

Technology Metals (TMT)

Potential High Class Vanadium Asset, at a A\$7m price tag?

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KEY POINTS

- Since listing in late 2016 TMT has delivered a maiden resource and positive metallurgy results, both of which are not yet reflected in the share price.
- A solid maiden resource of 62.8Mt at 0.8% V₂O₅ (inferred) includes a high grade component of 29.5Mt at 1.1% V₂O₅, makes TMT's Gabanintha Project (WA) one of the highest grade vanadium resources in Australia.
- Positive metallurgical test results have indicated a high grade concentrate with low silica can be produced.
- In an environment where vanadium flow batteries are tipped to be part of growing demand for energy storage, which can be seen in the vanadium pentoxide price doubling in the past 12 months we believe TMT is well positioned to capitalise in the sector.

Gabanintha Project - Well Underway

At the **Gabanintha Project** (Western Australia) TMT has two highly prospective project areas.

At the **Northern Block** TMT has successfully drilled and defined a maiden resource of 62.8Mt at 0.8% V₂O₅ and 9.7% TiO₂ including a high grade component of 29.5Mt at 1.1% V₂O₅. Additional drilling completed to infill and extend the resource, which has included ~7,500m RC drilling and ~1,200m of diamond drilling, has confirmed the continuity of high grade vanadium. This confirms the potential for expansion of the current resource. The recently completed preliminary metallurgical test work has been positive.

Southern Tenement: A recent drilling program on 200m spaced traverses along the +1.4km strike reported 21 of the 23 holes intersecting high grade vanadium mineralisation. With some of the better intersections including **11m at 1.14% V₂O₅** from 28m and **19m at 1.01% V₂O₅** from 66m

The Vanadium Market: The global vanadium market has been operating a deficit position for the past five years, with a forecast deficit of 9,700 tonnes in 2017, according to TTP Squared. The tightening supplies of vanadium (In particular, China) are resulting in a global shortage. As a result, vanadium price has surged in the past 12 months.

Investment Summary: TMT is well on the way to defining a resource within their exploration target of 80–100mt at 0.8–1.0% V₂O₅, and our analysis suggests a target towards the top end of the range is plausible. In our view making Gabanintha a potential significant vanadium asset, TMT is ideally positioned to take advantage of the increasing price environment with a high grade vanadium project located in a very favourable mining district with outstanding infrastructure.

Catalysts:

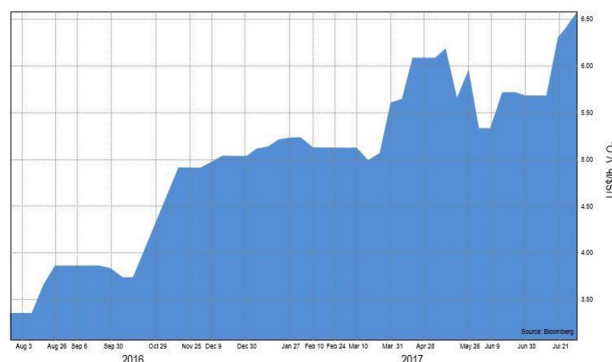
- Further infill and extensional drilling results
- Resource upgrades
- Detailed metallurgical testwork results
- Commencement of scoping/prefeasibility study

RECOMMENDATION

Speculative Buy

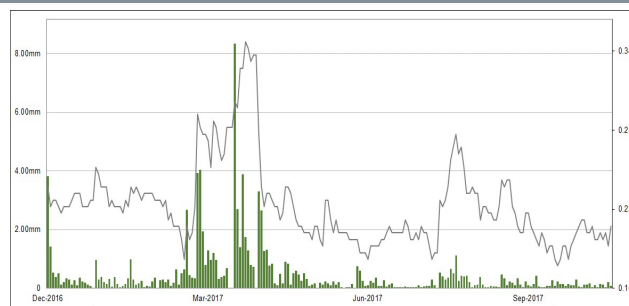
Previous Recommendation	No change
Risk Rating	High
Current Share Price	\$0.21
Shares on Issue (m)	35.1
Options (m)	15
Performance Shares (m)	10
12 Month High/Low (A\$/sh)	\$0.37/\$0.18
Market capitalisation	\$7.2m
Cash (A\$m) - estimated	\$2m

