

TNG LIMITED

6 March 2018

DEVELOPMENT UPDATE: THE MOUNT PEAKE V-Ti-Fe PROJECT

An advanced global vanadium project

Australian strategic metals developer TNG Limited (ASX: TNG) is pleased to provide an update on the development of its flagship 100%-owned **Mount Peake Vanadium-Titanium-Iron Project**. The company has been busy with a range of pre-development activities. A number of key milestones have recently been achieved including:

- Mine site EIS approved by NTEPA. Final determination from the Federal Government expected.
- EIS for TIVAN[®] processing site in Darwin underway; awarded to experienced environmental consultants.
- Negotiations advanced with Central Land Council for Mining Agreement.
- Grant of Mining Lease expected by mid-2018 (subject to all other requirements).
- Fully-optimised TIVAN[®] flowsheet enabling final engineering and design (FEED) work.
- Breakthrough in TiO₂ pigment production process.
- Negotiations advanced for life-of-mine titanium off-take agreement.
- Construction proposals received.
- Project Finance plan and schedule advanced.
- Vanadium pentoxide and Titanium pigment commodity prices increased.
- TNG's Vanadium pentoxide has been determined suitable for high purity electrolyte.

PERMITTING

MINE SITE EIS

- The permitting process for the Mount Peake mine site is now in its final stages following the completion of the Environmental Impact Assessment report (EIA) on TNG's EIS, by the Northern Territory Environmental Protection Authority (NTEPA) in late 2017.
- As advised on 26 January, the NTEPA has provided an approved Assessment Report (EIA) and made recommendations to approve the go-ahead of the project, and has informed the next phase of mining

approval under the Mining Management Act (NT) and Federal approval under the EPBC Act (Commonwealth).

- The Commonwealth Department of Environment and Energy (DoEE) has commenced its assessment process, which is now awaiting final determination and is expected to take approximately 30 days. TNG anticipates that it will hear from the EPBC shortly after this final determination is received.

MINE MANAGEMENT PLAN (MMP)

- TNG has commenced work to finalise its Mine Management Plan (MMP), incorporating the recommendations made by the NTEPA from the EIA, marking the beginning of the all-important transition to a mining project and clearing the way for financing and site-based construction to commence.

TIVAN® PROCESSING FACILITY EIS

- The Darwin-based TIVAN® downstream processing plant EIS is being progressed separately to the mine site, reflecting both the geographical separation and the fact that significantly different environmental and social issues need to be addressed at the two locations.
- TNG has appointed Perth-based specialist environmental group Animal Plant Mineral (APM) to oversee the EIS process for the TIVAN® site, following their completion of the mine site EIS. APM, which comprises a group of expert environmental advisors and biologists. APM also managed the completion of the EIS process for the mine site. The work is expected to be concluded in the coming months.

MINING AGREEMENT WITH TRADITIONAL LAND OWNERS

- TNG has been in negotiations with the Central Land Council (CLC) on the terms of the Mount Peake Mining Agreement for the past 12 months on finalising the proposed agreement.
- The process is progressing and expected to be concluded by April 2018.
- TNG has met with the respective Aboriginal groups on several occasions over the past few years and has always received support for the project subject to the Mining Agreement terms.

MINING LICENCE (ML)

- The completion of a Mining Agreement and EIS will pave the way for the grant of a Mining Lease by the Northern Territory Government. Subject to all other requirements the Company anticipates that this will occur around mid-2018.

TIVAN® PROCESS

- Following the completion of the updated Feasibility Study and optimised flowsheet for the Mount Peake Project (see ASX release, 20 November 2017) and the recently announced breakthrough production process for TiO₂ pigment (see ASX release, 26 February 2018), TNG's Mine site concentrator and downstream TIVAN® process flowsheet can be finalised.

The mine site concentrator is fully optimised to produce a clean magnetite feed for TIVAN.

TIVAN process is optimised to produce three key commercial products, setting it apart from other producers:

- High-purity vanadium pentoxide (V₂O₅), and the ability to produce commercial-grade vanadium electrolyte and Ferro-Vanadium;
- High-grade titanium dioxide (TiO₂) with the ability to produce a high-quality pigment product from titanium feed residue;

- High-purity iron oxide (Fe_2O_3) with the ability to produce Pig iron
- TNG's strategic engineering partner, SMS group, will oversee the Final Engineering and Design (FEED) work based on the final optimised TIVAN® flowsheet and concentrate specifications.
- TNG's process and infrastructure engineering group, Como Engineers, has fully optimised the mine site magnetite concentrator equipment and flow sheet to produce a clean magnetite for feed into the TIVAN process.
- New titanium process – a technological breakthrough for TiO_2 pigment production at Mount Peake, as outlined in the ASX release of 26 February 2018, has cleared the way for the company to finalise the remaining titanium pigment off-take agreement. This discovery marks the culmination of extensive technical work that has been undertaken as part of the Company's ongoing strategy to maximise value from the Mount Peake Project.

ENGINEERING PROCUREMENT AND CONSTRUCTION (EPC)

TNG has received proposals for the engineering, procurement and construction (EPC) of the Mount Peake Project and is currently reviewing potential partners who are best positioned and aligned with TNG's development objectives.

