TECHNOLOGY
METALS AUSTRALIA LIMITED

ASX Announcement

15 March 2021

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Directors

Michael Fry:
Chairman

Ian Prentice:
Managing Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

149,641,390 ("TMT") Fully Paid Ordinary Shares

6,849,834 – Unquoted Options exercisable at $0.25 on or before 15 June 2022

8,850,000 – Unquoted Director and Employee Options at various exercise prices and expiry dates

2,650,000 – Performance Rights

ASX Code: TMT

FRA Code: TN6

VANITEC
TRANSFORMING POSSIBILITIES

AMEC

MOU SIGNED WITH JAPANESE VRFB ELECTROLYTE COMPANY

HIGHLIGHTS

- Memorandum of Understanding executed with LE System Co., Ltd., a leading Japanese VRFB R&D company with strong relationships with the Japanese Government.
- Agreement to investigate applying proprietary processing technology to extract vanadium and other metals from various Gabanintha waste streams.
- Investigate opportunity to use proprietary technology to manufacture VRFB electrolyte in Western Australia, supporting TMT's downstream processing strategy.
- Development of this relationship and negotiation of the MOU was supported by the WA Governments Japan based JTSI representative.
- The Parties to work together to explore potential for sales of Yarrabubba Fe-V concentrate to Japanese customers.

Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to announce the execution of a non-binding Memorandum of Understanding ("**MoU**") with LE System Co., Ltd ("**LES**") of Fukuoka, Japan. The MoU covers technical collaboration to assess the potential application of LES' proprietary technology to extract vanadium (and other valuable metals) from the Gabanintha Vanadium Project (**"GVP**") waste streams and to explore establishing a joint venture ("**JV"**) to investigate the opportunity to manufacture VRFB electrolyte in Western Australia.

TMT and LES have also agreed to work together to investigate the opportunity to sell the high grade, high purity iron-vanadium concentrate to be produced from the Yarrabubba Iron-Vanadium Project ("**Yarrabubba Project**") to Japanese customers with the aim of providing a reliable source of vanadium for LES's VRFB electrolyte business.

LE System Chief Executive Officer Junichi Sato commented: "With the necessity of large capacity storage batteries rapidly increasing, the successful technology collaboration and business cooperation between TMT and LE System are very important to us".

Managing Director Ian Prentice commented: "Execution of this MoU with LE System is an important step in delivering on our vision of developing the GVP in a sustainable, environmentally responsible manner and represents another key component of our strategy to develop downstream processing opportunities to play a significant role in the development of a domestic VRFB industry.

The MoU also supports TMT's staged project development strategy through the investigation of opportunities to expand the customer base for the Yarrabubba high grade, high purity iron-vanadium product."

LE SYSTEM MOU

The non-binding MoU between Technology Metals and LES covers technology collaboration to explore the application of LES' proprietary processing technology, based on intellectual capital accumulated over a decade or more, to Technology Metals projects, including the extraction of vanadium (and other valuable metals) from GVP waste streams. Successful application of the proprietary processing technology to the GVP waste streams would provide LES with access to a low cost stable supply of vanadium products and provide Technology Metals with potential environmental management benefits, supporting the Company's key objectives of sustainability and environmental responsibility.

The parties will also assess the application of the proprietary processing technology to the GVP process flow sheet to maximise product recovery, thereby further reducing the highly competitive forecast operating costs, and potentially reduce capital costs.

Technology Metals and LES have been working together on developing this concept for some time, with a number of samples of GVP ore and waste streams sent to LES for initial assessment and confirmation analysis. This sample assessment and associated R&D will continue under the MoU, with Technology Metals to provide additional samples as requested and subject to availability.

Under the MoU the parties have agreed to investigate the opportunity to jointly produce electrolyte for the VRFB market in Western Australia, initially focused on the use of vanadium sourced from GVP waste streams, but potentially expanding to use the high purity vanadium to be produced from the GVP. This opportunity would have scope to establish a significant downstream value add industry designed to target what TMT sees as the rapidly emerging stationary storage battery market opportunities in Australia, further enhancing the significant economic and social benefits for the Mid-West region of Western Australia, the State and the Nation that the development of Gabanintha is expected to generate over a long period of time.

