



RESOURCES

*resourcing the new economy  
for a better tomorrow*



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# EQ RESOURCES LIMITED

## Critical Mineral Producer

Noosa Mining Conference

July 19<sup>th</sup>, 2023

ASX : EQR



# Disclaimer



## Competent Person's Statement

- The information in this presentation partly relates to the outcomes of the Mt Carbine Bankable Feasibility Study Update (May 2023), 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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# Consistent Board & Leadership Team

Diverse and Experienced Board & Leadership Team



## Oliver Kleinhempel - Non-executive Chairman



- Appointed Non-executive Director 12 August 2019 and Chair on 24 April 2020
- Executive management experience in **project development, finance and commodity trading sectors**
- Corporate experience includes Outotec, Ferrostaal Group and CRONIMET
- Currently an executive director of CRONIMET Holding GmbH

## Stephen Layton - Non-executive Director



- Appointed Non-executive Director 14 November 2017
- +35 years' experience in **equity capital markets in UK and Australia**
- Experience in both principal and director roles with a depth of knowledge in capital raisings, ASX listings and corporate advisory matters
- Currently non-executive director of Mithril Resources Limited, and previously a non-executive director on New Age Exploration Limited (both ASX listed)

## Zhui Pei Yeo - Non-executive Director



- Appointed Non-executive Director 12 August 2019
- Has held executive, management and supervisory roles with a range of experience from **project planning to resource management**
- Has been working at a leading system integrator in the telecommunications industry in South-East Asia
- Currently an **executive director of a steel-product manufacturer**

## Richard Morrow - Non-Executive Director



- Appointed as Non-Executive Director on 16 March 2021
- +30 years' experience as a sharebroker in Melbourne and in London, with a particular interest in the resources space. A long-serving Chairman of **Melbourne Mining Club**, Australia's foremost networking organisation for the Australian resources sector.
- Richard's **investment experience** includes a role as director of Lowell Resources Fund Management, manager of the ASX-listed Lowell Resources Fund. He is a Fellow of the **AusIMM** and an honorary member of the AusIMM Investment Advisory Committee.

## Kevin MacNeill - Chief Executive Officer



- Appointed Interim-CEO & Senior Technical Advisor in May 2019 and permanent CEO in January 2020
- +33-year career dedicated to developing and leading mining projects globally
- Expertise in **project development, mineral processing, specialty processing applications & mining waste processing**
- Held Executive appointments as President of Etruscan Diamonds (part of TSX-listed Etruscan Resources) & founded Specialized Metallurgical Projects Pty Ltd

## Tony Bainbridge - Chief Geologist

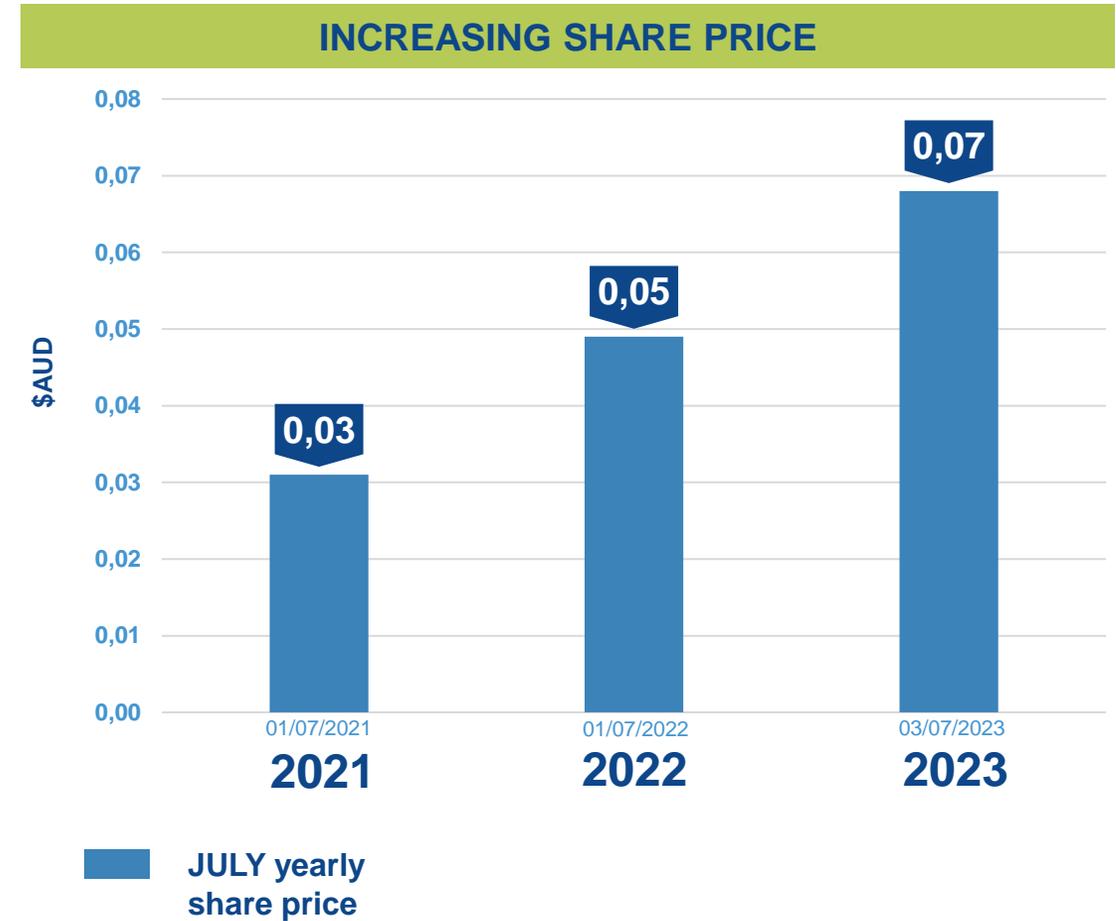
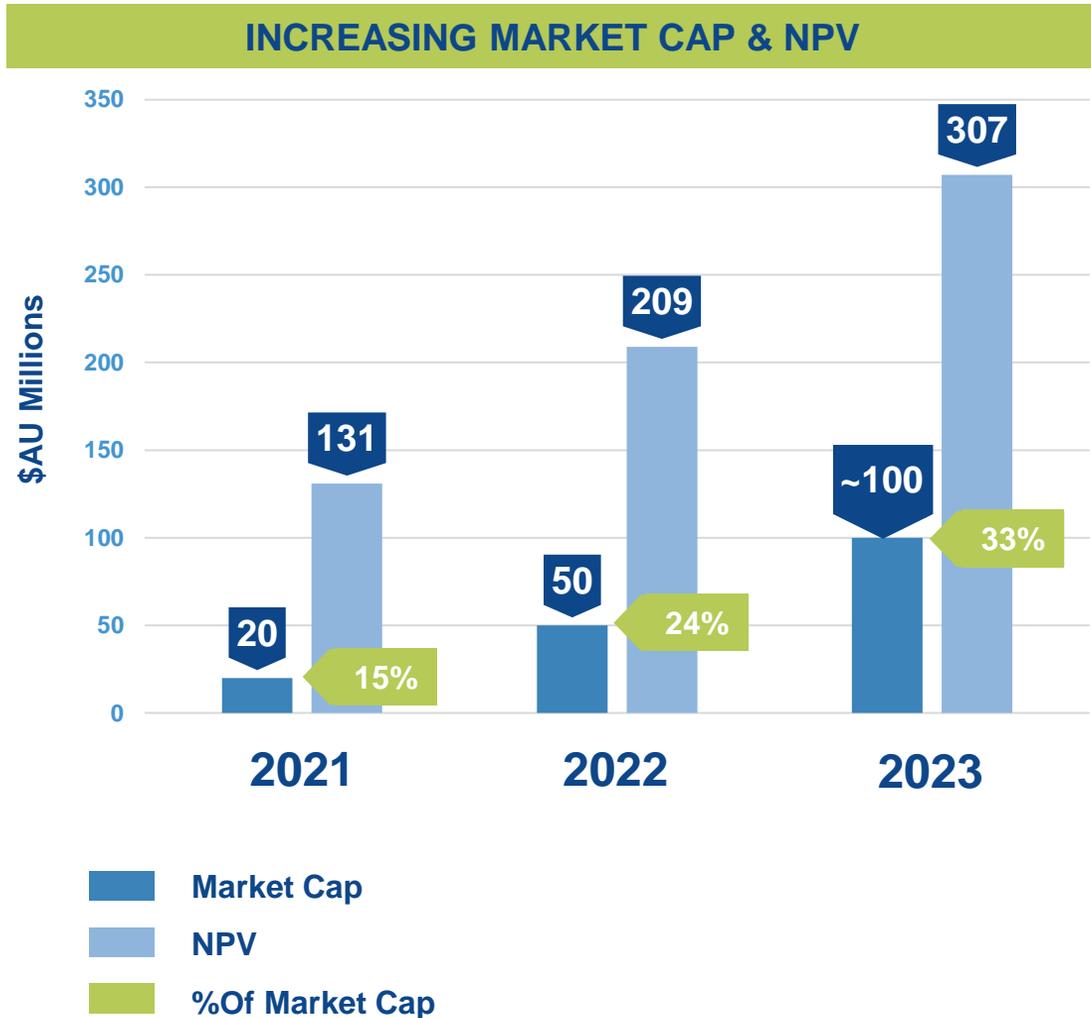


