TECHNOLOGY METALS AUSTRALIA LIMITED

ASX Announcement

22 January 2021

ACN: 612 531 389

T: 08 6489 1600

F: 08 6489 1601

E: investors@tmtlimited.com.au

Suite 9, 330 Churchill Avenue,

Subiaco WA 6008

www.tmtlimited.com.au

Directors

Michael Fry:
Chairman

Ian Prentice:
Managing Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

149,391,390 ("TMT") Fully Paid Ordinary Shares

8,250,000 – Unquoted Director and Employee Options exercisable at $0.20 on or before 10 May 2023

6,849,834 – Unquoted Options – various exercise prices and dates

1,800,000 – Performance Rights

ASX Code: TMT

FRA Code: TN6

YARRABUBBA AND GABANINTHA PROJECT UPDATE

HIGHLIGHTS

- Diamond drilling resumed at Yarrabubba on 5th January 2021, with a second rig starting on 11th January 2021.
- Technical co-operation agreement executed with Sinosteel Equipment & Engineering Co., Ltd to support Yarrabubba testwork and flowsheet design.
- Testwork on two large Yarrabubba samples underway to confirm outcomes of magnetic beneficiation, with results due shortly, and to further investigate titanium separation.
- Extension of term agreed for the Shaanxi Fengyuan Vanadium Technology Development Co., Ltd. vanadium pentoxide offtake MOU.
- The Company has $9.5 million cash to fund the progression of Yarrabubba to a development decision.

Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to provide an update on activities at, and in support of, its Yarrabubba Iron-Vanadium Project ("**Yarrabubba**") and Gabanintha Vanadium Project ("**Gabanintha**").

Diamond drilling at Yarrabubba designed to generate a life of mine representative bulk sample for pilot scale testwork, resumed on 5th January 2021, with a second diamond drill rig starting on 11th January 2021. The drilling will also collect additional geotechnical data to support open pit design / ore reserve estimation work and to infill the Yarrabubba Mineral Resource. The program consists of up to 22 holes for 2,820m of mixed PQ and HQ sized diamond core and is expected to generate 6.0 to 7.0 tonnes of sample for metallurgical testwork. Drilling is due to conclude towards the end of January, with processing of the diamond drill core expected to continue through February.

The Company has a non-binding Letter of Intent ("**LoI**") with Sinosteel Australia Pty Ltd ("**Sinosteel**") with regard to negotiating a life-of-mine offtake agreement over up to 1.5Mtpa of the premium Yarrabubba High Grade Iron-Vanadium product and entering into an Engineering, Procurement and Construction ("**EPC**") contract with Sinosteel Equipment & Engineering Co., Ltd ("**MECC**").

Engagement with MECC has progressed with the parties entering into a co-operation agreement to enable the technical teams from both Companies to work together to advance the metallurgical testwork and flowsheet design to support the development and implementation of Yarrabubba. This direct engagement during the testwork phase has the benefit of Technology Metals receiving early technical input from MECC and for MECC to become familiar with the attractive characteristics of the Yarrabubba orebody.

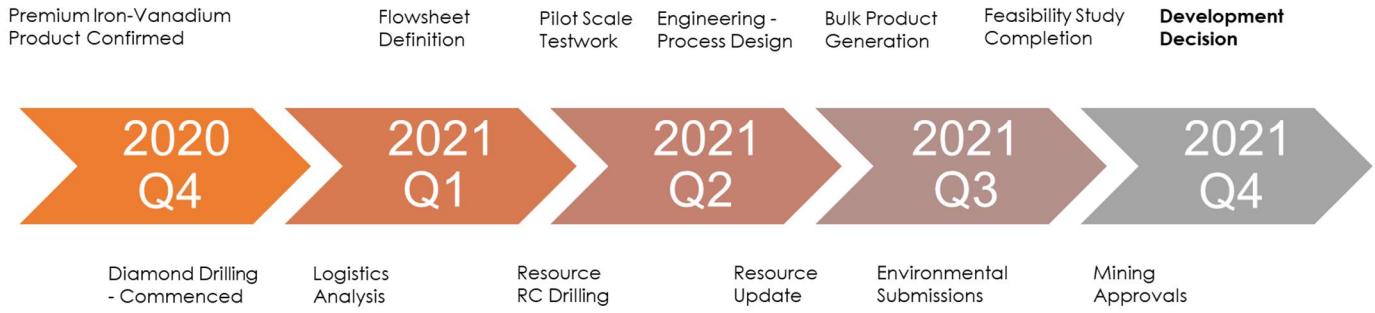
A round of metallurgical testwork on two large, massive fresh composites from Yarrabubba, MASFR1 (300kg) and MASFR2 (90 kg) commenced in December 2020. This testwork, designed to confirm the generation of the high grade, high purity iron-vanadium product from the magnetic beneficiation circuit and to further investigate the titanium separation from the non-magnetic tailings, is progressing with results from the magnetic separation testwork expected shortly.

