphite markets

July 2016

Corporate Overview



Overview

ASX Code	GPX
Issued Capital	55M
Share Price	\$0.47
Market Capitalisation	\$26M
Cash	\$5M
Enterprise Value	\$21M
Options Loyalty options * Advisor options Director/Employee options 	24M 12M 6M 6M

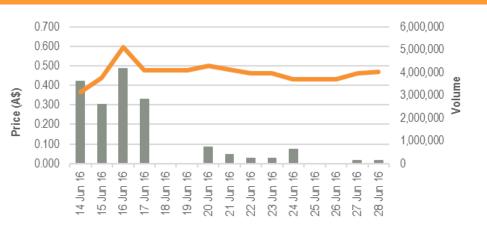
* Subject to shareholding after 3 months being no less than IPO shares

Analyst Coverage

Pulse Markets	Chris Baker
RM Research	Guy Le Page
Red Leaf (part of Palladion Partners dealer group)	David Greenwood

Top 5 Shareholders		
MMG Exploration Holdings	6.4%	
UBS Nominees	5.8%	
Christopher Shun	3.4%	
Baisheng Feng Mining	2.7%	
BPM Commodities	2.6%	
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Board		
Stephen Dennis	Non-executive Chairman	
Grant Davey	Non-executive Director	
Phil Hoskins	Managing Director	
Key Management		
Phil Hoskins	Managing Director	
Nick Corlis	General Manager - Technical	
Stuart McKenzie	Company Secretary / Commercial Manager	
Chris Knee	Chief Financial Officer	
Heavenlight Kavishe	Country Manager, Tanzania	
Exclusive Consultant		
Juyan Feng	China Marketing	
GPX Share Price Movements		



Experienced Board and Management

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Board and management with recent project development experience in Tanzania and offtake marketing experience in China

Stephen Dennis Non-executive Chairman	 Over 30 years with senior management positions at CBH Resources, Brambles Australia, Minara Resources and MIM Holdings Non-executive Chairman of Heron Resources, Rox Resources and Cott Oil & Gas Holds Bachelor of Laws, Bachelor of Commerce and Graduate Diploma of Applied Finance
Grant Davey Non-executive Director	 Over 20 years of senior management and operational experience in the construction and operation of gold, platinum and coal mines in Africa, Australia, South America and Russia Co-founder and Managing Director of the Panda Hill niobium project in Tanzania, which will commence construction during 2016 Holds a BSc Mining Engineering degree
Phil Hoskins Managing Director	 Chartered accountant with corporate and financial experience with both Australian and international listed companies Previously CFO and then MD at IMX Resources leading the transition from Australian iron ore producer to Tanzanian graphite developer Holds Bachelor of Commerce, is a Chartered Accountant and holds a Graduate Diploma of Applied Finance
Nick Corlis GM Technical	 Geologist with over 20 years of domestic and international experience in the resources industry Significant experience in exploration, project development and business development with Flinders Mines, Central Norseman Gold Corp, Perilya and WMC Resources Holds a Bachelor of Science (Hons), Master of Science

Value Proposition



Exposure to high growth markets	 Demand for expandable graphite for use in flame retardant building materials may exceed demand from electric vehicles Changes in Chinese and European building regulations and a macro shift towards environmentally friendly products a driving force behind potential future demand
High quality product	 Unique graphite product – highest expansion ratio amongst its peers (1500 ml/g) Coarse flake size distribution attractive to Chinese market where reserves have diminished Allows product differentiation to graphite competitors and optionality over target markets
End user demand	 Strong Chinese strategic relationships with China Gold and China National Building Materials Currently in exclusive negotiations for offtake, project debt, project equity, procurement and construction Execution of binding agreements expected to lead to a significant re-rating event
Quick pathway to production	 Environmental approval received, mining licence expected within months of listing Small scale project allows for quick development
Attractive project economics ¹	 PFS outlines pre-tax NPV₁₀ of US\$200M and pre-tax IRR of 62% Annual EBITDA of US\$47M at 69,000tpa
Strong cash position	Well funded to deliver on the strategy
Resource upside	Large resource potential will allow mine life extension and increases to production
www.graphexmining.com.a	1. Graphex confirms that all material assumptions underpinning the production targets and forecast financial information in the PFS announced on 23 November 2015 continue to apply and have not materially changed.

