

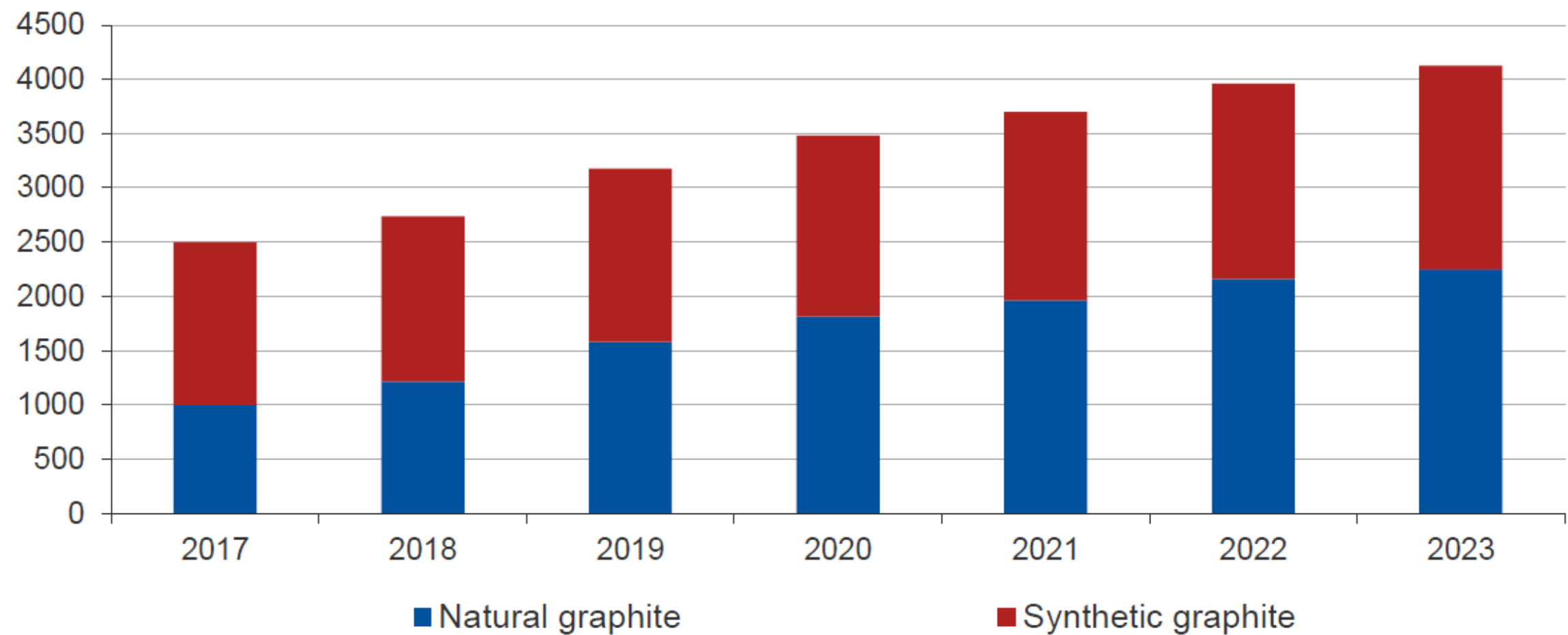
# Two Exceptional Projects



**Diggers and Dealers**  
**6<sup>th</sup> August 2018**



Figure 8 Graphite demand by source, kt



# Corporate Overview



**Jeff Dowling**  
Non-Exec Chairman



**Ben Van Roon**  
Chief Operating Officer



**David Flanagan**  
Managing Director



**Tony Walsh**  
Company Secretary &  
GM Corporate



**Brett Smith**  
Non Exec Director



**Jeff Dawkins**  
Chief Financial Officer



**Gilbert George**  
Non Exec Director



**Naomi Scott**  
Country Director and  
General Counsel



**Paul Glasson**  
Non Exec Director  
(based in China)



**Ivy Chen**  
Non Exec Director

***“More than 300 years industry experience across board and management”***

***“Proven performers. People that have developed a new mine every year for the last 10 years”***

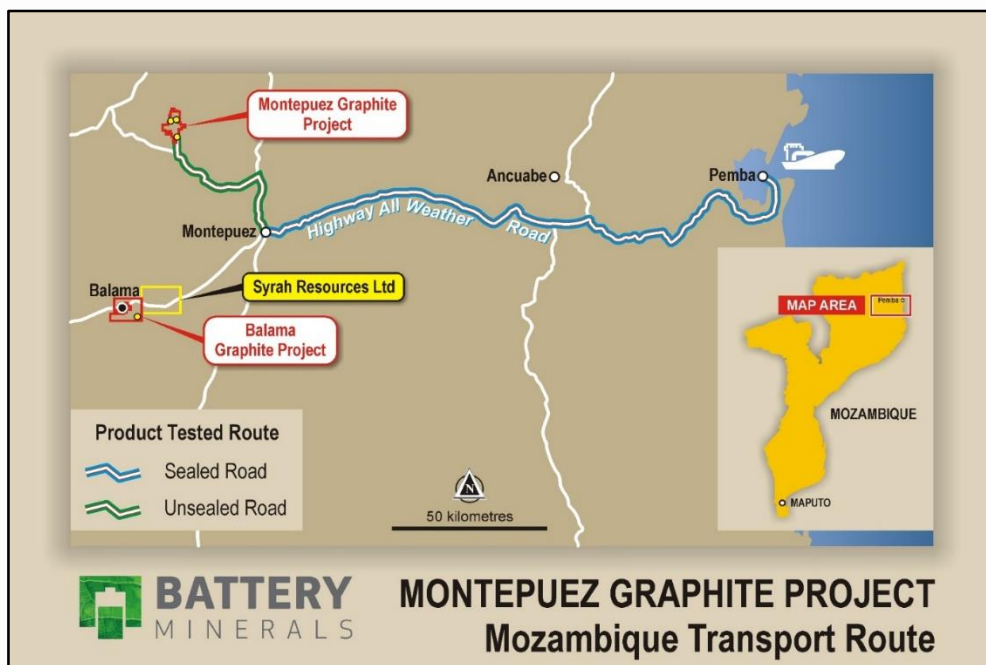
## Share Price



## Capital Structure

Shares on Issue (ASX Code: BAT)	1,113.7M
Board and Management	>10% fully diluted
Share price (as at 1 <sup>st</sup> August 2018)	~3.1cps
Market Capitalisation (as at 1 <sup>st</sup> August 2018)	~\$35.6 million
Cash at bank (as at 30 <sup>th</sup> June)	~\$20 million
Enterprise Value	~\$15.6 million
Top 20 Shareholders	~40%
Listed Options (ASX Code: BATO)	~172.3 million
Unlisted Options	~146.7 million

# Project 1 Montepuez



Montepuez Graphite Project <sup>2</sup>	VES (First Module)
Annual graphite production	45,000 - 50,000tpa
Capex (pre-production)	US\$51.2 M
Opex (concentrate/t) <sup>7</sup>	US\$378/t
Grade processed	12% TGC
Plant Type and Scale	Modular, ~500ktpa
Projected Payback	~2 years <sup>5</sup>
Net Operating Cash Flow	~US\$20 Mpa <sup>5</sup>
Metallurgical Recovery	>80%
Mine Life <sup>3</sup>	+10 years <sup>4</sup>
Graphite Concentrate purity	96-97% TGC



- **Timing:** Mining Licence granted, First Exports 12 months from finance completion
- **Proven Logistics:** bulk sample delivered to port in 2017, 260km logistics chain tested and proven
- **Port Allocation approved:** at Pemba Port for 100,000tpa of graphite concentrate
- **Expansion to 100ktpa:** USD 25-29M for additional 45-50,000tpa
- **Indicated & Inferred Resource:** 115.6Mt @ 7.51% TGC @ 2.5% cut-off<sup>1</sup>, Target for additional 3-400Mt at 5-10% TGC<sup>6</sup>
- **Proven and Probable Reserve:** 41.4Mt @ 8.8% TGC @ 4% TGC cut-off<sup>1</sup>

1. See ASX announcement on 15 February 2017 for DFS outcomes. See ASX announcement dated 18 October 2017 for VES outcomes. See ASX announcement dated 16 July 2018 for Elephant deposit Mineral Resource upgrade and CP sign-off

2. Excludes National Ownership (anticipated to be ~5%) and 32% tax rate

3. Based on Ore Reserves (see ASX released dated 15 February 2017) prepared by a competent person in accordance with the JORC Code. All material assumptions underpinning the production target in that announcement continue to apply and have not materially changed

4. Mine life of +10 years at 12% TGC plus 10+ years at 7-8% TGC

5. BAT has used US \$798/t FOB Pemba as a long term basket price for its concentrate in the Feb 2017 DFS. Current Independent market commentators supported by our detailed market analysis indicates long term pricing in a range US \$847-950/t FOB Pemba.