- EQR's Chief Geologist, focusing on developing Mt Carbine's underground resource to define & extract 'King-Vein' style mineralisation
- Experience in tungsten projects in South Korea & Africa – including building, owning and managing a tungsten mining operation in South Korea
- Expertise includes **tungsten, gold, resource definition, mine exploration, feasibility studies, mine development, mine production efficiencies, and day-to-day operations**
- Currently director of Asia Intercept Mining Ltd and AMB Exploration Pty Ltd

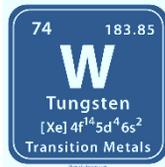
# Mt Carbine Mine: At Its Inflection Point of Value



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# Why Tungsten?



at 3420°C highest melting point of all metals



as carbide compound hardest element after diamond

Tungsten is ranked by the British Geological Surveys, various US Departments, the European Commission, Japan, South Korea and Australia as a **'critical mineral'**:

- Due to its **economic importance**
- **Supply risk** with >80% dominance of China in the market
- **Inability to be substituted** in many applications



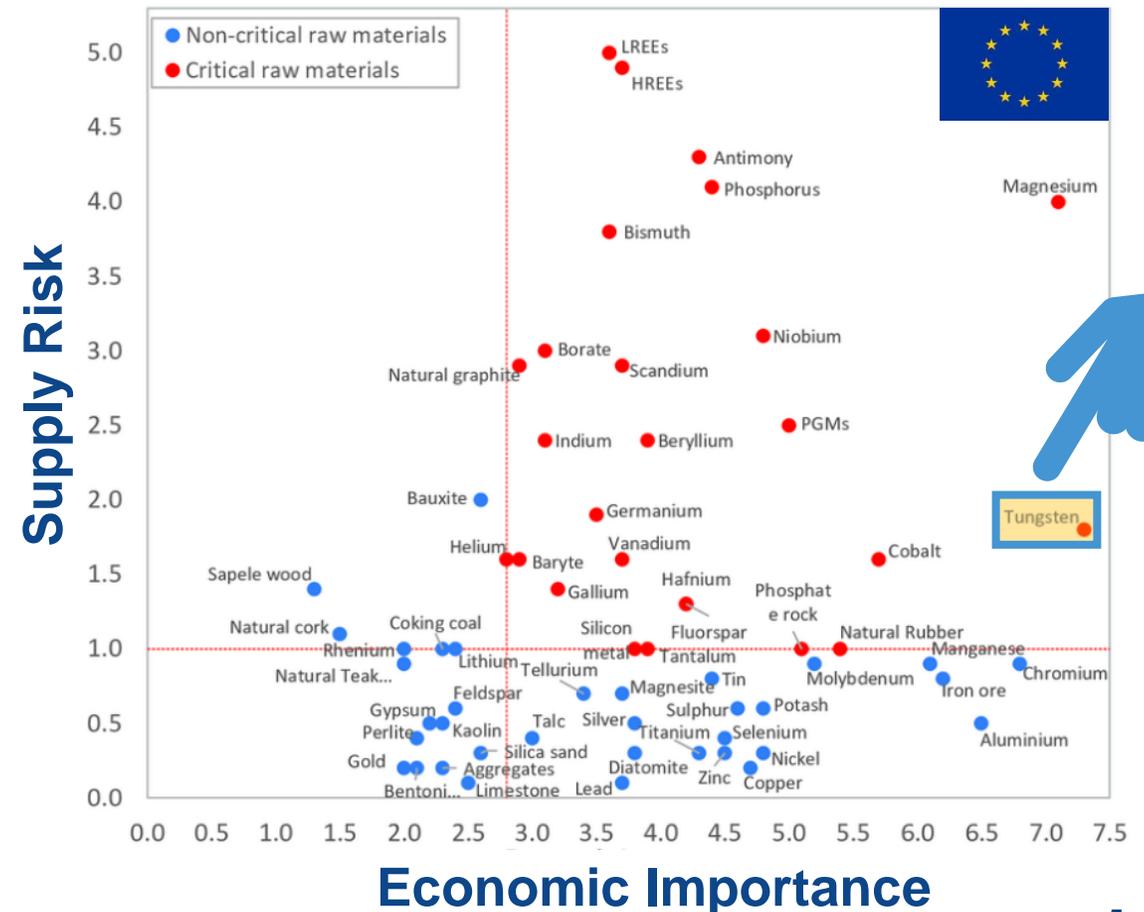
Recently published draft EU Critical Minerals Act furthermore classifies Tungsten as a **'strategic mineral'** ([link](#))