Offtake status – China Gold / CNBM



Graphex's immediate focus is converting its existing MOU into binding offtake and financing.

- Site visit completed June 2016 8 representatives from CNBM, China Gold and Suzhou independent testing authority
- Graphex remains in **exclusive negotiations** and finalising due diligence focussing on an **offtake and financing** transaction
- Graphex expects to execute binding agreements within months of listing
- China Gold and CNBM are interested in securing offtake from Chilalo due to the coarse flake and highly expandable graphite it can produce
- CNBM is the dominant company in the building materials industry in China and their interest stems from the use of Chilalo graphite in **flame retardant building materials** following recent amendments to Chinese building regulations

Strong relationship with strategic industry players



Site visit: Chilalo trench and Mtwara port



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CNBM

Expandable Graphite

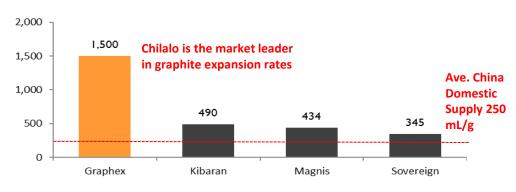


Expandable graphite is a value-added product derived from flake graphite.

- Chilalo exhibits market-leading expandability (1500ml/g vs 250ml/g average in China)
- Chilalo's superior expandability should ensure Graphex will receive a higher price for these size fractions than peers
- Expandable graphite currently used to produce:
 - Graphite foil the heat shield in electronic devices
 - Graphite paper/sheet
 - Seals, gaskets
 - Flame retardant building materials
- Chinese end user interest in Chilalo graphite is due to the excellent expandability achieved from testwork
- 80% of expandable graphite produced in China
- Chinese domestic supply unable to meet demand



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Published Expansion Rates (mL/g)

Source: Company announcements

Flame Retardant Building Materials



Recent changes to Chinese building requirements expected to considerably increase demand.

- Chinese building requirements now require the use of flame retardant building materials for all inner insulation and finishing of exterior walls – potential for exponential demand growth
- Combustion performance categories (including A, B1 and B2) are set out in the code with combustion performance required depending on building height, location and population density
- Expandable graphite capable of 'A' combustion performance
- CNBM have indicated that the flame retardant building material industry in China is 5Mtpa
- Expandable graphite content in flame retardant building materials varies from 5-50% depending on combustion performance requirement
- Market size is currently supply-driven (ie. Demand is large, supply is limited)
 Flame retardant insulation foam





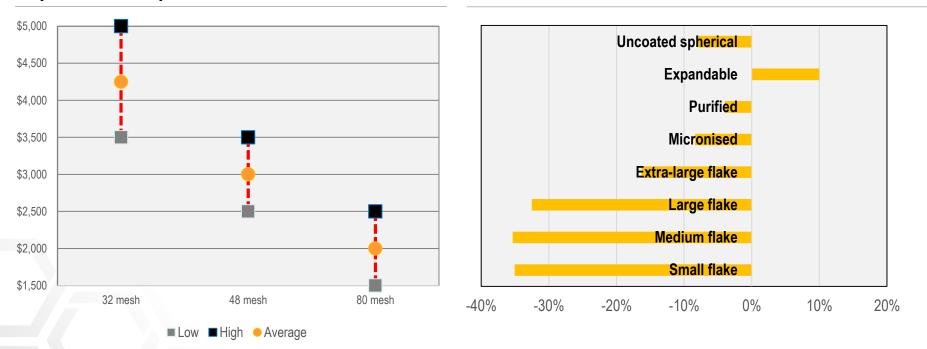


Expandable Graphite: From the Experts



Two-tier market: April 2014 – April 2016 Price Change

Source: Benchmark Mineral Intelligence, June 2016



Expandable Graphite Prices

- Independent third party expandable graphite pricing implies substantial upside to PFS pricing assumptions (implied US\$1,577/t basket sales price vs US\$1,217/t assumed in PFS)
- Environmental pressure on Chinese supply pushing up prices 5-20% in the last 12 months
- Certain flame retardants banned in EU from 2017 onwards potential for increased demand for expandable graphite as replacement

