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GROUP6 METALS LIMITED

# Securing Reliable Supplies of Tungsten to Meet Growing Demand for Critical Minerals

(ASX:G6M)

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# COMPANY PRESENTATION

## Tungsten Production Ramp Up Continues
## AGM November 2023

# Disclaimer

## FORWARD LOOKING STATEMENTS

Statements in this announcement may be forward looking statements. Forward looking statements can be identified by the use of forward-looking terminology such as, but not limited to, ‘may’, ‘will’, ‘expect’, ‘anticipate’, ‘estimate’, ‘would be’, ‘believe’ or ‘continue’ or the negative or other variations of comparable terminology.

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**COMPETENT PERSON'S STATEMENT**

The Information in this presentation relating to Mineral Resources and Exploration Results are extracted from the following reports lodged as market announcements and available to view on the Company's website www.g6m.com.au:

- "Updated Resources Statement April 2015" released 24 April 2015
- "Updated Reserve Statement" released 21 September 2015
- "Updated Reserve Statement released 21 September 2015" released 20 October 2015
- "Dolphin Project Drilling Results April 2018" released 23 April 2018
- "Exploration Drilling Results May 2018" released 17 May 2018
- "Updated Feasibility Study and Mineral Resource" released 3 June 2019
- "18% Increase in Tungsten Resources" released 26 September 2019
- "Bold Head Maiden Mineral Reserve Estimate" released 26 June 2023

The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements. Material assumptions underpinning production targets, or the forecast financial information derived from a production target, in the relevant market announcements continue to apply and have not materially changed. In the case of estimates of mineral resources, 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.

# Key Highlights – Dolphin Tungsten Mine

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1. Tungsten production commenced – commercial production has commenced with brand new processing plant producing high-grade product.

2. Highest-grade – highest-grade tungsten deposit in the western world with an average reserve grade of 0.92%

3. Critical mineral – broad application in "every-day settings", including in construction, automotive, energy, aerospace and defence. Tungsten production is dominated by China (80%) and Russia (5%)

4. Offtake agreements – secured c.59% of estimated production for the first c.4 years with Traxys and Wolfram (Sandvik). Strong demand for production received outside of the two existing offtake agreements

5. Attractive margins expected – for the contained $WO_3$, G6M will receive the APT price[2], multiplied by a payability factor. At the long term realisation price of A$392/mtu of $WO_3$ (A$39,200/t $WO_3$), this would imply annual revenue of c.A$100 million based on average annual sales of 2,600t of $WO_3$. With estimated All-in Costs of A$246/mtu of $WO_3$ (A$24,600/t $WO_3$), margins are c.37% over life of mine.

6. Beyond the Dolphin Mine – capacity to add value through development of Bold Head mine operations and exploration at Investigator prospect, renewable energy deployment and potential downstream processing to increase $WO_3$ recovery

7. Strong support of major shareholders – major shareholders Richard Chadwick, Chris Ellis, D.A.CH.S Capital AG and Dale Elphinstone continue to support the project through ramp up

Note: (1) Refer to the "Forward Looking Statements" on the disclaimer slides of this Presentation for further details.
(2) G6M will receive the APT price as published by commodity price reporting agency Fastmarkets, with an assume long term price of US$345/mtu (A$517/mtu).

# Corporate Overview

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## 6-Month Share Price and Volume

| | |
|---|---|
| **A$0.085**<br>Share Price<br>@ 21 Nov 2023 | **1,003.4M**<br>Shares on Issue |
| **A$1.9M**<br>Undrawn Debt Facilities<br>@ 30th Sept 2023 | **A$3.0M[1]**<br>Cash<br>@ 30th Sept 2023 |
| **A$85.3M**<br>Market Cap<br>(@ $0.085) | **A$59.1M**<br>Debt Drawn<br>@ 30th Sept 2023 |

Note: (1) Does not include $8m in bridge finance funding announced to the ASX on 3 November 2023.