Dodd Frank Act (Art.1502) – tungsten, tin, tantalum & gold defined as **'conflict mineral'** (wide ranging traceability obligations)

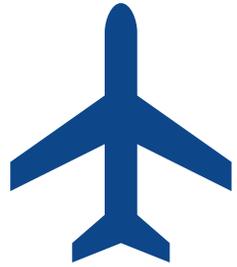


Australia-US 'Climate, Critical Minerals & Clean Energy Transformation Compact', defines **Australian resources** as **"US domestic"** source

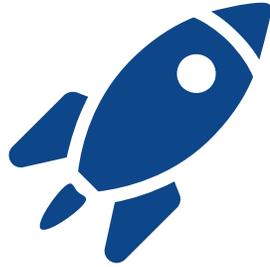


# Tungsten Uses

Critical Alloy Element, Un-substitutable in many applications



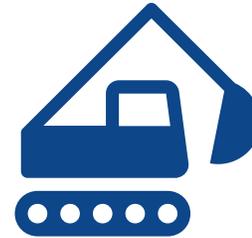
**Aviation**



**Aerospace**



**Automotive**



**Heavy Machinery**



**Heavy Industry**



**Tools & Construction**



**Medical**



**Military**



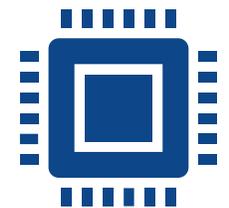
**EV Battery Development**



**Green Energy**



**Science & Tech**

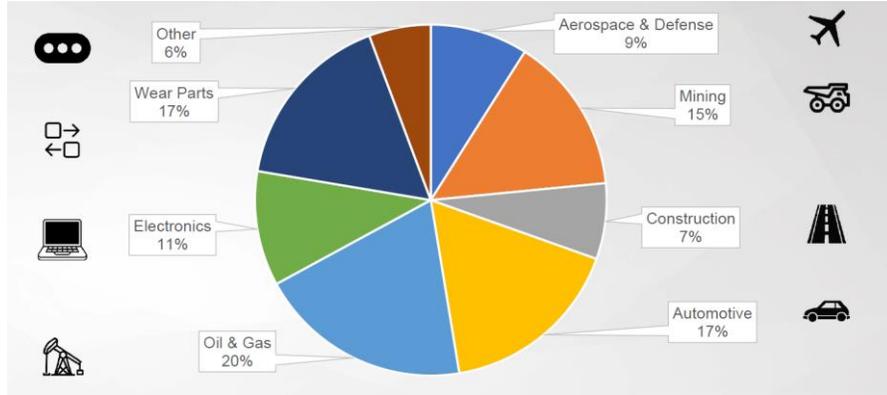


**Micro Electronics**

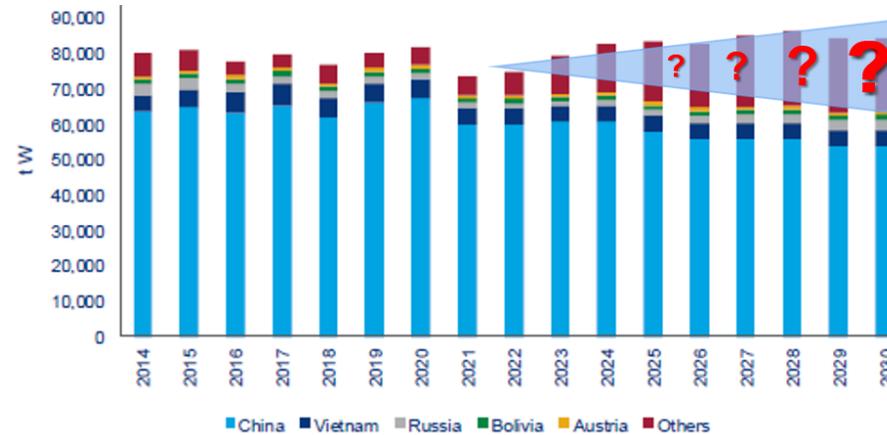
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# Why Tungsten?

Distribution of End-Use (2022)