6. The potential quantity and grade is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

7. Operating costs are sensitive to movements in diesel price. A 30% increase in diesel price would deliver an increase in operating costs of approximately 10%

## **Budgeted Expenditure in the six months to 31 December 2018:**

• Tailings Dam complete & Earthworks	AUD \$2.2M
• Mozambique Admin and owners costs	AUD \$2.1M
• Camp completion	AUD \$1.4M
• Balama Central Project Feasibility Study	AUD \$1.3M
• Detailed engineering design	AUD \$1.0M
• VAT (refundable after Jan 2020)	AUD \$1.0M
• Exploration	AUD \$0.8M
• Infrastructure, Logistics and Utilities	AUD \$0.7M
• Downstream test work Urbix	AUD \$0.3M
• Corporate O/H	AUD \$3.6M

**The Company expects to have AUD\$5M in cash and no significant project development financial liabilities at 31 December 2018.**



# Permanent Camp Construction at 85% - August 2018



**BATTERY**  
MINERALS



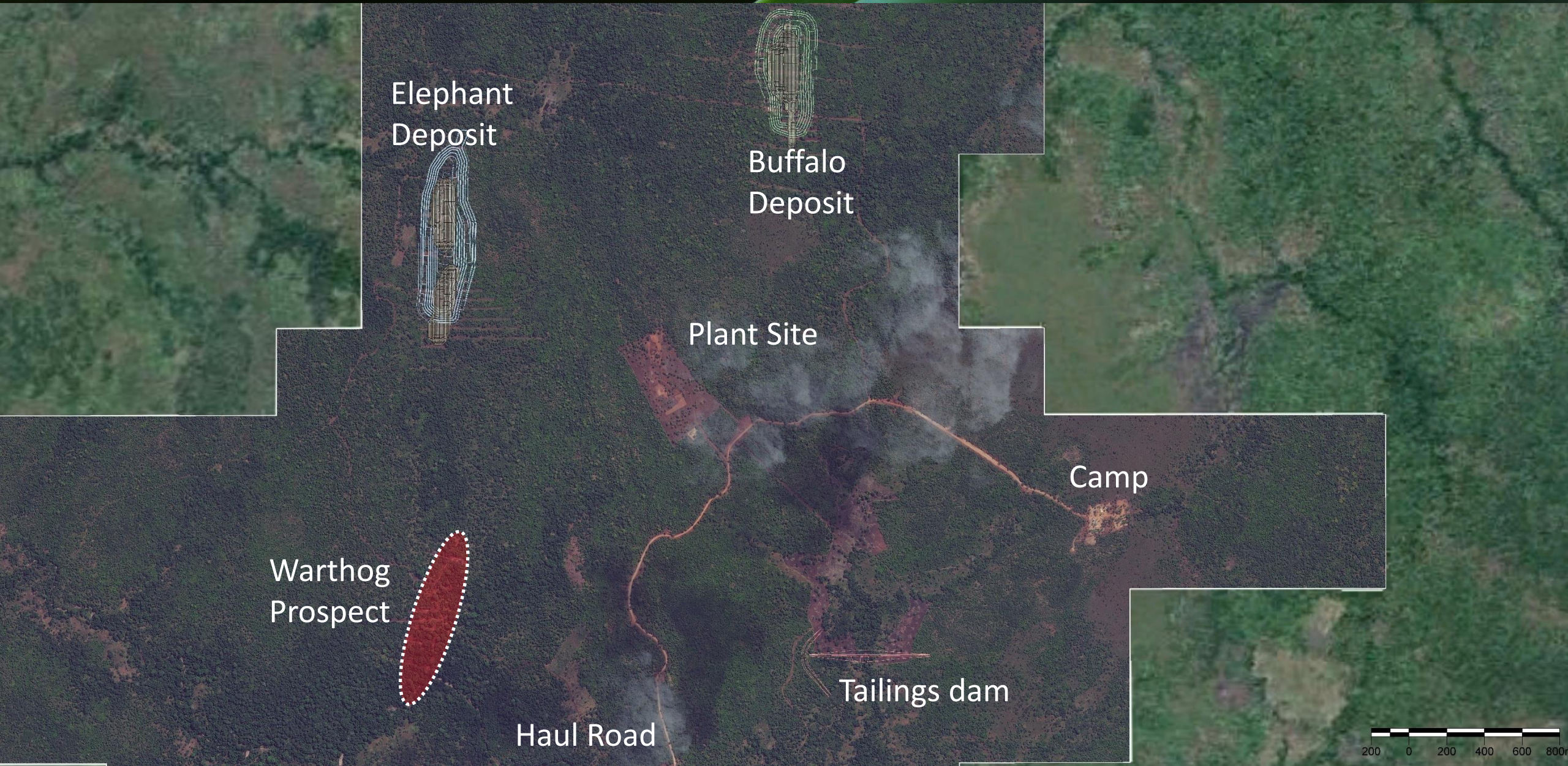


# Tailings Dam Wall First Lift - August 2018



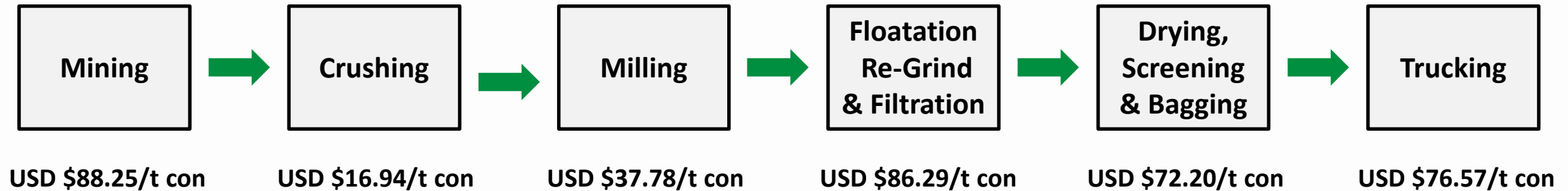


# May 2018 Satellite Image



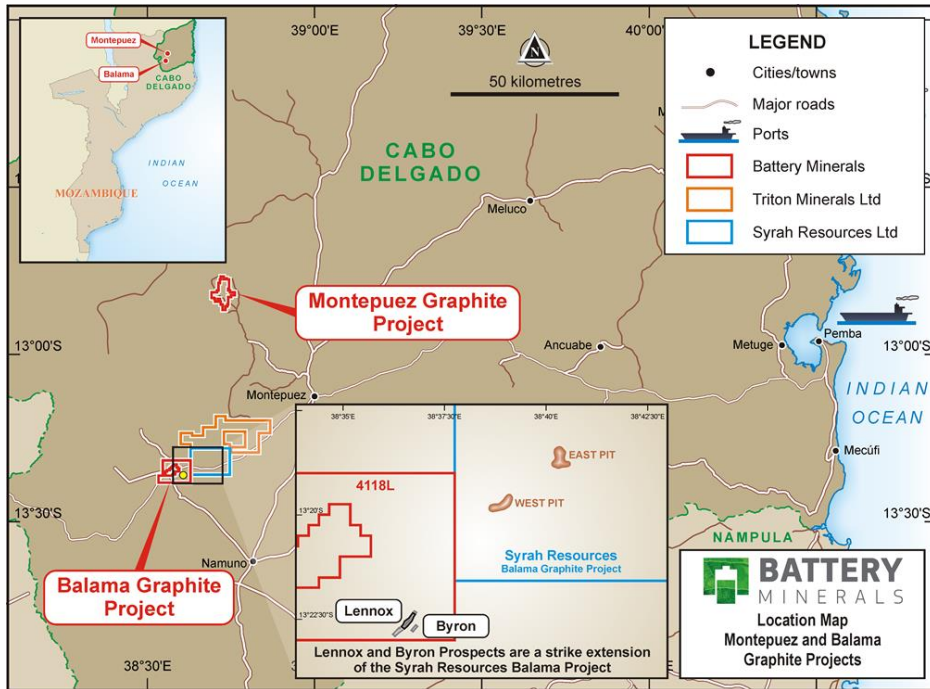


# *A very simple low risk processing plant*





# Project 2 Balama



Balama Graphite Project <sup>2</sup>	Scoping Study
Annual graphite production	50,000 - 55,000pa
Capex (pre-production)	US\$50 M
Opex (concentrate/t) <sup>6</sup>	US\$372/t
Grade Processed	10.6% TGC
Plant Type and Scale	Modular, ~550ktpa
Projected Payback	<1.5 years <sup>5</sup>
Net Operating Cash Flow	>US\$30 Mpa <sup>5</sup>
Metallurgical Recovery	>93%
Mine Life <sup>3</sup>	+10 years <sup>4</sup>
Graphite Concentrate purity	96-97% TGC



