

## TNG ADVANCES VANADIUM ENERGY STRATEGY THROUGH AGREEMENT WITH PERTH-BASED ULTRA POWER SYSTEMS

*Agreement advances TNG's green energy opportunities in vanadium electrolyte production and vanadium redox flow batteries for Australia*

### Key Points

- Collaboration agreement executed with Perth-based Australian energy company Ultra Power Systems Pty Ltd ("Ultra") to jointly explore opportunities for vanadium electrolyte production and vanadium redox flow batteries ("VRFB") in Australia.
- Ultra is a private Australian energy technology company that supplies renewable power generation and energy storage systems, including its Ultra V40 Vanadium Battery Module.
- The agreement supports TNG's green energy strategy and carbon emissions reduction planning, including the potential application of VRFBs at the Mount Peake Project.

Australian resource and mineral processing technology company TNG Limited (ASX: TNG) ("TNG" or the "Company") is pleased to announce that it has further progressed its vanadium energy strategy after executing a memorandum of understanding for collaboration ("Agreement") with Perth-based energy technology company, Ultra Power Systems Pty Ltd ("Ultra").

TNG plans to produce high-purity vanadium pentoxide as one of three key products from its flagship Mount Peake Vanadium-Titanium-Iron Project in the Northern Territory. Vanadium pentoxide is the key component in the production of vanadium electrolyte used in vanadium redox flow batteries ("VRFBs") (see ASX announcement dated 3 March 2022). TNG has already produced high-purity vanadium electrolyte from its Mount Peake concentrate during previous pilot-plant test-work.

Ultra has developed its own vanadium redox flow battery ("VRFB") system, the Ultra V40 battery module, and a Standalone Power Station which integrates solar and wind turbines into a mobile and scalable power-generation system highly suitable for off-grid applications. Ultra's battery is powered by its unique mixed-acid vanadium electrolyte, which provides a 70% higher energy density and a higher temperature capability compared with mainstream vanadium electrolytes.

Under the Agreement, TNG and Ultra will collaborate on opportunities for the identification, development, and deployment of a combined renewable power generation and VRFB storage system for the Australian market. This includes the production of Ultra's high performing mixed-acid vanadium electrolyte.

The Agreement supports both TNG's green energy strategy (which includes a net reduction in carbon emissions from the Mount Peake Project) and the Northern Territory and Federal Governments' greenhouse gas emissions reduction plans for Australia. TNG's green energy strategy is focused on the commercialisation of renewable energy opportunities, including the production of vanadium electrolyte and deployment of VRFB's in Australia. This strategy will leverage off TNG's plans to produce high-purity vanadium pentoxide from the Mount Peake Project.

Notably, the development and subsequent demand for VRFB's has increased significantly in recent years, and is predicted to grow strongly beyond 2050 as a result of the transition away from fossil fuels to renewable energy. This will require immense growth in energy storage (of which batteries are a critical component) and decentralisation of energy production and management.

The resultant infrastructure spending in the renewable energy sector will positively impact demand for critical mineral projects producing high-quality vanadium pentoxide.

The collaboration with Ultra will support TNG's plans to establish a vertically integrated vanadium energy business including the supply of vanadium electrolyte and installation of batteries across a range of industries and remote locations. The parties will consider further formal agreements for collaboration initiatives.

### **About Ultra**

Ultra is Australia's first VRFB manufacturer, with a business model focused on the design, manufacture, installation, commissioning and maintenance of modular, integrated renewable power generation (solar and wind) and energy storage systems through a network of local "flow" partners. Ultra's initial markets, both in Australia and overseas, include off-grid applications within the mining sector (such as bore pumps, exploration camps, mining villages and ultimately full mine electrification), remote communities, community batteries, residential microgrids, and the specific charging demands of the electric vehicle sector. Ultra is intending to list on the ASX during FY23. For more information on Ultra, please visit <https://www.ultraenergy.com.au/>.

### **Management Comment**

Commenting on the Agreement with Ultra, TNG's Managing Director and CEO Paul Burton said:

*"We are very pleased to be engaging with Ultra, a WA-based group that shares TNG's vision of playing a lead role in growing the emerging vanadium energy market in Australia. The collaboration between TNG and Ultra offers many synergies in vanadium electrolyte and battery development, making this a very progressive agreement with huge potential within the Australian market. We look forward to working with Ultra for this important development."*

Ultra's CEO & Chairman Brad Appleyard said:

*"We are extremely pleased to sign an MoU with TNG, a global strategic metals company with the assets, capability and shared vision to lead the Australian vanadium energy industry together."*

*"Ultra is currently producing scalable vanadium batteries (V40 series) and cyclone-rated stand-alone power stations. We are investing substantially in the development of clean-energy generation and storage solutions and consider local high-grade vanadium pentoxide production and electrolyte manufacture as critical to the development of the vanadium energy industry. We look forward to working with Paul Burton and his team to expedite the transition to clean energy."*

Authorised by:

**Paul E Burton**  
**Managing Director & CEO**

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**Inquiries:**

Paul E Burton  
Managing Director & CEO + 61 (0) 8 9327 0900

Paula Raffo  
Company Secretary & IR + 61 (0) 8 9327 0900

Nicholas Read  
Read Corporate + 61 (0) 8 9388 1474

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**About TNG**

TNG is a mineral resource and 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 Status from the Australian Federal Government and the Northern Territory Government.

TNG is also advancing a green energy strategy with the dual objective of offsetting carbon emissions from its planned future operations and generating new business opportunities in the alternative energy market to create additional shareholder value, with a focus on green hydrogen and vanadium redox flow batteries.

**Forward-Looking Statements**

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