Spark+

20 September 2020

Ticker: TMT	Current Price: AUD 0.265

Technology Metals Australia Ltd (ASX:TMT)

Desk Note

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Market Data	
52-Week Range (A$)	0.059 - 0.275
Avg Daily Vol ('000)	235.1
Market Cap (A$m)	32.6
Shares Out. (M)	123.0
Book Value (A$/share)	0.24
Cash (A$m)	3.2
Enterprise Value (A$m)	29.4

Recent Developments:

16 September 2020 - 32% increase to Ore Reserve, delivers 22.5 years mine life

1 September 2020 – Gabanintha Vanadium Project Mining Leases granted.

1 July 2020 – Maiden Southern Tenement indicated mineral resource saw 32% increase in project measured and indicated resource to 39.6Mt.

24 June 2020 – TMT has selected FLSMIDTH as the preferred supplier of the key roasting kiln section of the Gabanintha vanadium processing plant

Top 5 Shareholders

Great Southern Flour Mills P/L	12.2%
Chris Retzos	6.4%
Buxiao Yu	5.3%
Collin David Iles	4.4%
Station Nominees P/L	4.1%

THE "PRACTICAL" GOLD OF OUR FUTURE – VANADIUM. Vanadium will be heavily used in our everyday life, in steel, renewables, and batteries. We expect vanadium prices to rise as the market enters a supply deficit in 2021 and beyond. Primary producers to benefit the most as the market looks to decouple vanadium production from steel production.

Investment Highlights

Prolonged supply deficit in the vanadium market from 2021 to 2029. The vanadium market is expected to experience a supply shortage of 8.6kt by 2029 as demand for steel and vanadium-related energy storage application outgrows the capacity expansion plans.

The global vanadium market is expected to grow at 8.6% CAGR till 2029. The demand is driven by the emerging VRFB technology as an energy storage solution in the renewables and electric vehicle sector, and the need for stronger steel with higher vanadium content.

High quality, >99%, V_2O_5. DFS on Gabanintha shows consistent results of high purity V_2O_5 at an average purity of 99.53%. high-quality **V_2O_5** are favoured in VRFB which is expected to grow at 59.7% CAGR to hit USD 1.11B by 2025.

4th lowest OPEX/lb V_2O_5 with a short capital payback time of 3.2 years. DFS on Gabanintha suggests an average annual output of 27.9Mlb of V_2O_5 and an estimated OPEX of USD 4.04/lb, which works out to be a capital payback of 3.2 years on a capital cost of USD 318m.

Ready customers to take up to 85% of annual capacity once the production starts. TMT has signed 3 offtake agreements with 3 separate China clients for a minimum of 6kt of V_2O_5 per annum in total and up to 11kt per annum, subject to availability.

Massive resource of V_2O_5 to take on future demand. The entire Gabanintha Project is estimated to have a mineral resource of 137.2Mt at 0.9% V_2O_5, including an outstanding ore reserve of 39Mt at 0.9% V_2O_5 as of September 2020. TMT is prepared for capacity expansion when necessary.

Company Introduction

Technology Australia Limited (TMT) y is focused on developing its 100% owned Gabanintha Vanadium Project (Gabanintha) in Western Australia. The entire Gabanintha project, consisting of the Northern Block, and the Southern Tenement, is estimated to have a mineral resource of 137.2Mt at 0.9% V_2O_5.

In Aug 2019, TMT announced the results of its Definitive Feasibility Study (DFS) on the Northern Block of Gabanintha which states a mining reserve of 29.6Mt at 0.88% V_2O_5 (Vanadium (V) oxide) and an initial mine life of at least 16 years. The project, containing >99% V_2O_5 high purity and a massive magnetite resource, will be one of the highest-grade, low- cost operations, and the largest single primary vanadium producer in the world to date.

Gabanintha (The project)

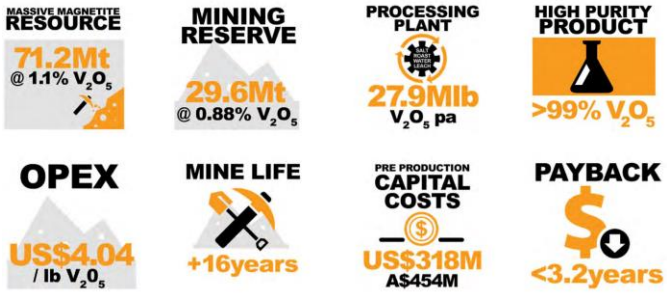
The DFS done on Gabanintha in 2019 suggested a mining reserve of 29.6Mt at 0.88% V_2O_5 (or 0.26Mt of high purity V_2O_5) with a proposed average production of 12.8kt per annum and a mine life of 16 years or more in the Northern Block. Its proposed peak steady-state production rate of 14.2kt would suggest Gabanintha as the world's largest primary production vanadium producer. The company estimates pre-production capital cost of AUD 454m (USD 318m) to kickstart the production. The DFS has been developed to a confidence level of -5% to +15%.

