STUDY CONFIRMS LOWEST QUARTILE OPERATING COST POTENTIAL

HIGHLIGHTS

- **Engineering Cost Study component of PFS completed with assistance from leading consulting engineers Hatch Pty Ltd;**
- **Operating cost estimate of US$ 4.25/lb V_2O_5 places project in lowest quartile of the industry cost curve;**
- **Capital cost estimate of US$ 184M (including 20% contingency);**
- **Pilot plant on schedule for commencement in June quarter;**
- **Permitting activities well advanced with initial Environmental Impact Assessment Program document submitted to Finnish regulators; and**
- **Vanadium Recovery Project investment decision on track for second half of 2022.**

Project developer Neometals Ltd (**ASX: NMT**) ("**Neometals**" or "**the Company**") is pleased to announce the completion of an Association for the Advancement of Cost Engineering ("**AACE"**) Class 4 Engineering Cost Study ("**Cost Study**") on the recovery of high-purity vanadium pentoxide ("**V_2O_5**") from high-grade vanadium-bearing steel by-product ("**Slag**").

As announced on 6th April 2020 (*see ASX announcement titled "High-Grade Vanadium Recycling Agreement"),* Neometals has the right, subject to funding certain evaluation studies, to enter into a 50:50 incorporated joint venture ("**JV**") to develop the project with unlisted Scandinavian mineral development company, Critical Metals Ltd ("**Critical**"). The parties are jointly evaluating the feasibility of constructing a facility to process and recover high-grade vanadium chemicals from vanadium-bearing steel making by-product generated by SSAB EMEA AB and SSAB Europe Oy (collectively "**SSAB**") in Scandinavia.

Table 1 - *Study Highlights (all figures expressed on a 100% ownership basis)*

Study Highlights	
Annual Production	13.4 million lbs V_2O_5
Life of Plant (LOP)	10.5 years
Average Net Operating Cost of recovered V_2O_5	US$4.25/lb
Total initial capital costs	US$184 million

As part of these evaluation activities Neometals is in the process of finalising a pre-feasibility study ("**PFS**") which will include the findings from the Cost Study. Neometals is extremely encouraged by the outcomes of the Cost Study which confirm the potential for lowest quartile operating cost outcome of the original Scoping Study to a higher degree of accuracy (from -35% +50% to -20% +25%). The positive results from the Cost Study augur well for the financial metrics which will be released in the full PFS results expected to be released later this quarter.

The Cost Study outcomes validate Neometals' decision to accelerate it evaluation activities, the decision to construct and commission a comprehensive pilot plant ("**Pilot Plant**") in parallel with the PFS will enable the seamless transition into the commencement of a Feasibility Study ("**FS**"), targeted for completion in June 2022.

Excellent progress has already been made with permitting activities being managed by Critical Metals Ltd and its local team of consultants, with submission of initial documents to the local regulators.

Neometals Managing Director Chris Reed said:

"The results from the Cost Study come as no surprise given the success of the Mini Pilot test work from last year using our proprietary process and the exceptional grade of the feedstock material. The potential for lowest quartile costs is complemented by the exceptional product purity and potential for premium pricing from increasing use in both electric vehicle and stationary storage batteries. Our patent pending process uses an alkaline carbonate leach which sequesters carbon in the tailings stream and gives us a sustainable competitive advantage in the production of an emerging battery raw material with the lowest carbon footprint. The project demonstrates Neometals' alignment with, and pivot towards, the environmentally responsible, sustainable recovery of finite materials."

CAUTIONARY STATEMENT

The Cost Study referred to in this report is based on low-level technical and economic assessments and is insufficient to provide definitive assurance of an economic development case, or to provide certainty that the conclusions of the Cost Study will be realised. Further detailed studies will be required to determine the feasibility and viability of a commercial-scale project.

Background

On the 6th of April 2020, Critical executed a conditional agreement ("**Slag Supply Agreement**") with SSAB, a steel producer that operates steel mills in Scandinavia, to acquire Slag produced as by-product at SSAB's operations. The Slag Supply Agreement provides a secure basis for the evaluation of the Vanadium Recovery Project which will be capable of processing 200,000 tonnes of Slag per annum (with a reference grade of 3.93% V_2O_5, being the reference grade for pricing under the Slag Supply Agreement) without the need to build a mine and a concentrator like existing primary producers. The Slag Supply Agreement provides for the conditional purchase of 2,000,000 dmt of Slag from SSAB.