In addition the parties will look to develop a vanadium supply plan (offtake) to assist LES in meeting its forecast demand for electrolyte production to support its participation in the global VRFB market.

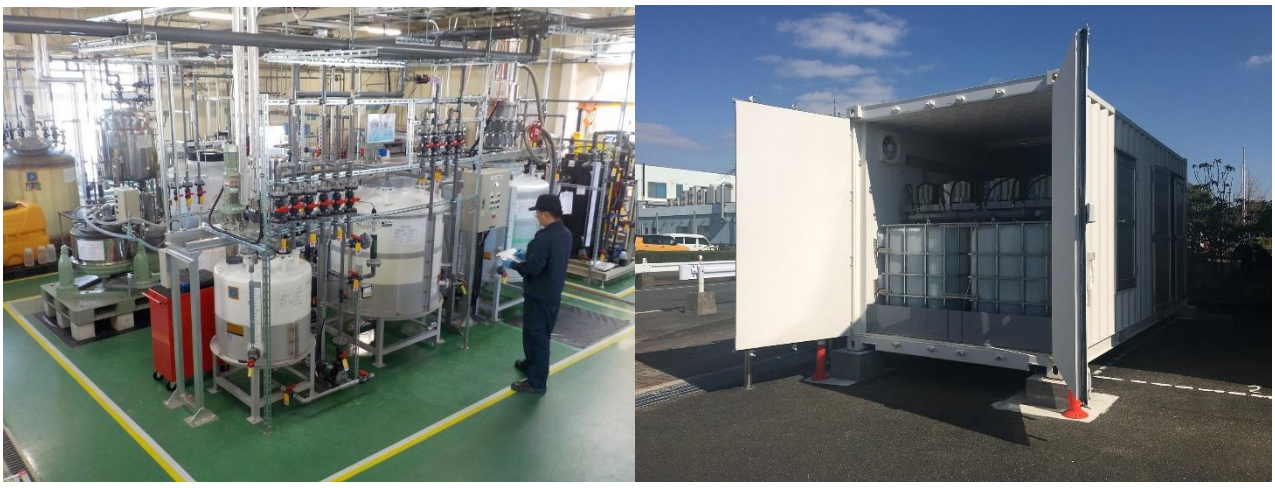


Figure 1: LE System's Patented Electrolyte Production

The parties have also agreed to work together to investigate the opportunity to sell the high grade, high purity iron-vanadium concentrate to be produced from the Yarrabubba Project to Japanese customers. The aim of this collaboration is to engage with customers / processors able to efficiently extract the vanadium units from the Yarrabubba iron concentrate with the goal of providing a reliable source of vanadium for LES's VRFB electrolyte business.

The development of this relationship with LES and the negotiation of this MOU was supported and facilitated by the Western Australian Governments Japan based representative of the Department of Jobs, Tourism, Science and Innovation. TMT would like to thank the Government of Western Australia for its assistance in reaching this important milestone. The Government has provided a consistently efficient and professional service since mid-2020 and continue to work with our Corporate Advisors on a number of fronts in the Japanese market.

TMT is looking forward to continuing to work closely with the Northern Australia Infrastructure Facility("**NAIF**"), the Western Australian Government's Lead Agency team and other Government agencies as it progresses the development of Gabanintha to be a producer of vanadium, a critical mineral with a vital role to play in the efficient and effective deployment of renewable energy. Vanadium's strategic importance to the Australian economy has been recognised with its inclusion on the Australian Government's list of Critical Minerals and the recently announced Modern Manufacturing Initiative, designed to support downstream processing and manufacturing including the Resources Technology and Critical Minerals Processing road map (see Resources Technology and Critical Minerals Processing)

ABOUT LE SYSTEM CO., LTD.

