



MT CARBINE BANKABLE FEASIBILITY STUDY

CHAPTER 2: STRATEGY AND MARKET ANALYSIS

DECEMBER 2021



Document History

REVISION	DATE	AUTHOR	CHANGE DESCRIPTION	APPROVED BY
A	01/12/2021	RM	Issued for Review	PJ
B	02/12/2021	RM	Issued for Approval	KM
0	08/12/2021	RM	Issued for Use	KM

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1. Introduction

1.1. Context

This Chapter 2: Strategy and Market Analysis shall be read in conjunction with Chapter 1: Executive Summary and additional references as listed in Section 7.

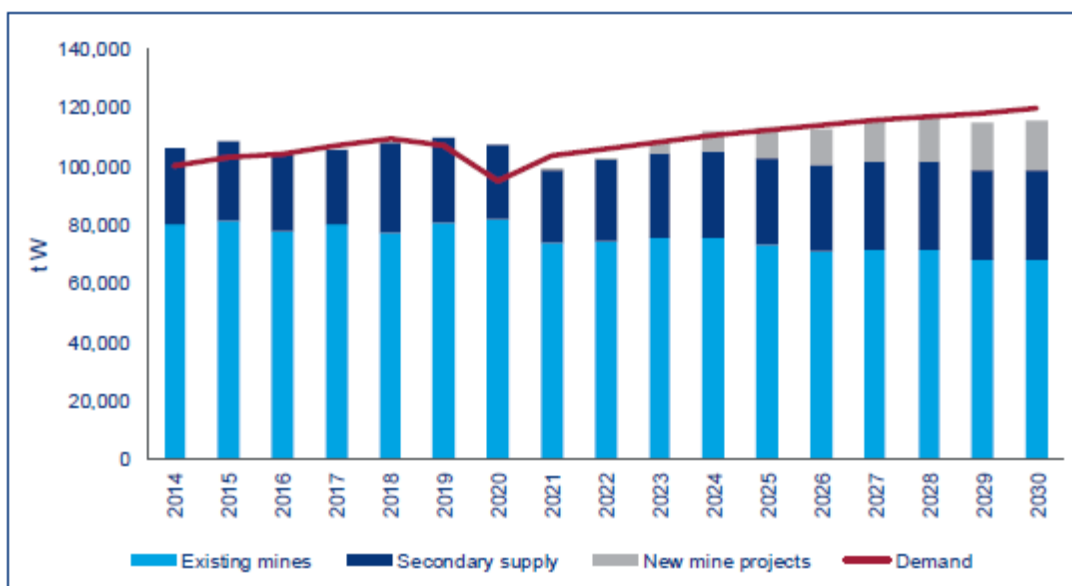
1.2. Purpose

The purpose of Chapter 2: Strategy and Market Analysis is to articulate the strategy underpinning the financial assumptions to market and sell the Mt Carbine tungsten concentrate. This chapter identifies the market opportunities with respect to the target product specifications, forecast product revenue and supply and demand analysis.

2. Strategy

2.1. Market History and Opportunities

The global tungsten market was in surplus in 2020 for the second successive year. This can be attributed to a sharp decline in demand in 2020, largely as a result of the impacts of the COVID-19 pandemic. Global consumption in 2020 fell by 11.3% year-on-year. Despite record mine output in 2020, primarily as a result of strong Chinese production, low availability of secondary material led to the lowest total supply levels since 2012. However, low total supply only partially offset the sharp decline in demand. Consumption fell to its lowest level since 2010 and far below total supply for the year. The surplus supply of 12.5 kt is the highest surplus level overhanging the market since 2013, when the now-defunct Fanya Metals Exchange was operational and tungsten prices were at record levels.



Source: Wood Mackenzie

Figure 1: Market Balance

While annual tungsten supply and demand has returned to surplus in recent years, it had been in deficit for several years after the collapse of the Fanya Metals Exchange. Prior to this the market had remained sufficiently supplied owing to the drawdown of stocks. In the 2013-2015 period there was substantial oversupply of tungsten into the market, which was linked to artificial demand from the Fanya Metals Exchange.

Further sources of material include company inventories, which are understood to be at relatively low levels in the upstream part of the tungsten supply chain (concentrates through to oxides) as of Q1 2021. However, inventories of metal powders, tungsten carbide and finished tungsten products are thought to be in the region of 10-15 kt, having been building steadily through 2020. An uptick in end-user markets such as automotive, aerospace and consumer electronics will be required to work through inventories. Roskill expects these markets to recover strongly in 2021.

With the exception of the ex-Fanya APT stockpile held by China Molybdenum Co Ltd (CMOC), there is little inventory in the upstream portion of the tungsten supply chain as of Q1 2021. Most industry stocks are thought to be in the form of tungsten metal, tungsten carbide and finished tungsten products, with much of this residing in China.

In addition to industry stocks, there are those held in government strategic stockpiles. Tungsten ores and concentrates held by US Defense National Stockpile Center (DNSC) were an important source of concentrates to US processors in 2017 and 2018, when global supply of ex-China concentrates was tight. Tungsten DNSC

concentrate sales were in the region of 1.2ktpa tungsten (W) in those years, effectively acting as a US mine source. With tightness returning in Q4 2020 and Q1 2021, DNSC stocks could return as an important source of concentrates in 2021. DNSC stocks were estimated to be 7.6 kt contained W at end-2020, and it is expected that this inventory will be eliminated by 2026. The other major government tungsten stockpile is held by China's State Reserve Bureau (SRB). The SRB is believed to hold concentrate inventories of more than 50 kt (25.7 kt contained W). These may well be held as a strategic reserve and are unlikely to be released to the market in normal circumstances.