- **Timing:** Feasibility Study conclude H2 2018
- **Logistics:** Bulk sample delivered to port in 2017, 260km logistics chain tested & proven by Montepuez bulk sample
- **Port Allocation:** Discussions on allocation ongoing, capacity is available to cater for Battery Minerals exports of 200ktpa
- **Expansion to 100ktpa:** USD 30-35M for additional 50-55,000tpa
- **Resource <sup>3</sup>:** Total Mineral Resources of 32.9Mt at 10.2% TGC (6% TGC cut off), Indicated Mineral Resources 26.6Mt at 10.3% TGC, includes indicated resources of 11.8Mt at 14.8%TGC (8% TGC cut off)
- **Feasibility Study** to consider processing grade parameters of 10.26% - 15.95% TGC (see Appendix for grade tonnage curve)

1. See ASX announcement dated 1 March 2018 for Balama Central Scoping Study outcomes. All material assumptions underpinning the production target in that announcement continue to apply and have not materially changed  
2. Excludes National Ownership (anticipated to be ~5%) and 32% tax rate  
3. See ASX announcement dated 29 March 2018 entitled "Resources double at Balama Central graphite project in Mozambique" for full details. Please refer to additional details on slide entitled Disclaimer & Competent Persons Statement.  
4. Mine life of +10 years based on 2016 Indicated Resources only  
5. BAT has used US \$1,100/t as basket price FOB Pemba for its Balama Central concentrate. The current market basket price for its Balama Central concentrate is greater than US \$1,100/t FOB Pemba.  
6. Operating costs are sensitive to movements in diesel price. A 30% increase in diesel price would deliver an increase in operating costs of approximately 10%



# Production Profile



\*Assumes ramp-up of each additional stage in the first quarter



Milestone	Status
<ul style="list-style-type: none"> <li>Environmental Impact Assessment</li> <li>PFS,DFS and Value Engineering Studies</li> <li>Detailed engineering, early works &amp; procurement</li> <li>Port Allocation from government for Pemba port</li> <li>Targeted exploration activity</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completed and Approved, 2017</li> <li>✓ Completed, 2017</li> <li>✓ Completed</li> <li>✓ 100,000tpa export capacity Govt approved</li> <li>✓ Drilling completed, reported, more pending</li> </ul>
<ul style="list-style-type: none"> <li>Offtake Agreements</li> <li>Mozambique mining licence granted</li> <li>Balama Central Scoping Study</li> <li>Montepuez Resource Updates</li> <li>Project Finance</li> <li>Long Lead Item procurement</li> <li>Mine Plan and Commence construction</li> </ul>	<ul style="list-style-type: none"> <li>✓ Four offtake agreements in place</li> <li>✓ Completed</li> <li>✓ Completed</li> <li>• Elephant completed, Buffalo ~late Q3 CY2018</li> <li>• Ongoing , project finance advisor appointed</li> <li>• Pending project finance</li> <li>• Planning completed, early earthworks underway</li> </ul>



# Next Steps

1. Complete Montepuez project finance
2. Award remaining construction contracts and commit expenditure
3. Urbix, Anode and other downstream test work
4. Resource and reserves, exploration update
5. Balama Feasibility Study Results
6. Montepuez Project Commissioning & Exports
7. Vanadium and other minerals on existing tenements





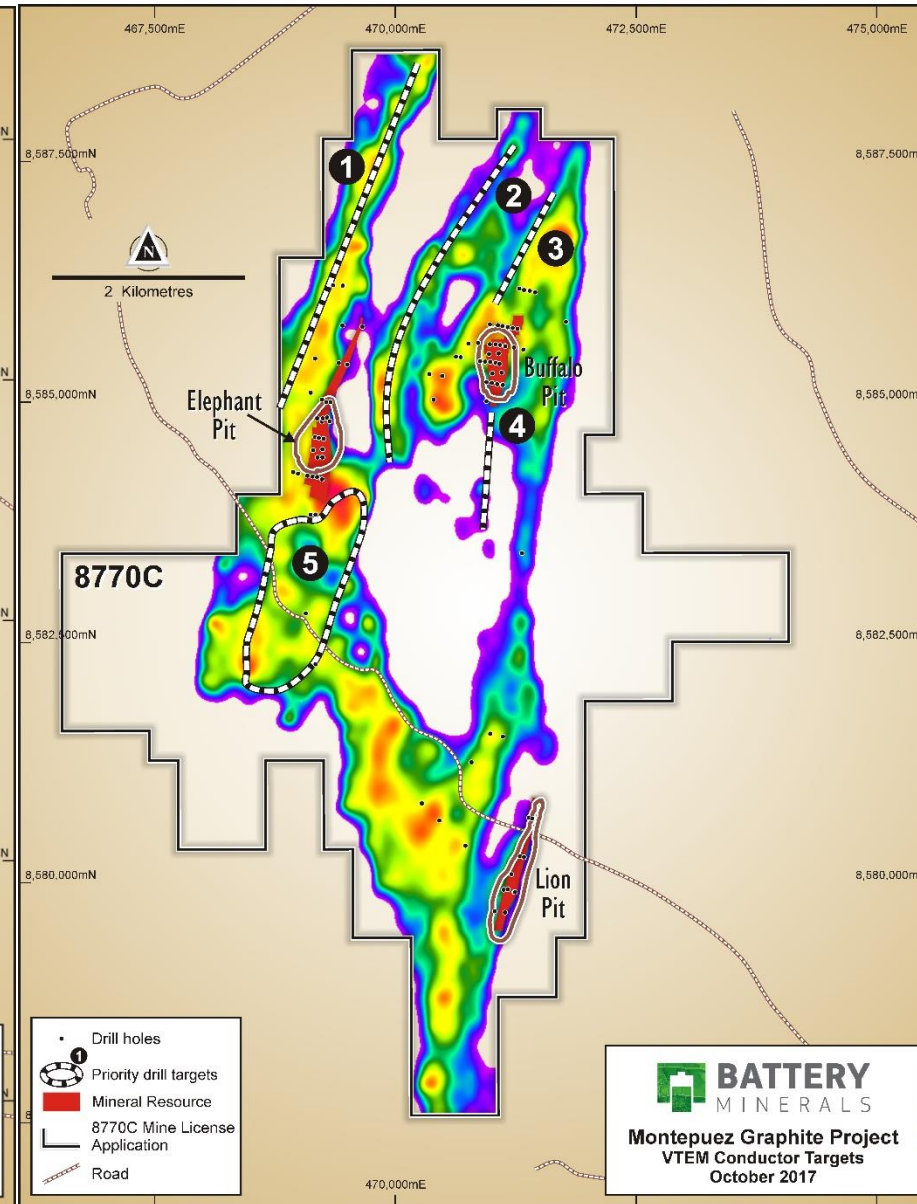
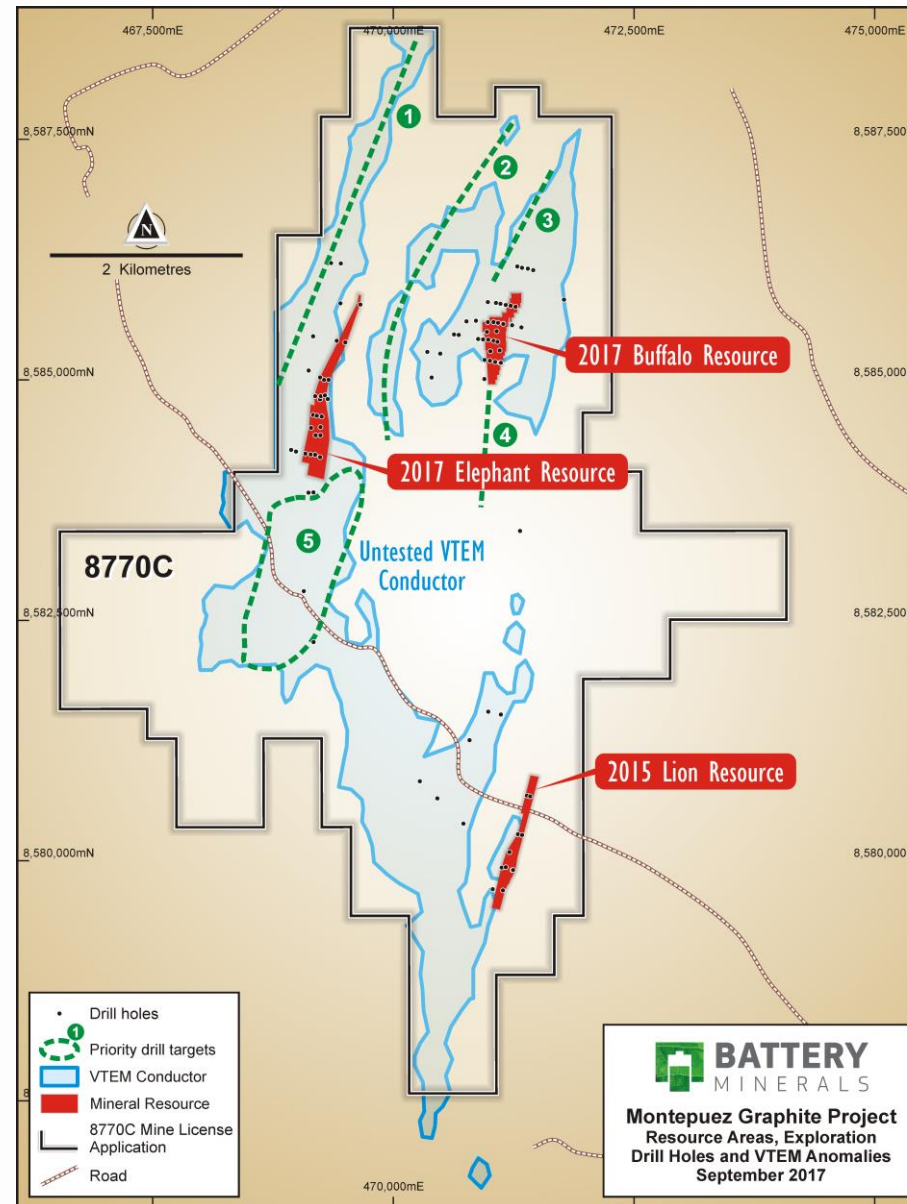
- Montepuez Exploration Potential
- Elephant grade control drilling confirmatory results
- EV Lithium ion battery mineral requirements
- CRU-Growing demands across industries for graphite
- Capex waterfall impact of currency and delays
- Opex waterfall impact of fuel price increase
- BMI-Graphite Price Trend Jan 2016 to June 2018 - Montepuez
- BMI-Graphite Price Trend Jan 2016 to June 2018 - Balama Central
- Mineral Resources, Reserves, disclaimer, Competent person statements



