



MT CARBINE BANKABLE FEASIBILITY STUDY

CHAPTER 16: INVESTMENT EVALUATION

DECEMBER 2021



Document History

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CONTENTS

1.	INTRODUCTION.....	4
1.1.	Context	4
1.2.	Purpose	4
2.	SUMMARY	5
3.	INVESTMENT EVALUATION INTRODUCTION.....	6
3.1.	Project Overview	6
3.2.	Financial Analysis	7
4.	CAPITAL EXPENDITURE	9
5.	OPERATING EXPENDITURE	10
6.	VALUATION	12
6.1.	Results	12
6.2.	Methodology.....	12
6.3.	Foreign Exchange Assumptions	13
6.4.	Exclusions	14
7.	PROJECT EVALUATION.....	15
8.	SENSITIVITY ANALYSIS	17
8.1.	Methodology.....	17
8.2.	NPV Sensitivity.....	17
8.3.	IRR Sensitivity	18
8.4.	Breakeven Analysis.....	19
9.	RISK AND OPPORTUNITIES	19
10.	TAXATION	21
10.1.	General.....	21
11.	REFERENCES.....	22
12.	LIST OF ABBREVIATIONS.....	23

LIST OF TABLES

Table 1: Financial Model Key Outputs.....	5
Table 2: WBS Level 1 Capital Cost Summary.....	9
Table 3: Operating Costs.....	10
Table 4: LOM Operating Costs.....	11
Table 5: Financial Model Key Outputs.....	12
Table 6: Key Financial Model Assumptions.....	12
Table 7: Pre-tax Cash Flow	15
Table 8: Mining Physicals, Income Statement and NPV	16
Table 9: Breakeven Analysis	19



LIST OF FIGURES

Figure 1: European APT Price Forecast (Roskill) 8

Figure 2: AUD:USD Exchange Rate Nominal 14

Figure 3: Sensitivity of the NPV to Changes in Key Assumptions 18

Figure 4: Sensitivity of the IRR to Changes in Key Assumptions..... 18

1. Introduction

1.1. Context

This Chapter 16: Investment Evaluation shall be read in conjunction with Chapter 1: Executive Summary and additional references as listed in Section 11.

1.2. Purpose

The purpose of Chapter 16: Investment Evaluation is to summarise the financial methodology and inputs into a financial model that was used to determine the economic robustness of the Project. The output from the financial evaluation and the Project's sensitivity to external factors is also detailed.

2. Summary

Investment evaluation of the Project has been undertaken to support EQR in the determination of the viability of the Mt Carbine Upgrade Project.

The overall valuation has been completed to the standard required by EQR to put forward the business case for an investment approval request and support the necessary project financing required to deliver the project.

A financial model for evaluating the Project has been created by Rock Financial Advisory (Rock), where the key outputs examined are net present value (NPV) and internal rate of return (IRR).

The financial model was created using the operational inputs from DAS Mining Solutions (DAS) received 8 December 2021, being:

- Case Number 15; and
- Name: "2% HG, 6Mtpa extraction limit, \$31,500 price, no capital".

The sheet "DAS" was exported from mining software, COMET, and thus all inputs were completely hardcoded. Rock has added formulae to identify the calculations behind the key operating costs.

The DAS mining inputs did not include capex, or owner's costs (regarding equipment financing), or tax, thus those and other financial calculations have been added in the financial model for completeness.

The financial model reflects only the activity in this feasibility study, and does not include any underground mining which there is potential for as set out in Chapter 17: Forward Work.

The key outputs from the financial model are summarised in Table 1.

Table 1: Financial Model Key Outputs

Item	Financial Model Output
NPV	\$131.52 million (CAPEX included, pre-tax and ungeared) 8% discount rate
IRR	154%

3. Investment Evaluation Introduction

3.1. Project Overview

The Mt Carbine Tungsten Project (the Project) is expected to generate discounted cash flows totalling \$131.52m based on a discount rate of 8% (pre-tax), before considerations for project financing. The pre-tax, ungeared IRR of the Project is expected to be 154% with payback in early 2024.

This analysis has been based on the following assumptions:

- Mining method which operates open cut mining and low-grade stockpile mining;
- Average of 2,223 tpa of minimum 50% WO₃ concentrate sold on a FCA basis;
- Capital costs of \$21.4M (real) (\$22.9M including contingency);
- Tungsten concentrate production has an estimated C1 Cash Cost of A\$155/mtu (US\$113/mtu) (real) steady state life of mine;
- Mining Costs broken down as follows:
 - Mining costs of \$4.50/ ROM t (real), for mining of the open pit by a contractor;
 - LGS Mining for 24/hr operations at \$2.47/t;
 - LGS Mining for 12/hr operations at \$1.68/t;
- Mine closure and ancillary equipment at \$0.20/t;
- Dry processing costs of \$2.00/t (real) based on estimates provided as detailed in Chapter 13: Operating Cost Estimate;
- Ore sorting costs of A\$1.06/t to ore sorters (real) based on estimates provided as detailed in Chapter 13: Operating Cost Estimate;
- Gravity processing plant costs of \$11.00/t of feed (real) based on estimates provided in Chapter 13: Operating Cost Estimate with \$0.34/t for tailings management;
- Other costs of \$1.98/t (real) based on internal estimates, lease vehicles, grade control, sampling, drilling and lab testing, contractor mobilisation to site, maintenance facility cost and contractor demobilisation;
- Logistics and marketing costs are for the CRONIMET account and are reflected in the APT payable received for concentrates sold from the Project;
- Royalty costs of 2.7% of revenue based on current Government legislation;
- There are no private royalty costs associated with the project;
- Concentrate production with a minimum of 50% WO₃, within product specifications;
- Tungsten European APT price averaging US\$315/mtu or \$31,500/t;
- APT payable = 70-75%;
- AUD / USD FX rate: 0.73:1;
- 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; and
- Payment terms: 95% payment upon delivery of product and 5% balance payment upon final settlement based on weighing and assay results.

3.2. Financial Analysis

The Project Base Case is premised on a stand-alone project with a mine life of approximately 12 years. EQR will design, construct, finance and manage the project. The open cut mining is expected to be operated via a mining contractor who will provide all mining equipment and use the Company's mining fleet as suitable. The dry and wet processing plants will be operated by the Company and will be a scale-up of ongoing operations with general site infrastructure being upgraded as required. Capital costs for the project will therefore be limited with ample capacity to support a feed processing rate of 1 Mtpa, split between the LGS and the open cut mining operations.

The project is currently operating and going through the early works expansion to increase production outputs, FY2022, is planned to produce 1,203t of concentrate, with the next three years producing between 3,016 to 8,008 million tonnes, before reducing to an average of 1,176 tonnes of concentrate produced yearly for the remainder of the project.

The operation will require initial development capital of \$22.9M (including contingency, real basis) to complete all design, civil works and infrastructure to expand operations from the LGS to the proposed open pit. Ongoing maintenance costs are included and well understood due to the current operational capacity of the Project.

Revenue for the sale of product uses an average \$315/mtu APT price. Roskill 2021-2030 APT base pricing average is US\$320.5, APT low average is US\$271/mtu and APT high average is US\$392.5/mtu. All concentrate produced from the mine will be quality tested before export, with ongoing monthly concentrate sales giving confidence to the Project's capability to continue delivering concentrate within export requirements.

Operating costs are inclusive of all activities required to excavate, dry process and wet process tungsten ore through to tungsten concentrate and prepare the concentrate for sale FCA Mt Carbine. This includes all maintenance activity for infrastructure and support facilities. It also includes all management costs for both site operations and corporate allocation of overheads.

All open cut mining operations will be contracted.

All costs for the open cut mining operations, excluding costs for electricity and water are the responsibility of the contractor. The contractor will operate their own mining fleet / equipment with EQR responsible for quality and grade control of the ore. Rates for ore and waste mining have been included in the contractor rate quoted including the full maintenance cost to maintain contractor plant & equipment.

Overhead costs including a team to manage/oversee the required contractors based on current and future planned staffing levels are included in the Project financial model.

Depreciation (non-cash) expenses for each aggregated capital item is calculated using a straight-line methodology for the financial evaluation given the short life of the project.

The financial model includes estimates for corporate government taxes. The standard Australian Corporate tax rate has been applied in the years where a taxable profit exists. Prior year tax losses are accumulated and used to offset tax payments in future years.

Project revenue forecasts are subjected to foreign currency rate exposure, with market APT prices in USD. The financial analysis assumes a rate of AUD/USD 0.73:1 for the life of the project.

3.2.1. Pricing Assumptions

Pricing forecasts were sourced from Wood Mackenzie/Roskill, using the report prepared for EQR in October 2021 as part of this feasibility study titled "Tungsten Market and Price Outlook Study" and discounting the base

case slightly from a 10-year average of US\$320/mtu to \$US315/mtu as a straight-line price for the financial evaluation.