COMMODITY OFF-TAKE

TNG has binding life of mine agreements in place:

Vanadium Products (60% minimum) KOREA	Binding Life-of-Mine (LOM) off-take Agreement and Technology Transfer agreement with WOJIN Metals. TNG is holding discussions with other interested parties for the remaining 40% of forecast vanadium pentoxide production.
Titanium Dioxide Products HONG KONG	MoU with global TiO_2 trader Wogen for LOM sales and marketing of titanium dioxide products. TNG continues to discuss Titanium pigment offtake with producers and end users of pigment products.
Iron Products (60% minimum) SINGAPORE	Binding Term Sheet for LOM off-take Agreement with major global commodity trader Gunvor for iron products. TNG is holding discussions with a number of interested parties for the remaining 40% of forecast production.

VANADIUM REDOX BATTERIES

The Mount Peake Project business model could benefit from an increase in demand for vanadium pentoxide as a result of the commodity's immense large-scale battery potential. TNG investigated and subsequently successfully produced commercial-grade Vanadium Electrolyte from the Mount Peake Project's V_2O_5 .

Vanadium Electrolyte (VE) has a number of significant differences to other battery metals or materials. VE efficiency does not decay over time, is highly stable, and is suitable for large complexes/towns/manufacturing sites. The long term nature of the battery makes them ideal to replace static long term diesel power.

TNG estimates that 100 X 20MW VE batteries would consume in excess of 12,000tonnes of V2O5 – equivalent to the proposed Mount Peake vV05 production.

Vanadium prices increased more than 175% over the past year and Bloomberg labelled it the best performing battery metal of the past year – beating more high-profile commodities like cobalt, lithium and nickel.

TNG considers the emerging VE batteries as a significant future energy storage opportunity and expects this to be more fully in place by the time it is in production. As a result, TNG is positioning itself with major VE battery producers and GREEN Energy facilities.

PROJECT FINANCE

TNGs model for Project Finance includes the potential for funding from the German export credit bank(s).

TNG has had preliminary meetings with the leading Government-owned KfW IPEX-Bank GmbH and received a positive hearing with an expression of interest to conduct further due diligence ahead of possible mandating for finance.

TNG has also engaged with other debt finance provider including North Australia Infrastructure Fund (NAIF) and Australia's Export Credit Finance Agency, Efic – the extent of their potential involvement in the funding package is unknown at this stage. The company expects updates on this area shortly.

PROJECT DEVELOPMENT TEAM

TNG is looking to recruit suitably qualified candidates for key executive roles in the project development team. Appointments will be announced when confirmed.

INVESTOR ENGAGEMENT

TNG has continued to actively promote the Company at investor briefings globally. The Company's Managing Director, Paul Burton, recently presented extensively to potential strategic investors at the 121 Forum in Cape Town, South Africa, as well as in New York and Canberra, Australia.

Further investor forums and roadshows are planned in coming months:

NEW PREMISES

On 9 March 2018, TNG's head office will relocate to larger premises at 20/22 Railway Road, Subiaco.

The company also maintains a Regional Exploration Office and shed in Alice Springs for access to Mount Peake, and a Shanghai Business Development Support office for access to the Asia region.

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ABOUT TNG LIMITED

TNG is an Australian strategic metals developer, specialising in titanium, vanadium and iron. Our focus is the multi-commodity Mount Peake Project situated in Australia's northern development hub, which will produce three key products: vanadium pentoxide (V_2O_5), titanium dioxide (TiO_2) and iron oxide (Fe_2O_3).

TNG's proprietary TIVAN® Process is a hydro-metallurgical extraction process designed with Perth based metallurgical consultants METS, the CSIRO and German metallurgical plant supplier and development partner, SMS Group. The process has undergone 6 years of development including several successful pilot plant test stages. The process was designed to use conventional and existing equipment currently used in extractive resources.

Mount Peake's development is expected to be a major boost for the Northern Territory economy, leveraging off its strategic location close to existing power and transport infrastructure, including the Alice Springs-Darwin railway, the Sturt Highway and an LPG pipeline.

TNG updated the economics of its Definitive Feasibility Study (DFS) for the Mount Peake Project in November 2017, confirming a world-class project capable of generating outstanding returns (ASX Release, 20 November 2017). The recent technical breakthrough should further improve the economics of TNG's Mount Peake project while at the same time reducing some technical complexity and environmental impact. Key findings of the updated DFS included life-of-mine net cash flow of \$11.7 billion, a pre-tax IRR of 44% and an NPV₈ of \$4.7 billion (see ASX Announcement – 20 November 2017). The Company confirms that all material assumptions underpinning the production target and financial information set out in the announcement released on 20 November 2017 continue to apply and have not materially changed.

TNG has demonstrated production of three commercial high purity products from its TIVAN process:

Vanadium Pentoxide and Vanadium Electrolyte:

TNG has previously confirmed the ability to produce high-purity vanadium pentoxide at +99% purity from its TIVAN® plant following an extensive pilot plant testwork program in 2015 (ASX release, 8 July 2015).

Subsequently, the Company successfully produced commercial-grade high-purity vanadium electrolyte from this vanadium pentoxide (see ASX release, 10 October 2016) to the exacting and detailed specification required by Sumitomo Electric (SEI).

Titanium Dioxide – Titanium Pigment

TNG has previously confirmed its ability to produce a high-grade titanium dioxide feedstock from its TIVAN® process, grading approximately 80% TiO_2 (see ASX release, 8 July 2015). This feedstock is a direct residue from the initial leaching phase of the TIVAN® process, where the vanadium and iron have been dissolved into solution.

With this current breakthrough, TNG has now confirmed that this feedstock can be taken directly to a pre-coating pigment phase.

Iron Oxide: As part of the acid digestion process, the iron component of the magnetite is removed and then captured once the vanadium is extracted from solution, producing a 99.9% pure Fe_2O_3 product .