TNG LIMITED

13 April 2021

TNG POISED TO ENTER GREEN ENERGY MARKET WITH EXECUTION OF HEADS OF AGREEMENT FOR JOINT VENTURE WITH LEADING VANADIUM REDOX FLOW BATTERY MANUFACTURER

The planned establishment of the joint venture will represent a major step towards TNG achieving its vision of becoming a commercial supplier of Vanadium Redox Flow Battery systems in Australia

Key Points

- **Heads of Agreement ("HoA") signed with Singaporean-based company V-Flow Tech ("V-Flow") for establishment of a joint venture to commercialise Vanadium Redox Flow Battery ("VRFB") systems in regional Australia.**
- **V-Flow is a battery technology development company that specialises in the design, manufacture and installation of innovative VRFB systems.**
- **Under the proposed joint venture, the parties will collaborate on the development and delivery of new energy power systems underpinned by VRFBs; V-Flow intends to supply the battery systems, and TNG intends to supply the high-purity vanadium electrolyte required to operate the batteries.**
- **Proposed plan will be undertaken in parallel with development of the V-Ti-Fe Mount Peake Project.**
- **VRFBs are long-life energy storage systems that are expected to play an important role in unlocking the full potential of renewable energy and in capitalising on the green energy revolution.**
- **TNG has previously produced high-purity vanadium electrolyte from vanadium pentoxide produced in pilot scale testwork for the Mount Peake Project, and intends to develop its own electrolyte production capability.**
- **The joint venture intends to work collaboratively with State and Territory Governments to plan and install new green energy and VRFB systems at targeted sites to replace high-cost fossil fuel systems and significantly reduce carbon emissions.**

Australian resource and mineral processing technology company TNG Limited (ASX: TNG) ("TNG" or the "Company") is pleased to announce that it has made further significant progress towards delivering its green energy strategy with the execution of Heads of Agreement for an incorporated joint venture with leading Singaporean-based battery technology development company V-Flow Tech Pte Ltd.

The joint venture intends to commercialise Vanadium Redox Flow Batteries as part of renewable power generation systems at targeted remote sites in regional Australia with the objective of offering a long-life, economically viable alternative to existing diesel-based power systems. Remote sites would include indigenous communities, pastoral stations, road houses and mine sites.

As previously announced (see ASX Announcement dated 3 November 2020), TNG established its new VRFB business unit as part of a vertical integration strategy for the Mount Peake Vanadium-Titanium-Iron Project ("Mount Peake Project" or "Project") and to capitalise on its ability to produce high-purity vanadium electrolyte from the vanadium pentoxide expected to be produced at the Mount Peake Project.

The joint venture with V-Flow is the next step in TNG's green energy business development strategy, and will underpin the development of a VRFB business capable of offering both the battery system and vanadium electrolyte required to store renewable energy.

V-Flow Tech is a Singaporean based battery technology development company that specialises in the design, manufacture and installation of innovative VRFB systems and renewable energy technologies (e.g., solar), with the capability to provide a complete "energy plus storage" solution. V-Flow Tech has installed renewable power generation and VRFB storage systems in both regional and commercial applications in Asia. For more information, please visit http://www.vflowtech.com/.

Vanadium Redox Flow Batteries 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 key benefits for sustainable large-scale energy storage, including:

- Long lifespans of potentially 20-plus years without performance degradation.
- Ease of scalability for larger grid-scale applications through modularisation.
- Very low maintenance requirements, reducing operating expenditure.
- Ability to discharge without battery damage.
- Non-flammability of the vanadium electrolyte, with-no thermal or fire system management required.
- Ability to recover and re-use the vanadium electrolyte at the end of the battery life.

V-Flow's batteries have been developed to further build upon the performance of conventional VRFB systems, offering improved scalability, higher energy density and enhanced efficiency and stability. V-Flow has also developed a proprietary operational management and analytical software system in support of on-going performance monitoring and optimisation.

Under the HoA, the parties intend to establish a formal joint venture arrangement through incorporation of a new company to jointly develop and roll-out a VRFB business targeting initial applications at remote regional sites in Australia with a fully integrated renewable energy supply and VRFB storage solution.

It is intended that V-Flow will supply the renewable energy systems and vanadium redox flow batteries, and TNG the high-purity vanadium electrolyte required to operate the batteries. The joint venture will also consider other applications for VRFB systems including commercial and residential settings.

The parties are now progressing negotiation of a formal joint venture agreement and other supporting commercial agreements for the strategic corporate, commercial and operational structure of the new business venture.

A secure supply of high-purity vanadium electrolyte is critical to the on-going viability and sustainability of the joint venture. Vanadium electrolyte is produced through a chemical process using vanadium pentoxide (V_2O_5). Vanadium pentoxide is currently predominately used as a strengthening agent in steel alloys. The growing momentum for VRFBs is expected to increase demand for vanadium pentoxide in the medium-term.

TNG has previously produced high-purity vanadium electrolyte using vanadium pentoxide from the Mount Peake Project during pilot plant testwork (see ASX Announcement dated 10 October 2016). The Company is targeting production of 6,000 tonnes per annum of vanadium pentoxide from its Mount Peake Project. TNG is progressing with a review of the design and engineering requirements, and feasibility, for a vanadium electrolyte production facility in Australia.

Management Comment

Commenting on the HoA with V-Flow, TNG's Managing Director & CEO, Mr Paul Burton, said:

"*We are very pleased to execute the Heads of Agreement with V-Flow Tech and to establish an exciting joint venture arrangement as we position our business to enter the green energy market in Australia in parallel with development of our Mount Peake Project.*

"V-Flow Tech have demonstrated expertise in Vanadium Redox Flow Batteries and renewable power systems, and offer an innovative and high-quality product. Combined with our own ability to produce a high-purity vanadium electrolyte, the joint venture is expected to be uniquely positioned to provide a fully integrated green energy generation and storage solution.

"We firmly believe that VRFBs will play an integral role in the green energy revolution, and look forward to being at the forefront of this emerging industry in Australia."

Authorised by:

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Managing Director & CEO

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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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