A deficit of around 5.1kt W is expected in 2021, which may be partly met by CMOC's APT stocks, US DNSC concentrate stocks, and the drawdown of finished product inventories. The deficit is forecast to reduce and swing to a marginal surplus in 2023 as mine output from existing producers increases. Several large new Projects came online in 2019 and suffered delays to ramping up in 2020/2021 as a result of COVID-19. Further ramping up is set to continue through 2022 and will replace the fall in output from longer established mines. New mine Projects will be able to meet the market supply requirements through the middle of the 2020s but will begin to fall short towards the end of the forecast. By 2029 new mine supply may not cover demand which is again likely to underpin higher prices.

2.2. Supply Strategy

Mt Carbine is exceptionally well positioned to supply tungsten concentrates into the market after the successful completion of pilot operations, trials, optimisations and the recent drilling program, it now has the proven capability of producing tungsten from the resources at Mt Carbine on a low-cost basis.

Through site-based pilot-scale operations, focusing initially on the historic LGS, the aim was to prove the economic viability of mine waste retreatment by recovering industry-critical tungsten minerals. A geometallurgical approach to characterising mine waste materials was undertaken since it has significant benefits for evaluating and quantifying resource potential at historical sites. This was coupled to sensor-based particle sorting whose recent advancements in technologies made a significant step-change possible for the mining sector through the development and site-specific optimisation of a flexible and cost-efficient material handling and sorting solution.

In this pilot study, a multidisciplinary approach was chosen to transform waste materials with very low tungsten grades at Mt Carbine into a saleable concentrate and a benign waste stream suitable for industrial reuse. The workflow followed an iterative approach with optimisation based on responsive feedback loops separated out as follows:

- Site geological and geometallurgical characterisation, covering geological review of deposit physiology including ore deposit model, host rock and alteration mineralogy and mineralisation characteristics. This involved the detailed review of historical and modern mining operations at Mt Carbine, flow sheets and existing characterisation work from trenching and selected sampling.
- The installation of a TOMRA X-ray Transmission (XRT) Ore Sorter on site for the trial processing of large sample lots from the LGS (which is >12 Mt in total) through the sorter and allows for early, low-cost production at Mt Carbine.
- Geometallurgical characterisation of ore sorter concentrates to determine grade and nature of the material. Significant volumes were required to be rehandled to achieve industrial scale tungsten production and to get a detailed understanding of the mineralogy of the deposit to understand the suitability of XRT sorting for Mt Carbine. Specific work was undertaken on the grade by material size, as it is one of the most important factors in determining the optimal liberation characteristics for beneficial upgrade and downstream material handling for further beneficiation.

Ore sorting at Mt Carbine was key to the early restart and cashflow generation of the mine. The use of XRT sorting on the ore at Mt Carbine reduces the volume of non-mineralised material entering the downstream processing stream. This reduction positively impacts the economics of the Project and simultaneously reduces the capital footprint of the processing plant whilst producing a quarry aggregate product through the inert sorter waste products produced.

Through the site-based operations, the metallurgical response of the XRT and gravity processing for the ores trialled across variable feed characteristics tested positively, refined the process flow and proved viable economics of the Project.

2.3. EQR Business Framework

EQR is focusing on being a low-impact miner through the use of advanced technologies, re-using historical mine footprints and creating beneficial reuse through the final waste materials produced. Mt Carbine has both a mineralised stockpile on surface that is tungsten bearing as well as a historic open pit that has been defined to have an accessible high-grade ore body. The focus of EQR currently is on the Mt Carbine Project to maximise value from the resource, while minimising the Company's footprint and creating value for shareholders.

Following the results of the pilot campaign and ongoing test programs, the positive recovery of tungsten as a critical metal to Australia and several countries in the world, along with the positive outcome of this feasibility study, EQR has proven it is able to effectively recover tungsten, produce saleable concentrates on an ongoing basis using low-impact technologies while minimising its footprint. On top of this, the newly transformed waste materials have the capability of being used as quarry products, minimising EQR's footprint further, while creating a by-product revenue stream and additional value for shareholders and satisfying EQR's intention to work within the circular economy.

The Mt Carbine Project will benefit the wider minerals sector in Australia through alignment with the priority agenda of the Australian Government to expand its critical minerals industry and enhance the capabilities with regards to mine waste management and social licence to operate. EQR remains committed to responsible mining and sustainability with the aim to proactively minimise waste through reprocessing and innovative re-use of waste materials to generate a new, sustainable supply of (critical) minerals.

3. Product Specification and Market Value Assessment

A price assessment model was developed for the Mt Carbine WO_3 concentrate by using the current valid off-take contract the company has with CRONIMET Asia PTE (CRONIMET) as evidence of the baseline price for marketable concentrates from Mt Carbine. The concentrates from Mt Carbine have ranged in quality from 45%-60% WO_3 since the operation restarted in 2020. Since then, CRONIMET have purchased the product on an ex-gate basis and have sold to consumers in North America, Europe, and Asia. CRONIMET are completely responsible for the marketing of the concentrates produced until the satisfaction of the equivalent tungsten units from the LGS and historic tailings has been recovered and sold, in line with the joint venture agreement between the parties. Thereafter, EQR has the right, if they should so choose, to market their product through other off-takers.

The relationship with CRONIMET has been beneficial for the sale of the concentrates produced. Due to their extensive global network, some of the lower grade concentrates produced early in the operation were able to be placed with their customers.

Concentrates are priced on the basis of the past 30-day ammonium paratungstate (APT) pricing for the period in which it is sold, as well as considering a market conform payable (concentrate buyers apply a discount to the APT price, considering their own refining costs to convert the concentrate to APT). CRONIMET are responsible for handling all logistics from the Mt Carbine gate to final client with payment made to EQR on collection of the concentrate.

