# For the quarter ended 30 September 2020

# HIGHLIGHTS

# CORPORATE

- Cash A\$76.6 million, receivables and investments of A\$7.3 million and no debt; and
- Core development projects advancing through evaluation stages with all projects funded through to final investment decisions.

## CORE DEVELOPMENT ACTIVITIES

### Lithium-ion Battery ("LIB") Recycling Project

- 50:50 joint venture (Primobius GmbH) established with leading German plant suppliers, SMS group, to commercialise Neometals proprietary lithium-ion battery recycling process;
- Engineering and procurement activities for showcase German demonstration recycling plant materially complete with site permitting and preparation on schedule; and
- Engineering Cost Studies for Stage 1 commercial operation (20,000tpa) commenced in parallel with commercial activities to support the formal Feasibility Study due for completion in the second half of CY 2021.

### Vanadium Recovery Project

- Successful completion of continuous mini-pilot plant with final assay results and test work report pending;
- Successful completion of grade confirmation/metallurgical sample drill program on stockpiles at SSAB Lulea steel mill; and
- Identification of plant sites for Prefeasibility Study and tender process materially complete, awaiting final test work report before final award, due for completion by mid CY 2021.

## Lithium Refinery Project

- Jointly funded Class 3 Feasibility Study for proposed Indian lithium refinery JV continues to advance with completion targeted in the first half of CY 2021; and
- Indian Government announced plans to offer \$US4.6 Billion in incentives to companies setting up battery manufacturing facilities as it seeks to promote the use of electric vehicles and cut the dependence on oil.

### Barrambie Titanium and Vanadium Project

- Identification of preferred flowsheet / development structure which produces titanium-rich gravity concentrate on site for downstream processing in China into chloride ilmenite and vanadium-rich magnetite; and
- Strong product evaluation and marketing feedback from potential Chinese offtakers. Mining and on-site concentration studies have commenced with contractors for potential development on a build-own-operate basis.

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### **EXPLORATION ACTIVITIES**

- Mining studies completed at four of the Mt Edwards deposits as Neometals continues to build its pipeline of short lead-time nickel sulphide resources and evaluate strategic options to realise value for shareholders; and
- Re-interpretation of historical and new assay data during the quarter led to an updated nickel sulphide resource at Mt Edwards' 132N deposit (announced post the quarter end).

# **COMPANY OVERVIEW**

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 vertically integrating 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 and demonstration scale trials with 50:50 JV partner SMS group due to commence in the first half of CY2021, working towards a development decision in early 2022; and
- Vanadium Recovery earning in to 50% equity in a 50:50 joint venture to recover vanadium from processing by-products ("Slag") from leading Scandinavian steel maker SSAB. Underpinned by a 10-year Slag supply agreement, Neometals is sole funding the evaluation to consideration of decision to develop sustainable, European production of high-purity vanadium pentoxide by the end December 2022.

Downstream Advanced Materials:

 Lithium Refinery Project – co-funding the evaluation of developing India's first lithium refinery to supply the battery cathode industry with potential 50:50 JV partner Manikaran Power. The feedstock supply is 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 by the end of 2022.

Upstream Industrial Minerals:

• Barrambie Titanium and Vanadium Project - one of the world's highest-grade hard-rock titanium-vanadium deposits, jointly evaluating the development of a concentrate export operation in Australia with downstream processing in China with potential 50:50 JV partner IMUMR.



Figure 1 – Location map of Neometals Projects

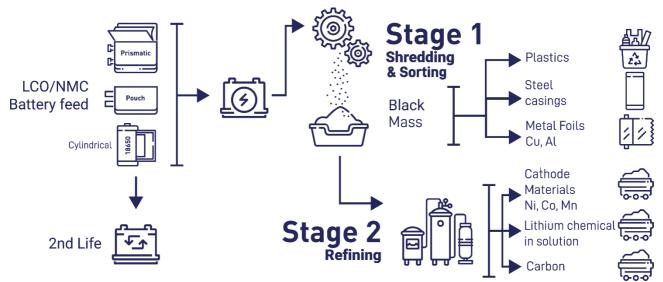
# **CORE PROJECTS**



<u>Lithium Battery Recycling Project</u> (Neometals 100%, SMS earning into 50% through Primobius GmbH incorporated JV)

Neometals has developed a sustainable process flowsheet targeting the recovery of battery materials contained in production scrap and end-of-life lithium-ion batteries (LIBs) that might otherwise be disposed of in land fill or processed in high-emission pyrometallurgical recovery circuits. Neometals' process flowsheet ("LIB Recycling Technology") targets the recovery of valuable materials from consumer electronic batteries (devices with lithium cobalt oxide (LCO) cathodes), and nickel-rich EV and stationary storage battery chemistries (lithium-nickel-manganese-cobalt (NMC) cathodes). The LIB Recycling Technology is designed to recover cobalt, nickel, lithium, copper, iron, aluminium and manganese into saleable products that can be reused in the battery supply chain.

A 2019 scoping study, based on previous bench scale test work, highlighted robust project economics. Data from the successfully concluded pilot trial ("**Pilot**") is guiding current engineering and feasibility studies.



**Figure 2** - High level flowsheet showing the materials generated from 'Shredding and Sorting' and 'Refining' stages of the LIB Recycling Technology

The LIB Recycling Technology, comprises two stages:

- 1. Shredding and beneficiation to physically separate components and remove metal casings, electrode foils and plastics ("Shredding and Sorting"); and
- 2. Leaching, purification and precipitation to deliver refined chemical products via the hydrometallurgical processing facility ("**Refining**").