# Australia's Largest and Highest-grade Tungsten Mine

- Located adjacent to the port of Grassy, on the southeast coast of King Island, it was first operated in 1917 and closed in 1990 due to sustained low tungsten prices
- Commenced commercial production and completed first container shipment from the port of Grassy in July 2023
- Ramping up to produce 2,600tpa of WO3 over the life of the mine
- Seeking opportunities to lower costs and bringing forward revenue in a high-cost environment
- Evaluating options to increase metal recoveries over the life of the mine
- Positioning the company to become a long term reliable western supplier of an important critical mineral

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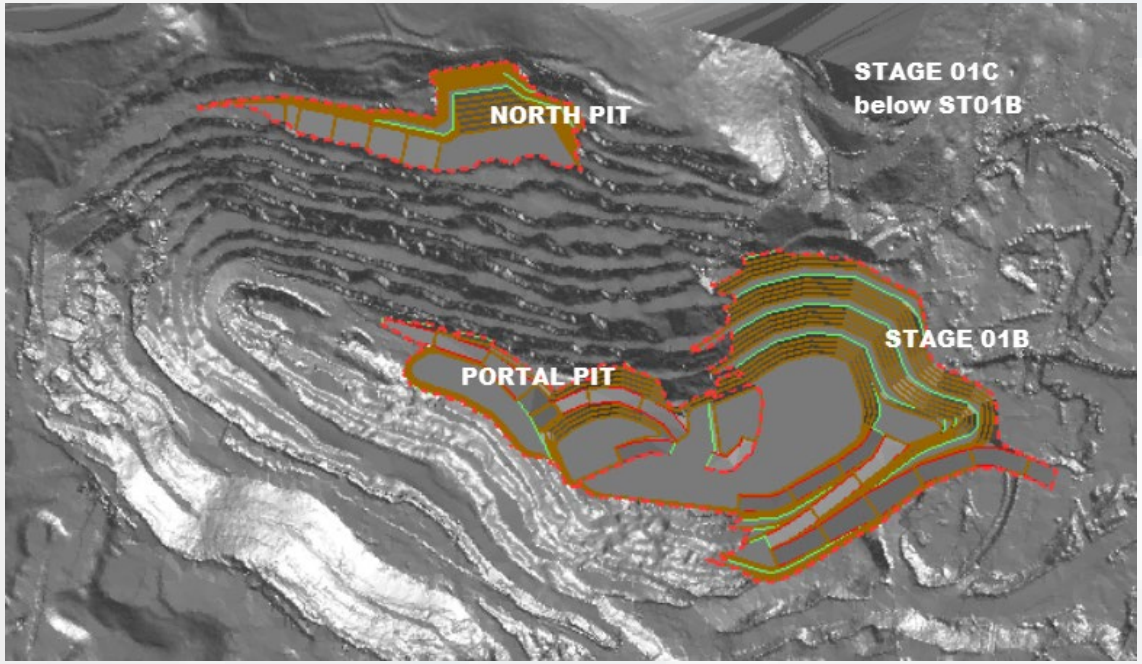
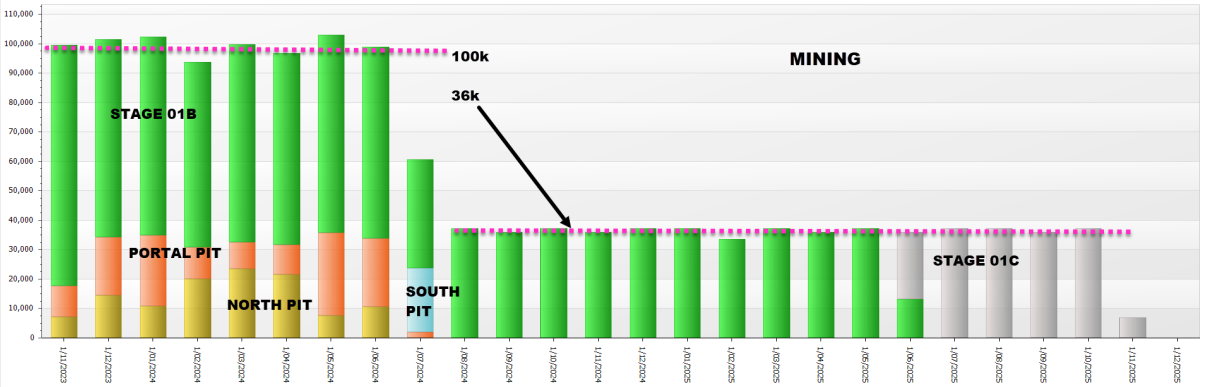
# Accelerating High Grade Ore from Open Cut Pit

- Optimising the initial 2-year open pit mine plan to bring forward higher grade ore.
- Reducing overall open cut pit material movements over this period, significantly in H2 2024
- Evaluating mining sequence to access underground earlier with the following key benefits;
  - ✓ Access to higher grade ore, maximising concentrate production
  - ✓ Deferral of stage 2 open cut infrastructure
  - ✓ Re-use existing underground infrastructure
  - ✓ Potential to identify additional high grade UG resources
- Mine stage 2 open cut later with optimised mining fleet and improved processing recoveries
- Adding Bold Head Reserve to LOM mine plan

