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#### **Mineral Resources**

The information in this Presentation that relates to in situ Mineral Resources for the Chilalo Project was announced on 20 September 2018. Graphex confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 20 September 2018 and that all material assumptions and technical parameters underpinning the estimates in the announcement of 20 September 2018 continue to apply and have not materially changed.

#### Ore Reserves

The information in this Presentation that relates to the Ore Reserve at the Chilalo Project was announced on 20 September 2018. Graphex confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 20 September 2018 and that all material assumptions and technical parameters underpinning the estimates in the announcement of 20 September 2018 continue to apply and have not materially changed.

#### Forecast financial information

The forecast financial information (and the production target on which such forecast financial information is based) in this Presentation was announced on 20 September 2018. All material assumptions underpinning the forecast financial information (and the production target on which such forecast financial information is based) in the announcement of 20 September 2018 continue to apply and have not materially changed.

#### **Exploration Target**

The information in this Presentation that relates to the Exploration Target was announced by IMX Resources Limited (now Indiana Resources Limited) on 2 September 2015). Graphex confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 2 September 2015. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that any associated production target will be realised.

#### **UNLOCKING VALUE**

## Financed for graphite delivery



#### **US\$80M FUNDING PACKAGE**

expected to fully fund mine construction to production<sup>1</sup>

### **EXPANDABLE GRAPHITE OPPORTUNITY**

first mover in an emerging market

#### **UNRIVALLED GRAPHITE MARGIN**

larger flake sizes attract premium prices

### price premium provides

competitive cashflow advantage

**MARKET INSIGHT** 

#### NPV US\$349M & 131% IRR

fully permitted Chilalo delivers exceptional economics



#### **GLOBAL INVESTMENT FIRM STAKES GRAPHEX POSITION**

### **US\$80M** is an independent validation of

- Chilalo Project quality
- Market opportunity for large flake product
- Potential for resolution in Tanzania

#### MILESTONES TO FUND PRODUCTION up to US\$80M Senior Funding Package US\$5M PRINCIPAL CONDITIONS to unlock Senior Funding Package up to US\$40M up to US\$40M Interim Loan Notes Senior Secured Loan Notes Equity Investment Available immediately Funding for development, construction **Completion of BFS** and ramp-up of the Chilalo Project **UNDERWAY** Funds used to satisfy **Senior Funding** 50/50 debt equity ratio Package conditions **Resolution of issues** Castlelake Funds to potentially become in Tanzania 2 vear term **UNDERWAY** 40% shareholder of GPX (can be capitalised into Senior Funding Package) Existing shareholders will be provided **Execution of material** contracts opportunity to participate on the same **UNDERWAY** terms



## Global Investment Firm with US\$13.7B under management

Specialising in discovering and pursuing complex small and mid sized asset based opportunities.

GRAPHEX MINING / 4

# HIGH-GRADE LARGE FLAKE RESOURCE Chilalo Project

#### **FULLY PERMITTED**

with Mining Licence and Environmental Approvals

16.9Mt GRAPHITE @ 10.2% TGC

incl Ore Reserves 5.3Mt @ 10.9% TGC

100-350Mt @ 3-11% TGC<sup>2</sup>

Exploration target tonnage - resource upside

#### **DRILLING UNDERWAY**

to upgrade resource classification

GPX PRODUCT FLAKE SIZE

**57% >300 μm** 

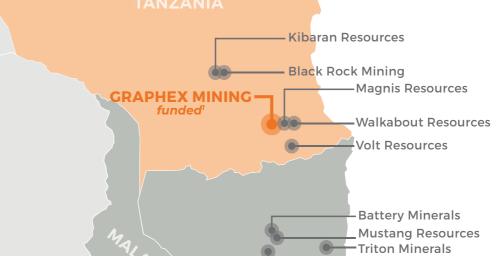
9% 24% 24% +850μm 500-850μm 300-500μm

43% < 300μm Sovereign Metals

#### **FLAKE SIZE PRICE PREMIUM**

1 Subject to agreed conditions per ASX announcement dated 29 October 2018 and slides 4, 19, 20 in this presentation. 2 IMX Resources ASX Announcement dated 2 September 2015.