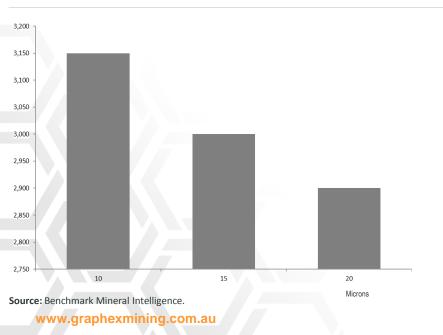
Spherical Graphite

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Spherical graphite is a value-added product derived from flake graphite and is used as the anode material in lithium-ion batteries.

- Exciting growth from electric vehicle (EV) and energy storage
- 10x more graphite than lithium in a lithium-ion battery
- Tesla building a \$5b 35GWh battery factory
- China expanding battery capacity to > 50GWh by 2020
- Chinese Government committed to reducing pollution targeting an EV population of 5 million by 2020
- Chilalo purification results indicate the product is suitable for producing battery-grade graphite
- Neighbour Magnis Resources (ASX: MNS) capable of producing battery-grade spherical graphite

Analyst Pricing – Spherical uncoated graphite > 99.95% (US\$/t)







Project Location - Tanzania



- Tanzania proving to be the coarsest flake graphite province in the world: recent strong growth in valuation of Tanzanian graphite peers
- Proximity to existing infrastructure
- **Experienced in-country operator** over 15 vears
- Board and management have recent Tanzanian project development experience
- Located 13km to the west of Magnis Resources' (mkt cap \$441m¹) Nachu Project

Tanzania

- Stable democratic Government
- Strong GDP growth over the past 10 years
- Established mining history (4th largest gold producer in Africa)
- Globally competitive tax and regulatory regime
- Access to skilled and educated workforce

Located within Tanzania/Mozambigue Graphite Province



1.

Shimba Deposit, Chilalo

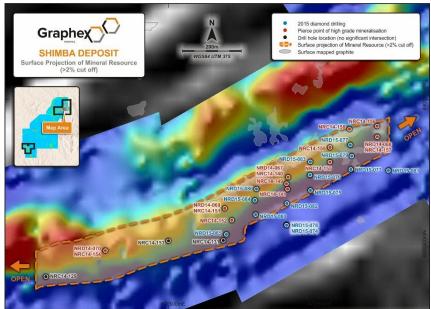


10 year mine life with high confidence of substantial resource upside

- High-grade Mineral Resource (Indicated and Inferred) of 9.2 Mt @ 10.7% TGC
 - 62% of the resource in Indicated category
 - Substantial resource upside in exploration target

Shimba Deposit: Ore Reserves and Mineral Resources

- Ore Reserve defined that supports 7.5 years out of assumed 10 year mine life
- Mineralisation at or near surface
- PFS focused on high-grade zone only



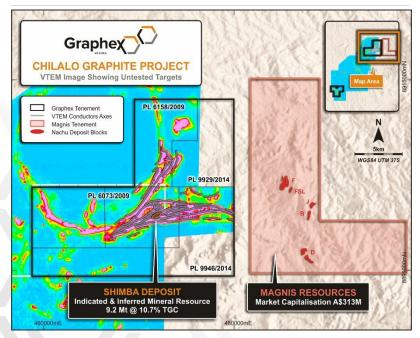
Domain	Classification	Tonnes (Mt)	TGC%	Contained Graphite (Kt)
High-grade zone	Probable Reserve	4.7	11.0	516
Total ore reserves	Probable Reserve	4.7	11.0	516
High-grade zone	Indicated	5.1	11.9	613
High-grade zone	Inferred	4.1	9.1	370
Total high-grade resource	Indicated and Inferred	9.2	10.7	984
Low-grade zone	Inferred	15.9	3.3	523
Total resource	Indicated and Inferred	25.1	6.0	1,507