### JV with SMS

During the quarter, Neometals executed a formal agreement governing the formation and operation of an incorporated 50:50 joint venture ("**JV**") with SMS group GmbH ("**SMS group**"), called Primobius GmbH ("**Primobius**"). Primobius has been incorporated to co-fund and complete final stage process evaluation before the parties commercialise the LIB Recycling Technology. The creation of the JV followed extensive due diligence by SMS group on development activities, including Neometals' successful North American Pilot.

SMS group is a highly capable project delivery partner that can accelerate commercialisation of the LIB Recycling Technology globally. Primobius represents a significant milestone in the generation and realisation of value for the Neometals battery recycling project and its sustainable materials recovery strategy going forward. Should the JV decide to commence construction of a commercial plant, a positive financial investment decision would involve Neometals contributing technical and commercial know how to the JV and SMS contributing to the engineering design, fabrication,



operation and maintenance of future recycling plants. SMS will also, on a best endeavour's basis, procure debt financing for no less than 50% of the capital expenditure.

### **Primobius Status**

During the quarter, Primobius has been busy designing the Demonstration Plant ("**DP**") and improving the beneficiation flowsheet using Pilot data. It has completed most engineering, vendor test work and equipment procurement in preparation for the construction phase for the DP. In parallel with the DP activities, Primobius has been very active in its endeavours to secure feed sources and offtake partners for future commercial operations.

Primobius has chosen the SMS manufacturing centre in Hilchenbach Germany as the location for its recycling DP showcase. A dedicated 1,000m<sup>2</sup> facility is ready for plant installation activities and operating permit applications are being processed. The Shredding and Sorting equipment from the Neometals Pilot is being upgraded and will be combined with new beneficiation and Refining plant. Installation of both the Shredding and Sorting and Refining circuits will be integrated under one roof.

The DP will be operated as a continuous version of the earlier Pilot with a commercial-scale shredding circuit (20,000tpa) coupled to a Refining section with design capacity to process ~2tpd of leach feed. The DP will process batches of spent cells and Black Mass sourced from potential battery industry customers and will deliver cathode intermediate materials that will be used in evaluation activities with potential off-takers. Importantly, the DP will provide an opportunity for vehicle, battery and consumer electronics manufacturers to see first-hand, the process capability to ethically dispose of hazardous LIBs and generated re-usable materials for the production of new batteries. The LIB Recycling Technology will also deliver a mechanism to fulfil custody and stewardship obligations.



Figure 3 – SMS group engineering competence centre in Hilchenbach



Figure 4 – Interior of building where DP will be constructed

### **Market Tailwinds**



Figure 5 – Sample of products generated using the Primobius LIB Recycling Technology

### European Market Tailwinds

Europe is presently leading the world in electric vehicle value chain investment. Primobius has direct line of sight on how industry is positioning to ensure that producers can deliver the lowest carbon footprint products and support resource efficiency and circular economy principles. Of particular significance in recent months has been the push by the European Commission to increase domestic raw material supply chain resilience and reduce dependence on countries with low environmental and social standards. European critical raw materials are a topic of strategic security and supplies from responsible secondary sustainable sources, such as recycling, have high-level support from Governments. The European Commission has launched a European Raw Materials Alliance to build resilience as it looks to deliver on its 'Green Deal' objective with net zero greenhouse gas emissions targeted in the EU by 2050. Also supporting the timing of the Primobius industrial recycling solution are imminent regulatory changes to the EU Battery Directive which will confirm legislated provisions for greater recycling efficiency, carbon intensity reporting measures, responsible sourcing and increased recycled raw material content in new batteries.

Europe is using both a 'carrot' and 'stick' approach to drive decarbonisation. Price parity between electric vehicles and internal combustion engine vehicles is within sight with battery costs continuing to fall, stimulus reducing total ownership costs of electric vehicles and car manufacturer penalties for emissions. Coupled with global climate concern and the targeted phase-out of internal combustion engines, electric vehicle adoption is inevitable. The flow-on consequence for battery recycling is a market awash in scrap and spent LIBs, with a critical need for scalable, sustainable solutions that also support the forecast shortages of raw materials required to keep pace with anticipated battery production.

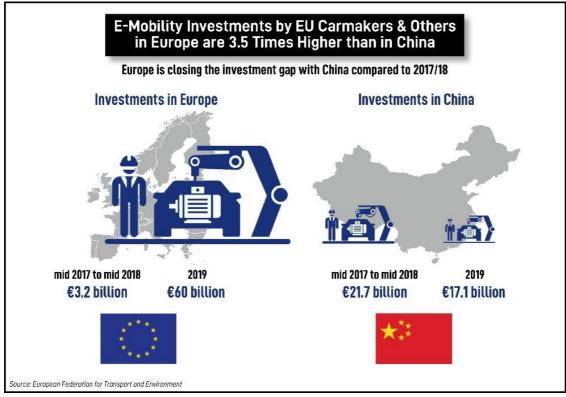


Figure 6 – Image highlighting world leading battery value chain investments being made in Europe