The entire Gabanintha has a total, global measured, indicated, and inferred, mineral resource of 137.2Mt at 0.9% V_2O_5, and a recently updated proven and probable ore reserve of 39Mt at 0.9% V_2O_5. This suggests an outstanding 98.2Mt of mineral resource available for conversion to ore reserve.

Gabanintha is in a favourable location, with a sealed National Highway from Perth within 30km of the project, allowing ease of transportation for equipment, labor, and goods as well as access to ports. TMT will support the development of a gas pipeline to ensure round the clock service throughout the entire mine life, with the opportunity to provide for future projects, be it in-house or by 3rd party. Water supply is easily accessible from the northern paleochannel borefield, near the plant location. All these benefits TMT in terms of operating costs.

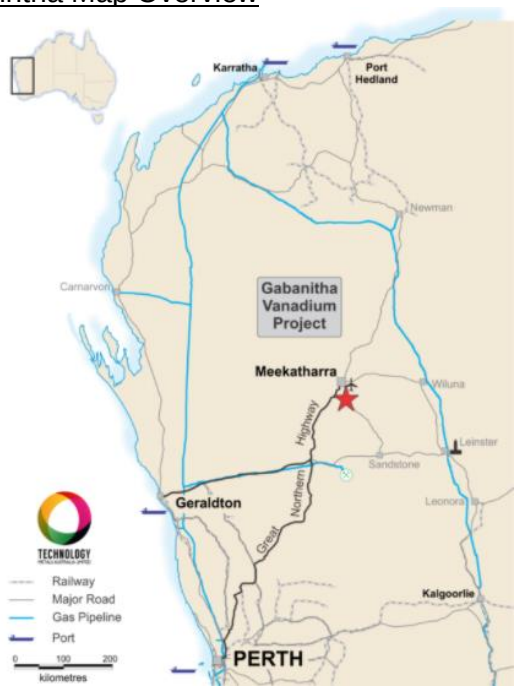
The project's operating expenses (OPEX) are estimated to be US$4.04/lb of V_2O_5 with all-in costs,

Gabanintha's Aug 2019 DFS findings

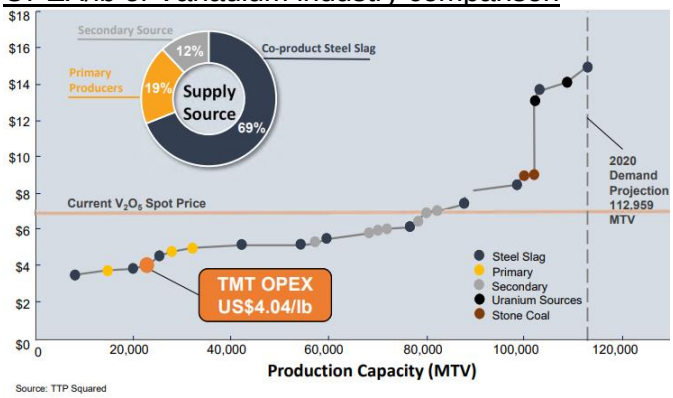


Extracted from TMT's presentation, July 2020

Gabanintha Map Overview



OPEX/lb of Vanadium industry comparison



TMT have further goals to reduce OPEX below USD4.00/lb through process innovations and improvement. When done, they will be the 3rd lowest cost primary producer.

including start-up and sustaining capital, of US$5.75/lb of V_2O_5. This level of OPEX ranks Gabanintha as the 4th lowest vanadium producer in the world and the 2nd lowest primary producer of V_2O_5, behind Largo Resources (TSX:LGO). As one of the low-cost producers, TMT faces less risk of being eliminated if vanadium prices drop and holds a certain level of pricing power as the largest primary producer of vanadium.

Downstream processing of the metallurgical testwork program, utilising liquors generated from various roast and leach tests, has consistently produced quantities of high purity V_2O_5 at 99.1% - 99.7% with extremely low impurity levels. This confirms the opportunity to produce higher quality V_2O_5 as compared to most of the existing suppliers with purity ranging from 97.5% - 98.5%.

The DFS suggests a capital payback of less than 3.2 years and indicates that Gabanintha can generate AUD 1.09b of free cash flow (IRR of 34% using an 8% discount rate) over the first 6 years of the operation, assuming the price of V_2O_5 at USD 10.88/lb to remain stable. The pre-production process plant capital costs are estimated at AUD 454m while the pre-production mining capital is estimated at AUD 16m. The company aims to commence production in late 2022/early 2023.

A Stage 2 capital expenditure (CAPEX) of AUD 64m to improve reagent consumption and vanadium recovery will be proposed once the project is in positive cashflow.

