

## TNG ADVANCES GREEN ENERGY STRATEGY WITH ESTABLISHMENT OF VANADIUM REDOX FLOW BATTERY BUSINESS

*The VRFB strategy will capitalise on the planned production of high-purity vanadium pentoxide from the Company's flagship Mount Peake Project and further diversify TNG's green energy interests*

### Key Points

- TNG has established a Vanadium Redox Flow Battery ("VRFB") business unit as part of the vertical integration strategy for its flagship Mount Peake Vanadium-Titanium-Iron Project, further expanding its strategic footprint in the green energy sector.
- VRFBs utilise high-purity vanadium electrolyte to store energy and support renewable power generation from sources including solar and wind.
- TNG has previously produced high-purity vanadium electrolyte from vanadium pentoxide produced in pilot scale testwork for Mount Peake.
- The VRFB business unit will be owned by TNG Energy, the Company's green energy-focused subsidiary company.
- TNG's aim is to produce its own vanadium electrolyte and become a commercial supplier of VRFBs targeting greenhouse emission reductions and providing an economic alternative to conventional power generation for standalone off-grid power systems.
- TNG is now positioned to capitalise on the growing momentum for sustainable green energy, following its strategic partnership with SMS group to develop a CO<sub>2</sub>-neutral technology for green hydrogen production.

Australian resource and mineral processing technology company TNG Limited (ASX: TNG) ("TNG" or the "Company") is pleased to announce that it has established a new Vanadium Redox Flow Battery (VRFB) business unit as part of its vertical integration strategy for the 100%-owned **Mount Peake Vanadium-Titanium-Iron Project** ("Mount Peake Project" or the "Project") in the Northern Territory, Australia.

The launch of this new business unit marks a further important growth and diversification step for the Company into the rapidly growing green energy sector, complementing other recently unveiled initiatives including its strategic partnership with SMS group to develop a CO<sub>2</sub>-neutral technology for green hydrogen production.

The Mount Peake Project is a world-scale strategic metals deposit targeting production of 6,000 tonnes per annum of high-purity vanadium pentoxide, in addition to titanium dioxide pigment and iron ore fines products, utilising TNG's patented and 100%-owned TIVAN<sup>®</sup> processing technology.

Pre-development planning for the Mount Peake Project is at an advanced stage, providing strong impetus for the Company to progress its plans to establish a commercial VRFB business unit via its green energy focused 100%-owned subsidiary, **TNG Energy Pty Ltd** ("TNG Energy").

TNG Energy's aim will be to enter the fast-growing alternative energy market as a supplier of VRFBs using its own high-purity vanadium electrolyte, targeting applications focused on greenhouse emission reductions and providing an economic alternative to conventional power generation for standalone off-grid power systems.

TNG has previously produced high-purity vanadium electrolyte using vanadium pentoxide from the Mount Peake Project during pilot plant testwork for the Project with its engineering partner SMS group (see ASX Announcement dated 10 October 2016).

Since then, the Company has continued to evaluate the green energy market and the potential for VRFB use, while also advancing other initiatives aimed at moving to green energy and carbon neutral operations across its business. These include its recently announced partnership with SMS group for the production of green hydrogen energy (see ASX announcement dated 17 September 2020).

The ability to produce high-purity vanadium electrolyte – a key requirement for the operation of VRFBs – provides the Company with a competitive advantage in developing its VRFB business, and is consistent with its overarching strategy of fully integrating its vanadium supply chain from the mine site to final products for sale globally.

VRFBs use vanadium electrolyte to store energy in support of the wider application of renewable power generation, such as from wind and solar, and are highly scalable for use in a variety of settings.

VRFBs offer a number of distinct advantages for sustainable large-scale energy storage, having long lifespans of potentially 20-plus years without performance degradation, the ability to discharge without battery damage, the non-flammability of the vanadium electrolyte, and the ability to recover and re-use the vanadium electrolyte at the end of the battery life.

The Company has confirmed that suitably sized VRFBs can replace diesel power generation at remote sites, providing an economically viable alternative while assisting with carbon emission reduction and promoting green energy. Remote sites include indigenous communities as well as applications for mine-sites, pastoral stations and road houses across Australia.

TNG Energy will work with State and Territory Governments and seek support from Federal agencies such as ARENA, to identify suitable sites to roll out VRFBs.

A steering committee has been established to oversee the development of TNG Energy, which will be chaired by TNG's Managing Director & CEO, Mr Paul Burton. Work will commence on the project immediately, with an initial focus on the completion of a commercial, marketing and technical implementation strategy for the VRFB business under TNG Energy.

The Company's long-term strategy is to develop TNG Energy to a point where its possible spin-off could be evaluated to maximise shareholder value.

To support its VRFB strategy, TNG has engaged with renewable energy companies to provide specialist commercial and technical advice. Further details will be provided in due course.

The Company's primary focus remains on completion of design, engineering and pre-development planning for the Mount Peake Project, as it progresses towards a Final Investment Decision. The VRFB business will be progressed in parallel with the Mount Peake work streams.

### **Management Comment**

Commenting on the establishment of the VRFB business unit, TNG's Managing Director & CEO, Mr Paul Burton, said: *"The VRFB market represents an exciting opportunity for the Company to further expand into the green energy sector and diversify the Mount Peake product portfolio with the future production of high-purity vanadium electrolyte.*

*"Given that we are now at a very advanced stage of pre-development planning for Mount Peake, the timing is right to advance our VRFB strategy in order to capitalise on the growing momentum for alternative energy solutions that can reduce greenhouse emissions.*

*"The development of the VRFB business is an extension of our positioning as a resources and mineral processing technology company, underpinned by the 100%-owned TIVAN® processing technology to be used at Mount Peake.*

*“The potential development of VRFBs using Mount Peake’s vanadium electrolyte, together with the recent agreement signed with SMS to develop a hydrogen production technology, marks another step towards realising our strategic vision of establishing TNG as a sustainable resources company and providing maximum benefit to our shareholders.”*

Authorised by:

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#### **About TNG**

TNG is a Perth based resource and mineral processing technology company focussing on building a world-scale strategic metals business based on its flagship 100%-owned Mount Peake Vanadium-Titanium-Iron Project in the Northern Territory. Located 235km north of Alice Springs, Mount Peake will be a long-life project producing a suite of high-quality, high-purity strategic products for global markets including vanadium pentoxide, titanium dioxide pigment and iron ore fines. The project, which is expected to be a top-10 global producer, has received Major Project Facilitation status from the Northern Territory Government.

#### **Forward-Looking Statements**

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