



**RESOURCES**

*resourcing the new economy  
for a better tomorrow*



# EQ RESOURCES LIMITED

## Accelerating the Mt Carbine Tungsten Project

July 22, 2022

**ASX : EQR** 

# Disclaimer



## Competent Person's Statement

- The information in this presentation partly relates to the outcomes of the Mt Carbine Bankable Feasibility Study, made available through the Company's website [www.eqresources.com.au/](http://www.eqresources.com.au/).
- The Company confirms that it is not aware of any new information that materially affects the information included in the corresponding market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company 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.

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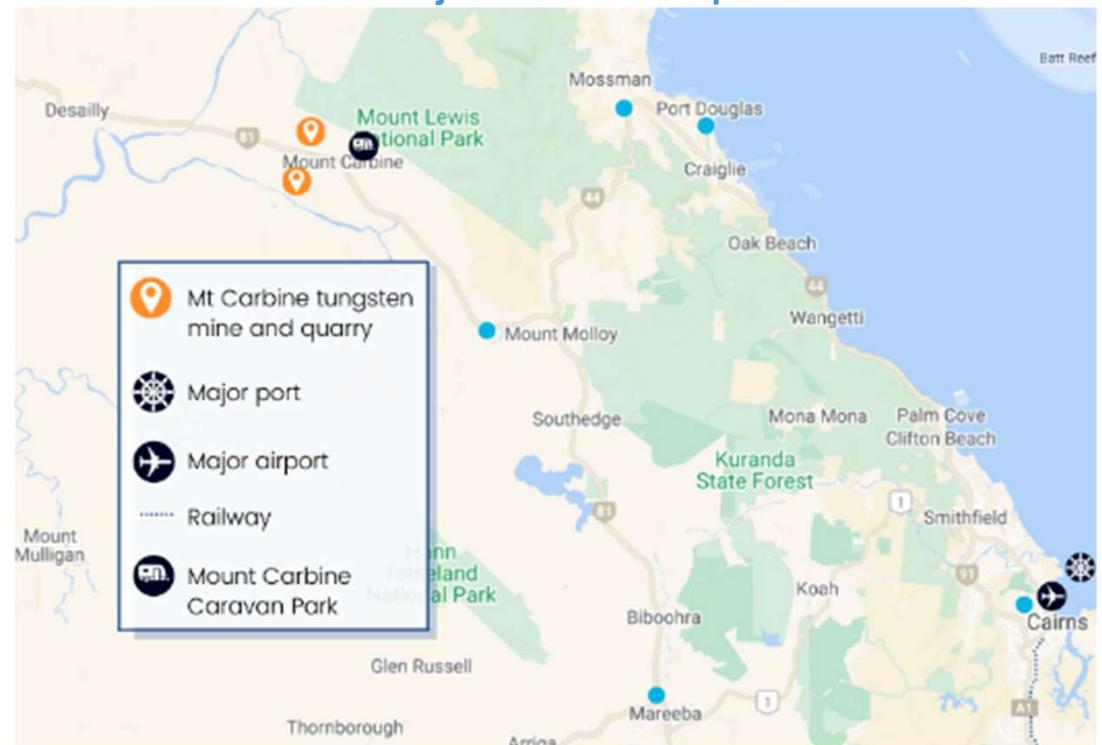
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# Mt Carbine Open-cut & Modernisation Project Overview

Australia's Only Primary Tungsten Producer



Project Location Map



- Situated in Far North **Queensland's critical mineral province**
- Located 130 km north of the city of Cairns