Titanium testwork and optimisation, following up on the initial preliminary and unoptimised sighter testwork[1] that generated products with grades up to 48.5% TiO_2 for MASFR1 and 48.4% TiO_2 for MASFR2, is now underway following generation of the non-magnetic tailings. Results from this round of optimised testwork are expected to further enhance the titanium product as well as provide guidance on the expected product yields and will be reported as they become available.

The Company has negotiated a twelve month extension to the previously announced 3,000Tpa V_2O_5 offtake Memorandum of Understanding ("**MoU**") with Shaanxi Fengyuan Vanadium Technology Development Co., Ltd. ("**Fengyuan**"). This extension is recognition of the attractiveness of the high purity Gabanintha V_2O_5 and reflects a high level of confidence from Fengyuan in the Company's overall project development strategy. This extension is also designed to ensure the parties can complete mutual due diligence and progress discussions on the draft offtake agreement in a period which is still very much impacted by the international travel restrictions imposed as part of the management of the COVID-19 pandemic.

Following the completion of the Company's successful capital raisings in late 2020 it enters calendar year 2021 with $9.5 million cash at bank. These funds will primarily be applied to funding the activities and development of Yarrabubba as well as progressing environmental approvals and related activities at Gabanintha. The Company expects that this available capital will comfortably ensure that it is fully funded through to the delivery of the Yarrabubba feasibility study and progression to a development decision, enabling the Company to implement its staged development strategy leading to the timely development of Gabanintha.

Figure 1: Indicative Yarrabubba Development Timeline



Managing Director Ian Prentice commented: "The Company has launched into a very exciting and transformative 2021 with significant activity taking place, both on site at Yarrabubba and in the laboratories in Perth. The team is also actively progressing a range of discussions with offtake groups across the full range of expected products to be generated as well as with prospective development / funding partners. We are very excited about the trajectory of the Company over the course of this year and very much look forward to sharing the news with our stakeholders as the full range of activities progress."

1 – See TMT ASX release 3 December 2020 – "Testwork Confirms recovery of Yarrabubba Titanium Product".

ABOUT VANADIUM

Vanadium is a hard, silvery grey, ductile and malleable speciality metal with a resistance to corrosion, good structural strength and stability against alkalis, acids and salt water. The elemental metal is rarely found in nature. The main use of vanadium is in the steel industry where it is primarily used in metal alloys such as rebar and structural steel, high-speed tools, titanium alloys and aircraft. The addition of a small amount of vanadium can increase steel strength by up to 100% and reduces weight by up to 30%. Vanadium high-carbon steel alloys contain in the order of 0.15 to 0.25% vanadium while high-speed tool steels, used in surgical instruments and speciality tools, contain in the range of 1 to 5% vanadium content. Global economic growth and increased intensity of use of vanadium in steel in developing countries will drive near term growth in vanadium demand.

An emerging and likely very significant use for vanadium is the rapidly developing energy storage (battery) sector with the expanding use and increasing penetration of the vanadium redox flow batteries ("**VRFB's"**). VRFB's are a rechargeable flow battery that uses vanadium in different oxidation states to store energy, using the unique ability of vanadium to exist in solution in four different oxidation states. VRB's provide an efficient storage and re-supply solution for renewable energy – being able to time-shift large amounts of previously generated energy for later use – ideally suited to micro-grid to large scale energy storage solutions (grid stabilisation). Some of the unique advantages of VRB's are:

- a lifespan of 20 years with very high cycle life (up to 20,000 cycles) and no capacity loss,
- rapid recharge and discharge,
- easily scalable into large MW applications,
- excellent long-term charge retention,
- improved safety (non-flammable) compared to Li-ion batteries, and
- can discharge to 100% with no damage.