High purity V_2O_5 results

HIGH PURITY PRODUCT >99% V_2O_5

Final Product Assays and Indicative Impurities (%)*

V_2O_5	MnO_2	SiO_2	Fe_2O_3	Al_2O_3	P_2O_5	SO_3	Na_2O	Cr_2O_3	K_2O
99.53	<0.02	<0.01	0.03	<0.02	<0.02	0.15	0.02	0.03	<0.01

* based on TMT final product sample A18725

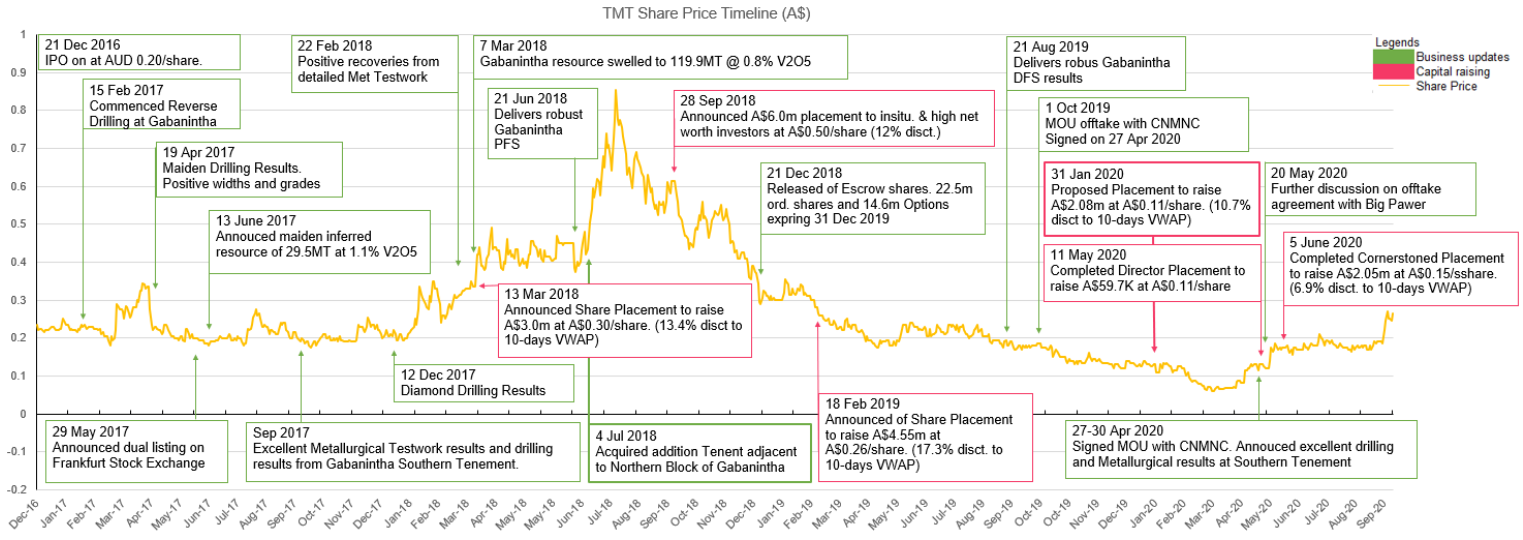
Extracted from TMT's presentation, July 2020

Gabanintha DFS – Material Financial Assumptions and Anticipated Outputs.

Key Metric	Unit	DFS
Long Term Commodity Price Forecast[1]	US$/lb V_2O_5	10.88
Exchange Rate Assumption	A$: US$	0.70
Total Revenue	A$m	7,019
Total EBITDA	A$m	4,063
Average Annual EBITDA (Steady State)	A$m	268
Total Pre-Production Process Plant Capex[2]	A$m	454
Total Stage 2 / Deferred Capex[3]	A$m	64
Total Operating Expenditure	A$m	2,957
Average Operating Costs	US$/lb V_2O_5	4.04
Average All in Sustaining Costs	US$/lb V_2O_5	5.75
Discount Rate Assumption	%	8
Net Present Value 8% Discount Rate (pre-tax)	A$m	1,320
Internal Rate of Return (pre-tax)	%	34.2
Net Present Value 8% Discount Rate (post-tax)	A$m	870
Internal Rate of Return (post-tax)	%	27.3
Anticipated Payback on Capital	Years	3.2

Extracted from TMT's DFS report, Aug 2019

Timeline



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Industry analysis[i]

Vanadium pentoxide or V_2O_5 served many purposes including strengthening of steel, acting as a chemical agent, and enabling energy storage. Over the past 10 years, more than 90% of the vanadium consumption are used in steel alloys for construction and building, followed by specialty alloys, chemical catalysts, and about 1% used for vanadium redox flow batteries (VRFB). Generally, lower purity V_2O_5, less than 98.5%, are commonly used as steel additive while high purity, above 99%, are used for chemical catalyst and VRFB.

According to Bushveld minerals, the vanadium demand in the steel market is expected to grow at a CAGR of 2.7% to 138,000 tonnes by 2029. Considering the various forecast for VRFB, **the global vanadium demand could grow at a CAGR of 8.7%** or higher in the longer term. The ongoing largest VRFB project in Dalian by Rongke Power is expected to consumer 5,000 tonnes of vanadium upon completion and similar projects are starting to surface.