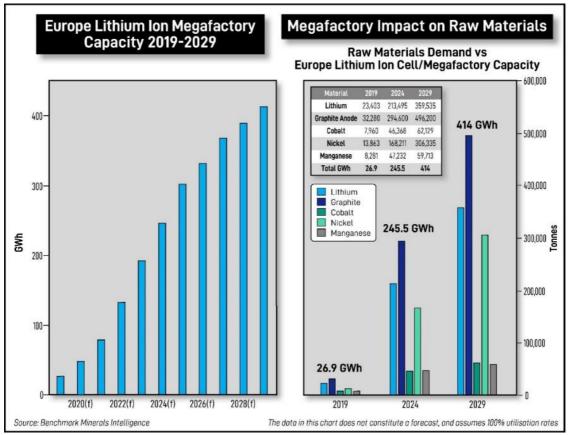


Figure 7 – Image showing the impact of EU cell production on requirements for battery material demand



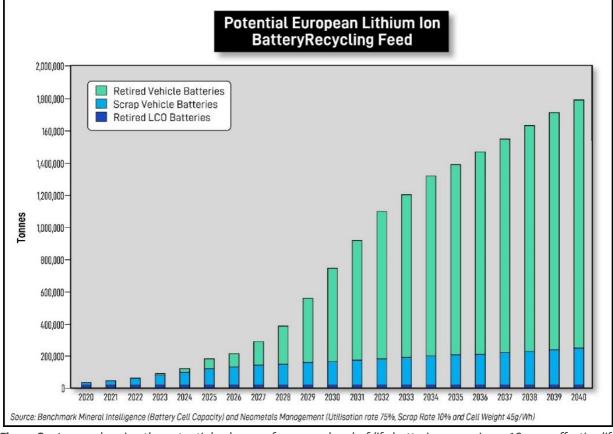


Figure 8 – Image showing the potential volumes of scrap and end-of-life batteries assuming a 10-year effective life

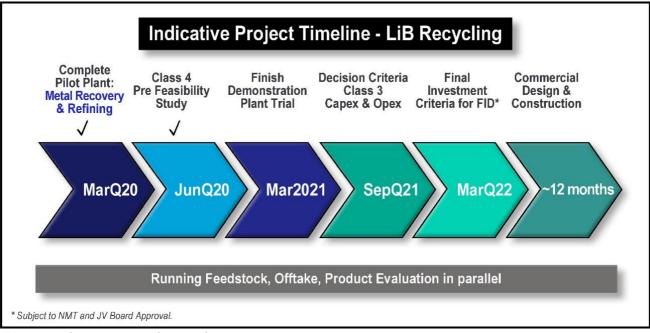


Figure 9 - Indicative LIB recycling timeline



### Vanadium Recovery Project (Earning into 50:50 Joint Venture)

Neometals and unlisted Scandinavian-focussed explorer, Critical Metals Ltd ("**Critical**"), are jointly evaluating the feasibility of recovering high-purity vanadium products from high-grade vanadium-bearing steel by-product ("**Slag**") in Scandinavia. Under the formal collaboration agreement between the parties, Neometals is to fund and manage the evaluation activities, up to consideration of an investment decision. A positive investment decision will lead to a 50:50 incorporated joint venture ("**JV**") with Critical.

Critical has executed a conditional agreement ("**Slag Supply Agreement**") with SSAB EMEA AB and SSAB Europe Oy, subsidiaries of SSAB ("**SSAB**"), a steel producer that operates steel mills in Scandinavia (*for full details refer to Neometals ASX announcement dated 6<sup>th</sup> April 2020*). Slag is a by-product of SSAB's steel making operations. The Slag Supply Agreement provides a secure basis for the evaluation of an operation capable of processing 200,000 tonnes of Slag per annum without the need to build a mine and concentrator like existing primary producers.

The Vanadium Recovery Project offers a compelling business case for Neometals which is underpinned by:

- 1. Exceptional grade (reference grade of 3.93% V<sub>2</sub>O<sub>5</sub> under the Slag Supply Agreement);
- 2. Robust economics (scoping study outcomes highlighted a first quartile position on the cost curve (*for full details refer to Neometals ASX announcement dated 24<sup>th</sup> June 2020*);
- 3. Processing flowsheet utilises conventional equipment at atmospheric pressure and mild temperatures;
- 4. Potentially saleable by-product generation; and
- 5. Likely net zero greenhouse gas footprint given the absence of mining and a processing route requiring the sequestration of  $CO_2$ .

Key activities under the evaluation program comprise hydrometallurgical flowsheet optimisation including plant trials to recover vanadium from the Slag, feasibility studies, site selection, market evaluation and grade confirmation.

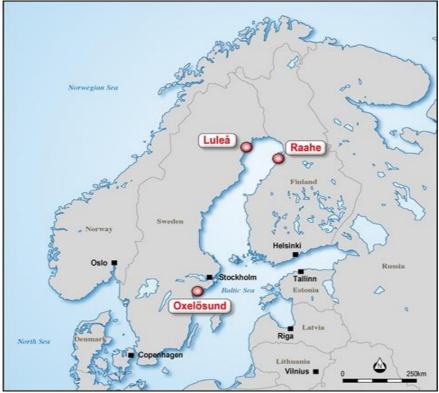


Figure 10 – Image showing Scandinavian locations of SSAB steel plants and Slag stockpiles

### Stockpile Sampling

During the quarter, a sample collection program was undertaken at Lulea, one of the three SSAB steel production sites in Scandinavia. Initial sampling prior to the execution of the collaboration agreement with Critical generated material for confirmatory processing test work. The more recent samples, collected during a Neometals coordinated drilling campaign, are being used for metallurgical sampling and to confirm the reference grade of 3.93% V<sub>2</sub>O<sub>5</sub> under the Slag Supply Agreement (results pending). Detailed metallurgical sampling will provide Neometals with further confidence ahead of its planning activities and feasibility evaluations.

