Introducing the NEW Vanadium Recovery Project

www.criticalmetals.eu
This presentation introduces two excellent transactions recently completed by Critical Metals with Swedish steel giant SSAB and leading Australian specialty minerals company Neometals Ltd.

The Vanadium Recovery Project is new to our investors and this presentation highlights key aspects of the project in its early development stage.

Investors are welcome to contact the Company for more information.

Refer Appendix A for Q & A on value creation.
Our mission is to supply Europe with metals from Scandinavia via:

- urban mining (recovering metals from industrial by-product stockpiles); and
- traditional mining (discovering and extracting metals from the earth)

Refer Appendix B for portfolio summary
New Vanadium Recovery Project – Value Proposition

Critical Metals aims to produce high-purity vanadium products late 2024 and in doing so:
- supply Europe with vanadium products from Sweden and Finland
- decrease reliance on supply chains connected with China for the supply of vanadium
- supply Europe with responsibly sourced vanadium products
- recover metals from by-products in an environmentally friendly manner
- produce vanadium products using renewable energy
- produce vanadium products without mining
- produce safe and saleable by-products

Refer Appendix C for vanadium information
Value Creation for Investors

Critical Metals investors have exposure to the highest grade vanadium feedstock globally and therefore have leverage to significant value creation

- Europe is focussed on sourcing critical metals internally (including vanadium) and decreasing reliance on China for the supply of critical metals
- Scandinavia is focussed on recycling and the circular economy, use-reuse-recycle
- Critical Metals aim to recover by-products from the steel making process into high-purity vanadium products for use in the high strength steel, aerospace and energy storage industries
- Production costs have potential to be in the lowest quartile because Critical Metals has access to the highest grade feedstock for vanadium production globally and the feedstock is located on surface, at major ports, in low sovereign risk countries (Sweden and Finland)
- Critical Metals is free-carried through the scoping, pre-feasibility and feasibility studies by partner and will have a final joint venture interest of 50%
- Scoping study anticipated July 2020 and pre-feasibility study March 2021

Production in 2024
Excellent Transactions

Two transactions underpin the vanadium recovery project, namely a feedstock supply agreement with Scandinavian steel giant SSAB and a technology collaboration agreement with leading Australian specialty minerals company Neometals Ltd.

- **10 year slag supply agreement with SSAB**
  - Critical Metals will purchase steel by-products (i.e. slag) from SSAB
  - Agreement provides for at least 2 million dry metric tonnes of slag
  - Agreement conditional on Critical Metals meeting project study milestones and commencing production by December 2024

- **Collaboration agreement with Neometals Ltd**
  - Critical Metals and Neometals will share the economic benefits of the vanadium recovery project
  - Neometals to fund all studies up to final investment decision, which if positive will lead to a 50:50 joint venture
  - Critical Metals will fund location study for plant in Sweden or Finland
  - Neometals entitled to a gross revenue royalty on sales of vanadium products
Valuations of Listed Vanadium Companies

Critical Metals plans to list on a securities exchange in the short-medium term

<table>
<thead>
<tr>
<th>Stage</th>
<th>Name</th>
<th>Securities Exchange</th>
<th>Market Capitalisation (AUD M)</th>
<th>Equity interest in projects</th>
<th>V₂O₅ Grade (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>Largo Resources Ltd</td>
<td>TSX:LGO</td>
<td>685</td>
<td>100%</td>
<td>2.4</td>
</tr>
<tr>
<td>Production</td>
<td>Bushveld Minerals Ltd</td>
<td>AIM:BMN</td>
<td>292</td>
<td>74%</td>
<td>1.98</td>
</tr>
<tr>
<td>Pre-development activities</td>
<td>TNG Ltd</td>
<td>ASX:TNG</td>
<td>67</td>
<td>100%</td>
<td>0.28</td>
</tr>
<tr>
<td>DFS</td>
<td>Australian Vanadium Ltd</td>
<td>ASX:AVL</td>
<td>23</td>
<td>100%</td>
<td>0.77</td>
</tr>
</tbody>
</table>

- The table above lists a subset of the vanadium only companies listed on global securities exchanges. All projects are different and no two projects can be compared directly.
- Critical Metals has a feedstock grade of 3-4% V₂O₅ and no mining is required.
Critical Metals is aiming for first sales of high-purity vanadium products in 2025.