# Montepuez Exploration Target - Additional Growth 300-400MT @ 5-10 % TGC<sup>1</sup>

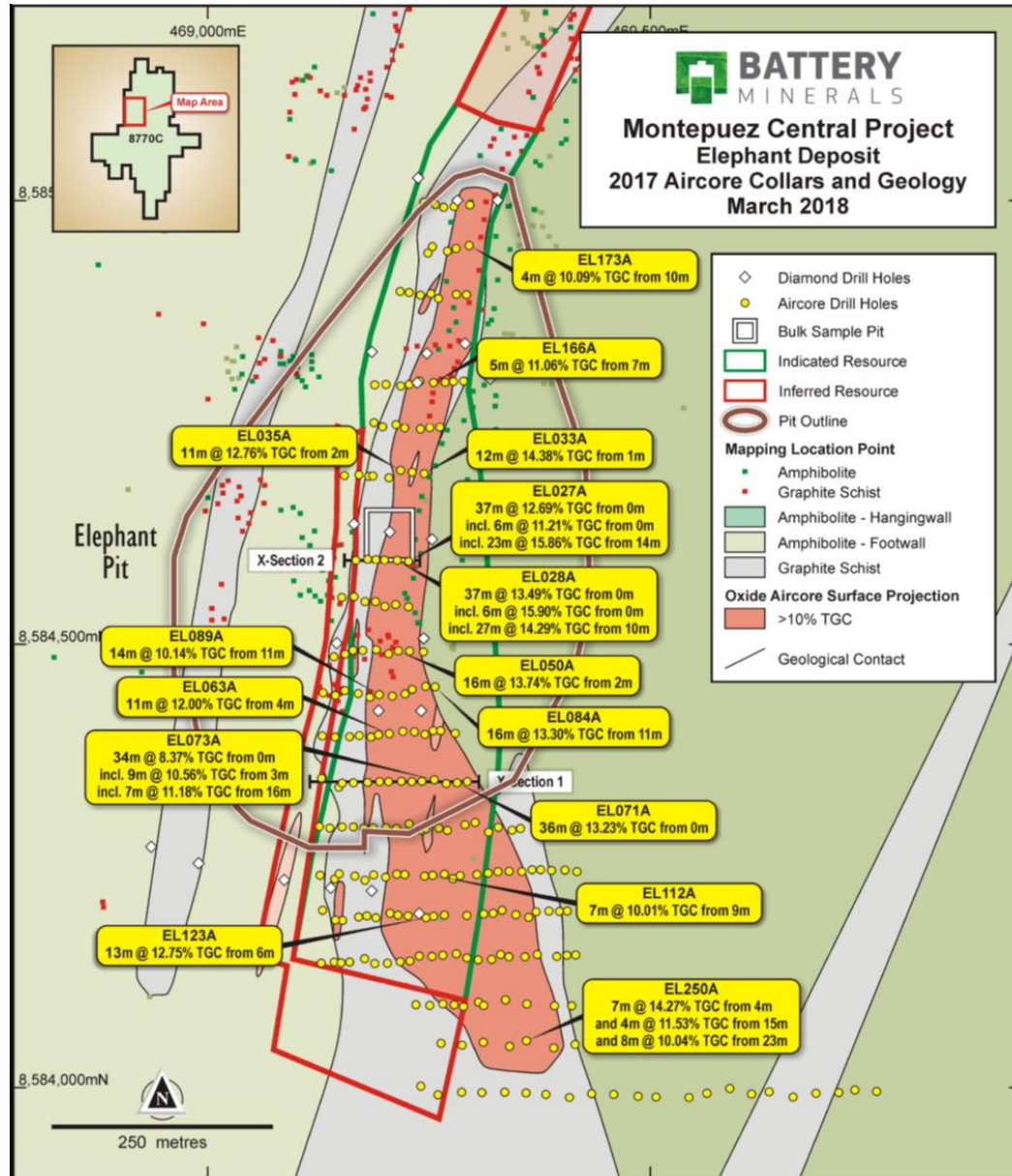
- 5 VTEM target areas
- Only 15-20% of targets have been drilled
- VTEM conductors remain largely untested
- All deposits remain open at depth and along strike
- Potential for 300-400Mt @ 5-10% TGC<sup>1</sup>
- Buffalo deposit drilling assays pending