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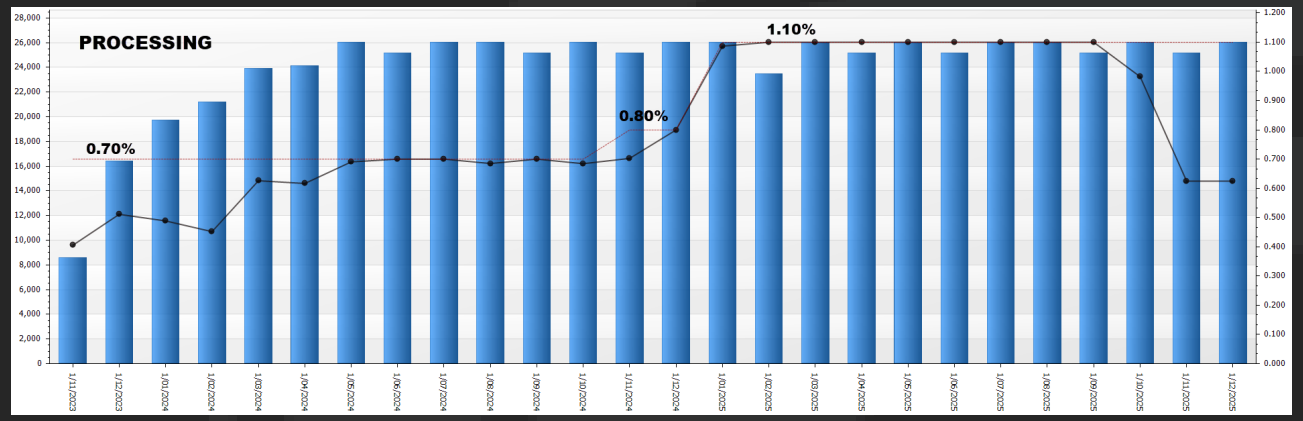
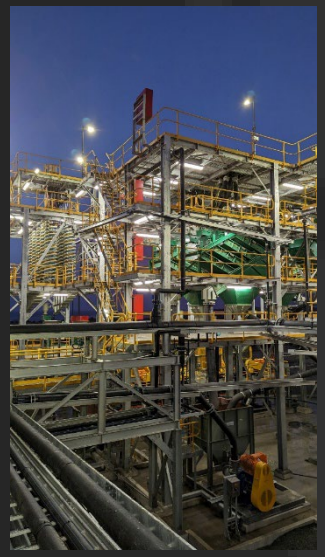
# Increasing production from Process Plant

High grade ore brought forward increasing cashflow

- Producing high grade concentrate at 65% $WO_3$
- Continuously improving process plant performance based on utilisation and throughput rate.
- Focus on improving recovery through plant optimisation and increasing head grade.
- Plant recoveries have been shown to significantly increase with grade
- Head grade forecast to increase to 1.10% $WO_3$ in early 2025
- Potential opportunities for ore sorting and bolt-on alkali leech ST plant to treat low grade ore/concentrate and increase overall recovery



Spirals and Derrick Screens

Concentrate Dryer and Magnetic Separator

Concentrate Product loaded for dispatch – Nov 2023

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# Dolphin Mine Reserves and Resources

Long mine life with significant exploration upside to potentially extend project life

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## Indicated Resource[1]