<table>
<thead>
<tr>
<th>Year</th>
<th>Expected Delivery Period</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2025</td>
<td>Jan – March</td>
<td>First sales</td>
</tr>
<tr>
<td>2024</td>
<td>Sept – Dec</td>
<td>Commercial production</td>
</tr>
<tr>
<td>2022</td>
<td>Sept – Dec</td>
<td>Final Investment Decision</td>
</tr>
<tr>
<td>2022</td>
<td>March – June</td>
<td>Feasibility study</td>
</tr>
<tr>
<td>2021</td>
<td>March – June</td>
<td>Prefeasibility study</td>
</tr>
<tr>
<td>2020</td>
<td>July – Dec</td>
<td>Scoping study</td>
</tr>
</tbody>
</table>

- Feedstock contains +4% V$_2$O$_5$ in Luleå and +3% V$_2$O$_5$ in Oxelösund and Raahe
- Benefiting from +30 years of SSAB assaying feedstock stockpiles
- Throughput ~200,000 tpa of feedstock
- Feedstock crushed to <10mm
- No mining risk on feedstock
- Hydrometallurgical flowsheet
- Products include V$_2$O$_5$
- By-products are inert and potentially saleable
# Agreement to Plant Commissioning

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Milestone</th>
<th>Completed</th>
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</thead>
<tbody>
<tr>
<td>2024</td>
<td>Q4</td>
<td>Commission plant</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>Commence construction</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>December</td>
<td>Commence site preparation</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>September</td>
<td>All permits granted</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>July</td>
<td>Commence preparation of permit applications</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>June</td>
<td>Identify preferred locations</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>April</td>
<td>Sign agreement with SSAB</td>
<td>✔️</td>
</tr>
</tbody>
</table>

CriticalMetals
## Permits and Approvals

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>September</td>
<td>All permits and approvals granted</td>
</tr>
<tr>
<td>2020</td>
<td>July</td>
<td>Commence preparation of permit and approval applications</td>
</tr>
<tr>
<td>2020</td>
<td>June</td>
<td>Execute Memorandums of Understanding with Stakeholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receive pitch presentation from Stakeholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify preferred locations</td>
</tr>
<tr>
<td>2020</td>
<td>May</td>
<td>Discussions and information sharing with Stakeholders</td>
</tr>
<tr>
<td>2020</td>
<td>April</td>
<td>Introduce Vanadium Recycling Project to Stakeholders</td>
</tr>
</tbody>
</table>
Luleå, Oxelösund and Raahe are being considered as potential locations for the project.

Location of stockpiles, tonnage and grade: Luleå 711kt of slag grading +4% V₂O₅; Oxelösund 890kt of slag grading +3% V₂O₅; Raahe 385kt of slag grading +3% V₂O₅.

Plant area: ~10 Ha, stockpile storage ~10 Ha

By-product storage area: 40-80 Ha

Labour: 80 full time employees (when in operation)

Power consumption: 26 million kWh per year.
## Capital Structure

### Capital Raising History

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Shares &amp; Options</th>
<th>Shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 2016</td>
<td>In-specie distribution to shareholders of Hannans Ltd (ASX:HNR)</td>
<td>Fully paid ordinary shares on issue: 37,421,250 (incl. 1,518,750 shares subject to shareholder approval)</td>
<td>#1 Neometals Ltd 15.4%</td>
</tr>
<tr>
<td>Apr. 2017</td>
<td>$1.13 million at $0.10 ps</td>
<td>Options ex at $0.30 each on or before 26 November 2023: 6,500,000</td>
<td>Top 20: 65 %</td>
</tr>
<tr>
<td>Sept. 2019</td>
<td>$0.42 million at $0.20 ps</td>
<td>Options ex at $0.40 each on or before 30 April 2024: 1,000,000</td>
<td></td>
</tr>
<tr>
<td>May 2020</td>
<td>$0.76 million at $0.25 ps (incl. $0.38M conversion of debt to equity, subject to shareholder approval)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Critical Metals – Corporate Structure

All companies within the Group are wholly owned.

Party contracting with SSAB
Directors & Management

Jonathan Murray – Independent Non-Executive Chairman
Resides in Perth, Australia
20 years experience as a corporate lawyer; Senior Partner of Steinepreis Paganin. Principal legal practice areas include equity capital markets, takeovers, project acquisitions and divestments, corporate governance, commercial law and strategy.

Damian Hicks – Executive Director
Resides in Perth, Australia
15 years experience as Founder of resources companies in Western Australia (since 2002) and Sweden (since 2007). Financial, legal and compliance qualifications with principal responsibilities including strategy formulation, team development, deal origination & execution and capital raising. Director of all companies within the Group.