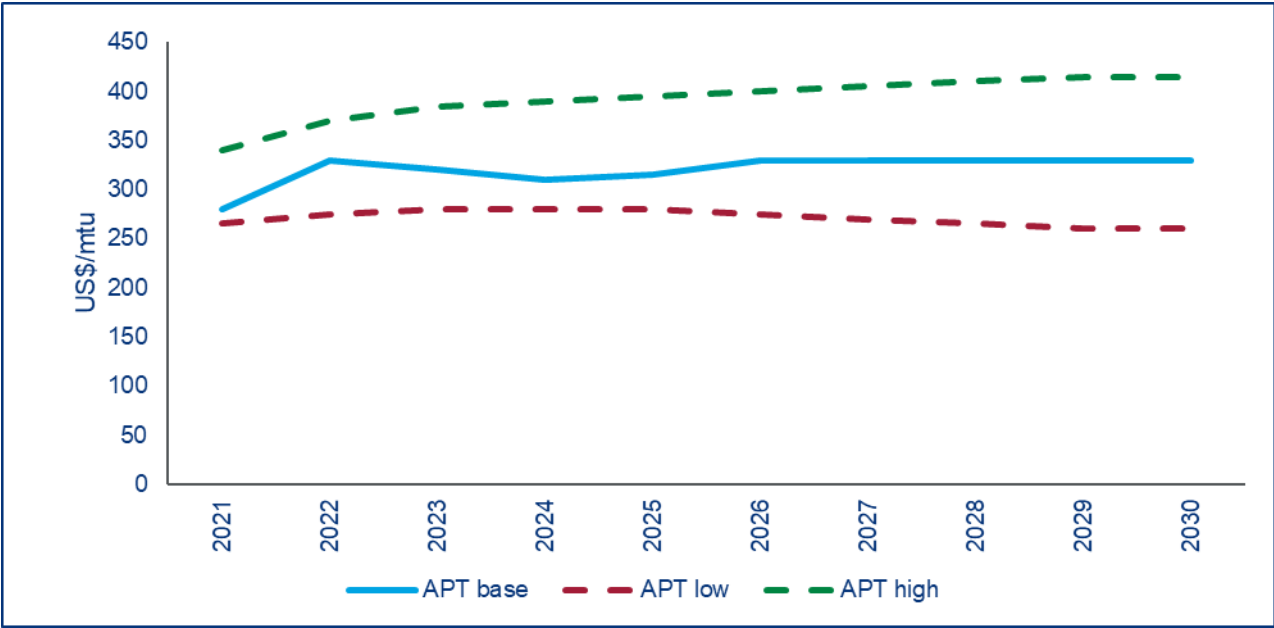


Figure 1: European APT Price Forecast (Roskill)

4. Capital Expenditure

The estimated initial capital expenditure, for the Project, is \$22.9M (incl contingency) and summarised below. The detailed figures for the capital expenditure can be found in Chapter 12.

There is no price escalation included in these amounts, as the intent is to keep numbers in real dollars as of November 2021

Table 2: WBS Level 1 Capital Cost Summary

WBS	Description	Cost (AUD)	Timing of Spend
10000	Mining	2,431,000	Over February to September 2022
20000	Processing	14,527,258	Over February to September 2022
30000	On-site Infrastructure	1,235,188	Over February to September 2022
70000	Project Indirects	1,443,460	Over February to September 2022
80000	Owner's Costs	1,804,123	Over February to September 2022
90000	Contingency	1,516,591	Over February to September 2022
	Total	22,957,620	All in 2022

The total capex of \$22.957M includes \$2.34M that has already been spent in November and December 2021, thus the remainder of the \$20.617m can be seen in the financial model starting from January 2022.

5. Operating Expenditure

The key operating costs are presented below with the detailed operating costs able to be found in Chapter 13:

There is no:

- contingency included in these amounts, as the Project is already an operating mine and therefore has a strong understanding already of these capital costs; and
- price escalation included in these amounts, as the intent is to keep numbers in real dollars as of November 2021.

The operating costs are summarised in Table 3 with LOM operating costs detailed in Table 4.

Table 3: Operating Costs

Cost Item	(A) Base Quantity (Mt)	(B) Multiplied by Unit Cost (AUD)	(A*B) = LOM cost in AUD\$ Million
Lab costs, geology sampling, grade control this is a fixed cost- not variable	N/A	N/A	29
OC Mining cost - Phase 3B	0.8	4.50/t of ore mined from PhaseOC3B	3.61
OC Mining cost - Phase 4B	14.2	4.50/t of ore mined from PhaseOC4B	64.23
LGS Mining cost - LGS1	4.4	1.68/t	7.5
LGS Mining cost - LGS2	5.6	1.68/t	9.68
Dry Processing cost	11.3	2.00/ t of Open Pit Ore	22.76
Ore Sorting Cost	7.3	1.06/ t of Ore Sorter Feed	7.71
Gravity Processing Plant cost	4.7	11/ t of Gravity Plant Feed	52.51
Tailings cost	4.7	0.34/ t of Gravity Plant Tailing	1.61
Rehabilitation & closure cost	15.0	0.20/ t of OC Mining	3.02
FEL cost	17.9	0.84/ t of FEL Material Movement	15.11
Ancillary Cost	15.0	0.06/ t of OC Mining	0.9