Neometals has developed a proprietary processing method to recover vanadium from steel slags. This hydrometallurgical process utilises conventional equipment and operates at atmospheric pressure and mild temperatures. Mini-Pilot Plant testing of the selected flowsheet was completed in Perth (*see ASX announcement released 4th November 2020 titled "Successful Vanadium Recovery Mini-Pilot and Commencement of PFS")* and resulted in product purities of greater than 99.5% with metallurgical recoveries exceeding 77.5%. The information from the operation of the Mini-Pilot Plant was captured in a process design criteria and mass balance and was utilised to develop PFS (-20% +25%) opex and capex numbers for a 200,000 dry tonnes per annum ("**tpa**") hydrometallurgical processing circuit.

The Cost Study was based on establishing an operation at Tahkoluoto, Pori in Finland. This location has excellent infrastructure, including a deep-water port, as shown below in Figure 1 and was chosen after the completion of an extensive location study (*for further details see ASX announcement released 10th December 2020 and titled "Pori, Finland selected for Vanadium Recovery Project*").

Figure 1 - *Aerial schematic showing location for the proposed VRP processing plant at Tahkoluoto port, Pori, Finland*

Summary

Key highlights from the Cost Study, summarised in **Table 1** are denominated in US$ dollars using an exchange rate of US$1 = €0.83. Overall metallurgical recovery of V_2O_5 is based on results from the Mini Pilot Plant and is 77.5%.

Figure 2 highlights the competitive operating cost of the Vanadium Recovery Project, with a lowest quartile position on the industry operating cost curve (excluding royalties, taxes, depreciation, and amortisation).