1. The potential quantity and grade is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.



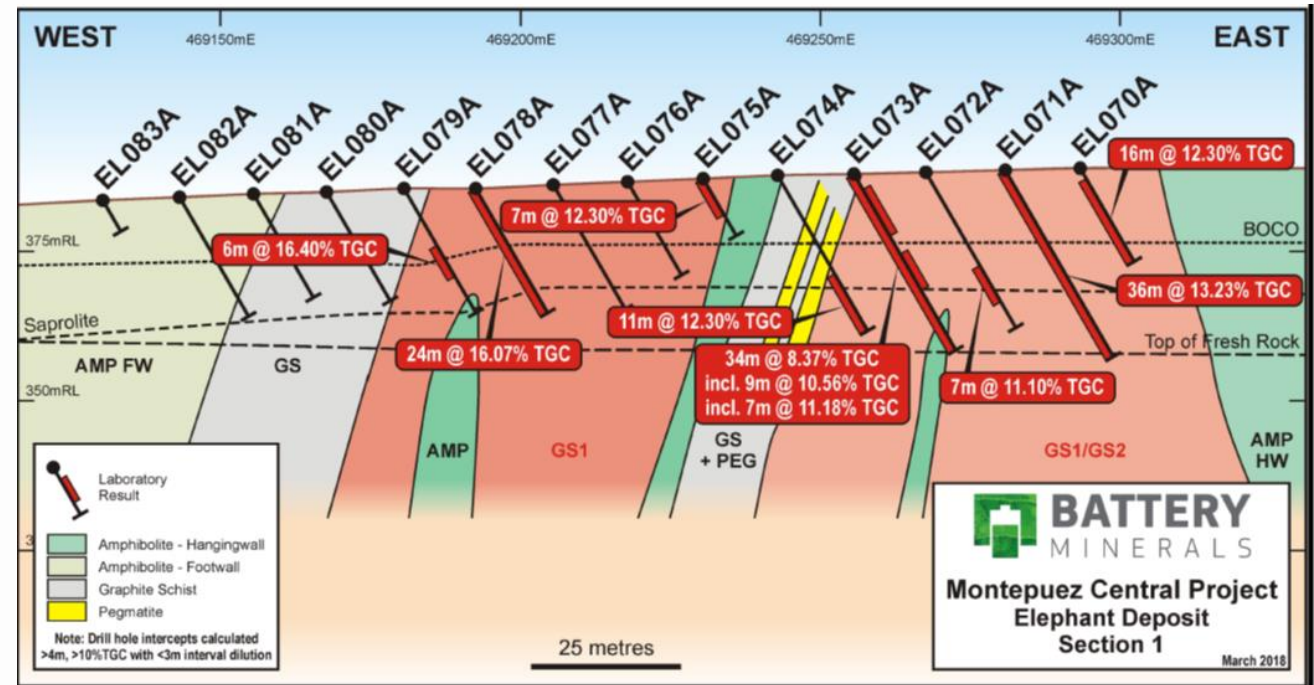


# Montepuez Detailed Drilling Confirms Potential



Elephant deposit, comprised 240 holes for 4,968 metres drilled to refusal using blade RC aircore technique. The results include:

- EL028A, 37 metres at 13.49% TGC from surface,
- EL058A, 20 metres at 15.61%TGC from 2 metres,
- EL078A, 24 metres at 16.07% TGC from surface,
- EL137A, 21 metres at 16.7%TGC from 3 metres, and
- EL140A, 27 metres at 15.03% TGC from 3 metres



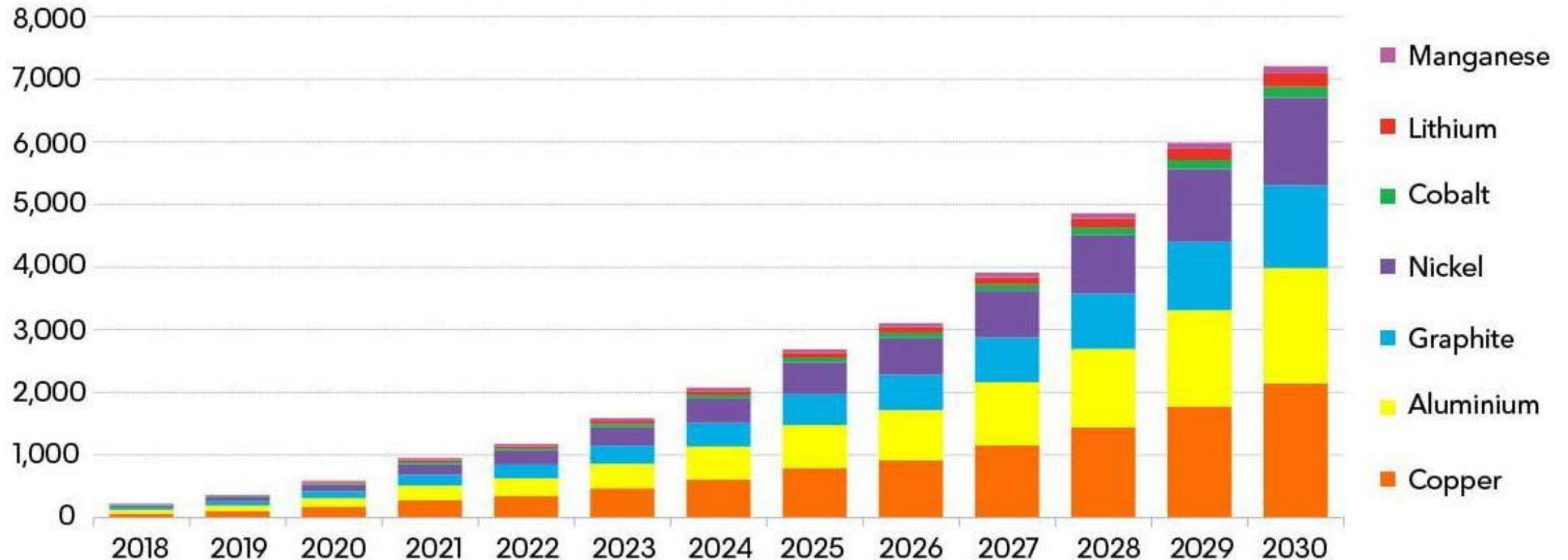
**Note:** See "Outstanding drilling results further strengthen economic outlook for Montepuez graphite project" to ASX dated 4 April 2018 for further details and CP statement