Table 4: LOM Operating Costs

Year ending 31 Dec			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034														
131.522560	Month for NPV	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27	30-Jun-28	30-Jun-29	30-Jun-30	30-Jun-31	30-Jun-32	30-Jun-33	30-Jun-34															
	Applicable FX	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300															
	LOM total	Annual totals																											
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13															
State Govt Royalty cost: Cash Flow Total (\$M)	-	11.4792	-	11,479,177	-	490,491	-	1,265,191	-	2,115,647	-	3,498,861	-	547,616	-	526,106	-	520,051	-	525,526	-	525,526	-	525,526	-	413,109	-		
Addiitonal Opex: lab costs, geology sampling, grade control	-	29.9638	-	29,963,829	-	1,968,700	-	3,821,500	-	3,464,500	-	3,629,500	-	2,411,500	-	2,161,500	-	2,161,500	-	2,161,500	-	2,161,500	-	2,161,500	-	1,699,129	-		
OC Mining cost - Phase 3B: Cash Flow Total (\$M)	-	3.6111	-	3,611,103	-	-	-	3,542,934	-	68,168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
OC Mining cost - Phase 4B: Cash Flow Total (\$M)	-	64.2299	-	64,229,908	-	-	-	20,051,399	-	24,905,895	-	19,207,940	-	64,674	-	-	-	-	-	-	-	-	-	-	-	-			
LGS Mining cost - LGS1: Cash Flow Total (\$M)	-	7.5425	-	7,542,498	-	1,680,000	-	1,260,000	-	756,000	-	252,000	-	1,680,000	-	1,680,000	-	234,498	-	-	-	-	-	-	-	-			
LGS Mining cost - LGS2: Cash Flow Total (\$M)	-	9.4686	-	9,468,628	-	-	-	-	-	-	-	-	-	-	-	1,428,000	-	1,680,000	-	1,680,000	-	1,680,000	-	1,680,000	-	1,320,628	-		
Dry Processing cost: Cash Flow Total (\$M)	-	22.7690	-	22,769,036	-	2,000,000	-	1,897,234	-	1,741,275	-	1,566,516	-	2,012,212	-	2,000,457	-	1,979,165	-	2,000,000	-	2,000,000	-	2,000,000	-	1,572,176	-		
Ore Sorting cost: Cash Flow Total (\$M)	-	7.7149	-	7,714,936	-	678,400	-	642,447	-	588,921	-	527,662	-	680,890	-	678,400	-	671,333	-	678,400	-	678,400	-	678,400	-	678,400	-	533,282	-
Gravity Plant cost: Cash Flow Total (\$M)	-	52.5159	-	52,515,940	-	4,452,725	-	4,488,000	-	4,443,511	-	4,488,000	-	4,473,509	-	4,452,725	-	4,406,338	-	4,452,725	-	4,452,725	-	4,452,725	-	4,452,725	-	3,500,233	-
Tailings cost: Cash Flow Total (\$M)	-	1.6143	-	1,614,303	-	137,228	-	137,712	-	135,659	-	136,038	-	137,858	-	137,228	-	135,798	-	137,228	-	137,228	-	137,228	-	137,228	-	107,873	-
Rehabilitation & Closure cost: Cash Flow Total (\$M)	-	3.0152	-	3,015,156	-	-	-	1,048,637	-	1,109,958	-	853,686	-	2,874	-	-	-	-	-	-	-	-	-	-	-	-	-		
FEL cost: Cash Flow Total (\$M)	-	15.1119	-	15,111,895	-	1,339,974	-	1,250,956	-	1,123,349	-	973,842	-	1,344,554	-	1,339,974	-	1,326,014	-	1,339,974	-	1,339,974	-	1,339,974	-	1,339,974	-	1,053,337	-
Ancillary cost: Cash Flow Total (\$M)	-	0.9045	-	904,547	-	-	-	314,591	-	332,988	-	256,106	-	862	-	-	-	-	-	-	-	-	-	-	-	-	-		
	-		-	229,940,955	-																								

6. Valuation

6.1. Results

The key outputs from the financial model are summarised in Table 5.

Table 5: Financial Model Key Outputs

Item	Financial Model Output
NPV	\$131.52 million (CAPEX included, pre-tax and ungeared) 8% discount rate
IRR	154%
NPV on Post Tax and Geared cashflows	\$110 million Post-tax and geared 6% discount rate

The post tax and geared NPV above has been calculated assuming a certain level of debt funding, should that quantum change, so will the outputs.

6.2. Methodology

The financial model was built on the deliverables and outputs of the DAS data. The valuation and the design were based on a 12-year life of mine, from 2022- 2033 inclusive.

The feasibility study model by DAS was done on a deterministic basis. It includes scenario analysis and ranging and multiple variable sensitivities. This basis is considered an appropriate level of valuation to inform the final investment decision.