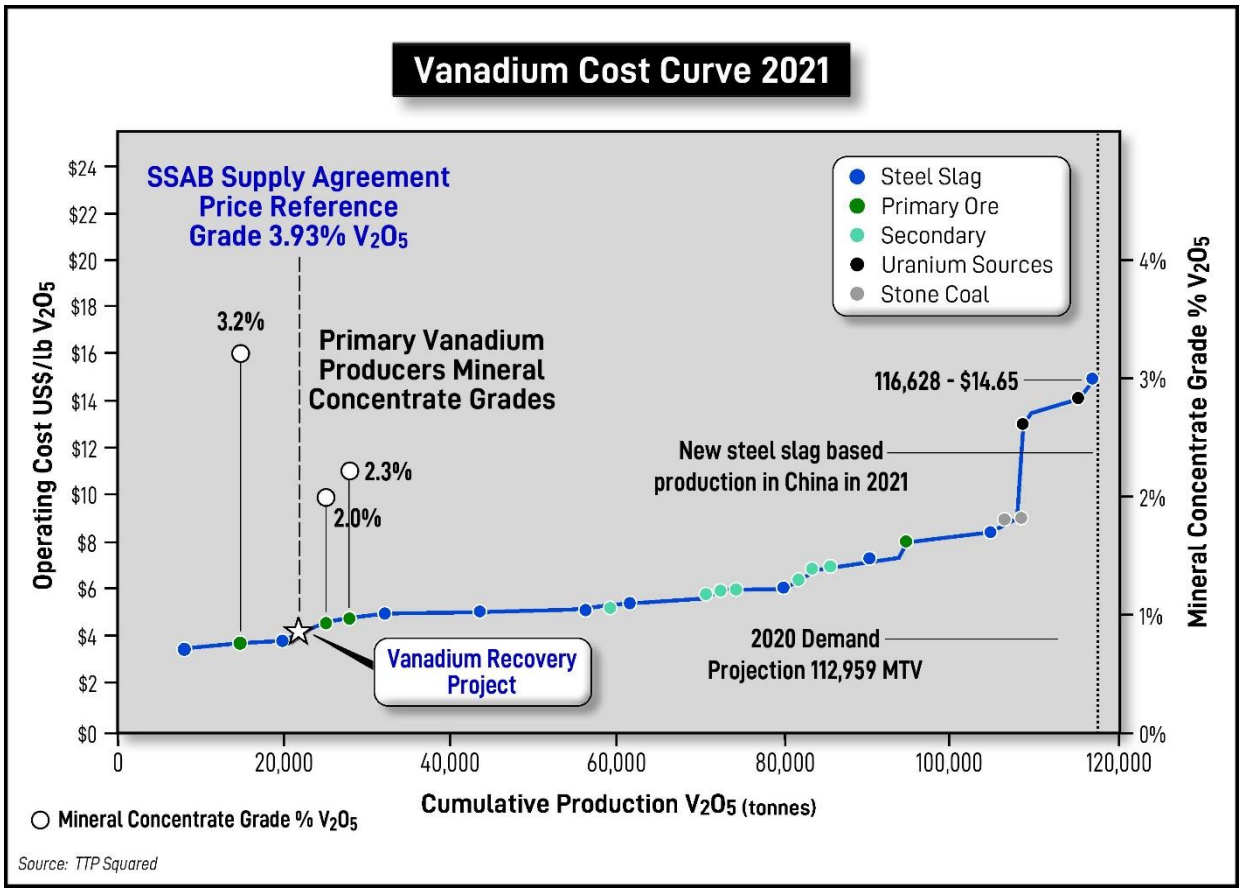

Figure 2 - *2021 Vanadium Operating Cost Curve*

Development Scenario

The development scenario for this Cost Study is characterised by:

- Greenfields development starting with a cleared industrial site at Pori, Finland.
- Plant with a throughput capacity of 200,000 dry tpa.
- Feedstock comprising steel by-product Slag with a grade of 3.93% V_2O_5 (being the reference grade for pricing under the Slag Supply Agreement).

Feed Preparation

Slag material (predominantly less than 10mm in size) is received and screened prior to being placed through a comminution circuit.

Processing Flowsheet

The process flowsheet was developed by Neometals with assistance from an independent metallurgical laboratory. The process, for which a provisional patent has been applied, utilises conventional equipment and configuration, employing novel chemistry, operated at atmospheric pressure and mild temperatures.

The Slag is processed in the alkaline leach circuit to facilitate dissolution of the vanadium from the feed as shown in **Figure 3** below. The pregnant leach solution ("**PLS**") is then separated from the solid leach residue. Further extraction and purification of PLS results in the recovery of vanadium which is further processed through into vanadium pentoxide.