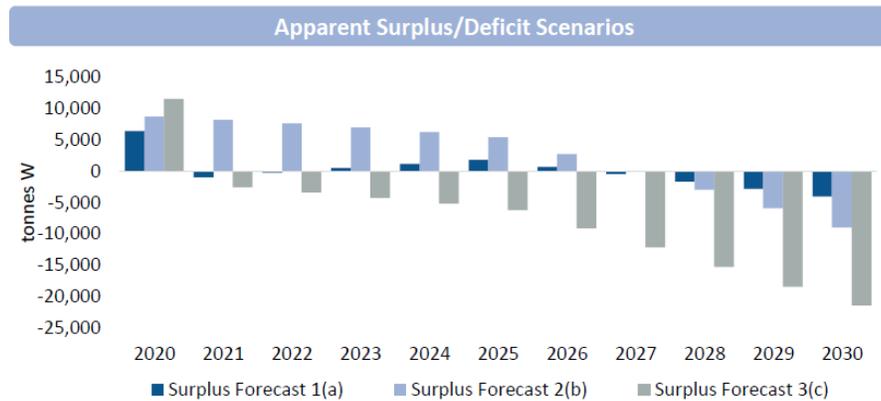
Gloomy Supply Outlook for 2030



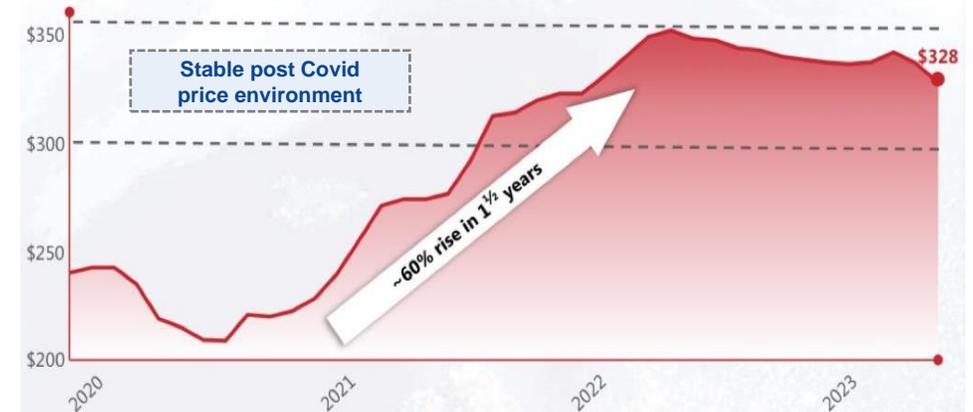
ITIA\* forecasted average tungsten consumption growth 2020-2030: 2.9% p.a. / 33,400t W (approx. 3,340t W p.a. - equals >2x EQR each year).

\*International Tungsten Industry Association

Significant deficit throughout 2030



Tungsten Price in US\$ per mtu (mtu = 10kg)



In all scenarios the tungsten market is in deficit from 2026 onwards, with an average forecast deficit of 11.5kt W by 2030 (equals ~8x EQR).

Citic Securities (25 May): "Gap of supply and demand for tungsten in 2023, 2024, 2025 will be -2,594 tonnes, -2,642 tonnes, -2,449 tonnes."

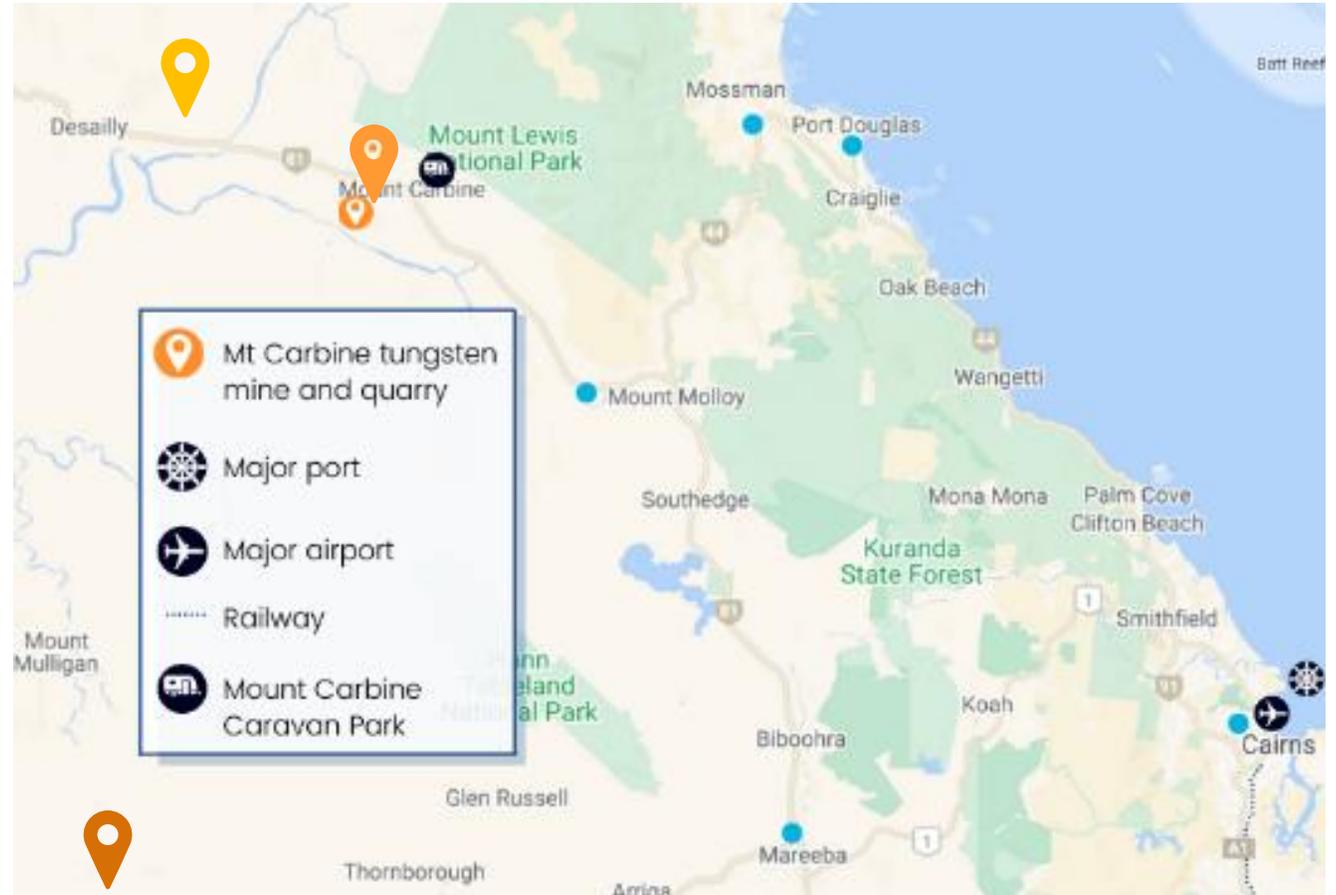
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# Mt Carbine Open-cut & Modernisation Project Overview

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
- **Cluster Potential:** Significant deposits defined in region.

 **Watershed Tungsten Project**

 **Wolfram Camp Project**

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**Noosa 2021**

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**Mt Carbine Tungsten Mine and Quarrying Operations, QLD, Australia**

**Noosa 2022**

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**Mt Carbine Tungsten Mine and Quarrying Operations, QLD, Australia**

**Noosa 2023**

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**Mt Carbine Tungsten Mine and Quarrying Operations, QLD, Australia**

# Mt Carbine Blasts into Operation

3... 2... 1... Go!!