Global economic growth and increased intensity of use of vanadium in steel in developing countries will drive near term growth in vanadium demand.

This announcement has been authorised by the Board of Technology Metals Australia Limited.

For, and on behalf of, the Board of the Company,

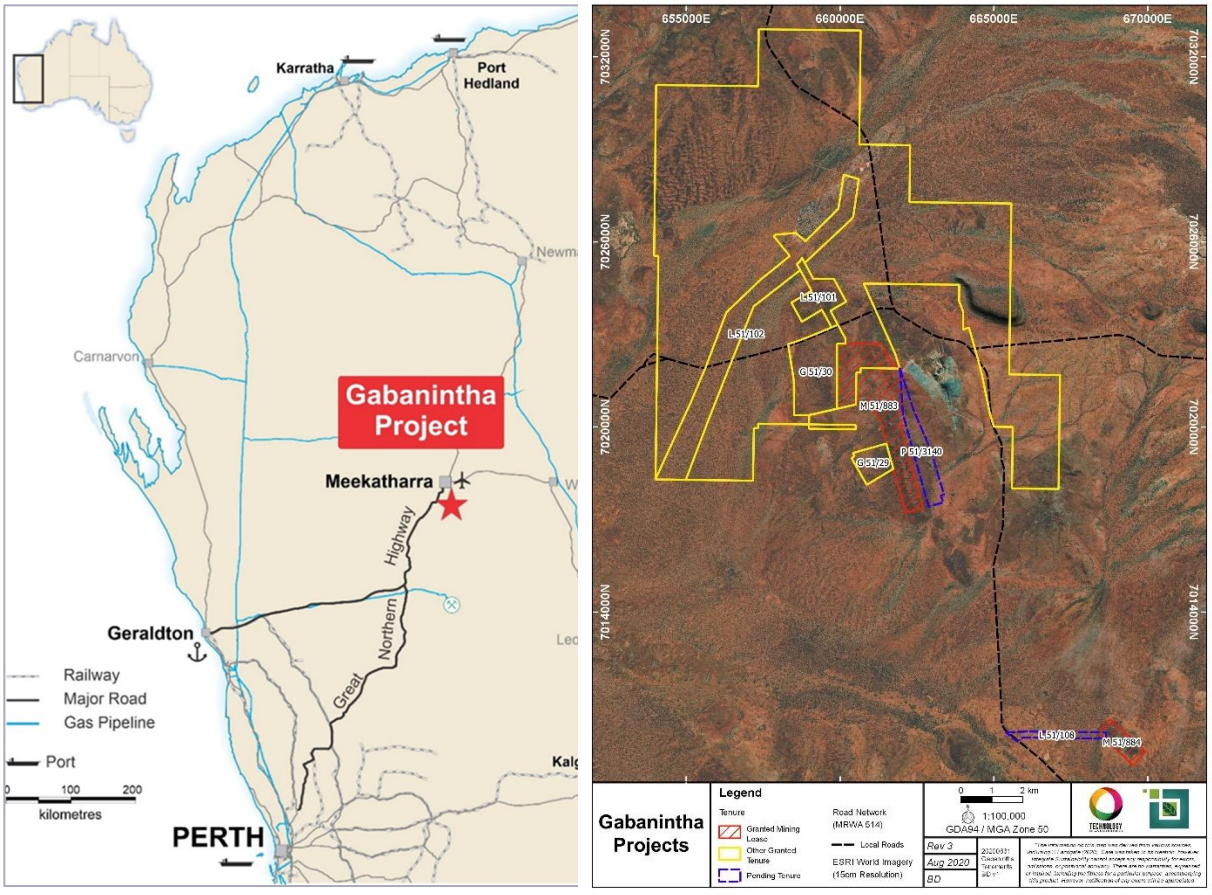
Ian Prentice
Managing Director
Technology Metals Australia Limited

- ENDS -

About Technology Metals Australia Limited

Technology Metals Australia Limited (ASX: TMT) was incorporated on 20 May 2016 for the primary purpose of identifying exploration projects in Australia and overseas with the aim of discovering commercially significant mineral deposits. The Company's primary exploration focus has been on the Gabanintha Vanadium Project located 40 km south east of Meekatharra in the mid-west region of Western Australia with the aim to develop this project to potentially supply high-quality V_2O_5 flake product to both the steel market and the emerging vanadium redox battery (VRB) market.