3.1. Resource Modelling

The exploration program carried out in 2021 sought to update the resource quality information and improve confidence in the data output that has been developed historically by previous management.

Measured Group Pty Ltd was engaged to reassess the historical data and update the quality values through a validation and normalisation process aligned to results from the 2021 exploration program. This new data set was then used to provide product specifications based on the feasibility study mining schedule. This normalisation process involved:

- Utilisation of the production schedule with weight averaged ore qualities to normalise the resource values to a predicted value;
- Evaluation of quality parameters and development of relationships and trends which were adjusted to an expected value; and
- Determination of zones that reflect mine production with similar ore qualities.

Through applying the normalisation process to the mine schedule output, trends can be generated which are considered to be the best estimate of production quality. Average quality has been generated for each block which has been used by the Project as an input for market price assessment. A plan has been implemented blending the open pit ore and the LGS ore to maintain a constant head grade to the processing plant that maintains a consistent feed grade to the processing plant for recovery.

More details on how the mine plan and blending strategy can be found in Chapter 4: Mining.

3.2. Market Value Assessment

EQR developed a market value model as a basis for revenue modelling for the Project. The model was informed by the current contractual elements that are in place for the sale of concentrate from the Mt Carbine site as well as considering end-user purchase prices as known to EQR.

Market value modelling was then developed to adjust the baseline reference prices to reflect the value of Mt Carbine products in the global market. The parameters selected for price adjustments were:

- Base Price: Calculated on a metric tonne unit (MTU) of WO₃ contained in a dry metric tonne delivered FCA Mt Carbine (INCOTERMS 2010);
- Index: London Metal Bulletin (LMB) European APT;
- Pricing: Low and High European APT averaged for the calendar month of delivery for the tungsten concentrate;
- APT payable: A floating payable is considered, covering the period under the fixed off-take contract with CRONIMET and for the period afterwards;
- Payment terms: 95% payment upon delivery of product and 5% balance payment upon final settlement based on weighing and assay results.

3.3. Product Specification

Based on the Off-take Agreement in place between CRONIMET Australia Pty Ltd, CRONIMET Asia Pte Ltd and Mt Carbine Retreatment Pty Ltd (a wholly owned subsidiary of EQR) in 2019, the specifications for tungsten concentrate are provided in Table 1. Further details of the ownership structure between EQR and CRONIMET are provided in Chapter 15: Ownership, Legal and Contractual.

Table 1: Tungsten Concentrate Specifications

Name of Element	Specification
WO ₃	50% min
S	1.5% max
Sn	0.50% max
Mo	0.40% max
Sb	1.0% max
As	0.15% max
H ₂ O	1.0% max
Radioactivity: ≤1,000 bq/kg	

These specifications are in line with the overall market requirements for tungsten concentrate and shall remain applicable on the new products being defined in the frame of this feasibility study.

It must be noted that unlike what was considered in the Off-take Agreement, the feasibility study is now considering two separate products, a scheelite concentrate, and a wolframite concentrate, with the later expected to be of suitable quality for further processing into ferrotungsten. The feasibility study is also including an arsenic removal circuit to ensure compliance with the arsenic specification.

This leads to additional, more stringent requirements applicable only on the wolframite product which are provided in Table 2.

Table 2: Wolframite Concentrate Specifications

Name of Element	Specification
Sn	0.30% max
Mo	0.30% max
P	0.05% max

4. Market Fundamentals

Market supply and demand forecasts in this section are based on data provided by Roskill, a subsidiary of Wood Mackenzie.

Disclaimer: “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”

4.1. Tungsten Concentrate

Most tungsten concentrate supply, and a large proportion of secondary tungsten, is converted into APT. APT production is estimated at 102.7 kt contained W in 2020, with the bulk of this produced by China. APT production is more concentrated than mine supply, with only a handful of major smelters active in the ex-China market. These include Global Tungsten & Powders (USA), Wolfram Bergbau und Huetten (Austria, owned by Sandvik), Masan Tungsten (Vietnam), H.C. Starck Tungsten Powders (Vietnam/Germany) and Pobedit (Russia).

Very little APT is consumed directly in end-use applications. Instead, it is used as feedstock for the production of other refined tungsten products, but mainly serves as feedstock for tungsten oxide – which itself is then converted to tungsten metal powder, and finally into tungsten carbide. Tungsten carbide is the main raw material used in cemented carbide tools. All major APT producers undertake further refining of tungsten, as higher margins are achieved further down the supply chain. Several of these are also directly or indirectly (i.e. through a parent company) involved in the production of finished tungsten products, such as tools.

The other major market for tungsten concentrates (and to a lesser extent, scrap) is in the production of ferrotungsten. Ferrotungsten is a master alloy used in the production of tungsten-containing steels, including tool steels such as high-speed steel. Raw materials used are high-grade ore or concentrates of wolframite or scheelite but artificial scheelite or soft scrap can also be used. Tungsten trioxide in these compounds can be reduced either carbothermically in electric arc furnaces or metallothermically with silicon and/or aluminium. A mixed carbothermic-silicothermic production method is also used. Commercial ferrotungsten contains 75-85% W.

Chinese production capacity for ferrotungsten is the largest in the world at an estimated 26 ktpa of contained W in 2020. However, overcapacity is high and utilisation in 2020 is estimated at only 18% (4.8kt contained W). The largest operation is Hunan Chuangda Vanadium Tungsten's plant at Wuji in Hunan province, with a nameplate capacity of 6.4 ktpa contained W. Besides China, the other two main ferrotungsten hubs are Russia (2.5 ktpa capacity) and Vietnam (2.7 ktpa capacity). Based on Russian trade statistics, around two-thirds of its ferrotungsten capacity was utilised in 2020. Global ferrotungsten output is estimated at 10 kt contained W in 2020 and is forecast to stay around this volume for the remainder of the forecast period.