Vanadium Pentoxide (98%) US\$/lb 12 Month Price Chart



Source: Bloomberg

TMT Share Price Performance



Source: Capital IQ

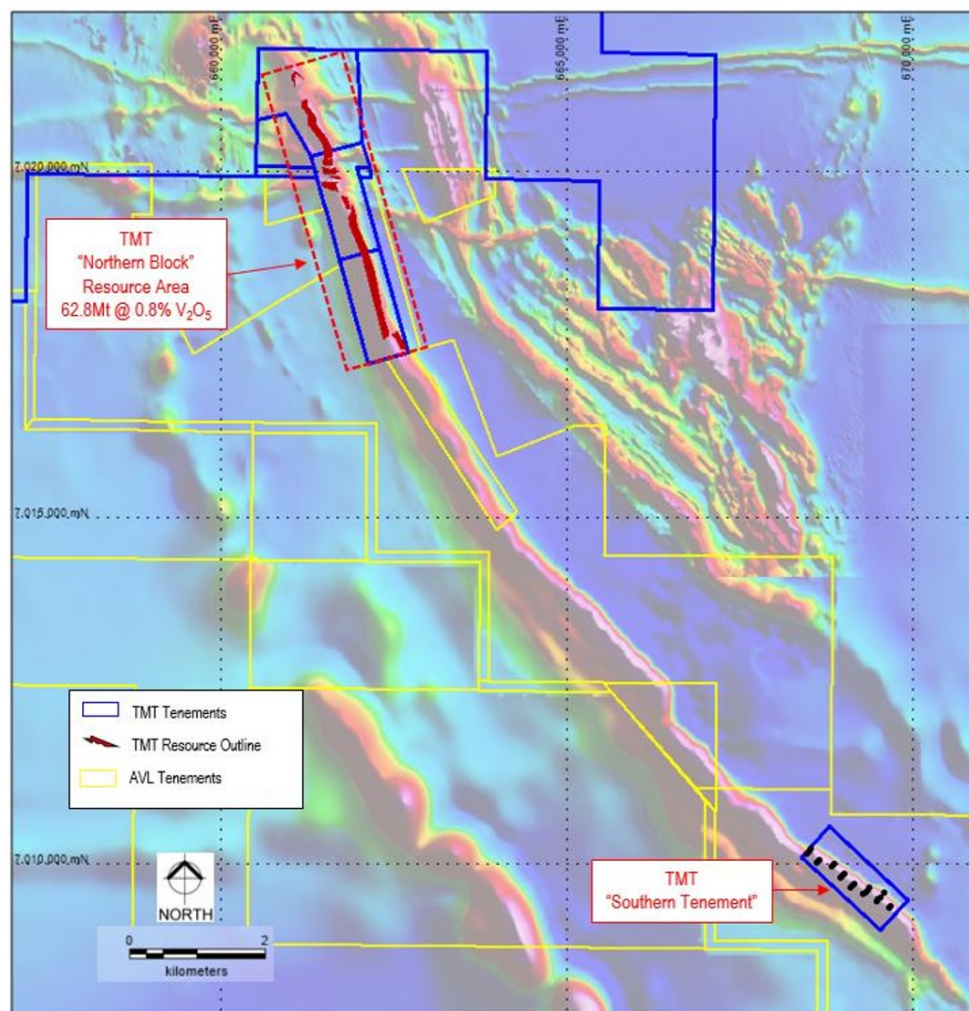
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OUTSTANDING MAIDEN DRILLING RESULT

NORTHERN BLOCK

TMT completed its initial 36 hole RC drilling program on the Northern Block of tenements at the Gabanintha project, and reported an overall maiden resource of 62.8Mt at 0.8% V₂O₅ and 9.7% TiO₂, including a high grade component of 29.5Mt at 1.1% V₂O₅, which is well on the way to achieving TMT's exploration target of 80–100mt at 0.8–1.0% V₂O₅.

Gabanintha Vanadium Project Mineral Resource Layout



Source: TMT FY17 Annual Report

Significant maiden resource

Mineral Resource estimate for Technology Metals Gabanintha Vanadium Project as at 12 Jun 2017									
Mineralised Zone	Classification	Million Tonnes	V ₂ O ₅ %	Fe %	Al ₂ O ₃ %	SiO ₂ %	TiO ₂ %	LOI %	Density t/m ³
Basal massive magnetite	Inferred	29.5	1.1	46.4	6.1	8.2	12.6	1	3.6
Hanging wall disseminated	Inferred	33.2	0.5	26.6	14.9	27.1	7.2	5.1	2.4
Combined Total	Inferred	62.8	0.8	35.9	10.8	18.3	9.7	3.2	2.8

* Note: The Mineral Resource was estimated within constraining wireframe solids using a nominal 0.9% V₂O₅ lower cut off for the basal massive magnetite zone and using a nominal 0.4% V₂O₅ lower cut off for the hanging wall disseminated mineralisation zones. The Mineral Resource is quoted from all classified blocks within these wireframe solids above a lower cut-off grade of 0.4% V₂O₅. Differences may occur due to rounding.