Kris Gram – Non-Executive Director
Resides in Oslo, Norway
5 years Management Consultant and 10 years Investment Banking experience. Currently COO of Norwegian investment bank.

Olof Forslund – Non-Executive Director
Resides in Malå, Sweden
Geophysicist with extensive international experience in the mineral exploration industry. Founder of Malå Geoscience. Commenced with Geological Survey of Sweden (SGU) in 1966 and during the period 2003 – 2007 was Regional Manager of the Mineral Resources Information Office in Mala, Sweden.

Markus Bachmann – Non-Executive Director
Resides in Johannesburg, South Africa
Corporate finance professional with 20 years experience. Founder of Craton Capital. Craton Capital awarded Fund Manager of the Year at the Mining Journal’s “Outstanding Achievement Awards” during December 2010.

Amanda Scott – Non-Executive Director of Swedish Subsidiary Companies
Resides in Malå, Sweden
Geologist with 15 years experience (8 years in Sweden). Extensive experience in Western Australia and northern Scandinavia generating new projects and exploring for lithium, gold, copper, nickel, PGEs, iron and manganese.
## Directors & Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Location</th>
<th>Experience and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per-Olof Renling</td>
<td>Non-Executive Director of Swedish Subsidiary Company</td>
<td>Malå, Sweden</td>
<td>Experienced in Power Generation and Power Distribution, particularly construction of power lines and operation and maintenance at thermal power generation and heat distribution plants. Currently Mr Renling is the site manager for several wind farms.</td>
</tr>
<tr>
<td>Mindy Ku</td>
<td>Company Secretary</td>
<td>Perth, Australia</td>
<td>Accountant. Diverse experience in finance, compliance, information technology, marketing and management, both in Australia and internationally (<a href="http://www.corpbservices.com">www.corpbservices.com</a>).</td>
</tr>
<tr>
<td>Pernilla Renberg</td>
<td>Chief Administrator</td>
<td>Malå, Sweden</td>
<td>Responsible for the day-to-day operations, management and administration of all companies within the Group.</td>
</tr>
</tbody>
</table>
What is the opportunity for Critical Metals shareholders? To get in on the ground floor of Europe’s most leveraged vanadium project. We expect the Company’s value will increase rapidly as it achieves key milestones and new investors seek to acquire ownership of the project.

Who are the securities exchange listed primary producers of vanadium? Refer to Bushveld Minerals Ltd (AIM:BMN), Largo Resources Ltd (TSX:LGO) and Glencore PLC (LSE:GLEN).

When will Critical Metals list on a securities exchange? As soon as the right opportunity to do so presents itself taking into account the need to access capital and provide liquidity for shareholders.

How does Critical Metals’ vanadium grade compare to these companies? The vanadium pentoxide \( (V_2O_5) \) grade of the stockpiles we will process is at least 50% higher than the \( V_2O_5 \) grade of the deposits being mined by the most valuable primary vanadium producer Largo Resources.

What is the rationale for the transaction? We want to create value for shareholders and make a positive contribution to the community. One way we can do this is by recovering by-products from the steel making process in Scandinavia and converting them into high value vanadium products for Europe. The slag has been sitting on the ground for many years in large stockpiles and is challenging to dispose of. We will process it and turn it into by-products.
Q & A

- **What vanadium product is Critical Metals aiming to produce?** We aim to produce vanadium at that point where purity, margins, cash flow, profitability and return investment are optimised.

- **What is Critical Metals life of mine?** Critical does not own a mine. It has a 10-year slag supply agreement with SSAB. The slag containing the vanadium is a by-product the steel making process. The iron ore used in the steel making process comes from Sweden and naturally contains a high percentage of vanadium. Subject to performance both parties are open to extending contract length.

- **What is the grade of the vanadium in the slag being purchased by Critical Metals?** The average grade of the slag from Lulea is 4% $V_2O_5$. This is the highest-grade $V_2O_5$ feedstock we are aware of globally.

- **When does Critical Metals expect to be in production?** If everything goes according to plan, we aim to be in production late 2024 with first sales 2025.

- **Is the Critical Metals process for making vanadium products environmentally friendly?** Yes. We aim to deploy a low energy – low emission – low throughput process to recover the slag containing the vanadium. We will re-use many of the processing inputs, consume renewable energy and create valuable vanadium products. Our by-products will be safe to store and safe to use.
Q & A

▪ Is Critical Metals using a proven technology to extract the vanadium? The process we are using has not been deployed commercially. This is our competitive advantage and will enable us to provide excellent outcomes for all our stakeholders.