The financial model has been developed using the operational inputs from DAS, and then typical finance calculations added to arrive at a range of valuation measures as well as being a cashflow forecasting tool, which can show cash balances out to 2033.

The key assumptions included in the financial model are summarised in Table 6.

Table 6: Key Financial Model Assumptions

Item	Assumption
Valuation date	A valuation date of 31 December 2021 has been selected.
Inflation Rates	All data is in real dollars as at November 2021 i.e. no inflation has not been applied, thus no CPI index used
Discount Rate	The financial model presents various NPVs: - The pre-tax NPV uses a discount of 8.00% - The financial model then calculates post tax NPV, where the discount rate has been adjusted for a corporate tax rate of 25%, to arrive at 6.0%
Discount period	Over the LOM of 12 years i.e., 1 Jan 2022 to 31 December 2033
Revenue: Product Price (real) including any premiums or discounts	WO ₃ APT Price USD = \$31,500 APT payable = 70-75% Minimum Concentrate Grade = 50% Recovery through plant : Ore sorter product = 90%, and Fines = 79.5%

Item	Assumption
Royalty payable	2.7% of gross Tungsten revenue to Queensland State Government Paid to Traditional Owners: Nil Paid to other parties: Nil
Exchange Rates (Real)	1 AUD= 0.73 USD
Timing	LOM from 2022- 2033, being 12 years (2022 to 2033 inclusive), with Open Pit over only three years of 2023 to 2025 inclusive, and thereafter (2026 to 2033 inclusive), lower grade ore and quarry revenue continue All key capex spent in 2022
Corporate Income Tax	Corporate Income tax of 25% Carry forward tax losses as at time of writing of AUD\$21million
Native Title Compensation	No payments are applicable
Rehabilitation	A cost of \$0.20/ tonne of open pit ore mined has been assumed
Debt	The funding required in 2022 has been modelled all as debt, as summarised below. Should an equity raising instead be the funding avenue, the post tax geared valuation outputs cited in this chapter will change - Approximately AUD\$4m of yellow goods and XRT Sorter under equipment finance at 5%, over 3 to 5 years \$21m of capex assumed to be funded by a \$23m senior debt facility at 10%, and repaid over 5 years commencing in January 2023
Depreciation	Depreciation has been calculated as follows: - Accumulated depreciation and amortization at time of writing of AUD10.7m, which is further depreciated/amortized over 10 years - All other capex that is yet to be spent as detailed in earlier Capex section), is depreciated on a linear basis over 10 years

6.3. Foreign Exchange Assumptions

Various sources have been considered in arriving at the 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 number of brokers / contributors. The basis of the exchange rate assumption is summarised in Figure 2.

Please note that 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, therefore a Real FX rate of 0.73 is seen as an appropriate rate.

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 2: AUD:USD Exchange Rate Nominal

Source: <https://assets.kpmg/content/dam/kpmg/au/pdf/2021/coal-price-fx-market-forecast-september-october-2021.pdf>

6.4. Exclusions

The following exclusions apply to the investment evaluation:

- Marketing
 - Indirect marketing costs, including commissions or other fees;
 - Market and/or customer-specific quality testing for market development purposes. Ore quality testing for the purposes of Joint Ore Reserves Committee (JORC) reporting are included; and
 - Macroeconomic hedging/de-risking.
- Logistics
 - Road and port costs have been excluded as the concentrate is sold at the mine gate.
- Carbon emissions
 - No carbon emissions tax has been included in the current investment evaluation.

7. Project Evaluation

The macroeconomic, operational, and strategic factors presented above underpin the comprehensive financial model analysis completed for the basis of this economic study.

An economic model was developed to incorporate critical financial impacts required to undertake the development and operation of the project including estimated capital expenditures and deferred capital, revenues generated, operational expenditures, tax penalties, funding options, shareholders' returns and project financial statement analysis.

Based on current assumptions data the project is estimated to generate cashflows of:

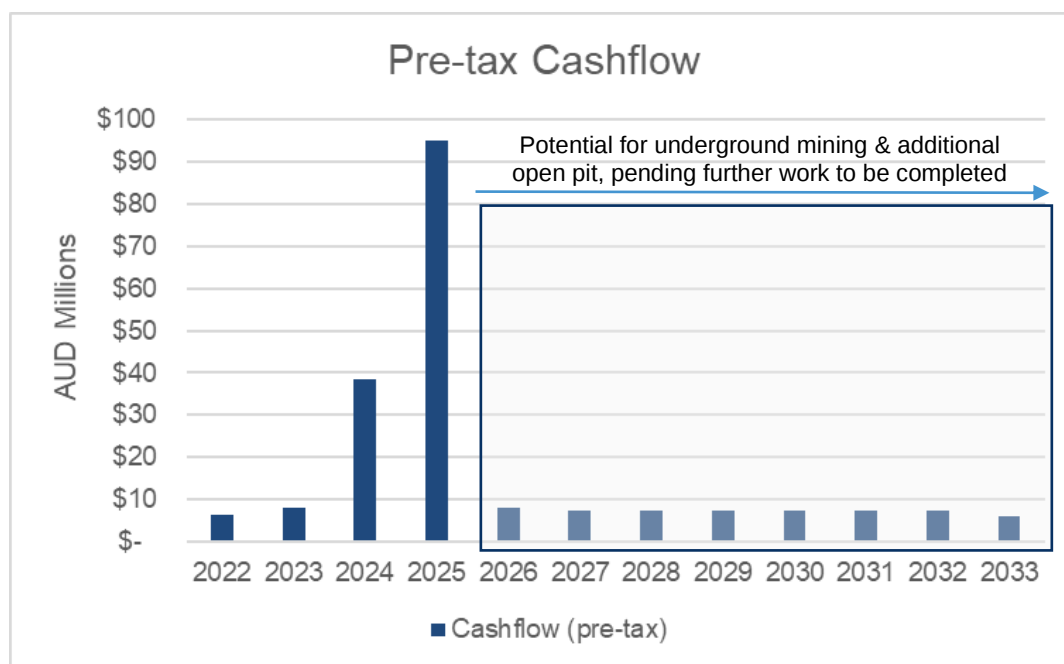
- \$206m before any capex, tax or financing;
- \$181m after adding on capex, and GST and equipment finance costs (which are akin to operating costs) and an NPV of \$131m and an IRR of 154%. Expected payback (i.e. when cumulative cashflows turn positive) is in March 2024
- \$135m after further adding tax and financing, and an NPV of \$110m, and no IRR (as there are no negative cashflows due to debt funding inflows negating such).

A summary of the mining physicals, income statement and NPV analysis is presented in Table 8.

A strong pre-tax cash flow is driven by the cut back of the historic open pit and the ramp-up of mining and ore delivery from the open pit to the crushing and screening plant. Based on current modelling, the economics of the open pit peak in 2025 at a pre-tax cash flow of \$95m, this is due to the low-grade strip ratio over this period combined with high-grade ore delivery.

On depletion of the current ore reserve accessible through open pit mining, that has been modelled for the purposes of this document, the intention of EQR is to extract the remainder of the ore reserves at Mt Carbine through underground mining activities. Limited work has been completed on the underground mining methodology to date, therefore, an additional study document is required to define the methodology and economics around this project expansion. Should an economic solution be defined for the potential underground ore reserves, the positive economics and strong cash flow is expected to continue and will be defined on completion of further work EQR.

Table 7: Pre-tax Cash Flow



Outputs				Year ending 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
NPV from Fin. Mod			131.52%													
NPV from DAS (A\$)			156													
Lowest Cash (A\$m)			1.740													
Sensitivities are Off																
Error check this page			OK													
Master error check			OK													
			LQM total		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
UG Data (only affects this sheet if UG is turned on)																
Mineralised SP Fines			0.50													
UG Fines Split			0.50													
Mineralised SP XRT Feed			50%													
UG XRT Feed			50%													
			percentage													
			percentage													
Crusher feed Head Feed to Scalper																
Underground cumulative of row above			tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-
Open Pit to Crusher			tonnes	na		94,698	416,576	529,956								
cumulative of row above			tonnes	na	1,041,229		94,698	511,274	1,041,229	1,041,229	1,041,229	1,041,229	1,041,229	1,041,229	1,041,229	1,041,229
Screen Fines																
Screen Fines Underground			tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorter Feed Underground			tonnes	-	-	-	-	-	-	-	-	-	-	-	-	-
			tonnes of con.	-	-	-	-	-	-	-	-	-	-	-	-	-
Concentrate Production UG Sorter Fines			tonnes of con.	-	-	-	-	-	-	-	-	-	-	-	-	-
UG XRT Conc			tonnes of con.	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Concentrate Tonnages			tonnes of con.	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungsten Revenue- Underground			AUD\$	-	-	-	-	-	-	-	-	-	-	-	-	-
Royalties-Underground			AUD\$	-	-	-	-	-	-	-	-	-	-	-	-	-
Mining Opex- Underground			AUD\$	-	-	-	-	-	-	-	-	-	-	-	-	-
Inputs (originally frn DAS sheet -some changed now)																
Concentrate Tonnages				26,677	1,203	3,016	5,044	8,008								946
WOS APT Price USD			\$ 31,500.00													
APT Payable			73.0%		70.0%	72.0%	72.0%	75.0%								75.0%
Concentrate Grade			50.0%													
Tungsten Revenue			425.15	425,154,719	18,166,330	46,858,921	78,357,309	129,587,452	20,282,092	19,485,415	19,261,155	19,463,926	19,463,			

8. Sensitivity Analysis

8.1. Methodology

Various sensitivities were conducted by DAS in their modelling to arrive at the optimal case.