**MOZAMBIOUE** 

Bass Metals production

MADAGASCAR

**Svrah Resources** 

**GRAPHEX MINING / 5** 

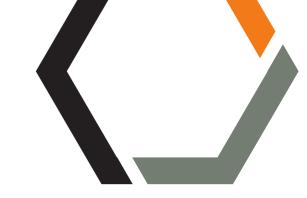
# CHILALO DEVELOPMENT PLAN PFS highlights compelling economics

**STAGE 1 PRODUCTION** 

58,000 TONNES (YRS 1-2)

**STAGE 2 PRODUCTION** 

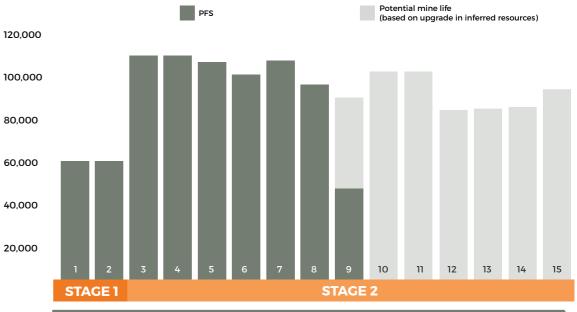
~100,000 TONNES (YRS 3+)



Item	Measure	PFS
Life of mine	years	8.5
Average annual production	tpa	93,000
Plant feed rate	tpa	883,000
Average head grade	% TGC	10.6%
Average annual EBITDA	US\$m	112
Basket sales price FOB Mtwara	US\$/t	1,777
Operating cost per tonne of product	US\$/t	500
Operating margin	US\$/t	1,277
Stage 1 capital cost	US\$m	43.6
Stage 2 capital cost	US\$m	32.5
Post-tax NPV (10% discount rate)	US\$m	349
Post-tax internal rate of return (IRR)	%	131
Post-tax payback period	Yrs	0.84

#### **GRAPHEX PRODUCTION SCHEDULE**





15 YEAR PRODUCTION SCHEDULE

#### **TANZANIA**

## Focus on building a strong foundation

#### TIMELINE OF TANZANIAN GOVERNMENT ENGAGEMENT



### Established Community Relationships

Graphex is proud of the impact its programs have made to the local community

- Nachingwea Secondary School
- Nditi Secondary School females' dormitory project
- Nditi Secondary School project
- · Lionja admin office project
- Lionja wells pumping system and repair project

Recognised by President for multiple CSR awards

#### STRONG CAPABILITY TO DELIVER IN AFRICA

PHIL HOSKINS
7yrs GPX/IMX

GRANT DAVEY +10yrs Anglo Gold Ashanti & Cradle Resources STUART MCKENZIE

+12yrs GPX/IMX & Anvil Mining

**HEAVENLIGHT KAVISHE** 

Country Manager (Tanzanian Government liaison)

Mining contributes 4.8% to GDP with the government AIMING TO

**GROW TO 10% BY 2025** 



#### **BANKING ON FLAKE SIZE**

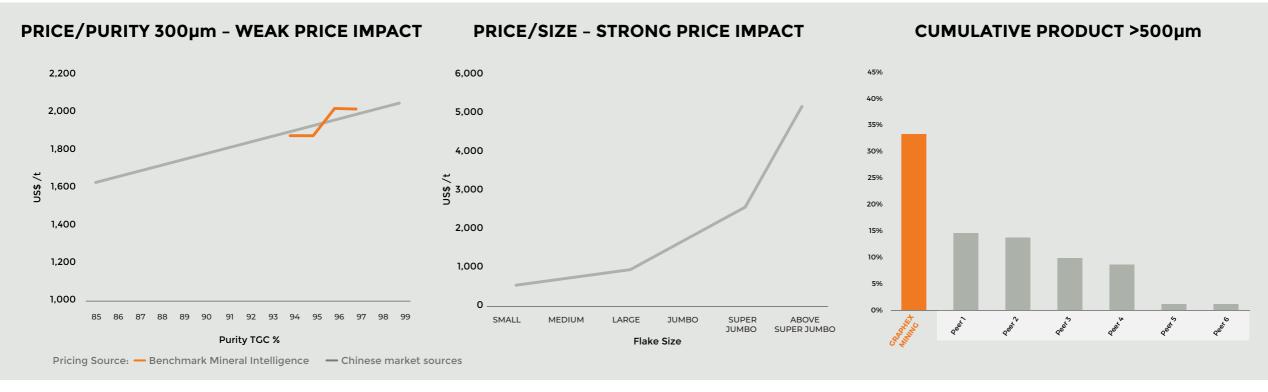
Graphex targets larger flakes in size vs purity trade-off