### Flowsheet Optimisation

A continuous 'mini-pilot' processing trial was run by Neometals to test its vanadium hydrometallurgical processing flowsheet. Specifically, the trial was designed to determine leach feed recovery, vanadium chemical purity and residence time to provide inputs into the Class 4 Prefeasibility Study which is due to commence shortly. The mini-pilot was constructed and commissioned during the last weeks of August and subsequently run for ~ 100 hours during the first week of September. The aim being to test the mill/leach circuit, solid/liquid separation stage and the solvent extraction (SX) of vanadium from Luleå and Oxelösund samples. The construction, commissioning and operations were achieved without any safety incidents and once final assays have been received and interpreted key outcomes will be announced.



Figure 11 – Images of Neometals vanadium mini-pilot operated at a commercial laboratory in Perth

### Studies

Neometals completed its Class 5 Scoping Study in the June quarter 2020 and has supplied the results to Critical which has since appointed Behre Dolbear Group Australia as an independent expert to deliver the study to SSAB. With the mini-pilot outcomes almost finalised, tender documents were sent to three parties during the quarter and proposals are now being evaluated for the Class 4 Pre-Feasibility study award.

### Site Selection

As part of the evaluation activities planned under the collaboration agreement with Critical, Critical is responsible for managing the site selection and permitting considerations. During the period, Critical submitted a consultation paper, in accordance with the Swedish Environmental Act, to National stakeholders and other interested parties. The objective of the consultation process is to commence a dialogue with stakeholders and other interested parties to inform them about potential operations and to receive feedback and opinions. This consultation process forms part of the site selection and subsequent permitting process for the project. The consultation paper described the project, operation, potential location, and process at a high level. The environmental impacts, direct and indirect, are also described at a high level.

Critical is also assessing sites in Finland and the United Kingdom for locating the Vanadium Recovery Project. Site selection will also be impacted by availability/cost of reagents and vanadium offtake considerations. Despite the early stage of development, Neometals is fielding enquiries from potential vanadium chemical purchasers keen to secure an environmentally friendly domestic supply of what is a 'critical mineral' in Europe.

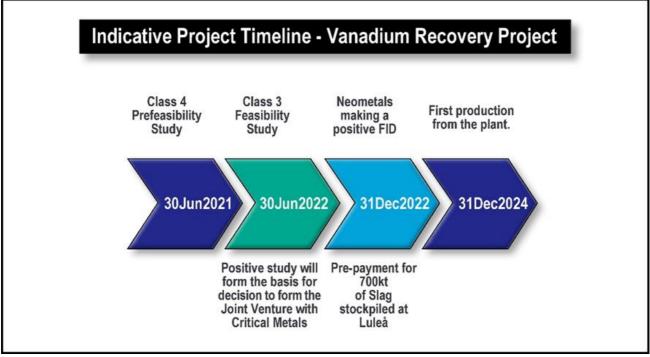


Figure 12 – Indicative timeline for the Vanadium Recovery Project

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<u>Lithium Refinery Project</u> (Neometals 100%)

The key purpose of the lithium refinery project ("LR") is to realise value from the Company's Mt Marion spodumene concentrate offtake option ("Offtake Option"). The annual Offtake Option from Mt Marion provides a fixed volume of up to 57,000tpa of 6% spodumene concentrate for conversion into battery grade lithium hydroxide ("LiOH") for supply to LIB cathode and cell makers. The LR has been designed with a flexible capacity of nominally 20,000tpa of LiOH.

The LR represents a strategic option for downstream lithium chemical production when the lithium market returns to a position of strength. Development timelines have been designed to align with projected supply deficits forecast from ~2025 onwards.

Pursuant to the MOU between Neometals and Manikaran Power Limited ("Manikaran"), the parties have continued their co-funded evaluation studies on the development of a LR in India. Upon completion of evaluation studies, and subject to agreement on terms, a final investment decision ("FID") will be considered for a 50:50 joint venture ("JV") to progress and develop the LR in India.

A positive FID and formal JV commitment would see Neometals contributing to the venture its 'life-of-mine' Offtake Option volume. Additional spodumene feed would be secured, as required, from external sources to meet the LR's needs depending on nameplate capacity. It is proposed Manikaran will take the lead role in procuring project financing for not less than 50% of the capital expenditure required, securing regulatory approvals and Indian government subsidies (as available), securing a suitable site for the LR and necessary utility and reagent supplies.

September quarter activities associated with the Manikaran MOU included:

- Ongoing evaluation under the location study of three potential project sites within the Mundra port in the State of Gujarat;
- AACE Class 3 Feasibility Study on track for completion by Primero Group in Q4:
  - o Specification sheets have been developed for all products, by-products and reagents
  - Non-Process Infrastructure design has been finalised;
- Progress on the capital cost estimate and process modelling;
- Veolia has finished the scope for the hydrometallurgical and SCT has completed the scope for pyrometallurgical section of the refinery;
- Testing of Mt Marion concentrates with potential plant vendors;
- Veolia has completed process design work package for the hydrometallurgical component of plant;
- Process design criteria advanced in preparation for input from pyrometallurgy and hydrometallurgy technology vendors, SCT and Veolia respectively;
- Mass energy balance and basis for key financial model inputs progressed; and
- Commercial discussions ongoing with potential providers of third party spodumene feed for the LR.