**Dolphin** – 9.6M tonnes @ 0.90% $WO_3$ (0.20% cut-off)

**Bold Head** – 1.6M tonnes @ 0.91% $WO_3$ (0.50% cut-off)

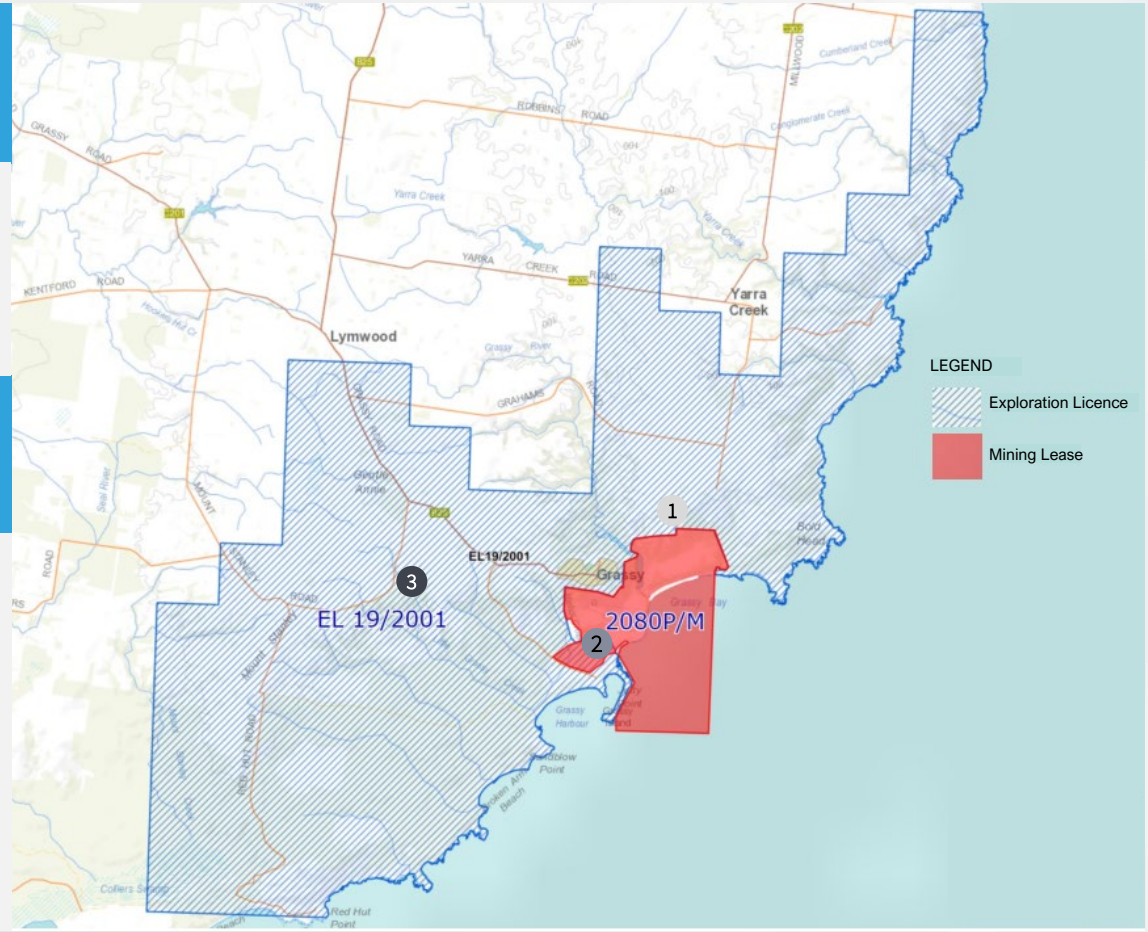
## Probable Reserves[2]