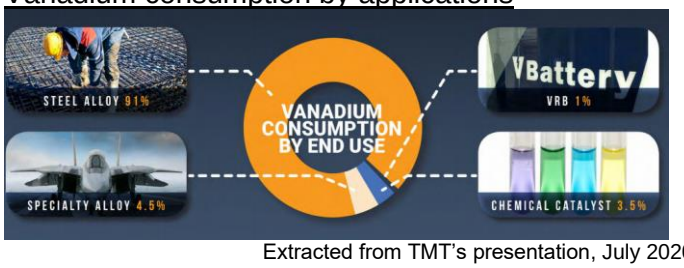
There are 3 known methods to obtain V_2O_5, Co-production, primary production, and secondary production. In 2019, 71% of global vanadium are obtained from co-production, where vanadium is a by-product of steel production. 18% is derived from primary production, where vanadium is extracted from magnetite or titanomagnetite ores, and 11% from secondary production, where vanadium is recovered from the refining of ash and crude oils. High purity V_2O_5 is mainly obtained from primary production.

China is the largest producer of vanadium with 59% of the market share in 2019 where most of its vanadium was derived from co-production. Russia ranked 2nd with 17% of the market share and South Africa, 3rd with 7%. Likewise, China is the largest consumer of vanadium with a 54% market share, followed by Europe (14%), then North America (11%). Australia might not be known for its vanadium production to date, but it has the 3rd largest vanadium resource as of 2017.[ii]

Supply

Since most of the vanadium is obtained through co-production in China, the supply correlates strongly with the steel production in China. Thanks to that, global vanadium production grew 15% YoY in 2019 supported by higher steel production in China. However, this restricts the independency of vanadium production and limits the degree of further production growth.

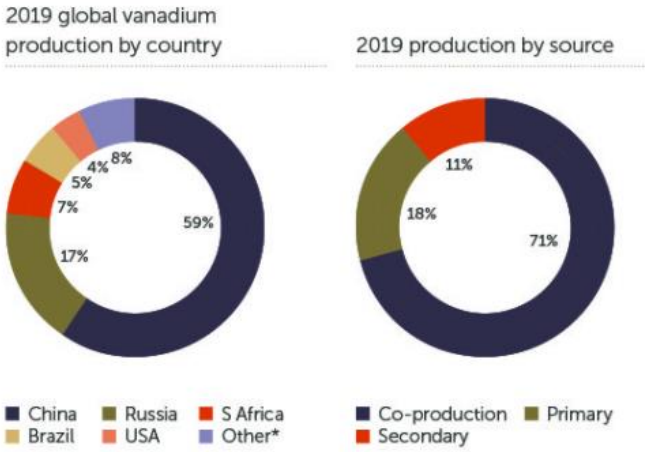
Vanadium consumption by applications



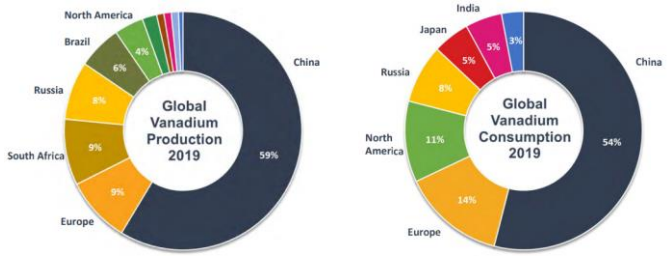
Extracted from TMT's presentation, July 2020

Just by adding 0.2% vanadium to steel makes the latter up to 100% stronger and significantly lighter.[vi]

Vanadium production by China and method

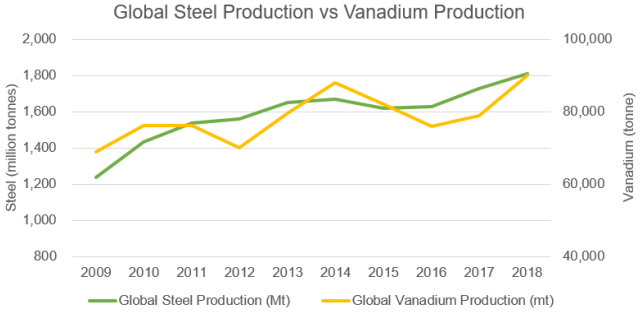


Vanadium Supply and Demand 2019



Extracted from TMT's presentation, July 2020

Steel production vs Vanadium production coupling



Data from TTP Squared, Inc and World Steel Association, 2019.

Environmental issues and regulations in China put pressure on the vanadium co-production steel plants, adding constraints to vanadium production growth. To decouple vanadium production reliance on steel production, the market turns to primary production as new uses of vanadium continue to grow faster than steel demand, especially for energy storage applications. As a result, primary producers grew the fastest with the growth of 50% in just 2 years from 13kt in 2017 to 20kt in 2019.

Secondary production could provide a certain degree of boost for vanadium production, but supply-dependency remains, and the cost of production is higher as compared to co-production and primary production.