Figure 13 – Proposed Project Location adjacent to Mundra Port, the largest port in India



## Barrambie Titanium/Vanadium Project (Neometals 100%)

The Barrambie Vanadium and Titanium Project in Western Australia ("**Barrambie**") is one of the largest vanadiferoustitanomagnetite ("**VTM**") resources globally (280.1Mt at 9.18% TiO<sub>2</sub> and 0.44% V<sub>2</sub>O<sub>5</sub>)\*, containing the world's second highest-grade hard rock titanium resource (53.6Mt at 21.17% TiO<sub>2</sub> and 0.63% V<sub>2</sub>O<sub>5</sub>)\* and high-grade vanadium resource (64.9Mt at 0.82% V<sub>2</sub>O<sub>5</sub> and 16.9% TiO<sub>2</sub>) subsets (referred to as the Eastern and Central Bands respectively) based on the latest Neometals 2018 Mineral Resource Estimate (\**for full details refer to ASX announcement entitled "Updated Barrambie Mineral Resource Estimate" released on 17 April 2018 and Table 1 below*).

	Tonnes (M)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Indicated	187.1	9.61	0.46
Inferred	93.0	8.31	0.40
Total	280.1	9.18	0.44
High	Grade V <sub>2</sub> O <sub>5</sub> Resourc	ce (at 0.5% V <sub>2</sub> O <sub>5</sub> cu	ıt-off) <sup>2</sup>
	Tonnes (M)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Indicated	49.0	16.93	0.82
Inferred	15.9	16.81	0.81
Total	64.9	16.90	0.82
	High TiO <sub>2</sub> Resource	(14% TiO <sub>2</sub> cut-off)	2
	Tonnes (M)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Indicated	39.3	21.18	0.65
Inferred	14.3	21.15	0.58
Total	53.6	21.17	0.63
			<ol> <li>Based on Cut-off grades of ≥</li> </ol>

Table 1 – Barrambie Mineral Resource Estimate, April 2018

Barrambie is located approximately 80km North-west of Sandstone in Western Australia (see Figure 1), and has a granted mining lease covering its mineral resource.

### **IMUMR MOU**

In October 2019, Neometals entered a memorandum of understanding ("**MOU**") with Chinese research organisation, IMUMR, to jointly advance development of Barrambie. The MOU outlines a potential pathway towards a 50:50 joint venture to advance Barrambie's commercial exploitation.

Developing Barrambie with a partner will considerably reduce Neometals funding requirements and project risk. It should also be recognised that IMUMR has a Chinese national mandate that includes development of upstream supply chains for industries of strategic relevance to China. IMUMR will have the right, subject to Neometals approval, to assign its interests under the MOU to a commercial Chinese chemical processing partner.

### **Next Steps**

MOU evaluation activities conducted to date include beneficiation and pyrometallurgical (smelting) test work undertaken by IMUMR in China and pilot-scale beneficiation and hydrometallurgical (acid digestion) test work undertaken by Neometals in Australia. During this process it has become clear that Neometals favoured path is to extract value from both the titanium and vanadium in the Barrambie ore and to focus on options that will reduce start up capital and complexity of processing. To this end Neometals has recently completed bench scale test work on a reductive roast flowsheet as shown in Figure 14 below.





The preferred flowsheet and optimal development structure is conventional open-cut mining, comminution and gravity concentration on site at Barrambie with a mixed titanium/vanadium/iron concentrate being shipped to China for a reductive roast and magnetic separation which generates an ultra-clean titanium concentrate (Ilmenite) and a separate vanadium-iron (magnetite) concentrate.

The Barrambie ilmenite product is targeted for smelting to produce a chloride-grade titanium slag to feed the fastgrowing demands of the Chinese chloride pigment market as they switch away from sulfate pigment production. The vanadium-rich iron (magnetite) concentrate is targeted for blending by steelmakers to obtain vanadium and iron units alleviating the requirement to purchase ferrovanadium to harden steel.

Evaluation of bench-scale samples by a number of potential Chinese end users had resulted in strong interest being shown for offtake. Evaluation of the vanadium-rich iron concentrate is currently in progress. The Company notes a recent letter of intent signed with Technology Metals Australia Limited and Sinosteel Australia Pty Ltd to negotiate a life of mine offtake for their vanadium rich iron concentrates from its Gabanintha Vanadium Project, 90km north of Barrambie. In parallel, work has commenced on generating the operating and capital costs for a "capital-light" operation through early engagement with contractors to deliver a build-own-operate proposal. Once this work is complete, Neometals will provide the remaining information to IMUMR to finalise the scope of demonstration trials in China proposed under the IMUMR MOU.

# **EXPLORATION PROJECTS**



Mt Edwards Lithium and Nickel Project (Neometals 100%)

Since acquisition in 2018, drill programs have defined high grade massive nickel mineralisation and several Mineral Resources have been reviewed with estimates updated. Successful exploration outcomes at Mt Edwards are driving development of a pipeline of short lead time nickel sulphide deposits being evaluated under mining studies. Exploration results to date have provided strong encouragement regarding alternatives to realise value at Mt Edwards.