**Dolphin OC** – 2.9M tonnes @ 0.76% $WO_3$ (0.20% cut-off)

**Dolphin UG**– 1.5M tonnes @ 1.24% $WO_3$ (0.70% cut-off)

**Bold Head OC**– 0.05M tonnes @ 1.0% $WO_3$ (0.70% cut-off)

**Bold Head UG**– 0.39M tonnes @ 0.9% $WO_3$ (0.70% cut-off)



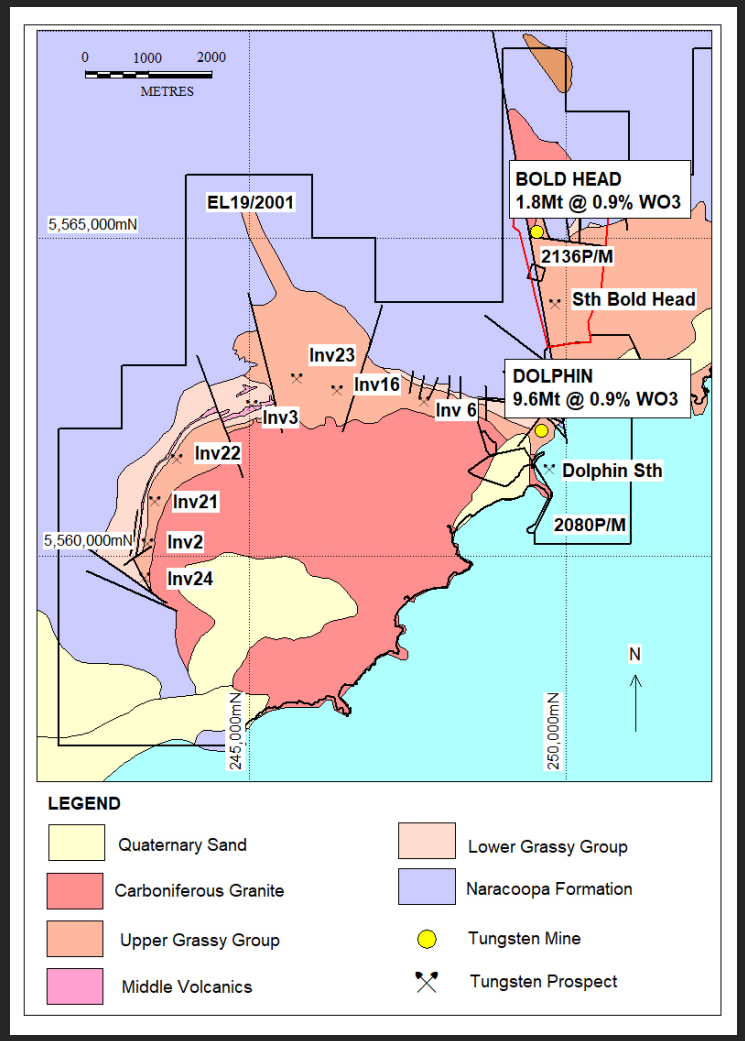

Open-cut Dolphin is the first ore body, with significant potential to extend mine life on underexplored land located on the current mining lease:

1. Maiden Reserve at Bold Head adds to the tungsten Reserve on completion of Feasibility Study[3]
2. Dolphin underground mine (extension beyond open-pit) producing c.264kt pa at an average grade of 1.24%
3. A drilling campaign in 2018 successfully found scheelite at the Investigator deposit (6km west of Dolphin), with similar geology to the Dolphin Mine. Another round of drilling was completed in April with assay results pending.

1. Source: Increase in Tungsten Resources 26 September 2019 and Updated Resources Statement 24 April 2015
2. Source: Bold Head Maiden Mineral Reserve Estimate, 26th June 2023, Revised Feasibility Study, 16 December 2020 & Revised Mineral Resource, 3 June 2019
3. Refer to ASX Announcement dated 26th June 2023 - "Bold Head Maiden Mineral Reserve Estimate".

# Resource Expansion beyond Dolphin

## World Class High Grade Tungsten Skarn




- **Two high grade tungsten resources discovered;**
  - Dolphin pre-mining resource of 24.1Mt @ 0.8% W03
  - Bold Head pre-mining resource of 2.9Mt @ 0.8%
- **Maiden Reserve estimate completed for Bold Head increasing overall reserves by 10%**
  - Proposed small high grade open pit followed by underground to supplement Dolphin ROM ore
- **Regional prospectivity in 9Km of Grassy Group/Granodiorite contact**
  - Geopeko completed regional mapping, soil sampling and 500m spaced and stratigraphic drilling 1970-1980
  - Limited exploration since 1980s
  - Discovered Investigator 21 - Undertaking 100m x 100m infill drill pattern.
  - Potential to discover several Bold Head size deposits

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Note: (1) Refer to the "Forward Looking Statements" on the disclaimer slides of this Presentation for further details.

# Enhanced Metal Recovery Opportunities

Seeking more value in a higher cost environment

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## Sodium Tungstate Plant (ST)

- Evaluating plans to upgrade low grade concentrate using ST plant, which would replace/integrate into back-end of existing plant
- As ST plant would be used to extract ST from lower grade concentrate and remove deleterious elements
- Expected to deliver increased recovery of 15-20% and higher playability for $WO_3$ sold

## Ore Sorting

- Re-evaluation of Ore Sorting;
  - ✓ Access to representative samples for testing
  - ✓ Increased recovery and lower costs from low grade ore
  - ✓ Based on previous testwork, potential to increase head grade by ~ 15%
- G6M is in discussions with experienced OEMs and expects to commence test work shortly

Sodium Tungstate (Atmospheric Alkali Leach) Plant

Scheelite Ore Sorting Plant

# Tungsten: A Strategically Important Critical Mineral

## An element of great strategic importance

- Tungsten is ranked by the British Geological Surveys, various US Departments, the European Commission, Japan, Russia and **Australia as a 'critical' mineral:**
  - Due to its economic importance
  - Supply risk – dominance of China in the market
  - Inability to be substituted
- **Tungsten's growing strategic importance:**
  - Defence consumption forecast to double over next 5 years
  - In 2022, Biden Administration announced it was working to increase US stockpiles of critical minerals, including tungsten
  - G6M seeking to engage with US Dept of Defense to supply Tungsten to US Strategic Stockpile
  - Securing reliable western supplies of tungsten are becoming increasingly more important as the world seeks secure supply chains for critical minerals