## Tungsten: A Critical Mineral

*Tungsten Concentrate from Mt Carbine*

**HAVE YOU CONSIDERED  
A WORLD WITHOUT  
TUNGSTEN?**

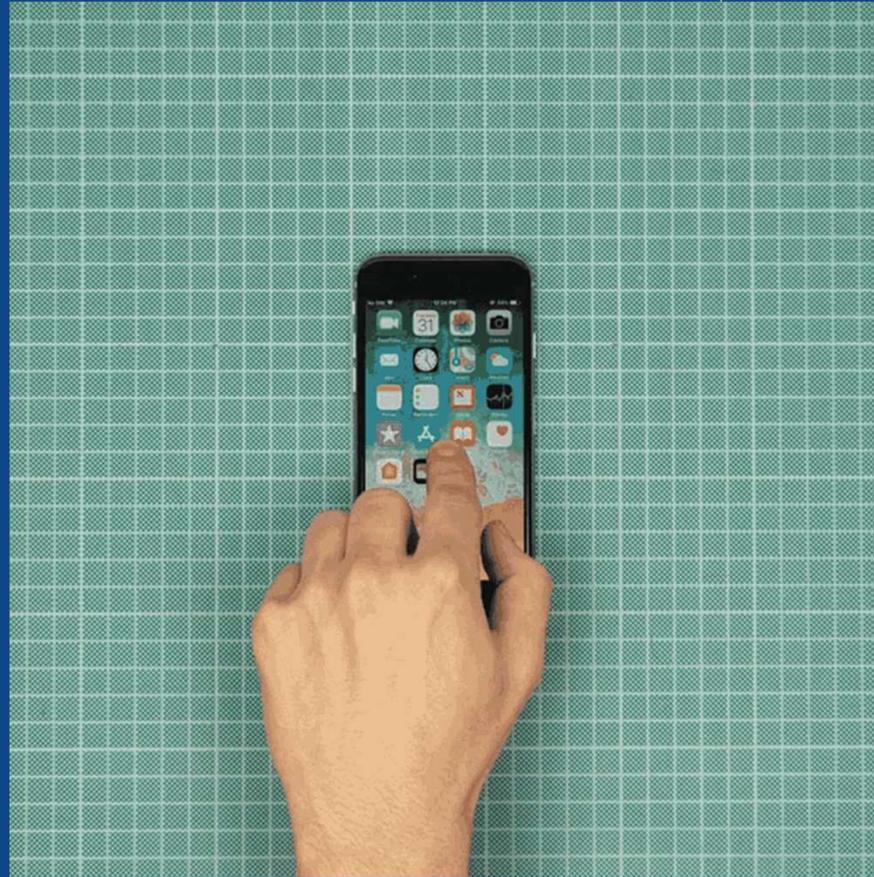


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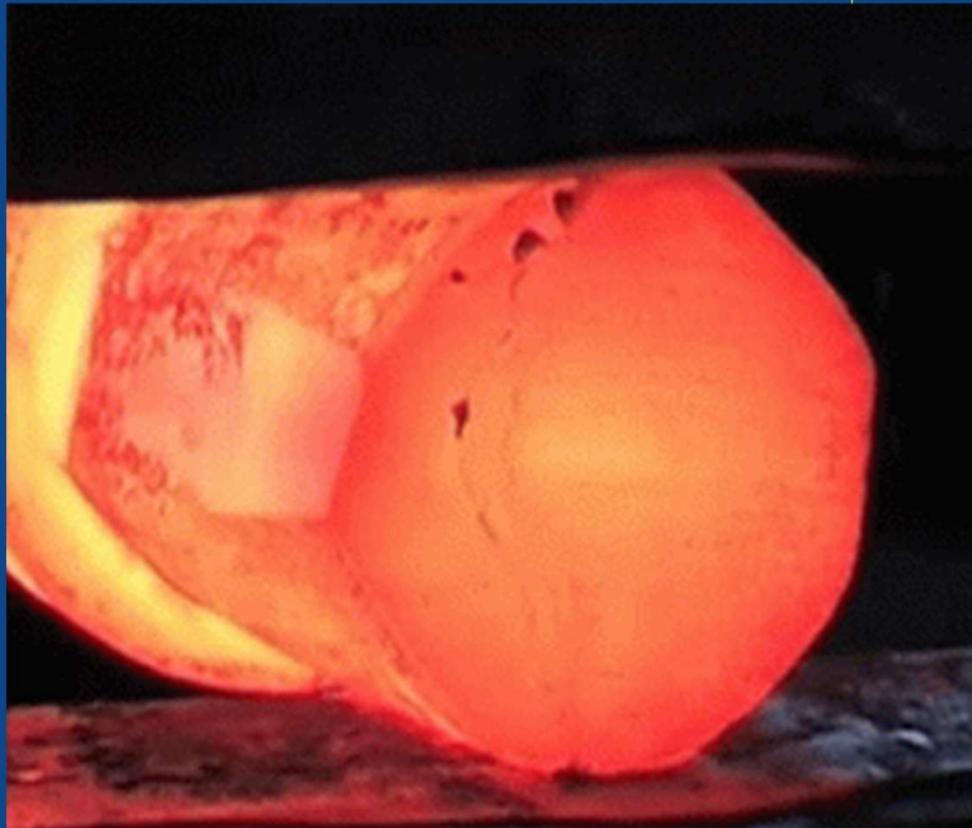
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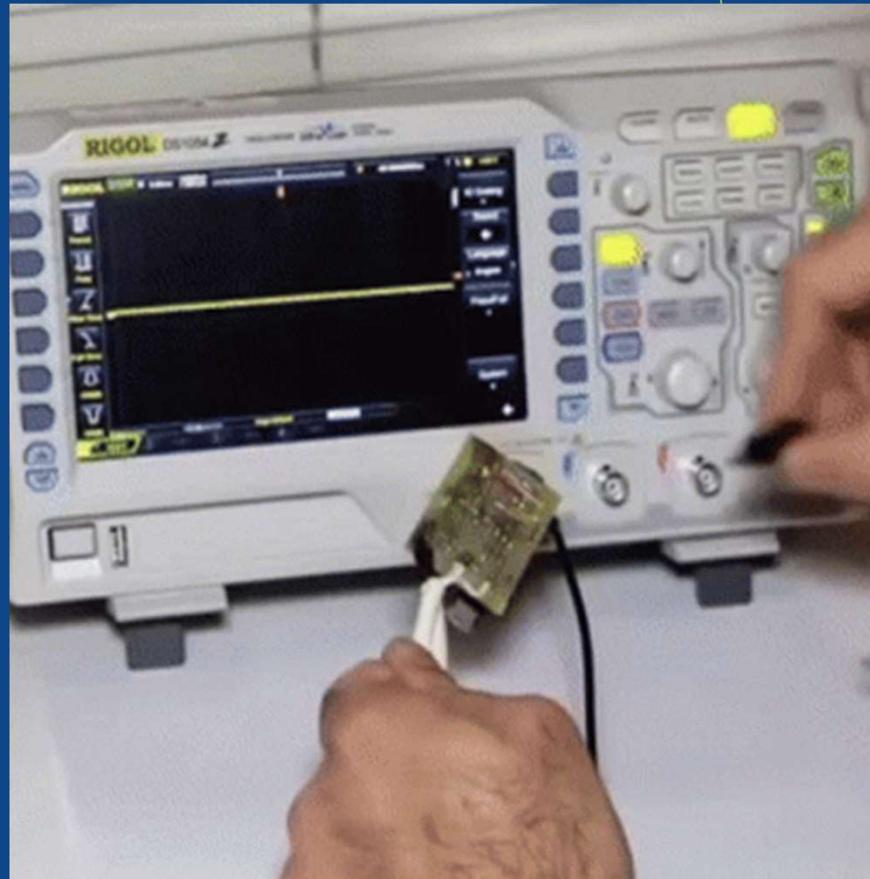
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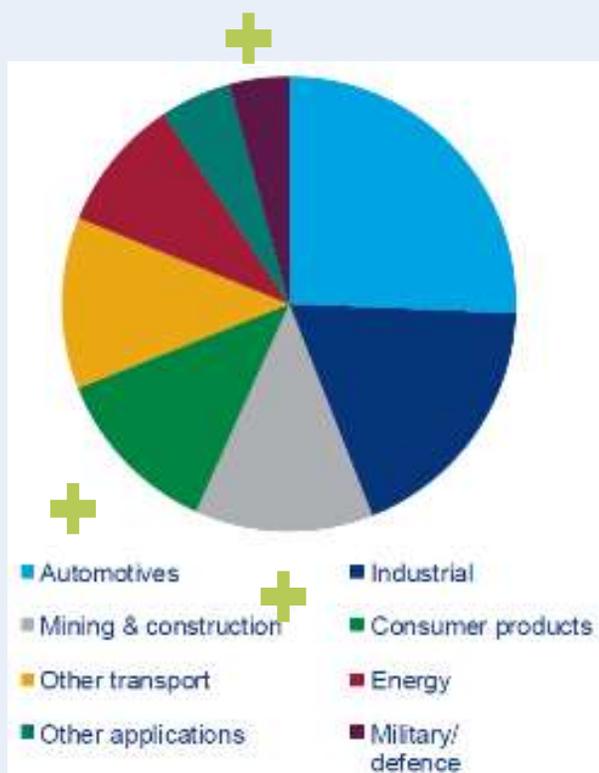
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# Tungsten/Niobium fast-charging battery

## END USE CONSUMPTION (2020)



**Positive results in the research process of H.C. Starck Tungsten Powders on batteries come amid strong demand for electric vehicles.**

*Research project with ZSW on tungsten cathode coating in lithium-ion batteries.  
Photo: Masan*