LE System Co., Ltd. is one of Japan's leading research and development companies for Vanadium Redox Flow Batteries (VRFB) and is on track to become a leading supplier of electrolytes to VRFB manufacturers. Established in 2011, the company is one of the top two suppliers in Japan and is located at Fukuoka. LE System enjoys strong relationships with the Japanese government and key Japanese enterprises throughout Japan. LE System supports the construction of next-generation energy systems that store and efficiently use electricity to transform the global energy market.

Le Systems shareholders include Innovation Network Corporation of Japan (INCJ), and TOA ELECTRIC INDUSTRIAL CO., LTD. INCJ was established in July 2009 with the aim of nurturing key industries via open innovation for the prosperity of future generations. INCJ is wholly owned by Japan Investment Corporation (JIC). JIC is owned by the Government of Japan and twenty-five leading Japanese corporations. It aims to address the growing demand for risk capital for long-term, large-scale growth investments with a governance structure conducive to quick and flexible investment decision making. TAO is a leading trading and manufacturing company established in 1947 with 34 offices in nine countries with strong global distribution capabilities. It focuses on electrical and electronic materials and parts, capital investment as well as advanced technology.

KEY TERMS DEFINED IN THE TMT – LE SYSTEM MOU

The MoU between TMT and LES establishes a framework for ongoing discussions, evaluations and negotiations aimed at progressing the technical collaboration, associated R&D, and the potential joint development of a vanadium electrolyte production facility in Western Australia, ultimately leading to the delivery of a definitive and binding agreement ("**Agreement**") and the establishment of a JV for vanadium electrolyte manufacturing in Australia. Key terms that have been defined and agreed upon in the MoU are:

- Technical collaboration between the parties assessing GVP waste stream samples, flow sheet design and associated R&D for the application of LES' proprietary processing technology,
- TMT to provide required samples, subject to availability, with each party to share costs of transport and analysis,
- Aim to assess the potential to produce vanadium products from the GVP waste streams on a shared cost and benefits basis,
- Explore the concept of using LES' proprietary processing technology to deliver vanadium recovery, operating cost and capital cost improvements at GVP,

- The parties to develop a vanadium supply plan to support LES forecast demand for electrolyte production,
- Investigate the opportunity to jointly produce vanadium electrolyte for the VRFB market in Australia and prepare a study with regard to establishing a JV for manufacturing electrolyte,
- The parties to investigate the opportunity to sell Yarrabubba high grade iron-vanadium concentrate in Japan with the aim of extracting vanadium to satisfy LES' long-term demand, and
- The parties to work collaboratively to source investment to support the development of GVP, Yarrabubba and manufacturer of vanadium electrolyte.

The MoU is effective until 31 December 2021 unless the parties mutually agree to formally terminate or extend the term.

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 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 VRFB'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,