The Project consists of eleven granted tenements and three applications (including two Mining Leases) divided between the Northern Block of Tenements (12 tenements) and the Southern Tenement (2 tenements). Vanadium mineralisation is hosted by a north west – south east trending layered mafic igneous unit with a distinct magnetic signature. Mineralisation at Gabanintha is similar to the Windimurra Vanadium Deposit, located 270km to the south, and the Barrambie Vanadium-Titanium Deposit, located 155km to the south east. The key difference between Gabanintha and these deposits is the consistent presence of the high-grade massive vanadium – titanium – magnetite basal unit, which results in an overall higher grade for the Gabanintha Vanadium Project.



GVP Location and Tenure

Data from the Company's 2017 and 2018 drilling programs, including 111 RC holes and 53 HQ and PQ diamond holes at the Northern Block and 31 RC holes and 4 PQ sized diamond holes completed in late 2018 at the Southern Tenement, has been used by independent geological consultants CSA Global to generate a global Inferred and Indicated Mineral Resource estimate, reported in accordance with the JORC Code 2012 edition, for the Project. The Resource estimate confirms the position of the Gabanintha Vanadium Project as one of the highest grade vanadium projects in the world.

Global Mineral Resource estimate for the Gabanintha Vanadium Project as at 29 June 2020.

Material Type	Classification	Mt	V_2O_5%	Fe%	Al_2O_3%	SiO_2%	TiO_2%	LOI%	P%	S%
Massive Magnetite	**Measured (North)**	**1.2**	**1**	**44.7**	**6.2**	**10.4**	**11.4**	**0**	**0.009**	**0.2**
	Indicated (North)	18.5	1.1	49.1	5.2	5.8	12.9	-0.1	0.007	0.2
	Indicated (South)	7.3	1.1	49.2	5.1	5.8	12.6	-0.6	0.004	0.3
	Total Indicated	**25.8**	**1.1**	**49.1**	**5.1**	**5.8**	**12.8**	**-0.3**	**0.007**	**0.2**
	Inferred (North)	41	1.1	47.7	5.6	7.1	12.6	0.3	0.008	0.2
	Inferred (South)	7.1	1.1	46.9	5.6	7.4	12.1	0.5	0.005	0.3
	Total Inferred	**48.1**	**1.1**	**47.6**	**5.6**	**7.2**	**12.5**	**0.3**	**0.008**	**0.2**
	Massive Global	**75.1**	**1.1**	**48.1**	**5.5**	**6.8**	**12.6**	**0.1**	**0.007**	**0.2**
Disseminated / Banded Magnetite	Indicated (North)	10.3	0.6	28.6	13.1	25.5	7.5	3	0.03	0.2
	Indicated (South)	2.3	0.7	33.1	9.5	20.6	8.5	2.3	0.014	0.3
	Total Indicated	**12.6**	**0.6**	**29.5**	**12.5**	**24.6**	**7.7**	**2.8**	**0.027**	**0.2**
	Inferred (North)	38.5	0.5	27.1	12.7	27.4	6.9	3.3	0.027	0.2
	Inferred (South)	11	0.6	27.7	13	25.9	7	2.7	0.015	0.3
	Total Inferred	**49.5**	**0.5**	**27.2**	**12.8**	**27.1**	**6.9**	**3.2**	**0.024**	**0.2**
	Diss / Band Global	**62.1**	**0.6**	**27.7**	**12.7**	**26.6**	**7.1**	**3.1**	**0.025**	**0.2**
Combined	**Global Combined**	**137.2**	**0.9**	**38.9**	**8.7**	**15.7**	**10.1**	**1.5**	**0.015**	**0.2**

*Note: The Mineral Resources were estimated within constraining wireframe solids using a nominal 0.9% V_2O_5% lower cut-off grade for the massive magnetite zones and using a nominal 0.4% V_2O_5% lower cut-off grade for the banded and disseminated mineralisation zones. The Mineral Resources are quoted from all classified blocks within these wireframe solids above a lower cut-off grade of 0.4% V_2O_5%. Differences may occur due to rounding.