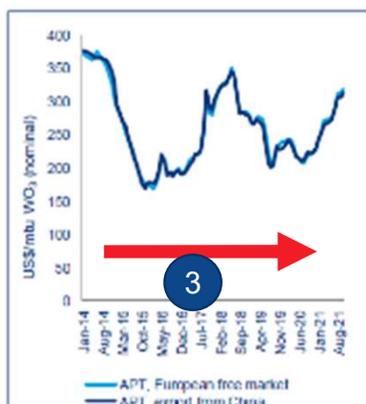
# Tungsten Market Analysis



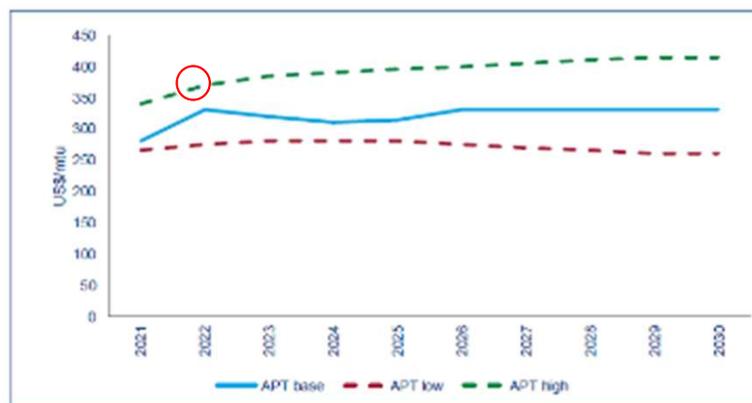
1 China mine output declining

Russia Sanctions

2 20kt W of new supply needed



3 Solid floor pricing



Source: ITIA (2019); Roskill – 'The data and information provided by Roskill should not be interpreted as advice and you should not rely on it for any purpose. You may not copy or use this data and information except as expressly permitted by Roskill in writing. To the fullest extent permitted by law, Roskill accepts no responsibility for your use of this data and information'.

- 1 Office, Lab & Core Shed
- 2 Tailings Pond / Retreatment Plant
- 3 Quarry & OOSR Stock-pile
- 4 XRT Sorter
- 5 LG Ore Stock-pile
- 6 Exploration Targets – Iron Duke

# Mt Carbine Production, Expansion & Development Plan

100%-owned by EQ Resources



*Mt Carbine Wet Screen Early Works*

# Concentrate Production Continues



- ✓ Existing **dry and wet processing facilities currently in operation**
- ✓ Processing facilities are designed for **steady-state production of 1Mtpa with Early Works Expansion**

# Technology driven Economics



TOMRA's XRT sorter gives us a significant cost saving and upgrade in material grade

# Quarry: A Circular Economy



- ✓ Clean Waste Rock
- ✓ Green / Recycled Quarry Products
- ✓ Additional Revenue Stream



# Quarry: Circular Economy



- ✓ Clean Waste Rock
- ✓ Green / Recycled Quarry Products
- ✓ Additional Revenue Stream



# Strong JV Partnership



**CRONIMET** is a multi-national, privately owned business which has 103 branches, subsidiaries & representations at 72 locations on 6 continents with over 5,400 employees worldwide.

## The business has 3 business units focusing on:

1. Metals Recycling
2. Trade & sales of primary and secondary raw materials
3. Production of ferroalloys and metal powders

CRONIMET maintains long-term, mutually beneficial relationships with clients and partners, leveraging its global network of operations.

[www.cronimet.de/en/](http://www.cronimet.de/en/)

## Mt Carbine Retreatment Management Joint Venture (unincorporated)

- 50% CRONIMET Australia / 50% Mt Carbine Retreatment (*EQR 100% Subsidiary*).
- JV relates to surface stockpiles, 12Mt Low Grade Stockpile & 2Mt Tailings Stockpile – excludes UG.
- CRONIMET provided off-take funding securing right of product off-take at fair market value.
- Sharing of operational management & funding responsibility on pro-rata basis.
- CRONIMET introduction of sensor-based sorting plant to site.

# Compelling Economics

BFS<sup>1</sup> confirms high margins, low capital intensity & operating cost and speed to market



## Summary of BFS Results

Parameter	Unit	BFS
Production Rate (LoM Avg)	mtu	2,200
Life of Mine	years	12
Total Cash Cost (FCA)	A\$/mtu	159
Capital Cost	A\$m	21
<b>Pre-tax NPV<sub>8, real</sub></b>	<b>A\$m</b>	<b>131</b>
NPV / Capex Ratio	x	5.2
<b>Post-tax IRR</b>	<b>%</b>	<b>154%</b>
EBITDA Margin (LoM)	%	49
Payback Period	years	2.25

1) Refer to the ASX Release on 13 December 2021 for full Bankable Feasibility Study details.

### Notes:

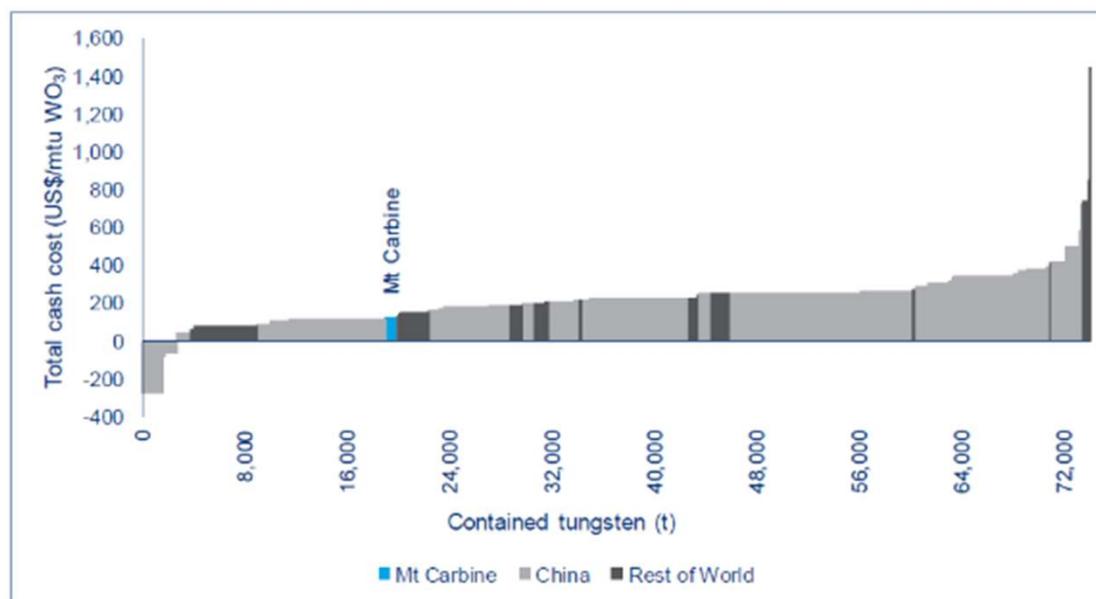
- The BFS has been prepared to a -20% to +20% level of accuracy. The production target and financial information in this table must be read in conjunction with the cautionary statement in this ASX Release.
- AUD:USD exchange rate of 0.73 has been used for currency conversions.