4.2. Demand

Cemented carbides make up more than half of the first-use consumption of tungsten demand. Cemented carbides then form the major component of the top three end-use sectors: automotive, industrial, and mining and construction. Although cemented carbides will continue to make up the majority of first-use tungsten demand, the sector will be negatively affected by the rise of electric vehicles. These vehicles have fewer internal components and will therefore require less machining. A similar negative trend is occurring for tungsten mill products, which largely served to produce filaments for lamps. With these being substituted by LED lights, demand from this sector is waning. Overall, these negative effects will be offset by positive trends for steel alloys and chemicals. Steel alloys demand has recently declined due to large impact issues in the aerospace industry, but it is forecast that demand growth will return in the short term. Chemical usage will continue to be supported by ongoing growth in semiconductor production as well as through its role as a catalyst to reduce air pollution in coal power stations.

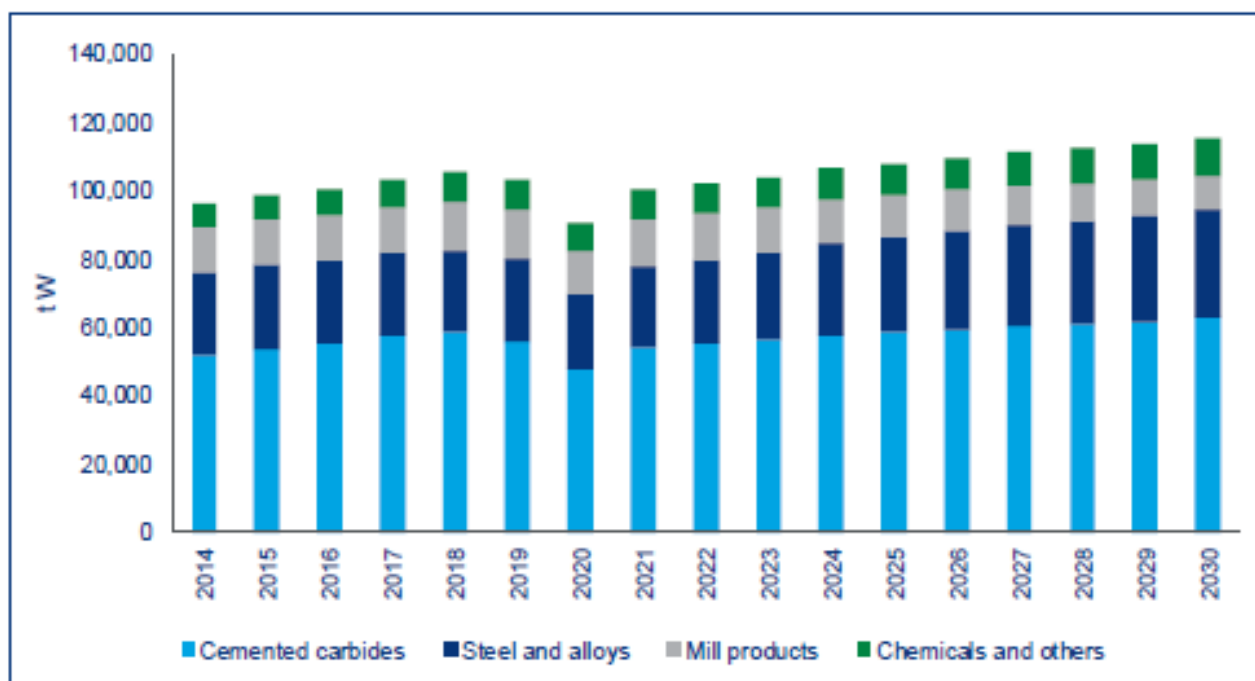
China is the major tungsten demand centre, accounting for just under half of global demand currently and for the remainder of the forecast. Europe and the US are the next largest demand regions, with both expected to grow demand over the coming decade.

4.2.1. First-use Demand

Cemented carbides are the largest first-use market for tungsten, accounting for 53% of tungsten consumption in 2020. Between 2014 and 2020, tungsten uses in this application fell by 1.3% compound annual growth rate (CAGR), to 48.0 kt contained W. The decline over the entire period comes after drops to consumption in 2019 and 2020. Cemented carbide consumption peaked in 2018 at 58.6 kt contained W. Cemented carbide tools are used across a wide range of manufacturing industries and their demand growth correlates closely to GDP, and major consumer markets such as automotive output.

The other leading first-uses for tungsten are steel and alloys (24% in 2020), mill products (such as tungsten wire for lamps; 14% in 2020), and chemicals (including catalysts, and tungsten hexafluoride) which is combined with other uses to account for the remaining consumption (9% in 2020). Steel and alloys consumption also experienced declining demand between 2014 and 2020. Demand had been relatively stable from 2014-2019, with a significant 11% drop in 2020 causing a decline in this demand sector of 1.7% CAGR over the entire period.

The decline in cemented carbide consumption, combined with declining steel and alloys consumption resulted in an overall decline in tungsten demand of 0.9% CAGR between 2014 and 2020. However, growth is forecast to return from 2021 as shown in Figure 4. Steel and alloys demand will grow at 3.9% CAGR from 2020 to 2030, increasing the sector's share of overall demand to 27%. Demand for cemented carbides will also rebound, with demand growth of 2.7% CAGR expected by 2030. Cemented carbides will also improve its share of overall demand, reaching 55% by 2030. This comes at the expense of mill products, which will be the only demand sector to continue its decline over the forecast period.