*"The U.S. Army will boost production of 155mm artillery shells more than sixfold to 85,000 a month by fiscal 2028, according to the service's undersecretary"*

Source: Defence News "US Army eyes sixfold production boost of 155mm shells used in Ukraine" 29th March 2023

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# Supply and Demand For Tungsten

Estimated 4.3% growth in demand for 2023, defence will grow stronger

1. **Mining and Construction** – Primarily used in drill bits, hammers and tunnel-boring machines, mining and construction was the most tungsten consuming segment in 2021
2. **Automotive** – Cutting tools are abrasion resistant able to withstand higher temperatures, and used in applications where steel tools would wear quickly. Tungsten is widely used for machining in engines and prominent in electric vehicles
3. **Industrial** – Used in applications where steel tools would wear quickly, such as high-quantity and high-precision production. Significant growth estimated in Silicon and PV wafer production using tungsten wire for cutting.
4. **Energy** - Used in a wide range of applications in both the renewables and O&G industry. Critical input for equipment needing the ability to withstand significant pressure, such as drill bits and well logging. Particularly strong growth to come from renewables construction, primarily wind turbines and solar panels
5. **Defence and Aerospace** – Used in a wide range of counterweights for satellite and helicopter blades, missiles, and cockpits to increase the efficacy of vibration-warning control. Significant growth in demand is expected following increasing defence budgets in light of Russia's military activity in Ukraine

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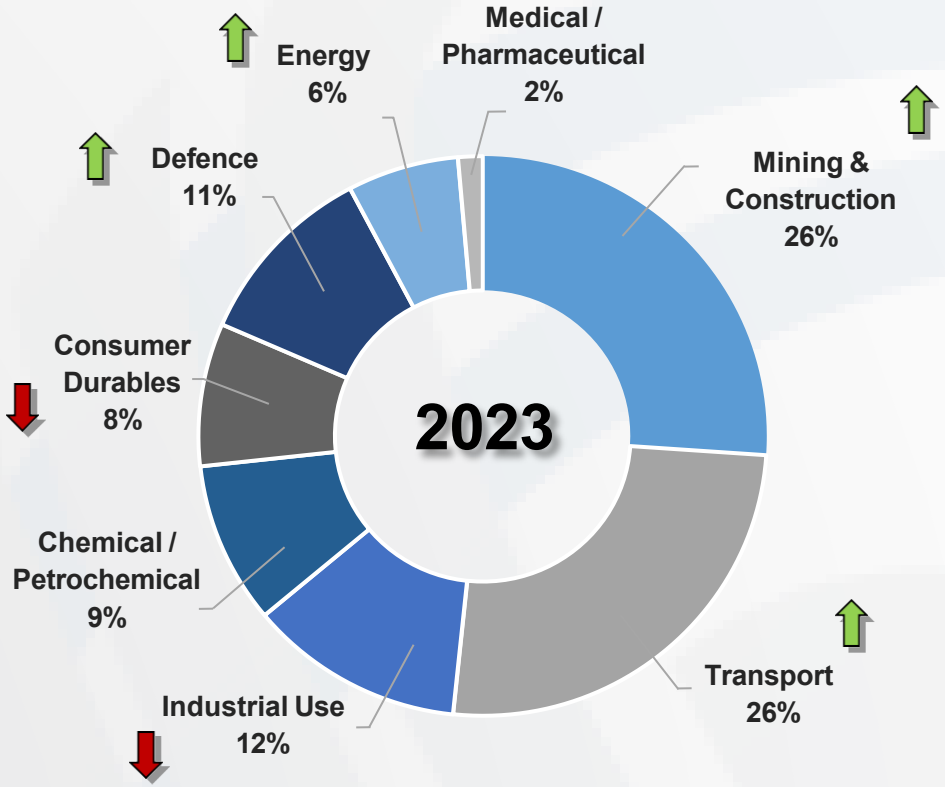
Short Term Demand Drivers




Source: SRM Tungsten End of Use Updates (April 2023)

- **Defence spending** – NATO 2% of GDP guideline and requirement to replenish ammunitions as a result of the Ukraine – Russia conflict
- **Strategic stockpile** – US strategic stockpile expected to deplete by 2025, therefore will need to be restocked in the near term
- **Commercialisation of new industrial applications** such as tungsten Niobium batteries and tungsten hexafluoride gas

# Tungsten's role in clean energy transition

Longer lasting and efficient renewable energy solutions

**Battery Technology and EVs** – Used with Niobium in the anode of Nyobolt's battery technology resulting in higher voltage, faster charging and longer lasting batteries - >90% charge in less than 5 minutes

**Wind Turbines** – used in the production of high-performance alloys for the manufacture of blades, bearings and gearboxes and due to its strength and wear resistance increases the lifespan of these components.