# Compelling Economics

BFS<sup>1</sup> confirms high margins, low capital intensity & operating cost and speed to market



Global tungsten Cash Cost Curve (US\$/mtu)



Source: Wood Mackenzie, Mt Carbine costs provided by EQ Resources

# Pre-tax Cashflow Generation : OC + UG Potential

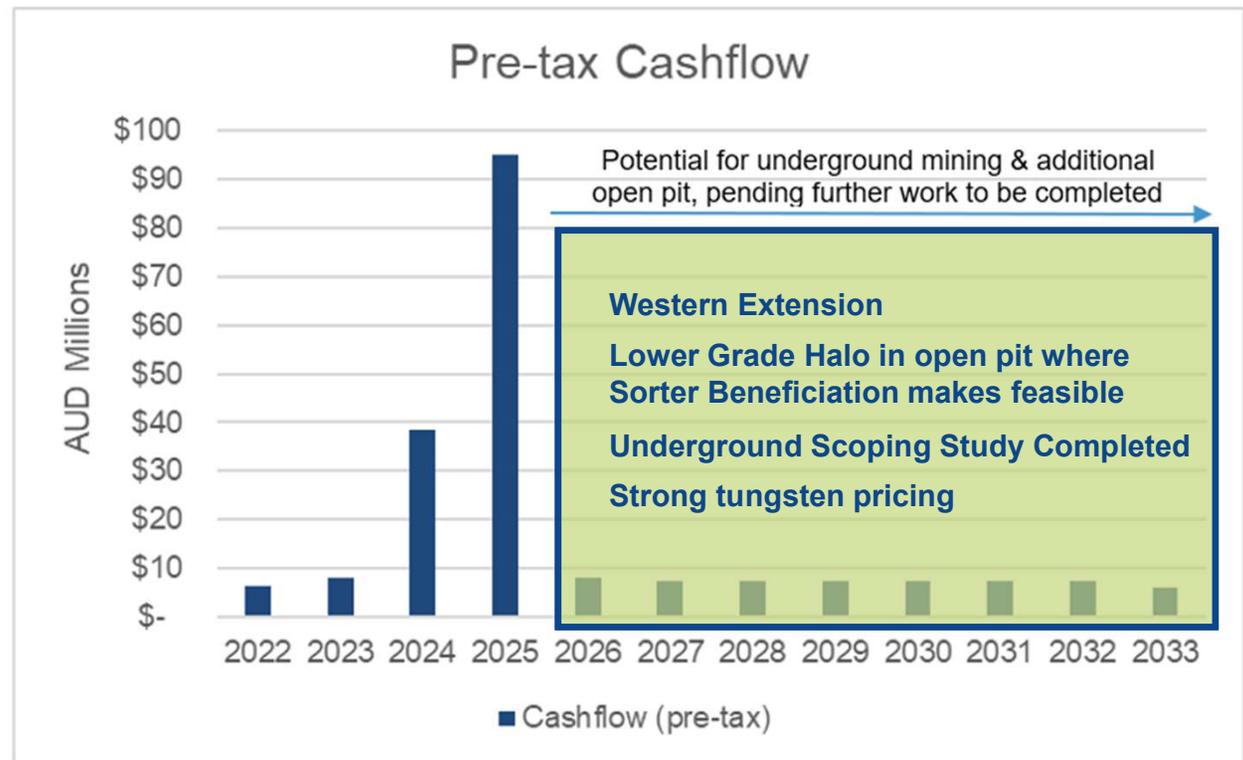


Open Pit currently defined is **+/-15% of resource**

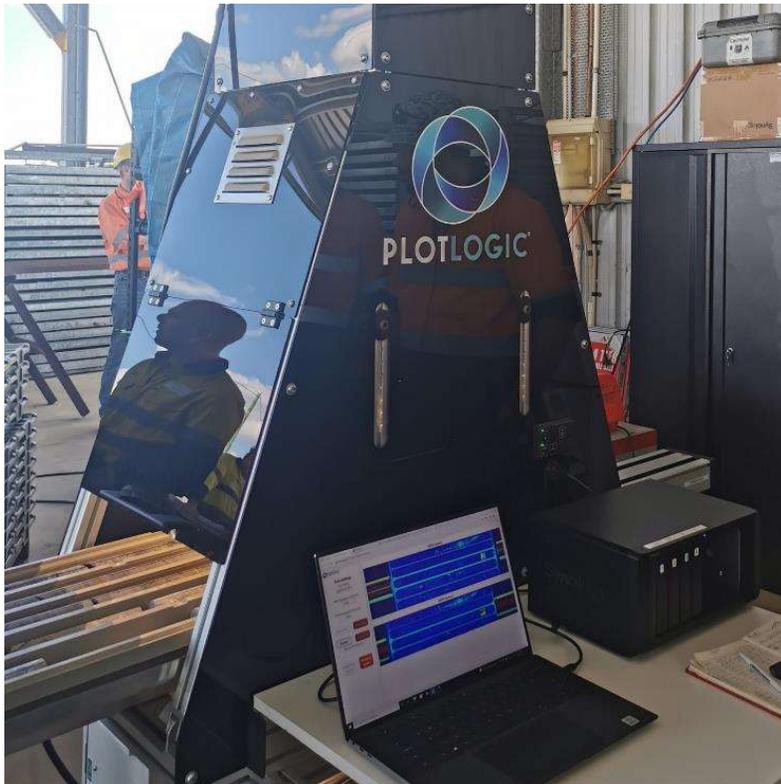
Significant **underground potential** exists to drive economics for several more years