Rock took the DAS outputs and added on:

- Capex;
- GST; and
- Equipment finance costs (which are akin to operating costs).

The model arrived at a pre-tax and ungeared NPV of \$131.52m (or \$132m) and an IRR of 154%.

Pre-tax and ungeared cashflows are viewed as the most suitable measure to use for sensitivities, as they are not distorted by tax and debt, and therefore focuses more on the fundamentals of the project.

Accordingly, this case then was then tested for percentage changes in the following key assumptions:

- Capital costs;
- Operating costs;
- AUD/ USD exchange rate;
- Tungsten price;
- APT payable;
- Concentrate grade; and
- Recovery rate in the gravity processing plant.

The outputs are detailed below, and illustrate that the Project is robust under various downside scenarios.

8.2. NPV Sensitivity

The base case NPV is \$131m.

The figure below illustrates the Project's NPV is most sensitive to the FX rate, and the tungsten price

The results were as follows:

- The AUD/ USD exchange rate has the most positive effect on the NPV, producing the highest NPV on the graph below of \$209 million, when it is decreased by 20% (i.e. a weak AUD increases the AUD revenue). A 20% decrease in the base case AUD of 0.73 would be 0.58. A 10% decrease in the AUD is seen as more likely (resulting in AUD0.67, which was seen as recent as 2020), and that would increase the NPV by \$34m, from the base case of \$132m to \$166m- as noted on the chart below;
- The following assumptions have the most negative effect, producing the lowest NPV of \$69m (and thus they appear as one line on the graph below, however, are lines on top of each other):
 - Tungsten recovery in process plant;
 - Tungsten price;
 - Concentrate grade; and
 - APT payable.

A percentage change in any of the above four inputs affect the NPV in the same manner.

Changes in capex have the least effect on the IRR, which is logical as capex is small at circa \$20m, versus Revenue of \$425million, thus percentage changes in assumptions that affect the latter will have a higher effect.

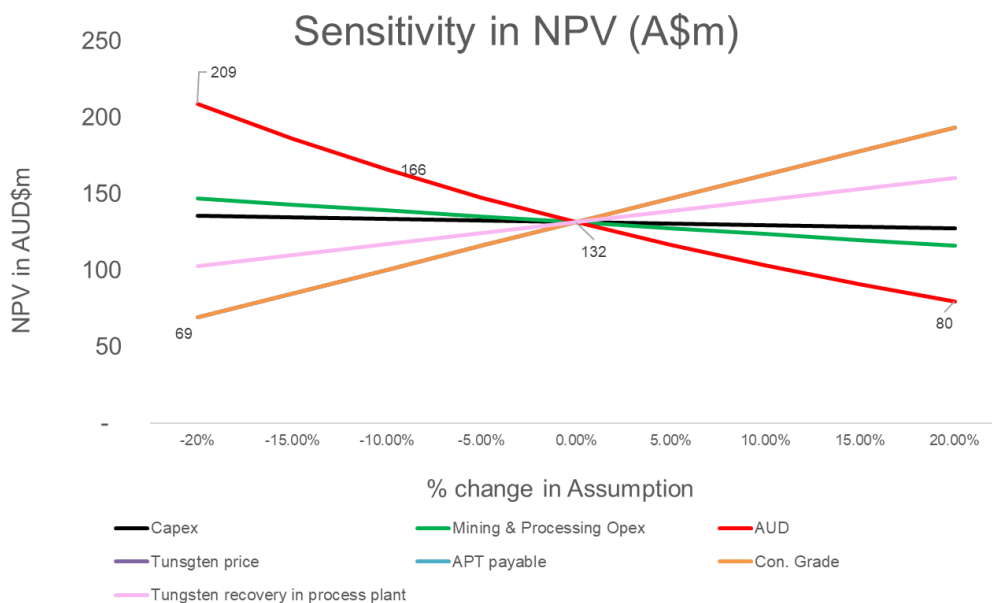


Figure 3: Sensitivity of the NPV to Changes in Key Assumptions

8.3. IRR Sensitivity

The base case IRR is 154%.

Changes in the NPV sensitivity inputs, had nearly exactly the same effect on the IRR as they did on the NPV, with the one exception being that a percentage change in the capex affects the IRR slightly more than a percentage change in opex does, as the IRR is calculated on monthly cashflows and the NPV on annual (both totalling the same, however more granularity in the monthly).