[Link](#)

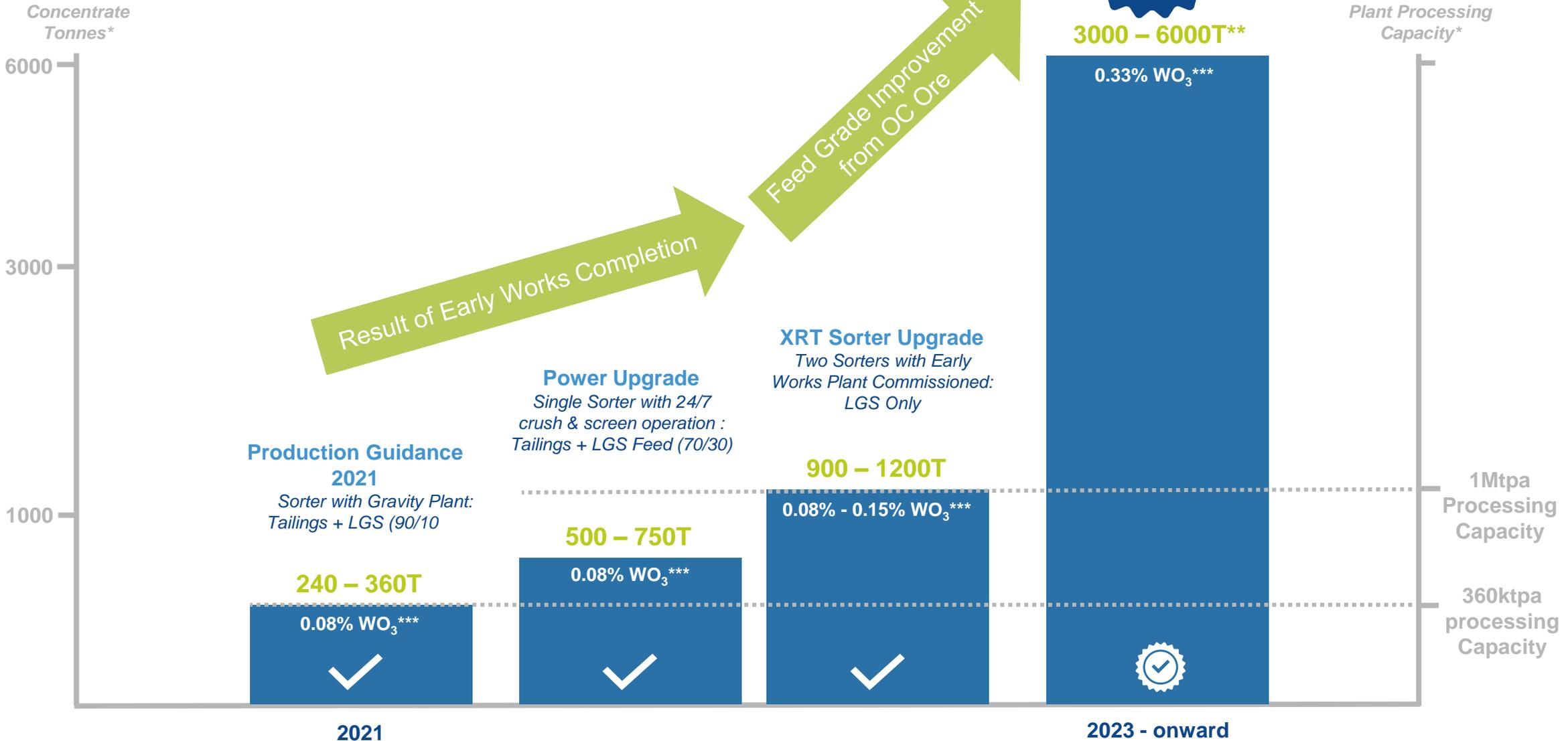
Mt Carbine Tungsten Mine and Quarrying Operations, QLD, Australia

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# Mt Carbine Mine: At Its Inflection Point of Production Ramp Up



3000 – 6000T\*\*



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\*Basis 50% WO<sub>3</sub> concentrate // \*\*Based on new pit design // \*\*\*Actual / estimated feed grade

# Compelling Economics

Initial BFS already confirmed high margins, low capital intensity & operating cost and speed to market



## Comparison of Consolidated Project Economics

Parameter	Unit	BFS Pit Optimisation (2022)	BFS Pit Optimisation (May 2023)	
Total Cash Cost (FCA)	US\$/mtu	118	104	
Capital Cost	A\$m	22.9	26.3*	
<b>Pre-tax NPV<sub>8, real</sub></b>	<b>A\$m</b>	<b>210*</b>	<b>307**</b>	
NPV / Capex Ratio	x	9.2	11.7	
Payback Period	years	1.5	<1	
Strip Ratio	(Waste:Ore)	3.1:1	3.9:1	
Concentrate Produced	(t / 50% WO <sub>3</sub> )	30,960	38,570	

### Indicative Tax Payable from BFS modelling is +/- \$95 Million over the LOM

- \* Capex has increased due to \$7.7m added to double plant capacity (without this, capex forecast is lower than last BFS)
- \* \* NPV shown as Project NPV; NPV attributable to EQR as 50% portion of Joint Venture Scope and 100% of additional ore recovered from Open Pit results to **\$270 million**

#### 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 the relevant ASX Release
- AUD:USD average exchange rate of 0.688 over the life of project was used for currency conversions

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# Mt Carbine Phased Development Plan

Focus: Open pit restart and processing facility modernisation

BFS Scope / Implementation Ongoing

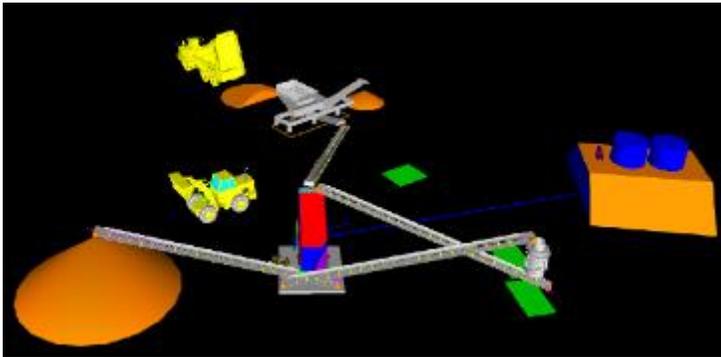
## Stage 1

**Focus:** Minimal capital expenditure, incremental improvements to increase the mine's productivity and profitability focusing solely on the mining and processing of the Low-Grade Stockpile.

## Stage 2

**Focus:** Commencement of open pit mining. Crushing and screening plant and processing plant will be upgraded to further reduce operating costs and improve the tungsten recovery from the open pit high grade ore.