▪ What does Critical Metals know about processing slag? We rely on our technology partner to provide the processing expertise. If our joint venture partnership reaches its goals, we’ll share ownership of the project equally 50/50. They are very experienced in vanadium and processing, they’re called Neometals.

▪ What does Critical Metals contribute to the project? We secured the agreement for the slag and we have 10 years experience operating in Scandinavia. The slag is being sourced from Sweden and Finland. Most of our team live in Sweden and they have many years of professional experience and wide industry networks. We focus on the relationships in country and work to ensure the permits are in place so we can consider an investment decision at the appropriate time.

▪ What’s the next milestone for Critical Metals? Results from detailed scoping study are expected to be received in July 2020.
At this early stage how is Critical Metals addressing the main risks of this recovering project? We’ve secured a 10 year supply of slag with a minimum volume of 2Mt so we have enough feedstock for at least 10 years of production. We completed preliminary hydrometallurgy tests during the last nine months. They confirm up to 80% vanadium recovery from leaching under mild conditions. We’ll commence test work on another 150kg of slag in June 2020. In relation to permitting we’re considering a low energy – low emission – low throughput hydrometallurgical flowsheet producing high-purity vanadium products. The by-products will be safe and generally saleable. We believe this is an environmentally and socially acceptable process. We’re considering sites in both Finland and Sweden and there’s a healthy appetite to secure this particular project. We anticipate being positioned in the lowest quartile of the global vanadium production cost curve so we anticipate a sustainable operation. We believe that traditional equity and debt will create a viable funding solution. Its early days but it’s a promising start.
B: Portfolio

The portfolio has been developed by Critical Metals over an extensive period of time and has significant value at different times throughout the commodity price cycles.

Urban Mining

- Vanadium Recovery – extracting high-purity vanadium from by-products of the steel making process in Sweden and Finland (Major Project)
- Lithium Ion Battery (LiB) Recycling – recycling high-purity battery metals from off-specification and end-of-life LiBs

Traditional Mining

- Lapland Cu-Ni-PGE / Fe-V-Ti / IOCG Project, Sweden – greenfields exploration aiming to confirm camp scale nature of this highly prospective “hot-spot (seeking JV partner)
- Pahtohavare Copper-Gold Project – free-carried by joint venture partner (Lovisagruvan AB) through to Decision to Mine.
- Soidinvaara Vanadium Project, Finland – advanced exploration stage (seeking JV partner)
- Paljasjärvi Iron Projects – refer to www.kirunairon.se a wholly owned subsidiary of Critical Metals Ltd (seeking JV partner)
Vanadium
- Vanadium is a hard, silver-grey metallic element. It has a natural resistance to corrosion and stability against alkalis, acids and salt water. It is found in over sixty different minerals.

Production method
- Vanadium minerals are mined as both a primary ore and as a secondary ore (i.e. where it is not the most valuable metal being mined).

Vanadium products
- Vanadium can be supplied as flake, powder, chemicals and electrolyte.

Uses
- 91% of global vanadium consumption is used in steel alloys (rebar), 4.5% in aerospace alloys, 3.5% in chemical catalysts and 1% in batteries.

Supply
- Supply of vanadium is concentrated and constrained. 81% of the global vanadium supply comes from four countries namely China (53%), Russia (20%), South Africa (8%) and Brazil (7%).
Vanadium – Information

Consumption
- Global consumption of vanadium in 2019 was ~98kt.
- 50% of the vanadium is consumed by China (~50kt), 13% by North America (~12kt), 14% by Europe (~13kt), 8% by Asia excl. China and India (~8kt) and 15% by the rest of the world (~15kt).

Forecast demand
- Global consumption of vanadium has been increasing year-on-year since 2016 and is expected to reach ~ 135kt by 2025 driven by the steel market in China and emerging markets.

Pricing
- The higher the purity of the vanadium supplied the higher the price.
- Vanadium flake and powder purity ranges 78% through to 99.5% V.
- Products are often quoted as vanadium pentoxide ($V_2O_5$), vanadium trioxide ($V_2O_3$), ferro vanadium ($FeV_{80}$), vanadium chemicals and vanadium electrolyte.
- The price for FeV is published by the London Metal Bulletin Fastmarkets (Europe) and Ryan’s Notes (US). The price for individual vanadium products is negotiated privately between the buyer and the seller. There is no openly quoted market for the full range of vanadium products.
Pricing continued…

- Real average FeV$_{80}$ price over 40 years is ~ US$33/kg V. The long-term average price for commodity grade V$_2$O$_5$ is USD8.86/lb.