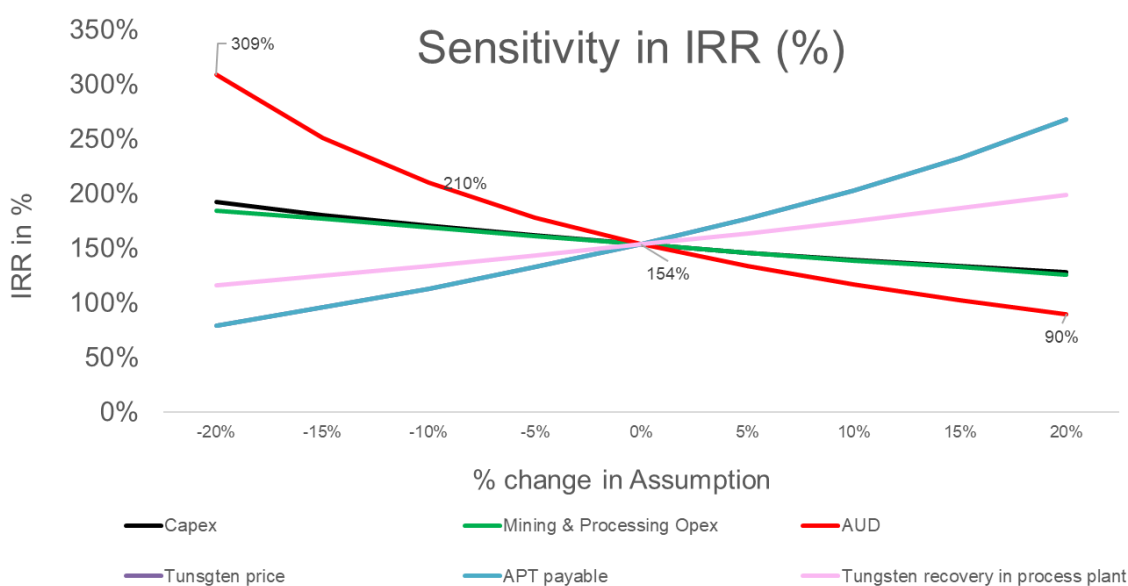


Figure 4: Sensitivity of the IRR to Changes in Key Assumptions

8.4. Breakeven Analysis

The model has been tested to determine the change required in key inputs to reach a “breakeven” level, by flexing/ changing one input at a time.

A breakeven level can be defined numerous ways but for the purpose of this analysis, it’s defined as an IRR of 0% return.

All the inputs behave in the same manner as when testing for the NPV i.e. the inputs which the project is the most sensitive to (FX and revenue related inputs), require the least change to affect the IRR. i.e. for the IRR to decrease to 0%:

- the AUD would have to increase by 79% across all years. This would mean the AUD increasing from base case level of 0.73 to 1.422 (a level that has not been seen in 20 years);
- the tungsten price, or APT payable or concentrate grade or recovery rate would have to decrease by 45% across all years; or
- Conversely, the capex would have to increase by 881% (as it’s coming off a low base of only circa \$20m).

The breakeven analysis is summarised in Table 9.

Table 9: Breakeven Analysis

Assumption	Change Required to reach IRR of Zero
Capex	881%
Mining & Processing Opex	192%
AUD	79%
Tungsten Price	-45%
APT Payable	-45%
Concentrate Grade	-45%
Tungsten Recovery in Process	-45%

9. Risk and Opportunities

There are a number of factors which may impact on the economic evaluation of the Mt Carbine Project, which are summarised in Chapter 14: Risk and Opportunities.

10. Taxation

10.1. General

The Project falls under the Australian taxation system and is an incorporated Australian legal entity that is taxed as part of the EQR consolidated group.

For simplicity, the financial analysis in this chapter utilises stylised Australian tax rules to estimate tax payable:

- Capital costs and certain expenses are capitalised during construction as assets and depreciated for tax using a straight-line depreciation over a 10-year period;
- All expenses incurred by the project during operations are assumed to be tax deductible, with capital costs depreciable;
- All interest expenses incurred in financing the project have been assumed to be tax deductible.
- As EQR has significant tax losses, this analysis includes those losses and has modelled them accordingly;
- The impact of GST has been included in the economic evaluation; and
- The corporate tax rate is assumed to be 25% for the duration of the Project, applied to profits after allowances for all cash operating expenses, royalties, and capital depreciation is applied.

11. References

- Chapter 1: Executive Summary
- Chapter 12: Capital Cost Estimate
- Chapter 13: Operating Cost Estimate
- Chapter 14: Risk and Opportunity
- Chapter 17: Forward Work

12. List of Abbreviations

Abbreviation	Description
APT	Ammonium paratungstate
DAS	DAS Mining Solutions
EQR	EQ Resources Limited
EQR	EQ Resources Limited
FCA	Free carrier
FEL	Front end loader
FX	Foreign exchange
GST	Goods and services tax
IRR	Internal rate of return
LMB	London Metal Bulletin
LOM	Life of mine
MTU	Metric tonne unit
NPV	Net present value
OC	Open cut
Rock	Rock Financial Advisory
ROM	Run of mine
XRT	X-ray transmission

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