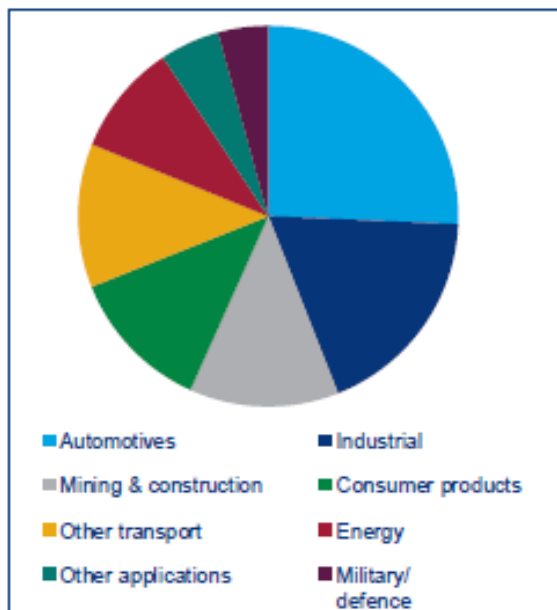
Source: Wood Mackenzie

Figure 2: First-use Consumption

4.2.2. End-use Demand

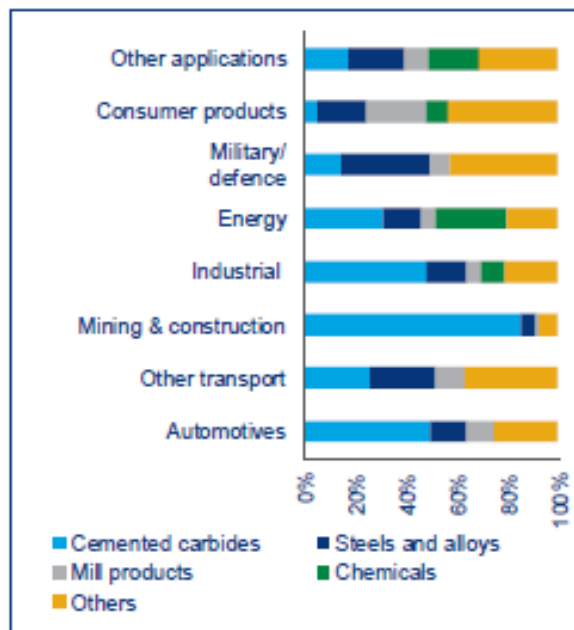
The consumption of tungsten by end-use in 2020 is illustrated in Figure 3. The automotive market was the largest end-use sector for tungsten in 2020 at 26% of the total, mainly in the form of cemented carbide tools for machining vehicle components. Industrial applications were the next largest segment at 18%.

Other transport, mining & construction, and consumer goods combine to form 37% of demand, each consumed around 11-12 kt W in 2020, although with a marked difference in the type of tungsten product used. Consumer goods, for example, consumed tungsten mainly in the form of mill products. This reflects the importance of residential users in the lamp and electrical contacts sectors. Figure 4 shows additional detail of the proportion of first-use products in each end-use demand sector for 2020.



Source: Wood Mackenzie

Figure 3: End-use Sector Consumption (2020)

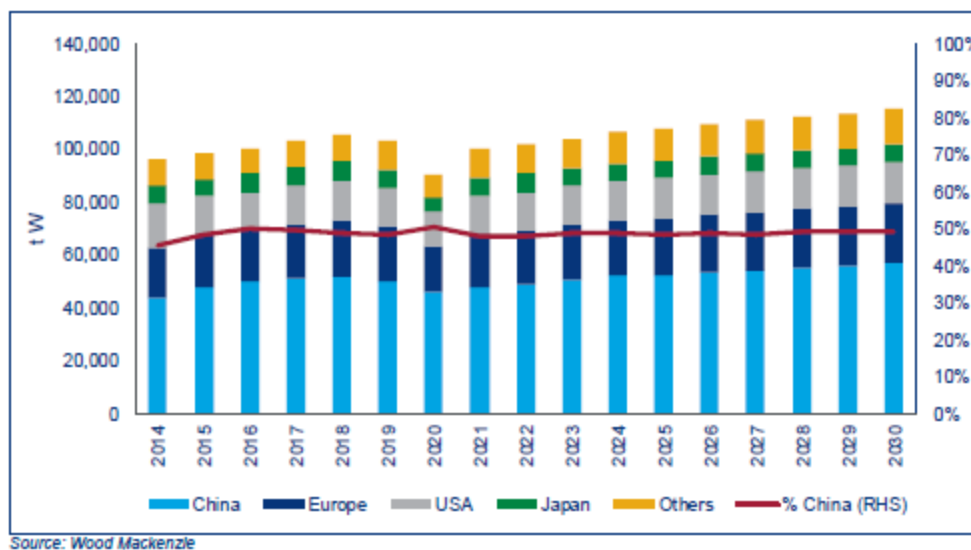


Source: Wood Mackenzie

Figure 4: First-use Product Consumption by Sector

4.2.3. Demand by Region

Global demand has been dominated by China in recent years. From 2014-2020, China accounted for just under half of global demand in most years except for 2017 and 2020 where demand surpassed 50% by a small margin. For the period 2021-2030 China is expected to maintain its dominant position with around 49% of global demand in each year. Other major demand centers are Europe (19% of global demand in 2020), United States (14% of global demand in 2020), and Japan (6% of global demand in 2020). The demand per region is shown in Figure 5.



Source: Wood Mackenzie

Figure 5: Demand by Region

4.3. Supply

Most tungsten is mined as a primary or co-product metal, and in lower volumes as a by-product. In skarn-type deposits it is commonly associated with molybdenum, and in hydrothermal veins with tin. To a certain extent its production is linked to market conditions for molybdenum, particularly in China where some of the largest operations produce molybdenum as the primary product or as a co-product. CMOC operates the Sandaozhuang molybdenum-tungsten mine in Henan, which accounted for just over 10% of global tungsten mine output in 2020.