Demand

The vanadium demand is largely supported by China's steel industry, roughly 49.1% of the market share. China will continue to dominate vanadium demand over the next few years due to higher infrastructure spending to stave off economic slowdown brought by trade war[iii] and the COVID-19 pandemic as well as accelerating nation-wide 5G networks and data centers[iv].

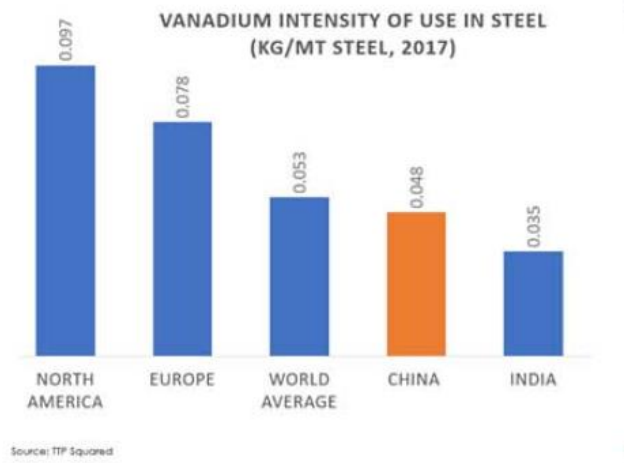
New standards for rebar, used as concrete reinforcement in buildings, calls for higher vanadium content to improve support strength and safety for buildings. Vanadium consumption from rebar rose by 28% in 2019 due to larger rebar volumes as well as an increased in vanadium content from 0.052kg/tonne to 0.054kg/tonne of steel. With the growing emphasis of safety, vanadium content in rebar is expected to rise to 0.063kg/tonne by 2030.

Other areas seeing growth in vanadium-enhanced steel include the automobile industry. Vanadium-enhanced steel alloys allow vehicles to be lighter yet stronger, achieving lower energy consumption when traveling.

Another high growth prospect for vanadium is from the energy storage sector. In 2019, VRFB constitutes only 1% of vanadium consumption, but World Bank Group forecasts that by 2050, vanadium demand for energy storage only could double the entire 2018 global vanadium production. This suggests a CAGR of 18.1% till 2050. VRFB is the emerging solution for energy storage mainly due to its scalability and longer lifespan as compared to lithium batteries.

In the medium-term outlook, VRFB market is expected to grow at 59.7% CAGR to hit USD 1.11B by 2025[v],

V_2O_5 content in Steel used by various countries.



VRFB vs Lithum-ion batteries

	Vanadium Redox Battery	Lithium
Number of cycles (Lifespan)	35,000+ (35-50 years)	~300 max (3-5 years)
Low self-discharge (once charged stays charged)	✓	✗
Low environmental footprint	✓	✗
Highly expandable	✓	✗
Generates low levels of heat	✓	✗
Charges and discharges simultaneously	✓	✗
Can release energy instantaneously	✓	✗
Suitable for connection to power grid	✓	✗
Small footprint	✗	✓

Source: Hodge, 2011. Vanadium: The Best Thing Since Lithium

Rongke Power's 200MW/800MWh VRFB system in Dalian. Image dated Dec 2017.

Other ongoing VRFB projects includes

By Company	Capacity	Est. Completion	Location
Bushveld Energy	50MW/200MWh	NA	London
Sumitomo	17MW / 51MWh	Mar 2022	Japan
Bushveld Energy	1MW/4MWh	NA	South Africa
UniEnergy Technologies	150kW/600kWh	2020	Australia
VSUN	80kW/320kWh	NA	Australia
VSUN	20kW/80kWh	NA	Australia
VSUN	40kW/160kWh	nA	Australia

growing much faster than the steel demand of 2.7% CAGR. The research by Adroit Market Research suggests that the growth will be driven by the strong development of electric vehicles (EV) and renewable power industries.

Supply and demand

According to Roskill, the vanadium market will enter a short-term supply surplus in 2020 as ex-China steel mills shutdowns continue due to the COVID-19 pandemic. The market would then turn into a deficit from 2021 to 2023 as demand recovers faster than supply growth. Based on existing capacity, announced expansion, the restart of ex-China steel mills, and the conservative growth of 16.6% CAGR for the VRFB market, **Roskill expects the market to remain in a deficit of 8.6kt by 2029.**

However, Bushveld Minerals and several energy-focused research firms believe that the growth in vanadium-related energy storage applications will be significant which will result in a **deeper deficit** than suggested above.