# NEV sales driving all battery materials

## Metals and materials demand from lithium-ion battery packs in passenger EVs

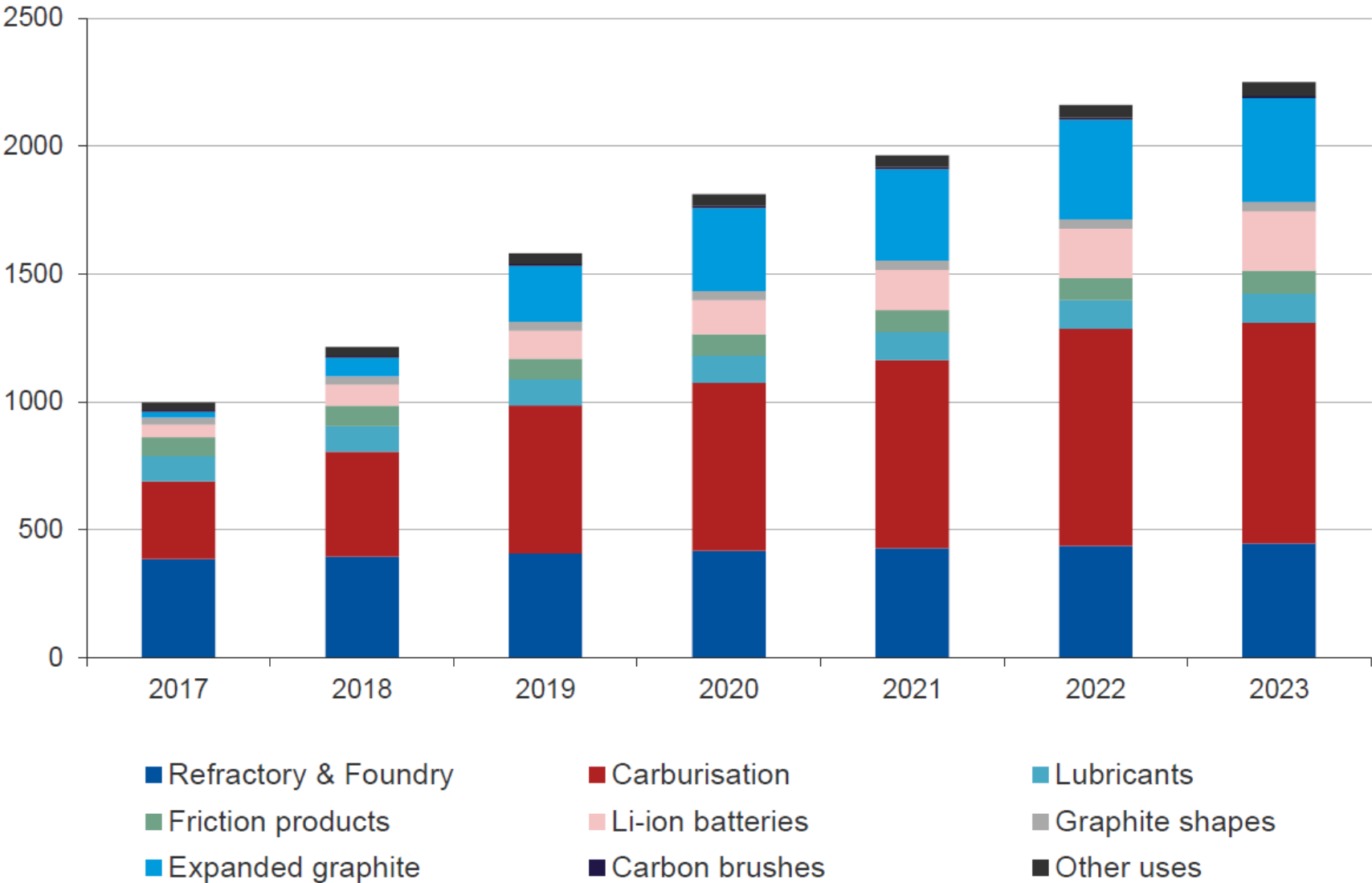
Thousand metric tons



Source: Electric Vehicle Outlook 2018, Bloomberg New Energy Finance. Note: Copper includes copper current collectors and pack wiring. Aluminium includes aluminium current collectors, cell and pack materials and aluminium in cathode active materials.