World mine production has remained relatively stable across this period between 2014 and 2020, with moderate drops in 2016 and 2018. The period between 2014 and 2020 marks substantially higher annual production than across earlier years. This was initially supported by a period of historically high APT prices, which themselves were at least partially driven by the failed Fanya Metal Exchange in Kunming, China, which traded APT. While Chinese tungsten consumption increased strongly over this period, Fanya also incentivised higher production of tungsten, leading to the build-up of large concentrates and APT stockpiles. After its collapse in mid-2015 the scale of the Fanya stocks became apparent when the Kunming police seized some 70kt of various metals, including nearly 30 kt of APT (21 kt contained W). The Fanya stockpiles were purchased by CMOC via a public auction in September 2019.

In 2016 tungsten prices declined following the build-up of large inventories in both concentrates and APT. Low prices led to falling concentrates production, which dropped to 78 kt in 2016. However, stronger demand in 2017 saw mine output again increase to 80 kt. Prices also recovered, but despite these positive market conditions mine supply in 2018 fell to 77.1 kt W as a result of widespread environmental inspections in China, leading to the mothballing and (in some instances) closure of non-compliant mine operations.

Mine supply in 2019 recovered as a result of strong output from Chinese mines, despite reduced demand, depleting mine grades in Russia and Vietnam, and the mothballing or closure of other assets (Mongolia and the UK). In 2020, mine supply has risen again to historic highs, despite the impacts of COVID-19. Chinese output is again the principal contributor to this, with record production levels. Much of this increase to Chinese output is estimated to have been driven by strong tungsten by-product production, with many tungsten-only focused mines suffering from depleting grades.

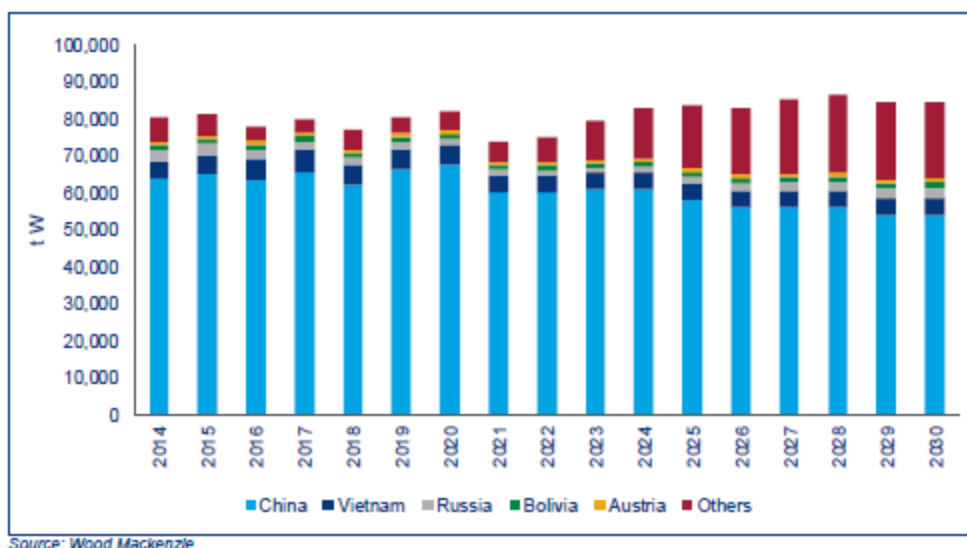


Figure 6: Global mine production

In 2014, production of concentrates outside China accounted for 20% of global supply, which by 2019 had dropped to 17%. In recent years Vietnam has become an increasingly important supplier, albeit for domestic consumption, following the start-up of the Nui Phao operation in 2014. It is now the second-largest producer globally, accounting for 5.4kt W in 2020. Other important non-Chinese tungsten producers include Russia, Bolivia, North Korea, Spain and Portugal.

4.4. Cost Curve Analysis

The Mt Carbine Tailings Retreatment Project came online in late 2019 and with the mine expected to commence operations in 2023. The mine is a low cost operation, with total cash costs (including royalties, but excluding potential by-product sale of processing waste through the quarry) well below global average. It is also forecasted to be one of the lowest cost “tungsten-only” producing mine, with most of the first quartile suppliers producing tungsten as a by-product of another metal, which is particularly notable for the first two producers which are reporting a negative production cost for their tungsten.