1. Since the announcement of the Mineral Resource estimate on 13 October 2015 and the Ore Reserve estimate on 10 May 2016, both of which were for the Shimba Deposit, Graphex confirms that it is not aware of any new information or data that materially affects the information included in those announcements and that all material assumptions and technical parameters underpinning the Mineral Resource estimate and the Ore Reserve estimate in those announcements continue to apply and have not materially changed.

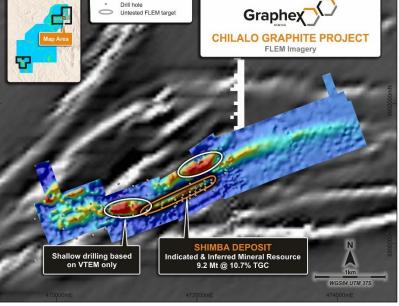
Resource Upside

Large scale potential

- Potential to significantly expand resources
- Shimba resource represents 1km out of 54km of strike identified by VTEM
- 34km of high conductance targets with similarities to high-grade Shimba resource
- Exploration target tonnage of 100-350Mt @ 3-11% TGC¹ shows that Chilalo has scale to expand
- China Gold and CNBM are attracted by Chilalo's scale potential



VTEM – a further 53km of untested strike length



1. ASX announcement 2 September 2015. An Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. Since the announcement of the Exploration Target on 2 September 2015, Graphex confirms that it is not aware of any new information or data that materially affects the information included in that announcement.

Notes: Magnis Resources market cap increased to \$441M as at 10/06/2016.

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Exploration Targets over Late-time VTEM 1VD Image



A High Quality Product

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The most important factor to a successful graphite project is producing a high quality product in demand by end users.

- Chilalo produces a high quality product
 - Coarse flake
 - Amenable to downstream value-add applications (market-leading expandability)
 - No deleterious elements
- Chilalo's expandability results provide optionality opening up downstream products other than spherical graphite used in lithium ion batteries
- Across all size fractions, Graphex expects to receive a higher price selling to expandable graphite manufacturers than other end users
- Further improvements in flake size expected following metallurgical optimisation



Price (US\$/t)¹ Basket Price (US\$/t)¹ **Target Market Flake Size** Mass Dist. % Assay TGC % Microns Mesh 47 Super Jumbo >500 35 Mesh 1.9 95.9 2,500 Expandable 528 24.0 Jumbo 300-500 50 Mesh 95.6 2,200 Expandable 315 22.5 Expandable / Refractory 180-300 80 Mesh 93.7 1,400 Large 57 6.0 Medium 150-180 100 Mesh 93.9 950 Expandable / Refractory 144 Expandable / Battery-grade spherical Small 75-150 200 Mesh 20.6 94.9 700 125 25.0 Fines <75 -200 Mesh 90.0 500 Expandable / Battery-grade spherical Total 100.0 1,217

Chilalo Product Specifications

Notes: 1. PFS base case price.

Existing Infrastructure



Roads and transport

- Chilalo to Mtwara Port is ~ 220km, predominantly sealed
- Existing airport at Nachingwea ~ 47km from Chilalo
- Government has announced plans to seal road between Nanganga to Nachingwea

Mtwara Port

- Commercial deep water port with capacity to handle Chilalo's volumes
- Land available for concentrate storage

Power

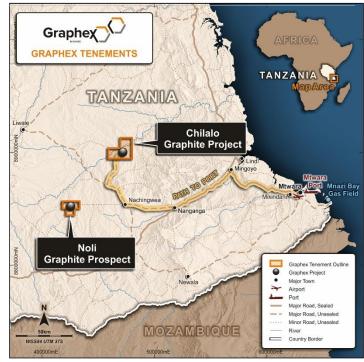
- PFS assumed 4MW diesel generated power
- Long-term potential for grid power in SE Tanzania

Water

Water supply expected to be available at site from bores

No significant capex required

Chilalo route to port



Mtwara Port





Low capex, low opex and conservative pricing assumptions underpin a quality project.