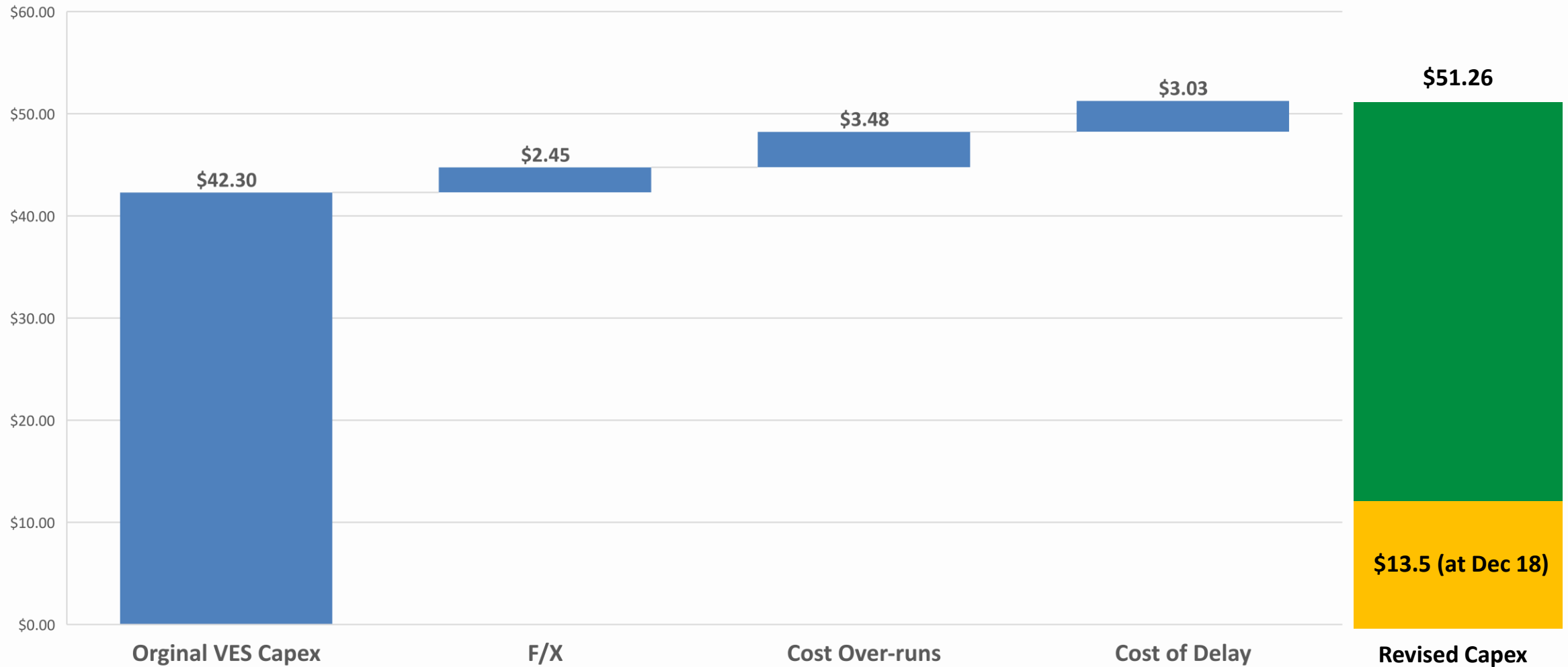


Figure 9 Natural graphite end use demand, kt



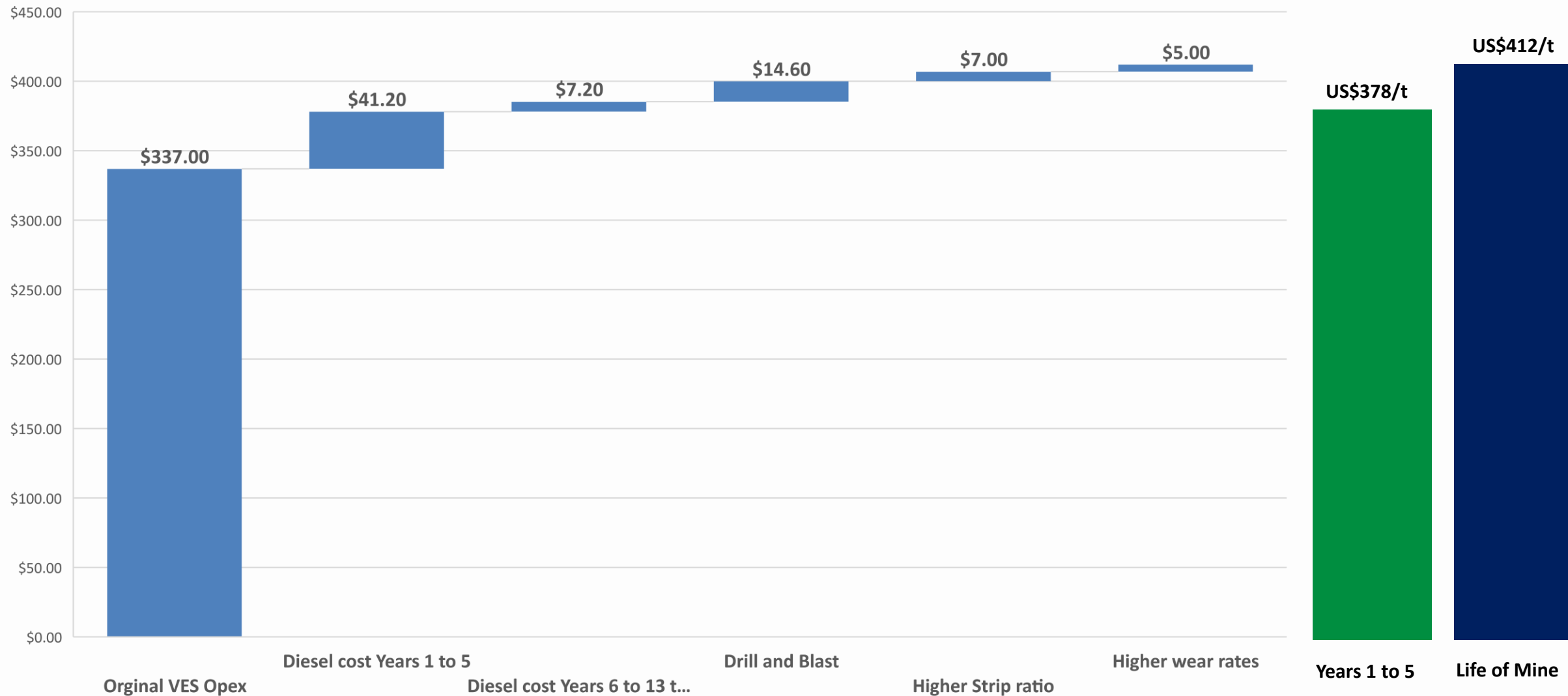


## Montepuez Graphite Project Capex change waterfall chart – US\$M





### Montepuez Graphite Project Opex change waterfall chart - US\$/t

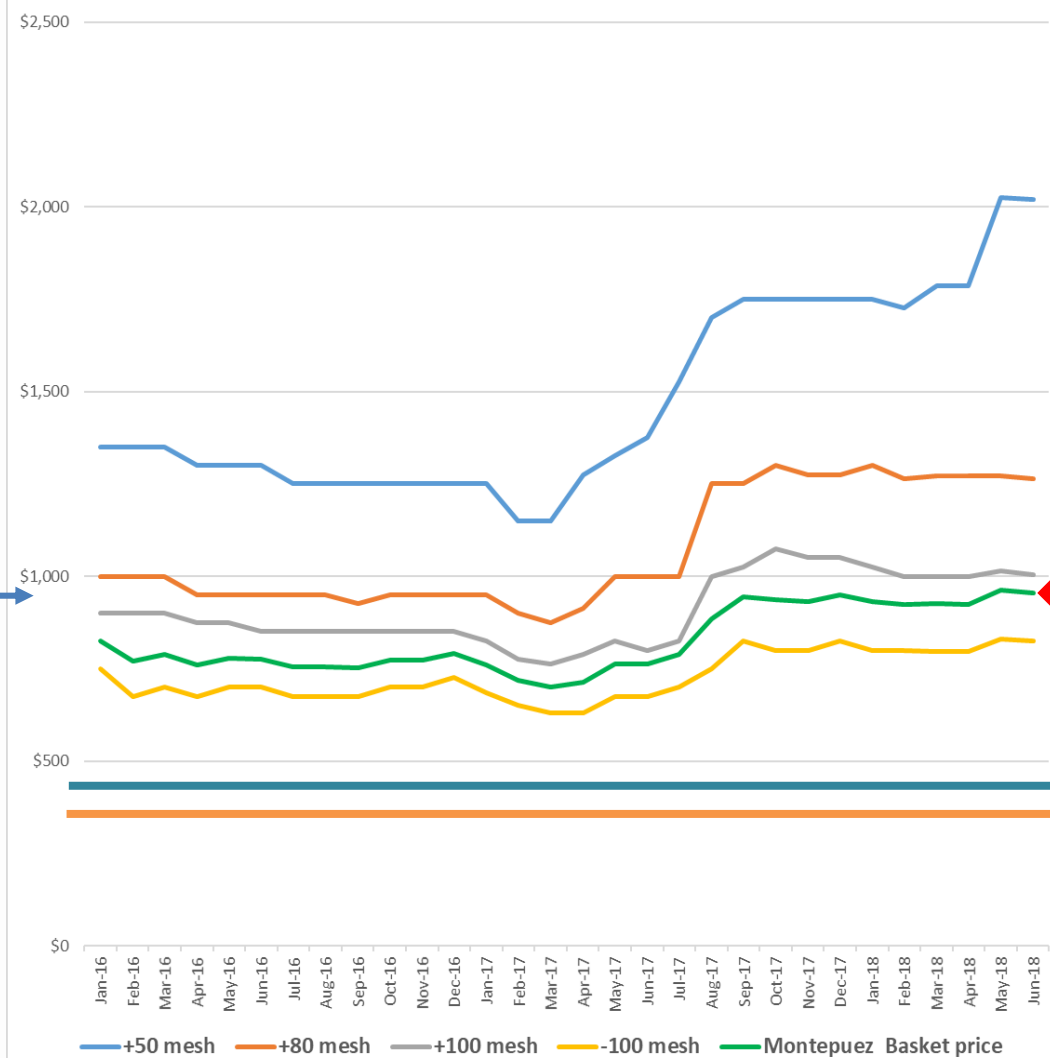




# BMI - Montepuez Basket Price Jan16 - June18



Montepuez Basket Price  
Flake Graphite Price Trend Jan 16 - June 18  
USD, Metric tonnes  
Data source: Benchmark Mineral Intelligence



UBS long term is US\$950/t cif China (UBS research dated 15 June 2017)

Graphite commodity prices have steadily improved since March/April 2017

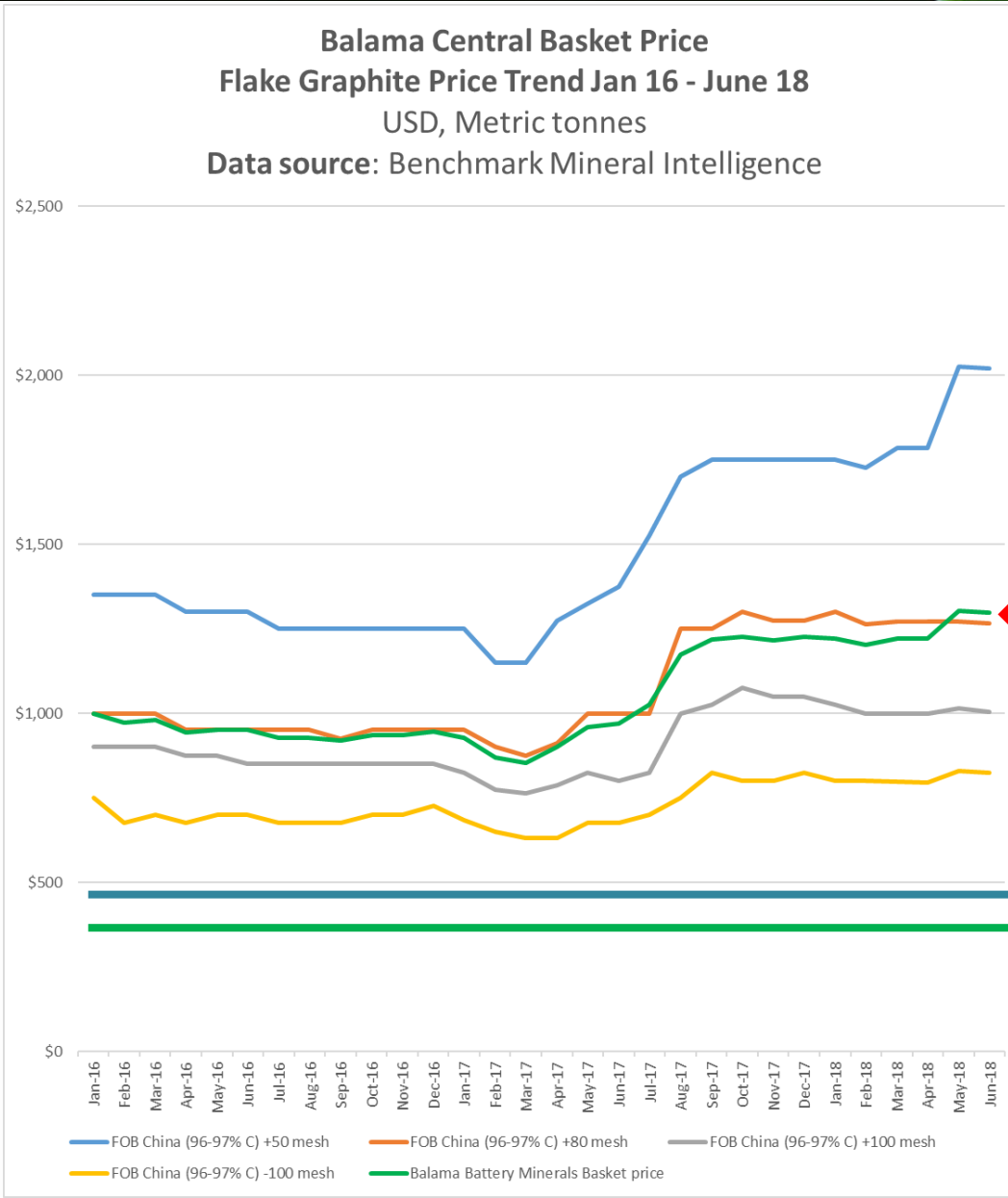
Montepuez: Battery Minerals - Flake Graphite Concentrate Sizing

Flake size	Flake size (mesh)	Flake size (micron)	% of concentrate	TGC grade
Fine	-100 Mesh	0 - 150	71.9%	97.0%
Medium	+100 Mesh	+150 -180	10.2%	96.0%
Large	+80 Mesh	+180 -300	13.5%	96.0%
Jumbo	+50 Mesh	+300	4.4%	96.0%

Battery Minerals (Montepuez) delivered US\$440 cost per tonne cif China  
Battery Minerals (Montepuez) Opex US\$337 OPEX cost per tonne FOB Pemba