#### FLAKE SIZE (NOT PURITY) IS THE MOST IMPORTANT PRICE DETERMINANT

Price premium for flake size exceeds purity

#### THE PRICE/SIZE RELATIONSHIP

Our market insight is backed by our funding and offtake partners



#### **CONVERTING MICRONS TO MARGINS**

## Valuable product portfolio

US\$1,777/t<sup>3</sup>
Basket sale price

US \$1,277/t
Operating Margin

57% OF GPX PRODUCT achieves premium price

PRICING SOURCE<sup>3</sup> Lower of BMI and Chinese market sources

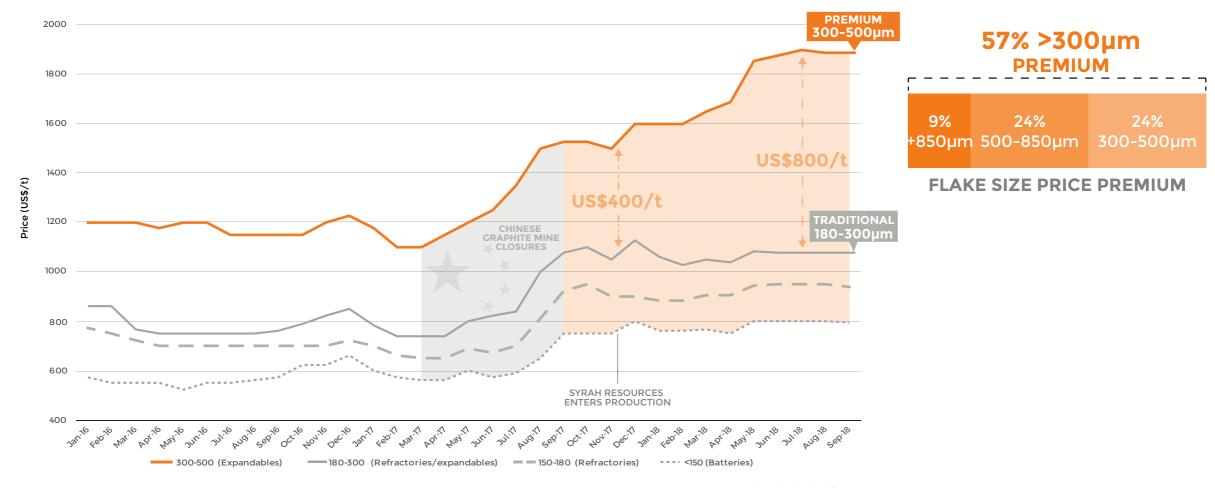
#### **GPX BASKET PRICE**

Flake Size	Microns	Mass Dist. %	Grade TGC %	Price (US\$/t)	Basket Sale Price (US\$/t)		
Above Super Jumbo	> 850	9	93.4	\$5,150	\$437		PRIC
Super Jumbo	500 - 850	24	90.3	\$2,540	\$620	EXPANDABLE	E PR
Jumbo	300 - 500	24	88.6	\$1,757	\$427		EMIC
Large	180 - 300	9	98.7	\$974	\$83	REFRACTORIES & EXPANDABLE	<b>Z</b>
Medium	150 - 180	5	98.8	\$779	\$39	LITHIUM ION BATTERIES	
Small	< 150	29	97.4	\$583	\$171	& EXPANDABLE	
WEIGHTED AVERAGE BASKET SALE PRICE (FOB) US\$1,777					US\$1,777		

#### MINE THE GAP

## Growing price inequality between premium and traditional markets

(REFRACTORY)



#### FLAME RETARDANT REVOLUTION

China stepping stone to the global market



CHINA DRIVES GLOBAL FLAME RETARDANT BUILDING (FRBM) MATERIAL INDUSTRY

"China needs 40Mtpa of FRBM's, which will contain 5% expandable graphite."