**Scoping Study** completed on UG resource, will move into PFS next and open up UG for drone survey

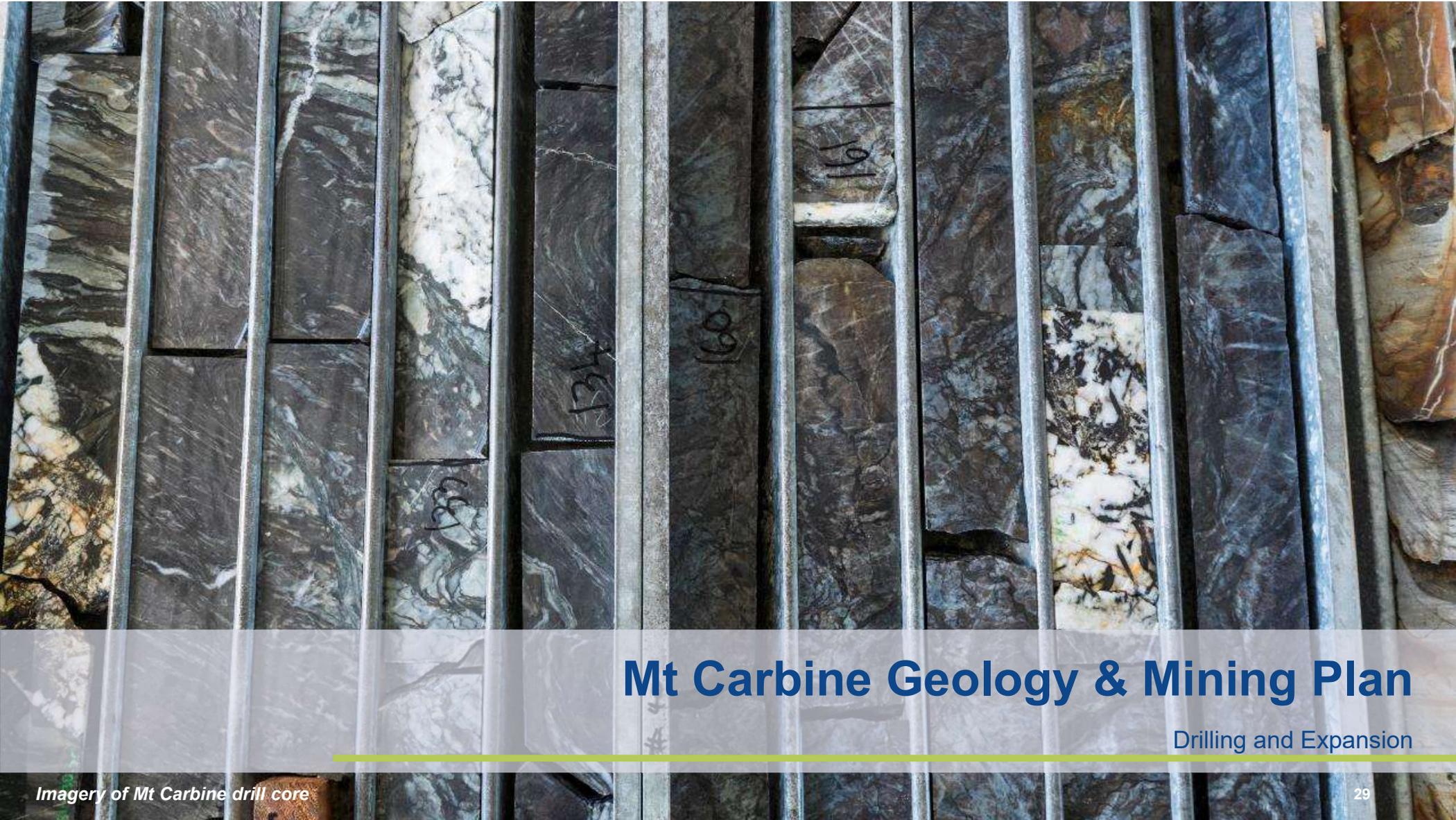
**Site infrastructure** supports UG mining operation and capacities



# Technology Driven Economics



PlotLogic's technology informs decision making through core sample scanning



# Mt Carbine Geology & Mining Plan

Drilling and Expansion

Imagery of Mt Carbine drill core

# Geology and Resources



## Completed

### Phase 1 – Define Resources for Open Cut Mine

- Detailed Drilling allowed **high grade zones to be linked**, around the Andy White pit
- **Measured Group** prepared Statement released on 23 September 2021
- BFS open pit shell design includes 14.4% of the known resources

## Workplan

### Phase 2 – Drill & Expand

- Drill out **additional shallow open cut resources** 
- **Convert 6Mt@0.59%WO<sub>3</sub> Inferred to Indicated**; So far conversion has increased tonnes & grade 
- **Drill Exploration Targets - Dazzler & Daisy** 

Classification	Tonnes (million)	Grade (% WO <sub>3</sub> )	WO <sub>3</sub> (mtu)
<b>Low Grade Stockpile</b>			
Indicated	12.00	0.075	900,000
<b>In-Situ Hard Rock Resources</b>			
Indicated	2.40	0.74	1,776,000
Inferred	6.81	0.59	4,017,900
<b>Sub-Total</b>	<b>9.21</b>	<b>0.63</b>	<b>5,793,900</b>
<b>Total Mt Carbine Mineral Resource</b>			
	<b>21.21</b>		<b>6,693,900</b>

1. Total estimates are rounded to reflect confidence and resource categorisation.

2. Classification of Mineral Resources incorporates the terms and definitions from the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012) published by the Joint Ore Reserve Committee (JORC)

3. No upper cut was applied to individual assays for this resource, a lower cut of 0.25% WO<sub>3</sub> was applied

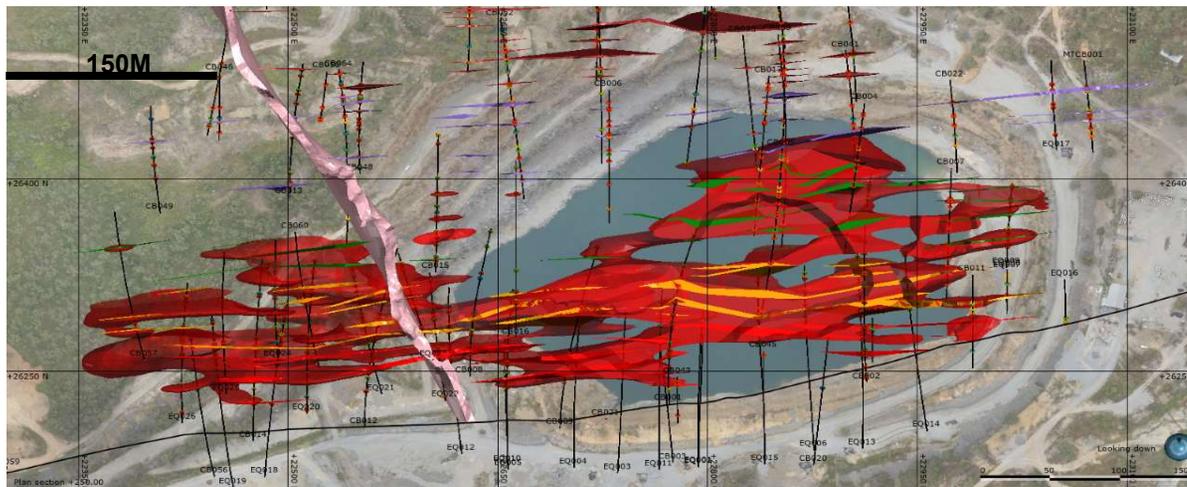
For further details refer to ASX Release on the 23<sup>rd</sup> of September 2021:  
[Mineral Resource Update Drives Mt Carbine BFS Optimization](#)

# Review of BFS Model is underway



## Dyke West Area - Leads to Longer pit life

Latest Drilling Extension



### Phase 2 'Dyke West' drilling completed

- 10 holes for 2,121.9m
- High Grade Zone continues to the west and remains open
- Lower cut-off's expand the resource significantly. I.e. Red area = 0.05% WO3 halo surrounding high grade veins.