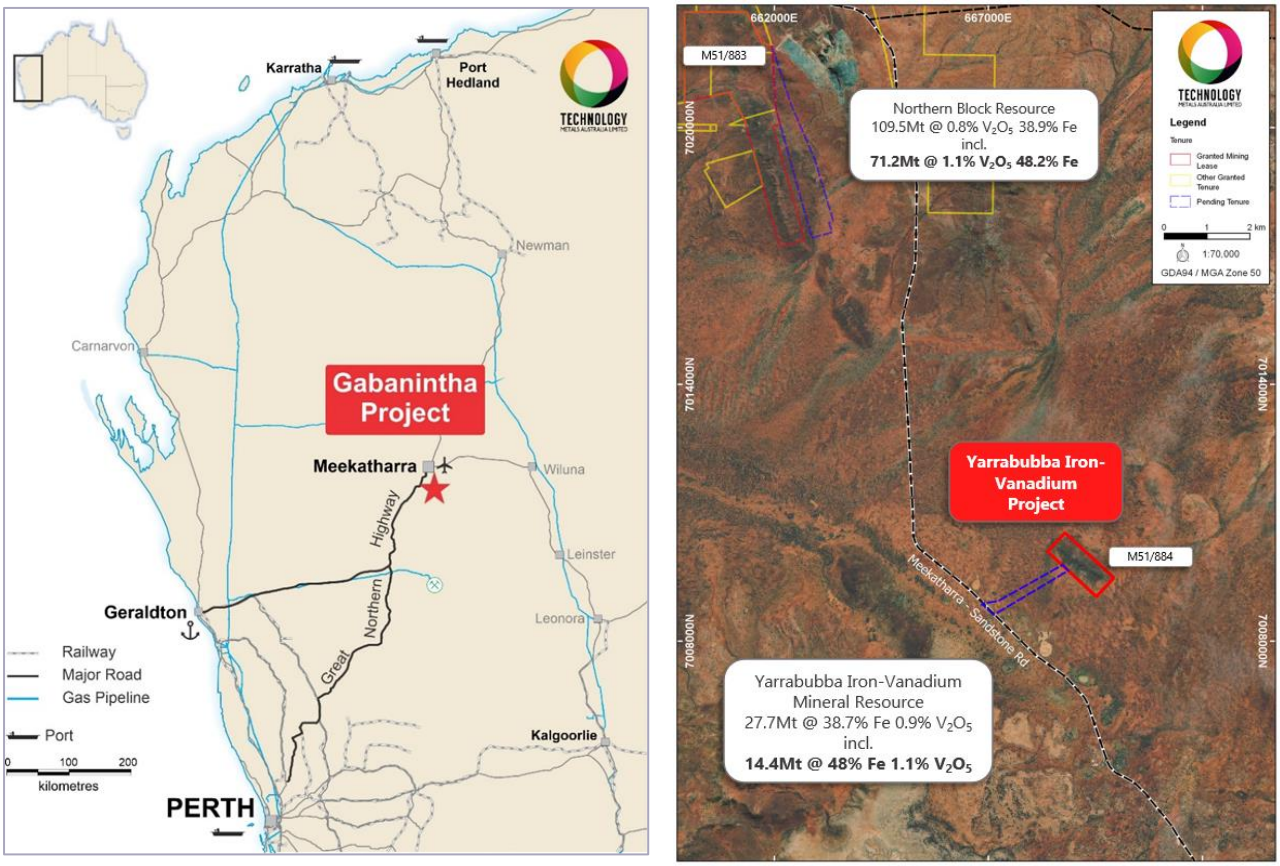
Ian Prentice
Managing Director
Technology Metals Australia Limited

- 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 nine granted tenements and one application divided between the Gabanintha Vanadium Project (8 tenements) and the Yarrabubba Project (2 tenements). Vanadium mineralisation is hosted by a north west – south east trending layered mafic igneous unit with a distinct magnetic signature. A key difference between Gabanintha and several other vanadium 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 and Yarrabubba 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	*149.6m*
Unquoted Options ($0.25 – 15/06/22 expiry)	*6.850m*
Unquoted Options ($0.20 – 10/05/23 expiry)[1]	*8.0m*
Unquoted Options ($0.50 – 01/01/24 expiry)[2]	*0.85m*
Class B Performance Rights[3]	*1.325m*
Class C Performance Rights[4]	*1.325m*

1. *Director and employee options – 50% vested on grant of the mining licences, 50% vest on Gabanintha FID*
2. *Employee options – 50% vest and subject to the Company making a final investment decision (FID) for the Yarrabubba Project prior to 30 October 2023 and 50% vest subject to the Company achieving first commercial production from the Yarrabubba Project prior to 30 October 2023.*
3. *Each Class B Performance Right is a right to receive one fully paid ordinary share in TMT, subject to the terms of the employee incentive scheme and subject to the Company making a final investment decision (FID) for the Yarrabubba Project prior to 30 October 2023.*
4. *Each Class C Performance Right is a right to receive one fully paid ordinary share in TMT, subject to the terms of the employee incentive scheme and subject to the Company achieving first commercial production from the Yarrabubba Project prior to 30 October 2023.*

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 is 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 a 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 Yarrabubba project is based on and fairly represents, information and supporting documentation compiled by Mr Brett Morgan of METS Engineering Group Pty Ltd. Mr Morgan 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, Brett Morgan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.