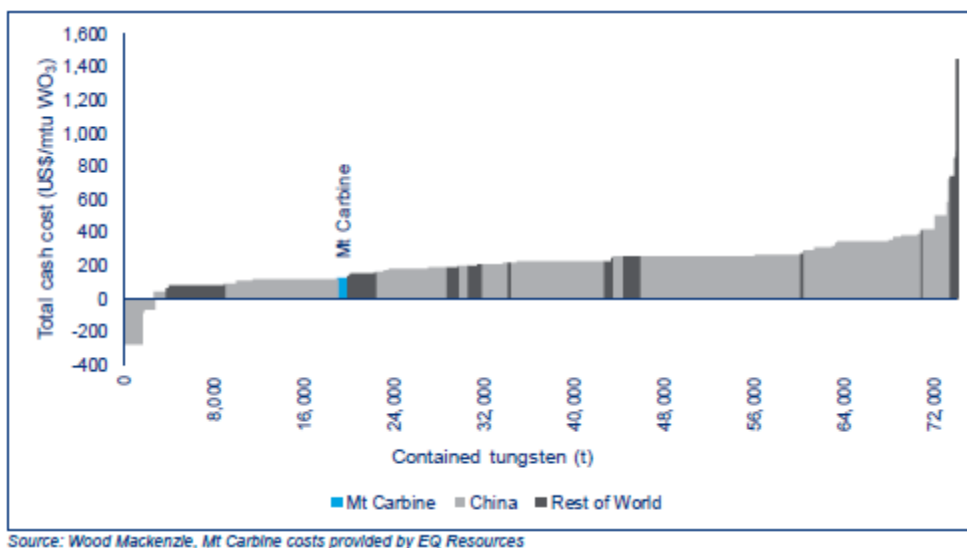


Figure 7: Total Cash Cost Curve - 2020

It must be noted from the above cash cost curve that in order to sustain the growing demand, and despite the new projects expected to come online over the coming years, prices will have to remain at levels which incentivises production of the third, and even likely the fourth quartile suppliers, which will in addition face in future higher costs due to falling ore grades. For Mt Carbine, this guarantees that its production cost will be well covered, and that significant margin shall be generated.

5. Pricing Basis and Forecast

The following revenue assumptions have been utilised for investment evaluation purposes to fully explore the range of revenue possibilities for the Project:

- WO₃ APT Price USD = 31,500
- APT payable = 70-75%
- Concentrate grade = 50%
- AUD / USD rate: 0.73

The basis for the price assumptions based on historical, current and forecast data is supplied below.

5.1. Tungsten Concentrate

Tungsten mineral concentrate prices are predominantly based on a discounted APT price, and thus followed similar trends to prices for APT between 2014 and 2018.

Prices for tungsten concentrates have broadly followed the same trend as APT in recent years, although since 2015 the premium of APT over concentrates has reduced. This is believed to be because availability of concentrates has become tighter, particularly in the ex-China market. In 2018, the premium widened again, suggesting adequate supply of feedstocks – in this case, likely representing greater volumes of scrap onto the market. In 2019 and 2020, the premium of APT over concentrates once again generally reduced, with some temporary upticks, as availability of concentrates tightened once more in tandem with falling mine production. Historical pricing for WO₃ concentrate is provided in Figure 8.



Source: Wood Mackenzie

Figure 8: Chinese Tungsten Concentrate Prices

5.2. Forecast APT Prices

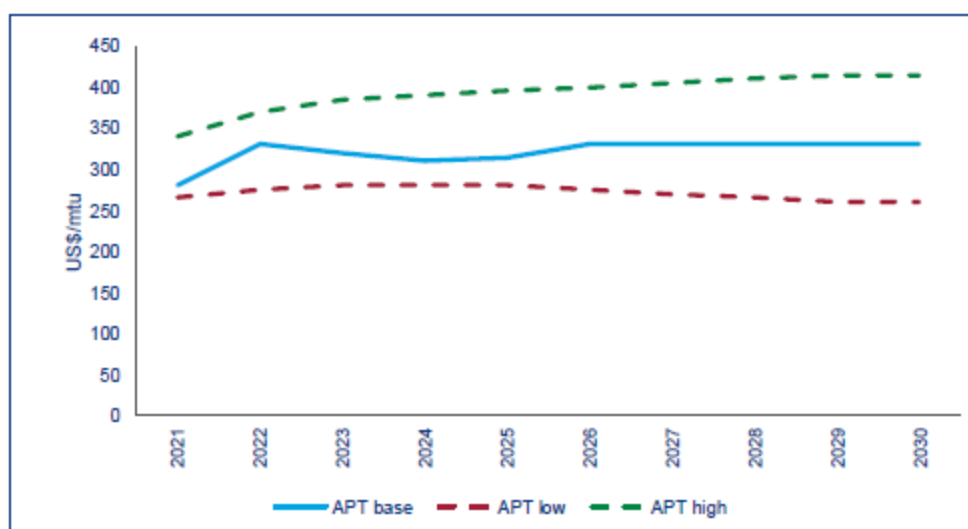
The range of factors contributing to APT prices means that forecasts for future prices are best examined under several scenarios. In the base case scenario, it is assumed that a deficit does occur in the early 2020s, as demand recovers and spikes after several years of decline, but that this is partly offset by either the continuation of CMOC's release of the Fanya APT stocks, by consumption of existing finished product inventories, or by new mine supply ramping up earlier than expected. As new mine projects come online however, the market is likely to move into balance during the mid-2020s. Towards the end of the forecast period, new mine supply may not cover demand, likely providing an upside driver to prices.

There is a risk that demand does not perform as well as expected and forecast deficits may not arise, leading to a surplus supply/demand balance in the early part of the outlook period. This would likely return prices to within the US\$200-250/mtu range, which has typically been observed during periods of oversupply. However, it should be noted that many (mainly Chinese) established mines are facing higher costs due to falling ore grades, and hence future prices will need to be at a level that incentivises their production. It is likely that CMOG will continue to release its ex-Fanya APT stock into the market in a controlled manner should deficits arise. This would need to be handled with care to avoid a large downwards price adjustment.

In the low-case scenario, a combination of factors may weigh down on the sector – such as the impacts of the COVID-19 pandemic leading to a sustained period of suppressed tungsten demand, a negative resolution to the US-China trade talks, or a higher penetration rate of electric vehicles than forecasted. New mine projects could also contribute to lower prices if more are successfully brought online than the market can sustain.

By contrast, the high-case scenario sees a deficit occurring in the early 2020s, which is not alleviated quickly enough by stocks or new mine projects. Furthermore, the high-case scenario makes a provision for Chinese environmental inspections occurring again in 2021-2022 when the market is already in a deficit. Prices would rise rapidly under these conditions, potentially exceeding US\$370/mtu in 2022. If mine projects are not ramped up as quickly as forecast, this could potentially see prices gain to US\$385/mtu in 2023. This would, however, likely incentivise new production or greater scrap use, leading to a correction in the price in the mid-2020s.