### Factors that have changed since BFS :

- 15% increase in tungsten price
- Ore Sorting success on grades down to as low as 0.05% WO3
- Expansion westwards

# Phase 1 & 2 Mine Plan

Mine plan is designed to extract ore from the open-cut pit extension and low grade ore stockpile

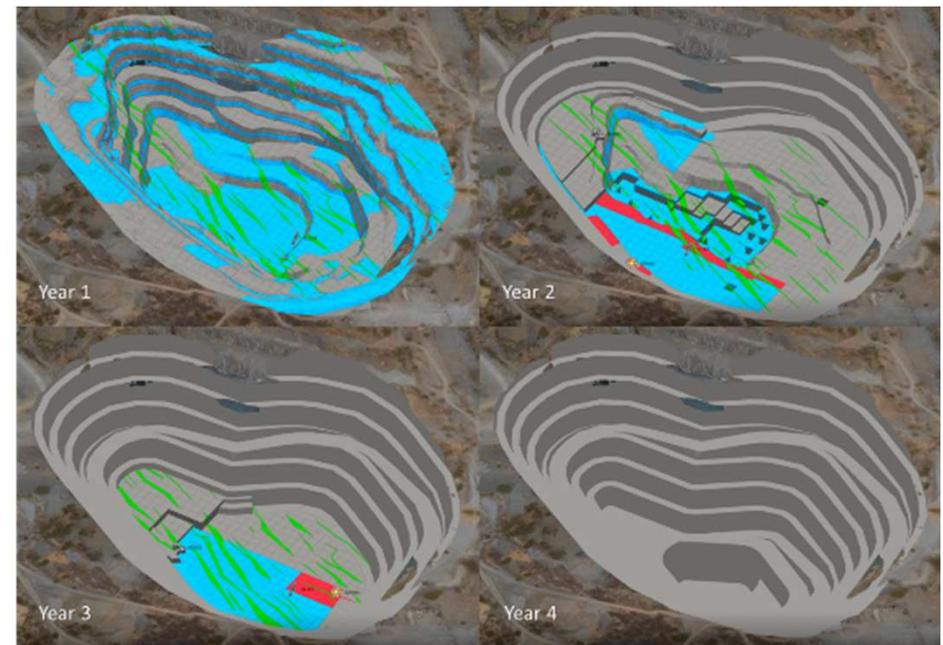


BFS mine plan is designed to deliver a **constant feed of 1Mtpa of ore to the ROM for a 12 year mine life**

**Mine plan is supported by the Mineral Resource of 21.2Mt** (Extraction from Measured and Indicated Mineral Resources)

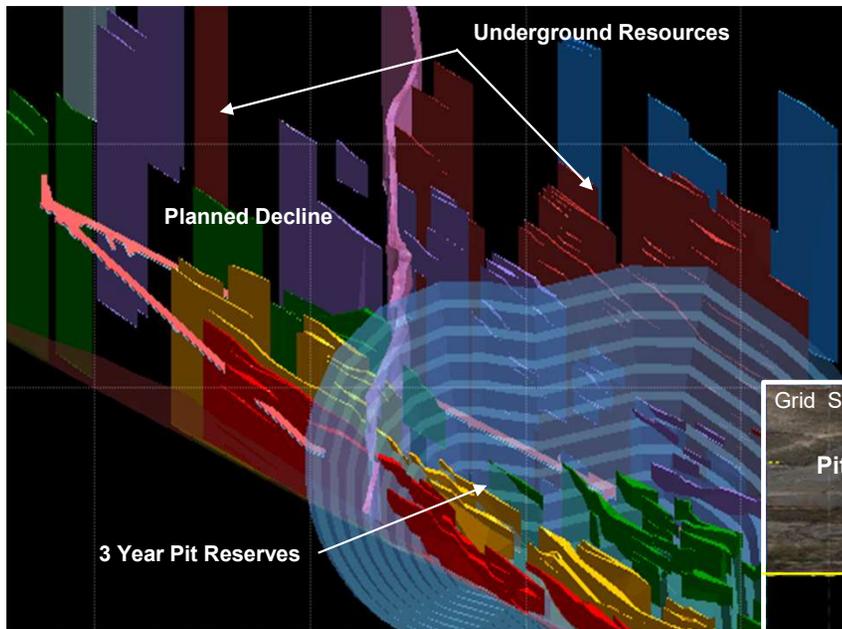


**Low grade ore stockpile**



**Open-cut pit extension stage plans**

# Geology and Resources



## Perspective View showing

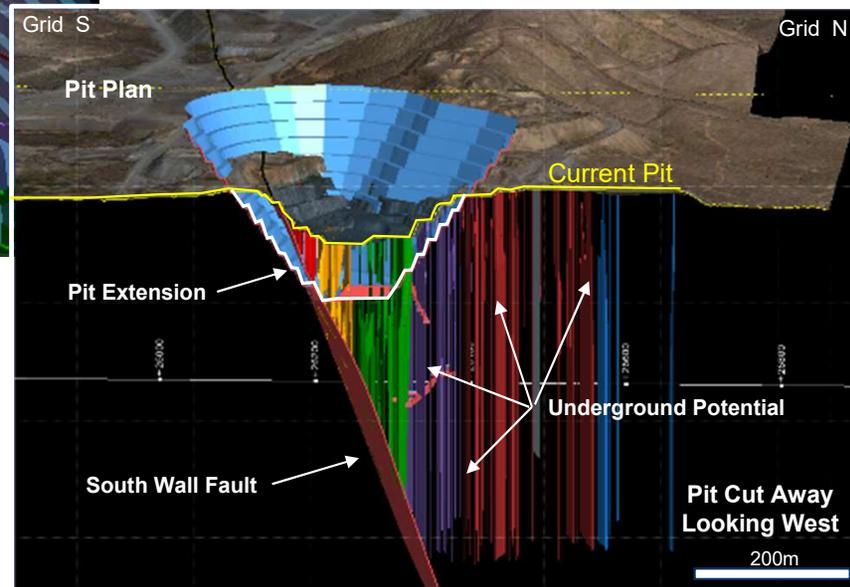
- Planned Open Cut Extension
- Color Coded Ore Zones in the pit
- Highlights additional resources outside planned pit, a lot of this ore will be accessed from existing decline

## Phase 1 and 2 (under Bankable Feasibility Study)

- Low grade stockpile – 10.1Mt@0.075%
- Preferred Pit - 15Mt Pit Extension contains 1.1Mt@0.83%WO<sub>3</sub>
- 14.4% of known in-situ resources

