



# VANADIUM RECOVERY PROJECT - PILOT PLANT AT STEADY STATE

## HIGHLIGHTS

- Pilot plant recovery of vanadium from steel making by-product operating at steady state;
- Trial to process 13 tonnes over 22 days from 3 Scandinavian sites at 25 times larger scale than previous 'mini-pilot';
- Campaign will generate proof-of-scale data for feasibility study and significant volume of samples for end-user product evaluation; and
- Successful completion in July will also confirm carbon sequestration and potential 'net zero' CO<sub>2</sub> footprint.

Innovative project developer Neometals Ltd (**ASX: NMT**) ("**Neometals**" or "**the Company**") is pleased to announce continuous pilot trial ("**Pilot**") on the Company's Vanadium Recovery Project ("**VRP**"). The Pilot campaign will process approximately 13 tonnes of vanadium-bearing steel by-product ("**Slag**") over a total of 22 days from 3 Scandinavian sites at 25kg/hr. Successful completion of the Pilot will confirm the technical feasibility of Neometals' proprietary process at scale and data for an AACE Class 3 feasibility study ("**Feasibility Study**"), it will also provide vanadium pentoxide ("**V<sub>2</sub>O<sub>5</sub>**") samples for evaluation by potential off-takers.

As previously announced, Neometals has executed a collaboration agreement with Critical Metals Ltd ("**Critical**"), to jointly evaluate the feasibility of constructing a VRP facility in Finland to recover and produce sustainable high-grade vanadium products from Slag stockpiles in Scandinavia (*for further details see Neometals announcement titled "High-Grade Vanadium Recycling Agreement" dated 6<sup>th</sup> April 2020*). Neometals is funding and managing the evaluation activities, including the completion of successive feasibility studies up to consideration of a final investment decision, which, if positive, will earn Neometals a 50% interest in an incorporated joint venture with Critical.

The 1:1000 scale Pilot follows positive results from an earlier mini-pilot trial (*for further details see Neometals announcement titled "Vanadium Recovery - Mini Pilot Results and Award of PFS" dated 4th November 2020*) together with encouraging financial outcomes from scoping and pre-feasibility level studies. The VRP Pilot seeks to confirm the technical feasibility of Neometals' proprietary hydrometallurgical process flowsheet at a scale 25 times larger than previous studies. Specifically, the trials, due for completion in July 2022, are expected to confirm the exceptional product purities and strong recoveries demonstrated in the mini-pilot. In addition to providing proof-of-scale, the VRP Pilot will generate approximately 300 kilograms of vanadium pentoxide for marketing and product evaluation purposes as well as stabilised slag material ("**SSM**") by-product for evaluation as a construction material in building industry trials. Please follow this link for a video of the VRP Pilot Plant ([www.neometals.com.au/vrp-pilot-plant](http://www.neometals.com.au/vrp-pilot-plant))

Neometals Managing Director Chris Reed said:

*"It's hard not to be excited by the strong results delivered by successive evaluations of the VRP and the significant market tailwinds in Europe for domestic battery metals projects with a potential 'zero-carbon' footprint. We are confident that this Pilot which will further reinforce a business case underpinned by industry-leading sustainability credentials, exceptional grade stockpiled feedstocks and robust potential financial metrics. Aside from generating data for our internal evaluation, the VRP Pilot will generate significant samples to mature our dialogues with potential off-takers under formal product evaluation arrangements."*

\*Association for the Advancement of Cost Engineering



Figure 1 – Overview of Pilot Plant



Figure 2 – Solvent Extraction section of Pilot Plant



*Authorised on behalf of Neometals by Christopher Reed, Managing Director*

## ENDS

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## About Neometals Ltd

Neometals innovatively develops opportunities in minerals and advanced materials essential for a sustainable future. With a focus on the energy storage megatrend, the strategy focuses on de-risking and developing long life projects with strong partners and integrating down the value chain to increase margins and return value to shareholders.

Neometals has three core projects that support the global transition to clean energy and span the battery value chain:

### Recycling and Resource Recovery:

- Lithium-ion Battery Recycling – a proprietary process for recovering nickel, cobalt and other valuable materials from spent and scrap lithium batteries. Completing construction of demonstration scale plant with 50:50 JV partner SMS group. Targeting a development decision in Mar Q 2022; and
- Vanadium Recovery – sole funding evaluation studies to form a 50:50 joint venture with Critical Metals Ltd to recover high-purity vanadium pentoxide from processing by-products ("Slag") from leading Scandinavian steelmaker SSAB. Underpinned by a 10-year Slag supply agreement, Neometals is targeting an investment decision to develop a 200,000tpa processing plant in DecQ 2022.

### Upstream Industrial Minerals:

- Barrambie Titanium and Vanadium Project - one of the world's highest-grade hard-rock titanium-vanadium deposits, working towards a development decision in 2022 with potential operating JV partner IMUMR and potential cornerstone product off-taker, Jiuxing Titanium Materials Co.