Source: TMT FY17 Annual Report

Positive metallurgy results

In addition, TMT recently completed preliminary magnetic separation test work on four composite samples (two shallow/oxide composites, one transitional and one fresh).

Davis Tube Recovery (DTR) delivered vanadium grades of 1.40% to 1.53% V_2O_5 in to the magnetic concentrates.

Low silica (SiO_2) grades (below 4% of the concentrate) was found, which is an important factor for the efficient and effective salt roasting of vanadium concentrates.

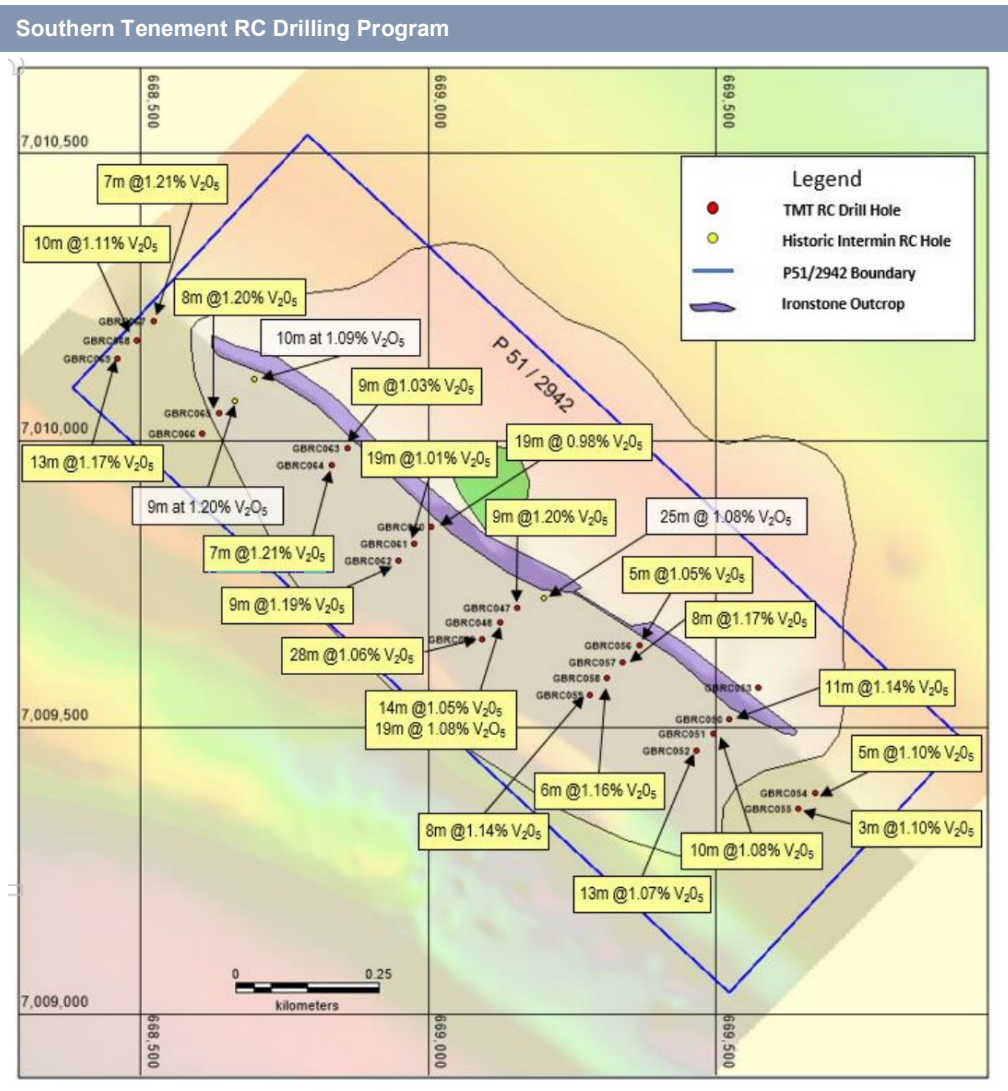
SOUTHERN TENEMENT

TMT initiated a drilling program consisting of 23 holes for 2,233m on 200m spaced traverses along the +1.4km strike at the tenement.