Producers

- The three main primary producers of vanadium listed on global stock exchanges are Bushveld Minerals Ltd in South Africa (AIM), Largo Resources Ltd in Brazil (TSX) and Glencore in South Africa (LSE).

Sources of information

- Web sites of Vanitec, Bushveld Minerals Ltd, Largo Resources Ltd, Glencore and Australian Vanadium Ltd
Vanadium – Information

Ferrovanadium price chart

Russia’s vanadium material disappeared, the market price moved up and thereafter Russia restarted production.

Advent of grade 3 rebar in China. The new standard forced Chinese rebar producers to start using vanadium (grade 3) for high strength rebar applications.

Problems with production of electrical power and resulting load shedding in South Africa negatively impacted vanadium production leading to the 2008 price spike.

In preparation of the new high-strength rebar standard, mills in China were building up their inventories. Standard came into effect in November 2018.

Highveld Steel & Vanadium stops production.

Reduction due to: slower than anticipated implementation of Rebar standard; substitution with ferro niobium; and opportunistic production (stone coal).

Real average FeV price over 40 years of ~ US$33/kgV

Source: Bushveld Minerals Ltd, April 2020
D: LiB Recycling Project

- Critical Metals has the sole and exclusive rights to recycle LiBs in Sweden, Norway, Denmark and Finland using proprietary technology\(^1\).
- Urban mining includes recycling off-spec and spent lithium ion batteries (LiBs).
- Neometals are currently in negotiation with SMS Group GmbH (“SMS”) to establish a recycling joint venture. SMS is a global, leading partner for the metal industry, refer [www.sms-group.com](http://www.sms-group.com).
  Execution of an agreement is expected to add significant value to the sole and exclusive license held by Critical Metals. Decision on JV expected by 30 June 2020.
- In anticipation of the proposed joint venture Neometals has advanced design and procurement activities for the demonstration plant operation and shipped its process, analytical and assay equipment to SMS test work facilities.
- Neometals’ 20,000 tonne per annum, two-stage comminution circuit (shredding) is undergoing CE certification (EU Compliance) and factory acceptance testing in the USA for subsequent shipment to SMS in Europe.
- To the best of Neometals’ knowledge, once commissioned, the comminution circuit will have Europe’s largest LIB shredding capacity by throughput.

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1. Technology owned by subsidiary of Neometals Ltd and licensed to LiB Recycling Pty Ltd (a wholly owned subsidiary of Critical Metals Ltd).
Critical Metals is very well positioned to capitalise on the forecast surge in end-of-life lithium ion batteries in Europe by recycling them in Scandinavia

- The EU needs between 10 and 20 Lithium Ion Battery (LiB) Giga factories to meet demand.
- The EU faces intense global competition for critical metals to supply the Giga factories.
- Waste generated from end-of-life LiBs will be large and must be recycled.
- Forecast growth of EVs using LiBs is massive.
- Substantially more critical metals need to be sourced from within the EU.
- High potential to source feedstock and create a sustainable LiB recycling business with support of both the EU legislation and Scandinavian recycling culture.
LiB Recycling – Business Model

Critical Metals will finalise its business model on completion of the Feasibility Study and will work with Scandinavian stakeholders to maximise the benefits for the community and shareholders

- Independently process waste lithium ion batteries.
  - Revenue from sale of high-purity metals ‘produced’ from recycling waste LiBs.
- Batch process (toll treat) waste lithium ion batteries on behalf of collectives, existing recycling companies and importers & distributors of electronic and electric equipment.
  - Revenue from providing service to third party.
- Joint venture initiatives with National Government, local Kommuns, recycling companies, collectives and importers & distributors of electronic and electric equipment.
  - Partner with existing actors to generate an optimal solution for the recycling of waste containing critical metals.
Contact Details

For further information please contact:

<table>
<thead>
<tr>
<th>Damian Hicks</th>
<th>Pernilla Renberg</th>
</tr>
</thead>
<tbody>
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<td>Chief Administrator</td>
</tr>
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<td>M: +46 703 225 133</td>
</tr>
<tr>
<td>E: <a href="mailto:dhicks@criticalmetals.eu">dhicks@criticalmetals.eu</a></td>
<td>E: <a href="mailto:prenberg@criticalmetals.eu">prenberg@criticalmetals.eu</a></td>
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