Mr Jiang Yang, Group Vice President - China National National Building Materials

FIRE REGULATORY
RECOMMENDATIONS

CHINA FRBM MANDATED – BUILDING COD

UAE SKYSCRAPER FIRE REGULATORY RECOMMENDATIONS

GPX HAS THE RIGHT PRODUCT FOR THE RIGHT MARKET

AUSTRALIA INDUSTRY
BEST PRACTICE FOLLOWING
GRENFELL (UK)

# CHINA GRAPHITE SUPPLY UNDER THREAT Issues facing graphite production

China has historically produced +70% OF THE WORLD'S GRAPHITE

Chinese production of graphite is under threat due to CHINESE GOVERNMENT ENVIRONMENTAL CRACKDOWN causing mine closures and threatening an industry already impacted by diminished

large flake graphite reserves

Structural change will see EAST AFRICA REPLACING CHINA as the

Structural change will see EAST AFRICA REPLACING CHINA as the world's leading supplier of graphite



#### **BUILDING THE PIPELINE**

China offtake interest

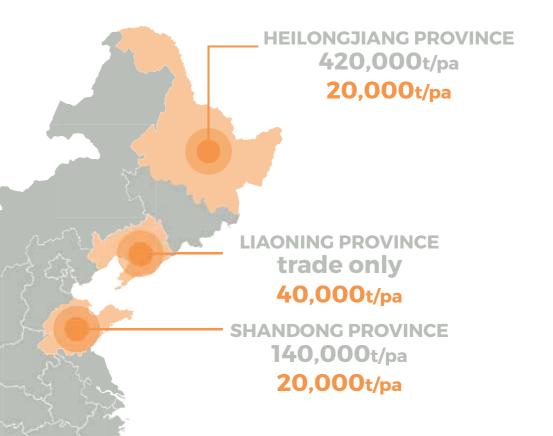
#### **5 SIGNED**

statements of sales intent

### **80,000 TONNES**

per annum of Chilalo Graphite

Final offtake partners and tonnages to be matched with STAGE 1 PRODUCTION



## Building offtake relationships in China

#### **PHIL HOSKINS**

5yrs in-country experience (Regular in-China interaction with offtake partners)

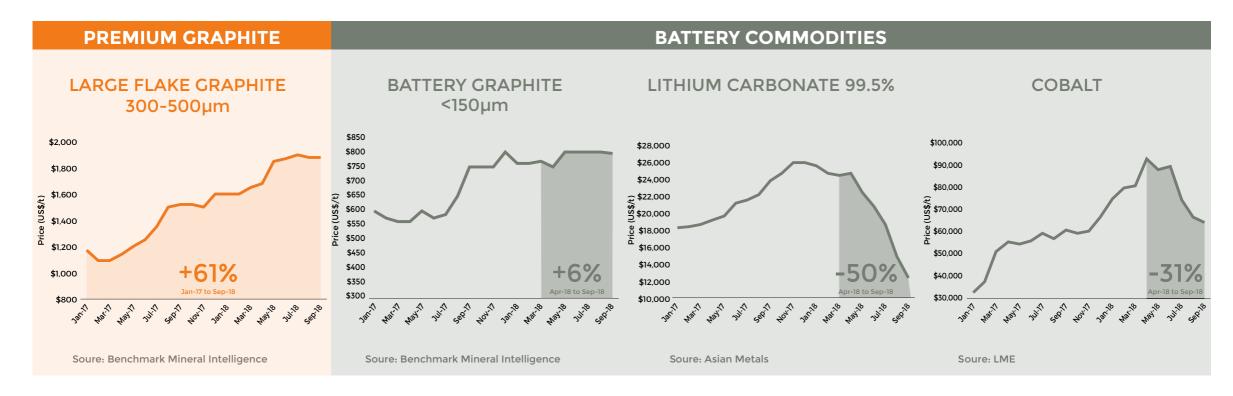
**2016 GRAPHITE SUPPLY** 

GPX OFFTAKE INTEREST

#### THE UNDERSTATED OVERACHIEVER

Surging large flake graphite price obscured by EV story





Large flake graphite prices have risen over 60% since early 2017

### **FUNDING CONDITIONS UNLOCKING PATHWAY TO PRODUCTION**

Strategy targeting 2020 production

Management attention now concentrated on resolution of financing conditions ahead of targeted production by 2020

US\$32.5m STAGE 2 mine expansion to be funded from STAGE 1 cash flows







**Bankable Feasibility** 

Study

**UNDERWAY** 





Resolution of

Tanzania Issues

**UNDERWAY** 



**Execution of** 

material contracts

**UNDERWAY** 









Commencement of Construction 2019



2018

FULLY FUNDED FROM BFS THROUGH TO PRODUCTION

2020

# **EXPANDING OUR HORIZONS** investing in east African Graphite

## TRANSFORMATIVE FUNDING ARRANGEMENT

transparent, fully funded pathway to cashflow with experienced resource investors

