

Aiming to be a secure, reliable and long-term vanadium supplier

BY STAFF WRITER

Vanadium, traditionally used in aerospace, vehicles, infrastructure and tools to make steel lighter yet stronger (remember those chrome V spanners your Dad used to have) has been getting more and more traction in the race for green, battery metals required for the energy transition.

Notably, there are significant deposits of vanadium in North Queensland and Richmond Vanadium Technology (ASX: RVT) has one of the largest undeveloped oxide vanadium resources in the world, capable of supporting a vanadium operation for +100 years.

WHY IS VANADIUM SO IMPORTANT?

Vanadium redox flow batteries or VRFBs are grid scale energy storage systems that allow excess generation, from solar installations or wind farms, to be stored when demand is low and used later, rather than that electricity being wasted. Consumption of vanadium for batteries is forecast to grow on average +20% year on year.

VRFBs are not new, in fact, they were invented in 1985 in Australia by Prof. Maria Sklyllas-Kazacos and her University of NSW team. VRFBs are non-flammable compared to lithium batteries with longer service life of around 20 years (compared to 10 years for lithium batteries) and can discharge 100% of stored energy.

RVT's Richmond-Julia Creek Vanadium Project is located in the minerals rich area of North Queensland, between Townsville and Mt Isa, close to existing infrastructure including gas pipeline, HV network line, major highway and railway linked to Townsville Port.

WHAT MAKES RVT STAND OUT FROM THE CROWD?

RVT has taken a systematic and stepped approach through exploration into development. The project has an Ore Reserve of 459.2Mt @



Chairman Brendon Grylls and Managing Director Shaun Ren onsite during the recent met sample drilling program.

0.49% V2O5. After a four-year metallurgical review and testing program, including industrial scale testwork, the project boasts a patented metallurgical solution with conventional processing achieving a concentrate grade of 1.82% V2O5.

Pre-Feasibility works completed demonstrated a financially strong project payback of more than five years based on a 25-year life. As such, the Company progressed to a Bankable Feasibility Study (BFS) resulting in its IPO on the ASX in December 2022. RVT's raising was the largest of the 2022 small caps and in the top 10 for 2022, raising \$25 million before costs – enough to complete the BFS.

RVT appointed experienced study manager Peter Hedley to commence the BFS, followed by a qualified and professional BFS lead contractor. Concurrently, the Environmental Impact Statement (EIS) is underway, led by Epic Environmental. Both BFS and EIS will be completed by Q4 2024.

THE FUTURE

Ongoing support for the critical minerals industry is essential to support Australia's

energy transition timetable. Queensland has the potential to be a critical minerals destination and recognising this, the Queensland Government has been incredibly supportive, committing \$5B to construct CopperString 2032 high voltage powerline connecting the north west into the grid, \$75M to the Queensland Common User processing demonstration facility in Townsville, \$100M Critical Minerals Investment Fund targeting support for downstream processing / advanced manufacturing, and \$27M investment into a Townsville electrolyser facility.

Australia has an immense opportunity to create a market for vanadium in grid storage batteries, diversify the storage capacity for energy transition and maintain sovereignty over a critical mineral.

RVT has a dream, where we will see a mine to metal to battery manufacturing chain industry in Australia.

RVT's ultimate aim is to be a secure, reliable and long-term supplier of vanadium. ■