**Solar Panels** – New solar PV cell developed in Japan using indium tin oxide and Tungsten disulfide to create a near-invisible solar cell with significantly better efficiency (>70%) converting sunlight into energy

**Fuel Cells** – Tungsten is used as catalysts in fuel cells to speed up the reaction of hydrogen and oxygen to produce electricity

**Fusion Energy** – Significant quantities of Tungsten required for construction of Fusion reactors

New Lotus Eclipse Concept Car using Nybolt fast charging battery technology

Longer lifespan offshore windfarms

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# ESG Commitment

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Group 6 Metals is committed to the principles of ESG as the most effective means of creating long-term enterprise value and addressing the societal priorities enshrined in the United Nations' Sustainable Development Goals.

## Governance

1. Corporate Purpose
2. Board Composition
3. Stakeholder Consultation
4. Anti-Corruption
5. Ethical Behaviour
6. Risks & Opportunities

## Planet

7. GHG Emissions
8. TCFG Implementation
9. Land use
10. Water Consumption

## People

11. Diversity and Inclusion
12. Pay Equity
13. Wage Level
14. Modern Slavery
15. Health & Safety
16. Training Provided

## Prosperity

17. Rate of Employment
18. Economic Contribution
19. Financial Investment
20. Research & Development
21. Global Taxation

## Achievements to Date

- Increased regional employment opportunities
- 37.28Ha of land committed as Conservation Covenant area
- Commitment to renewable energy solution to decarbonise mine operations

FY2024 Focus

- Define purpose, values and measure performance using Socialsuite's ESG reporting disclosure platform

# Offtake Agreements

Sales have commenced to established industry participants

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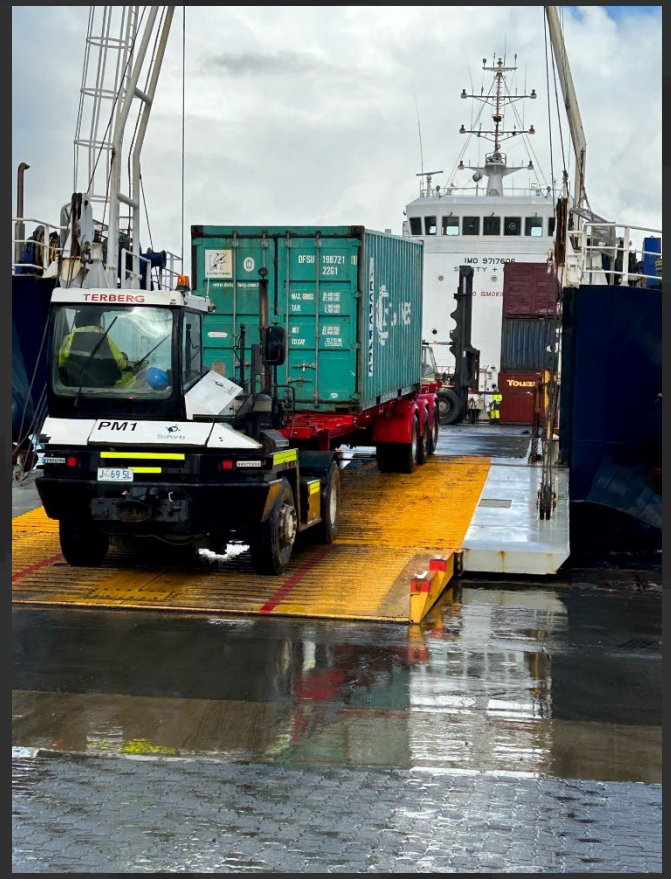
- Wolfram Bergbau und Hütten AG – a world leading supplier of tungsten powders and a subsidiary of the US$23 bn market cap Sandvik Group (STO: SAND)
- Traxys, a leading international physical commodity trader headquartered in Luxembourg, engaged in the sourcing, trading, marketing and distribution of non-ferrous metals, ferro-alloys, minerals and industrial raw materials
- Combined agreements accounted for c.59% of average annual forecast production over contracted period
- G6M will receive the APT price as published by commodity price reporting agency Fastmarkets, which is then multiplied by an assumed average payability factor of 76-78%, across current agreements and spot market forecasts
- Samples are being provided to other ammonium paratungstate producers to increase committed sales under offtake once production reaches steady state in H1 2024