The Mt Edwards project is located 90km south of Kalgoorlie and 35km south west of Kambalda in Western Australia. The tenements cover an area of 300km<sup>2</sup> across the Widgiemooltha Dome nickel sulphide belt and host approximately 146,000 tonnes of contained nickel estimated across eleven nickel sulphide Mineral Resources (for full details refer to ASX announcement entitled "132N Nickel Mineral Resource and Exploration Update at Mt Edwards" released on 6 October 2020).

	Indic	ated	Infe	rred	TOTAI	. Mineral R	esources
Deposit	Tonne (kt)	Nickel (%)	Tonne (kt)	Nickel (%)	Tonne (kt)	Nickel (%)	Nickel Tonnes
Widgie 3 <sup>2</sup>			625	1.5	625	1.5	9,160
Gillett <sup>5</sup>			1,306	1.7	1,306	1.7	22,500
Widgie Townsite <sup>2</sup>	2,193	1.9			2,193	1.9	40,720
Munda <sup>3</sup>			320	2.2	320	2.2	7,140
Mt Edwards 26N <sup>2</sup>			575	1.4	575	1.4	8,210
132N	34	2.9	426	1.9	460	2.0	9,050
Cooke <sup>1</sup>			150	1.3	150	1.3	1,950
Armstrong <sup>4</sup>	526	2.1	107	2.0	633	2.1	13,200
McEwen <sup>1</sup>			1,070	1.3	1,070	1.3	13,380
McEwen Hanging wall <sup>1</sup>			1,060	1.4	1,060	1.4	14,840
Zabel <sup>1</sup>			330	1.8	330	1.8	5,780
TOTAL	2,753	1.9	5,969	1.5	8,722	1.7	146,000

# Table 2 – Mt Edwards Project Nickel Mineral Resources

Mineral Resources quoted using a 1% Ni block cut-off grade, except Munda at 1.5% Ni. Small discrepancies may occur due to rounding Note 1. refer announcement on the ASX: NMT 19 April 2018 titled Mt Edwards JORC Code Mineral Resource 48,200 Nickel Tonnes Note 2. refer announcement on the ASX: NMT 25 June 2018 titled Mt Edwards Project Mineral Resource Over 120,000 Nickel Tonnes Note 3. refer announcement on the ASX: NMT 13 November 2019 titled Additional Nickel Mineral Resource at Mt Edwards

Note 4. refer announcement on the ASX: NMT 16 April 2020 titled 60% Increase in Armstrong Mineral Resource

Note 5. refer announcement on the ASX: NMT 26 May 2020 titled Increase in Mt Edwards Nickel Mineral Resource

Note 6. refer announcement on the ASX: NMT 6 October 2020 titled 132N Nickel Mineral Resource and Exploration Update at Mt Edwards

During the quarter, the exploration team continued its progress with re-interpretation of historical and new assay data leading to an updated nickel sulphide resource at Mt Edwards' 132N deposit (announced post the quarter end). Mining studies continued on four of the Mt Edwards short lead time deposits and geophysical surveys and drill programs were undertaken at Lake Eaton South.

### 132N

During the period, preparatory work set the stage for an updated nickel Mineral Resource at the 132N deposit, estimated in accordance with the 2012 JORC Code (for full details refer to ASX announcement entitled "132N Nickel Mineral Resource and Exploration Update at Mt Edwards" released on 6 October 2020).



Using historical and new assay data the reinterpreted Mineral Resource estimate at 132N more than doubled the amount of contained nickel in the previous 2016 estimate from 4,070 to 9,050 tonnes.

Mineral Resource Classification	Cut-off Ni%	Tonnes	Ni %	Ni tonnes
Indicated	1	34,000	2.9	1,010
Inferred	1	426,000	1.9	8,030
TOTAL	1	460,000	2.0	9,050

Table 3 – 132N Indicated and Inferred Mineral Resource Estimate at a 1% nickel grade cut-off

The re-estimation of the 132N Mineral Resource followed a major review of the Mt Edwards project since mid-2019, which has included an audit of the drill database and the historical exploration and mining literature.

### Lake Eaton South

Neometals completed targeted geophysical surveys and drill programs at its Lake Eaton South prospect. Drilling comprised a 3-hole diamond core program for 1,018.9 metres, and a 7-hole reverse circulation ("**RC**") program for 1,437 metres. Diamond hole MEDD003 intercepted 5.06 metres @ 0.66% nickel, including 0.98 metres at 1.36% nickel. Assay results for the RC drilling remains pending. Geophysical surveys included a drone supported magnetic survey and down hole electromagnetic surveys of the 3 diamond core holes.