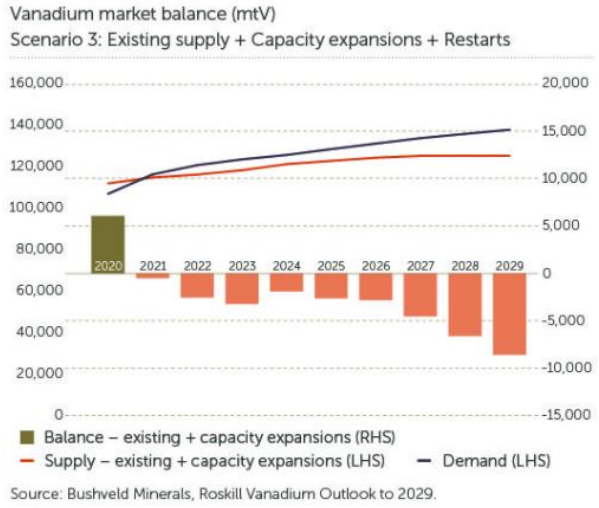
Ready Customers

TMT are in discussion for a few offtake agreements including 1 signed BOA with a subsidiary of China's State-owned multi-billion company, China Nonferrous Metal Mining Group (CNMC). These agreements provide immediate demand for TMT's production, contributing to at least 46% of the forecasted output of 12.8kt/annum, and up to 85.9% of annual output if no new contracts are signed. These sales could generate USD 169.4m per annum based on the current China V_2O_5 price of USD7.00/lb.

Signed a 2kt/annum binding MOU with CNMC Ningxia Orient Group Company Ltd (CNMNC), subsidiary of CNMC. CNMNC is the top 10 producer of vanadium alloys in China with a registered capital of RMB 2.3B. Under this offtake agreement, CNMNC will purchase 2kt/annum of V_2O_5, or of such quantity available during the ramp-up and commissioning phase, on a take-or-pay basis over a 3+3 years term. Pricing to be negotiated based on the European FOB price in USD not exceeding the Chinese Domestic price and to review on an annual basis.

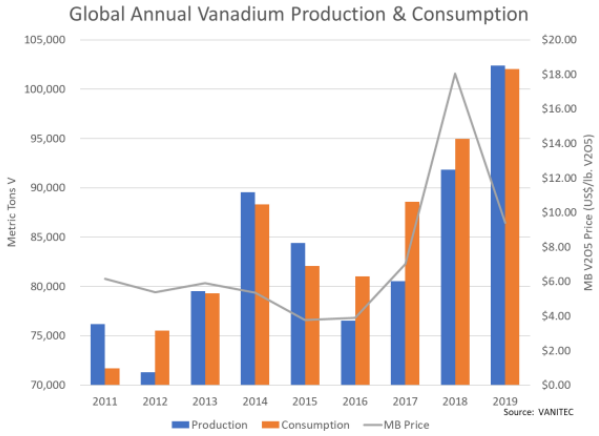
TMT also reserve the rights to temporarily suspend deliveries in the event of a sustained downturn in V_2O_5 prices and to terminate the agreement if negotiation to lift the temporary suspension are not successful.

Vanadium market balance forecast



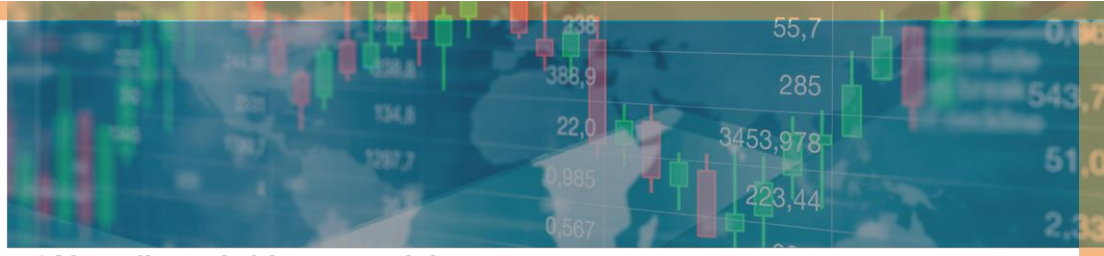
Source: Bushveld Minerals, Roskill Vanadium Outlook to 2029.

Global Vanadium supply and demand vs Price



Source: TTP Sqaured, Inc. Apr 2020.

The supply and demand relation to price shows a spike in V_2O_5 price to above USD18.00/lb in 2018 driven by the supply deficit and diminishing inventories. We can expect vanadium prices to go higher in 2021 and beyond as the vanadium market turns into a supply deficit. TMT will stand to benefit from it as margins will be wider with higher profits.



3kt/annum MOU with China's top 3 Vanadium nitride (VN) producer, Shaanxi Fengyuan Vanadium Technology Development Co. Ltd. The offtake agreement in discussion includes a minimum purchase of 3kt/annum of V_2O_5, or of such quantity available during the ramp-up and commissioning phase of the project, on a take-or-pay basis and with a 5+5 year term. Pricing to be negotiated based on the Metal Bulletin V_2O_5 Pricing Index (or similar) incorporating a floor and ceiling price structure.

Shaanxi Fengyuan is the majority and privately owned by Shaanxi Yongheng Vanadium Group and boast production capacity of 10kt of VN per annum, which requires 14.3kt of V_2O_5 feedstock per annum.