**At current tungsten pricing, offtake agreements represent c<u>A$181 million</u> over 4 years**

# Tungsten Price

Price history

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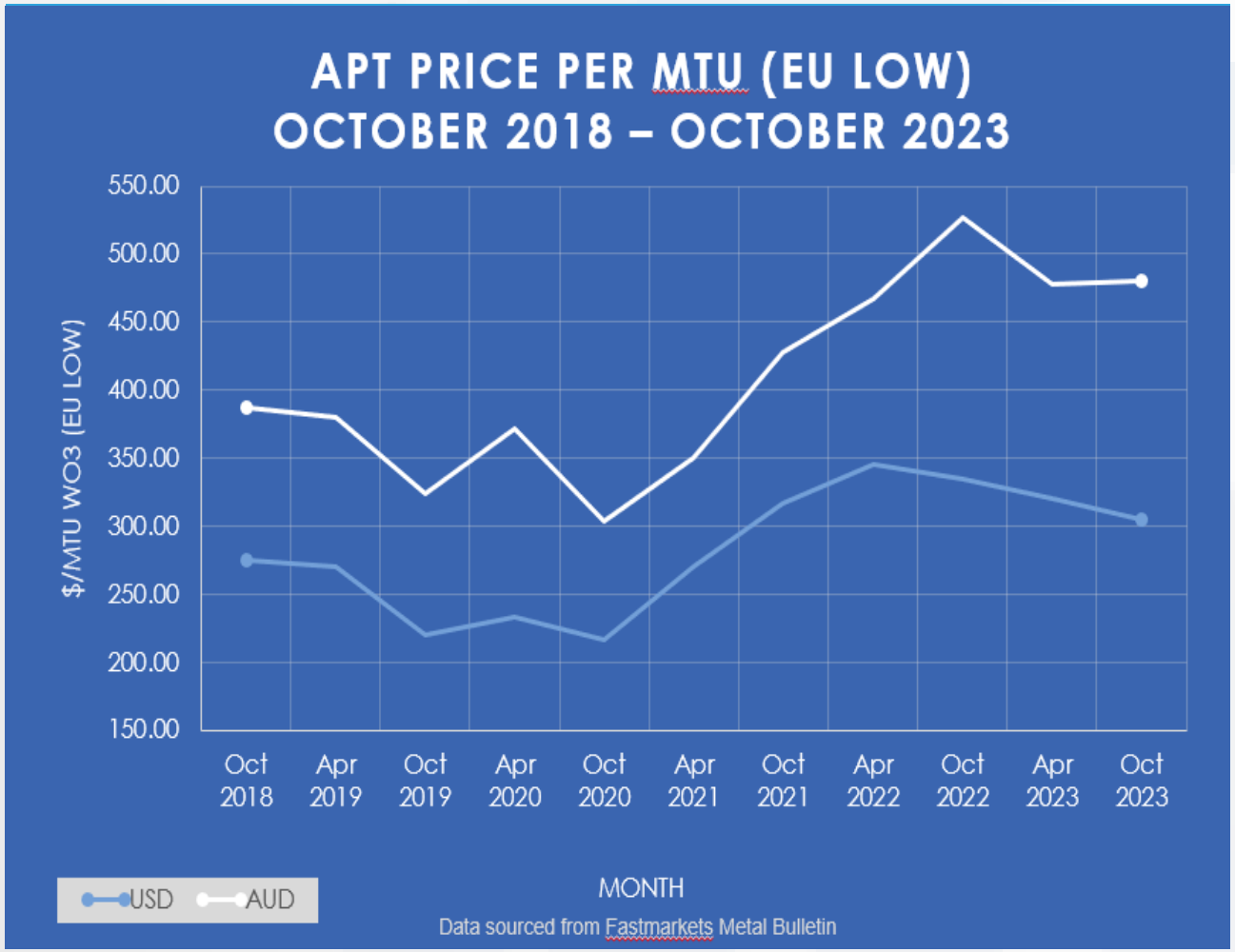
- Ammonium paratungstate (or APT) is a white crystalline material and is described as the most important raw material for all other tungsten products
- Tungsten concentrate pricing is referenced from the APT price published weekly by Fastmarkets, Argus and other market publications
- Prices have been steadily increasing since 2020 following the economic slowdown resulting from Covid-19
- The average cost of production for Chinese producers in 2023 is increasing due to global inflationary cost pressures and stricter regulatory requirements




Source: Fastmarkets Metal Bulletin – CIF Rotterdam.

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