## Phase 3 (planned Scoping Study)

- Long Life Underground Mine
- 85.6% of known resources

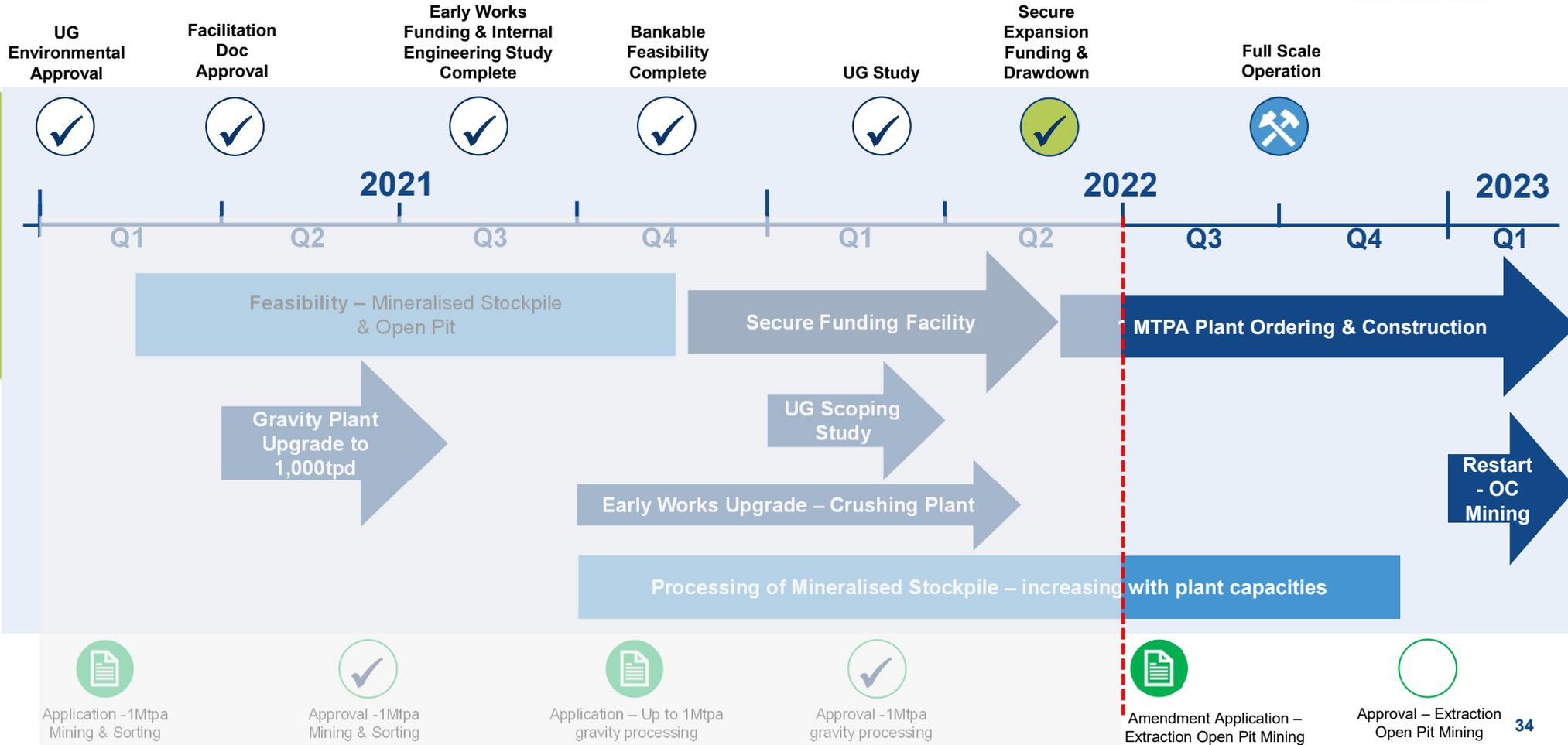


## Cut-Away section through Planned Pit shows

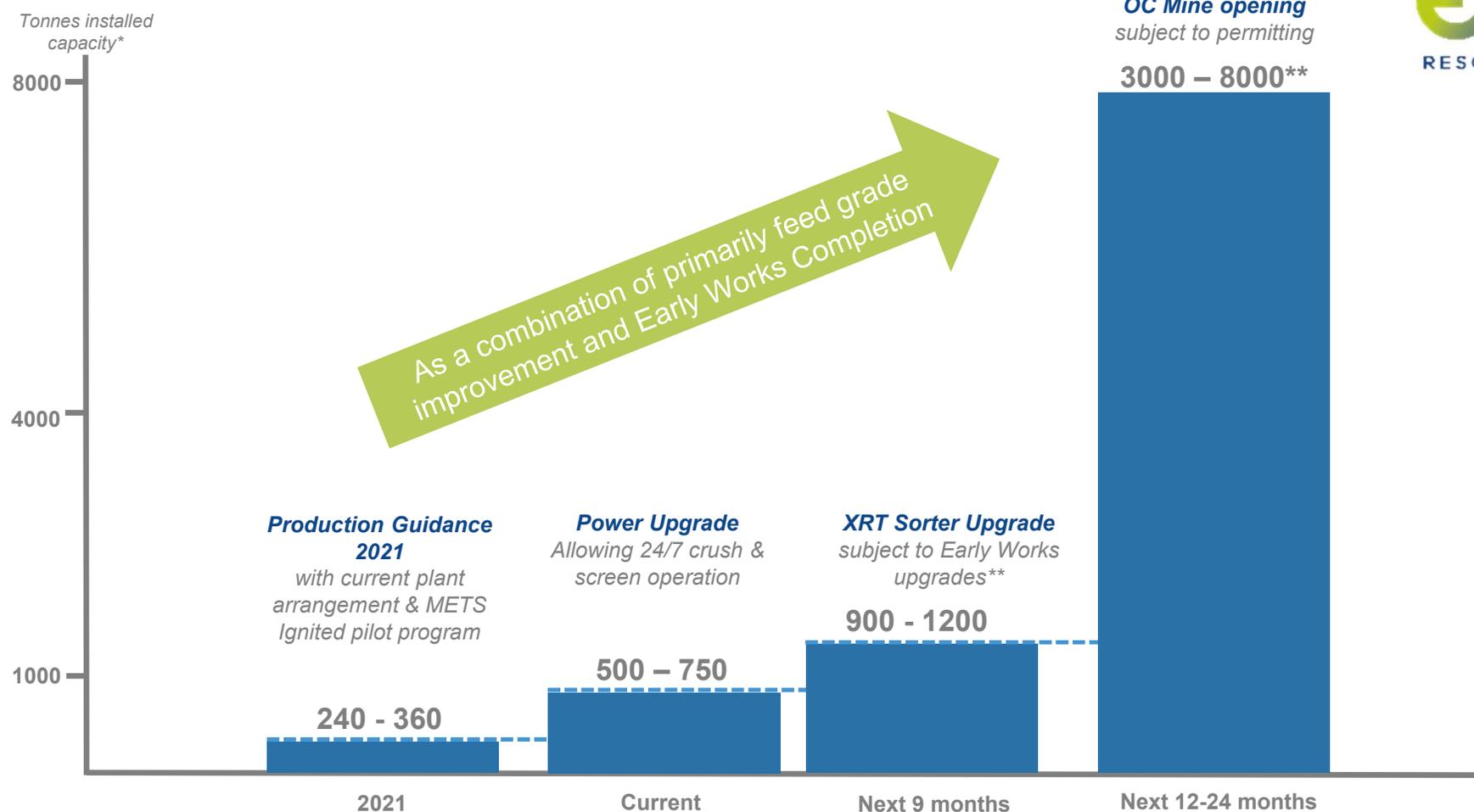
- Existing & new pit extension
- Bounding South Wall Fault
- Ore is open to the West & North and to Depth
- Pit extends on low side not touching the high wall