Non-binding MOU with China's Big Pawer Electrical Technology Xiangyang Inc. (Big Pawer) which includes 1) an offtake agreement to purchase 1kt/annum of V_2O_5, or of such quantity available, on a take-or-pay basis during the ramp-up and commissioning phase of the project and an ongoing annual quantity of up to 5kt/annum, subjected to availability. The agreement is on a 5+5 years term with pricing to be negotiated based on the average of the European V_2O_5 FOB price. 2) The establishment of a JV for vanadium electrolyte or VRFB manufacturing in Australia where Big Pawer will provide technology and in-kind support to assist in the timely development of the JV.

Big Pawer started R&D in VRFB development since 2009 and established its industrial production platform in 2014. It has deployed over 20 VRFB's across Asia and was recognised as having the Top 6 best R&D team in the world.

Key Risk

Future commodity prices

The profitability and cashflow of mining companies are greatly dependent on the realised price of the commodities they produced. For those in the exploration or discovery stage, the assumed future price of the commodities determines the profitability of the company. In TMT's case, we are assuming the market to be in a supply deficit beyond Year 2020 and V_2O_5 prices to increase as a result.

Factors having a negative impact to V_2O_5 prices include, 1) slowdown in China's infrastructure spending, 2) failure in renewables take off resulting in reduced investment in VRFB systems, 3) new discovery of large vanadium resources which may result in supply surplus, and 4) technological advancement in energy storage solutions that may cause VRFB to be obsolete.

Actual output vs forecasted output

Mineral deposits may not be homogenous, and the forecasted production quantity and quality are based on a sampling basis, therefore it might not translate to actual output. We believe the management took a more conservative stand in their forecast using a left-skewed, confidence level of -5% to +15% on the DFS.

Financial Risk

Mining operations are capital intensive. We noticed that the pre-operation cost for Gabanintha is AUD 454m while TMT's current MCap is AUD 32.6m with cash of AUD 3.2m as of June 2020. The company would need to raise capital aggressively to reach the target and it might take a couple of years to do so. We would also like to monitor that future capital raise does not reduce the existing shareholder's value by too much.

Trade Risk

Trade complications between Australia and China may negatively affect demand for TMT's V_2O_5. China has slammed tariffs on Australia's barley and suspended certain beef imports from Australia in May 2020, for reasons some might think as a political weapon. Since V_2O_5 export value between the 2 countries is not significant, we deem this as a low risk to TMT.

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Peer Comparison

Listed On	Ticker	Company	Stage	MCap (AUD Mil)	Cash Cost USD/lb	Guided Annual production (tonnes)	Mine life (years)	Total Resouces (Mt) M+I+I	Grade g/t	V2O5 resources (kilo lb)	MCap/V2O5 resource (A$/lb)	MCap/V2O5 annual output (A$/lb)
TSX	LGO	Largo Resources	Production	639.1	3.55	12,000.0	8.0	33.66	1.08	80.3	7,963.6	24.21
LSE	BMN	Bushveld	Production	255.1	4.64	8,400.0	30.0	409.32	1.36	1,224.5	208.3	13.80
ASX	TNG	TNG Ltd	DFS (2017)	92.2	11.19	6,000.0	37.0	162.00	0.28	99.5	926.5	6.99
ASX	AVL	Australian Vanadium Ltd	PFS	43.6	4.15	7,560.0	17.0	208.20	0.74	338.9	128.7	2.62
ASX	VR8	Vanadium Resources	Scoping	10.5			25.0	612.00	0.78	1,050.2	10.0	
TSX-V	FVAN	First Vanadium	Exploration	24.9				31.83	0.59	41.6	597.9	
TSX-V	VRB	Vanadium Corp	Exploration	15.6				14.38	0.42	13.3	1,171.3	
TSX-V	VONE	Vanadium One	Exploration	7.1				634.10	0.60	837.0	8.5	
		Average							0.73		1,376.8	11.9
ASX	TMT	Technology Metals Australia Ltd	DFS (2019)	32.6	4.04	12,800.0	20.0	137.20	0.90	271.7	120.0	1.16

The table above illustrates the few larger primary producers of vanadium. We noticed companies in production commands a higher Market capitalisation (MCap), as expected due to a large amount of CAPEX needed to start production. To have a more comparable view, we derived the MCap per V_2O_5 resource and MCap per V_2O_5 annual production and ignore those companies in the exploration/scoping stage. We opined that the significant factors affecting the MCap are the Cash Cost per pound of V_2O_5 and the Guided Annual Production. Largo Resource, with the lowest cash cost and highest guided annual production, can command the highest MCap/V_2O_5 annual output followed by Bushveld and Australian Vanadium Ltd. TNG Ltd is an exception as its technology produces TiO_2 and Fe_2O_3 as well, adding additional revenue streams.