# BMI - Balama Basket Price Jan16 to June18



## Balama Central Graphite Project

- Higher Jumbo and Large flake product
- Higher basket price of circa US\$1,220/t

### Balama Central Battery Minerals - Flake Graphite Concentrate Sizing

Flake size	Flake size (mesh)	Flake size (micron)	% of concentrate	TGC grade
Fine	-100 Mesh	0 - 150	37.0%	97.0%
Medium	+100 Mesh	+150 -180	9.0%	96.0%
Large	+80 Mesh	+180 -300	25.0%	96.0%
Jumbo	+50 Mesh	+300	29.0%	96.0%

Battery Minerals (Balama Central) delivered US\$470 cost per tonne cif China

Battery Minerals (Balama Central) Opex US\$370 OPEX cost per tonne FOB Pemba



# Montepuez Ore Reserves and Mineral Resources



- Ore Reserve Estimate January 2017 for Buffalo and Elephant deposits is **41.4Mt @ 8.80% TGC** for **3.64Mt** of graphite reported at a cut-off grade of 4% TGC
- Total Mineral Resource July 2018 and January 2017 for Elephant and Buffalo deposits is **115.6Mt @ 7.51% TGC** for **8.62Mt** of graphite reported at a 2.5% TGC cut-off
- Two world class deposits provide optionality of product, blending opportunities and development options
- Flake size, creates opportunity for price premium Natural Flake products
- Chemical structure and easy liberation attributes (low impurities) offers unique opportunities
- The graphite resources remain open in every direction ensuring mine life opportunity beyond the currently scheduled 30 years

MONTEPUEZ GRAPHITE PROJECT - ORE RESERVE STATEMENT @ 4% TGC cut-off - January 2017				
Ore Type	Classification	Ore Reserve	TGC	Contained Graphite
		Mt	%	Mt
Weathered	Proved	-	-	-
	Probable	8	8.5	0.68
Fresh	Proved	-	-	-
	Probable	33.5	8.8	2.96
Total	Proved	-	-	-
	Probable	41.4	8.8	3.64

Note: See ASX Announcement dated entitled 'Montepuez Graphite Project Mineral Resource and Ore Reserve Estimate' dated 15 February 2017 for full details.<sup>1</sup>

# Montepuez Mineral Resource Statement



Total Mineral Resource July 2018 and January 2017 for Elephant and Buffalo Elephant deposits is **115.6Mt @ 7.51% TGC for 8.62Mt** of graphite reported at a 2.5% TGC cut-off

ELEPHANT RESOURCE @ 2.5% TGC cut-off - July 2018				
Classification	Type	Tonnes	TGC	Contained Graphite
		Mt	%	Mt
Indicated and Inferred	Weathered	6.60	7.00	0.60
	Unweathered	70.30	7.30	4.50
	<b>Total</b>	<b>76.90</b>	<b>7.30</b>	<b>5.62</b>

BUFFALO RESOURCE @ 2.5% TGC cut-off - December 2016				
Classification	Type	Tonnes	TGC	Contained Graphite
		Mt	%	Mt
Indicated and Inferred	Weathered	5.20	8.14	0.40
	Unweathered	33.50	7.90	2.60
	<b>Total</b>	<b>38.70</b>	<b>7.93</b>	<b>3.00</b>

Note: See ASX Announcements dated 16 July 2018 and also 15 February 2017 entitled 'Montepuez Graphite Project Mineral Resource and Ore Reserve Estimate' for full details and CP signoffs.<sup>1</sup>

1. See ASX announcements dated 16 July 2018 and also 15 February 2017 – Montepuez Ore Reserves & Mineral Resources. Please refer to additional details on slide entitled Disclaimer & Competent Persons Statement



# Balama Central Mineral Resource (1)

Total Mineral Resource for Balama Central is **32.9 million tonnes at 10.2 per cent TGC for 3.36Mt** of graphite reported at a 6.0% TGC cut-off and includes Indicated Resources of 26Mt @ 10.3% TGC for 2,733Kt of graphite reported at a 6.0% TGC cut-off

BALAMA CENTRAL GRAPHITE PROJECT <sup>1</sup>					
March 2018 Mineral Resource Estimate (6% TGC Cut-off)					
Class	Tonnage	TGC	V2O5	Cont. Graphite	Cont. V2O5
	Mt	%	%	Kt	Kt
Indicated	26.6	10.3	0.22	2,733	58.5
Inferred	6.3	9.9	0.19	630	11.9
<b>Total</b>	<b>32.9</b>	<b>10.2</b>	<b>0.21</b>	<b>3,363</b>	<b>70.4</b>

**Note:** See ASX Announcement on 29 March 2018 entitled “Resources double at Balama Central graphite project in Mozambique ” for full details.

1. See ASX announcement dated 29 March 2018 entitled “Resources double at Balama Central graphite project in Mozambique ” for full details. Please refer to additional details on slide entitled Disclaimer & Competent Persons Statement

# Disclaimer & Competent Persons Statement

## Forward Looking Statements

- Statements and material contained in this Presentation, particularly those regarding possible or assumed future performance, resources or potential growth of Battery Minerals Limited, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Such forecasts and information are not a guarantee of future performance and involve unknown risk and uncertainties, as well as other factors, many of which are beyond the control of Battery Minerals Limited. Information in this presentation has already been reported to the ASX.

## Competent Persons Statement

- Battery Minerals Limited released the results of a DFS on its Montepuez Project on 15 February 2017 & its Value Engineering Study (VES) results for Montepuez on 18 October 2017. These releases are available on Battery Minerals' website & ASX.
- All references to future production and production & shipping targets and port access made in relation to Battery Minerals are subject to the completion of all necessary feasibility studies, permit applications, construction, financing arrangements, port access and execution of infrastructure-related agreements. Where such a reference is made, it should be read subject to this paragraph and in conjunction with further information about the Mineral Resources and Ore Reserves, as well as the relevant competent persons' statements.
- Any references to Exploration Results, Ore Reserve and Mineral Resource estimations should be read in conjunction with the competent person statements included in the ASX announcements referenced in this presentation as well as Battery Minerals' other periodic and continuous disclosure announcements lodged with the ASX, which are available on the Battery Minerals' website.
- The information in this report that relates to Battery Minerals' Mineral Resources or Ore Reserves is a compilation of previously

published data for which Competent Persons consents were obtained. Their consents remain in place for subsequent releases by Battery Minerals of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

- The information in this Presentation that relates to Montepuez Mineral Resources and Ore Reserves is extracted from the ASX Announcements dated 16 July 2018 and also 15 February 2017 entitled 'Montepuez Graphite Project Mineral Resource and Ore Reserve Estimate and DFS and VES information is extracted from the ASX announcement entitled 'Lithium Ion Battery anode PFS and Montepuez Graphite DFS confirm robust economics' dated 15 February 2017 and VES results of 18 October 2017, both of which are available at Battery Minerals website in the ASX announcement page.
- See ASX announcements on the Balama Central Scoping Study dated 1 March 2018 and the Concept Study dated 26 October 2017 for details, Table 1 and Competent Person Statement
- Balama Central Preliminary metallurgical testwork: The information in this Presentation that relates to Metallurgy is based on and fairly represent information reviewed by Mr. Sean Richardson, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Richardson is an independent consultant. Mr. Richardson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken. Mr. Richardson consents to the inclusion in the Announcement of the matters based on his information in the form and context in which it appears.
- Any references to Mineral Resource estimates on the Balama Central Project should be read in conjunction with the competent person statements included in the ASX announcements referenced in this report (See ASX announcement dated 29 March 2018 entitled "Resources double at Balama Central graphite project in Mozambique " for full details and Competent Persons Statement) as well as Battery Minerals' other

periodic and continuous disclosure announcements lodged with the ASX, which are available on the Battery Minerals' website.

- The information in this presentation that relates to Battery Minerals' Balama Central Mineral Resources is a compilation of previously published data for which Competent Persons consents were obtained. Their consents remain in place for subsequent releases by Battery Minerals of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.
- The information in this presentation that relates to Mineral Resources in the ASX announcement dated 29 March 2018 and entitled "Resources double at Balama Central graphite project in Mozambique " which is available at Battery Minerals website at <http://www.batteryminerals.com.au> in the ASX announcements page.
- Battery Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the market announcements continue to apply and have not materially changed. Battery Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