## >500µm MICRON - COMPETITIVE OFFTAKE ADVANTAGE

highest margin producer, product tailored for expandable graphite partners

#### **CENTURY OF GRAPHITE**

two once-in-a-generation demand events

#### **GRAPHITE: A PERFECT STORM**

permanent supply disruption plus demand megatrend increasing prices and creating supply opportunities

# SIGNIFICANT THIRD-PARTY VALIDATION OF PROJECT, PRODUCT AND STRATEGY



#### **CORPORATE OVERVIEW**

**CAPITAL STRUCTURE** 

**Market Cap** A\$22.5M Shares on Issue 78.8M

MAJOR SHAREHOLDERS

J P Morgan Nominees Australia Limited 6.6% Stephen Dennis

**MMG** Exploration Holdings

One Managed Investment Funds Limited 3.7%

**BNP Paribas Nominees** 

**BOARD & MANAGEMENT** 

**4.5%** Grant Davey

**Phil Hoskins** 

3.5%

Non-executive Chairman

Non-executive Director

**Managing Director** 

#### **JORC TABLE**

DOMAIN	CLASSIFICATION	TONNES (MT)	TGC%	CONTAINED GRAPHITE (KT)
High-grade zone	Probable Reserve	5.3	10.9	576
Total ore reserves	Probable Reserve	5.3	10.9	576
High-grade zone	Indicated	5.2	11.9	622
High-grade zone	Inferred	11.7	9.4	1,100
Total high-grade resource	Indicated and Inferred	16.9	10.2	1,722
Low-grade zone	Inferred	36.6	3.5	1,265
Total resource	Indicated and Inferred	53.5	5.6	2,987

## **INTERIM LOAN NOTES - SUMMARY TERMS**

AMOUNT	US\$5 million
USE OF FUNDS	Funding activities that will satisfy the conditions precedent to the Senior Funding Package
TERM	Two years
INTEREST RATE	<ul> <li>15% on drawn funds, 4% commitment fee on undrawn funds</li> <li>Graphex can elect to capitalise</li> </ul>
FEES	<ul> <li>Structuring fee of 2% of the Amount and an issuer discount of 7.5% on drawn funds</li> <li>Graphex can elect to capitalise</li> </ul>
SHARES	1.645M GPX.ASX shares, at no cost
SECURITY	Security over shares in subsidiary company that indirectly owns the Chilalo Project
BOARD SEAT	1 Board representative

#### **SENIOR FUNDING PACKAGE - SUMMARY TERMS**

SENIOR FUNDING PACKAGE	<ul> <li>Up to US\$40 million in secured debt and up to US\$40 million equity</li> <li>GPX able to undertake market capital raising however Castlelake Funds' shareholding will be not less than 40%</li> </ul>	WARRANTS	<ul> <li>2 x 6.705M 5 year warrants with exercise price lower of:</li> <li>A\$0.20</li> <li>30% discount to 5 day VWAP at time of issue</li> </ul>
USE OF FUNDS	<ul> <li>Debt/equity ratio not to exceed 50/50</li> <li>Construction and ramp-up of Chilalo</li> <li>Project</li> </ul>	EQUITY ISSUE PRICE	<ul><li>Lower of:</li><li>Any equity raising between now and the Castlelake Funds' investment</li></ul>
DEBT TERM	Three years from drawdown	. Kież	<ul><li>10% discount to 15 day VWAP</li><li>A\$0.28 per share</li></ul>
INTEREST RATE	<ul><li>15% capitalised until the earlier of:</li><li>18 months from drawdown</li><li>Commercial production</li></ul>		<ul> <li>Resolution of Tanzania issues</li> <li>Completion of bankable feasibility study</li> </ul>
FEES	<ul> <li>Structuring fee of 2% of the Loan Amount and an issuer discount of 7.5% on drawn funds</li> <li>Graphex can elect to capitalise fees</li> </ul>	CONDITIONS PRECEDENT	<ul> <li>Execution of material contracts</li> <li>Entry into full form documentation</li> <li>Confirmatory due diligence in relation to the above</li> </ul>
		SECURITY	Security over all assets and accounts

**RELATIONSHIP** • 2 Board representatives

Anti-dilute rights

**AGREEMENT**