The initial RC drilling defined high grade basal massive magnetite hosted vanadium mineralisation on each of the traverses completed, with 21 of the 23 holes intersecting high grade mineralisation.

Some better intersections included:

- 28m at 1.06% V_2O_5 from 129m;
- 11m at 1.14% V_2O_5 from 28m; and
- 52m at 0.89% V_2O_5 from 77m

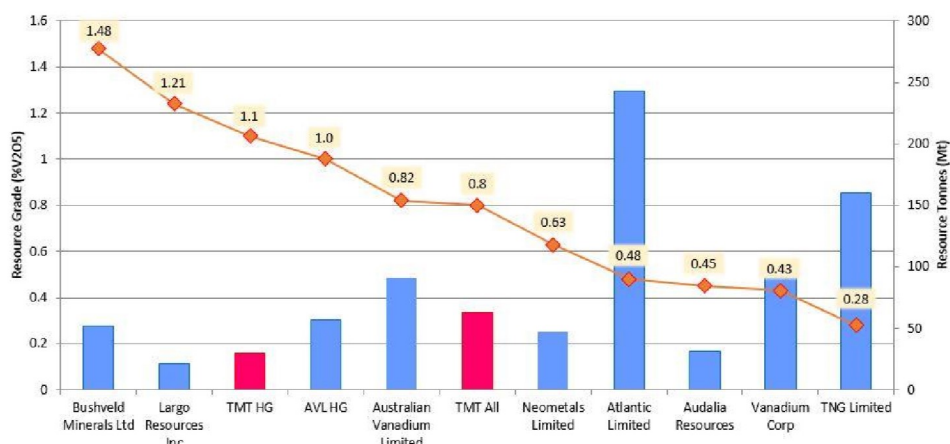


Source: Company Announcement

Peer Comparison

The grade of the maiden resource, particularly the high grade component of 29.5Mt at 1.1% V_2O_5 establishes the Gabanintha Vanadium Project as a world class vanadium deposit with one of the highest grades in the world.

Global Deposit Comparison



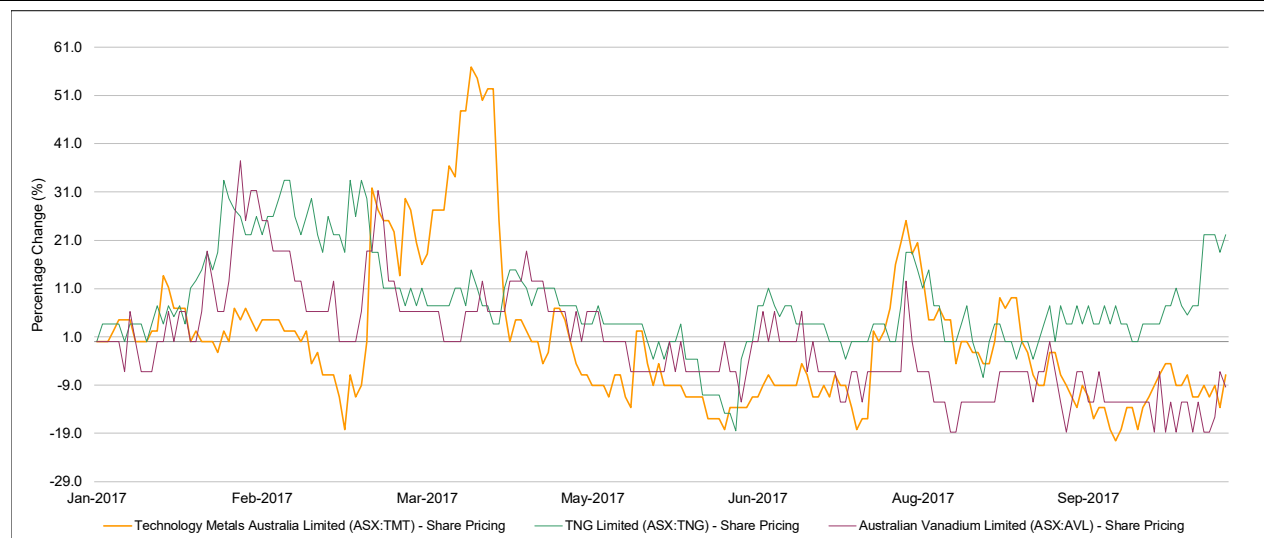
Source: TMT FY'17 Annual Report

ASX Peer Comparison

Company	Tonnes (Mt)	Grade V_2O_5 (%)	Enterprise Value (A\$m)	Comments
TNG Limited (TNG)	160	0.28	\$121	TNG is progressing the development of the lower grade Mount Peake vanadium-titanium-magnetite in the Northern Territory (160Mt at 0.28% V_2O_5 , 5.3% TiO_2 and 23% Fe)
Australian Vanadium (AVL)	180	0.75	\$19	Recently announced significant resource upgrade at the Gabanintha project adjacent to TMT's tenements.
Technology Metals (TMT)	63	0.8	\$4.3	Well on the way to exceeding TMT's exploration target of 80–100mt at 0.8–1.0% V_2O_5 .