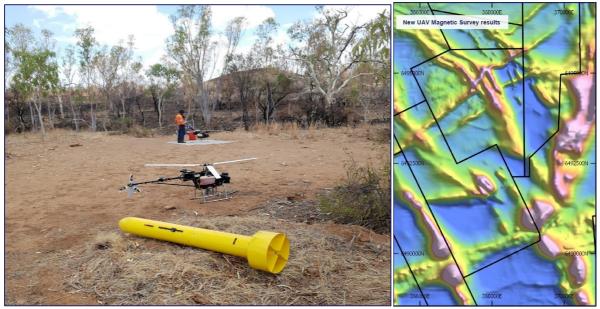


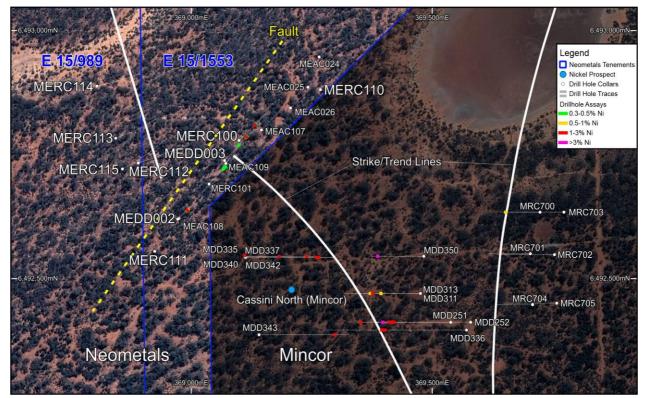
Figure 15 - UAV (drone) and equipment in the field, and the resultant spliced magnetic survey over the Lake Eaton region

Neometals Lake Eaton South prospect is across a tenement boundary only 100-200m north of Mincor Resources' ("**Mincor**") Cassini North prospect, an area of significant exploration effort with several nickel sulphide intercepts recently reported. More importantly this is along strike from Mincor's Cassini Nickel project currently under development.

Future work at Lake Eaton South by Neometals will be driven by assay and downhole geophysics outcomes from the abovementioned program.



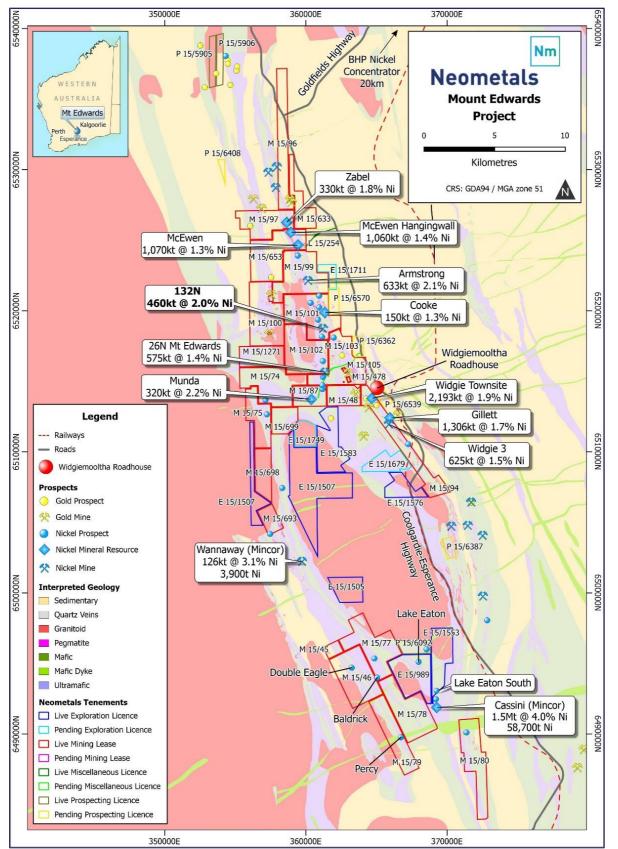
**Figure 16** - Yellow polygons show target areas across the Lake Eaton region from interpretation of geophysical surveys combined with structural and geochemical data



**Figure 17** - Neometals recent (July to September 2020) and December 2019 drill holes relative to Mincor's drilling of Cassini North prospect. Note the interpreted fault between MEDD002, MEDD003 and MERC112 to MERC115

Nm





**Figure 18** - *Mt Edwards Project tenure over geology, with the 132N Mining Lease M15/101 location shown as well as other Mineral Resources and the Lake Eaton South prospect. Neometals hold 100% nickel rights for all live tenements shown above* 

# **CORPORATE**

### Commercial / Corporate

During the quarter, Neometals was engaged with the preparation of its first sustainability report which is now close to finalisation. Enhanced environmental, social and governance performance, together with sustainability principles are firmly embedded into Neometals' core business. The images below provide a snapshot of some of the Company's 'ESG' endeavours during the quarter.



**Figure 19** - Neometals and its staff invest and support a range of community partnerships including Food Bank as well as advocacy organisations and association including the UN Global Compact and the Responsible Mining Initiative

### **Financial**

### Hannans Limited (ASX:HNR) (Hannans) (Yilgarn Nickel/Lithium/Gold)

As at 30 September 2020 Neometals holds 706,209,483 ordinary fully paid shares (36% of the issued capital) in Hannans on an undiluted basis. At 30 September 2020, Hannans' shares closed at 0.7c implying a value of \$4.9M.

### Critical Metals Limited (Unlisted, Scandinavian Lithium/Cobalt/Base Metals)

Neometals holds 16.4% of unlisted public company Critical Metals Ltd, a company which now houses the Scandinavian mineral assets previously held by Hannans.

### **Other Investments**

The market value of the Company's other investments as at 30 September 2020 totalled \$2.4M.

### Finances (unaudited)

Cash and term deposits on hand as of 30 September 2020 totalled A\$76.6 million, including \$4.2 million in restricted use term deposits supporting performance bonds and other contractual obligations. The Company has net receivables and listed securities totalling approximately \$7.6 million.

Related Party payments for the quarter outlined in the ASX 5B at section 6.1 total \$321,500 and are made up of Director fees and superannuation.