Data from the global Mineral Resource estimate and the 2019 DFS on the GVP were used by independent consultants CSA Global to generate a Proven and Probable Ore Reserve estimate based on the Measured and Indicated Mineral Resource of 39.6 Mt at 0.9% V_2O_5 located within the Northern Block of tenements and the Southern Tenement at Gabanintha.

Ore Reserve Estimate as at 15 September 2020

Reserve Category	Tonnes (Mt)	Grade V_2O_5%	Contained V_2O_5 Tonnes (Mt)
Proven	1.1	0.96	0.01
Probable	37.9	0.90	0.34
Total	39.0	**0.90**	**0.26**

- *Note: Includes allowance for mining recovery (98% for massive magnetite ore and 95% for banded and disseminated ore) and mining dilution applied as a 1 metre dilution skin; resulting in a North Pit dilution for massive magnetite ore of 13% at 0.45% V_2O_5, and North Pit dilution for banded and disseminated ore of 29% at 0.0% V_2O_5; a Central Pit dilution for massive magnetite ore of 10% at 0.46% V_2O_5, and Central Pit dilution for banded and disseminated ore of 20% at 0.0% V_2O_5.; a Southern Pit dilution for massive magnetite ore of 12% at 0.49% V_2O_5, and Southern Pit dilution for banded and disseminated ore of 15% at 0.21% V_2O_5)*
- *Rounding errors may occur*

Capital Structure	
Fully Paid Ordinary Shares on Issue	*149.4m*
Unquoted Options ($0.20 – 10/05/23 expiry)[1]	*8.25m*
Unquoted Options ($0.25 – 15/06/22 expiry)	*6.850m*
Unquoted Performance Rights[2]	*1.8m*

1 - Director and employee options – 50% vested on grant of mining licence, 50% vest on Gabanintha FID

2 – Performance rights issued to technical, metallurgical and processing consultants – two tranches; FID on Yarrabubba and first commercial production from Yarrabubba

Forward-Looking Statements
This document includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Technology Metal Australia Limited's planned exploration programs, corporate activities and any, and all, statements that are not historical facts. When used in this document, words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should" and similar expressions are forward-looking statements. Technology Metal Australia Limited believes that it has a reasonable basis for its forward-looking statements; however, forward-looking statements involve risks and uncertainties and no assurance can be given that actual future results will be consistent with these forward-looking statements. All figures presented in this document are unaudited and this document does not contain any forecasts of profitability or loss.

Competent Persons Statement

*The information in this report that relates to Exploration Results are based on information compiled by Mr John McDougall. Mr McDougall is the Company's Exploration Manager and a member of the Australian Institute of Geoscientists. Mr McDougall has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("**JORC Code**"). Mr McDougall consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources is based on information compiled by Mr Aaron Meakin. Mr Aaron Meakin is a Principal Consultant of CSA Global Pty Ltd and is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves ("**JORC Code**"). Mr Aaron Meakin consent to the disclosure of the information in this announcement in the form and context in which it appears.*

The information that relates to Ore Reserves is based on information compiled by Mr Daniel Grosso an employee of CSA Global Pty Ltd. Mr Grosso takes overall responsibility for the Report as Competent Person. Mr Grosso is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Daniel Grosso has reviewed the Ore Reserve statement and given permission for the publication of this information in the form and context within which it appears.

The information in this report that relates to the Processing and Metallurgy for the Gabanintha project is based on and fairly represents, information and supporting documentation compiled by Mr Brett Morgan and reviewed by Mr Damian Connelly, both employees of METS Engineering Group Pty Ltd. Mr Connelly takes overall responsibility for the Report as Competent Person. Mr Connelly is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Competent Person, Damian Connelly consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.