

TNG SIGNS AGREEMENT WITH MALAYSIAN GREEN HYDROGEN COMPANY TO DEVELOP VANADIUM REDOX BATTERIES

TNG and AGV Energy to collaborate on commercial opportunities for Vanadium Redox Flow Batteries and Green Hydrogen Technology in Malaysia and Australia

Key Points

- Heads of Agreement (“HoA”) signed with Malaysian-based green energy company, AGV Energy & Technology (“AGV Energy”), to collaborate on the proposed integration of vanadium redox flow batteries (“VRFB”) with AGV Energy’s green hydrogen production technology.
- AGV Energy and its partners are developing a technology to produce green hydrogen using the electrolysis of demineralised water and renewable energy (“HySustain”), with the first commercial application planned at a project in Malaysia (“Malaysian Green Hydrogen Project”).
- AGV Energy is planning to use VRFB as its preferred energy storage system for HySustain, at the Malaysian Green Hydrogen Project.
- Under the agreement, TNG and AGV Energy will also explore opportunities for formal collaboration for the commercialisation of HySustain in Australia and other opportunities for the application of VRFB in Malaysia.
- TNG and its existing VRFB technology partner, Singaporean based V-Flow Tech, are aiming to jointly develop and deliver green energy power systems underpinned by vanadium redox flow batteries.
- The HoA with AGV Energy forms part of TNG’s expanding vertical integration strategy for its flagship Mount Peake Project, and the Company’s plans to reduce its net carbon footprint.

Australian resource and mineral processing technology company TNG Limited (ASX: TNG) (“TNG” or the “Company”) is pleased to announce that it has taken another key step to progress its green energy strategy after reaching agreement with an international technology company and specialist in the green hydrogen sector to develop commercial opportunities using vanadium redox flow batteries (“VRFB”).

The Company has executed a Heads of Agreement with Malaysian-based AGV Energy & Technology Sdn Bhd (“AGV Energy”) to progress formal arrangements for collaboration on opportunities for the commercialisation of VRFB and technologies to produce green hydrogen.

AGV Energy, working with its specialised development partners from around the globe, is developing technology to produce green hydrogen and oxygen using the electrolysis of demineralised water and renewable energy (“HySustain”). The HySustain technology is well advanced, based on the results from a test plant in Europe to validate its operational and commercial feasibility. AGV Energy is also well advanced in discussions with potential hydrogen off-take partners in the Asia-Pacific region.

AGV Energy is planning a phased rollout of the scalable HySustain technology, with the first commercial application planned at an advanced project in Malaysia (“Malaysian Green Hydrogen Project”). AGV is a subsidiary of the AGV Group, a Malaysian-based environment, sustainability and climate change consultancy with clients across a broad range of industry sectors.

Green hydrogen production is reliant on green electricity production from 100% renewable energy sources. AGV Energy intends to utilise purpose-built, project-specific solar farms to provide the green electricity required for HySustain. VRFB, which offer large, scalable and long-life energy storage for solar power generation, are AGV Energy's preferred battery system for integration with HySustain.

Under the Heads of Agreement, TNG and AGV Energy intend to progress formal commercial arrangements for collaboration in three key proposed areas:

- Integration of VRFB into HySustain, including for its first commercial application initially at the Malaysian Green Hydrogen Project;
- Progression of opportunities for the rollout of HySustain in Australia; and
- Progression of opportunities for the rollout of VRFB in other commercial applications in Malaysia.

The parties are now advancing discussions to formalise business planning and commercial arrangements for collaboration in these areas.

As announced earlier this year, TNG has entered into a Heads of Agreement for an incorporated joint venture with leading Singaporean-based battery technology development company V-Flow Tech Pte Ltd ("V-Flow") ("TNG-V-Flow JV") (see ASX Announcement dated 13 April 2021).

TNG and V-Flow intend to jointly develop a VRFB business initially targeting applications at remote regional sites in Australia and other commercial and residential applications using a fully-integrated VRFB storage solution, with TNG providing the high-purity vanadium electrolyte required to operate the batteries.

Negotiations between TNG and V-Flow on a formal joint venture arrangement are well advanced.

The Heads of Agreement between TNG and AGV Energy represents an excellent and complementary opportunity for the TNG-V-Flow JV to develop and commercialise its planned VRFB product.

The collaboration with AGV Energy on its green hydrogen technology is separate to the work being undertaken by the Company with the SMS group for development of a technology to produce green hydrogen, by means of plasma pyrolysis, for potential application as the reduction agent in TNG's proposed TIVAN® processing technology and Mount Peake Project (see ASX Announcement dated 17 September 2020).

Management Comment

Commenting on the Heads of Agreement with AGV Energy, TNG's Managing Director & CEO, Mr Paul Burton, said:

"We are very pleased to have secured this Heads of Agreement with AGV Energy, opening up an exciting pathway to collaborate with them on the development of their exciting green hydrogen HySustain technology."

"HySustain is a great opportunity to showcase an integrated VRFB storage solution. We also intend to work with AGV Energy on the potential rollout of HySustain in Australia, given the significant momentum within Australia and the resources industry to move towards a hydrogen-based economy."

"Our collaboration with AGV Energy is an important further strategic step in our ongoing program to reduce our Company's net carbon emissions, including future emissions from our flagship Mount Peake Project, given the strong focus from environmental regulators on undertaking proactive measures to reduce carbon emissions globally and for companies to embrace world-leading ESG standards and practices."

Authorised by:

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Managing Director & CEO

21 June 2021

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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

This announcement has been prepared by TNG Limited. This announcement is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained.

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