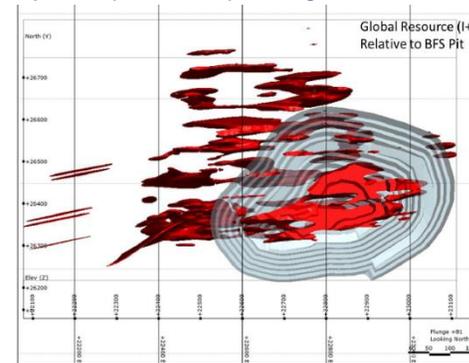
Stage 1 Crushing and Screening Circuit Design



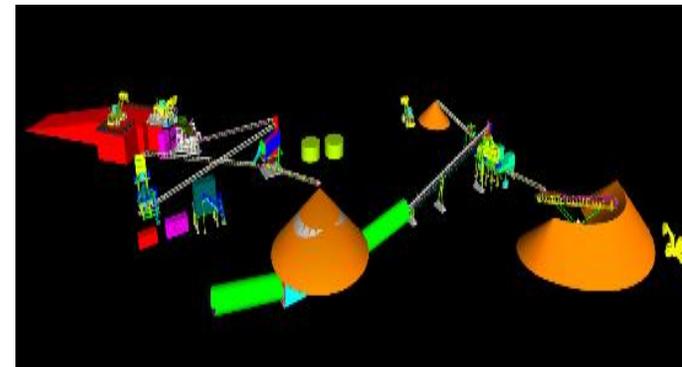
Stage 1 Crushing and Screening Circuit in production



Stage 2 Projected pit encompassing additional resource



Stage 2 Crushing and Screening & Sorting Circuit Design



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# Mt Carbine Phased Development Plan

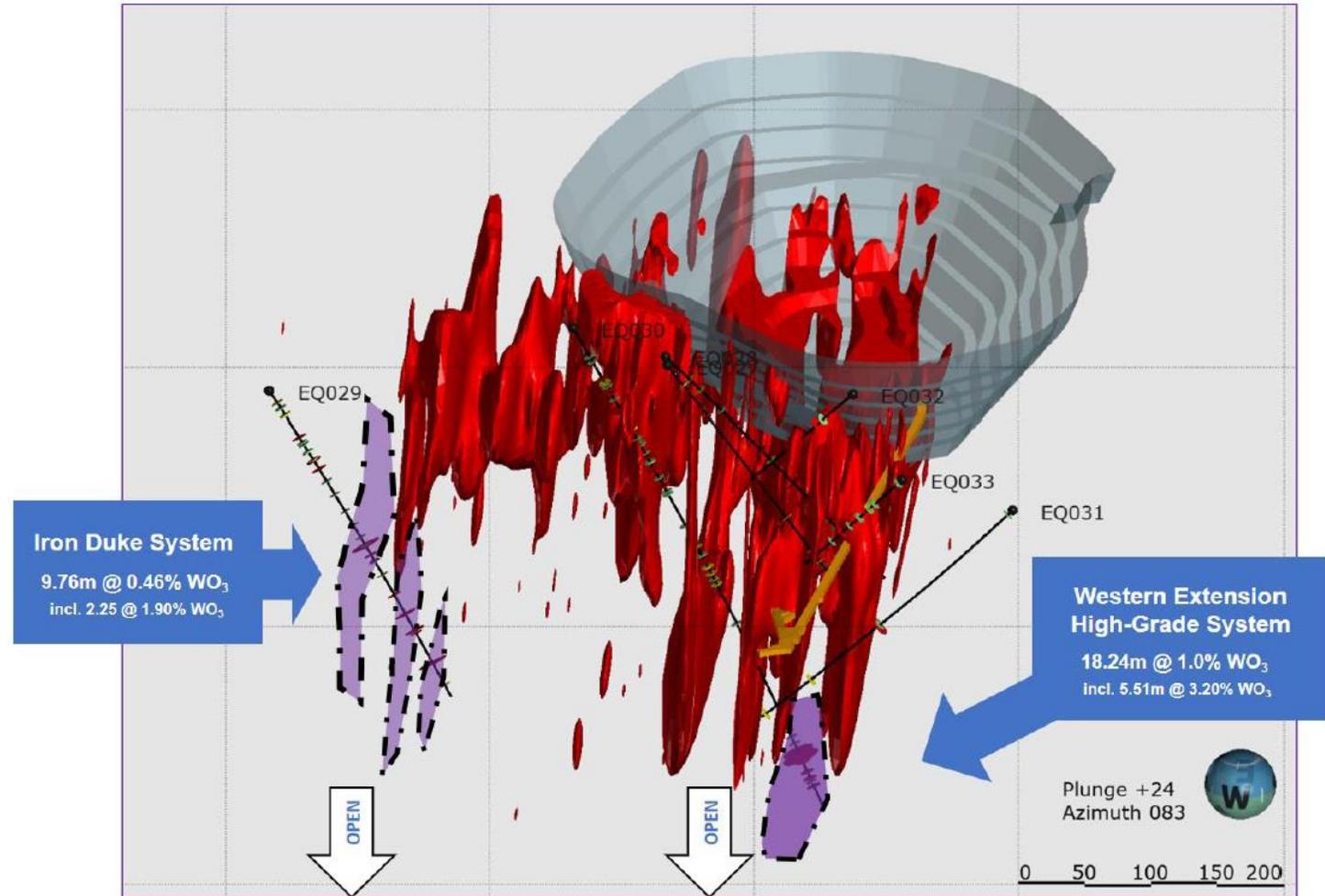
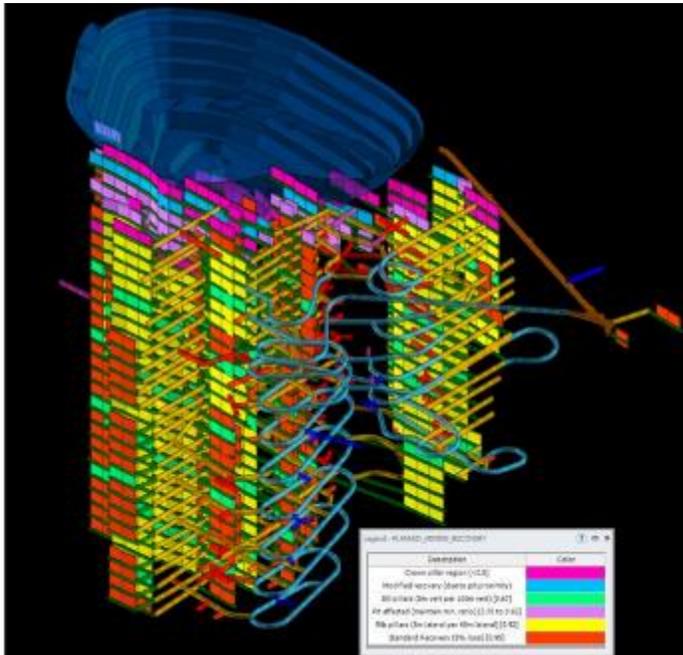
Focus: Open pit restart and processing facility modernisation