Implied MCap at various MCap/ V_2O_5 annual output

Cash cost percentile	Cash Cost USD/lb	Guided Annual production (tonnes)	MCap/V2O5 annual output (A$/lb)	Implied Mcap (AUD Mil)	Adj. MCap for pre-ops CAPEX (AUD Mil)	Implied Upside
0.0	3.55	12,000.0	24.21	639.1		
45.1	4.04	12,800.0	24.21	681.7	227.7	598.5%
45.1	4.04	12,800.0	18.50	520.8	66.8	105.0%
45.1	4.04	12,800.0	13.80	388.7	-65.3	-300.3%
100.0	4.64	8,400.0	13.80	255.1		

Based on these players progress to date, we believe that TMT, which ranks the highest in annual production and 2nd in cash cost per pound of V_2O_5 could command an MCap/V_2O_5 annual output of anywhere between 13.80 to 24.21, which translate to an MCap of AUD 389m to AUD 682m when it commences production. By taking a conservative approach, factoring only cash cost, and adjusting for the pre-operating capital cost of AUD 454m, we opined that TMT could trade at AUD 520.8m which suggests upside of 105.0% from current MCap.

Conclusion

The global vanadium market is expected to grow at 8.7% CAGR to 2029, driven by vanadium-related energy storage applications and the need for higher vanadium content in steel. As of 2019, 71% of global vanadium are obtained from co-production, which restricts the independent growth of vanadium production. As such, the global vanadium market is expected to be in a supply deficit from 2021 to 2029. Primary producers of vanadium play an important role to decouple the vanadium production market from the steel production market for future demand.

The Gabanintha Project which is 100% owned by TMT is in a favourable position to capture the growth in the global vanadium market. Gabanintha boasts a resource of 137.2Mt at 0.9% V_2O_5 including a mining reserve of 39Mt at 0.9% V_2O_5. The DFS suggests an average production of 12.8kt per annum with a low operating cost of USD4.04/lb making it the largest primary producer of vanadium to date and at a low cost. TMT has signed 3 separate offtake agreements with 3 separate China companies to provide up to 85.9% of the proposed annual production once operation commenced.

The pre-production process plant capital costs are estimated at AUD 454m and the project is expected to have a capital payback of fewer than 3.2 years, or an IRR of 34%, assuming the price of V_2O_5 at USD 10.88/lb to remain stable. V_2O_5 prices are expected to increase in 2021 and beyond as the vanadium market turns into a supply deficit, which will further boost profits for the company.

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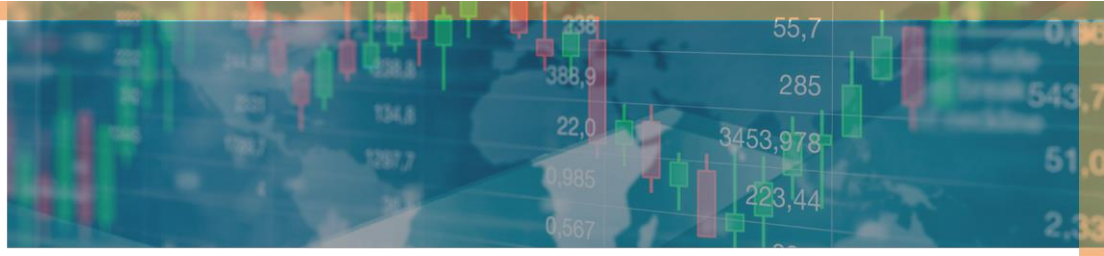

Appendix

Management Team and The Board of Directors

Michael Fry, Non-Executive Chairman

Mr. Fry is a Fellow of the Financial Services Institute of Australasia and a past member of the ASX. He possesses financial and capital market knowledge and a background in corporate treasury management. Mr. Fry sits on the board of several listed companies with a focus on O&G exploration including Brookside Energy Limited (ASX:BRK). He was also a board member of Precious Metals Australia Limited which owned and operated the Windimurra Vanadium operation in Western Australia.

Ian Prentice, Managing Director

Mr. Prentice is the founding Director of TMT. He holds a Bachelor of Science (Geology) from the University of Western Australia and has over 30 years of experience in the global mining industry. Mr. Prentice is a member of the Australasian Institute of Mining and Metallurgy and served as a Director of several ASX-listed resource companies including Merah Resource Limited (ASX:MEH), and Killara Resources Limited (ASX:KRA).

Sonu Cheema, Non-Executive Director and Company Secretary

Mr. Cheema is a Partner at Cicero Group with over 10 years' experience working with public and private companies in Australia and abroad. He has completed a Bachelor of Commerce majoring in Accounting at Curtin University and is a CPA member. Currently, Mr. Cheema is Company Secretary for Corizon Limited (ASX:CIZ), Avira Resources Limited (ASX:AVW), Yojee Limited (ASX:YOJ), and Comet Resources Limited (ASX:CRL).

Mr. David English, Technical Adviser

Mr. English has over 30 years of industry experience and has been involved in some of Australia's largest recent mining projects. He was the Project manager for Independent Group's (ASX :IGO) managing a A$445M nickel mine Project, the Project Manager for Sandfire Resource's (ASX :SFR) A$400M DeGrussa copper mine, and General Manager Operations at the Windimurra Vanadium Project (Feb 2008 – Feb 2010).