# Development Timeline

Phased approach for early cash flow



# Mt Carbine Production Ramp-Up



\*Basis 50% WO<sub>3</sub> concentrate  
 \*\*Based on the Feasibility Study

# Fully Funded:

## CAPEX Funding for Mt Carbine Expansion & Early Works Program



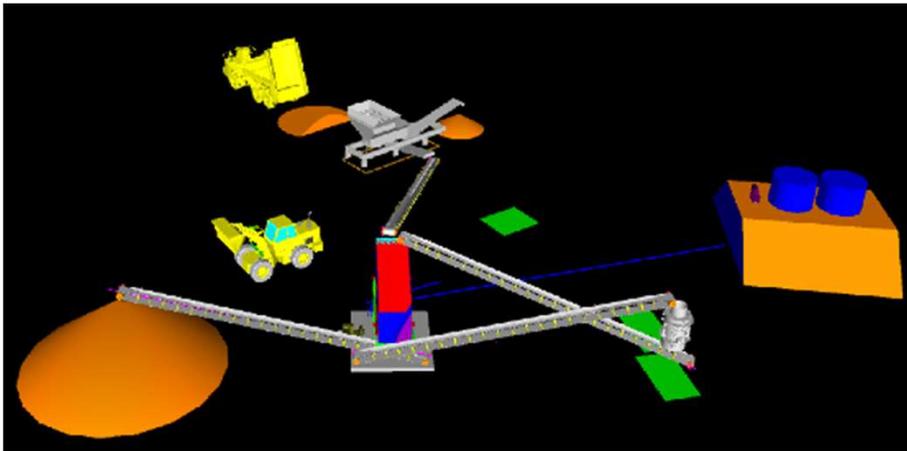
Facility	Amount (\$, up to)	Interest p.a. / Cost
CMAI Grant (Federal Government)	\$6 million	Government Grant support
Sandvik Supply & Finance	\$4.8 million	5.75% interest p.a.; 30% deposit
CRONIMET Offtake Prepayment	\$4.2 million	Interest free; Extension of existing offtake contract
Director / Shareholder Loan	\$1.5 million	8% interest p.a.
Early Works	\$6 million	Spend Completed
<b>TOTAL</b>	<b>\$22,5 million</b>	

# Phase 1- Early Works & 2- Processing

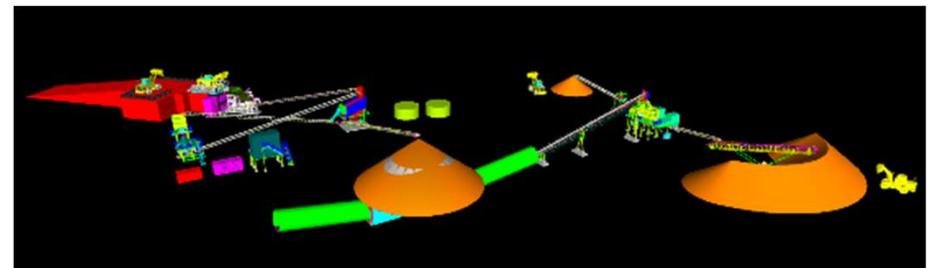
Processing improvements identified through operational performance analysis



Phase 1 Crushing and Screening Circuit

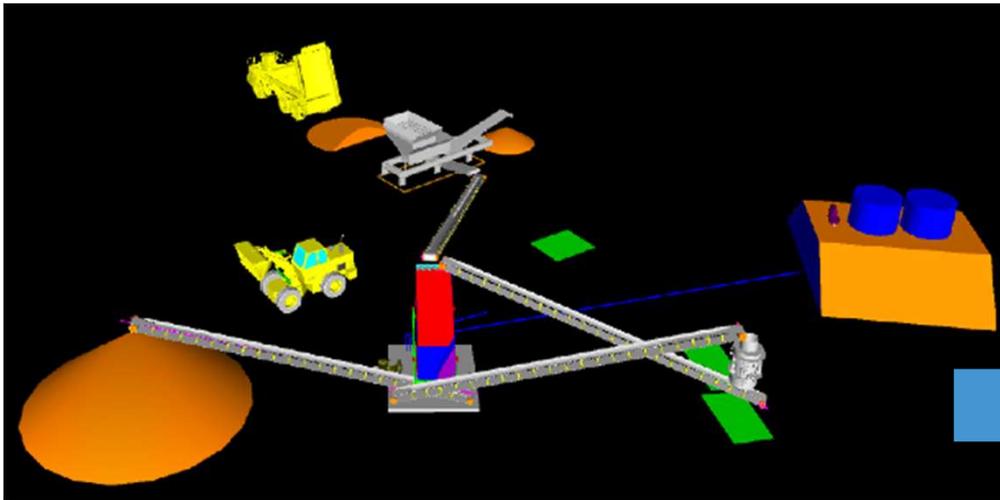


Phase 2 Crushing and Screening and Sorting Circuit



# Early Works Design & Delivery

Processing improvements identified through operational performance analysis



Phase 1 Crushing and Screening Circuit Design



✓ Phase 1 **Crushing and Screening Circuit** Installed

## Concentrate Production Continues



- ✓ Production process has a calculated **overall Tungsten recovery of 79.5%**, for the crushing/screening/sorting and gravity plant
- ✓ The tungsten concentrate produced at site is loaded into bulk bags, sealed and **sold ex-gate** at Mt Carbine

# Strategically Aligned With



Queensland  
Government



**CRONIMET**  
*metals are our passion*



**METS  
IGNITED**

 **TOMRA**

  
RESOURCES



**PLOTLOGIC**



**Australian Government**

**Department of Industry,  
Innovation and Science**

  
**goldring**

  
**morgans**

**SANDVIK**

 **THE UNIVERSITY  
OF QUEENSLAND**  
AUSTRALIA

# Corporate Snapshot



**Experienced Board & Leadership Team**



Oliver Kleinhempel	Non-exec Chairman
Stephen Layton	Non-exec Director
Zhui Pei Yeo	Non-exec Director
Richard Morrow	Non-exec Director
Kevin MacNeill	Chief Exec Officer
Tony Bainbridge	Chief Geologist



Share Price*	Issued Shares	Market Capitalization	Shareholding: Top 20 holders
A\$ 0.051*	1,344m	A\$ 80,65m	59.6%

\*Shareprice as at 6 July 2022

## **EQ RESOURCES:**

Australia's only primary tungsten producer



**Currently in  
production**



**High Grades  
Resource**



**Increasing  
LOM  
14yr +**



## **EQ RESOURCES:**

Australia's only primary tungsten producer



**Fully Funded**



**De-Risked**



**2<sup>nd</sup>  
Revenue  
stream**



## **EQ RESOURCES:**

Australia's only primary tungsten producer



**Experience**



**Staffing  
& Teams in  
place**



**Safety  
Management**



## **EQ RESOURCES:**

Australia's only primary tungsten producer



**Positive  
Market  
Conditions**



**Genuine  
ESG  
Commitment**



**On Track  
&  
Credible**



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