## Stage 3

**Focus:** Underground Mining; >80% of current Mineral Resources are not in the Open Cut BFS but rather sit below the planned pit & in the Iron Duke Formation. A full scoping showed a long-life Underground Mine has potential and EQR should complete a PFS on this option.

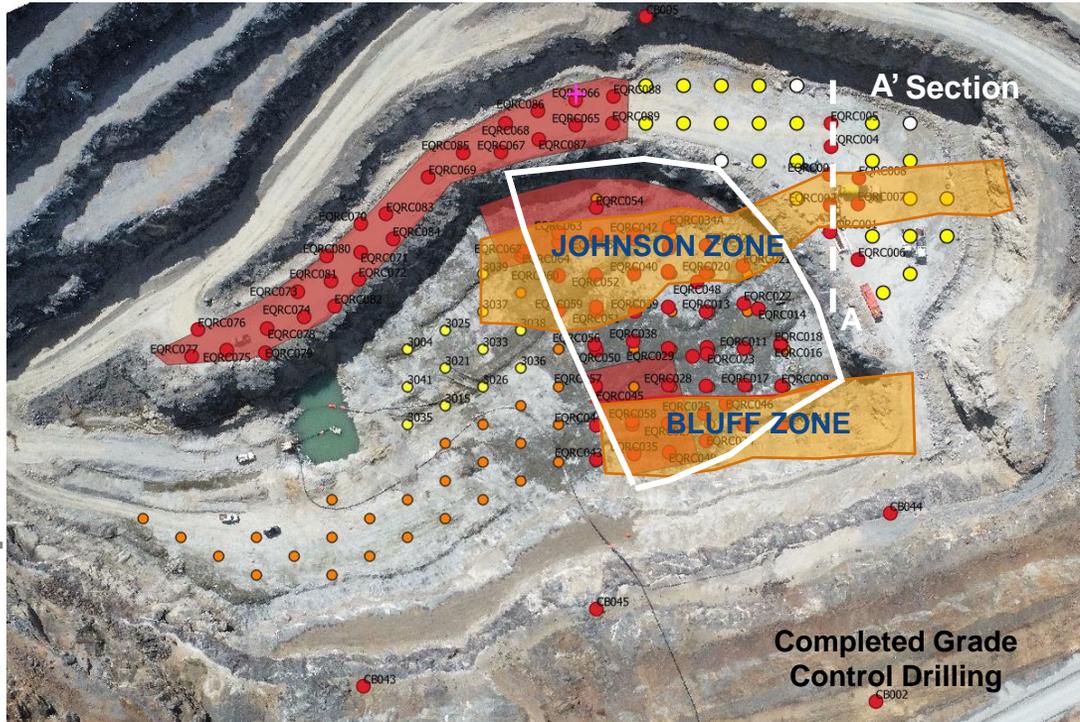
**Stage 3** Projected additional underground resource



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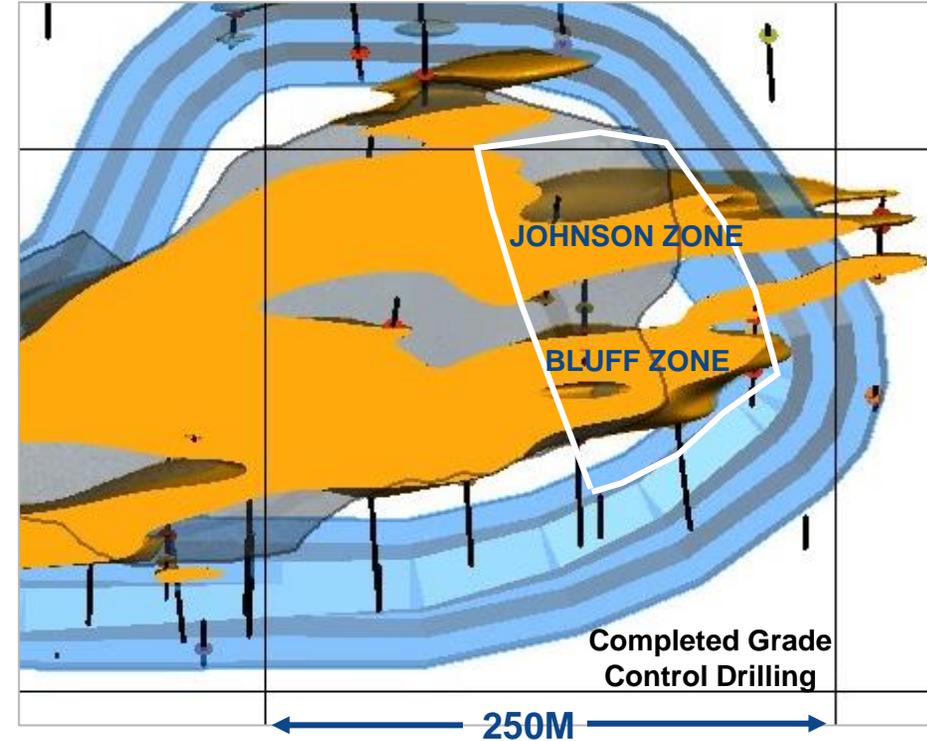
# Grade Control Drilling Progress