Source: PAC Partners estimates and Company Reports

Peer Share Price Performance

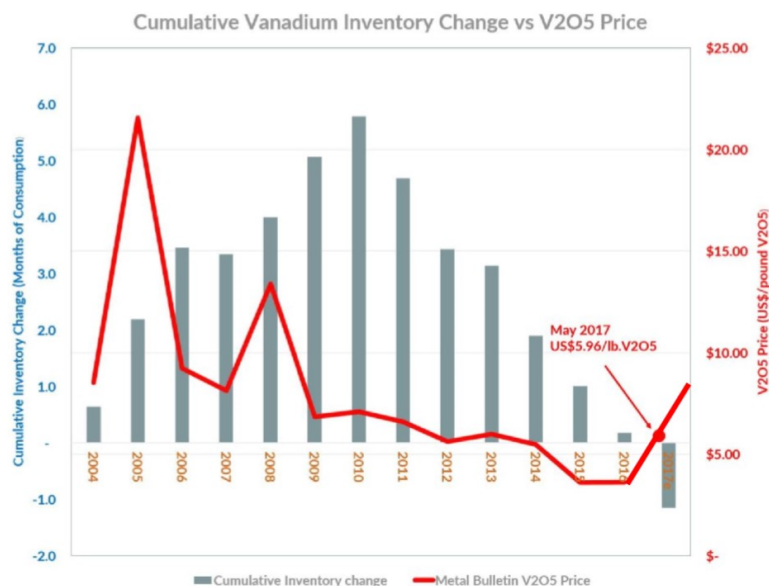


Source: Capital IQ

SURGING VANADIUM PRICE

Vanadium prices have soared to their **highest in nearly nine years** due to shortages created by China's anti-pollution drive, which has meant the country importing the steel ingredient to meet its needs

Prices of ferro vanadium, used in steel alloy, have risen 90% this year to around US\$43 per kg, levels last seen in November 2008

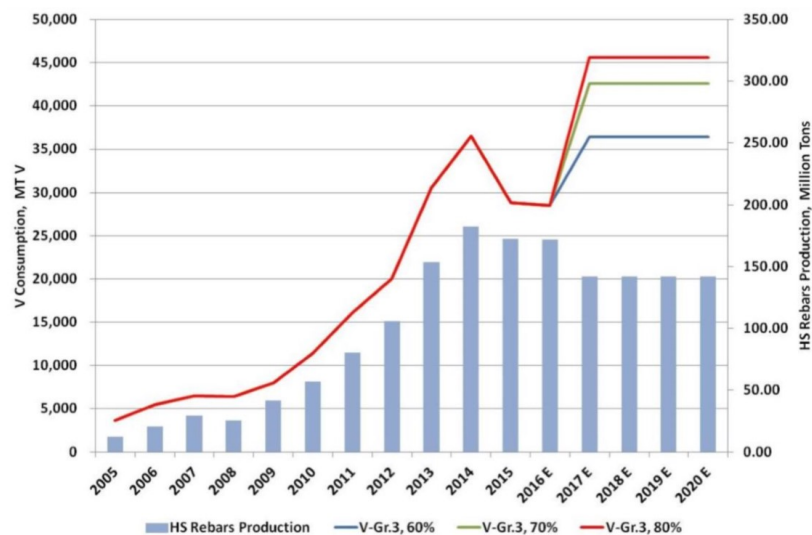


Source: TTP Squared, Inc.

Global Vanadium consumption is currently about 90,000tpa with market forecasters expecting demand to increase to 131,000tpa by 2025 (source: Roskill), excluding significant growth in the battery sector.

Industry rationalisation, reduced magnetite ore for steel production and environmental constraints in China resulting in a dramatic production decline (~9,700 deficit in 2017).

Vanadium Use in Chinese Rebar



Source: China Iron & Steel Research Centre

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