Operational metrics ¹		PFS – Nov 15
Life of Mine	Yrs	10
Average annual production (LOM)	tpa	69,123
Plant feed rate	tpa	630,000
Average head grade (LOM)	% TGC	10.85
Average recovery	%	94
Average concentrate grade	% TGC	94

Financial metrics ¹		PFS – Nov 15
LOM Revenue	US\$M	838
LOM Pre-tax Net Cashflow	US\$M	391
Average annual EBITDA	US\$M	47
Basket sales price	US\$/t	1,217
Operating cost per tonne of concentrate	US\$/t	490
Operating margin	US\$/t	727
Pre-production capital cost	US\$M	74
Pre-tax payback period	Yrs	1 year 7 months
Pre-tax NPV (10% discount rate)	US\$M	200
Pre-tax IRR	%	62

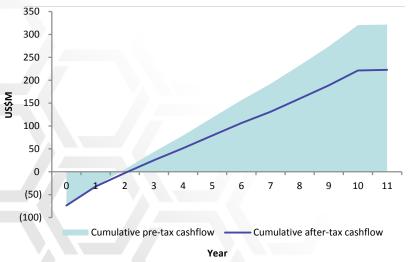
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Capex, opex and sensitivities



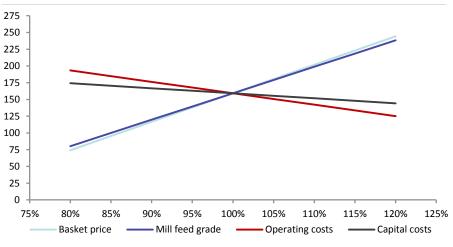
Capital cost (US\$M) ¹	PFS – Nov 15
Mining equipment	7.0
Process plant	32.7
Infrastructure	11.9
Pre-development works	6.9
EPC	3.3
Owner's cost	6.9
Contingency	5.1
Total	73.8

Cumulative Cash Flow¹



Operating costs (US\$/t) ¹	PFS – Nov 15
Mining	123
Labour	104
Product logistics (FOB)	75
Power	75
Reagents, consumables and water	54
Miscellaneous and G&A	45
Maintenance	14
Total	490

Sensitivity Analysis¹



Input Value as % of Base Case

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(N\$\$N)

Pre-Tax NPV

Tanzanian Capability



Supportive community, experienced team capable of delivery

Community

Current & historical CSR programs – Nachingwea Secondary School



Consultation with district officials and local communities



Relocation Action Plan completed, compensation agreed



Environment

Chilalo Environmental Certificate – received March 2016

Mining Licence application underway –expected in the coming months

In-Country Capability

Experienced Country Manager: Heavenlight Kavishe

- Holds degrees in Engineering and Business Administration
- Holds post-graduate qualifications in project management utility regulation
- Has held leadership positions with Tanzanian government agencies



Investment Summary



The right commodity: Exposure to rapidly growing graphite markets

Market focussed: Identifying product demand has been a strategic focus

High quality: Tier 1 expandable product following comprehensive testwork

Optionality: Expandability opens up new markets with opportunity to enter the battery market at the right time

The right partners: China Gold and CNBM

 \checkmark

Financing: A solution being negotiated

The mine: Advanced project capable of being brought into production quickly

Management: The right team to deliver a new project

Financial strength: Strong cash position

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Suite 4 Level 1, 2 Richardson Street West Perth, 6005 Western Australia

Telephone:+61 8 9200 4960Facsimile:+61 8 9200 4961

Phil Hoskins

Managing Director – Graphex Mining Limited Email: <u>phoskins@graphexmining.com.au</u>