## Grade Control Drilling Program



- Completed Grade Control Hole
- Grade Control Drilling Shapes
- A to A' Section

## Resource Model Comparison

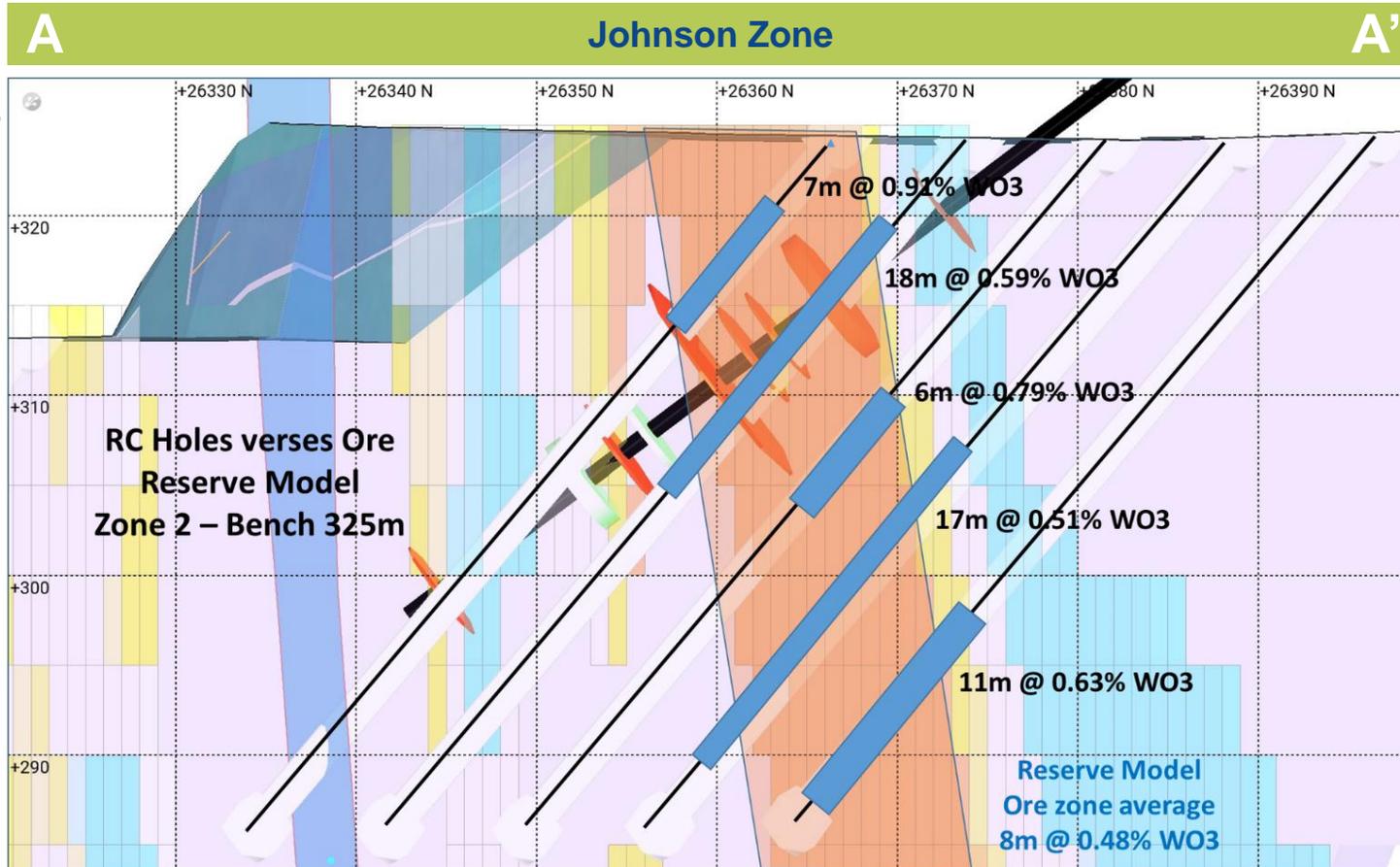


Refer to:  
Mt Carbine Expansion Project Bankable Feasibility Study 2023 Economic Update - [Link](#)

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# Grade Control vs Reserve Model

Section showing Johnson Zone Results



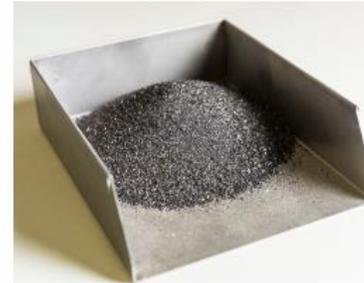
The above section shows the comparison on the first section. Johnson Zone (Zone 2) was a high-grade zone of 8m @ 0.48% WO<sub>3</sub> in the model – Our infill drill results are shown above.

# What We Care About

Responsible and Sustainable Critical Mineral Production



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New Economy Minerals



Circular Economy



Environment



Safety



Community



Collaborations

# What We Care About

Responsible and Sustainable Critical Mineral Production

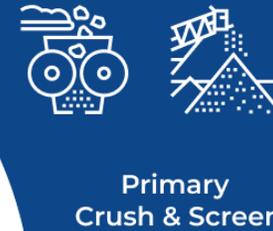


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### Circular Economy Process: Mt Carbine Tungsten Mine

The circular economy flow at Mt Carbine decouples economic growth from environmental degradation through a combination of beneficial reuse of waste rock and the utilisation of advanced XRT sorting processing technology.



### Mt Carbine Quarrying Operations

Sustainable Aggregates for a Better Tomorrow. Fully permitted and successfully in operation, the Mt Carbine Quarry responsibly recycles rock from mining operations into 18 various saleable quarry aggregates and products.



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for a better tomorrow*

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# Strategically Aligned With Key Stakeholders



**CRONIMET**  
*metals are our passion*



**Queensland  
Government**



**M A S A N**  
HIGH-TECH MATERIALS



**PLOTLOGIC**



## Endorsement Through Funding & Grants

Strong support for critical minerals projects in Australia



**Australian Government**  
Department of Industry,  
Innovation and Science

Queensland METS Collaborative Projects Fund (METS Ignited) ASX Announcement 24 July 2020: [Government Support for Mt Carbine Mine Waste Transformation Initiative](#)  
Advanced Manufacturing Growth Center (AMGC) ASX Announcement 25 January 2022: [Federal Government Co-Invests in High-Tech Ore Sorting](#)  
Critical Minerals Accelerator Initiative (CMAI) ASX Announcement 19 September 2022: [Federal Government Funding for Mt Carbine Reconfirmed](#)

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## EQ RESOURCES:

Australia's leading primary tungsten producer



**Currently In  
Hard Rock  
Production**



**De-Risked**



**Increasing  
LOM**



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# EQ RESOURCES:

Australia's leading primary tungsten producer



**Positive  
Market  
Conditions**



**Genuine  
ESG  
Commitment**



**Experienced  
Team &  
Staffing in  
Place**



# ASX:EQR

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a **Tungsten cube** valued at over **\$450!**



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