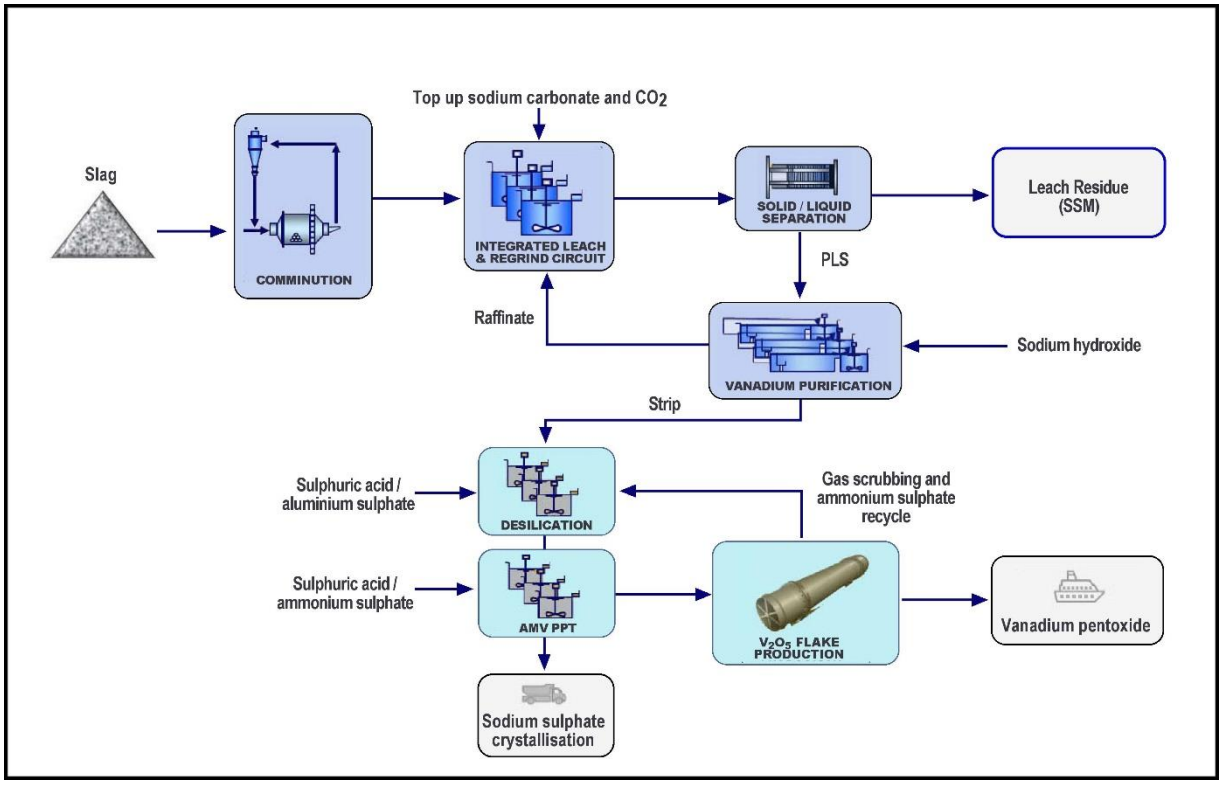

Figure 3 - *High level flowsheet for Vanadium Recovery from Slag*

Project Location

For the purpose of cost estimation, the design assumes that the entire plant will be based inside purpose designed industrial buildings. Pori, Finland is the selected location with plant offices, administration, ablutions facilities and a laboratory included in the scope. The Study includes tie-ins for water, electricity, district heating and natural gas, which are all available near the site boundary.

Capital Cost Estimate

The capital cost estimate for the process plant and relevant infrastructure was developed to a PFS-level accuracy of -20% +25% based on budget price estimates obtained from equipment suppliers and appropriate agreed factors. **Table 2** below presents the summary of the project capital costs.

Table 2 – *Capital Cost Estimate (all figures expressed on a 100% ownership basis)*

Capital	US$M
Direct – Buildings and Process Plant	126
Indirect – EPCM etc	27
Contingency (20%)	31
Total	**184**

Operating Cost Estimate

The Vanadium Recovery Project operating cost was estimated by major cost type and is considered an AACE Class 4 level estimate with a nominal accuracy level of -20% +25%. The estimated operating cost excluding royalties is less than US$ 4.25 /lb V_2O_5. The operating cost breakdown is shown in **Figure 4**.

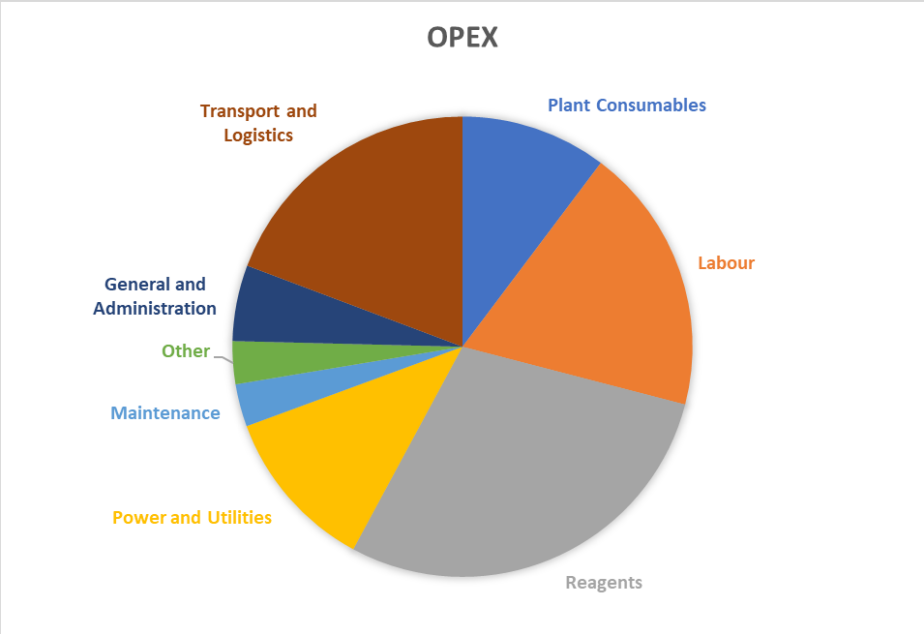

Figure 4 – *Operational cost breakdown by key areas*

Next Steps:

- Pilot Plant already under construction for target commissioning in the June 2021 quarter.
- Class 4 PFS results to be released in June 2021 quarter.
- Commencement of FS with Class 3 Engineering Cost Study component planned to commence in July 2021.
- Supplying product marketing samples from the pilot plant to advance discussions with potential offtake partners.
- Conducting vendor test work to confirm equipment parameters.
- Environmental Impact Assessment and other permitting will continue to advance.
- Commence work targeting financiers and other European project stakeholders with a focus on sustainable recovery of critical metals to support resilient domestic supply chains from non-mining sources.