### **Issued Capital**

During the quarter, 250,000 shares were issued on the exercise of performance rights pursuant to the company's employee Performance Rights Plan. In addition, 584,353 shares were issued to certain Non-executive Directors under a salary sacrifice equity scheme. The total number of shares on issue at 30 September 2020 was 545,351,266.

### **ENDS**

Nm

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

For further information, please contact:

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### Jeremy Mcmanus

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#### **Compliance Statement**

The information in this report that relates to Mineral Resource and Ore Reserve Estimates and updated DFS Results for the Barrambie Vanadium/Titanium Project and Mineral Resource Estimates and Nickel drill results for the Mt Edwards Project are extracted from the ASX Announcements listed in the table below, which are also available on the Company's website at www.neometals.com.au

05/10/2020	132N Nickel Mineral Resource and Exploration Update at Mt Edwards
26/05/2020	Mt Edwards Nickel – Increase in Mt Edwards Nickel Mineral Resource
16/04/2020	Mt Edwards Nickel – 60% Increase in Armstrong Mineral Resource
31/01/2020	Mt Edwards Nickel – High-grade massive nickel sulphide at Mt Edwards
11/12/2019	Mt Edwards Nickel – Drill Results from Widgie South Trend
13/11/2019	Additional Nickel Mineral Resource at Mt Edwards
25/06/2018	Mt Edwards Nickel – Mineral Resource over 120,000 Nickel Tonnes
19/04/2018	Mt Edwards Nickel – Mineral Resource Estimate

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified form the original market announcements.

# **APPENDIX 1: TENEMENT INTERESTS**

As at 30 September 2020 the Company has an interest in the following projects and tenements in Western Australia.

Project Name	Licence Name	Beneficial Interest	Status
Barrambie	E57/769	100%	Live
Barrambie	E57/770	100%	Live
Barrambie	E57/1041	100%	Live
Barrambie	L57/30	100%	Live
Barrambie	L20/55	100%	Live
Barrambie	M57/173	100%	Live
Barrambie	L20/80	100%	Pending
Barrambie	L20/81	100%	Pending
Mt Edwards	M15/45	100% (^)	Live
Mt Edwards	M15/46	100% (^)	Live
Mt Edwards	M15/48	100% (^)	Live
Mt Edwards	M15/74	100%	Live
Mt Edwards	M15/75	100%	Live
Mt Edwards	M15/87	100% (**)	Live
Mt Edwards	M15/77	100% (^)	Live
Mt Edwards	M15/78	100% (^)	Live
Mt Edwards	M15/79	100% (^)	Live
Mt Edwards	M15/80	100% (^)	Live
Mt Edwards	M15/94	100% (^)	Live
Mt Edwards	M15/96	100% (#)	Live
Mt Edwards	M15/97	100% (#)	Live
Mt Edwards	M15/99	100% (#)	Live
Mt Edwards	M15/100	100% (#)	Live
Mt Edwards	M15/101	100% (#)	Live
Mt Edwards	M15/102	100% (#)	Live
Mt Edwards	M15/103	100% (^)	Live
Mt Edwards	M15/105	100% (^)	Live
Mt Edwards	L15/102	100%	Live
Mt Edwards	M15/478	100% (^)	Live
Mt Edwards	M15/633	100% (^)	Live
Mt Edwards	M15/653	100% (#)	Live
Mt Edwards	M15/693	100% (^)	Live
Mt Edwards	M15/698	100%	Live
Mt Edwards	M15/699	100%	Live
Mt Edwards	M15/1271	100% (#)	Live
Mt Edwards	L15/254	100%	Live
Mt Edwards	E15/989	100% (^)	Live
Mt Edwards	L15/397	50%	Pending

L15/280	100%	Live
P15/5905	100%	Live
P15/5906	100%	Live
E15/1505	100%	Live
E15/1507	100%	Live
E77/2397	100%	Pending
E15/1576	100%	Live
E15/1583	100%	Live
E77/2427	100%	Pending
E15/1679	100%	Pending
P15/6362	100%	Pending
P15/6387	100%	Pending
E15/1665	100%	Pending
E15/1711	100%	Pending
P15/6408	100%	Pending
P15/6539	100%	Pending
P15/6092	100%	Live
E15/1553	100%	Live
E15/1749	100%	Pending
P15/6570	100%	Pending
	P15/5905         P15/5906         E15/1505         E15/1507         E77/2397         E15/1576         E15/1576         E15/1583         E77/2427         E15/1679         P15/6387         E15/1665         E15/1711         P15/6408         P15/6539         P15/6092         E15/1553         E15/1749	P15/5905         100%           P15/5906         100%           E15/1505         100%           E15/1507         100%           E77/2397         100%           E15/1576         100%           E15/1583         100%           E15/1583         100%           E15/1583         100%           E15/1679         100%           P15/6362         100%           P15/6387         100%           E15/1711         100%           E15/1655         100%           P15/6387         100%           P15/6387         100%           E15/1711         100%           P15/6408         100%           P15/6539         100%           E15/1553         100%           E15/1749         100%

^Nickel Mineral rights only

\*\*Lithium and Nickel Mineral rights only

<sup>#</sup> No gold interest

## Changes in interests in mining tenements

### Interests in mining tenements acquired or increased

Project Name	Licence Name	Acquired or Increased
n/a	n/a	n/a

### Interests in mining tenements relinquished, reduced or lapsed

Project Name	Licence Name	Relinquished, Reduced or Lapsed
n/a	n/a	n/a