The APT price forecast is shown in Figure 9.



Source: Wood Mackenzie

Figure 9: APT Price Forecasts

Note on Tungsten Concentrate Price Forecast

In consideration to the above-mentioned APT price forecast, it must be noted that the above discussed prices are all expressed in \$/mtu in APT, where typically tungsten concentrate sells for about 75-77% of the APT price on a cost, insurance and freight (CIF) basis. This payable factor varies with the product quality (WO₃ grade, but mostly impurities' levels), and its delivery term.

Given the range shown above, applying a 70-75% payable factor on the APT price forecast in the financial model has been deemed to be fair assumption of the tungsten concentrate price forecast.

5.3. Foreign Exchange

Various sources have been considered in arriving at the foreign exchange (FX) rate of 1 AUD = 0.73 USD, with the KPMG economic forecasts (dated October 2021 and shown below) ultimately used as the key source, due to the extensive amount of brokers/ contributors.

The exchange rates below are nominal therefore should be divided by the cumulative inflation to arrive at real FX rates. It can be seen below that the median nominal rate is around 0.77, with a real FX rate of 0.73 deemed as an appropriate rate for the modelling (as dividing by inflation results in a FX rate lower than 0.73).

AUD:USD exchange rate (Nominal)

Year ended 31 December	Reporting date	2021	2022	2023	2024	2025	LT (2021)
Contributor 1	25-Oct-21	0.77	0.71	0.71	0.77	0.77	n/a
Contributor 3	14-Oct-21	0.75	0.74	0.75	0.77	0.79	n/a
Contributor 5	12-Oct-21	0.76	0.76	0.76	0.75	0.74	0.74
Contributor 6	12-Oct-21	0.76	0.77	0.79	0.77	n/a	n/a
Contributor 7	8-Oct-21	0.75	0.72	0.72	n/a	n/a	0.72
Contributor 9	5-Oct-21	0.75	0.73	0.73	n/a	n/a	n/a
Contributor 10	5-Oct-21	0.75	0.72	0.72	0.73	0.74	0.75
Contributor 11	3-Oct-21	0.76	0.75	0.75	n/a	n/a	0.75
Contributor 13	24-Sep-21	0.74	0.70	n/a	n/a	n/a	n/a
Contributor 14	30-Sep-21	0.76	0.73	0.73	n/a	n/a	0.74
Contributor 15	29-Sep-21	0.77	0.75	0.75	0.75	0.75	0.75
Contributor 16	28-Sep-21	0.76	0.75	0.75	n/a	n/a	n/a
Contributor 17	28-Sep-21	0.75	0.75	0.75	0.75	0.75	0.75
Contributor 18	28-Sep-21	0.76	0.75	0.75	0.74	0.73	0.72
Contributor 19	28-Sep-21	0.76	0.74	0.74	0.74	0.75	0.75
Contributor 20	21-Sep-21	0.75	0.76	0.75	n/a	n/a	n/a
Contributor 21	20-Sep-21	0.80	0.87	0.88	0.88	n/a	0.88
Contributor 22	16-Sep-21	0.75	0.74	0.74	n/a	n/a	0.74
Low		0.74	0.70	0.71	0.73	0.73	0.72
High		0.80	0.87	0.88	0.88	0.79	0.88
Average		0.76	0.75	0.75	0.76	0.75	0.75
Median		0.76	0.75	0.75	0.75	0.75	0.75
Previous bulletin (Jun/Jul21)							
Average		0.77	0.78	0.78	0.78	0.77	0.76
Median		0.77	0.77	0.77	0.77	0.76	0.75

Figure 10: Forecast AUD:USD Exchange Rate (Nominal)

Source: Thomson Research, the Contributors, KPMG Analysis; <https://assets.kpmg/content/dam/kpmg/au/pdf/2021/coal-price-fx-market-forecast-september-october-2021.pdf>

Further information around the financial assumptions utilised in the feasibility study can be found in Chapter 16: Investment Evaluation.

6. Customers

Currently CRONIMET is the sole off-taker for the Project from the rights secured through early investment into the Mt Carbine Project. Since the start of the Project, concentrate has been sold to customers in Europe, the United States, Vietnam, and China.

While CRONIMET will retain a portion of the off-take at least equivalent to the existing deliveries, new off-takers might be considered as strategic project partners.

In addition, it has to be noted that CRONIMET has also a specific interest in off-taking part of the wolframite concentrate for its “in-house” conversion into ferrotungsten, which shall then be marketed to its existing steel clients.

Going forward, should CRONIMET no longer wish to trade the concentrates from the Mt Carbine operation, several other large commodity trading companies have verbally expressed interest in the concentrate being produced at Mt Carbine and therefore could be engaged if required.

7. References

- Chapter 1: Executive Summary
- Chapter 4: Mining
- Chapter 15: Ownership, Legal and Contractual
- Chapter 16: Investment Evaluation
- KPMG Coal Price and FX Market Forecasts September/October 2021
(<https://assets.kpmg/content/dam/kpmg/au/pdf/2021/coal-price-fx-market-forecast-september-october-2021.pdf>)

8. List of Abbreviations

Abbreviation	Description
APT	Ammonium paratungstate
CAGR	Compound annual growth rate
CIF	Cost, insurance and freight
CMOC	China Molybdenum Co Ltd
CRONIMET	CRONIMET Asia PTE
DNSC	US Defense National Stockpile Center
EQR	EQ Resources Limited
FX	Foreign exchange
LGS	Low grade ore stockpile
LMB	London Metal Bulletin
MTU	Metric tonne unit - one mtu equates to 10kg. The term is used as the pricing basis for APT
W	Tungsten

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