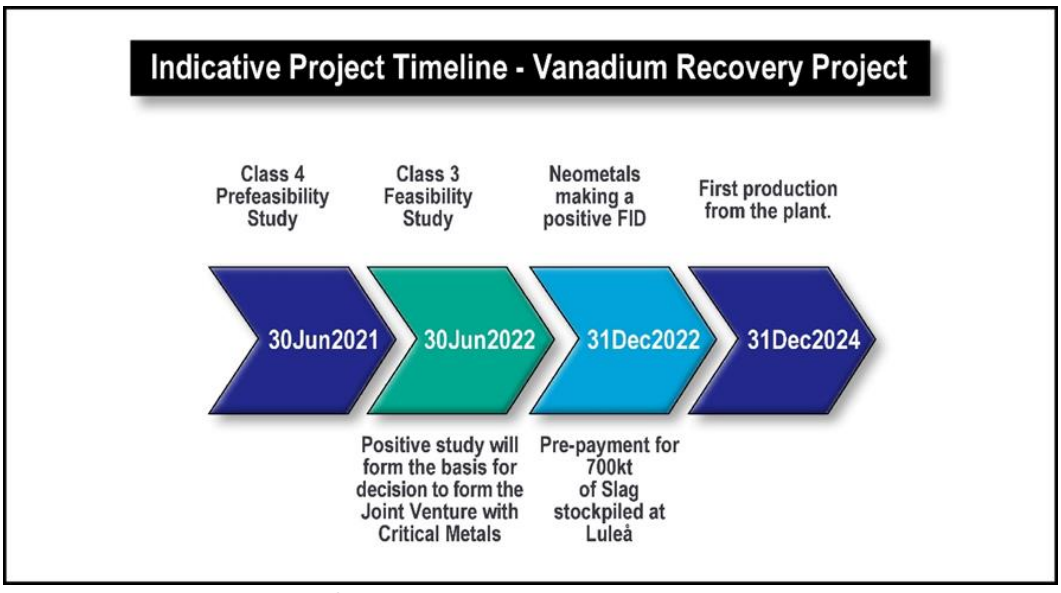

Figure 5 - *Indicative Timeline for the Vanadium Recovery Project*

Forward-looking Statements

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the Chemical industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

Neither the Company, nor any other person, gives any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. Except as required by law, and only to the extent so required, none of the Company, its subsidiaries or its or their directors, officers, employees, advisors or agents or any other person shall in any way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Advice

Nothing in this document constitutes investment, legal or other advice. Investors should make their own independent investigation and assessment of the Company and obtain any professional advice required before making any investment decision based on your investment objectives and financial circumstances.

Authorised on behalf of Neometals by Christopher Reed, Managing Director

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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 four core projects with large partners that span the battery value chain:

Recycling and Resource Recovery:

- Lithium-ion Battery Recycling – a proprietary process for recovering cobalt and other valuable materials from spent and scrap lithium batteries. Pilot plant testing completed with plans well advanced to conduct demonstration scale trials with 50:50 JV partner SMS group, working towards a development decision in early 2022; and
- Vanadium Recovery – sole funding the evaluation of a potential 50:50 joint venture with Critical Metals Ltd to recover vanadium from processing by-products ("Slag") from leading Scandinavian Steel maker SSAB. Underpinned by a 10-year Slag supply agreement, a decision to develop sustainable European production of high-purity vanadium pentoxide is targeted for December 2022.

Downstream Advanced Materials:

- Lithium Refinery Project – evaluating the development of India's first lithium refinery to supply the battery cathode industry with potential 50:50 JV partner Manikaran Power, underpinned by a binding life-of-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate, working towards a development decision in 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 early 2022.